ECMS Highway Construction

Contract: 74919

Swank Associated Companies, Inc. XX-XXXXXXX

NEW KENSINGTON

724-335-6000 (phone)

724-335-3834 (fax)

ronhags@swankco.com

Prime Business Partner

AlleghenyCounty

SR 65, Section A38

Design activities limited to roadway, E&S, hwy lighting, exp jt replmt, mpt, and bridge preservation

Location

X111-620-L010

Federal Project

P-B0006507A38-1110-373-1

WBS Element

June 26, 2009

Bid Opening

TABLE OF CONTENTS

Contract

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

Incorporated Addenda are As follows:

Addendum No. 1,	**A1,**	dated 05/29/2009
Addendum No. 2,	**A2,**	dated 06/12/2009
Addendum No. 3,	**A3,**	dated 06/15/2009
Addendum No. 4,	**A4,**	dated 06/18/2009
Addendum No. 5,	**A5,**	dated 06/22/2009
Addendum No. 6,	**A6,**	dated 06/24/2009

THIS AGREEMENT, Made this *4* day of *August* A.D. *2009*, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *Swank Associated Companies, Inc.* his, hers, its or their executors,administrators, successors, or assigns, hereinafter called the Contractor.

W I T N E S S E T H:

1. That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Commonwealth, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor in the improvement of a certain section of highway at the unit prices bid by said Contractor for the respective estimated quantities aggregating approximately the sum of *$20,843,648.52* and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with Publication 408/2007-4 - Specifications (as specified in the proposal), are made a part of this contract and accepted as such, also the drawings of the project, prepared and/or approved by the Department of Transportation, which drawings are also agreed by each party as being a part hereof.

2. The location and description being situated as follows:
The description and location of the project is as follows:This is a Design Build roadway and structure project which includes as-designed mainline and ramp work along SR 79. The project includes 10 structures of the Neville Island and Glenfield Interchanges. Design activities are limited to: concrete pavement roadway reconstruction, erosion and sedimentation pollution control, highway lighting, expansion joint replacement for Structure S-29389 (BMS#02007906500000), maintenance and protection of traffic for SR 0065-A38 and for Structure S-29389, and bridge preservation work for a 139 foot single span bridge (BMS# 02006501401735), a 144 foot single span bridge (BMS# 02801702600403), and a 32 foot tunnel (BMS# 02801707601426) including related approachment work.For the bridge preservation tasks including: latex overlays, spot/zone painting, steel repairs, expansion dam replacements, concrete deck and substructure repairs, resetting bearings, bituminous pavement, signing and pavement marking, and other miscellaneous construction, all within a length of 11,986 linear feet (2.270 miles) as indicated on the approved drawings included in the bid

package for STATE ROUTE 65, SECTION A38, in ALLEGHENY COUNTY, GLENFIELD BOROUGH, NEVILLE and ROBINSON TOWNSHIPS, Commonwealth of Pennsylvania.This project being situated as follows:SR 0065 - From a point approximately 1050 feet west of Toms Run Road at Segment 0130/0131 Offset 1516/1642 to a point approximately 3430 feet east of Red Gate Road (SR 4028) at Segment 0160/0161 Offset 1713/1019.SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off-ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

3. The Contractor further covenants and agrees that all work shall be performed in the best and most workmanlike manner. He also agrees that all materials furnished and labor performed shall be in strict and complete conformity, in every respect, with all parts of this contract and shall be subject to the inspection and acceptance of authorized representatives of the Department of Transportation. In the event that any portion of work (including materials supplied pursuant thereto) performed by the Contractor is rejected by the Department's authorized representatives as defective, unsuitable, or unacceptable, the Contractor agrees to remove and replace all such rejected portions of work in conformance with this contract and to the satisfaction of and at no expense to the Department. The Contractor further covenants that prompt payment will be made in full for all labor and materials used in the performance of work on this project.

4. The Contractor covenants and agrees that all work (including, but not limited to, all labor performed and all materials supplied) on this project shall be performed and completed to the satisfaction of the Chief Highway Engineer of the Department of Transportation on or before the expiration date of *10/06/2010*. If, for any reason, except as provided in the contract, the Contractor fails to complete all work on this project to the satisfaction of the Chief Highway Engineer within the aforementioned time allowed, the Department shall deduct from any sums due or which may become due the Contractor the amount indicated in the Specifications for each calendar day used in excess of the aforementioned number of days allowed, or, in case a completion date is fixed, for each calendar day elapsing between that completion date and the actual date of completion. If no sums are due the Contractor, the Contractor agrees to remit to the Department the aforementioned sum for each day used in excess of the time allowed for completion of the contract. The amounts deducted or remitted under this paragraph are liquidated damages and not penalties.

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

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

7. The Contractor further covenants and warrants that he has read, is completely familiar with and understands thoroughly the General Conditions; the Specifications of the Commonwealth of Pennsylvania, Department of Transportation, currently in effect; the Supplements, Special Provisions and/or Conditions; and

any other addenda or requirements, contained in the governing the performance of work under this contract, whether attached hereto and made a part hereof, or incorporated herein by reference.

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

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

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

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

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

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

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

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

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

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

Fiscal Information:

Recorded Number:	74919
Certified Fund Available Under Activity Program:	373
Symbol:	010-008-185-09-10-1
Amount:	$20,843,648.52

Contract Workflow Status

Status	Name	Disposition	Date/Time
Draft	Kireston N Jackson/PennDOT	Award	07/21/2009 02:16:57 PM
Contractor Review	John F Mccaskie/PennDOT BP-000395	Sign	07/21/2009 05:39:22 PM
BOD CMD Review	Christina M Troutman/ PennDOT	Accept	08/03/2009 02:25:23 PM
BOD Director Review	David J Azzato/PennDOT	Sign	08/03/2009 04:37:51 PM
Chief Counsel Preliminary Review	Jeffrey M Spotts/PennDOT	Accept	08/04/2009 09:35:29 AM
Chief Counsel Final Review	Michael H Kline/PennDOT	Accept	08/04/2009 12:09:56 PM
Comptroller Review	Rick A Zettlemoyer/PennDOT	Accept	08/04/2009 03:40:41 PM
CMD Execute	Christina M Troutman/ PennDOT	Submit	08/04/2009 03:46:40 PM

Addenda

Addendum: 1

Description:

The description and location of the project is as follows:

This is a Design Build roadway and structure project which includes as-designed mainline and ramp work along SR 79. The project includes 10 structures of the Neville Island and Glenfield Interchanges.

Design activities are limited to: concrete pavement roadway reconstruction, erosion and sedimentation pollution control, highway lighting, expansion joint replacement for Structure S-29389 (BMS#02007906500000), maintenance and protection of traffic for SR 0065-A38 and for Structure S-29389, and bridge preservation work for a 139 foot single span bridge (BMS# 02006501401735), a 144 foot single span bridge (BMS# 02801702600403), and a 32 foot tunnel (BMS# 02801707601426) including related approachment work.

For the bridge preservation tasks including: latex overlays, spot/zone painting, steel repairs, expansion dam replacements, concrete deck and substructure repairs, resetting bearings, bituminous pavement, signing and pavement marking, and other miscellaneous construction, all within a length of 11,986 linear feet (2.270 miles) as indicated on the approved drawings included in the bid package for STATE ROUTE 65, SECTION A38, in ALLEGHENY COUNTY, GLENFIELD BOROUGH, NEVILLE and ROBINSON TOWNSHIPS, Commonwealth of Pennsylvania.

This project being situated as follows:

SR 0065 - From a point approximately 1050 feet west of Toms Run Road at Segment 0130/0131 Offset 1516/1642 to a point approximately 3430 feet east of Red Gate Road (SR 4028) at Segment 0160/0161 Offset 1713/1019.

SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off-ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

Estimated Project:	$24,727,317.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/18/2009 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	08/17/2009
Required Completion:	10/06/2010

Additional Information

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

Item and Quantity

Revised the following items: 9000-7003, 9000-7004, 9000-7005, 9000-7006, 9901-0020

Added the following items: 4203-0003, 4208-0001, 9000-0002

Special Provision

Revised the following Special Provisions:

NOTICE TO CONTRACTOR
ROAD USER LIQUIDATED DAMAGES
SECTION 901
ITEM 9000-6001 - DESIGN ROADWAY
ITEM 9000-6005 - DESIGN REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM
ITEM 9000-6011 - CONSTRUCT ROADWAY
ITEM 9000-6055 - CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP
ITEM 9000-7002 - CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION, S-29389
ITEM 9000-7003 - LATEX MODIFIED CONCRETE WEARING SURFACE
ITEM 9000-7004 - RAPID SET LATEX MODIFIED CONCRETE WEARING SURFACE
ITEM 9000-7008 - SAW AND SEAL LATEX MODIFIED CONCRETE WEARING SURFACE
ITEM 9901-0003 - DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38
ITEM 9901-0006 - DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389
ITEM 9901-0033 - CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38
ITEM 9901-0066 - CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389

Added the following Special Provisions:

ITEM 4203-0003 - CLASS 1A EXCAVATION
ITEM 4208-0001 - SPECIAL ROLLING
ITEM 9000-0002 - REMOVAL AND DISPOSAL OF EXISTING YELLOW PAVEMENT MARKINGS

Other

Delete from Structure Plan S-29389 sheets 3, 5, and 8 of 8 and substitute the new sheets therefore.

Addendum: 2

Description:

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Estimated Project:	$24,867,317.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/18/2009 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	08/03/2009
Required Completion:	10/06/2010

Additional Information

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

Item and Quantity

Added the following item: 9000-0003, 9000-0004, 9000-7009, 9000-7010

Special Provision

Revised the following Special Provisions:

SPECIAL BIDDING PROCEDURES - ONE-STEP LOW BID PROJECTS
9000-6001 - DESIGN ROADWAY
9000-6055 CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389
ITEM 9000-7004 - RAPID SET LATEX MODIFIED CONCRETE WEARING SURFACE
ITEM 9901-0006 - DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389

Added the following Special Provisions:

SECTION 103.02(a) LETTER OF INTENT
ITEM 9000-0003 - UNFORESEEN DRAINAGE FACILITY REPAIRS
ITEM 9000-0004 - SUPERPAVE, HMA BINDER COURSE, MANUAL PATCHING
ITEM 9000-7009 - REPAIR TYPES 3A, 3B, 4A, B4, AND 4C, DRILL FLOORBEAM
ITEM 9000-7010 - REPAIR TYPES 4D AND 4E, DRILL FLOORBEAM WEB CRACK

Other

Revised the Anticipated NTP date.

Revised wages to PA080004 Modification Number 27 dated June 12, 2009.

Added the following Attachments:

Traffic Statistics for Pavement Design
ACOE Permit

Added Existing Highway Lighting Plan.
Added to Structure Plan S-29389 sheets 9 through 15 of 15.

Addendum: 3

Description:

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SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off-ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

Estimated Project:	$24,880,317.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/18/2009 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	08/03/2009
Required Completion:	10/06/2010

Additional Information

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Item and Quantity

Revised the following item: 9000-0250

Special Provision

Revised the following Special Provisions:

SECTION 901
9000-6011 - CONSTRUCT ROADWAY
9901-0066 - CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389

Added the following Special Provision:

PENNSYLVANIA STATE POLICE SERVICE

Other

Added the following Attachments:

D4279A Railroad Crossing Data for Contractor - NS
D4279A Railroad Crossing Data for Contractor - CSXT

Addendum: 4

Description:

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Estimated Project:	$24,880,317.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/25/2009 11:00:00 AM
New Let:	06/25/2009 11:00:00 AM
Let Date Move:	PENNDOT has moved the let date. Submitted bid files have been deleted. PENNDOT may publish further changes via addenda, resulting in the need to withdraw and resubmit bids.
Anticipated NTP:	08/03/2009
Required Completion:	10/06/2010

Additional Information

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

Item and Quantity

Special Provision

Other

Addendum: 5

Description:

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Estimated Project:	$24,885,117.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/25/2009 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	08/03/2009
Required Completion:	10/06/2010

Additional Information

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

Item and Quantity

Revised the following items: 9000-6011, 9000-7008

Special Provision

Revised the following Special Provisions:

ROAD USER LIQUIDATED DAMAGES
SECTION 103.02(a) LETTER OF INTENT
9000-6001 - DESIGN ROADWAY
9000-6011 - CONSTRUCT ROADWAY
9901-0003 - DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38

Other

The following changes pertain to the Construction Drawings:

Roadway Plan - SR 0065, sheets 7 thru 21 of 32 - Revise note C under Legend to read: Concrete Shoulders (Full Depth) (Depth to be Determined by Pavement Design)

Revised prints containing the revisions/additions from this addendum will be furnished to the successful bidder.

Addendum: 6

Description:

The description and location of the project is as follows:

This is a Design Build roadway and structure project which includes as-designed mainline and ramp work along SR 79. The project includes 10 structures of the Neville Island and Glenfield Interchanges.

Design activities are limited to: concrete pavement roadway reconstruction, erosion and sedimentation pollution control, highway lighting, expansion joint replacement for Structure S-29389 (BMS#02007906500000), maintenance and protection of traffic for SR 0065-A38 and for Structure S-29389, and bridge preservation work for a 139 foot single span bridge (BMS# 02006501401735), a 144 foot single span bridge (BMS# 02801702600403), and a 32 foot tunnel (BMS# 02801707601426) including related approachment work.

For the bridge preservation tasks including: latex overlays, spot/zone painting, steel repairs, expansion dam replacements, concrete deck and substructure repairs, resetting bearings, bituminous pavement, signing and pavement marking, and other miscellaneous construction, all within a length of 11,986 linear feet (2.270 miles) as indicated on the approved drawings included in the bid package for STATE ROUTE 65, SECTION A38, in ALLEGHENY COUNTY, GLENFIELD BOROUGH, NEVILLE and ROBINSON TOWNSHIPS, Commonwealth of Pennsylvania.

This project being situated as follows:

SR 0065 - From a point approximately 1050 feet west of Toms Run Road at Segment 0130/0131 Offset 1516/1642 to a point approximately 3430 feet east of Red Gate Road (SR 4028) at Segment 0160/0161 Offset 1713/1019.

SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off-ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

Estimated Project:	$24,885,117.35
Federal Project Status:	Federal Oversight
DBE:	5.00%
Structure Work:	48.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	Optional
Scheduled Let:	06/25/2009 11:00:00 AM
New Let:	06/26/2009 11:00:00 AM
Let Date Move:	PENNDOT has moved the let date. Submitted bid files have been retained, but may be withdrawn by the bidder prior to the new let date/time. PENNDOT may publish further changes via addenda, resulting in the need to withdraw and resubmit bids.
Anticipated NTP:	08/03/2009
Required Completion:	10/06/2010

Additional Information

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

Item and Quantity

Special Provision

Revised the following Special Provision:

ROAD USER LIQUIDATED DAMAGES

Other

Bid Items

Item	Description	Quantity	Unit Price	Item Total	Addendum
0201-0001	CLEARING AND GRUBBING	1.000	$25,000.00	$25,000.00	
0203-0001	CLASS 1 EXCAVATION	2,275.000	$12.00	$27,300.00	
4203-0003	CLASS 1A EXCAVATION (MODIFIED)	1,708.000	$30.00	$51,240.00	1
0205-0200	SELECTED BORROW EXCAVATION	5.000	$50.00	$250.00	
4208-0001	SPECIAL ROLLING (MODIFIED)	65.000	$60.00	$3,900.00	1
0212-0001	GEOTEXTILE, CLASS 1	1,139.000	$0.55	$626.45	
4350-0104	SUBBASE 4" DEPTH (NO. 2A) (MODIFIED)	4,698.000	$6.00	$28,188.00	
0360-0001	ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH	4,143.000	$12.00	$49,716.00	
0409-0782	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 76-22, 10 TO < 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-H	5,297.000	$8.00	$42,376.00	
0409-2595	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE (SCRATCH), PG 64-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, SRL-L	170.000	$105.00	$17,850.00	
0409-6750	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, 10 TO < 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	5,297.000	$11.50	$60,915.50	
0460-0001	BITUMINOUS TACK COAT	9,607.000	$0.50	$4,803.50	
0461-0002	BITUMINOUS PRIME COAT	278.000	$6.00	$1,668.00	
0491-0070	MILLING OF BITUMINOUS PAVEMENT SURFACE, VARIABLE DEPTH	425.000	$12.00	$5,100.00	
0501-0032	PLAIN CEMENT CONCRETE PAVEMENT, 10" DEPTH	4,143.000	$50.00	$207,150.00	
0503-0001	PROTECTIVE COATING FOR CEMENT CONCRETE PAVEMENTS AND SHOULDERS	4,638.000	$1.25	$5,797.50	
0504-0001	PAVEMENT RELIEF JOINT	75.000	$225.00	$16,875.00	
4505-0001	BRIDGE APPROACH SLAB (MODIFIED)	640.000	$300.00	$192,000.00	
0512-0001	LONGITUDINAL JOINT CLEANING AND SEALING	85.000	$6.00	$510.00	
0515-0001	SAWING AND SEALING OF BITUMINOUS OVERLAYS	3,593.000	$1.25	$4,491.25	
0516-2007	PATCHING JOINT	877.000	$14.00	$12,278.00	
0516-2008	NEW PAVEMENT JOINT	134.000	$12.00	$1,608.00	
4516-2021	SUBBASE MATERIAL FOR CONCRETE PAVEMENT PATCHING (MODIFIED)	30.000	$10.00	$300.00	
0516-2034	CONCRETE PAVEMENT PATCHING, TYPE A, 10" DEPTH	216.000	$95.00	$20,520.00	
0516-2044	CONCRETE PAVEMENT PATCHING, TYPE B, 10" DEPTH	230.000	$95.00	$21,850.00	
0521-0001	TRANSVERSE JOINT CLEANING AND SEALING	988.000	$3.00	$2,964.00	
0605-2731	TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	2.000	$600.00	$1,200.00	
0605-2740	TYPE S CONCRETE TOP UNIT AND GRATE	1.000	$700.00	$700.00	
0606-0050	GRADE ADJUSTMENT OF EXISTING INLETS	1.000	$250.00	$250.00	
0608-0001	MOBILIZATION	1.000	$1,000,000.00	$1,000,000.00	
0609-0002	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE A	1.000	$60,000.00	$60,000.00	
0609-0009	EQUIPMENT PACKAGE	1.000	$12,000.00	$12,000.00	
0610-7000	PAVEMENT BASE DRAIN	1,139.000	$10.00	$11,390.00	
0615-0022	6" SUBSURFACE DRAIN OUTLETS	12.000	$25.00	$300.00	
0615-0040	SUBSURFACE DRAIN OUTLET ENDWALL	1.000	$300.00	$300.00	
0615-0066	66" RED SUBSURFACE DRAIN OUTLET MARKER	1.000	$52.46	$52.46	
0619-0560	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3	1.000	$1,890.00	$1,890.00	
0619-0570	PERMANENT IMPACT ATTENUATING DEVICE, TYPE III, TEST LEVEL 3	1.000	$2,220.00	$2,220.00	

0620-0010	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITHOUT INLET PLACEMENT	2.000	$1,800.00	$3,600.00
0620-0402	TERMINAL SECTION, BRIDGE CONNECTION	2.000	$185.00	$370.00
4620-0500	RESET GUIDE RAIL (MODIFIED)	363.000	$6.45	$2,341.35
0620-0503	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)	723.000	$1.80	$1,301.40
0620-0862	TYPE 2-S POST ANCHORAGE	3.000	$680.00	$2,040.00
0620-1075	TYPE 2-S GUIDE RAIL	288.000	$14.70	$4,233.60
0623-0001	CONCRETE MEDIAN BARRIER	132.000	$45.00	$5,940.00
0623-0110	END TRANSITION	2.000	$800.00	$1,600.00
0657-0001	PAVED SHOULDERS, TYPE 7	4,310.000	$35.00	$150,850.00
0660-0020	CONCRETE SHOULDER RUMBLE STRIPS	1,494.000	$0.87	$1,299.78
0660-0030	BITUMINOUS SHOULDER RUMBLE STRIPS	3,677.000	$0.15	$551.55
0686-0020	CONSTRUCTION SURVEYING, TYPE B	1.000	$30,000.00	$30,000.00
0689-0003	CPM SCHEDULE	1.000	$10,000.00	$10,000.00
0845-0001	UNFORESEEN WATER POLLUTION CONTROL	6,000.000	$1.00	$6,000.00
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	1.000	$150,000.00	$150,000.00
0901-0203	ARROW PANEL	1.000	$4,000.00	$4,000.00
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	378.000	$1.15	$434.70
0901-0232	ADDITIONAL WARNING LIGHTS, TYPE C	1,029.000	$0.35	$360.15
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	200.000	$13.50	$2,700.00
0930-0004	POST MOUNTED SIGNS, TYPE A	110.000	$15.85	$1,743.50
0930-0101	STEEL S OR W BEAM POSTS	311.000	$3.85	$1,197.35
0930-0110	BREAKAWAY SYSTEM	2.000	$1,865.00	$3,730.00
4931-0001	POST MOUNTED SIGNS, TYPE B (MODIFIED)	223.000	$22.35	$4,984.05
0932-0001	POST MOUNTED SIGNS, TYPE C	217.000	$68.75	$14,918.75
0933-0001	POST MOUNTED SIGNS, TYPE D	57.000	$98.35	$5,605.95
0934-0002	POST MOUNTED SIGNS, TYPE E	164.000	$38.15	$6,256.60
0935-0001	POST MOUNTED SIGNS, TYPE F	113.000	$12.95	$1,463.35
0936-0001	STRUCTURE MOUNTED EXTRUDED ALUMINUM CHANNEL SIGNS	1,402.000	$17.45	$24,464.90
0937-0104	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/B)	52.000	$12.00	$624.00
0937-0106	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/B)	133.000	$12.00	$1,596.00
0937-0112	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (Y/B)	52.000	$4.00	$208.00
0937-0113	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (W/B)	133.000	$4.00	$532.00
0937-0118	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/R)	3.000	$12.00	$36.00
0937-0122	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (W/R)	3.000	$4.00	$12.00
0937-0200	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/B)	219.000	$4.75	$1,040.25
0937-0201	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (W/B)	214.000	$4.75	$1,016.50
0937-0207	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (Y/B)	200.000	$4.80	$960.00
0937-0208	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (W/B)	50.000	$4.85	$242.50
4937-0210	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/B) (MODIFIED)	86.000	$22.65	$1,947.90
0937-0210	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/B)	200.000	$22.00	$4,400.00
4937-0211	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (W/B) (MODIFIED)	94.000	$22.55	$2,119.70
0937-0211	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (W/B)	170.000	$21.85	$3,714.50
0937-0212	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/Y)	73.000	$24.35	$1,777.55
0937-0215	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/R)	13.000	$5.65	$73.45

0937-0300	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-1, WHITE POST WITH WHITE SHEETING	20.000	$32.15	$643.00	
0937-0301	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-1, YELLOW POST WITH YELLOW SHEETING	20.000	$28.35	$567.00	
0937-0330	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/BLANK SHEETING	48.000	$26.75	$1,284.00	
0937-0331	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/RED SHEETING	8.000	$27.95	$223.60	
0937-0333	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, YELLOW POST WITH YELLOW/BLANK SHEETING	35.000	$26.80	$938.00	
4956-0101	LOOP SENSOR (MODIFIED)	145.000	$16.28	$2,360.60	
0960-0002	4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS	2,388.000	$0.50	$1,194.00	
0960-0005	6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	2,848.000	$0.60	$1,708.80	
0960-0021	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	66.000	$8.50	$561.00	
0963-0001	PAVEMENT MARKING REMOVAL	525.000	$0.90	$472.50	
0964-0002	4" YELLOW EPOXY PAVEMENT MARKINGS	64,853.000	$0.48	$31,129.44	
0964-0005	6" WHITE EPOXY PAVEMENT MARKINGS	72,847.000	$0.53	$38,608.91	
0964-0008	8" WHITE EPOXY PAVEMENT MARKINGS	11,289.000	$0.70	$7,902.30	
0964-0011	12" WHITE EPOXY PAVEMENT MARKINGS	550.000	$3.50	$1,925.00	
0964-0021	24" WHITE EPOXY PAVEMENT MARKINGS	875.000	$8.50	$7,437.50	
0964-0230	WHITE EPOXY LEGEND, "WRONG WAY ARROW" , 23'-0"	10.000	$150.00	$1,500.00	
0964-0232	WHITE EPOXY LEGEND, "LANE REDUCTION TRANSITION ARROW - RIGHT LANE" , 18'-0" X 5'-6"	5.000	$375.00	$1,875.00	
0964-0233	WHITE EPOXY LEGEND, "LANE REDUCTION TRANSITION ARROW - LEFT LANE" , 18'-0" X 5'-6"	3.000	$375.00	$1,125.00	
0966-0015	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/R)	50.000	$22.00	$1,100.00	
0966-0018	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/B)	250.000	$22.00	$5,500.00	
0966-0104	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/B)	510.000	$22.00	$11,220.00	
0966-0106	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)	30.000	$22.00	$660.00	
1999-9999	TRAINEES	2,000.000	$2.00	$4,000.00	
8217-0010	DESIGN OF REHABILITATION OF BRIDGE STRUCTURE, S-29280	1.000	$49,600.00	$49,600.00	
8217-0011	DESIGN OF REHABILITATION OF BRIDGE STRUCTURE, S-29281	1.000	$69,000.00	$69,000.00	
8217-0012	DESIGN OF REHABILITATION OF BRIDGE STRUCTURE, S-29282	1.000	$38,300.00	$38,300.00	
8260-0010	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29280	1.000	$500,000.00	$500,000.00	
8260-0011	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29281	1.000	$350,000.00	$350,000.00	
8260-0012	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29282	1.000	$75,000.00	$75,000.00	
9000-0001	REMOVAL AND DISPOSAL OF EXISTING RAISED PAVEMENT MARKERS	540.000	$5.00	$2,700.00	
9000-0002	REMOVAL AND DISPOSAL OF EXISTING YELLOW PAVEMENT MARKINGS	9,200.000	$0.90	$8,280.00	1
9000-0003	UNFORESEEN DRAINAGE FACILITY REPAIRS	50,000.000	$1.00	$50,000.00	2

9000-0004	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, MANUAL PATCHING, PG 64-22, 3 TO < 10 MILLION ESALS, 9.5 MM MIX, SRL-L	200.000	$275.00	$55,000.00	2
9000-0011	LONGITUDINAL JOINT REPAIR	956.000	$33.12	$31,662.72	
9000-0019	HEAVY DUTY MEMBRANE	170.000	$1.15	$195.50	
9000-0250	LOCATE EXISTING UNDERGROUND FACILITIES	20,000.000	$1.00	$20,000.00	3
9000-2000	JACKING BRIDGE SUPERSTRUCTURE, S-25547	1.000	$100,000.00	$100,000.00	
9000-2001	SCARIFICATION, S-25547	4,600.000	$5.00	$23,000.00	
9000-2002	SCARIFICATION, VERTICAL TRANSITION, S-25547	395.000	$4.00	$1,580.00	
9000-2003	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION, S-25547	4,600.000	$25.00	$115,000.00	
9000-2004	LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/2" DEPTH, S-25547	4,600.000	$40.00	$184,000.00	
9000-2008	LATEX MODIFIED CONCRETE WEARING SURFACE, VARIABLE DEPTH, S-25547	65.000	$500.00	$32,500.00	
9000-2200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25547	800.000	$300.00	$240,000.00	
9000-2400	REPAIR TYPE 40, REPLACE DIAPHRAGMS AT NEW TOOTH DAM, S-25547	15,000.000	$1.00	$15,000.00	
9000-2410	REPAIR TYPE 41, REPLACE EXPANSION BEARINGS, S-25547	6.000	$7,500.00	$45,000.00	
9000-2420	REPAIR TYPE 42, BEARING STIFFENER, S-25547	2.000	$4,000.00	$8,000.00	
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	38.000	$1,000.00	$38,000.00	
9000-2530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH TROUGH AND DOWNSPOUT, S-25547	68.000	$3,000.00	$204,000.00	
9000-2560	REPAIR TYPE 56, CONCRETE BRIDGE DECK REPAIR - TYPE 3, S-25547	620.000	$30.00	$18,600.00	
9000-2700	REPAIR TYPE 70, CLASS R-4 ROCK SPLASH BLOCK, S-25547	60.000	$125.00	$7,500.00	
9000-2710	REPAIR TYPE 71, MODIFY EXISTING DOWNSPORT ENDS, S-25547	5.000	$250.00	$1,250.00	
9000-2720	REPAIR TYPE 72, REPLACE NAVIGATION LIGHT POWER CHORD STRAIN RELIEF GRIP, S-25547	1.000	$5,000.00	$5,000.00	
9000-2820	REPAIR TYPE 82, BACKFILL EROSION DITCH WITH CLASS R4 ROCK, S-25547	60.000	$100.00	$6,000.00	
9000-3000	JACKING BRIDGE SUPERSTRUCTURE, S-25548	1.000	$100,000.00	$100,000.00	
9000-3001	SCARIFICATION, S-25548	1,800.000	$6.00	$10,800.00	
9000-3002	SCARIFICATION, VERTICAL TRANSITION, S-25548	115.000	$6.00	$690.00	
9000-3003	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION, S-25548	1,800.000	$27.00	$48,600.00	
9000-3004	LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/2" DEPTH, S-25548	1,800.000	$42.00	$75,600.00	
9000-3005	LATEX MODIFIED CONCRETE WEARING SURFACE, VARIABLE DEPTH, S-25548	27.000	$500.00	$13,500.00	
9000-3200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25548	465.000	$300.00	$139,500.00	
9000-3210	REPAIR TYPE 21, EPOXY INJECTION CRACK SEAL, S-25548	15.000	$30.00	$450.00	
9000-3240	REPAIR TYPE 24, REPLACE JOINT SEALING MATERIAL, S-25548	22.000	$25.00	$550.00	
9000-3410	REPAIR TYPE 41, EXPANSION BEARINGS , S-25548	6.000	$7,000.00	$42,000.00	
9000-3420	REPAIR TYPE 42, BEARING STIFFENERS, S-25548	4.000	$4,000.00	$16,000.00	
9000-3430	REPAIR TYPE 43, MASONRY PLATE EXTENSION, S-25548	4.000	$2,000.00	$8,000.00	
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	43.000	$1,000.00	$43,000.00	

9000-3541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25548	45.000	$500.00	$22,500.00
9000-3551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	36.000	$800.00	$28,800.00
9000-3552	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25548	43.000	$800.00	$34,400.00
9000-3560	REPAIR TYPE 56, CONCRETE BRIDGE DECK REPAIR - TYPE 3, S-25548	1,230.000	$30.00	$36,900.00
9000-3700	REPAIR TYPE 70, CLASS R4 ROCK SPLASH BLOCK, S-25548	35.000	$100.00	$3,500.00
9000-3710	REPAIR TYPE 71, MODIFY EXISTING DOWNSPOUT ENDS, S-25548	3.000	$250.00	$750.00
9000-3820	REPAIR TYPE 82, BACKFILL EROSION DITCH WITH CLASS R4 ROCK, S-25548	100.000	$100.00	$10,000.00
9000-4000	JACKING BRIDGE SUPERSTRUCTURE, S-25549	1.000	$75,000.00	$75,000.00
9000-4200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25549	340.000	$300.00	$102,000.00
9000-4210	REPAIR TYPE 21, EPOXY INJECTION CRACK SEAL, S-25549	15.000	$30.00	$450.00
9000-4410	REPAIR TYPE 41, REPLACE EXPANSION BEARINGS, S-25549	6.000	$7,500.00	$45,000.00
9000-4420	REPAIR TYPE 42, BEARING STIFFENERS, S-25549	4.000	$4,000.00	$16,000.00
9000-4430	REPAIR TYPE 43, MASONRY PLATE EXTENSION, S-25549	4.000	$2,000.00	$8,000.00
9000-4500	REPAIR TYPE 50, CONCRETE BRIDGE DECK REPAIR - TYPE 2, S-25549	165.000	$20.00	$3,300.00
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	47.000	$1,000.00	$47,000.00
9000-4530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH DRAIN TROUGH AND DOWNSPOUT, S-25549	36.000	$3,000.00	$108,000.00
9000-4541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25549	84.000	$400.00	$33,600.00
9000-4700	REPAIR TYPE 70, CLASS R4 ROCK SPLASH BLOCK, S-25549	40.000	$100.00	$4,000.00
9000-4710	REPAIR TYPE 71, MODIFY EXISTING DOWNSPOUT ENDS, S-25549	3.000	$250.00	$750.00
9000-4740	REPAIR TYPE 74, CLEAN AND FLUSH SCUPPERS AND DOWNSPOUNTING, S-25549	1.000	$2,000.00	$2,000.00
9000-4770	REPAIR TYPE 77, REPLACE SCUPPER GRATE HOLD-DOWN BOLTS, S-25549	1.000	$1,000.00	$1,000.00
9000-5000	JACKING BRIDGE SUPERSTRUCTURE, S-25550	1.000	$100,000.00	$100,000.00
9000-5200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25550	440.000	$300.00	$132,000.00
9000-5410	REPAIR TYPE 41, REPLACE EXPANSION BEARINGS, S-25550	10.000	$7,500.00	$75,000.00
9000-5420	REPAIR TYPE 42, BEARING STIFFENERS, S-25550	8.000	$4,000.00	$32,000.00
9000-5430	REPAIR TYPE 43, MASONRY PLATE EXTENSION, S-25550	7.000	$2,000.00	$14,000.00
9000-5500	REPAIR TYPE 50, CONCRETE BRIDGE DECK REPAIR - TYPE 2, S-25550	250.000	$20.00	$5,000.00
9000-5510	REPAIR TYPE 51, REPLACE JOINT SEALING MATERIAL IN TRANSVERSE DECK CONSTRUCTION JOINTS, S-25550	76.000	$50.00	$3,800.00
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	39.000	$1,000.00	$39,000.00

9000-5551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	84.000	$1,000.00	$84,000.00	
9000-5570	REPAIR TYPE 57, REPLACE ALUMINUM RAILING FOR BRIDGE BARRIER, S-25550	40.000	$50.00	$2,000.00	
9000-5700	REPAIR TYPE 70, CLASS R4 ROCK SPLASH BLOCK, S-25550	26.000	$125.00	$3,250.00	
9000-5710	REPAIR TYPE 71, MODIFY EXISTING DOWNSPOUT ENDS, S-25550	2.000	$250.00	$500.00	
9000-5740	REPAIR TYPE 74, CLEAN AND FLUSH SCUPPERS AND DOWNSPOUTING, S-25550	1.000	$2,000.00	$2,000.00	
9000-6001	DESIGN ROADWAY	1.000	$380,000.00	$380,000.00	
9000-6002	DESIGN HIGHWAY LIGHTING	1.000	$36,816.91	$36,816.91	
9000-6005	DESIGN REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	1.000	$32,800.00	$32,800.00	
9000-6011	CONSTRUCT ROADWAY	1.000	$5,090,000.00	$5,090,000.00	5
9000-6022	CONSTRUCT HIGHWAY LIGHTING	1.000	$50,000.00	$50,000.00	
9000-6055	CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	1.000	$300,000.00	$300,000.00	
9000-7001	SCARIFICATION MODIFIED, S-29389	102,130.000	$3.00	$306,390.00	
9000-7002	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION, S-29389	51,065.000	$30.00	$1,531,950.00	
9000-7003	LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH, S-29389	19,440.000	$50.00	$972,000.00	1
9000-7004	RAPID SET LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/4" DEPTH, S-29389	31,625.000	$60.00	$1,897,500.00	1
9000-7005	LATEX MODIFIED CONCRETE WEARING SURFACE, VARIABLE DEPTH, S-29389	540.000	$500.00	$270,000.00	1
9000-7006	RAPID SET LATEX MODIFIED CONCRETE WEARING SURFACE, VARIABLE DEPTH, S-29389	879.000	$750.00	$659,250.00	1
9000-7007	CONCRETE BRIDGE DECK REPAIR - TYPE 3, S-29389	310.000	$30.00	$9,300.00	
9000-7008	SAW AND SEAL LATEX MODIFIED CONCRETE WEARING COURSE, S-29389	4,190.000	$3.50	$14,665.00	5
9000-7009	REPAIR TYPES 3A, 3B, 4A, 4B, AND 4C, DRILL FLOORBEAM WEB CRACK ARREST HOLE ADJACENT TOP OR BOTTOM FLANGE TERMINATION, S-29389	5.000	$3,000.00	$15,000.00	2
9000-7010	REPAIR TYPES 4D AND 4E, DRILL FLOORBEAM WEB CRACK ARREST HOLE OR SLOT ADJACENT BOTTOM FLANGE TERMINATION AND INSTALL BOLTED WEB STRENGTHENING BENT PLATES, S-29389	3.000	$4,000.00	$12,000.00	2
9000-8000	JACKING BRIDGE SUPERSTRUCTURE, S-25553	1.000	$20,000.00	$20,000.00	
9000-8200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25553	185.000	$300.00	$55,500.00	
9000-8210	REPAIR TYPE 21, EPOXY INJECTION CRACK SEAL, S-25553	20.000	$30.00	$600.00	
9000-8240	REPAIR TYPE 24, REPLACE JOINT SEALING MATERIAL, S-25553	116.000	$25.00	$2,900.00	
9000-8410	REPAIR TYPE 41, REPLACE EXPANSION BEARINGS, S-25553	2.000	$7,500.00	$15,000.00	
9000-8500	REPAIR TYPE 50, CONCRETE BRIDGE DECK REPAIR - TYPE 2, S-25553	905.000	$20.00	$18,100.00	
9000-8510	REPAIR TYPE 51, REPLACE JOINT SEALING MATERIAL IN TRANSVERSE DECK CONSTRUCTION JOINTS, S-25553	114.000	$50.00	$5,700.00	
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	76.000	$1,000.00	$76,000.00	

9000-9001	SCARIFICATION, S-25554	1,500.000	$5.00	$7,500.00
9000-9002	SCARIFICATION, VERTICAL TRANSITION, S-25554	285.000	$5.00	$1,425.00
9000-9003	CONCRETE BRIDGE DECK SURFACE PREPARATION, HYDRODEMOLITION, S-25554	1,500.000	$30.00	$45,000.00
9000-9004	LATEX MODIFIED CONCRETE WEARING SURFACE, 1 1/2" DEPTH, S-25554	1,500.000	$42.00	$63,000.00
9000-9005	LATEX MODIFIED CONCRETE WEARING SURFACE, VARIABLE DEPTH, S-25554	21.000	$500.00	$10,500.00
9000-9200	REPAIR TYPE 20, CLASS AA CEMENT CONCRETE REPAIRS, S-25554	230.000	$300.00	$69,000.00
9000-9210	REPAIR TYPE 21, EPOXY INJECTION CRACK SEAL, S-25554	90.000	$30.00	$2,700.00
9000-9220	REPAIR TYPE 22, REPAIR CONCRETE BLOCK SLOPE WALL, S-25554	64.000	$150.00	$9,600.00
9000-9240	REPAIR TYPE 24, REPLACE JOINT SEALING MATERIAL, S-25554	82.000	$25.00	$2,050.00
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	36.000	$1,000.00	$36,000.00
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	39.000	$1,000.00	$39,000.00
9000-9541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25554	110.000	$500.00	$55,000.00
9071-2001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25547	1.000	$175,000.00	$175,000.00
9071-3001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25548	1.000	$175,000.00	$175,000.00
9071-4001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25549	1.000	$150,000.00	$150,000.00
9071-5001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25550	1.000	$125,000.00	$125,000.00
9071-8001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25553	1.000	$40,000.00	$40,000.00
9071-9001	REPAIR TYPE 33, ZONE PAINTING EXISTING STRUCTURAL STEEL, S-25554	1.000	$40,000.00	$40,000.00
9073-2001	DISPOSAL OF BRIDGE WASTE, S-25547	1.000	$10,000.00	$10,000.00
9073-3001	DISPOSAL OF BRIDGE WASTE, S-25548	1.000	$10,000.00	$10,000.00
9073-4001	DISPOSAL OF BRIDGE WASTE, S-25549	1.000	$10,000.00	$10,000.00
9073-5001	DISPOSAL OF BRIDGE WASTE, S-25550	1.000	$10,000.00	$10,000.00
9073-8001	DISPOSAL OF BRIDGE WASTE, S-25553	1.000	$10,000.00	$10,000.00
9073-9001	DISPOSAL OF BRIDGE WASTE, S-25554	1.000	$10,000.00	$10,000.00
9075-2001	CONTAINMENT, S-25547	1.000	$150,000.00	$150,000.00
9075-3001	CONTAINMENT, S-25548	1.000	$150,000.00	$150,000.00
9075-4001	CONTAINMENT, S-25549	1.000	$100,000.00	$100,000.00
9075-5001	CONTAINMENT, S-25550	1.000	$100,000.00	$100,000.00
9075-8001	CONTAINMENT, S-25553	1.000	$20,000.00	$20,000.00
9075-9001	CONTAINMENT, S-25554	1.000	$20,000.00	$20,000.00
9077-2001	WORKER HEALTH AND SAFETY, S-25547	1.000	$15,000.00	$15,000.00
9077-3001	WORKER HEALTH AND SAFETY, S-25548	1.000	$15,000.00	$15,000.00
9077-4001	WORKER HEALTH AND SAFETY, S-25549	1.000	$15,000.00	$15,000.00
9077-5001	WORKER HEALTH AND SAFETY, S-25550	1.000	$15,000.00	$15,000.00
9077-8001	WORKER HEALTH AND SAFETY, S-25553	1.000	$15,000.00	$15,000.00
9077-9001	WORKER HEALTH AND SAFETY, S-25554	1.000	$15,000.00	$15,000.00
9469-0100	LONGITUDINAL JOINT SEALING FOR NEW PAVEMENT SURFACES	6,121.000	$0.75	$4,590.75
9516-3061	CONCRETE PAVEMENT PATCHING, TYPE A, VARIABLE DEPTH, 10" TO 11 1/2" DEPTH	85.000	$110.00	$9,350.00
9619-0001	RESET PERMANENT IMPACT ATTENUATING DEVICE	1.000	$5,000.00	$5,000.00

9619-0610	PERMANENT IMPACT ATTENUATOR DEVICE, TYPE V (STANDARD), TEST LEVEL 3, SPECIAL	1.000	$40,000.00	$40,000.00	
9620-0014	THRIE-BEAM TO PA BRIDGE BARRIER TRANSITION	2.000	$3,550.00	$7,100.00	
9901-0001	OFF-DUTY UNIFORMED POLICE OFFICER	36,200.000	$1.00	$36,200.00	
9901-0002	SIGNAL TIMING REVISIONS	12.000	$350.00	$4,200.00	
9901-0003	DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38	1.000	$190,000.00	$190,000.00	
9901-0006	DESIGN MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389	1.000	$37,500.00	$37,500.00	
9901-0020	FULL MATRIX CHANGEABLE MESSAGE SIGN	7.000	$15,000.00	$105,000.00	1
9901-0033	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38	1.000	$500,000.00	$500,000.00	
9901-0066	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389	1.000	$25,000.00	$25,000.00	
9990-0219	CLOTH OVERLAY SIGN, REFLECTORIZED	892.000	$25.00	$22,300.00	

Contract Total: $20,843,648.52

Bid Total: $20,843,648.52

Special Provisions

G201A - a00001 PRE-BID CONFERENCE

Addendum:

Associated Item(s):

Header:
PRE-BID CONFERENCE

Provision Body:

A pre- bidding conference will be held with Department of Transportation personnel and all prospective bidders and other interested parties to discuss this project.

The meeting will take place on June 2, 2009 at 1:30 P.M. in the District 11-0 Office, Room 112, 45 Thoms Run Road, Bridgeville, PA 15017.

G2A - a00002 PUBLIC BID OPENING LOCATION

Addendum:

Associated Item(s):

Header:
PUBLIC BID OPENING LOCATION

Provision Body:

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

G6C - a00006 PURCHASABLE ITEMS

Addendum:

Associated Item(s):

Header:
PURCHASABLE ITEMS

Provision Body:

Specifications or Standard Drawings listed or referred in this proposal are available for purchase upon request from the PENNDOT Sales Store, 5th Floor, Commonwealth Keystone Building, 400 North Street, P.O. Box 2730, Harrisburg, PA 17120 (Telephone 717-787-5968).

Specifications can be viewed on PENNDOT's homepage http://www.dot.state.pa.us by selecting "Design & Construction - Construction - Construction Specifications".

G101A - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Addendum:

Associated Item(s):

Header:
GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Provision Body:

This Special Provision pertains to the entire Project.

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

Specifications 408/2007, Change No. 4, effective April 2, 2009 of the Pennsylvania Department of Transportation. Within these Specifications where dual measurement and tabular options are presented English standards apply.

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

X DSP1. Offset Provision for Commonwealth Contracts.

X DSP2. Contractor Responsibility Provisions.

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

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

MBE WBE

(-)% (-)%

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

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

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

X DSP8. F.A.R. - Required Contract Provisions Federal - Aid Construction Projects - March 10, 1994.

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

X DSP10. Nondiscrimination/Sexual Harassment Clause.

X DSP11. Contractor Integrity Provisions.

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

G113A - a00113 CONTRACT PROVISIONS - RIGHT TO KNOW LAW

Addendum:

Associated Item(s):

Header:
CONTRACT PROVISIONS - RIGHT TO KNOW LAW

Provision Body:

Contract Provisions - Right to Know Law

a. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, applies to this Contract.

b. The Department will contact the Contractor using the Contractor information provided by the Contractor in SRM (or "the legal contact information provided in the Contract") unless the name and contact information of another person is provided to the Department, in writing if the Department needs assistance in any matter arising out of the Right to Know Law(RTKL). Notify the Department in writing of any change in the name or the contact information within a reasonable time prior to the change.

c. Upon notification that the Department has received a request for records under the RTKL, assist the Department or State in responding to the request. Provide the Department State within 3 days, access to, and copies of, any document or information arising out of the Contract that the Department deems a Public Record ("Requested Information") and providing such other assistance as the Department may request in order to comply with the RTKL. If unable to provide the Requested Information within 3 days for one of the reasons specified in the RTKL, immediately notify the Department that it will need up to an additional 25 days, and must provide in writing the reason the additional time is needed. Failure to provide the Requested Information to the Department within the period specified in this provision will be considered an event of default. Pay, indemnify and hold the Department harmless for any damages, penalties, detriment or harm that the Department may incur as a result of the failure. If the Office of Open Records or the Pennsylvania Courts determines that the record requested by the Department is a Public Record, liquidated damages of $500 per day will be assessed for each calendar day beyond the date the record was required to be provided.

d. The Department's determinations as to whether the Requested Information is a Public Record is dispositive of the question as between the parties. Agree not to challenge the Department's decision to deem the Requested Information a Public Record. If the Requested Information is a Trade Secret or Confidential Proprietary Information, as defined by the RTKL, immediately notify the Department, and provide a written statement signed by a representative explaining why the requested material is exempt from public disclosure under the RTKL within 5 days. If, upon review of the written statement, the Department still decides to provide the Requested Information, do not challenge or in any way hold liable the Department for such a decision.

e. The Department will provide reimbursement for any costs associated with complying with this provision only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

f. Abide by any decision to release a record to the public made by the Office of Open Records or by the Pennsylvania Courts. Waive all rights or remedies that may be available as a result of the Department's disclosure of Requested Information pursuant to the RTKL. Duties relating to the RTKL are continuing duties that survive the expiration of this Contract and continue as long as the Requested Information is retained.

00 - a00501 D11 Air Pollution Control

Addendum:

Associated Item(s):

Header:
AIR POLLUTION CONTROL

Provision Body:

This Special Provision pertains to the entire Project.

Follow the Allegheny County Health Department's Rules and Regulations, Article XXI, adopted October 20, 1995 and its latest revisions concerning Air Pollution Control.

G801A - a00801 PARTNERING

Addendum:

Associated Item(s):

Header:
PARTNERING

Provision Body:

I. In accordance with Section 104.01, INTENT OF PLANS AND SPECIFICATIONS, and as follows:

(a) Covenant Of Good Faith and Fair Dealing. This contract, in its performance and enforcement, imposes an obligation of good faith and fair dealing on the Contractor and the Department.

The Contractor and the Department, with a positive commitment to honesty and integrity, agree to the following mutual duties:

- To function within the laws and statutes applicable to their duties and responsibilities,
- To assist in the other's performance,
- To avoid hindering the other's performance,
- To proceed to fulfill obligations diligently, and
- To cooperate in the common endeavor of the contract.

(b) Voluntary Partnering. The Department intends to encourage the formation of a cohesive partnership with the Contractor and its principal subcontractors and suppliers. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance and completion of all work within budget, on schedule, and in accordance with the plans and specifications.

This partnership will be bilateral in makeup, and participation will be totally voluntary. Any cost associated with bringing about this partnering will be agreed to by both parties and shared equally. Participation is not a requirement of the contract and, therefore, the costs associated with partnering are not to be included in the bid, and the provisions specified in Section 110.03(d)4. do not apply to these costs.

To implement this partnering initiative prior to the Preconstruction Conference, the Notice to Proceed, and the start of work, as specified in Sections 108.02 and 108.03, the Contractor's management personnel and the District Engineer are to organize a Partnering Seminar/Team Building Workshop as follows:

1. Facilitator. Select and obtain Department concurrence for a third party facilitator to conduct the workshop for the project stakeholders. The Contractor and the Department are to share the cost of the facilitator equally.

2. Attendees. Persons required to be in attendance are the Department's Assistant Construction Engineer, Inspector-in-Charge, and key project personnel; the Contractor's on-site project manager (Superintendent); and key project supervision personnel for both the Contractor and its principal subcontractors and suppliers. The project design engineers, key specialty or technical personnel, utility management personnel, FHWA, and key local government personnel should also be invited to attend, as necessary. The Contractor may wish to have Regional and Corporate level managers in attendance. The Department may wish to have District and State level managers in attendance.

3. Agenda. Workshop agenda is to consist of at least the following:

- Discussion of partnering principles.
- Development of a project charter with defined goals and objectives.
- Defined problem solving procedure and evaluation process.

Approximately 1/3 of the workshop should be devoted to team building and problem solving techniques; with the remainder of the time being devoted to defining project goals and objectives and issue resolution.

4. Duration. Workshop duration should normally be 2 days, but may be modified due to project related variables such as cost, complexity, number of stakeholders, project personnel partnering experience, number of potential issues, and other project-related factors.

5. Location. The workshop is to be located at a "neutral" site, in Pennsylvania, in close proximity to the project site if possible. The Contractor and the Department are to share the cost of the facilities equally.

Follow-up workshops may be held periodically throughout the duration of the contract as agreed to by the Contractor and the Department.

II. The establishment of a partnership charter on this project will not change the legal relationship of the parties to the contract nor relieve either party of responsibility for any of the terms of the contract.

G1601A - a01601 E.E.O. COVERED AREA

Addendum:

Associated Item(s):

Header:
E.E.O. COVERED AREA

Provision Body:

This Special Provision pertains to the entire Project.

For the purpose set forth in the Executive Order 11246 the covered area for this contract is Allegheny County, which is within the Economic Area of Pittsburgh, PA as listed in Appendix B of Designated Special Provision 12 (DSP12) entitled “Executive Order 11246 (with Appendix A and B)” in Appendix C of Pub 408.

G1901A - a01901 INSURANCE--GENERAL APPLICATION

Addendum:

Associated Item(s):

Header:
INSURANCE--GENERAL APPLICATION

Provision Body:

I. Name and Address of the Railroad as found in the Project Specific Details, Detail 1(***see below***).

II. GENERAL.

(a) In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, provide and carry Railroad's Protective Public Liability Insurance in the specified amounts. Also, submit a properly executed Insurance Certificate evidencing the issuance of adequate Contractor's Public Liability and Property Damage Insurance with the executed contract when it is returned to the Department.

(b) Carry the specified insurance from the time physical work is started until all physical work required to be performed under the terms of the contract is substantially completed. Failure to carry or keep such insurance in force until all work is substantially completed will constitute a violation of the contract and in such event, the Secretary may avail himself of the remedies provided under Section 108.08.

(c) Furnish to the railroad company a signed copy of the policy for Contractor's Public Liability and Property Damage Insurance and the signed original policy for Railroad's Protective Public Liability Insurance prior to entry upon railroad right-of-way. If any work is subcontracted, also furnish to the railroad a signed copy of the policy for Contractor's Protective Public Liability and Property Damage Insurance.

III. RAILROAD'S PROTECTIVE PUBLIC LIABILITY INSURANCE.

Furnish the Department evidence that, with respect to the operations the Contractor or any subcontractors perform, provide Railroad Protective Public Liability Insurance in the name of the Railroad found in the Project Specific Details, Detail 1 providing coverage for bodily injury, death, and property damage limited to a combined single limit of not less than two million dollars ($2,000,000) per occurrence with an aggregate limit of not less than six million dollars ($6,000,000) for the term of the policy.

IV. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

In accordance with Sections 103.06 and 107.14, carry regular Contractor's Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000).

V. CONTRACTOR'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE

If any work is subcontracted, furnish evidence to the Department that regular Contractor's Protective Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000) is carried, in the Contractor's behalf.

Project Specific Details:

1. The Proper Name and Address of the Railroad as referred to in Para I is:

CSX Transportation, Inc.
500 Water Street, J-301
Jacksonville, FL 32202

G1902A - a01902 INSURANCE--GENERAL APPLICATION-ADDITIONAL COVERAGE LIMITS

Addendum:

Associated Item(s):

Header:

INSURANCE--GENERAL APPLICATION-ADDITIONAL COVERAGE LIMITS

Provision Body:

I. Name and Address of the Railroad as found in the Project Specific Details, Detail 1(***see below***).

II. GENERAL.

(a) In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, provide and carry Railroad's Protective Public Liability Insurance in the specified amounts. Also, submit a properly executed Insurance Certificate evidencing the issuance of adequate Contractor's Public Liability and Property Damage Insurance with the executed contract when it is returned to the Department.

(b) Carry the specified insurance from the time physical work is started until all physical work required to be performed under the terms of the contract is substantially completed. Failure to carry or keep such insurance in force until all work is substantially completed will constitute a violation of the contract and in such event, the Secretary may avail himself of the remedies provided under Section 108.08.

(c) Furnish to the railroad company a signed copy of the policy for Contractor's Public Liability and Property Damage Insurance and the signed original policy for Railroad's Protective Public Liability Insurance prior to entry upon railroad right-of-way. If any work is subcontracted, also furnish to the railroad a signed copy of the policy for Contractor's Protective Public Liability and Property Damage Insurance.

III. RAILROAD'S PROTECTIVE PUBLIC LIABILITY INSURANCE.

Furnish the Department evidence that, with respect to the operations the Contractor or any subcontractors perform, provide Railroad Protective Public Liability Insurance in the name of the Railroad found in the Project Specific Details, Detail 1 providing coverage for bodily injury, death, and property damage limited to a combined single limit of not less than five million dollars ($5,000,000) per occurrence with an aggregate limit of not less than ten million dollars ($10,000,000) for the term of the policy.

IV. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

In accordance with Sections 103.06 and 107.14, carry regular Contractor's Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000).

V. CONTRACTOR'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE

If any work is subcontracted, furnish evidence to the Department that regular Contractor's Protective Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000) is carried, in the Contractor's behalf.

Project Specific Details:

1. The Proper Name and Address of the Railroad as referred to in Para I is:

Norfolk Southern Corporation
1200 Peachtree Street, NE - Office 7100
Atlanta, GA 30309

G2001A - a02001 INSURANCE--INVOLVING A NON-OPERATING RR

Addendum:

Associated Item(s):

Header:

INSURANCE--INVOLVING A NON-OPERATING RR

Provision Body:

I. The Proper Name and Address of the Ownerd is found in the Project Specific Details, Detail 1(***see below***).

II. GENERAL.

(a) In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, provide and carry Owner's Protective Public Liability Insurance in the specified amounts. Also, submit a properly executed Insurance Certificate evidencing the issuance of adequate Contractor's Public Liability and Property Damage Insurance with the executed contract when it is returned to the Department.

(b) Carry the specified insurance from the time physical work is started until all physical work required to be performed under the terms of the contract is substantially completed. Failure to carry or keep such insurance in force until all work is substantially completed will constitute a violation of the contract and in such event, the Secretary may avail himself of the remedies provided under Section 108.08.

(c) Furnish to the owner a signed copy of the policy for Contractor's Public Liability and Property Damage Insurance and the signed original policy for Owner's Protective Public Liability Insurance prior to entry upon Owner's right-of-way. If any work is subcontracted, also furnish to the owner a signed copy of the policy for Contractor's Protective Public Liability and Property Damage Insurance.

III. OWNER'S PROTECTIVE PUBLIC LIABILITY INSURANCE.

Furnish the Department evidence that, with respect to the operations the Contractor or any of his subcontractors perform, provide Owner's Protective Public Liability Insurance in the name of the owner found in the Project Specific Details, Detail 1 providing coverage for bodily injury, death, and property damage limited to a combined single limit of not less than two million dollars ($2,000,000) per occurrence with an aggregate limit of not less than six million dollars ($6,000,000) for the term of the policy. Larger limits of insurance may be required in certain cases as specified by the Owner in any attachments

IV. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

In accordance with Sections 103.06 and 107.14, carry regular Contractor's Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000).

V. CONTRACTOR'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

If any work is subcontracted, furnish evidence to the Department that regular Contractor's Protective Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000) is carried, in the Contractor's behalf.

Project Specific Details:

1. The Proper Name and Address of the owner as referred to in Para I is:

Pittsburgh and Ohio Central Railroad
47849 Papermill Road
Coshocton, OH 43812

G2201A - a02201 RAILROAD COMPANY CONTACT PERSON

Addendum:

Associated Item(s):

Header:

RAILROAD COMPANY CONTACT PERSON

Provision Body:

Contact the following railroad company representative to request protective services required by the special provision entitled "Maintenance and Protection of Railroad Traffic":

Mr. Carl A. Roe, Jr.
CSX Transportation, Inc.
500 Water Street, J-301

Jacksonville, FL 32202
Telephone: (904) 359-1036

Mr. Tom Bracey
Norfolk Southern Corporation
1200 Peachtree Street, NE - Office 7100
Atlanta, GA 30309
Telephone: (404) 527-2536

Mr. John B. Corns
Pittsburgh and Ohio Central Railroad
47849 Papermill Road
Coshocton, OH 43812
Telephone: (740) 622-8092

G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Addendum:

Associated Item(s):

Header:
MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Provision Body:

I. Make the safety and operation continuity of the railroad company traffic of the first importance. At all times protect and safeguard such traffic and arrange project work accordingly. Whenever the work may affect the safety and movement of trains, submit the method of doing such work to the chief engineer of the railroad company or duly authorized representative for approval. Do not begin or prosecute work without such approval. However, the approval of the railroad company's chief engineer or duly authorized representative will not be considered as a release from responsibility for any damage to the railroad company by the acts of the Contractor or those of his/her employees. Prepare and submit plans for approval to the railroad company's chief engineer for all work, including, but not limited to, tunneling under tracks, sheeting, shoring, and erection in the vicinity of and over tracks.

II. During the construction period, the railroad company and the Department will co-operate with each other in the protection of their respective traffic and in the construction as indicated. Give the chief engineer of any involved railroad fourteen (14) days written notice before any work is started on railroad property, in order that the necessary arrangements may be made to properly protect railroad traffic.

III. The railroad company will provide all watchmen, operators, flagmen, clearance men, and similar protective services, considered by the railroad company's chief engineer or his duly authorized representative as necessary to insure the safety of trains contingent upon the project's operations, at the sole expense of the Department. It is agreed, however, that providing of such watchmen, and other precautions, will not relieve liability of payment for damage caused by project operations. The Department will not be responsible for such damage.

IV. It is expressly understood that this contract includes no work for which the railroad company is to be billed. Therefore, do not bill the railroad company for any work which may be performed unless the railroad company gives a written request that such work be performed at its expense.

V. The raising or surfacing of tracks due to any settlement, caused by the project operations will be performed by the railroad, but the cost will be borne entirely by Contractor.

VI. During construction a minimum overhead clearance of 6.7m (7m for electrical tracks) (22 feet (23 feet for electrical tracks)) above the top of rail and a minimum horizontal clearance of 12 feet from centerline of tangent track will be permitted. If the clearances indicated are less than those stated above, then the lesser clearance will be permitted. In any case, this minimum side clearance applies to tangent track only. For curved track, provide additional minimum side clearance to compensate for curvature. Contact the railroad company's chief engineer to ascertain the amount of additional minimum side clearance required. If at any time during construction it is decided that project operations require overhead and/or side clearances less than the minimum stated

or indicated submit a request to the railroad company's chief engineer as outlined above for safety and continuity of railroad operations. Deviate from those minimums stated above or indicated, only upon receipt of approval of such a request.

VII. Do not work over any high tension wires or within 10 feet on each side and below such wires. When it is necessary to work or place equipment within these limits, make arrangements with the railroad to furnish electrical clearance men and de-energize the wires contingent upon railroad operation. Where voltage exceeds 50,000 volts, increase this working clearance.

G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS

Addendum:

Associated Item(s):

Header:
RAILROAD PROTECTIVE SERVICES COSTS

Provision Body:

I. The Department will make payment to the railroad for all costs associated with watchmen, operators, flagmen, clearance men, and similar protective services provided by the railroad company based on railroad regulations and the Contractor's construction schedule.

II. Actual costs will be assessed by the Department whenever protective services are provided by the railroad at the request of the Contractor, but if such requested services are not utilized due to a change in the Contractor's construction schedule or if it is determined by the Department that the requested services were not necessary, the actual costs to be assessed by the Department against the Contractor will be the amount billed by the railroad to the Department.

III. It will be the Contractor's responsibility to obtain the protective services from the railroad and the Department assumes no liability for any delays caused by the failure of the Contractor to obtain such services.

IV. The actual costs to be assessed above will be deducted from money due or that becomes due the Contractor.

G4401B - a04401 UTILITIES--FOR USE ON PROJECTS WITH MINIMUM EXCAVATION - For SR 79-A40, 41, 42, 43, 44, 45

Addendum:

Associated Item(s):

Header:
UTILITIES--FOR USE ON PROJECTS WITH MINIMUM EXCAVATION

Provision Body:

In accordance with provisions of Act 287-1974, identify and contact all utilities having existing aerial or underground facilities located within the limits of work to arrange for marking of the field locations of these facilities prior to performing any excavation, drilling, and/or driving. Cooperate with affected utilities and/or municipalities in any necessary adjustment or relocation of their facilities.

G4710A - a04710 - UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS

Addendum:

Associated Item(s):

Header:
UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS

Provision Body:

This is to certify that the utility relocation coordination for contract document 74919 has not been finalized as this is a partial Design/Build Project and final design is not completed. The Design/Build Team must coordinate any and all utility work required to complete the subject SR 0065-A38 project.Such coordination includes, but is not limited to:

- Contact all utilities identified or having facilities within the project limits within 7 calendar days from the issuance of the Notice to Proceed and thereafter in intervals not to exceed 30 calendar days and provide updates to the District Utility Administrator (DUA) as to plan development and anticipated calendar days for both the utility and contractor.
- Coordinate all utility relocation design and resulting relocation arrangements within the physical construction schedule established by the Design/Build Team.
- Coordinate required utility relocation highway occupancy permits and utility reimbursement agreements through the DUA.
- Coordinate the relocation of any utilities affected by the project.If the utilities state that they have a real property interest within the project limits, then the reimbursement documents including real property interest documentation must be forwarded to the DUA immediately upon receipt.The DUA will forward the information to the Central Office Utility Relocation Unit (COURU) so determination can be made on the real property interest.

The Design/Build Team must have a Utility Coordination Manager for projects involving complex utility relocations.

The Design/Build Team must be fiscally responsible for the cost of any additional relocations a utility must make due to the Design/ Build Team changing plans and/or construction sequences that were established by the Design/Build Team upon acceptance of the utility's/utilities' relocation plan(s) and where the utility has physically moved their facilities based upon those approved Design/ Build Team plans and/or construction sequences.

For all utility relocation coordination activities, the Design/ Build Team must follow the procedures as provided in PENNDOT Publication 16M, Design Manual 5M, Utility Relocation.

Throughout the project, upon taking appropriate action, the Design/ Build Team must forward all utility documents and correspondence to the DUA.

All documents associated with the utility relocation process requiring signatures must be reviewed and approved by the Design/ Build Team and forwarded to the DUA for review. The DUA in turn will forward all documents needing approval by the COURU to them for review.

PENNDOT UTILITY RELOCATION UNIT'S SCHEDULED TIMES

The following schedule is for complete review and issuance of document times:

DUA processes utility relocation highway occupancy permit and/or utility reimbursement documentation.The review of completed submissions and issuance of reimbursement agreements will require 30 working days which includes a maximum of 8 working days at COURU.

Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers.The login time will be taken as the latest date in which the submission is received by the reviewers.Submittals received after 12:00 pm will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin from the date when all required information is received.Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-confirming submissions.Working days are weekdays, Monday through Friday.The following official Department holidays will not be included as working days:

New Year's Day, Dr. Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving Day, and Christmas Day.

Below is a list of the known utilities on the project, along with contact names and phone numbers.It will be the Design/Build Team's responsibility to verify the list of utilities and contact all utilities within the project limits including any utilities not listed below.

Utilities:

Equitable Gas Company 200 Allegheny Center Mall Pittsburgh, PA 15212-5352 Phone: (412) 395-3127 Attention: Mr. George Pozzuto	Columbia Gas of PA, Inc. 501 Technology Drive Canonsburg, PA 15317 Phone: (724) 416-6317 Attention: Mr. Nelson White
Quest Communications 113 Loire Valley Drive Pittsburgh, PA 15209 Phone: (412) 999-0726 Attention: Mr. Bill Macaulay	Duquesne Light Company 2825 New Beaver Avenue Building 6 Pittsburgh, PA 15233-1003 Phone: (412) 393-7813 Attention: Mr. Jim Runatz
AT&T 2315 Salem Road, 2nd Floor D3 Conyers, GA 30013 Phone: (1-770) 918-5433 Attention: Ms. N. Jean Riley	Verizon of PA Right of Way 201 Stanwix Street, 4th Floor Pittsburgh, PA 15222 Phone: (412) 633-3810 Attention: Ms. Debbie Delia
Elantic Network, Inc. 6341 Thompson Road Syracuse, NY 13206 Phone: (1-315) 414-0127 Attention: Mr. Bill McBride	Glenfield Borough 299 Dawson Avenue Sewickley, PA 15143 Phone: (412) 741-8566 Attention: Ms. Janet Mascara
Equitrans L. P. 4111 Finley-Elrama Road Finleyville, PA 15332 Phone: (724) 852-7330 Attention: Mr. Mike Macklin	Level 3 Communications 200 Technology Drive Pittsburgh, PA 15219 Phone: (412) 770-9283 Attention: Mr. Matt Hill
Aleppo Township 100 North Drive Sewickley, PA 15143 Phone: (412) 741-6555 Attention: Ms. Gwen Patterson	

For the SR 79-A40, A41, 42, 43, 44, 45 of this subject highway construction project, Standard Special Provision, a04401, in lieu of D-419 will be included:

In accordance with provisions of Act 287-1974, as amended, identify and contact all utilities having existing aerial or underground facilities located within the limits of work to arrange for marking of the field locations of these facilities prior to performing any excavation, drilling, and/or driving. Cooperate with affected utilities and/or municipalities in any necessary adjustment or relocation of their facilities.

G4801B - a04801 PRICE ADJUSTMENT FOR DIESEL FUEL COST FLUCTUATIONS

Addendum:

Associated Item(s):

Header:

PRICE ADJUSTMENT FOR DIESEL FUEL COST FLUCTUATIONS

Provision Body:

I. These requirements provide for a price adjustment in the form of a payment to the Contractor or a rebate to the Department for fluctuations in the cost of diesel fuel consumed in the performance of applicable construction work.

(a) General. These price adjustment provisions apply to contract items in the contract schedule of prices as grouped by category. Category descriptions and the fuel usage factors which are applicable to each are as follows:

1. Categories

1.a Category A: Earthwork. Contract items performed under Sections 203, 204, and 205, including any modified standard or nonstandard item where the character of the work to be performed is considered earthwork. The total of the applicable item plan quantities must exceed 38,250 m^3 (50,000 CY).

1.b Category B: Subbase and Aggregate Base Courses. Contract items constructed under Sections 320, 321, 341, 342, and 350 including any modified standard or nonstandard item where the character of the work to be preformed is considered construction of a subbase or aggregate base course. The total of the applicable item plan quantities must exceed 4,535 tonnes (5,000 tons)

1.c Category C: Flexible Bases and Pavements. Contract items constructed under Sections 305, 309, 360, 409, 420, 421, 422, 423, 424, 430, 431, 439, 440, 470, 471, 472, 480, 481, 651, 653, 654, 656 and 657, including any modified standard or nonstandard item where the character of the work to be performed is considered construction of a flexible base or pavement. The total of the applicable item plan quantities must exceed 4,535 tonnes (5, 000 tons).

1.d Category D: Rigid Bases and Pavements. Contract items constructed under Sections 301, 302, 303, 501, 502, 505, 506, and 658, including any modified standard or nonstandard item where the character of the work to be performed is considered construction of a rigid base or pavement. The total of the applicable item plan quantities must exceed 8,350 m^2 (10,000 SY).

1.e Category E: Structures. Structure (s) having an "S" drawing and a cumulative bid price that exceeds $250,000, based upon the total lump sum price for each structure including any associated items of work (i.e. AND items) not grouped under Categories A thru D.

2. Diesel Fuel Usage Factors - METRIC UNITS

Category	Factor	Factor
A - Earthwork	1.68	Liters per m^3
B - Subbase and Aggregate Base Courses	2.59	Liters per tonne
C - Flexible Bases and Pavements	12.43	Liters per tonne
D - Rigid Bases & Pavements	4.85	Liters per m^3
E - Structures	30.28	Liters per $ 1,000 of work performed

3. Diesel Fuel Usage Factors - ENGLISH UNITS

Category	Factor	Units
A - Earthwork	0.34	Gallons per CY
B - Subbase and Aggregate	0.62	Gallons per ton
Base Courses		
C- Flexible Bases & Pavements	2.98	Gallons per ton
D-Rigid Bases & Pavements	0.98	Gallons per CY
E - Structures	8.00	Gallons per $ 1,000 of work performed

4. Quantity Conversion Factors - METRIC UNITS

Category Conversion Factor

B m^2 to tonne 2 kg/mm of depth/m^2
C m^2 to tonne 2.5 kg/mm of depth/m^2
D m^2 to m3 mm of depth/1000

5. Quantity Conversion Factors - ENGLISH UNITS

Category Conversion Factor

B SY to ton 90 lbs/inch of depth/SY
C SY to ton 120 lbs/inch of depth/SY
D SY to CY inches of depth/36

II. The Department posts a monthly index price for Low Sulfur (LS), No. 2 Diesel Fuel using price data obtained, on the last Wednesday of the preceding month, from the Oil Price Information Service (OPIS), which publishes a weekly report on gasoline and distillate reseller prices for cities in the Eastern U.S. Price data reported for Harrisburg, Philadelphia, and Pittsburgh is averaged together to determine the statewide index price.

The price index in the bid proposal, FB, will be the index price posted by the Department, determined as specified above, for the month in which the project is advertised.

PRICE INDEX (FB) FOR DIESEL FUEL

PER LITER(PER GALLON) = $ (***is as found in the Project Specific Details, Detail 1***)

The price index at the time of performance, FP, will be the index price posted by the Department, determined as specified above, for the month during which applicable contract work is performed.

III. Price Adjustment Criteria and Conditions. The following criteria and conditions will be considered in determining a price adjustment for diesel fuel cost fluctuations.

(a) No Price Adjustment. When the ratio FP/FB falls within the range of 0.95 to 1.05, no price adjustment will be made for any diesel fuel consumed in construction work during the relevant month.

(b) Price Rebate. When the ratio FP/FB is calculated to be less than 0.95, the Department will receive an automatic price rebate determined in accordance with the following formula:

P.R. = (0.95 - FP/FB)(Q)(FB)(F)

where:
P.R. = Price Rebate
FP = Price Index for the month during which the diesel fuel is consumed in the performance of applicable construction work.
FB = Price Index in the Bid Proposal
Q = Quantity of eligible Category items as reported on current Estimates. Item quantities will be converted, as necessary, to agree with the units associated with the applicable Diesel Fuel Usage Factor.
F = Diesel Fuel Usage Factor

(c) Price Increase. When the ratio FP/FB is calculated to be greater than 1.05, the Contractor will receive a price increase to be determined in accordance with the following formula:

P.I. = (FP/FB - 1.05)(Q)(FB)(F)

where:
P.I. = Price Increase
FP = Price Index for month during which the diesel duel is consumed in the performance of applicable construction work.
FB = Price Index in the Bid Proposal
Q = Quantity of eligible Category items as reported on current Estimates. Item quantities will be converted, as necessary, to agree with the units associated with the applicable Diesel Fuel Usage Factor
F = Diesel Fuel Usage Factor

(d) Payment/Rebate. The price adjustment will be paid, or rebated, upon approval of a work order to be prepared after completion of all work. Cumulative price adjustments amounting to less than $1,000 will be disregarded. Upon written request by the Contractor, partial payments may be made, prior to total completion, when the unpaid accrued price increase exceeds $10,000 or once every 12 months.

(e) Expiration of Contract Time. When eligible items of work are performed after expiration of contract time and liquidated damages are chargeable the value of FP used to compute the price adjustment will be either the Price Index at the time of actual performance or the Price Index at the time contract time expired, whichever is less.

(f) Final Quantities. Upon completion of the work and determination of final pay quantities, an adjusting work order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for FP used in the price adjustment formula will be the average of all FP' s previously used for computing price adjustments.

(g) Inspection of Records. The Department, through the Office of Inspector General, reserves the right to inspect the records of the prime contractor and its subcontractors and material suppliers to ascertain actual pricing and cost, information for the diesel fuel used in the performance of applicable items of work.

(h) Extra Work. When applicable items of work, as specified herein , are added to the contract as Extra Work, in accordance with the provisions of Section 110.03, no price adjustment will be made for fluctuations in the cost of diesel fuel consumed in the performance of the extra work, unless otherwise approved by the Engineer. The current price for diesel fuel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on force account basis, reimbursement for material, equipment, and service by others costs along with specified overhead and profit markups will be considered to include full compensation for the current cost of diesel fuel.

Project Specific Details:

1. The per gallon cost as referenced in Para II. is: $ 1.42

G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT

Addendum:

Associated Item(s):

Header:
PRICE INDEX FOR ASPHALT CEMENT

Provision Body:

This Special Provision pertains to the entire Project.

The price index for asphalt cement (PG 64-22), as determined by the Department is $423.00 per ton. Use this price index in accordance with Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS.

G4902B - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Addendum:

Associated Item(s):

Header:
PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Provision Body:

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

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

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

The Department posts a monthly index price for steel ($ per ton) based on data obtained from the U.S. Department of Labor (USDOL), Bureau of Labor Statistics, which publishes monthly Producer Price Index (PPI) values for various commodities. The statewide index price for steel will be based on the PPI value posted by USDOL for "Semi-finished Steel Mill Products" (Series ID: WPU101702). The Department will post its monthly index price for steel after the USDOL lists the PPI value on which it is based as final.

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

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

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

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

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

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

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

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

where:

P.R. = Price Rebate

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

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

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

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

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

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

where:

P.I. = Price Increase

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

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

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

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

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

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

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

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

Steel Tonnage (ST) = 7.84 (Q) / 2000

where:

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

4.a.2. Type 2W Posts.

Steel Tonnage (ST) = 8.67 (L) (Q) / 2000

where:

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

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

4.a.3 Type 2S Posts.

Steel Tonnage (ST) = 9.17 (L) (Q) / 2000

where:

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

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

4.a.4 Rubbing Rail.

Steel Tonnage (ST) = 8.56 (Q) / 2000

where:

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

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

Steel Tonnage (ST) = (Q) / 2000

where:

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

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

4.c.1 Steel H-Piles.

Steel Tonnage (ST) = (UW) (Q) / 2000

where:

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

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

* The unit weight of steel will be the second of the two numbers associated with the size designation for the beam as cited in the item description (i.e. If the item description is "Steel Beam Bearing Piles, HP12x74", the unit weight of the steel is 74 pounds per foot).

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

Steel Tonnage (ST) = 2.80 (D) (Q) / 2000

where:

D = Diameter of the steel shell (inches)*

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

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

4.c.3 Pipe Piles.

Steel Tonnage (ST) = 6.70 (D) (Q) / 2000

where:

D = Diameter of the steel pipe (inches)*

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

* From the approved structure Plans or field measurements.

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

Steel Tonnage (ST) = (Q) / 2000

where:

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

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

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

Steel Tonnage (ST) = (Q) / 2000

where:

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

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

Steel Tonnage (ST) = (UW)(Q)/2000

where:

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

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

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

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

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

7. Final Quantities. Upon completion of the work and determination of final pay quantities, a final contract adjustment may be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for SI used in the price adjustment formula will be the average of all SI values previously used for computing price adjustments.

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

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

G7019A - a07019 CHANGES TO SPECIFICATIONS: SECTIONS 627, 901, and 1005

Addendum:

Associated Item(s):

Header:
CHANGES TO SPECIFICATIONS: SECTIONS 627, 901, and 1005

Provision Body:

SECTION 627 - Temporary Concrete Barrier

- 627.2 - Material. Revise to read as follows:

627.2 MATERIAL-

- Precast Concrete Barrier or Glare Screen
  - Barrier fabricated as shown in the Standard Drawings and Section 714

    OR

  - Certification and Shipment to Project - Certify each shipment with a copy of FHWA's acceptance letters indicating NCHRP 350 Test Level 3 (TL 3) or higher compliant barrier.
- Mortar-Section 1001.2(d)
- Structural Steel-Section 1105.02(a)2
- Warning Lights-67 PA Code, Chapter 213 and from a manufacturer listed in Bulletin 15.
- Barrier Mount Delineation Devices - Section 937.2(a)

- Section 627.3 - Construction. Revise to read as follows:

627.3 CONSTRUCTION-

(a) General. Place clean, precast barriers on a stable base, then properly join and align the barriers at the required locations. Install a bond breaker when placing barrier on bituminous pavement to prevent damage to the pavement when removing the barrier. Install delineators and warning lights as directed and according to the manufacturer's recommendations. Maintain alignment, delineation, warning lights, and condition of the barriers as necessary, for the duration of the project. Remove the barriers from the project upon project completion, or when directed.

Immediately replace or repair barriers showing the following signs of damage:

- fractures or cracks, that, as determined by the Representative, hinder the barrier performance.

- broken or cracked ends that, as determined by the Representative, prevent making a satisfactory joint.

- Section 627.4(a) - Incidental Work. Revise to read as follows:

(c) Incidental Work. The following work is incidental to the temporary concrete barrier item:

- burying approach blunt ends of the temporary concrete barrier into an existing backslope 1:3 (3:1) or steeper
- cleaning and removal of conflicting markings
- application of bond breaker

SECTION 901-MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

- Section 901.3(a) - General. Revise to read as follows:

(a) General. Comply with Publication 212, Publication 213, and the MUTCD.

Install and maintain traffic control devices as indicated on the TCP, or an approved alternate plan submitted at the preconstruction conference. The Representative may revise the TCP in writing during construction. If unforeseen conditions arise or if revisions are made to the TCP by the Representative, install and maintain additional warning lights and traffic control signs on necessary mounting devices according to Publication 212, Publication 213, and the MUTCD, and at locations designated in writing by the Representative. Use Department approved channelizing devices only. Reflectorize channelizing devices according to Publication 212, Publication 213, and the MUTCD. Provide safety for general public and work crew, and protection of work. Schedule construction operations to allow movement of traffic through various phases of construction with minimum interference. If traffic interruptions become too frequent, cease operations in the area concerned, as directed. Take remedial action to correct situation before continuing operations. Remove or cover existing traffic control devices that conflict with the TCP. When conflict no longer exists, erect or uncover them.

Install and maintain reduced regulatory speed limit signs in work areas, as indicated on the TCP, approved alternate plan, or as directed.

Temporarily remove or cover reduced regulatory speed limit signs when workers are not present, except as otherwise indicated on the TCP, approved alternate plan, or as directed.

Install temporary bituminous rumble strips according to locations, patterns, and configurations indicated. Maintain rumble strips in place for the period indicated or as directed, and remove them immediately thereafter. Restore the surface after removal and obtain acceptance.

Open any substantially completed section of roadway for the use and convenience of traffic, as directed, and as specified in Section 107.15. When work is completed, immediately remove temporary traffic control devices.

Maintain, clean, and properly operate the devices during the entire time they are in use. Traffic control devices must meet the acceptable or marginal standards of the Pennsylvania Quality Guidelines for Temporary Traffic Control Devices. Remove all devices when no longer required. Where operations are performed in stages, keep only the necessary devices that apply to the present stage of construction in operation.

Cover or remove from service signs that do not apply to the existing conditions. Cover with rubber roofing material (EPDM) having a thickness of 1.1 mm (0.045 inch) or any other approved material, to cover the entire sign. Stabilize and fasten this material to the sign with either plastic or wood to prevent any movement. Do not apply tape to face of sign. Do not deface or damage the sign face using this procedure.

Do not allow weeds, brush, trees, construction equipment, materials, and the like to obscure any traffic control device.

- 901.3(q) - Temporary Concrete Barrier. Revise to read as follows:

(q) Temporary Concrete Barrier. Blunt ends of temporary concrete barrier or glare screen will not be allowed. Protect blunt ends by burying them in a cut slope or using an appropriate end treatment according to the pertinent parts of the following: Design Manual, Part 2, Section 696, and the Standard Drawings.

Provide, install, and maintain top-mounted and side-mounted delineators on temporary concrete barriers, glare screen and bridge barrier as indicated on the TCP.

Clean or replace all delineators once per month or as directed. Clean in an approved method.

- 901.3(t) - Non-Compliance of Maintenance and Protection of Traffic. Revise to read as follows:

(t) Non-Compliance of Maintenance and Protection of Traffic. Work zone liquidated damages will be assessed in the event the Contractor neglects or refuses to correct a situation or condition of non-compliance with Maintenance and Protection of Traffic requirements (TCP, Publication 212, Publication 213, and the MUTCD, or other contract traffic control requirements).

When deficiencies are found, a copy of the Work Zone Traffic Control Compliance Checklist and Notification Form, CS-901, will be delivered to the Contractor to correct the deficiencies as soon as possible. After receiving this notification the Contractor may be assessed work zone liquidated damages if deficiencies are not corrected within the maximum time frames established below.

- Traffic control devices for short term operations - 2 hours
- Traffic control devices for long term operations - 24 hours, except for the following:

  Urgent

  - Three or more consecutive channelizing devices - 2 hours
  - Stop and Yield sign - 2 hours
  - Arrow panels - 2 hours
  - Attenuating devices - respond within 4 hours and complete repairs within 24 hours after notified the device is damaged

The base amount of work zone liquidated damages will be $1,000.00.

For long-term operations (as defined in Publication 213), an additional $100.00 assessment for each hour or portion thereof will be added to the $1,000.00 base amount until the deficiency is corrected.

For short-term operations (as defined by Publication 213), an additional $100.00 for each hour or portion thereof will be added to the $1,000.00 base amount until the deficiency is corrected.

Assessment of work zone liquidated damages will end when the Representative concurs that the deficiencies have been corrected.

If the Contractor remains in violation of the Maintenance and Protection of Traffic requirements, the District Executive will direct Department forces to correct the deficiencies and charge the Contractor for labor, equipment, and material costs incurred by the Department or suspend work in accordance with Section 105.01(b) until the deficiencies are correted.

- 901.3(v) - Criteria to Determine Non-Compliance with Maintenance and Protection Requirements. Revise to read as follows:

(v) Not in use

- 901.3(w) - Changeable Message Sign. Revise to read as follows:

(w) Changeable Message Sign. Furnish, operate, and maintain three-line or full matrix portable, trailer mounted, changeable message signs for traffic control as indicated or directed. Have all locations, messages, and times of operation approved by the District Traffic Engineer or authorized Representative.

When providing telecommunications they must be capable of changing message or sequences of messages from a hand held device and/or personal computer, with the computer having calendar and time mode capability. Provide appropriate software for personal computer for the purpose of remotely operating the changeable message sign(s). For the duration of the project, provide a qualified technician familiar with the programming and operation of the changeable message sign. Designate the technician to be on call 24 hours a day, 7 days a week and to arrive on the project site within 3 hours of notification. Provide capability to monitor approaching vehicles via radar and display the vehicle's speed on the message sign.

SECTION 1005 - PILES

- Section 1005.3(b)3. Driving Bearing Piles. Revise to read as follows:

3. Driving Bearing Piles. Do not drive bearing piles until the Structure Control Engineer has established the predetermined pile tip elevation and driving resistance from representative test piles or pile load tests.

Drive piles plumb or to the batter indicated. Drive piles to absolute refusal, or to the predetermined pile tip elevation and to the driving resistance established from test piles or pile load tests.

Unless otherwise indicated, the predetermined pile tip elevation is considered approximate in order to allow for variations in the locations or strength of the stratum from which the pile obtains its primary capacity. The limit of the approximation is established from pile load tests or test piles.

Drive bearing piles for a given structure, bridge, or foundation unit with the same hammer, under the same operating conditions, and with the same type and size of capblock and cushion material used to drive the test piles or load test piles.

Redrive piles raised by the driving of adjacent piles to the required driving resistance and tip elevation.

The Structure Control Engineer will reject driven piles with a deviation of more than 50 mm in 3000 mm (2 inches in 10 feet), from vertical or from the batter indicated. Do not drive the piles with their tops more than 150 mm (6 inches) out of the indicated position after driving. If piles extend above ground for open bent construction, Abutment on Mechanically Stabilized Earth Wall construction, or Integral Abutment construction, drive each pile with the butt within 50 mm (2 inches) of the location indicated and the longitudinal axis of the pile within 15^{o} of the orientation indicated for the length of the pile.

In full-depth footings, enclose piles that are driven closer to the edges of footings than indicated. Extend far enough to obtain the indicated encasement. Add additional reinforcement, as directed.

- Section 1005.3(g)2. Pile Driving Analyzer. Revise to read as follows:

2. Pile Driving Analyzer: The product of a resistance factor of 0.7 times the pile capacity as established by pile driving analyzer or CAPWAP analysis is greater than or equal to the plan factored axial resistance as indicated.

- Section 1005.4. Measurement and Payment. Revise to read as follows:

1005.4 MEASUREMENT AND PAYMENT- The Department will not pay for unauthorized piles, defective piles, unsatisfactorily driven piles, portions of bearing piles cut off, bearing piles not driven, or for any costs for such piles or portions of piles.

The following work will be considered Extra Work under Secion 110.03 (unless payment for such work is otherwise provided for in the conract, in which event the work will not be considered Extra Work and will be paid for as otherwise provided in the contract):

- Augering, predrilling, spudding, pre-excavation, jetting below the original ground, extracting satisfactorily driven piles, and test borings related to such work, when such work is directed to advance the piles to predetermined pile tip elevations, and
- When piles installed for integral abutments or abutments on mechanically stabilized walls are damaged by twisting as a result of conditions identified as differing site conditions pursuant to Section 110.02(b), the extraction of such damaged piles, predrilling for the driving of piles replacing such damaged piles, and the driving of piles replacing such damaged piles

The cost of spudding, augering, or drilling to original ground through embankments placed within this Contract is incidental for test piles and bearing piles, unless payment for such work is provided in the Contract.

The Department will not pay for the extraction and replacement of damaged piles.

(a) Test Piles. Lump Sum

The Department will pay for test piles at the Contract lump sum price per unit or group of units, including necessary cutting off, splicing and rebuilding to the indicated test pile length. The price includes necessary excavation for pile splicing, rebuilding, and extending; all pile driving equipment furnished on the project; costs of transporting the equipment to the project; erecting, maintaining, and moving the equipment within the project; and dismantling and removing the equipment from the project, and pile tip reinforcement.

Additional test piles and extensions in excess of the indicated number and location and the length of extensions added or placed in the leads to make the piles longer than the indicated test pile lengths will be measured and paid for by the meter (linear foot) price of bearing piles. The length will be measured from the driven end or the beginning of the splice to the top of the pile or cutoff elevation, for the corresponding type of bearing pile.

For any test piles specified in the proposal but not required to be placed, adjustment of payment will be made as specified in Section 110.02. Cutoff portions of test piles will remain the property of the Contractor.

Costs associated with the use of proximity switch(es) for the monitoring of piles, as specified, will be incidental to the price bid for test piles.

(b) Bearing Piles. Meter (Linear Foot)

Measured from the pile driven end to the indicated cutoff elevation. If piles are ordered driven to an elevation other than that indicated, measurement will be made from the new pile driven end to the cutoff elevation indicated or directed.

This will not include any portion of the tip reinforcement that extends below the driven end of the pile, if tip reinforcement is paid for separately.

The unit price includes costs of furnishing and driving, cutting off, splicing, rebuilding or extending and excavating necessary for splicing and rebuilding or extending.

A bearing pile that is in satisfactory condition after being driven and that meets specifications except for bearing capacity and/or stability, or because absolute refusal was attained above a predetermined pile tip elevation, will be considered acceptable for payment. If acceptable piles have to be replaced with another type of construction, and are removed or cut off, the length below the cut off elevation, or the bottom of the other construction, is the length for which payment will be made.

Piles that reach absolute refusal above a predetermined pile tip elevation due to freezing resulting from discontinuous driving are unsatisfactorily driven piles, and the Department will not pay for these piles. If either augering, predrilling, spudding, pre-excavation, or jetting is directed because of these unsatisfactory piles, the additional work is to be done at no expense to the Department.

The Department will not deduct the volume of concrete displaced by piles from the foundation concrete quantities.

Costs associated with the use of proximity switch(es) for the monitoring of piles, as specified, will be incidental to the price bid for bearing piles.

(c) End Closures for Shells and Points for Timber Piles. Metal end closures for shells for cast-in-place bearing piles and metal points for timber bearing piles will be included in the Contract unit price per meter (linear foot) for the pile of which it is a part. The Department will not pay separate or additional compensation.

End closures and points for test piles and test load piles will be included in the Contract lump sum prices for those items.

(d) Bearing Pile Tip Reinforcement. Each

G7020B - a07020 CHANGES TO SPECIFICATIONS: SECTION 409

Addendum:

Associated Item(s):

Header:
CHANGES TO SPECIFICATIONS: SECTION 409

Provision Body:

SECTION 409-Superpave Mixture Design, Standard and RPS Construction of Plant-Mixed HMA Courses

- Section 409.2(a) Bituminous Material. Revise to read as follows:

  (a) Bituminous Material

1. Virgin Mix, Mix Containing 5% to 15% RAP, or Mix Containing 5% Recycled Asphalt Shingles (RAS). Furnish material conforming to the requirements of Standard Specifications for Performance-Graded Asphalt Binder, AASHTO M 320, except as

revised in Bulletin 25. Obtain material from a source listed in Bulletin 15 for the specified grade. Provide QC testing and certification as specified in Sections 106.03(b) and 702.1(b)1. Provide the Representative a copy of a signed Bill of Lading for bituminous material on the first day of paving and when the batch number changes.

2. Mix Containing More than 15% RAP or Mix Containing Both 5% RAS and 5% or More RAP. The MTD will evaluate the asphalt cement in the RAP and, if applicable, the RAS source material. The MTD will determine the class (grade) of asphalt cement that the Contractor is required to use in the mixture.

Furnish material conforming to the requirements of Standard Specifications for Performance-Graded Asphalt Binder, AASHTO M 320, except as revised in Bulletin 25. Obtain material from a source listed in Bulletin 15 for the specified grade. Provide QC testing and certification as specified in Sections 106.03(b) and 702.1(b)1. Provide the Representative a copy of a signed Bill of Lading for bituminous material on the first day of paving and when the batch number changes.

- Section 409.2(c) RAP. Revise to read as follows:

  (c) Recycled Asphalt Material

1. RAP. If RAP material is proposed for use in the mixture, use at least 5% RAP consisting of cold milled or crushed hot mix bituminous mixture. Include a plan to control RAP and the procedures to handle RAP of significantly different composition in the producer QC Plan. Maintain all processed material free of foreign materials and minimize segregation. Process the RAP so that the final mixture conforms to Section 409.2(e).

2. Manufacturer Waste Recycled Asphalt Shingles (RAS). If RAS material is proposed for use in the mixture, use 5% RAS by weight of the total mixture consisting of manufacturer waste shingles that are rejected asphalt shingles or shingle tabs that are discarded in the manufacturing process of new asphalt roofing shingles. Do not use post-consumer asphalt roofing shingles that are removed from the roofs of existing structures. Due to significant composition differences, keep rejected asphalt shingles manufactured with fiberglass felt or paper or organic felt separate. Do not use both fiberglass felt, and paper or organic felt asphalt roofing shingles in the same mixture. Obtain certification, as specified in Section 106.03(b)3., from the manufacturer of the waste shingles certifying that the waste shingles were discarded during the manufacturing process of new asphalt roofing shingles and certifying the type of felt used during manufacturing of the waste shingles. Maintain and provide the Representative access to all certification records for manufacturer waste shingles.

Process any RAS material by shredding, screening or other methods so that 100 percent passes the 12.5 mm (1/2 inch) sieve. RAS may be uniformly blended with fine aggregate as a method of preventing the agglomeration of RAS material. If RAS and fine aggregate are blended, blend at 50% by mass (weight) of each material.

Include a plan to stockpile and control RAS and the procedures to handle RAS of significantly different composition in the producer QC Plan. Maintain all processed material free of foreign materials and minimize segregation. Process the RAS so that the final mixture conforms to Section 409.2(e).

- Section 409.2(e)1.a.3 Materials Storage and Handling. Revise the first and second bullets to read as follows:

  - Aggregate/RAP/RAM/RAS stockpiles.
  - Cold-feed systems for aggregates/RAP/RAM/RAS.

- Section 409.2(e)1.d.2 Asphalt Content. Revise to read as follows:

1.d.2 Asphalt Content. Include in the producer QC Plan a frequency of obtaining mixture samples according to PTM No. 1 and performing asphalt content tests to verify that the mixture conforms to the tolerances of Table A. Test the samples according to either PTM No. 757, PTM No. 702, or PTM No. 742. After obtaining a minimum of three test results, determine compliance with the multiple sample tolerances in Table A. After obtaining five or more test results, determine compliance with the multiple sample tolerances in Table A using the running average of the last five consecutive test results.

Printed ticket results may be used in place of laboratory test results for QC of asphalt content of the mixture if the producer is currently approved to use printed tickets according to Bulletin 27. During mixture production, maintain 90% of printed ticket results for each day of production within 0.2 percentage points of the JMF. If RAP or RAS is used in the mixture, determine asphalt content by testing samples of the completed mixture.

- Section 409.2(e)1.d.3 Gradation. Revise the first paragraph to read as follows:

1.d.3 Gradation. Sample the completed mixture, or sample the combined aggregate from the hot bins of a batch plant or the combined aggregate belt of a drum plant, according to PTM No. 1 and at the frequency in the producer QC Plan. If mineral filler, RAP, or RAS are used in the mixture, determine gradation by testing samples of the completed mixture.

- Section 409.2(e)2. Mixtures with RAM or 5% or More RAP. Revise to read as follows:

2. Mixtures with RAM, 5% or More RAP, and/or 5% RAS. Section 409.2(e)1 and as follows:

2.a RAM and RAP SRL. For HMA wearing courses, limit the total combination of RAM and RAP to a maximum of 15% of the mixture by mass (weight) unless documentation of the SRL designation of the coarse aggregate in the RAM and RAP materials is provided to the DME and the RAM and RAP meet the specified SRL or can be blended for SRL as specified in Section 409.2(b)1.

2.b RAP and/or RAS Asphalt Content and Gradation. Determine the average asphalt content and gradation of the RAP and/or RAS stockpile (s) according to Bulletin 27. Determine the proportions of RAP, RAM, RAS, and virgin materials necessary to conform to the JMF requirements. Maintain and provide the Representative access to records of all sampling, testing, and calculations.

- Section 409.3(c) Bituminous Mixing Plant. Revise to read as follows:

(c) Bituminous Mixing Plant. Obtain bituminous mixtures from a plant fully automated and recordated and currently listed in Bulletin 41. The necessary facilities for inspection include a plant office as specified in Section 714.5(a), except the minimum floor space is 11.1 m2 (120 square feet). For recycled mixtures, add the following requirements:

1. Batch Plant. Modify the batch plant to measure the mass (weight) of the RAP and/or RAS before adding it into the pug mill. Design the cold-feed bin (s), conveyor system (s), charging chute (s), and all special bins to prevent RAP and/or RAS from segregating and sticking. Dry the virgin aggregate and RAM and then heat the virgin aggregate and RAM to a temperature that, after adding RAP and/or RAS, produces a completed mixture within the temperatures specified in Table A for the class and type of material used. Ensure that virgin aggregate is free of unburned fuel oil when delivered to the pug mill.

2. Drum Mixer Plant. Modify the drum mixer plant to prevent RAP and/or RAS from directly contacting the burner flame and prevent RAP and/or RAS from overheating. Design the cold-feed bin(s), conveyor system(s), charging chute(s), and all special bins to prevent RAP and/or RAS from segregating and sticking. Produce a completed mixture within the temperatures specified in Table A for the class and type of material used.

G7021A - a07021 CHANGES TO SPECIFICATIONS: DSP 2

Addendum:

Associated Item(s):

Header:

CHANGES TO SPECIFICATIONS: Appendix C - DSP 2

Provision Body:

DSP 2 - Contractor Responsibility Provisions

- DSP 2 (a). Revise to read as follows:

By executing the contract, the Contractor certifies, in writing, for itself and all its subcontractors, that neither the Contractor, nor any subcontractors, nor any suppliers are under suspension or debarment by any State or Federal governmental entity, instrumentality, or authority.

- DSP 2 (f). Revise to read as follows:

The Contractor may obtain current lists of suspended and debarred entities at: http://www.dgs.state.pa.us by clicking on Doing Business with the Commonwealth, then Procurement, the Debarment List, and at: https://epls.arnet.gov.

G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107

Addendum:

Associated Item(s):

Header:
CHANGES TO SPECIFICATIONS: SECTION 107

Provision Body:

SECTION 107 - Legal Relations and Responsibility to the Public

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

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

N10401B - a10401 BRIDGE PARAPET

Addendum:

Associated Item(s):

Header:
BRIDGE PARAPET

Provision Body:

All references to Precast Parapet in Standard Drawings, BLC Standards, and Publication 408 Specifications are voided. Only cast-in-place parapets are permitted.

N10501A - a10501 BRIDGE SHOP DRAWINGS

Addendum:

Associated Item(s):

Header:
BRIDGE SHOP DRAWINGS

Provision Body:

The District Engineer has designated SAI Consulting Engineers to act as agent for the review and acceptance of bridge shop drawings. Submit print sets for review and acceptance, as specified in Section 105.02(d), to the following address:

SAI Consulting Engineers
1350 Penn Avenue, Suite 300
Pittsburgh, PA 15222

00 - a11610 Change Orders and Extra Work Orders

Addendum:

Associated Item(s):

Header:
CHANGE ORDERS AND EXTRA WORK ORDERS

Provision Body:

This Special Provision pertains to any of the Design/Build portions of the Project.

The Department reserves the right to issue change orders or extra work orders as determined by the Engineer in accordance with Section 104 and this Special Provision.

Change orders issued for additional work due to design errors or design omissions will result in no increase to the lump sum price and will be considered the responsibility of the Contractor to perform at no additional cost to the Department.

Change orders for additional work due to a change in the scope of work will be paid for based upon apparent unit prices derived from the Bid Item Schedule. Work having no price and that was not considered in the design of either the structure or roadway will be paid for as additional work on a force account basis in accordance with Section 110.03(a).

Extra work orders will be in accordance with Section 110.3(c).

00 - a11640 Cleaning and Sealing of Barrier Joints

Addendum:

Associated Item(s):

Header:
CLEANING AND SEALING OF BARRIER JOINTS, CURB JOINTS, TRAFFIC ISLAND JOINTS AND SIDEWALK JOINTS

Provision Body:
This Special Provision pertains to the Design/Build portions of the Project.

In accordance with Section 521 except as follows:

Section 521.1 DESCRIPTION - Revise to read:

This work consists of cleaning and sealing existing transverse and longitudinal joints in cement concrete barrier, in mountable or regular curbs, in traffic islands and in sidewalks. The concrete barrier joints include the longitudinal joint at the base of the barrier, the vertical joint between each section of barrier, equal to half the height of the barrier, and the longitudinal joints at the top backside of the barrier.

Section 521.2 MATERIAL - Revise to read:

Joint Sealing Material - Section 705.4(a), (b) or (c)

Joint Backing Material - Section 705.9

Section 521.3 CONSTRUCTION - Revise the first paragraph to read:

Clean all joints of all existing sealing material, bituminous material, and other foreign material, including all vegetation in a manner that provides a clean, newly exposed concrete surface.

MEASUREMENT AND PAYMENT - This item will be paid for under the "Construct Roadway" special provision.

00 - a11645 Guide Rail to Concrete Barrier Approach

Addendum:

Associated Item(s):

Header:
GUIDE RAIL TO CONCRETE BARRIER APPROACH TRANSITION RETRO-FITS

Provision Body:
This Special Provision pertains to the Design/Build portions of the Project.

Construct the appropriate guide rail connection to each concrete barrier approach end throughout the entire project in accordance with Section 620, as shown on the Standard Drawing RC-50M, and as shown on the attachment entitled, "Guide Rail to Bridge Barrier Approach Transition Retro-fits."

MEASUREMENT AND PAYMENT - This item will be paid for under the "Construct Roadway" special provision.

00 - a11653 Notice to Contractor

Addendum: 1

Associated Item(s):

Header:
NOTICE TO CONTRACTOR

Provision Body:

The following is a general outline of how each portion of this project will be bid:

- SR 0065, Section A38 - Design/Build
- SR 0079, Sections A40 thru A45 - Ramp Rehabilitation - Bid/Build
  Traffic Control Plan - Bid/Build
- SR 0079, Section A40 - Neville Island Bridge Overlay - Bid/Build & Design Build
  Traffic Control Plan - Design/Build

(The Traffic Control Plan for the ramp rehabilitation portion of SR 0079, Section A40 is Bid/Build, while the Traffic Control Plan for the Neville Island Bridge Overlay portion of the SR 0079, Section A40 work is being bid Design/Build).

SR 0065, Section A38 is the reconstruction of the roadways of the Glenfield Interchange (SR 8017) and the Glenfield Viaduct Interchange (SR 8092). It also includes the rehabilitation of most of the corresponding structures. A conceptual design for this work has been provided. Design and obtain Department approval before beginning construction on this portion of the project.

SR 0079, Sections A40 thru A43 are the rehabilitation of the four Neville Island Interchange ramps (SR 8015). Design plans for this work are included in the bid proposal and construction can start upon receipt of Notice to Proceed.

SR 0079, Section A40 also includes the latex overly of the SR 79 mainline bridge over the Ohio River, and approaches. Portions of this work are Design/Build and must be submitted for approval. The Traffic Control Plan must be designed by the Contractor and submitted for approval to the Department.

SR 0079, Sections A44 thru A45 are the rehabilitation of portions of two ramps (B1 and B2) of the Glenfield Interchange (SR 8017). Design plans for this work are included in the bid proposal. Construction on these ramps cannot begin until construction on the SR 0065, Section A38 portions of these two ramps is ready to begin. Do not close these ramps more than one time. All construction activities on these two ramps must be done during the one ramp closure.

Refer to all of the detailed information in the SR 0065, Section A38 Design Roadway, Design of Rehabilitation of Bridge Structure, Design Lighting and Design Traffic Control Plan, Special Provisions when constructing this project.

Keep the Glenfield Viaduct open to traffic at all times.

Complete all work associated with Ramp E (SR 8092) and Ramp R (SR 8092) within 35 calendar days for each ramp or be assessed work zone liquidated damages in accordance with Section 108.07(c).

00 - a11660 Pennsylvania State Police Service

Addendum: 3

Associated Item(s):

Header:
PENNSYLVANIA STATE POLICE SERVICE

Provision Body:

This construction project has been authorized to use the Pennsylvania State Police (PSP) for assistance with work zone traffic control. All requests for such services will be the sole responsibility of the Department. The State Police require that requests be made at least two weeks in advance and confirmed within the last 48 hours. To assist the Department in providing sufficient notice, submit a work schedule at the pre construction conference. Include dates and approximate times lane closures will be in effect, as well as other pertinent information, which may influence scheduling. The Department will directly reimburse the State Police for all costs associated with their services. It is not necessary to include costs for these services in the bid proposal. Full cooperation of all involved parties is necessary to ensure success of this venture. Failure to provide the necessary scheduling information may result in loss of State Police services and possible suspension of work.

00 - a11661 D11 Project Documentation

Addendum:

Associated Item(s):

Header:
PROJECT DOCUMENTATION

Provision Body:

Upon project completion, the Contractor will submit in .tif or .pdf electronic format, all engineering related submissions developed for the construction of the project. This includes but is not limited to the following: shop drawings, jacking plans and calculations, temporary shoring plans and calculations, demolition plans and calculations, alternate design plans and calculations, value engineered plans and calculations, Contractor proposed alternate details and supporting calculations, dynamic pile tests, caisson log, anchor log, vibration monitoring log, noise monitoring log, changes to deck pouring sequences, and erection plan submission and calculations.

The files will be accompanied by a hard copy index listing a summary of the electronic files as well as the contents of each file.

Contact Jason Zang, EDMS Coordinator at (412) 429-4912 prior to submission of the files.

Payment for project documentation is incidental to the other items of work in the contract and will not be paid for separately.

00 - a11663 Removal and Disposal of Existing Paint

Addendum:

Associated Item(s):

Header:
REMOVAL AND DISPOSAL OF EXISTING PAINT FROM BARRIER AND CURB

Provision Body:

This Special Provision pertains to the Design/Build portions of the Project.

DESCRIPTION - This work is the removal of existing paint along the base of the concrete median barrier and mounting curb. This work includes sweeping, brushing, water or abrasive blasting, handling, storage and waste disposal.

(a) General

1. This Item provides the material and execution requirements for ensuring that all project waste is properly collected, handled, stored, classified, transported, and disposed of in accordance with applicable EPA and Pennsylvania DEP regulations. The contractor is responsible for the protection of the workers, the public, and the environment from exposure to harmful levels of dust, heavy metals, and other toxic metals that may be present in the paint being removed.

2. Implement and maintain programs and procedures which comply with the requirements of this Item and all applicable Federal, State, County, and City regulations.

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

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

(b) Definitions

1. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act; commonly called Superfund. Federal laws addressing the clean up of hazardous waste sites. Amended in 1986 by Superfund Amendments and Re-Authorization Act (SARA). EPA implementing regulations are contained in 40 CFR 300-373.

2. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.

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

4. DEP - Pennsylvania Department of Environmental Protection

5. Department - Pennsylvania Department of Transportation

6. Disposal - The discharge, deposit, dumping, spilling, leaking or placing of any solid liquid waste or hazardous waste into or on any air, land or water, so that the solid liquid waste or hazardous waste, or any constituent thereof, may enter the environment or be emitted into the air, or discharged into any waters, including groundwaters.

7. Disposal Facility - A licensed facility where hazardous, residual, or non-hazardous waste is intentionally placed, and in which the waste will remain after closure.

8. Emission - A release of material to the air, water, or ground.

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

10. EPA Hazardous Waste Number - The Federal Number assigned to each hazardous waste. The number assigned to lead waste is D008.

11. Flood Plain - A flat, low-lying portion of a stream valley subject to periodic (50 to 100 years) inundation during a flood.

12. Generator - Any facility owner, operator or person whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. The Department is the Generator for the work under this Item, and will obtain the EPA provisional ID Number.

13. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Wastes may be classified as hazardous based on the characteristics of toxicity, ignitability, corrosivity, and reactivity. Paint debris is typically classified as hazardous waste based on the characteristic of toxicity. This is determined by testing representative samples of the waste using the Toxicity Characteristic Leaching Procedure (TCLP). If the leachate contains any of the eight metals or other substances in concentrations at or above limits established in 40 CFR 261, Identification and Listing of Hazardous Wastes, it is classified as hazardous (see Residual Waste).

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

15. Ignitability - A characteristic of waste that caused it to be classified as hazardous. Waste is determined to be ignitable if it is found to be capable of being set afire, or of bursting into flame spontaneously or by interaction with another substance or material, when tested in accordance with 40 CFR 261. Spent solvents and liquid paint waste typically fall into this category.

16. Leachate - The amount of a specific substance (e.g. lead) that is carried off or dissolved out of a material. The amount of leachable lead that classifies paint debris as being hazardous is 5 mg/L (ppm) when tested by TCLP.

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

18. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

19. mg/L - Milligrams per liter. Common units for reporting a concentration of a specific substance in units of mass per volume (e.g. amount of hazardous material contained in paint debris).

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

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

22. POTW - Publicly Owned Treatment Works

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

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

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

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

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

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

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

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

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

(c) Reference Standards and Regulations

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

2. Code of Federal Regulations (CFR)

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

3. EPA Methods

- SW 846, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods
- Method 3050, Acid Digestion of Sediment, Sludge, and Soils
- Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)

4. State, County, and City Regulations

- State - Title 25, Chapters 260a-266a, 266b and 268a-270a, Pennsylvania Department of Environmental Protection - Hazardous Waste Management
- State - Title 25, Chapter 271, Pennsylvania Department of Environmental Protection - Municipal Waste Management
- State - Title 25, Chapter 273, Pennsylvania Department of Environmental Protection - Municipal Waste Landfills - Permitting Requirements
- State - Title 25, Chapter 279, Pennsylvania Department of Environmental Protection - Transfer Facilities
- State - Title 25, Chapter 285, Pennsylvania Department of Environmental Protection - Storage, Collection and Transportation of Municipal Waste

- Allegheny County - Article VIII, Rules and Regulations of Allegheny County, Solid Waste Management.
- Allegheny County - Article XXI, Rules and Regulations of Allegheny County Health Department

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

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

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

MATERIAL -

(a) Waste Containers

1. Hazardous and Residual Waste: Provide DOT-approved containers of the appropriate size and type for the hazardous waste generated on the project. Use containers that are resistant to rust and corrosion (painted, if constructed of steel), that have tight fitting lids or covers, and which are water resistant and leak proof.

2. Municipal/Construction Waste: Provide all containers for non-hazardous municipal/construction waste. Use containers that are free of loose debris when brought on-site.

(b) Container Maintenance

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

CONSTRUCTION -

(a) General

Remove/sweep residue, dirt and debris from the inside roadway shoulder before commencing with paint removal operations. Collect and dispose of roadway sweeping at an approved waste site. Sweep, brush or use abrasive blast to remove paint from

concrete median barrier and mountable curb. Cover roadway inlet and drainage facilities to prevent paint debris from entering water course. Select the location of the secured waste storage area together with the Department's representative. Collect all spent paint chips and dust. Containerize the spent paint chips and dust. Once a container in the work area is full, transport the waste to the secured storage area at the conclusion of the work day, or at the frequency agreed upon by the Department's representative. Test the containerized material. Dispose of the containerized material. Dispose of hazardous material in an approved hazardous waste site. Dispose of non-hazardous material in an approved landfill.

1. The Department is the generator of the hazardous waste for permitting purposes, and will provide the EPA provisional identification number, but the Contractor is responsible for the collection, handling, storage, transportation and disposal of all wastes.

2. Recover all waste products generated during cleaning work, including but not limited to rags, tape, disposable coveralls, filters, and paint debris. Unless otherwise directed by the Department, contain the waste only within the legal right-of-way.

3. Select the location of the secured waste storage area together with the Department's Representative. Transport the waste to the secured storage area at the frequency agreed upon by the Department's representative.

4. Conduct the work in strict accordance with Federal, state, and local regulations governing the collection, handling, transportation and disposal of waste.

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

(c) Items Provided by the Contractor

1. Containerizing, testing (classifying), handling, and storage of all waste.

2. Contracting with licensed and/ or permitted waste transporters for the transportation of all hazardous, residual, and non-hazardous waste, as well as waste water.

3. Contracting with licensed and/or permitted recyclers or disposers of all waste.

4. Locations for waste storage together with appropriate measures to assure that the area is secure (Note: storage locations must be approved by the Department).

5. Completed Waste Characterization Data Sheets for Department signature.

6. Completed hazardous waste manifests for Department signature.

7. Bill of Lading for non-hazardous waste.

(d) Waste Sampling, Testing, and Classification

1. Sampling

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

2. Testing

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

3. Classification

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

Arsenic	5.0 mg/L
Barium	100.0 mg/L
Cadmium	1.0 mg/L
Chromium	5.0 mg/L
Lead	5.0 mg/L
Mercury	0.2 mg/L
Selenium	1.0 mg/L
Silver	5.0 mg/L

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

4. Laboratory Report

- Have the laboratory send the original test report directly to the Department's representative with copies of the test results to the Contractor. Issue the reports no later than ten calendar days after the representative samples are collected.
- Include the following minimum information in each report: Identity of the waste stream(s) analyzed, the number of samples collected and tested, dates of sampling and testing, laboratory test procedures utilized, the names and signatures of the individuals collecting the samples and conducting the laboratory tests, and an interpretation of the test results. Include copies of the chain-of-custody forms in the documentation.
- Prepare the Waste Characterization Data Sheet (WCDS) and provide to the Department's representative for review and signature. Once approved, submit the original WCDS to the Department.

(e) Waste Handling, Packaging, and Storage

1. Comply with 40 CFR 262 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a for the on-site handling, packaging, and storage of all hazardous waste generated by the project.

2. Comply with Pennsylvania Title 25, Chapters 285 and 299 for the handling, packaging, and storage of residual and municipal construction non-hazardous waste. Comply with additional County and City regulations as applicable.

3. Do not place hazardous waste on the unprotected ground (e.g., cover the ground with impervious tarping). Locate in a secure area with signs around the perimeter, and shield adequately to prevent dispersion of the waste by wind or water. Contact the Department's representative for approval of the storage location(s).

4. Collect and store the waste at the end of each working day in storage drums or containers such that no waste is left exposed overnight, at a minimum. Use DOT-approved containers for hazardous and residual waste storage.

5. Cover all containers immediately upon filling and confirm that all lids are attached except when filling. Verify that all labels remain intact.

6. Store non-hazardous waste separately from hazardous waste. Do not co-mix hazardous waste with non-hazardous waste. Do not mix different types of hazardous waste together unless specifically approved by the Department's representative and the disposal facility.

7. Arrange containers in the storage area for easy accessibility. Stage the containers together in lots no greater than two rows of five containers each. Maintain a minimum lane clearance of 915 mm (36") between each lot of ten containers.

8. Verify that all waste (hazardous, residual, and non-hazardous) is transported to the appropriate recycling or disposal facility within 90 days after waste is first placed into the container.

9. Improper waste storage is cause for immediate project shut down until appropriate corrective action is completed.

10. Train all personnel in the proper handling of the hazardous waste at the work site in accordance with 40 CFR 265.16. Include procedures in the Waste Handling Plan that will be followed in the event of a release or spill, required notifications, and methods to be used for cleanup. Maintain all training records on-site.

11. Do not fill any container or roll-off in excess of the capacity marked on the container. If delays during pick-up are caused by overfilled containers, remediate the situation at no additional cost to the Department.

12. Place the soil into separate containers and assume all costs for its disposal, if soil remediation is required as a result of Contractor activities.

(f) Labeling of Containers

1. Label all containers of project waste and debris immediately to identify the contents. Label containers of spent abrasive as "BRIDGE BLAST ABRASIVE WASTE, Contains Lead". Include the Contract Number and the Bridge Identification Number or SR and SEC Number. Provide similar labels on containers of other project waste and debris.

2. Apply hazardous waste labels after the TCLP test results are received, if the waste tests hazardous. Label each container or roll-off of hazardous waste in accordance with 40 CFR 262, 49 CFR 171-179, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Include the following minimum information:

- Hazardous Waste. Federal law prohibits improper disposal. If found, contact the nearest police, or public safety authority, or the U.S. Environmental Protection Agency.
- Proper DOT Shipping Name
- Manifest Document Number
- Generator Name, Address, and EPA ID Number
- Date of Accumulation
- EPA Waste Number

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

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

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

(g) Waste Transportation and Disposal

1. Hazardous Waste

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

2. Residual and Non-Hazardous Municipal/Construction Waste

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

(i) Special Handling and Disposal Conditions for Waste Water

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

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

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

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

(j) Recordkeeping

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

MEASUREMENT AND PAYMENT - This item will be paid for under the "Construct Roadway" special provision.

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

00 - a11671 D11 Resetting Segment Markers

Addendum:

Associated Item(s):

Header:
RESETTING SEGMENT MARKERS

Provision Body:

At the completion of project, install all the segment markers removed during construction back to their original locations. Please contact Mr. Bill Dipner, District Pavement Manager at (412) 429-3814 if you have any questions.

00 - a11673 Road User Liquidated Damages

Addendum: 6

Associated Item(s):

Header:
ROAD USER LIQUIDATED DAMAGES

Provision Body:
In addition to the requirements of Section 108.07, liquidated damages will be assessed as follows:

NOTICE: The Road User Liquidated Damages specified by this provision apply as specified below for each individual Roadway and Type Restriction. Damages apply individually for each condition and more than one condition may apply concurrently.

Open all lanes and respective ramps of SR 0065, Section A38 by the specified times or be assessed Road User Liquidated Damages as calculated in the amount as follows:

- For the first 15 minute period or portion thereof within the first hour that the roadway or associated ramps remain restricted or closed before or after the specified times, damages shall be levied as one quarter (25%) of the amount listed below.
- For the remaining 45 minutes or portion thereof of the first hour, damages shall be levied as three quarters (75%) of the amount listed below.
- And for each hour or portion thereof after the first hour, the full amount per hour shall apply.

PROJECT	ROADWAY	TYPE RESTRICTION	RULD PER HOUR
SR 79-A40	SR 0079 Northbound 2 Lanes Section reduced to 1 Lane	Single Lane Closure	$3,400
	SR 0079 Northbound 3 Lanes Section reduced to 2 Lanes	Single Lane Closure	$1,500
	SR 0079 Northbound 3 Lanes Section reduced to 1 Lane	2 Lane Closure	$3,400
	SR 0079 Southbound 2 Lanes Section reduced to 1 Lane	Single Lane Closure	$2,800
	SR 0079 Southbound 3 Lanes Section reduced to 2 Lanes	Single Lane Closure	$1,300
	SR 0079 Southbound 3 Lanes Section reduced to 1 Lane	2 Lane Closure	$2,800
SR 65-A38	SR 0065 Northbound 2 Lanes Section reduced to 1 Lane	Lane Closure	$1,100
	SR 0065 Southbound 2 Lanes Section reduced to 1 Lane	Lane Closure	$1,100

Open all lanes of the SR 0079, Section A40 northbound lanes outside the limits the of main arch span 21 over the Ohio River to unrestricted traffic by November 20, 2009 or be assessed liquidated damages in the amount of $37,800 per day or portion thereof that traffic remains restricted beyond the specified date.

Open all lanes of the SR 0079, Section A40 northbound lanes in the 3 lane to 2 lane long-term restriction area on main arch span 21 over the Ohio River to unrestricted traffic by May 27, 2010 and within 28 calendar days or be assessed liquidated damages in the amount of $37,800 per day or portion thereof that traffic remains restricted beyond the specified date and/or beyond the specified number of calendar days.

Open all lanes of the SR 0079, Section A40 southbound lanes outside the limits the of main arch span 21 over the Ohio River to unrestricted traffic by November 20, 2009 or be assessed liquidated damages in the amount of $32,200 per day or portion thereof that traffic remains restricted beyond the specified date.

Open all lanes of the SR 0079, Section A40 southbound lanes in the 3 lane to 2 lane long-term restriction area on main arch span 21 over the Ohio River to unrestricted traffic by May 27, 2010 and within 28 calendar days or be assessed liquidated damages in the amount of $32,200 per day or portion thereof that traffic remains restricted beyond the specified date and/or beyond the specified number of calendar days.

Open all lanes and respective ramps of SR 0065, Section A38 to unrestricted traffic by the said times or be assessed Road User Liquidated Damages in the amounts as listed below for each day, or portion thereof, that traffic remains restricted beyond the specified calendar days.

PROJECT	ROADWAY	TYPE RESTRICTION	RULD PER DAY	CALENDAR DAYS
SR 79-A40	I-79 NB 3 lanes to 2 section Long-Term Lane Closure	Lane Closure	$11,800	63
	I-79 SB 3 lanes to 2 section Long-Term Lane Closure	Lane Closure	$10,200	63
SR 79-A40-A43	Ramp D = SR 8015-0010 = I-79 NB to Grand Ave	Roadway Closure	$ 4,400	77
	Ramp E = SR 8015-0020 = Grand Ave to I-79 NB	Roadway Closure	$ 7,000	63
	Ramp H = SR 8015-0250 = Grand Ave to I-79 SB	Roadway Closure	$ 2,800	63
	Ramp J = SR 8015-0500 = I-79 SB to Grand Ave	Roadway Closure	$10,000	77
SR 79-A44-45	Ramp B1 = SR 8017-770 = I-79 NB to SR 65 SB	Roadway Closure	$ 1,800	63
	Ramp B2 = SR 8017-760 = I-79 NB to SR 65 NB	Roadway Closure	$ 2,500	63
SR 65-A38	SR 65 NB 2 Lanes to 1 Long-Term Lane Closures	Lane Closures	$ 9,900	154
	SR 65 SB 2 Lanes to 1 Long-Term Lane Closures	Lane Closures	$10,000	154
	SR 4033-8 access for Viaduct, Truck Detour	Lane Closures	$ 1,800	42
	SR 4033-8 access for Viaduct, Car Detour	Lane Closures	$ 1,000	42

	Ramp D = SR 8092-250 = SR 65 NB to SR 4033-8 WB	Roadway Closure	$ 3,900	28
	Ramp A1 = SR 8017-780 = SR 65 NB to I-79 SB	Roadway Closure	$ 3,400	28
	Ramp A2 = SR 8017-790 = SR 65 SB to I-79 SB	Roadway Closure	$ 2,600	42
	Ramp T = SR 8017-260 = SR 4033-10 to SR 65 NB	Roadway Closure	$11,600	42

The liquidated damages assessed as specified above, will be deducted from monies due or become due.

00 - a11673 Special Bidding Procedures

Addendum: 2

Associated Item(s):

Header:
SPECIAL BIDDING PROCEDURES - ONE-STEP LOW BID PROJECTS

Provision Body:
DESCRIPTION - The design-build team is hereby notified that the Department is using a special bidding procedure for this project for selecting the design-build team to perform work.

This project will utilize the Design-Build Low Bid method of contracting. The prime construction Contractor will be considered the lead with the engineering firms as prime consultants and subconsultants. **The design must be completed and sealed by a registered Professional Engineer in the Commonwealth of Pennsylvania and construction must be performed by a pre-qualified Contractor or subcontractor. All design consultants and subconsultants must have a current Annual Qualification Package on file with the Bureau of Design's Consultant Agreement Section and be registered business partners in ECMS.**

In accordance with 23 CFR 636.116, the Department has determined that all design consultants and/or design subconsultants who assisted in the preparation of this Bid Package are not allowed to participate on a design-build team that will submit a Bid Proposal in response to this Bid Package.

All bid package clarification questions will be submitted and responded to through the prime construction Contractor via ECMS Project #74919. Each design-build team will submit a Bid in response to Project #74919. A contract will be prepared for Project #74919 and will include all design engineering and construction items required to satisfactorily complete the project. **All engineering costs will be included as separate bid items in Project #74919 Bid.** Bids must be submitted by the Prime Contractor under ECMS Project #74919.

S1033A - b01033 SECTION 103.2(a) LETTER OF INTENT

Addendum: 5

Associated Item(s):

Header:
SECTION 103.02(a) LETTER OF INTENT

Provision Body:

- SECTION 103.02 AWARD OF CONTRACT- Revise by adding the following new subsection:

(a) Letter of Intent.It has been determined that the nature of this project is such that extensive and/or costly advance preparation by the Contractor is required. Therefore, prior to the Notice to Proceed date, a binding Letter of Intent will be issued by the Deputy Secretary for Highway Administration. The project- specific Letter of Intent will outline the extent to which the Contractor may prepare to start work and incur costs in preparation for performance of the contract.

The following have been identified by the Deputy Secretary as being preparatory costs that may be incurred for this contract with the Department's assurance that actual expenses will be reimbursed in the event the contract is canceled before the Notice to Proceed date:

- Orders for the fabrication of **bearings and dams**;
- Preparation of shop drawings for **bearings and dams**; and
- Design of **bearings and dams** and Traffic Control Plan for S-29389.

No work may commence at the construction site and no payments will be made until the contract is fully executed.

In the event the Secretary elects to cancel the award of the contract or the contract, as specified in Sections 103.03 and 103.07, reimbursement will be made for the documented cost of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with the Letter of Intent issued by the Deputy Secretary for Highway Administration. Any material reimbursed at actual purchase price becomes Department property. Alternatively, the Department is to receive credit for the salvage value of any material, for which reimbursement is made, that is then retained by the Contractor. No payment will be made for damages of any kind including, but not limited to, loss of anticipated profit, loss of use of money, or administrative or overhead costs.

- SECTION 103.03 CANCELLATION OF AWARD. Revise to read as follows:

103.03 CANCELLATION OF AWARD **-** The Secretary reserves the right to cancel the award of any contract at any time before its approval by the Chief Counsel, the General Counsel, and/or the Attorney General, or their designees, when such cancellation is in the best interests of the State. In the event of such cancellation, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with the Letter of Intent issued by the Deputy Secretary for Highway Administration as specified in Section 103.02(a).

- SECTION 103.07 CANCELLATION OF CONTRACT. Revise to read as follows:

103.07 CANCELLATION OF CONTRACT - The contract may be canceled by either party if the notice to proceed date is not within 30 days of award of the contract. Extension(s) of the 30-day period will be made only by mutual written consent of the parties to the contract provided such written consent is given before the expiration of the 30-day period. Prices will not be renegotiated. The Secretary also reserves the right to cancel the contract any time before the Notice to Proceed date. If the contract is canceled, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with the Letter of Intent issued by the Deputy Secretary for Highway Administration as specified in Section 103.02(a). No payment will be made for damages of any other kind including, but not limited to, lost profits.

00 - b01050 D11 Section 105.14(a) Non-Designated Areas

Addendum:

Associated Item(s):

Header:
SECTION 105.14(a) NON-DESIGNATED AREAS

Provision Body:

Use the attached PENNDOT Waste/Borrow Area package developed by District 11-0 for obtaining Conservation District approval on all areas less than one acre. Borrow/Waste areas larger than one acre will require a National Pollution Discharge Elimination System (NPDES) permit. Coordinate with the District Environmental Unit for all submissions.

S6081C - b06081 SECTION 608 - MOBILIZATION

Addendum:

Associated Item(s):

Header:
SECTION 608 - MOBILIZATION

Provision Body:

- Section 608.1 Description. Revise by adding the following:

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

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

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

S6092A - b06092-SECTION 609.2(g) MISCELLANEOUS MATERIALS

Addendum:

Associated Item(s):

Header:
SECTION 609.2(g) MISCELLANEOUS MATERIALS

Provision Body:

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

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

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

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

Project Specific Details:
a. Two
b. One

00 - b09010 D11 Section 901

Addendum: 3

Associated Item(s):

Header:
SECTION 901

Provision Body:

DESCRIPTION - This work is the construction and implementation of the maintenance and protection of traffic associated with Ramp D (SR 8015), Ramp E (SR 8015), Ramp H (SR 8015), Ramp J (SR 8015), Ramp B1 (SR 8017), and Ramp B2 (SR 8017).

ADVANCE REQUIREMENTS

Provide two weeks advance notice to affected municipalities, respective Emergency Services, local school districts, the Allegheny County Port Authority (412-854-7328 and Chuck Rompala at 412-566-5321), the Pennsylvania State Police (412-787-2000), PENNDOT Allegheny (412-781-3260) County Maintenance Manager and the appropriate State Representative or Senator, prior to beginning any work or imposing any traffic restrictions. Additionally, provide notification to all affected businesses and property owners four days prior to the erection of the Advance Construction Advisory signs. (District Construction Unit will provide typical form at pre-job conference.) Keep them informed at all times of changes to traffic restrictions as they occur.

Notify property owners ten days in advance of driveway restrictions affecting their properties.

Make a survey along with the Project Manager or his authorized representative by videotaping and voice recording onto a DVD format the location of all existing pavement markings, existing signs, road conditions and all potential driveway and/or private problems within the project limits prior to beginning construction. Use this information in placing all pavement markings and signs. Provide an additional copy of the videotape to the Project Manager or his authorized representative before construction begins. Properly label the DVD with the Contract #, SPN, SR #(s), date video was taken and by whom. Contact the District Traffic Engineer before making any changes to the existing pavement marking patterns, or signs or other devices.

Section 901.1 DESCRIPTION -

> Revise the first sentence to read: This work is the furnishing, installing, maintaining and protection of traffic adjacent to and within the Work Zone including the Active Work Zone, and relocating of traffic control devices.

Section 901.3(h) Existing Department Signs. Revise first sentence of first paragraph to read:

> Remove all existing signs as required to accommodate construction operations.
>
> Reinstall these signs at the completion of the project and/or as directed by the Project Manager.

Arrange with local police to restrict parking on streets within the work area. Maintain the minimum number of lanes specified.

Ten days prior to construction, erect the Advance Construction Advisory signs on Type III barricades as depicted below.

SR 0079 ROAD WORK	Use 150 mm (6") Series C black letters on a reflective orange background with a 12 mm (1/2") black border and 150 mm (6") corner radius.
Begins (Date)	
DELAYS LIKELY	Cover the above "Begins (Date)" with "DELAYS LIKELY" when construction begins.

Erect signs at each limit of work.

Remove the signs when construction begins.

After the pre-job conference and before the closure, meet with the Project Manager and the District Traffic Engineer's representative to locate detour signing and identify conflicting signs which must be covered or removed.

Notify the District Traffic Engineer prior to implementing phase change.

TRAFFIC CONTROL/DEVICES REQUIREMENTS

Section 901.2 MATERIAL - Revise by adding the following sentence:

> For all barricades, provide barricade rails constructed of non-metallic materials.

Section 901.3(i) Barricades. Revise sentence as follows:

> When specified or indicated, furnish and install non-metallic barricades in accordance with MUTCD Section 6F.63, Publication 213 and/or the approved TCP.

The signs and traffic control devices listed or indicated on the Traffic Control Plan or Publication 213 represent the minimum requirements for this item and as such, are for information only. The number and types of traffic control signs and devices for this project will be predicated on the number and location of work sites, the extent of repairs and the planned sequence of operations.

For this project, provide fluorescent orange sheeting for all construction warning signs and channelizing devices.

All type (A, B, C, D, E, F) signs shall be reflectorized including the letters and shields.

Provide new traffic control signs and devices. Do not use reflective sheeting that is scratched, scarred, dirty or shows evidence of loss of reflectivity. Do not use signs or devices that are cracked, bent, dented or broken.

Replace reflective sheeting should it become damaged where reflectivity becomes impaired. Immediately repair or replace damaged, defaced or dirty signs, devices or barrier.

Mount all construction warning signs (W series) for long-term operations on Type III barricades. If it is not possible to mount construction warning or other signing as indicated or specified, the District Traffic Engineer will determine the method of mounting the signs.

Provide additional channelizing devices and barricades at intersections, major driveways and ramps to prevent vehicles from turning onto any lane closed for construction. Space channelizing devices at 1.5 m (5-foot) intervals or as directed by the District Traffic Engineer.

Use channelizing devices with Type C steady burn lights for all nighttime lane restrictions. Mount a light on each device used in transition areas and on every third device used in tangent sections.

Space channelizing devices in the tangent sections at one times the posted (regulatory) speed limit unless otherwise noted on the Traffic Control Plan or as directed by the Project Manager or the District Traffic Engineer's authorized representative.

For overnight operations, if located within 152 m (500 feet) of any residence or business use arrow panels that are electrically, solar or battery operated.

When working on entrance and exit ramp gore areas, the same Traffic Restriction Tables for main road SRs must be adhered to for ramp SRs.

Restrict lanes on limited access freeways and expressways in accordance with appropriate Publication 213 long-term figures. This also includes entrance and exit ramps.

On limited access freeways and expressways, place a Portable Three Line Changeable Message Sign, two miles in advance of the work area.

For any lane closures on freeways and expressways, use approved non-metallic drums.

When working within the travel lanes of a freeway or expressway, use of a shadow vehicle equipped with a truck-mounted impact attenuator to protect each work area as shown in Publication 213. Placement - Place shadow vehicle with mounted impact attenuator and arrow panel 100 feet up stream of each active construction area or as indicated on the PATA and/or as directed.

Erect "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with Type B lights attached on each intersecting road and major drive as shown in Publication 213, for the appropriate situation.

In accordance with Act 229 of 2002, the Contractor will install signs R22-1, W21-19 and W21-20 at each approach to a work zone, as shown in Publication 213 - 'Act 229 Guidelines'.

Provide a Traffic Control Supervisor or Supervisors and phone numbers where they can be reached on a 24-hour - 7 days a week basis for the duration of the project. The Traffic Control Supervisor must be knowledgeable of work zone traffic control including incident management. The Traffic Control Supervisor must have a thorough understanding of the Manual on Uniform Traffic Control Devices (MUTCD) and Publications 212 and 213. The Traffic Control Supervisor shall attend the pre-job meeting. The Supervisor's responsibilities are as follows:

Notify District Public Relations Office, affected municipalities and property owners of all traffic restrictions. Prepare News Releases and submit to the Project Manager for his concurrence prior to the final submission to the District Office.

Implement and maintain traffic control schemes. Place and maintain all traffic control signs and devices used on the project.

Conduct daily reviews and document the performance of traffic control signs, devices, off-duty uniformed police and temporary pavement markings during the day and night, adverse weather conditions and active and inactive construction operations, as directed. The Traffic Control Supervisor will present all MPT problems and discrepancies in writing to the Department's Project Manager by noon of each day.

Prepare and submit the proposed corrective action to the Department's Project Manager. Correct any deficiencies or damage discovered during the daily review immediately.

Maintain ongoing communication with the Inspector-in-Charge regarding operations and phasing that will impact transportation operations and traffic control in and around the project vicinity. Develop and maintain lists of phone numbers, e-mail addresses and fax numbers for the affected stakeholders, including, but not limited to: Municipalities, school districts, media outlets, emergency services, major businesses, transit companies, trucking firms and other major traffic generators in the project vicinity. Notify these groups of initiation of and changes to construction operations and traffic control patterns and phasing at least 48 hours in advance or as directed by the Inspector-in-Charge. Use signs to advise the public of impending changes in the traffic patterns.

Maintain a daily written record of all crashes, work zone incidents and maximum daily queue lengths for each traffic pattern for the life of the project. All feedback received from the public through phone calls, e-mails, in writing or in person shall be documented. This information shall be submitted daily to the Inspector-in-Charge and maintained daily for reference by the District Traffic Unit upon request.

Notify the Traffic Management Center (TMC) 412-429-6030 or Jason Previte at 412-475-1862, fifteen (15) minutes prior to imposing any lane restrictions and prior to removing any lane restrictions.

Designate a representative to serve on Incident Management Committee.

When the work area encroaches on a crosswalk, sidewalk or other pedestrian walkway, submit a detailed plan for satisfactorily closing the walkway to pedestrian traffic to the Engineer. Include the number and type of devices to be used in accordance with the appropriate figure from Publication 213. Do not close any walkway without prior approval of the plan, and at all times adhere to the submitted plan unless otherwise directed.

Use a post mounted "NO GUIDE RAIL" (W21-9A) sign with a Type B light attached when existing guide rail is removed. Erect the first sign at a distance upstream from the removed guide rail section of 2 times the speed limit, in feet. Erect additional signs at intervals not greater than 804 m (1/2 mile).

Provide sufficient number of properly attired flaggers (vest; hard hat) to adequately control traffic flow through the work zone, which includes any intersecting streets in the work zone, and as directed.

Do not cause intermittent traffic stoppages for longer than 5 minutes. When traffic stoppages are necessary, position flaggers and signs as shown in Publication 213, PATA 10a. Do not stop traffic between 6 A.M. to 9 A.M. or 3 P.M. to 8 P.M.

Section 901.3(k) Work Area Pavement Markings. Revise the third paragraph by adding the following:

When installing painted standard pavement markings on roadways where traffic is to be maintained, install "WET PAINT DO NOT CROSS LINE" (R16-5) sign as directed.

Do not change any part of the Traffic Control Plan and/or Section 901 without prior written approval of the District Traffic Engineer or authorized representative. This includes but is not limited to:

- Traffic Control Phasing
- Location and hours of operation for all off-duty uniformed police officers.
- Times and/or dates when traffic may not be restricted.
- Any short-term or long-term detours.
- Item 0901-0240 Additional Traffic Control Signs. All locations and messages must be approved by the District Traffic Engineer.

Completely remove all existing conflicting pavement markings prior to installing any temporary markings. Do not paint over existing pavement markings. During inclement weather, where it is not possible to install pavement markings, install "NO PAVEMENT MARKINGS" (W21-16) signs with Type A light attached at intervals of 400 m (1/4 mile) and/or as directed by the Project Manager. In addition, as a minimum, place cones at one times the posted speed limit along the centerline of the travel lanes.

Use Type B lights with red lenses on all required stop sign installations.

Limit any lane closure to the length necessary to safely perform the required work.

Do not allow employees to park their personal vehicles on any traveled roadway, shoulder, median or seeded area along the highway.

When working at or within close proximity to a signalized intersection, provide off duty uniformed police officers to control and direct traffic at the intersection. Provide police officers to manually operate traffic signals or have the police officers place the signals in a flashing mode and direct traffic at the intersection. Give the municipality one week advance notice prior to working within a signalized intersection. Prior to removing the police officer at the end of the workday, return the traffic signals to normal operation.

Be advised that most of the boroughs and townships have noise ordinances. Obtain the necessary permits prior to construction.

TRAFFIC/CONSTRUCTION RESTRICTIONS

Road user liquidated damages will be assessed in the amount specified in the Special Provision entitled "Road User Liquidated Damages" for failure to open the roadway to unrestricted traffic within the allotted time.

I-79 (I-79 Pittsburgh Interchange to I-279 Split)

Note: With the exception of the work limitations outlined in the Traffic Control Plans, the Contractor must adhere to the following General and Holidays/Events Restrictions.

General Restrictions:

Mondays thru Fridays

- 6 A.M. - 9 A.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 9 A.M. - 3 P.M.: No travel lane closures are permitted.
- 3 P.M. - 8 P.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 12 Midnight to 6 A.M. and 8 P.M. to 12 Midnight: Provide at least one lane in the direction of travel.

Saturdays and Sundays

- Provide at least one lane in the direction of travel.

Holidays/Events Restrictions:

Memorial Day (Including the Saturday and Sunday before Memorial Day) - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Memorial Day -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 9 A.M. to 12 Noon: No travel lane closures permitted.
- 6 A.M. to 9 A.M. and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Labor Day (Including the Saturday and Sunday before Labor Day) - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Labor Day -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 9 A.M. to 12 Noon: No travel lane closures permitted.
- 6 A.M. to 9 A.M. and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Independence Day - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079. Additionally, no work affecting any travel lane, shoulder, associated ramp or gore area of SR 0079 on July 2, 3, 4, 5, 2010.

Great Race -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Light Up Night -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 9 A.M. and 3 P.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 9 A.M. to 3 P.M.: No travel lane closures permitted.

Three Rivers Regatta (Saturdays and Sundays)

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Pittsburgh Vintage Grand Prix -

- 12 Midnight to 6 A.M. and 8 P.M. to 12 Midnight: Provide at least one lane in the direction of travel.
- 6 A.M. to 8 P.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Other Event Restrictions:

- **In accordance with Publication 408 Section 901.3(a), the Contractor must be aware that there may be instances where the District Traffic Engineer may implement restrictions for unforeseen major events (i.e., events scheduled subsequent to contract execution).**

Do not close ramps that are being used as detour.

Other Highway Restrictions:

For short-term operations, do not restrict traffic flow on SR 0065 from 6 A.M. to 9 A.M. and from 3 P.M. to 6 P.M. and during non-working hours.

Interstate/Expressway Permits are required for all interstate or divided highways with ingress and egress at interchanges. Press Releases are required for all work within Department highway right-of-way. At least three days prior to any work or any change in traffic patterns for ongoing work on I-79,I-279, I-376, I-579, 22/30, 60, 22 and 422, obtain an Interstate/Expressway Permit from the District Traffic Engineer, and notify the following: the Pennsylvania State Police Parkway Station Commander (412-787-2000); District Press Officer (412-429-5010) and the District Traffic Management Center (412-429-6030) of any Traffic and/ or Construction restrictions on the Interstates and Expressways covered by this contract. The Interstate/Expressway Permit Form and Press Office Traffic Information Form (Press Release) are found in the Department web site through the following link: http:// www.dot.state.pa.us/ penndot/ districts/ district11.nsf/ D11Traffic? OpenFrameSet (go to "Commonly Used Traffic Forms"). The Contractor is responsible for completing all Press Releases and forwarding them to the Inspector-in-Charge (IIC). The Contractor is responsible for completing all Interstate/ Expressway Permit Forms for the IIC's signature and date. The IIC processes the Interstate/Expressway Permit and Press Release requests in accordance with established procedures.

Coordinate working schedule with any adjacent Department projects.

When working above a traveled roadway, provide shielding, netting or other means to prevent construction debris, including water, from falling to the roadway below.

No grade deviations along the roadway are permitted at the end of the workday. Place temporary bituminous material around all manholes, inlet valve boxes and between different roadway elevations to provide a smooth transition. Place wedges with a rate of taper of 1 m (3-feet) horizontal length for each 25 mm (1-inch) of vertical depth. Remove wedges prior to the placement of the bituminous surface courses. Install and remove the temporary asphalt wedges at no additional cost to the Department. Place "BUMP" (W8-1) and "ROUGH ROAD" (W8-8) signs with Type B lights.

Reopen all intersecting streets and driveways to traffic after the completed paving operation has progressed beyond them and the material has cooled to 60ºC (140ºF) or less.

When performing short-term operations on one lane ramps, provide traffic control in accordance with the following:

A. When operations can be performed without encroaching upon the travel lane, provide traffic control in accordance with Publication 213, PATA 5.

B. When operations encroach upon a portion of the travel lane, maintain a minimum 3.04 m (10-foot) wide unobstructed travel lane. Erect traffic control signs and devices in accordance with the attached figure shown for a Stationary Short Term Operation - One Lane, Ramp Roadway - Minor Encroachment.

In addition to A and B above, place a "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with three orange flags attached on the left side of the ramp unless physically impossible.

If it is not possible to place the "WORK AREA AHEAD" signs at the required distance ahead of the work area, place them on the ramp as far from the work area as possible. Then place a "RAMP WORK AHEAD" (W21-4-1B) sign with three orange flags attached on the mainline roadway at a distance from the ramp work area equal to the required distance for the "WORK AREA AHEAD" sign.

When closing a lane on a freeway or expressway, erect a G70-1 (USE BOTH LANES TO MERGE POINT) ½ mile in advance of the lane closure. Erect a G70-2 (MERGE HERE TAKE YOUR TURN) sign 500 feet in advance of the lane closure.

Mount "RAMP" (R1-1-2) signs above all "STOP" or "YIELD" signs erected on ramps.

Contact the District Traffic Management Center at 412-429-6030 for any Traffic and/or Construction restrictions on the Parkways and Interstates covered by this contract three days prior to any scheduled work.

Notify the District Traffic Engineer's authorized representative in the Operations Section at 412-429-4973 two weeks prior to opening any portion of a closed roadway to traffic that has had any changes to the permanent traffic control devices, and has been determined by the Project Engineer to be opened.

When covering conflicting signs, do not place adhesive on the sign face. Place adhesive on the back of the sign. Any reflective sheeting damaged by adhesive constitutes damage to the sign. Replace the sign at no additional cost to the Department. For signs which are frequently covered and uncovered based upon work schedules, provide a cover which permits the entire sign face (including the border and margin) to be visible when the sign is uncovered.

Section 901.3(j)2 - Revise Footnote (2) to read:

Use channelizing devices with Type C steady burn lights attached. Space devices as follows:

1. drop-offs between travel lanes - 7.5 m (25-foot) spacing
2. drop-offs between travel lane and shoulder - 7.5 m (25-foot) spacing
3. drop-offs in or beyond shoulder - two times the normal speed limit.

When the condition is less than 7.5 m (25-feet), place a channelizing device at each end of the drop-off condition.

Section 901.3(m) Lateral Lane Restrictions. Revise the third paragraph to read:

Notify the Inspector-In-Charge (IIC) by completing and submitting form M-937R (Route/Bridge Restriction) at least 14 days before implementing or changing any lateral lane restriction which provides less than 16 feet of pavement and shoulder in each direction for oversized vehicles. Notify the IIC by completing and submitting form M-937RO (Route/ Bridge Restriction Opening) at least seven days before removing the restriction. These forms are found on the Department website through the following link: http://www.dot.state.pa.us/penndot/districts/district11.nsf/D11Roadwork?OpenFrameSet (go to "Links to forms for construction related activities". Complete all route restriction forms and forward them to the IIC. The IIC processes the route restriction requests in accordance with established procedures.

S10791B - b10791 SECTION 1079 - ENVIRONMENTAL PROTECTION

Addendum:

Associated Item(s):

Header:
SECTION 1079 - ENVIRONMENTAL PROTECTION

Provision Body:

Section 1079.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for the monitoring of project emissions during paint removal or repair, and for verifying that satisfactory clean up has been performed upon project completion. Perform the following:

- Monitor visible emissions and releases, evaluate the suitability of project clean-up.
- Comply with the results of monitoring or analysis including all necessary clean up or remediation.
- Clean up the project site as stipulated in this Item, including pre-existing litter or project debris.
- Develop an Environmental Compliance Plan for the protection of the public and the environment from exposure to harmful levels of dust, lead, and other toxic metals that may be present in the paint being removed or repaired. Conduct Ambient Air Monitoring for a period of one week prior to blasting, to two weeks after blasting start, as a minimum.

2. Implement and maintain programs and procedures which comply with this Item, and all applicable Federal, State, County, and City regulations. Comply with all applicable regulations even if the regulation is not specifically referenced herein. If a State, County, or City regulation is more restrictive than the requirements of this Item, including the required ambient air monitoring, the more restrictive requirements prevail.

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

(b) Definitions

1. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.

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

3. DEP - Pennsylvania Department of Environmental Protection

4. Department - Pennsylvania Department of Transportation

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

6. Emission - A release of material to the air, water, or ground.

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

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

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

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

11. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

12. NAAQS - National Ambient Air Quality Standards. Federal regulations which establish limits on allowable pollutants in the ambient air. Lead and particulate matter are included. Regulations are found in 40 CFR 50.

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

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

15. PM-10 - Particulate matter of an aerodynamic equivalent diameter of 10 microns or less. PM-10 is associated with high volume ambient air monitoring.

16. POTW - Publicly Owned Treatment Works

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

18. TSP - Total Suspended Particulate. Term associated with the collection of airborne particulate using high volume ambient air samplers. Filters are typically analyzed for lead.

(c) Reference Standards and Regulations

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

2. Code of Federal Regulations (CFR)

- 40 CFR 50, National Primary and Secondary Ambient Air Quality Standards

- 40 CFR 58, Ambient Air Quality Surveillance
- 40 CFR 60, App. A, Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
- 40 CFR 60, App. A, Method 22, Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Fires
- 40 CFR 302, Designation, Reportable Quantities and Notification
- 40 CFR 355, Emergency Planning and Notification

3. State, County, and City Regulations

- State - Title 25, Chapter 123, Pennsylvania Department of Environmental Protection-Standards for Contaminants
- Allegheny County - Article XXI, 2105.51, Rules and Regulations of Allegheny County Bureau of Environmental Quality, Abrasive Blasting
- Philadelphia County - Regulation 2, Section 8, Philadelphia County Air Monitoring Regulation - Air Contaminated Fugitive Dust

4. EPA Methods

- Method 3050, Acid Digestion of Sediment, Sludge, and Soils

5. NIOSH Methods

- Method 7082, Lead

6. Society for Protective Coating (SSPC)

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

7. American Industrial Hygiene Association

- Environmental Lead Proficiency Analytical Testing Program (ELPAT)

(d) Submittals

1. Contractor Environmental Compliance Plan: Submit an Environmental Compliance Plan which establishes programs for the monitoring activities that are the responsibility of the Contractor, and includes provisions for complying with the results of any monitoring and analysis conducted. Include the following programs in the Plan and submit the Plan for Department review and acceptance a minimum of 21 calendar days prior to disturbing paints containing toxic metals:

- Assessments of Visible Emissions and Releases: A written program for the observation of visible emissions during project activities, and inspections for releases or spills of dust and debris that become deposited on surrounding equipment and property. Include the frequency of observations and inspections that will be made, areas or work activities that will be observed, and methods of observation and inspection that will be utilized. Include the name(s) and qualifications of the personnel conducting the observations and inspections.
- Final Cleaning/Clearance Evaluations: A written program identifying the procedures and methods that will be used to conduct final project clean up, and final cleanliness inspections and evaluations. The purpose of the clearance tests is to assure that the project area and surrounding surfaces have been properly cleaned in compliance with this Item.
- Compliance With Environmental Monitoring: Include statements in the Plan that appropriate corrective action will be implemented (e.g., making changes to the containment and/or work practices) if the results of monitoring and analysis show that violations of emissions criteria are occurring.

- Remediation of Ground (Soil), Water, and Sediment: Include provisions in the Plan that in the event post-project inspections show unacceptable results, the Contractor will remove all visible debris from the ground (soil), water, and/or sediment, when directed by the Department.

- High Volume Ambient Air Monitoring: A written program for the instrument monitoring of emissions to assure compliance with the NAAQS, this Item, and any applicable City or County regulations. Include procedures to confirm that the monitoring equipment is properly calibrated, sited, and operated; filters are properly handled and transported; the laboratory analysis is performed by an accredited laboratory; and that all monitoring calculations, documentation, and forms will be sent directly to the Department.

- Ground (Soil) Evaluations: A written program for inspection of the ground and soil prior to commencement of the project and upon completion to determine whether the ground was impacted by project activities.

- Water/Sediment Evaluations: A written program for inspection of the water and sediment prior to commencement of the project and upon completion to determine whether the water or sediment was impacted by project activities.

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

SECTION 1079.2 MATERIAL - Monitoring, Testing, and Sampling Equipment.

Supply the instrumentation needed for the monitoring of the ambient air, including all equipment needed for its operation (e.g., generators, batteries, power cords, fuel, etc.). Include a minimum of 1 TSP and 1 PM-10 Ambient Air Monitors per site and at a minimum of one week prior to blasting to two weeks after blasting start, unless otherwise directed by the Department.

Use equipment that is free of loose dust and debris when brought onto each bridge site, and upon removal.

SECTION 1079.3 CONSTRUCTION

(a) General

1. Conduct the work in strict accordance with Federal, state, and local regulations governing the protection of the public and the environment. State regulations require that all reasonable actions be taken to prevent particulate matter from becoming airborne.

2. All protection requirements apply to Contractor and Subcontractor personnel working for the Contractor.

(b) Assessment of Visible Emissions and Releases

1. General

- Conduct visible emissions assessments as defined in this Item, in accordance with 40 CFR 60, Appendix A, Method 22. These assessments are based on total visible emissions regardless of the opacity of the emission. Conduct visual inspections for releases or spills of dust and debris that have become deposited on surrounding property, structures, equipment or vehicles, and bodies of water.

- Consider all State, City, or County regulations regarding visible emissions in addition to, but not in lieu of, the requirements of this Item.

- Include procedures in Environmental Compliance Plan for the assessment of the visible emissions and releases, the frequency of observations and inspections that will be made, the equipment and work areas (e.g., containment) that will be observed for visible emissions, and the surrounding property and structures that will be examined for deposited debris.

2. Acceptance Criteria for Visible Emissions Assessments

- Limit random visible emissions from project activities to an SSPC Level 1 (no greater than 1% of the workday) in accordance with SSPC Guide 6. Conduct visible emission assessments in accordance with 40 CFR 60, Appendix A, Method 22.

- Pennsylvania State Regulation Title 25, Chapter 123.42, Section 123.42 exempts construction operations from the opacity requirements established under Section 123.1. However, it is the Department's policy, through this specification, that all bridge projects will comply with the opacity requirements, as established under Section 123.1.
- Immediately shut down the emission-producing activities if emissions in excess of the criteria stipulated in this Item are observed. Do not resume the emission-producing operations until the cause of the violation is corrected.
- Immediately shut down the project and initiate corrective action if there are violations of high volume ambient air monitoring, even if the visible emissions results are acceptable.
- Clean up releases of dust and debris outside of the work area that have become deposited on surrounding property; on the unprotected ground, soil, water or sediment; around storm sewers or drains; or in areas where rain water could carry the debris into storm sewers or drains. Conduct the clean up on a daily basis, or more frequently if directed by the Engineer, and take appropriate corrective action to change work practices or to modify the containment to provide better controls over releases in the future.

3. Frequency and Location of Assessments and Inspections

- Conduct the visible emissions assessments to account for all locations where emissions of lead dust might be generated, including but not limited to, the containment, dust collection and abrasive recovery equipment, and waste containerizing areas.
- Conduct casual observations and corrections of visible emissions and releases of dust or debris on an ongoing daily basis, but conduct the specialized assessments and inspections as described in this Item at least 3 times each day.
- Method PD/Lead A4 of SSPC publication 95-06, Project Design, provides guidance on visible emissions assessments.

4. Reporting of Visible Emissions

- Report the results of the daily assessments in a log book or other report form.
- Document all cases where work has been halted due to unacceptable visible emissions or releases of material, the cleanup activities invoked, and the corrective action taken to avoid a reoccurrence. Provide the written report to the Department within 48 hours of the occurrence.

(c) High Volume Ambient Air Monitoring

1. Conduct high volume ambient air monitoring during paint removal and clean-up activities to confirm that emissions do not exceed the EPA National Primary and Secondary Ambient Air Quality Standards (NAAQS), or specific County or City regulations.

2. Comply with the acceptance criteria established in City or County regulations when applicable. Comply with the criteria established in 40 CFR 50 as summarized below if there are no local regulations governing high volume ambient air monitoring:

- TSP-Lead (Total Suspended Particulate-Lead) - Do not exceed 1.5 ug/m3 averaged over a 90 day period. Place one (minimum) TSP-Lead Ambient Air Monitor(s) per site in the location acceptable to the Engineer. Conduct Ambient Air Monitoring for a period of one week prior to blasting, to two weeks after blasting start, as a minimum.
- PM-10 (Particulate Matter 10 Microns and Less in Aerodynamically Equivalent Diameter) - Do not exceed the equivalent of 150 ug/m3 as a 24-hour average. Set up one per site, @ a minimum, unless otherwise directed by the Department. Place one (minimum) PM-10 Ambient Air Monitor(s) per site in the location acceptable to the Engineer. Conduct Ambient Air Monitoring for a period of one week prior to blasting, to two weeks after blasting start, as a minimum.

3. If the results are acceptable, at the direction of the Engineer, reduce monitoring to one (1) day per month, but resume if problems appear to be occurring as determined by visual assessments of the operations, or as otherwise directed by the Engineer. Change all monitor filters in the presence of the Inspector-In-Charge. Be responsible for damage or loss of monitors for the life of the contract.

4. If monitoring is conducted and the above criteria is violated, immediately stop work and make changes to the containment and/or work practices to achieve compliance. Note that excedances may also result in City or County violations.

(d) Restrictions on Emissions to Ground (Soil), Water, and Sediment

1. Conduct all activities so that releases to the soil, water, sediment, or storm sewers do not occur.

2. If particulate or debris is released beyond the contained or protected areas, immediately shut down the emission-producing operations until the cause of the emissions is corrected.

3. Immediately clean up visible deposits of debris on the unprotected ground, on the soil, on or in the water or sediment, around storm sewers or drains, or in areas where rain water could carry the debris into storm sewers or drains. Take the appropriate corrective action to change work practices or to modify the containment to prevent emissions from occurring in the future.

(e) Final Cleaning/Clearance Evaluations

1. General

- Conduct an inspection of the project site and surrounding property and surfaces located within the likely dispersion zone of project dust and debris upon completion of project activities, and after all Contractor equipment and materials have been removed.
- Thoroughly inspect the property and surfaces for the presence of debris including, but not limited to spent abrasives or other paint removal media, paint chips, materials of construction, fuel, and other liter.
- Remove all visible abrasive, paint chips, and debris from the project site, even if the abrasive, paint chips, and debris were a pre-existing condition.
- Include procedures in the Environmental Compliance Plan for project clean up, including the inspections that will be employed to verify that the cleanliness complies with the acceptance criteria identified in this Item.

2. Cleaning Requirements. Comply with Section 104.05.

- Remove all project debris and litter from the project site and surrounding property, equipment, and structures.
- When cleaning paint chips and dust, use vacuuming equipment equipped with HEPA filters, wet washing, or other means that will effectively remove the dust and debris without re-dispersing it into the air. Do not use compressed air for cleanup activities unless it is used in conjunction with a ventilation system designed to capture the airborne particulate.
- Collect water used for cleaning and dispose of in accordance Section 1073.

3. Acceptance Criteria - Project Cleanup

- Conduct a final inspection with the Engineer after all clean up activities are completed. Conduct any additional cleaning identified by the Department. Consider the site properly cleaned under the following conditions:
- Paint chips, spent abrasive and other paint removal media, fuel, materials of construction, litter, or other project debris are not visible on or around the project site.
- Remove all lead dust from the surface of the completed structure as well as from surrounding structures and equipment.

4. Report on Clearance Inspections

- Prepare a letter report presenting the results of the inspections conducted to verify the final cleanliness of the project site, surrounding property, waterways, equipment, buildings, and structures.
- Include a summary of any problems or releases that occurred during the project, and the clean up and corrective action measures that were taken to resolve the problem.

(f) Reportable Releases

1. Clean Water Act - Reportable quantities of hazardous substances in waterways are addressed in Section 311 of the Clean Water Act. Report such releases to the Department's Representative, the EPA in accordance with 40 CFR 117 and 40 CFR 355, and the Pennsylvania DEP. Notify the Fish and Boat Commission, and the Coast Guard, when applicable.

2. CERCLA - Reportable quantities under CERCLA are found in 40 CFR 302. In the case of lead, the reportable quantity is a release of 4.5 or more kilograms (10 or more pounds) in a 24 hour period. If such releases occur, stop work immediately and notify the Department's Representative, the Pennsylvania DEP, and the National Response Center (800/424-8802).

SECTION 1079.4 MEASUREMENT AND PAYMENT - Costs associated with Item 9079, Environmental Protection, are incidental to Item 9075 - 20 __ (Item 9075--00__), Containment. ***(is as found in the Project Specific Details, Detail 1)***

Project Specific Details:

Detail 1. The Item Number for Containment as referenced in SECTION 1079.4 is: Items 9075-2001, 9075-3001, 9075-4001, 9075-5001, 9075-8001, and 9075-9001

00 - c02031 Item 4203-0003 - Class 1A Excavation

Addendum: 1

Associated Item(s): 4203-0003

Header:

ITEM 4203-0003 - CLASS 1A EXCAVATION MODIFIED

Provision Body:

In accordance with Section 203 except as follows:

Section 203.1(b) Class 1A Excavation. Revise to read:

Excavation for the removal of unsuitable material below subgrade having a variable width bottom, as indicated or directed. Saw cut as necessary. Includes backfilling as specified in Section 206, except only use No. 2A aggregate as specified in Section 350.2.

00 - c02081 Item 4208-0001 - Special Rolling

Addendum: 1

Associated Item(s): 4208-0001

Header:

ITEM 4208-0001 - SPECIAL ROLLING MODIFIED

Provision Body:

In accordance with the Special Provision entitled, Section 208 - Special Rolling, except as follows:

Section 208.1 DESCRIPTION - Revise to read:

This work is the Special Rolling of subgrade and embankments.

Section 208.3 CONSTRUCTION - Revise the second sentence of the first paragraph to read:

When the special rolling of any layer shows an area unstable or nonuniform, satisfactorily stabilize the area by providing additional compaction or by removing and replacing the unsuitable material with subbase material, and recompacting as specified in Section 350.3 and as directed. Payment for removal and replacement of unstable material will be paid for separately under Item 4203-0003.

00 - c03501 Items 4350-0104/ 4516-2021 - Subbase 4" Depth (No. 2A)

Addendum:

Associated Item(s): 4350-0104, 4516-2021

Header:

Provision Body:

In accordance with Section 350 and Section 516 as applicable, except as follows:

Section 350.2 MATERIAL - Revise to read:

(a) Aggregate - Provide material with a maximum absorption rate of 3.5% as determined by AASHTO T-85 and as specified in Sections 703.2 and 703.5.

00 - c05051 Item 4505-0001 - Bridge Approach Slab

Addendum:

Associated Item(s): 4505-0001

Header:

Provision Body:

In accordance with Section 505 and as follows:

Section 505.1 DESCRIPTION - Revise the first sentence to read:

This work is the removal of the existing bridge approach slabs and disposal of excavated material, construction of reinforced cement concrete approach slabs and associated sleeper slabs, including the joint adjacent to the bridge, the subbase material and necessary excavation.

Section 505.4 MEASUREMENT AND PAYMENT - Revise by adding the following:

Includes slab removal and disposal.

I6091C - c06091 ITEM 0609-0009 - EQUIPMENT PACKAGE

Addendum:

Associated Item(s): 0609-0009

Header:

Provision Body:

Appendix

Table A

EQUIPMENT PACKAGE	
Equipment	**Quantity**
Communications Equipment	
Copier (1)	1
Fax Machine (1)	1
Cellular Phone(s)	3
Electronic Equipment	
Digital Camera	-
Specialized Equipment	
Surveyor's Level & Measuring Rod	-
Electronic Digitizer	1
Digital Display Level	1
Infrared Thermometer	1
Laser Range Finder	-
Miscellaneous Items	
Internet Service Provider	1
Computer Media	Yes
Toners/Cartridges	Yes

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

Microcomputer Systems. A total of three microcomputer systems will be used on the project.

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

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

00 - c06205 Item 4620-0500 - Reset Guide Rail

Addendum:

Associated Item(s): 4620-0500

Header:

Provision Body:

In accordance with Section 620 as indicated, and as follows:

Section 620.3(c) Reset Guide Rail. Revise by adding the following:

Replace all existing offset brackets and hardware with new material, and properly dispose of existing metal offset brackets and hardware.

Section 620.4(g) Reset Guide Rail. Revise by adding the following:

Includes resetting existing guide rail with new offset brackets, hardware, and proper disposal of existing metal offset brackets and hardware.

00 - c09311 Item 4931-0001 - Post Mounted Signs, Type B

Addendum:

Associated Item(s): 4931-0001

Header:

Provision Body:

In accordance with Section 931 except as follows:

Section 931.2 MATERIAL - Revise the second bullet to read as follows:

- Breakaway Steel Post. From a manufacturer listed in Bulletin 15, and as in Section 1103.08 except delete Section 1103.08 (a).

00 - c09370 Items 4937-0210/0211 - Barrier Mounted Delineator

Addendum:

Associated Item(s): 4937-0210, 4937-0211

Header:

Provision Body:
This Special Provision pertains to the Bid/Build portion of the Project.

DESCRIPTION - This work is the removal and replacement of existing reflective units and brackets in accordance with Section 937 and as directed.

CONSTRUCTION - Section 937.3. Revise by adding the following:

Remove existing structure mounted delineator brackets. Install new Barrier Mounted Delineators, Top-Mount Type S as indicated one existing structure parapets and walls behind the existing bridge railing at a 30" minimum height.

MEASUREMENT AND PAYMENT - Revise to read:

Each. Includes removal of existing delineator brackets.

00 - c09561 Item 4956-0101 Loop Sensor Modified

Addendum:

Associated Item(s): 4956-0101

Header:

Provision Body:

In accordance with Section 956 except as follows:

Section 956.2 MATERIAL - Revise by adding the following:

Section 1104.05(a)2. Rigid Polyvinyl Chloride Conduit. Revise by adding the following:

Use 3/4" or 1/2" Polyvinyl Chloride (PVC) conduit and fittings.

Section 956.3(a) Loop Detector. Revise by adding the following:

At the direction of the Project Manager and the District Traffic Engineer or authorized representative, install the loop sensor in the roadway by sawcutting or by installing a preformed loop sensor. Install sawcut loop sensor into groove so that a minimum of 2" of cover depth is over the last turn of loop sensor.

If the loop perimeter is less than 30' (9 m), use three turns of wire unless otherwise indicated on the drawing. If the loop perimeter is over 30' (9 m), use two turns of wire. All sequential loops will be wired to operate in series unless otherwise directed by the Project Manager.

If a preformed loop sensor is installed, use the following installation specifications:

Before placing concrete pavement, measure and cut the PVC conduit to the dimensions indicated. Prior to bonding the fittings and conduit, string and loosely pull three passes of loop sensor through the PVC conduit and fittings. Continue entire sensor assembly to the junction box. Splicing within the loop sensor assembly is not permitted. Place the complete assembly in the roadway at the location indicated prior to placing concrete. Do not place anything on top of loop assembly. Wire cages and load transfer dowel bars must be trimmed so the cage is not resting on the PVC conduit. Seal the termination of the conduit within the junction box for approximately 3" of conduit depth with approved sealant. Test the entire assembly at the junction box prior to placing concrete. Terminate all assemblies in the junction box in accordance with TC-7806, sheet 2 of 2. Premanufactured preformed loop sensors made to the dimensions shown will be acceptable but catalog cuts must be submitted for approval to the District Traffic Engineer prior to purchasing and installation.

Section 956.4(c) Loop Sensors. Revise the second sentence to read:

Includes PVC conduit, fittings, wire, sealant and splicing.

I19992A - c19992 ITEM 1999-9999 - TRAINEES

Addendum:

Associated Item(s): 1999-9999

Header:

Provision Body:

This Special Provision is an implementation of 23 U.S.C. 140 (a).

I. DESCRIPTION - As part of the project equal employment opportunity affirmative action program, provide on the job training aimed at developing candidates toward full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this contract is (***as found in the Project Specific Details, Detail 1.***)

II. CONSTRUCTION -

(a) In the event a subcontract is given for a portion of the contract work, determine how many, if any, of the trainees are to be trained by the subcontractor. However, retain the primary responsibility for meeting the training requirements imposed by this special provision. Insure that this Special Provision is physically included and is made applicable to any such subcontract. Where feasible, provide 25% of apprentices or trainees in each occupation, in their first year of apprenticeship or training.

(b) Distribute the number of trainees among the work classifications on the basis of the project needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Within 10 calendar days following the Notice to Proceed, submit to the Department for approval the number of trainees to be trained in each selected classification and training program to be used, specifying the starting time for training in each of the classifications. The Department will give credit for each trainee employed on the contract who is currently enrolled or becomes enrolled in an approved program and payment will be made for such trainees as provided herein.

(c) Training and upgrading of minorities and women toward journeyman status is a primary objective of this Special Provision. Accordingly, make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Accept responsibility for demonstrating that steps are taken in pursuance thereof, prior to a determination as to whether compliance is made with this Special Provision. This training commitment is not intended, and do not use it, to discriminate against any applicant for training, whether a member of a minority group or not.

(d) Do not employ a person as a trainee in any classification in which he/ she has successfully completed a training program leading toward journeyman status or in which he/ she has been employed as a journeyman. Candidates may be trained a maximum of 3 times as long as the training is not repetitious in the scope of work and is not on the same project. Those candidates having attained journeyman status would be acceptable as trainee candidates only in classifications where they have not attained journeyman status. Satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, provide records documenting the findings in each case.

(e) The minimum length and type of training for each classification will be as established in the training program selected and submitted to and approved by the Department. The Department will approve a program if it is reasonably calculated to meet the project equal employment opportunity obligations and gives meaningful training to move candidates toward journeyman status. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of Federal- aid highway construction contracts. Obtain approval or acceptance of a training program and training candidate from the Department prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk- typists or secretarial- type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Department. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

(f) Furnish the trainee a copy of the program he/she will follow in providing the training.

(g) Provide each trainee with a certification showing the type and length of training satisfactorily completed.

(h) Provide for the maintenance of records and furnish required reports documenting his/ her performance under this Special Provision.

(i) Pay no less than the common laborer rate for this project to any trainee performing in a construction craft (percentage payments are no longer in effect). Pay non- construction crafts, such as timekeeper, office manager, and surveyor, the fair market rate for those services or classifications. Trainees in construction crafts may remain at the common laborer rate throughout the training program. Upon completion, pay trainees in accordance with wage rates scale for this contract for work performed. In the case of apprentices, the appropriate rates approved by the Federal Departments of Labor or Transportation in connection with the existing program apply to all trainees being trained for the same classification who are covered by this Special Provision.

III. MEASUREMENT AND PAYMENT - Hour

Will be paid as follows:

(a) Except as otherwise noted below, payment will be made per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, payment will be made for training persons in excess of the number specified herein. Payment for offsite training indicated above may only be made where one or more of the following is done and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

(b) No payment will be made due to failure to provide the training required as stated in the approved training program. Make every good faith effort to retain the trainee upon completion of the training program, if work continues to be available in that classification. It is normally expected that a trainee will begin his/her training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until he/she has completed the training program. It is not required that all trainees be on board for the entire length of the contract. Responsibilities will have been fulfilled under this Special Provision if acceptable training has been provided to the number of trainees specified. Determine the number trained on the basis of the total number enrolled on the contract for a significant period.

Project Specific Details:

1. The number of trainees to be trained under this contract as referred to in para I. is: TWO

I32170A - c82170 ITEMS 8217-0010/0011/0012 - DESIGN OF REHABILITATION OF BRIDGE STRUCTURE

Addendum:

Associated Item(s): 8217-0010, 8217-0011, 8217-0012

Header:

Provision Body:

I. DESCRIPTION - This work is the design and preparation of construction plans for bridge rehabilitation work as indicated on the Department's Preliminary TS&L Plans included with the proposal attachments. Preparation of a Final TS&L Submission for the proposed work is required.

II. DESIGN

(a) General

The Department's Preliminaryl TS&L Plans represent the required work that will meet safety, geometric, environmental, and load carrying capacity requirements for the project. Alternate methods of meeting the designated rehabilitation work may be used subject to the requirements specified herein. A Final TS&L submission for the proposed work must be prepared and submitted for review and approval.

The Preliminary TS&L Report and all other applicable plans can be provided to the successful bidder in CADD Microstation format. Make request for this information to the District Bridge Engineer, Attention Louis Ruzzi, P.E., in writing. Include a signed release form for electronic data (use attached Release for PENNDOT Electronic Design Project Files). The Contractor is responsible for all plan changes made to the approved plans due to the final design of the structure. Follow procedures outlined in Design Manual 1A for plan changes.

No foundation submission is required for the project. Structure will utilize the existing abutments. No analysis is required for the abutments or piers.

Designs that take advantage of any errors and/or omissions in the Preliminary TS&L Plans or discrepancies between the Preliminary TS&L Plans and the Special Provisions, will not be accepted. In the event any such error, omission, or discrepancy is discovered, immediately notify the Department. Failure to notify the Department will constitute a waiver of all claims for misunderstandings, ambiguities, or other situations resulting from the error, omission, or discrepancy.

On the first sheet of the final structure plans and partial plan submissions, provide the Design Engineer's P.E. seal, valid signature in ink, the date signed, business name, and address. Provide the Design Engineer's P.E. seal, signature, and date signed on the first sheet of all computations, including computations for partial plan submissions.

Provide a complete set of computations for the superstructure. Provide additional calculations, as requested by the Department's District Bridge Engineer or Chief Bridge Engineer, to evaluate any details throughout the life of the contract.

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

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

Structure types, concepts, construction sequencing, or other details that are not covered in the design and construction specifications or standards, or practice not commonly used in Pennsylvania are allowed only when specifically indicated herein. Where design or construction that deviates from standard practice is proposed, a conceptual design shall be submitted prior to the Final TS&L for review and approval. The submittal shall contain conceptual plans, a list of items that deviate from standard design and construction, including but not limited to design methodology, the computer program that will be used in the design, construction sequencing, and any specialized construction techniques.

Value engineering is allowed.

(b) Designer Qualifications

Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.

Submit to the Department, at or prior to the pre-construction meeting, the name and address of the Contractor's Design Engineer including the firm's resume showing the experience and expertise, during the last 5 years, of two similar projects of comparable complexity on Pennsylvania's State Highway or local system. Local projects must have been funded with Federal Aid Highway Funds. Also include an affidavit stating that the Design Engineer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. The Design Engineer will be approved or disapproved by the Department within five (5) working days from the time and date of submission. Unless indicated otherwise by the Department in writing, Design Engineer disapproval will not permit the extension of the construction completion date or price adjustments to any items in the contract. Resubmit to the Department, within ten (10) days of receiving the disapproval, the required information listed herein for a Design Engineer replacement.

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

The following information/data will be made available to the Contractor during the advertisement period:

- Existing Bridge Plan: Original Drawings S-9687, 89 sheets dated June 4, 1971.

(d) Design Specifications

Use PENNDOT Design Manual Part 4 for design policy and procedures and design criteria. Refer to the "Bridge/ Structures Related Effective Policy Letters" for design criteria. Refer to the "Bridge/Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and addenda (addendum) to the proposal.
- Design related Strike-Off Letters in effect on the date of project advertisement.
- PENNDOT Design Manual Part 4, Structures
- PENNDOT Bridge Design and Bridge Construction Standards
- AASHTO Guide Specifications for Horizontally Curved Highway Bridges
- AASHTO LRFD Bridge Design Specifications or, when applicable, AASHTO Standard Specifications for Highway Bridges

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

(e) Design Requirements

1. General

- Permissible Bridge Geometrics. Maintain existing horizontal alignment and roadway profile. Bridge deck cross slopes will match the superelevation cross slope as indicated on existing plans. Utilize existing abutments, steel beams, and bearing. Do not lower the existing lower chord elevation.
- Abutment Analysis. No analysis is required for abutments or piers.
- Bearing. Utilize existing bearing.
- Permissible Material Type. Utilize existing superstructure to obtain adequate capacity to accommodate design vehicles (PHL-93 @ inventory rating and P-82 @ operating rating). Provide ratings in accordance with DM4 Policies and Procedures Section 5.5.5.1a and Figure 5.5.5.1.
- Design the superstructure to meet all strengths and service limit states for the specified staging.
- Apply protective coating for reinforced concrete surfaces (penetrating sealers) to deck and parapets and extend to drip notch.

- Slip-formed barriers are not allowed.
- Class AAA concrete is required for the bridge deck, and barriers.
- Provide composite cement concrete deck.
- Do not use the BLC standard drawings.
- Provide final bridge ratings with final TS&L submission.
- Shear and Moment Diagrams will not be required.

2. Geometry

Design the structure according to the geometrics shown on the Preliminary TS&L Plans, except changes will be allowed as follows:

- Horizontal Alignment: No Change Allowed
- Vertical Alignment: No Change Allowed
- Substructure Unit Locations: No Change Allowed
- Bridge Length: No Change Allowed
- Lane, Shoulder, and Sidewalk Widths: Provide proposed bridge out-to-out and curb-to-curb
- Cross Slope: No Change Allowed
- Centerline Bearing locations: No Change Allowed

3. Seismic

Use the following for seismic design:

• Seismic Site Coefficient = Not Applicable

4. Superstructure

Incorporate the following requirements into the superstructure design:

- Match existing typical deck section and deck grade.
- Deck Expansion Joints: Provide a new neoprene strip seal at Abutments.
- Precast panel forms for placing the concrete deck slab in lieu of metal stay-in-place forms are not allowed.
- Provide live load ratings with and without future wearing surface.
- All live load inventory ratings must be in accordance with DM4 Policies and Procedures Section 5.5.5.1a and Figure 5.5.5.1.
- Utilize existing bearing. Clean and lubricate bearings.

5. Substructure

Incorporate the following requirements into the substructure design:

- Design will utilize existing abutments. No analysis is required for abutments.
- Repair existing abutments, including deteriorated concrete, missing or loose granite stone veneer tiles, and pressure pointing of tile joints.

6. Temporary Bridges - Not Applicable

7. Maintenance of Traffic during Construction - Maintain traffic during construction in accordance with the special provision entitled "Item 9901-0033 - Construct Maintenance and Protection of Traffic Control Plan, SR 0065-A38" and the approved Traffic Control Plan.

8. Railroad Requirements - Not Applicable

9. Future Widening Requirements

In addition to Design Manual Part 4 requirements, incorporate the following future widening provisions into the design: None

10. Future Redecking Requirements

In addition to the requirements in Design Manual Part 4, incorporate the following future redecking provisions into the design: None

11. Inspection and Maintenance Accessibility - None

12. On-Bridge Lighting - None

13. Waterway Requirements - None

14. Environmental - None

15. Utilities

Refer to the existing structure plans for general utility details and a listing of required on-bridge utility materials, and material acquisition and installation responsibilities.

Design the bridge structure to accommodate the following utility facilities on, under, or above the bridge: None.

If utility relocations are required as part of an alternate structure, be responsible for securing approvals from the affected utility companies.

16. Other - None

(f) Foundations - Not Applicable

(g) Submittals

1. Final TS&L Submission

According to DM4, Policies and Procedures, Section 1.11.3.2.

2. Waterway - Not Applicable

3. Foundation Submission - Not Applicable

4. Final Structure Plans and Computations

According to DM4, Policies and Procedures, Section 1.11.3.4.

5. Shop Drawings

The contractor's designer is responsible for review and approval of all shop drawings. Provide District 11-0 with one (1) copy of all fabricator submissions, approved shop drawings, and designer comments.

6. Revisions During Construction

According to applicable sections of DM4, Policies and Procedures, Section 1.11.4

7. As-Built Plans

Prepare as-built plans according to DM4, Policies and Procedures, Section 1.11.4.5.

(h) Submittal Review, Approval, and Distribution

1. Submittal Review, Approval, and Distribution

According to DM4, Policies and Procedures, Section 1.11.3.5. This is a PENNDOT Oversight Project. A concurrence review and approval process will be used consisting of two parties: PENNDOT District 11-0 and the Department's review consultant.

2. Review Times

Submittal reviews will be performed within the following time periods:

a. Final TS&L Submission: Ten (10) working days for the first submission; five (5) working days for subsequent submissions.

b. Hydraulic Analysis/Permit Amendments - Not Applicable

c. Foundation Submission - Not Applicable

d. Partial Plans Submissions - Not Applicable

e. Utilities: Additional contract time will not be considered for additional utility relocation work associated with an alternate structure.

f. Final Plans: Ten (10) working days for the first submission; five (5) working days for subsequent submissions.

g. Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 PM will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

November 27 & 28, 2008 - Thanksgiving Holiday

December 25, 2008 - Christmas Day

January 1, 2009 - New Years Day

January 19, 2009 - Martin Luther King Junior Day

February 16, 2009 - President's Day

May 25, 2009 - Memorial Day

July 4, 2009 - Independence Day

III. MEASUREMENT AND PAYMENT - Lump Sum

Incremental payment will be made for the design based on the following schedule:

Final TS&L Approval 20%

Final Plans Approval 70%

As-Built Plans 10%

I32350B - c82350 ITEMS 8260-0010/0011/0012 - CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE

Addendum:

Associated Item(s): 8260-0010, 8260-0011, 8260-0012

Header:

Provision Body:

DESCRIPTION - This work is the construction for bridge work of the type bid in the corresponding specification entitled "Items 8217-0010/0011/0012 - Design of Bridge Structure, S-29280, S-29281, S-29282" and in accordance with the approved design and structure drawings. Construction of a temporary excavation support and protection system is included, if applicable.

MATERIAL - As indicated and as specified for each respective item included in the bridge structure.

CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408; Design Manual Part 4, Policies and Procedures, Chapter 1.11.4; Special Provisions for each respective item; and any additional requirements specified herein.

Do not commence construction until the structure plans are approved and signed by the District Bridge Engineer or Chief Bridge Engineer. Construction may commence on components of the structure provided that partial structure plans are approved and signed by the District Bridge Engineer or Chief Bridge Engineer.

MEASUREMENT AND PAYMENT - Lump Sum

a. General

ll items of work are to be included in and paid for as part of the contract lump sum price, except as indicated otherwise herein.

Submit a Component Item Schedule, as specified in Section 103.01(a). Make the total at the end of the Component Item Schedule equal to the lump sum price shown for the structure.

00 - c90001 Item 9000-0001 - Removal and Disposal of Existing Raised Pavement Markers

Addendum:

Associated Item(s): 9000-0001

Header:

Provision Body:

DESCRIPTION - This work is the removal and disposal of existing raised pavement markers in preparation for placement of the latex modified concrete wearing surface construction.

MATERIAL - Place the following materials if removal areas will be opened to traffic prior to preparation and construction of the latex modified concrete wearing surface operations.

- Superpave Asphalt Mixture Design, HMA Wearing Course, PG 64-22, 10 to < 30 Million ESALs, 9.5 MM Mix, SRL-L - Section 409.2
- Tack Coat - Section 460

CONSTRUCTION - Submit for approval the method of removal of pavement markers two weeks in advance of actual operation. Remove and dispose of existing raised pavement markers, as indicated or directed.

Satisfactorily and thoroughly clean the recessed area of loose materials, apply tack coat, and place wearing material with the type indicated, and compact.

MEASUREMENT AND PAYMENT - Each

Includes removal and disposal of existing raised pavement markers, placement of bituminous tack coat, and placement and compaction of wearing material.

As directed by Project Engineer.

00 - c90002 Item 9000-0002 - Removal and Disposal of Existing Pavt. Markings

Addendum: 1

Associated Item(s): 9000-0002

Header:

Provision Body:

DESCRIPTION - This work is the removal of existing paint along the base of concrete barrier and mountable curb. This work includes sweeping, brushing, water or abrasive blasting, handling, storage and waste disposal.

(a) General

1. This Item provides the material and execution requirements for ensuring that all project waste is properly collected, handled, stored, classified, transported, and disposed of in accordance with applicable EPA and Pennsylvania DEP regulations. The contractor is responsible for the protection of the workers, the public, and the environment from exposure to harmful levels of dust, heavy metals, and other toxic metals that may be present in the paint being removed.

2. Implement and maintain programs and procedures which comply with the requirements of this Item and all applicable Federal, State, County, and City regulations.

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

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

(b) Definitions

1. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act; commonly called Superfund. Federal laws addressing the clean up of hazardous waste sites. Amended in 1986 by Superfund Amendments and Re-Authorization Act (SARA). EPA implementing regulations are contained in 40 CFR 300-373.

2. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.

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

4. DEP - Pennsylvania Department of Environmental Protection

5. Department - Pennsylvania Department of Transportation

6. Disposal - The discharge, deposit, dumping, spilling, leaking or placing of any solid liquid waste or hazardous waste into or on any air, land or water, so that the solid liquid waste or hazardous waste, or any constituent thereof, may enter the environment or be emitted into the air, or discharged into any waters, including groundwaters.

7. Disposal Facility - A licensed facility where hazardous, residual, or non-hazardous waste is intentionally placed, and in which the waste will remain after closure.

8. Emission - A release of material to the air, water, or ground.

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

10. EPA Hazardous Waste Number - The Federal Number assigned to each hazardous waste. The number assigned to lead waste is D008.

11. Flood Plain - A flat, low-lying portion of a stream valley subject to periodic (50 to 100 years) inundation during a flood.

12. Generator - Any facility owner, operator or person whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. The Department is the Generator for the work under this Item, and will obtain the EPA provisional ID Number.

13. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Wastes may be classified as hazardous based on the characteristics of toxicity, ignitability, corrosivity, and reactivity. Paint debris is typically classified as hazardous waste based on the characteristic of toxicity. This is determined by testing representative samples of the waste using the Toxicity Characteristic Leaching Procedure (TCLP). If the leachate contains any of the eight metals or other substances in concentrations at or above limits established in 40 CFR 261, Identification and Listing of Hazardous Wastes, it is classified as hazardous (see Residual Waste).

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

15. Ignitability - A characteristic of waste that caused it to be classified as hazardous. Waste is determined to be ignitable if it is found to be capable of being set afire, or of bursting into flame spontaneously or by interaction with another substance or material, when tested in accordance with 40 CFR 261. Spent solvents and liquid paint waste typically fall into this category.

16. Leachate - The amount of a specific substance (e.g. lead) that is carried off or dissolved out of a material. The amount of leachable lead that classifies paint debris as being hazardous is 5 mg/L (ppm) when tested by TCLP.

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

18. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

19. mg/L - Milligrams per liter. Common units for reporting a concentration of a specific substance in units of mass per volume (e.g. amount of hazardous material contained in paint debris).

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

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

22. POTW - Publicly Owned Treatment Works

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

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

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

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

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

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

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

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

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

(c) Reference Standards and Regulations

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

2. Code of Federal Regulations (CFR)

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

3. EPA Methods

- SW 846, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods
- Method 3050, Acid Digestion of Sediment, Sludge, and Soils
- Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)

4. State, County, and City Regulations

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

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

- Waste Handling Plan: A written program that addresses the proper handling and disposal of all waste. Include the procedures that will be followed for the collection of representative samples of the waste; the procedures for the site handling, storage, and packaging of the waste; and contingency plans in the event of a spill.
- Transporter Information: The names, addresses, license or permit numbers, and qualifications of the proposed haulers of hazardous waste, non-hazardous waste, and waste water. Note that for work in Allegheny County, Article VIII has specific requirements for the permitting of solid waste transportation vehicles. Note the restrictions stipulated below for the use of Ohio transporters.

- Hazardous Waste Disposal Information: Advise legally permitted recycling or waste disposal facilities that paint debris will be generated (e.g., abrasive/paint debris), and identify the toxic metals that the waste will likely contain. Based on that information, request a letter from one or more of the hazardous waste recycling or disposal facilities, stating that the facility can accept this type of waste, is authorized to accept the waste under the laws of the state of residence; has the required capability to treat and dispose of the materials; and will provide or assure the ultimate disposal method indicated on the Uniform Hazardous Waste Manifest. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility. Note the restrictions stipulated below for the use of Ohio transporters.
- Restrictions on the Use of Ohio Hazardous Waste Transporters and Disposal Facilities: There are special restrictions on the use of Ohio hazardous waste transporters and disposal facilities. If the use of Ohio firms is proposed, have each proposed Ohio transporter and disposal facility complete the Certificate of Non-Affiliation Sheet (attached as Exhibit 1). Include the original sheet(s) with the submittals. Non-Hazardous and Other Waste Disposal Information: Submit the name and address of the permitted municipal waste landfill that will accept the non-hazardous and residual waste generated by the Contractor.
- Waste Water: Provide a letter from the proposed facility that will be accepting the waste water for disposal, indicating that the facility has the capability to handle and properly dispose of the water. Advise the facility of all of the toxic metals that may be present in the water. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility.
- Laboratory Qualifications: Provide the name, address, experience, and qualifications of the laboratory and/or firm that will be used for the waste sampling and analysis required under this Item.

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

MATERIAL -

(a) Waste Containers

1. Hazardous and Residual Waste: Provide DOT-approved containers of the appropriate size and type for the hazardous waste generated on the project. Use containers that are resistant to rust and corrosion (painted, if constructed of steel), that have tight fitting lids or covers, and which are water resistant and leak proof.

2. Municipal/Construction Waste: Provide all containers for non-hazardous municipal/construction waste. Use containers that are free of loose debris when brought on-site.

(b) Container Maintenance

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

CONSTRUCTION -

(a) General

Remove/sweep residue, dirt and debris from the inside roadway shoulder before commencing with paint removal operations. Collect and dispose of roadway sweeping at an approved waste site. Sweep, brush or use abrasive blast to remove paint from concrete median barrier and mountable curb. Cover roadway inlet and drainage facilities to prevent paint debris from entering water course. Select the location of the secured waste storage area together with the Department's representative. Collect all spent paint chips and dust. Containerize the spent paint chips and dust. Once a container in the work area is full, transport the waste to the secured storage area at the conclusion of the work day, or at the frequency agreed upon by the Department's representative. Test the containerized material. Dispose of the containerized material. Dispose of hazardous material in an approved hazardous waste site. Dispose of non-hazardous material in an approved landfill.

1. The Department is the generator of the hazardous waste for permitting purposes, and will provide the EPA provisional identification number, but the Contractor is responsible for the collection, handling, storage, transportation and disposal of all wastes.

2. Recover all waste products generated during cleaning work, including but not limited to rags, tape, disposable coveralls, filters, and paint debris. Unless otherwise directed by the Department, contain the waste only within the legal right-of-way.

3. Select the location of the secured waste storage area together with the Department's Representative. Transport the waste to the secured storage area at the frequency agreed upon by the Department's representative.

4. Conduct the work in strict accordance with Federal, state, and local regulations governing the collection, handling, transportation and disposal of waste.

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

(c) Items Provided by the Contractor

1. Containerizing, testing (classifying), handling, and storage of all waste.

2. Contracting with licensed and/ or permitted waste transporters for the transportation of all hazardous, residual, and non-hazardous waste, as well as waste water.

3. Contracting with licensed and/or permitted recyclers or disposers of all waste.

4. Locations for waste storage together with appropriate measures to assure that the area is secure (Note: storage locations must be approved by the Department).

5. Completed Waste Characterization Data Sheets for Department signature.

6. Completed hazardous waste manifests for Department signature.

7. Bill of Lading for non-hazardous waste.

(d) Waste Sampling, Testing, and Classification

1. Sampling

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

2. Testing

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

3. Classification

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

Arsenic	5.0 mg/L

Barium	100.0 mg/L
Cadmium	1.0 mg/L
Chromium	5.0 mg/L
Lead	5.0 mg/L
Mercury	0.2 mg/L
Selenium	1.0 mg/L
Silver	5.0 mg/L

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

4. Laboratory Report

- Have the laboratory send the original test report directly to the Department's representative with copies of the test results to the Contractor. Issue the reports no later than ten calendar days after the representative samples are collected.
- Include the following minimum information in each report: Identity of the waste stream(s) analyzed, the number of samples collected and tested, dates of sampling and testing, laboratory test procedures utilized, the names and signatures of the individuals collecting the samples and conducting the laboratory tests, and an interpretation of the test results. Include copies of the chain-of-custody forms in the documentation.
- Prepare the Waste Characterization Data Sheet (WCDS) and provide to the Department's representative for review and signature. Once approved, submit the original WCDS to the Department.

(e) Waste Handling, Packaging, and Storage

1. Comply with 40 CFR 262 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a for the on- site handling, packaging, and storage of all hazardous waste generated by the project.

2. Comply with Pennsylvania Title 25, Chapters 285 and 299 for the handling, packaging, and storage of residual and municipal construction non-hazardous waste. Comply with additional County and City regulations as applicable.

3. Do not place hazardous waste on the unprotected ground (e.g., cover the ground with impervious tarping). Locate in a secure area with signs around the perimeter, and shield adequately to prevent dispersion of the waste by wind or water. Contact the Department's representative for approval of the storage location(s).

4. Collect and store the waste at the end of each working day in storage drums or containers such that no waste is left exposed overnight, at a minimum. Use DOT-approved containers for hazardous and residual waste storage.

5. Cover all containers immediately upon filling and confirm that all lids are attached except when filling. Verify that all labels remain intact.

6. Store non-hazardous waste separately from hazardous waste. Do not co-mix hazardous waste with non-hazardous waste. Do not mix different types of hazardous waste together unless specifically approved by the Department's representative and the disposal facility.

7. Arrange containers in the storage area for easy accessibility. Stage the containers together in lots no greater than two rows of five containers each. Maintain a minimum lane clearance of 915 mm (36") between each lot of ten containers.

8. Verify that all waste (hazardous, residual, and non-hazardous) is transported to the appropriate recycling or disposal facility within 90 days after waste is first placed into the container.

9. Improper waste storage is cause for immediate project shut down until appropriate corrective action is completed.

10. Train all personnel in the proper handling of the hazardous waste at the work site in accordance with 40 CFR 265.16. Include procedures in the Waste Handling Plan that will be followed in the event of a release or spill, required notifications, and methods to be used for cleanup. Maintain all training records on-site.

11. Do not fill any container or roll-off in excess of the capacity marked on the container. If delays during pick-up are caused by overfilled containers, remediate the situation at no additional cost to the Department.

12. Place the soil into separate containers and assume all costs for its disposal, if soil remediation is required as a result of Contractor activities.

(f) Labeling of Containers

1. Label all containers of project waste and debris immediately to identify the contents. Label containers of spent abrasive as "BRIDGE BLAST ABRASIVE WASTE, Contains Lead". Include the Contract Number and the Bridge Identification Number or SR and SEC Number. Provide similar labels on containers of other project waste and debris.

2. Apply hazardous waste labels after the TCLP test results are received, if the waste tests hazardous. Label each container or roll-off of hazardous waste in accordance with 40 CFR 262, 49 CFR 171-179, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Include the following minimum information:

- Hazardous Waste. Federal law prohibits improper disposal. If found, contact the nearest police, or public safety authority, or the U.S. Environmental Protection Agency.
- Proper DOT Shipping Name
- Manifest Document Number
- Generator Name, Address, and EPA ID Number
- Date of Accumulation
- EPA Waste Number

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

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

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

(g) Waste Transportation and Disposal

1. Hazardous Waste

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

- Provide a certification for each manifested shipment that the waste was accepted by the recycling or disposal facility, and properly treated and disposed.

2. Residual and Non-Hazardous Municipal/Construction Waste

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

(i) Special Handling and Disposal Conditions for Waste Water

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

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

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

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

(j) Recordkeeping

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

MEASUREMENT AND PAYMENT -

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

00 - c90003 Item 9000-0003 - Unforeseen Drainage Facility Repairs

Addendum: 2

Associated Item(s): 9000-0003

Header:

Provision Body:

DESCRIPTION - This work is the repair and/or cleaning of existing subsurface drainage facilities which were unforeseen during design and revealed by the visual and video inspections.

MATERIAL - In accordance with:

- Section 601.2 - Pipe Culverts

- Section 604.2 - Combination Storm Sewer and Underdrain
- Section 605.2 - Endwalls, Inlets, Manholes, and Spring Boxes
- Section 616.2 - End Sections and Slope Pipe Fittings
- Other drainage repairs as directed

CONSTRUCTION - In accordance with applicable portions of Sections 601, 604, 605, 616, applicable portions of Design Manual Part 2, Chapter 10 Drainage Design and Related Procedures, and the following Standard Roadway Construction Drawings:

- RC-31M (Endwalls)
- RC-32M (Slope Pipe Fittings, Pipe Connectors, and Concrete Collar for Pipe Extension)
- RC-33M (End Sections for Pipe Culverts)
- RC-34M (Inlets)
- RC-36M (Spring Boxes)
- RC-39M (Standard Manholes)
- RC-46M (Inlet Boxes)

And as follows: Repair and/or clean existing subsurface drainage facilities, as directed, and as a result of the facility inspections. This item is for work identified as a result of a facility inspections and does not include any drainage work required by the Special Provision for Item 9000-6001.

Coordinate these repairs with the Erosion and Sediment Pollution Control Plan control measures and permanent features to ensure economical, effective, and continuous pollution control throughout the construction and post-construction periods.

Also comply with the requirements specified in Section 107.28.

If directed, place pollution control measures for authorized areas outside the right-of-way.

Comply with all applicable Federal, State, and local laws, rules, or regulations.

MEASUREMENT AND PAYMENT - Dollar

The proposal will include an item and a predetermined amount of money for repair of damaged or non-functional existing drainage facilities. The contract item will have a unit of measure of Dollar, a unit price of $1.00, and a quantity equal to the predetermined amount.

Due to the contingent or unpredictable nature of the work being performed, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under the Unforeseen Drainage Facility Repairs item as follows:

a. Contract Items. The Department will pay for performance of work, identified as having similar items listed in the contract, at the contract unit price.
b. Non-Contract Items. The Department will pay for items of work not identified in the contract as follows:

    1. Negotiated Price. At price agreed upon with the Department before performing the work. If applicable, agreement is also required with FHWA.
    2. Force Account Basis. Section 110.03(d).

00 - c90004 Item 9000-0004 - Superpave, HMA Binder Course, Manual Patching

Addendum: 2

Associated Item(s): 9000-0004

Header:

Provision Body:

In accordance with Section 450 except as follows:

Section 450.1 DESCRIPTION - Revise by adding the following:

This work is for the maintenance of the roadways and shoulders throughout the entire project area throughout the life of the project, as directed.

Section 450.3 CONSTRUCTION - Revise by adding the following:

Maintain the quality of the riding surface of all of the existing project roadways by performing manual bituminous patching, as directed.

Section 450.4(a) Superpave Asphalt Mixture Design, HMA Wearing Course (Manual Patching). Revise by adding the following:

Includes bituminous tack coat.

00 - c90011 Item 9000-0011 - Longitudinal Joint Repair

Addendum:

Associated Item(s): 9000-0011

Header:

Provision Body:

DESCRIPTION - This work is the repairing of existing longitudinal joints with superpave asphalt mixture design, HMA wearing course (standard) prior to resurfacing of the roadway as indicated.

MATERIAL -

a. Superpave Asphalt Mixture Design, HMA Wearing Course, PG 64-22, 10 to <30 Million ESALs, 9.5 MM Mix, SRL-L - Section 0409.2

b. Bituminous Tack Coat - Section 460.2(a)

c. Heavy Duty Membrane - Section 467

d. Longitudinal joint cleaning and sealing as specified in the plans.

e. Milling of Bituminous Pavement Surface - Section 491

CONSTRUCTION - As indicated and as follows:

a. Mill existing longitudinal joint 2' wide or as directed, to remove existing deteriorated concrete.

b. Clean and seal remaining depth of longitudinal joint as specified in the plans and as follows:

1. If the width of the joint or spall in this area is less than 2" wide, clean and seal in accordance with Publication 408, Section 512.

2. If the width of the joint or spall in this area is equal to or greater than 2" wide, clean, and seal in accordance with Publication 408, Section 512, except use FJ-1 bituminous material in lieu of joint sealing material.

c. Tack coat all surfaces prior to placement of wearing course material.

d. After tack coat is cured, place wearing course material. Ensure that, after compaction, the surface of the patch conforms to the grade of the surrounding pavement.

MEASUREMENT AND PAYMENT - Linear Foot

Consider the milling, wearing course, bituminous tack coat, longitudinal joint cleaning and sealing, and heavy duty membrane incidental to the longitudinal joint repair item.

00 - c90019 Item 9000-0019 - Heavy Duty Membrane

Addendum:

Associated Item(s): 9000-0019

Header:

Provision Body:

In accordance with Section 467 except as follows:

Section 467.1 DESCRIPTION - Revise to read:

This work is placing heavy duty membranes over longitudinal joints and random cracks in existing concrete pavements at locations indicated or directed by the representative.

Section 467.3(d) Revise by adding the following:

Place membrane in 12" widths.

Section 467.4 MEASUREMENT AND PAYMENT - Revise to read:

Linear Foot

00 - c90025 D11 Item 9000-0250 - Locate Existing Underground Facilities

Addendum:

Associated Item(s): 9000-0250

Header:
ITEM 9000-0250 - LOCATE EXISTING UNDERGROUND FACILITIES

Provision Body:

DESCRIPTION - This work is identifying, investigating, testing, electronically and physically locating including plotting existing facilities on contract drawings, and disconnecting and reconnecting existing underground facilities.

MATERIAL -

- Electrical splice materials. Use material appropriate for facilities that are required to be disconnected and reconnected.

CONSTRUCTION - Identify those buried electrical facilities which are within the project limits and may be impacted by work performed on the project. Review any available plans, details, diagrams, and information provided by facility owners, representatives or interested parties. Provide the labor, material, and equipment necessary to accurately identify and physically locate those facilities. Utilize industry recognized procedures and analytical devices to assist in the physical location. Plot existing facilities that have been identified and located on contract drawings to show potential conflicts with proposed construction activities such as guiderail installation. Provide a full size copy of these drawings along with any anticipated conflicts and proposed solutions to the Engineer for review and approval four weeks prior to beginning any operation that may impact existing underground facilities. When disconnection of the facility is required for testing and/or location, make arrangements with the facility owner to

provide necessary jumpers to ensure continuity of operation. Provide those jumpers in a manner approved by the facility owner and the Engineer, in advance of performing the work.

When the work is completed, remove any jumpers, reconnect, and test the system to the satisfaction of the Engineer, demonstrating that the integrity of the facility is fully restored. Do not begin this work without notifying the facility owner and the Engineer at least three days in advance.

MEASUREMENT AND PAYMENT - Dollar

The proposal will include an item and a predetermined amount of money for locating existing underground facilities. The contract item will have a unit of measure of Dollar, a unit price of $1.00, and a quantity equal to the predetermined amount.

Due to the contingent or unpredictable nature of the work being performed, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under the Locate Existing Underground Facilities item as follows:

(a) Contract Items. The Department will pay for performance of work, identified as having similar items listed in the contract, at the contract unit price.

(b) Non-Contract Items. The Department will pay for items of work not identified in the contract as follows:

1. Negotiated Price. At price agreed upon with the Department before performing the work. If applicable, agreement is also required with FHWA.

2. Force Account Basis. Section 110.03(d).

00 - c90200 Items 9000-2000 thru 8000 - Jacking Bridge Superstructure

Addendum:

Associated Item(s): 9000-2000, 9000-3000, 9000-4000, 9000-5000, 9000-8000

Header:

Provision Body:

DESCRIPTION - This work is jacking of the superstructure, including designing, furnishing, installing, and removing a jacking system. This work also includes a secondary temporary support system to secure the superstructure in the jacked position such that full support is provided by means other than the hydraulic pressure of the jack(s). Jacking is required for bearing replacement at the following locations:

S-25547 (Ramp D)

- Pier D8 Back Bearing Line
- Pier D8 Ahead Bearing Line
- Abutment D10

S-25548 (Ramp E)

- Abutment E1
- Pier E3 Back Bearing Line
- Pier E3 Ahead Bearing Line

S-25549 (Ramp H)

- Abutment H7
- Pier H4 Back Bearing Line
- Pier H4 Ahead Bearing Line

S-25550 (Ramp J)

- Pier J2 Back Bearing Line
- Pier J2 Ahead Bearing Line
- Pier J4 Back Bearing Line
- Pier J4 Ahead Bearing Line
- Abutment J7

S-25553 (Ramp B1)

- Abutment B1-1

MATERIAL - Provide materials as specified by the Professional Engineer registered in the Commonwealth of Pennsylvania who prepared the jacking scheme. The specified materials are not approved until the jacking scheme is approved by the Department. Materials need not be new but must be in good physical condition as determined by the Engineer. Submit all applicable material certifications to the representative for review and acceptance. All temporary material used does not have to be from a Bulletin 15 source, but must meet the following:

a. Structural Steel - Section 1105.02 conforming to AASHTO M270 (ASTM A709) Grade 36, Grade 50, or Grade 50W.

b. High Strength Bolts, Nuts, and Washers - Section 1105.02(d)

c. Timber - Rough Cut Species in AASHTO Guide Specification, Appendix A, and AASHTO Construction Handbook for Bride Temporary Works, Appendix C.

d. Concrete - Section 704

e. Reinforcement Bars - Section 709.1

f. Other Material - In accordance with applicable sections of Publication 408.

DESIGN -

a. Jacking and Temporary Superstructure Support Procedure. Submit for approval drawings and calculations for the proposed jacking operation and temporary superstructure support system for each location prior to beginning this work. Do not begin this work until the submission is approved. Include in this submission the following minimum items:

1. Work required to be completed prior to the jacking operation being performed.

2. Written narrative describing the jacking procedure and when work is to be performed.

3. Sketches of all required components of the jacking operation and temporary superstructure support system, including the size and capacity of the jacks to be used. Include catalog cuts of any manufactured products which clearly state the capacity, strength, safe working load, allowable working stresses, etc., for that product or material.

4. Calculations performed, sealed, and signed by a Professional Engineer registered in the Commonwealth of Pennsylvania showing that all components of the jacking system and temporary superstructure support system are not overstressed and are stable for all combinations of loads in accordance AASHTO Standard Specifications for Highway Bridges and Design Manual, Part 4, current FHWA guidelines and AASHTO Guide Specifications, as applicable. Include in these calculations the effect of wind and all other transverse and longitudinal forces on the structure in accordance with current design codes. Show all assumptions, material specifications, and references clearly. Include calculations for foundations and design bearing pressures at base of falsework towers. Use maximum design bearing pressure of 2 tons per square foot. A larger allowable design bearing pressure may be used if substantiated by field investigation, approved core borings, and approved calculations.

5. Provide for expansion and contraction movement of the girders while supported by the jacking system for a minimum temperature range of 40°F. Account for forces that develop in all components due to thermal movement of the superstructure. Provide bearings or slip surfaces as required.

CONSTRUCTION -

a. General.

1. Do not order materials or begin work until the jacking procedure and materials are approved by the Department.

2. Verify all dimensions in the field before fabrication.

3. Coordinate this work with Class AA Cement Concrete Repairs. Perform concrete repairs on concrete surfaces that will be supporting jacking devices or assemblies prior to jacking operations. Jack structure after concrete has attained its required compressive strength of 3000 psi.

4. Submit calibration certificates for the jacks indicating calibration within six months of the performance of the jacking operation.

5. Repair any structural damage resulting from this work to the satisfaction of the Engineer at no additional cost to the Department.

b. Phasing.

1. Perform this work when the bridge is closed to traffic.

2. Complete this work prior to setting expansion dams at the same locations.

c. Jacking Requirements.

1. Require the Professional Engineer responsible for the design of the jacking system and temporary support system to inspect the completed installation prior to jacking operations. Provide a letter from the engineer that the installation is consistent with the design. Make suitable changes to the installation to correct any inconsistencies, or have the engineer revise and resubmit to the Engineer calculations and sketches that are inconsistent with the installation.

2. Jacking loads for dead loads are shown on the Plans. Included loads from anticipated construction materials and equipment in the design of the jacking and temporary support systems.

3. Provide jacks with a minimum rated capacity of one and one-half (1.50) times the calculated jacking loads.

4. Install temporary bearing stiffeners and other structural steel modifications, as required, prior to jacking.

5. Provide a secondary temporary support system to secure the superstructure in the jacked position such that full support is provided by means other than the hydraulic pressure of the jack (s). Accommodating expansion and contraction of the superstructure through the use of bearings, slip surfaces, or other suitable means.

6. Do not exceed a vertical jacking displacement of 1/4".

7. Jack both bearings at a bearing line (right and left bearings) simultaneously.

d. Temporary Support System.

1. Do not begin jacking procedures until the temporary support system is in place. Once the superstructure has been raised to the required height, and prior to removing the existing bearings, engage the temporary support system.

2. Once the bearings have been replaced, remove the temporary support system and lower the superstructure onto the new bearings.

e. Bearing Stiffeners.

1. Provide for field- installed bearing stiffeners to stiffen the webs of the existing beams at the temporary support locations. Attached bearings stiffeners by bolts. Field welding of the bearing stiffeners is not permitted.

2. Clean and prime paint existing steel that will be in contact with new steel in accordance with the Special Provision "Zone Painting Existing Structural Steel."

3. Field drill new bolt holes in girder web. Drill holes at every third bolt location. Install bolts in the stiffener in every third bolt location prior to proceeding with drilling the remaining bolt holes. Install bearing stiffeners in accordance with Section 1050.3.

f. Removal.

1. Remove all temporary materials to the satisfaction of the representative.

2. Leave bearing stiffeners permanently attached to structure and do not remove. Provide for painting of these bearing stiffeners in accordance with the Special Provision "Zone Painting Existing Structural Steel."

MEASUREMENT AND PAYMENT - Lump Sum

Includes all jacking and temporary support for the structure.

Concrete repairs are included in other items.

Cleaning and painting of connection areas are included painting items.

00 - c90201 Items 9000-2001/3001/9001 - Scarification

Addendum:

Associated Item(s): 9000-2001, 9000-3001, 9000-9001

Header:

Provision Body:

DESCRIPTION - This work is scarifying existing concrete bridge decks to a 1/2" uniform depth in preparation for placing a latex modified concrete wearing surface.

CONSTRUCTION - Section 1041.3 and as follows:

Section 1041.3(b) Equipment. Revise the second sentence to read:

The equipment used for scarification is required to remove 1/2" across the cutting path.

MEASUREMENT AND PAYMENT - Square Yard

For 1/2" total depth of scarification satisfactorily completed, regardless of how many passes are made with the scarifier.

00 - c90202 Items 9000-2002/3002/9002 - Scarification, Vertical Transition

Addendum:

Associated Item(s): 9000-2002, 9000-3002, 9000-9002

Header:

Provision Body:

DESCRIPTION - This work is scarifying existing concrete bridge deck to a variable depth in preparation for placing a latex modified concrete wearing surface in the vertical transition areas where indicated.

CONSTRUCTION - Section 1041.3 and as follows:

Section 1041.3(a) General. Add the following:

Perform work adjacent to deck expansion joints where indicated. Suitably combine transition and geometrics to accommodate adjacent intersecting deck expansion joint.

Perform this work after removal of the first 1/2" of depth in accordance with Items 9000-2001, 9000-3001, and 9000-9001.

Remove 1/2" or less with each pass of the scarification equipment. Provide four 6' wide steps of for a total transition width of 24' and a total depth of 1 1/2" at the edge of the deck. Refer to BC-783M for additional details of transition area.

Section 1041.3(b) Equipment. Revise the second sentence to read:

The equipment used for scarification is required to remove 1/2" across the cutting path.

MEASUREMENT AND PAYMENT - Square Yard

For total depth of scarification satisfactorily completed regardless of how many passes are made with the scarifying equipment.

The first 1/2" depth of removal is not included in this item, and is included in other scarification items.

00 - c90203 Items 9000-2003/3003/9003 - Concrete Bridge Deck Surface Preparation

Addendum:

Associated Item(s): 9000-2003, 9000-3003, 9000-9003

Header:

Provision Body:

DESCRIPTION - This work is bridge deck preparation using hydrodemolition to remove unsound material. This item also includes the removal and disposal of concrete and debris, vacuuming, shielding, water control, additional removal of concrete, and other aspects of work necessary to prepare the deck for the placement of the new latex modified concrete overlay.

CONSTRUCTION -

a. General. Perform hydrodemolition surface preparation over the entire top surface of the reinforced concrete bridge deck to provide a rough and bondable surface and to remove unsound concrete during the initial hydrodemolition surface preparation pass. Remove unsound concrete or original deck surface found after the initial hydrodemolition surface preparation pass at no additional cost to the Department. Unsound concrete is defined as existing bridge deck concrete that is deteriorated, spalled, delaminated, or determined by the Engineer to be unsound.

b. Hydrodemolition.

1. Provide hydrodemolition equipment consisting of a computerized, self-propelled machine that utilizes a high pressure water jet stream to provide a rough and bondable surface while removing all unsound concrete, rust, and concrete particles from exposed reinforcement during the initial pass.

2. Prior to the commencement of the hydrodemolition surface preparation operation, calibrate the hydrodemolition equipment on an area of sound concrete 7' x 7' as designated by the Engineer to demonstrate the desired result of this specification which is providing a highly rough and bondable surface while not removing significant surface depth.

3. Move the hydrodemolition equipment to a second area 7' x 7' that is unsound as designated by the Engineer to demonstrate the desired result of this specification which is providing highly rough and bondable surface while removing unsound concrete during the initial pass.

4. Provide verification of the following settings to the Engineer:

- Water Pressure Gauge.
- Minimum water usage at 55 gallons per minute.
- Machine staging control (step).
- Nozzle size.
- Nozzle speed (travel).

5. If the equipment or end result is deemed unsatisfactory by the Engineer, remove the hydrodemolition equipment from the project site and provide another hydrodemolition unit for calibration. No additional contract time will be provided for this recalibration process if required.

6. The hydrodemolition surface preparation production may begin after the Engineer has approved the calibration and the above settings. Maintain and give to the Engineer the calibration and production settings prior to and during hydrodemolition surface preparation production by the Contractor.

7. Stop the surface preparation operation if it is determined that sound concrete is being removed or unsatisfactory results are being obtained, as determined by the Engineer. Perform appropriate recalibration or changes in equipment and methods prior to resuming the operation.

8. Perform calibration each time the hydrodemolition surface preparation is performed and as required to achieve the results specified.

c. Water Control. Submit a plan for approval to the Engineer for control and filtering of all water discharged during operation. Implement the plan during all hydrodemolition operations.

d. Shielding. Provide shielding, as required, to ensure containment of all dislodged concrete within the removal area in order to protect the traveling public from flying debris on, adjacent to, and below the work site.

e. Additional Removal of Concrete.

1. Remove any existing asphalt or concrete patching material with a pneumatic hammer not heavier than 30-pound class prior to the initial hydrodemolition surface preparation pass.

2. After the hydrodemolition surface preparation operation has completed the initial pass and the deck and approach slabs are dry and frost free, resound the deck to ensure that all unsound material has been removed.

3. Use pneumatic hammers not heavier than nominal 30-pound class, operated at no more than a 45° angle from horizontal, in areas that are inaccessible to the hydrodemolition equipment or in full-depth patching areas that require minor trim work to remove the remaining unsound concrete.

4. Remove unsound materials detected by the Engineer by pneumatic hammers (not heavier than 30 pound class) or by hydrodemolition at no additional cost to the Department.

5. Remove additional concrete around exposed reinforcement bars that are adjacent to unsound concrete to provide 3/4" clearance around the bar.

6. The requirement to provide a minimum 3/4" clearance around all reinforcing bars that have more than one-half the diameter exposed is waived, providing that the existing concrete is sound. The amount of steel exposed should be kept to a minimum.

f. Removal of Concrete and Debris.

1. All construction debris, milling debris, and dust is to be completely removed from the bridge deck surface prior to calibration and commencement of the hydrodemolition surface preparation operation.

2. Clean the hydrodemolition and milling debris with a vacuum system equipped with fugitive dust control devices and capable of removing wet debris and water all in the same pass. Blow dry the deck with air to remove excess water.

3. Perform cleaning in a timely manner, before debris and water is allowed to dry on the deck surface. Remove any material allowed to dry prior to sounding at no additional cost to the Department.

g. Reinforcement.

1. Splice or replace any reinforcing steel damaged or dislodged by these operations, with the same size bar, at no additional cost to the Department.

2. Existing epoxy coating removed from reinforcement as a result of these operations is not required to be repainted.

h. Technical Representation. Provide a non-working technical field representative on the project site during the calibration and the hydrodemolition surface preparation operation.

MEASUREMENT AND PAYMENT - Square Yard

Includes full surface area of deck regardless of the number of passes required to achieve satisfactory results.

Additional removal of concrete is incidental to this item of work and will not be paid for separately.

00 - c90204 Items 9000-2004/3004/9004 - Latex Modified Concrete Wearing Surface

Addendum:

Associated Item(s): 9000-2004, 9000-3004, 9000-9004

Header:

Provision Body:

DESCRIPTION - This work is construction of a one course wearing surface of latex modified concrete on in-service bridge deck at the indicated minimum depth.

MATERIAL - Section 1042.2

CONSTRUCTION - Section 1042.3 and as follows:

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing latex modified concrete.

Where any portion of the latex modified concrete is to be placed adjacent to a sawcut or formed vertical construction joint, sandblast the vertical face prior to placement.

MEASUREMENT AND PAYMENT - Square Yard

Scarification, Concrete Bridge Deck Surface Preparation Hydrodemolition, and Concrete Bridge Deck Repairs, Type 3, will be paid separately.

Additional latex modified concrete for depths greater than 1 1/2" due to deterioration removed by hydrodemolition and scarification of vertical transitions will be paid for separately as Latex Modified Concrete, Variable Depth.

00 - c90208 Items 9000-2008/3005/9005 - Latex Modified Concrete Wearing Surface

Addendum:

Associated Item(s): 9000-2008, 9000-3005, 9000-9005

Header:

Provision Body:

DESCRIPTION - This work is furnishing and placing latex modified concrete wearing surface of a variable depth where depths are in excess of 1 1/2". This includes locations were deteriorated deck concrete has been removed by hydrodemolition and in the areas of scarified vertical transitions.

MATERIAL - Section 1042.3

CONSTRUCTION - Section 1042.3 except as follows:

Section 1042.3(b) Surface Preparation. Revise by replacing with the following:

Perform all surface preparation as part of Latex Modified Concrete Wearing Surface, 1 1/2" Depth.

Section 1042.3(c) Placing and Finishing. Revised by adding the following:

Place latex modified concrete required for this item in one operation with Latex Modified Concrete Wearing Surface, 1 1/2" Depth.

Section 1042.4 MEASUREMENT AND PAYMENT - Cubic Yard

The limits of payment are from above the prepared and roughen deck surface elevation to the bottom the Latex Modified Concrete Wearing Surface, 1 1/2" Depth.

00 - c90220 Items 9000-2200 thru 9200 - Repair Type 20, Class AA Cement Concrete Repairs

Addendum:

Associated Item(s): 9000-2200, 9000-3200, 9000-4200, 9000-5200, 9000-8200, 9000-9200

Header:

Provision Body:

DESCRIPTION - This work is repairing deteriorated areas of concrete on substructure units with Class AA Cement Concrete.

MATERIAL -

- Class AA Cement Concrete - Section 704, except use AASHTO No. 8 Coarse Aggregate.
- Reinforcement Bars - Section 709.1, epoxy coated.
- Steel Welded Wire Fabric - Section 709.3, epoxy coated or galvanized.
- Concrete Bonding Compound - Section 706
- Annealed Iron Wire - ASTM A684.
- Adhesive Anchor Material - Section 516.2(k), an approved type listed in Bulletin 15.
- Epoxy Paint - An approved type.
- Water-reducing Admixture (Superplasticizer) - Section 711.3.

CONSTRUCTION -

a. General.

1. All repair areas will be delineated by the Engineer.

2. Provide safe access to concrete repair areas of the substructure to permit the Engineer to sound all concrete and delineate the limits of repair.

3. Provide safe access for performance of the work.

4. Perform work in accordance with applicable parts of Section 1001.3 and as indicated.

b. Removal.

1. Provide satisfactory shielding below or adjacent to all areas of removal of deteriorated concrete to protect traveled roadways and railroad tracks. Do not permit debris to fall onto traveled roadways and railroad tracks or fall into the river.

2. Sawcut around the periphery of delineated repair areas to a minimum depth of 1", but not to the depth of reinforcement.

3. Remove deteriorated concrete within the boundaries to sound concrete, but not less than a depth to 3/4" behind the reinforcement bars. If concrete is unsound at a depth at 3/4" behind the reinforcement bars, do not remove additional concrete without approval of the Engineer. Remove concrete to roughly squared edges around the perimeter of the repair area. Provide

exposed reinforcement bars with a 3/4" minimum clearance all around. If deteriorated concrete extends beyond the initially outlined area, enlarge area as directed.

4. Do not use pneumatic hammers heavier than nominal 25-pound class.

5. Use hand tools, such as hammers and chisels or small air chisels, to remove loose particles of unsound concrete or to provide necessary clearances around reinforcement bars.

6. After removal of concrete, sandblast the concrete surface within the removal limits to remove partially loosened chips.

c. Reinforcement.

1. Blast clean all exposed existing reinforcement to white metal. Remove and replace all portions of damaged or heavily corroded reinforcement bars (reinforcement with 25% loss or more) with the same size epoxy coated reinforcement. Splice new epoxy coated bars to the existing reinforcement. If sufficient splice length is not available, drill new dowel holes and place dowel bars as directed.

2. Paint all exposed reinforcement bars with epoxy paint.

3. Dowel No. 4 reinforcement with a standard hook 9" into the existing concrete with non-shrink grout at spacings as indicated.

4. Place welded wire fabric reinforcement within the repair area and tie to existing reinforcement bars and dowel bars.

d. Concrete Placement.

1. Set forms to original surface and maintain all chamfers, joints, and grooves. If clear concrete cover to the reinforcement bars is less than 2", set forms to provide 2" of clear cover by haunching the repair outwards. Provide adequate ports for applying concrete bonding compound and placement of repair concrete. Use removable forms.

2. Blow-clean all removal areas with oil-free compressed air and protect against any contaminant detrimental to the bond of the new concrete.

3. Immediately prior to placing new concrete, apply concrete bonding compound to the area of existing concrete that will be in contact with the new concrete. Place concrete against the bonding compound while it is still sufficiently tacky to provide a proper bond. Recoat bonding compound that is no longer tacky. Wire-brush or abrasive blast bonding compound that has hardened before recoating.

4. Place concrete in accordance with applicable parts of Section 1001.3.

5. Use water cure in accordance with Section 1001.3. Membrane curing is not permitted.

MEASUREMENT AND PAYMENT - Cubic Foot

Measured prior to placing forms.

Removal of existing concrete and placement of all repair materials are included in this item.

Repair areas enlarged beyond the initially outlined area will be paid at the same unit price with no compensation for additional sawcutting.

Providing safe access for the Engineer to determine limits of repair and inspect the work is incidental to this item.

00 - c90240 Item 9000-2400 - Repair Type 40, Replace Diaphragms at New Tooth Dam

Addendum:

Associated Item(s): 9000-2400

Header:

Provision Body:

DESCRIPTION - This work is removal of existing steel diaphragms and replacement with new steel diaphragms in-kind.

MATERIAL -

- Fabricated Structural Steel – Section 1105(a), Grade 36.
- High-strength Bolts, Nuts, and Washers – Section 1105.02(d), ASTM A325.
- Paint (Primer) - Use the same primer as selected for zone painting existing structural steel.

CONSTRUCTION -

a. General.

1. Diaphragm replacement is as directed by the Engineer. The Engineer will determine the location of diaphragm replacements.

2. Verify all dimensions in the field before fabrication.

3. Replace only one diaphragm at a bearing line at a time.

4. Coordinate this work with replacement of expansion dam with tooth dam.

b. Cleaning Connection Areas. Clean and prime existing steel where new steel, bolts, nuts, and washers will be in contact in accordance with the Special Provision “Zone Painting Existing Structural Steel.”

c. Installation. Install new structural steel in accordance with Section 1050.3.

d. Painting. Shop-apply primer in accordance with Section 1060.

MEASUREMENT AND PAYMENT – Dollar. The proposal will include an item and a predetermined amount of money for replacing diaphragms at new tooth dams. The contract item will have a unit of measure of Dollar, a unit price of $1.00, and a quantity equal to the predetermined amount.

Due to the contingent or unpredictable nature of the work being performed, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under the Replace Diaphragms at New Tooth Dam Repair item as follows:

1. Negotiated Price. At price agreed upon with the Department before performing the work. If applicable, agreement is also required with FHWA.

2. Force Account Basis. Section 110.03(d).

00 - c90241 Items 9000-2410/3410/4410/5410/8410 - Repair Type 41, Replace Expansion Bearings

Addendum:

Associated Item(s): 9000-2410, 9000-3410, 9000-4410, 9000-5410, 9000-8410

Header:

Provision Body:

DESCRIPTION - This work is the replacing existing expansion (rocker) bearings at the locations indicated with high load multi-rotation bearings (disc bearings) and includes removing existing bearings and sole plates and fabricating and installing new steel bearing stools and disc bearings.

MATERIAL -

- Fabricated Structural Steel - Section 1105.02(a), AASHTO M270, Grade 50.
- High Load Multi-Rotational Bearings - Section 1111

- High-strength Bolts, Nuts, and Washers - Section 1105.02(d), ASTM A325
- Paint – Section 1060.2

CONSTRUCTION -

a. General.

1. Verify all dimensions in the field before fabrication. Ensure that final placement of new bearing stools and bearings restore the girder to its original elevation.

2. Jack superstructure in accordance with the Special Provision AJacking Bridge Superstructure.@

3. Perform masonry plate extension in accordance with the Special Provision AMasonry Plate Extension@ prior to installing new bearing where indicated.

4. Install new bearing stiffeners in accordance with the Special Provision “Bearing Stiffeners” prior to installing new bearing where indicated.

5. Repair deteriorated concrete adjacent to new concrete prior to placing new concrete in accordance with the Special Provision “Class AA Cement Concrete Repairs.”

6. Provide shop drawings of the bearings in accordance with Section 1111.03(g).

b. Removal.

1. Remove existing rocker bearings and sole plates in their entirety. Remove welds connecting the sole plate to the girder flange by grinding or other suitable means that will not damage the existing girder flange. Following removal of the plate, grind remaining welds flush with and as smooth as the base metal. Grind pintles flush with masonry plate.

2. Clean and prime paint existing steel that will be in contact with new steel in accordance with the Special Provision “Zone Painting Existing Structural Steel.”

c. New Bearing Stools and Disc Bearings.

1. Install new bearing stools as indicated and in accordance with Section 1105.03(m).

2. Install bearings in accordance with Section 1050.3(c)4. Field-drill and field-tap holes in new sole plate where indicated.

MEASUREMENT AND PAYMENT - Each

Jacking bridge superstructure, repair of deteriorated concrete, masonry plate extension, and bearing stiffeners are included in other items of work.

00 - c90242 Items 9000-2420/3420/4420/5420 - Repair Type 42, Bearing Stiffeners

Addendum:

Associated Item(s): 9000-2420, 9000-3420, 9000-4420, 9000-5420

Header:

Provision Body:

DESCRIPTION – This work is furnishing and installing new fabricated structural steel bearing stiffeners with bolted connection.

MATERIAL –

- Fabricated Structural Steel - Section 1105.
- High-Strength Bolts, Nuts, and Washers - Section 1105.02(d).

- Paint (Primer) - Use the same primer as selected for zone painting existing steel.

CONSTRUCTION -

(a) General. Verify all dimensions in the field before fabrication.

(b) Removal. Remove existing bracing gusset plates that interfere with installation of the new bearing stiffener, as required. Temporarily support bracing. Reinstall gusset plate with new bolts after installation of new bearing stiffener.

(c) Installation. Install new bearing stiffeners as indicated and in accordance with Section 1050.3. Ensure tight fit against the bottom flange. Field drill new bolt holes in girder web. Do not drill more than one-third of the bolt holes in the girder web at any one time. Install bolts in the stiffener to specification prior to proceeding with drilling the next set (one-third) of bolt holes.

(d) Cleaning Connection Areas. Clean and prime existing steel where new steel, bolts, nuts, and washers will be in contact in accordance the Special Provision “Zone Painting Existing Structural Steel.”

(e) Painting. Shop-apply primer in accordance with Section 1060.3.

MEASUREMENT AND PAYMENT – Each

One repair consists of furnishing and installing two bearing stiffener angles, one on each side of the web plate.

Cleaning and priming connection areas are included in painting items.

00 - c90252 Items 9000-2521 thru 9522 - Repair Type 52, Replace Expansion Dam

Addendum:

Associated Item(s): 9000-2521, 9000-3521, 9000-4521, 9000-5521, 9000-8521, 9000-9521, 9000-9522

Header:

Provision Body:

DESCRIPTION - This work is removing existing expansion joints and fabricating and installing new replacement neoprene strip seal dams of the size indicated.

MATERIAL - In accordance with Section 1026.2 and as follows:

a. Class AAA Cement Concrete - Section 704

b. Class AA Cement Concrete - Section 704

c. Curing and Protecting Covers - Section 711.1

d. Forms - Section 1001.2(h)

e. Reinforcement Bars - Section 1002.2(a), epoxy coated.

f. Annealed Iron Wire - Section 1002.2(b)

g. Epoxy Paint - An approved type listed in Bulletin 15.

h. Concrete Bonding Compound - Section 1001.2(k)

i. High Strength Bolts, Nuts, and Washers - Section 1105.02(d)

j. Conduit Expansion and Deflection Fittings - Section 1101.09(a)

CONSTRUCTION -

a. General.

1. Prepare shop drawings in accordance with Section 1026.3.

2. Perform expansion dam replacement after completion of bearing replacement where expansion joints and bearings are replaced at the same location.

b. Removal.

1. Protect traffic on adjacent travel lanes and below bridge from debris. Protect facilities below the bridge from damage due to debris. Use tarps, shielding, debris nets, or other protection devices to prevent debris from entering travel lanes or damaging other facilities.

2. Do not damage existing aluminum railing attached to top of existing barrier. Where existing posts for aluminum railing are located within removal limits of barrier, temporarily remove or support post as required.

3. Do not damage existing PENNDOT ITS fiber optic conduits attached to the exterior of the bridge barriers. Where existing conduit supports are located within the removal limits of the barrier, temporarily remove and provide temporary support for the existing conduits.

4. Sawcut perimeter of removal limits to a depth of 1". Remove portion of deck slabs, barriers, and abutment backwalls as indicated.

5. Remove or cut steel elements of the existing dam as close as practical to the base of the element as indicated or required. Grind rough edges smooth.

6. Remove existing steel elements of the existing dam in their entirety by unbolting, as required. Fill all unused holes with bolts of the same diameter. Steel supports that do not interfere with the installation of the new dam may be cut as close as practical to the base of the element as indicated or as required. Grind rough edges smooth.

7. Take care to not damage existing conduit embedded in the barrier. Replace any conduit damaged during construction with an approved conduit material at no additional cost to the Department. Replace conduit expansion/ deflection devices during construction with an approved device.

8. Take care to not damage existing reinforcement bars that are to remain in the finished construction. For any bars bent by removal operations, bend bars back into final position for the finished work. Clean exposed reinforcement by sandblasting. Coat exposed reinforcement with epoxy paint.

9. Clean and prime paint top flange of existing diaphragms, floorbeams, and girders that will be in contact with new concrete in accordance with the Special Provision for "Zone Painting Existing Structural Steel."

c. Installation.

1. Reinforcement. Place reinforcement bars in accordance with Section 1002.3.

2. Conduit Expansion/Deflection Devices. Replace existing conduit expansion/deflection devices with new devices in accordance with Section 1101.09(a).

3. Concrete. Place concrete in accordance with Section 1001.3. Apply concrete bonding compound to existing concrete surfaces that are to be in contact with new concrete in accordance with Section 1001.3(m). Do not tool the transverse joint while finishing the concrete.

4. Neoprene Strip Seal Dam.

4.a. Install dam in accordance with Section 1026.3. Place top surface of dam retainer to match existing roadway cross slope and grade. Provide shop splices for retainer at T-joints and L-joints. Field splices are permitted where indicated.

4.b. Fabricate and install a continuous seal (gland) to the maximum extent possible. Shop splice T-joints and L-joints for the seal (gland). Field splices in the seal (gland) are permitted where indicated. Submit to the Engineer for approval of alternate locations. If alternate locations are not accepted by the Engineer, proceed with fabrication and installation at the locations indicated at no additional cost to the Department.

5. Aluminum Railing. After retainer and seal have been installed, reset post and railing using new anchor bolts, nuts, and washers. Rotate railing and drill new hole for attachment if the existing hole is unusable. Use new fasteners to reattach railing. Repair or replace any railing components damaged as result of construction activities.

6. PENNDOT ITS Fiber Optic Conduits. After retainer and seal have been installed, reset conduit supports using new anchor bolts, nuts, and washers. Repair or replace any conduits or components damaged as result of construction activities

7. Painting. Paint retainer and hood plates in accordance with Section 1060.3.

MEASUREMENT AND PAYMENT - Linear Foot

Measured out-to-out along the centerline of exposed surfaces of seal and steel plates following the vertical and sloped faces of the barriers resulting in a true length as opposed to a horizontally projected length.

This item includes removal of existing expansion dam and portions of concrete deck, barrier, and backwall; protection of traffic; installing new reinforcement, new concrete, new conduit expansion/deflection fittings, and new strip seal dam; resetting existing aluminum bridge railing and conduit supports; and painting new hood plates.

Cleaning and priming top flanges are included in painting items.

00 - c90253 Items 9000-2530/4530 - Repair Type 53, Replace Expansion Dam

Addendum:

Associated Item(s): 9000-2530, 9000-4530

Header:

Provision Body:

DESCRIPTION - This work is removing existing expansion joints and fabricating and installing new replacement tooth dam with drain trough and downspout.

MATERIAL - In accordance with Section 1020.2 and Section 1051.2 and as follows:

a. Class AAA Cement Concrete - Section 704

b. Class AA Cement Concrete - Section 704

c. Curing and Protecting Covers - Section 711.1

d. Forms - Section 1001.2(h)

e. Reinforcement Bars - Section 1002.2(a), epoxy coated.

f. Annealed Iron Wire - Section 1002.2(b)

g. Epoxy Paint - An approved type listed in Bulletin 15.

h. Concrete Bonding Compound - Section 1001.2(k)

i. High Strength Bolts, Nuts, and Washers - Section 1105.02(d), ASTM A325.

j. Adhesive Anchor Material - Bulletin 15, Section 516.2(k)

k. Conduit Expansion and Deflection Fittings - Section 1101.09(a)

CONSTRUCTION -

a. General.

1. Prepare shop drawings in accordance with Section 105.02(d).

2. Perform expansion dam replacement after completion of bearing replacement where expansion joints and bearings are replaced at the same location.

b. Removal.

1. Protect traffic on adjacent travel lanes and below bridge from debris. Protect facilities below the bridge from damage due to debris. Use tarps, shielding, debris nets, or other protection devices to prevent debris from entering travel lanes or damaging other facilities.

2. Do not damage existing aluminum railing attached to top of existing barrier. Where existing posts for aluminum railing are located within removal limits of barrier, temporarily remove or support post as required.

3. Do not damage existing PENNDOT ITS fiber optic conduits attached to the exterior of the bridge barriers. Where existing conduit supports are located within the removal limits of the barrier, temporarily remove and provide temporary support for the existing conduits.

4. Sawcut perimeter of removal limits to a depth of 1". Remove portion of deck slabs, barriers, and abutment backwalls as indicated.

5. Remove existing steel that interferes with the installation of the tooth dam in its entirety. Remove ends of existing steel girders where indicated and grind rough edges smooth.

6. Remove existing steel elements of the existing dam in their entirety by unbolting, as required. Fill all unused holes with bolts of the same diameter. Steel supports that do not interfere with the installation of the new dam may be cut as close as practical to the base of the element as indicated or required. Grind rough edges smooth.

7. Take care to not damage existing conduit embedded in the barrier. Replace any conduit damaged during construction with an approved conduit material at no additional cost to the Department. Replace conduit expansion/ deflection devices during construction with an approved device.

8. Take care to not damage existing reinforcement bars that are to remain in the finished construction. For any bars bent by removal operations, bend bars back into final position for the finished work. Clean exposed reinforcement by sandblasting. Coat exposed reinforcement with epoxy paint.

9. Clean and prime paint top flange of existing diaphragms, floorbeams, and girders that will be in contact with new concrete in accordance with the Special Provision for "Zone Painting Existing Structural Steel."

c. Installation.

1. Reinforcement. Place reinforcement bars in accordance with Section 1002.3.

2. Conduit Expansion/Deflection Devices. Replace existing conduit expansion/deflection devices with new devices in accordance with Section 1101.09(a)

3. Concrete. Place concrete in accordance with Section 1001.3. Apply concrete bonding compound to existing concrete surfaces that are to be in contact with new concrete in accordance with Section 1001.3(m). Do not tool the transverse joint while finishing the concrete.

4. Tooth Expansion Dam with Drain Trough. Install dam in accordance with Section 1020.3. Place top surface of dam to match existing roadway cross slope and grade.

5. Downspout. Install in accordance with Section 1051.3. Where downspout pipe extends down into drainbox, set centerline of pipe at centerline of drainbox at 68°F unless otherwise indicated. Drill holes in existing concrete as required for installation of anchor bolts using adhesive anchor material.

6. Aluminum Railing. After retainer and seal have been installed, reset post and railing using new anchor bolts, nuts, and washers. Rotate railing and drill new hole for attachment if the existing hole is unusable. Use new fasteners to reattach railing. Repair or replace any railing components damaged as result of construction activities

7. PENNDOT ITS Fiber Optic Conduits. After retainer and seal have been installed, reset conduit supports using new anchor bolts, nuts, and washers. Repair or replace any conduits or components damaged as result of construction activities.

8. Painting. Paint dam and hood plates in accordance with Section 1060.3.

MEASUREMENT AND PAYMENT - Linear Foot

Measured out-to-out along the centerline of exposed surfaces of seal and steel plates following the vertical and sloped faces of the barriers resulting in a true length as opposed to a horizontally projected length.

This item includes removal of existing expansion dam and portions of concrete deck, barrier, and backwall; protection of traffic; installing new reinforcement, new concrete, new conduit expansion/ deflection fittings, and new tooth dam; resetting existing aluminum bridge railing and conduit supports; and painting new hood plates.

Cleaning and priming top flanges are included in painting items.

00 - c90256 Items 9000-2560/3560 - Repair Type 56, Concrete Bridge Deck Repair

Addendum:

Associated Item(s): 9000-2560, 9000-3560

Header:

Provision Body:

DESCRIPTION – This work is removing and repairing deteriorated areas of the concrete bridge deck as a Type 3 full depth repair.

MATERIAL – Section 1040.2

CONSTRUCTION – Section 1040.3 and as follows:

Section 1040.3(a) Deck Sounding. Replace the second sentence with the following:

As directed, provide assistance to the Representative for the purpose of sounding the deck surface with a hammer after hydrodemolition to delineate areas for repair.

Section 1040.3(f)1.c Patching. Add the following:

Place concrete in the repair area flush with adjacent surfaces of concrete.

MEASUREMENT AND PAYMENT – Square Foot

00 - c90270 Items 9000-2700/3700/4700/5700 - Repair Type 70, Class R4 Rock Splash Block

Addendum:

Associated Item(s): 9000-2700, 9000-3700, 9000-4700, 9000-5700

Header:

Provision Body:

DESCRIPTION – This work is construction of new rock splash blocks for bridge downspouts.

MATERIALS –

- Rock Class R4 – Section 850
- Geotextile – Section 735, Class 2, Type B

CONSTRUCTION –

(a) Preparation. Remove vegetation and debris from the splash block area. Excavate to the indicated depth and dimensions. Provide a uniform surface for placement of the geotextile.

(b) Installation. Place the geotextile in accordance with Section 212.3. Carefully place the rock on the geotextiles to produce an even distribution of pieces with a minimum of voids and without tearing the geotextile. Place the full course thickness in one operation in a manner to prevent segregation and to avoid displacement of the underlying material. Placing of rock in layers by dumping into chutes, or by similar methods likely to cause segregation or geotextile damage, is not permitted. Rearrange individual rocks to provide uniform distribution.

(c) Erosion Precautions and Restoration. Perform work only under dry conditions. Complete each splash block within a single work day. Re-seed areas of disturbed vegetation around the splash blocks with Formula D in accordance with Section 804. In case of a sudden unexpected storm event before construction can be completed, direct water from the downspout away from the excavation. This work is incidental to the item.

MEASUREMENT AND PAYMENT – Cubic Yard

00 - c90271 Items 9000-2710/3710/4710/5710 - Repair Type 71, Modify Existing Downspout Ends

Addendum:

Associated Item(s): 9000-2710, 9000-3710, 9000-4710, 9000-5710

Header:

Provision Body:

DESCRIPTION – This work is removing existing downspout end and furnishing and installing new end fitting.

MATERIALS –

- Downspouting – Section 1051.2. Galvanize all materials in accordance with Section 1105.02(s) after fabrication.

CONSTRUCTION –

(a) Removal. Remove portion of existing pipe as required. Cut existing pipe to required length and prepare end for welding or mechanical coupling.

(b) Installation. Install pipe as indicated on pier column or shaft. Install pipe and 45-degree elbow fitting to provide the height or the pipe outlet as indicated. Use mechanical couplings or welding. Repair damaged galvanizing in accordance with Section 1105.02 (s).

MEASUREMENT AND PAYMENT – Each

00 - c90272 Item 9000-2720 - Repair Type 72, Replace Navigation Light Power Cord

Addendum:

Associated Item(s): 9000-2720

Header:

Provision Body:

DESCRIPTION – This work is removing and replacing the power chord strain relief grip attached to the conduit stub-out below the bridge deck for the navigation light system.

MATERIAL –

- Strain Relief Grip – A suitable type.
- Conduit Fitting – A suitable type.

CONSTRUCTION –

(a) Coordinate this work with the United States Coast Guard and District Electrical Engineer. Inform the Coast Guard of the nature and time frame of the work. Conform to the requirements of the Coast Guard for disengaging navigation lights. Do not allow disengagement of the navigation lights beyond daylight hours. Coordinate with the following persons:

Coast Guard:	Commander David H. Studt
	Bridge Management Specialist
	Eighth Coast Guard District
	314-269-2381
PennDOT:	Mr. William Lester
	District Electrical Manager
	412-429-4804

(b) Disconnect the existing power cord as required to remove and install new strain relief grip. Remove the existing strain relief grip.

(c) Remove portion of existing conduit stub-out, as required, and provide a suitable fitting to accept the new strain relief grip. Take care to not damage existing power cord. Replace any portion of the cord damaged by construction activities at no additional cost to the Department.

(d) Install the new strain relief grip. Reconnect the navigation light electrical cable and re-engage navigation light system.

MEASUREMENT AND PAYMENT – Each

00 - c90282 Items 9000-2820/3820 - Repair Type 82, Backfill Erosion Ditch With Class R-4 Rock

Addendum:

Associated Item(s): 9000-2820, 9000-3820

Header:

Provision Body:

DESCRIPTION - This work is the excavation and backfilling of embankment washouts.

MATERIAL -

- Class R-4 Rock – Section 850

CONSTRUCTION -

Prepare the area required for placing the rock. Remove vegetation and debris from the erosion ditch. Excavate loose material or as required to provide a suitable depth of rock placement.

Carefully place the rock to produce an even distribution of pieces with a minimum of voids. Place the full course thickness in one operation in a manner to prevent segregation and to avoid displacement of the underlying material. Placing of rock in layers, by dumping into chutes or by similar methods likely to cause segregation is not permitted. Rearrange individual rocks, if necessary, to ensure uniform distribution.

MEASUREMENT AND PAYMENT - Cubic Yard

Preparing area and excavating material is incidental to this item.

00 - c90321 Items 9000-3210/4210/8210/9210 - Repair Type 21 - Epoxy Injection Crack Seal

Addendum:

Associated Item(s): 9000-3210, 9000-4210, 9000-8210, 9000-9210

Header:

Provision Body:

DESCRIPTION- This work is preparation and sealing of vertical and horizontal cracks on concrete substructure units with epoxy resin mixture.

MATERIAL - Section 1091.2.

CONSTRUCTION - Section 1091.3.

MEASUREMENT AND PAYMENT - Linear Foot

Measurement of the crack will be the length of the crack on the exposed surface of the substructure unit.

00 - c90324 Items 9000-3240/8240/9240 - Repair Type 24, Replace Joint Sealing Material

Addendum:

Associated Item(s): 9000-3240, 9000-8240, 9000-9240

Header:

Provision Body:

DESCRIPTION - This work is removing existing joint material between abutment and wingwall and installing new joint materials.

MATERIAL -

- Joint Backing Material - Section 705.9
- Caulking Compound - Section 705.8(b), elastomeric type.

CONSTRUCTION -

a. Removal. Remove existing joint material that is loose or deteriorated. Intact material that is tight in the expansion joint may remain in place.

b. Installation. Grind surfaces of concrete that are to receive caulking compound to expose virgin concrete. Blow-clean the joint to remove dirt and remaining loose material. Select a joint backing material that is wider than the joint to provide a snug fit within the joint. Install joint backing material to allow a depth of caulking compound consistent with the manufacturer's recommended depth for the joint width. Apply caulking compound in accordance with manufacturer's written instructions.

MEASUREMENT AND PAYMENT - Linear Foot

00 - c90343 Items 9000-3430/4430/5430 - Repair Type 43, Masonry Plate Extension

Addendum:

Associated Item(s): 9000-3430, 9000-4430, 9000-5430

Header:

Provision Body:

DESCRIPTION - This work is extending existing masonry plates, including modification of the bearing seat.

MATERIAL -

a. Fabricated Structural Steel - Section 1105.02(a)

b. Class A Cement Concrete - Section 704, except use AASHTO No. 8 Coarse Aggregate.

c. Reinforcement Bars - Section 1002.2, epoxy-coated.

d. Annealed Iron Wire - Section 1002.2(b)

e. Nonshrink Grout - Section 1001.2(e)

f. Epoxy Paint - An approved type listed in Bulletin 15.

g. Concrete Bonding Compound - Section 1001.2(k)

h. Paint (Primer). Use the same primer as selected for zone painting existing steel.

CONSTRUCTION -

a. General. Verify all dimensions in the field before fabrication.

b. Masonry Plate.

1. Cleaning Connection Areas. Clean and prime existing steel in areas where connection of new steel is to be made in accordance with the Special Provision "Zone Painting Existing Structural Steel." Mask or remove primer from areas within 2" of new field welds

2. Prepare face and edges of exiting masonry plate to provide a suitable connection surface and edge for welding by grinding.

3. Install masonry plate extension in accordance with Section 1105.03(m). Grind welds smooth. Support new plate to provide a flush continuous top surface with the existing masonry plate.

c. Bearing seat Modification.

1. Sawcut perimeter of concrete removal area. Remove concrete to limits indicated. Do not use pneumatic hammers heavier than nominal 25-pound class. Take care to not damage existing reinforcement bars that will remain the finished work.

2. Clean reinforcement bars of concrete, corrosion, and foreign material. Straighten bars bent during removal operations. Paint bars with epoxy paint.

3. Drill dowel holes and grout dowels in place in accordance with Section 1003.3.

4. Prepare existing concrete surfaces that will be in contact with new concrete in accordance with Section 1001.3(m).

5. Place reinforcement bars and concrete in accordance with Section 1001.3. Ensure that concrete placement provides full contact with the underside of the masonry plate extension.

d. Painting. Shop-apply primer to new masonry plate extension in accordance with Section 1060.3.

MEASUREMENT AND PAYMENT - Each

Shop-painting (primer) of new steel for this work is incidental to this item.

Cleaning and priming contact areas are included in painting items.

00 - c90354 Items 9000-3541/4541/9541 - Repair Type 54, Replace Compression Seal

Addendum:

Associated Item(s): 9000-3541, 9000-4541, 9000-9541

Header:

Provision Body:

DESCRIPTION - This work is removing portions of existing longitudinal compression seal joints and fabricating and installing a new longitudinal neoprene strip seal dam of the size indicated.

MATERIAL - In accordance with Section 1026.2 and as follows:

(a) Neoprene Strip Seal Dam – Furnish an expansion dam system consisting of a low-profile strip seal retainer, compatible seals, and elastomeric concrete nosing, as indicated, as listed in Bulletin 15, or as otherwise approved for use by the Department.

1. Retainer Rail – AASHTO A709, Grade 36, with shop-applied anchorages, galvanized. Provide a retainer rail that is compatible with the transverse strip seal dam retainer rail (for Repair Types 52 and 55) for preparing a field-welded splice, and with a cavity of the exact same shape and dimension.

2. Seal – Section 704.5(d). Use the exact same seal as used for the transverse strip seal dam.

3. Elastomeric Concrete – A material suitable for the intended use and approved by the Department for use with the expansion dam system.

(b) Class AA Cement Concrete - Section 704

(c) Curing and Protecting Covers - Section 711.1

(d) Forms - Section 1001.2(h)

(e) Fabricated Structural Steel – Section 1105.02(a), galvanized.

(f) Epoxy Paint - An approved type listed in Bulletin 15.

(g) Concrete Bonding Compound - Section 1001.2(k)

(h) Flathead Stainless Steel Countersunk Screws with Inserts - ASTM F738 or F593 (Type 304).

(i) Zinc Dust-Zinc Oxide Paint - An acceptable type.

(j) Conduit Expansion and Deflection Fittings – 1101.09(a)

CONSTRUCTION -

(a) General.

1. Prepare shop drawings in accordance with Section 1026.3.

2. Where expansion joints and bearings are replaced at the same location, set retainers and place deck concrete for the expansion dam replacement after completion of bearing replacement.

(b) Removal.

1. Protect traffic on adjacent travel lanes and below bridge from debris. Protect facilities below the bridge from damage due to debris. Use tarps, shielding, debris nets, or other protection devices to prevent debris from entering travel lanes or damaging other facilities.

2. Do not damage existing aluminum railing attached to top of existing barrier. Where existing posts for aluminum railing are located within removal limits of barrier, temporarily remove or support post as required.

3. Do not damage existing PENNDOT ITS fiber optic conduits attached to the exterior of the bridge barriers. Where existing conduit supports are located within the removal limits of the barrier, temporarily remove and provide temporary support for the existing conduits.

4. Saw- cut perimeter of removal limits to a depth of 1". Remove portion of deck slabs, barriers, and abutment backwalls as indicated. Where reinforcement bars are exposed, do not debond existing reinforcement from the underlying concrete. If debonding occurs, remove additional concrete to provide 3/4" clear around the reinforcement bar.

5. Remove or cut steel elements of the existing dam as close as practical to the base of the element as indicated or required. Grind rough edges smooth.

6. Take care to not damage existing conduit embedded in the barrier. Replace any conduit damaged during construction with an approved conduit material at no additional cost to the Department. Replace conduit expansion/ deflection devices during construction with an approved device.

7. Take care to not damage existing reinforcement bars that are to remain in the finished construction. For any bars bent by removal operations, bend bars back into final position for the finished work. Clean exposed reinforcement by sandblasting. Coat exposed reinforcement with epoxy paint.

(c) Installation.

1. Elastomeric Concrete. Perform deck scarification for preparation of latex modified concrete overlays prior to placing elastomeric concrete. Place elastomeric concrete in accordance with the manufacturer’s written instructions.

2. Conduit Expansion/ Deflection Devices. Replace existing conduit expansion/ deflection devices in accordance with Section 1101.09(a)

3. Class AA Cement Concrete. Place concrete in accordance with Section 1001.3. Apply concrete bonding compound to existing concrete surfaces that are to be in contact with new concrete in accordance with Section 1001.3(m).

4. Neoprene Strip Seal Dam. Install dam in accordance with manufacturer’s written instructions. Place top surface of retainer rail to match existing roadway cross slope and grade. Perform field- splicing of the seal where indicated. Perform field splicing of the retainer rail were indicated. Remove galvanization prior to welding. Repair galvanized surfaces in accordance with Section 1105.02(s)2.

5. Aluminum Railing. After retainer and seal have been installed, reset post and railing using new anchor bolts, nuts, and washers. Rotate railing and drill new hole for attachment if the existing hole is unusable. Use new fasteners to reattach railing. Repair or replace any railing components damaged as result of construction activities.

6. PennDOT ITS Fiber Optic Conduits. After retainer and seal have been installed, reset conduit supports using new anchor bolts, nuts, and washers. Repair or replace any conduits or components damaged as result of construction activities

MEASUREMENT AND PAYMENT - Linear Foot

Measured out-to-out along the centerline of exposed surfaces of seal and steel plates following the vertical and sloped faces of the barriers resulting in a true length as opposed to a horizontally projected length. This item includes demolition of existing longitudinal joint, placing new concrete, new conduit expansion/deflection fittings, resetting existing aluminum bridge railing, and painting new hood plates.

This item includes removal of existing expansion dam and portions of concrete deck, barrier, and backwall; protection of traffic; installing new reinforcement, new elastomeric concrete, new conduit expansion/ deflection fittings, and new strip seal dam; resetting existing aluminum bridge railing and conduit supports; and painting new hood plates.

Cleaning and priming top flanges are included in painting items.

00 - c90355 Items 9000-3551/3552/5551 - Repair Type 55, Replace Expansion Dam

Addendum:

Associated Item(s): 9000-3551, 9000-3552, 9000-5551

Header:

Provision Body:

DESCRIPTION - This work is removing existing expansion joints and fabricating and installing new replacement neoprene strip seal dams of the size indicated.

MATERIAL - In accordance with Section 1026.2 and as follows:

- Class AAA Cement Concrete - Section 704
- Class AA Cement Concrete - Section 704
- Curing and Protecting Covers - Section 711.1
- Forms - Section 1001.2(h)
- Reinforcement Bars - Section 1002.2(a), epoxy coated.
- Annealed Iron Wire - Section 1002.2(b)
- Epoxy Paint - An approved type listed in Bulletin 15.
- Concrete Bonding Compound - Section 1001.2(k)
- High Strength Bolts, Nuts, and Washers – Section 1105.02(d), ASTM 325.
- Conduit Expansion and Deflection Fittings – Section 1101.09(a)

CONSTRUCTION -

(a) General.

1. Prepare shop drawings in accordance with Section 1026.3.

2. Perform expansion dam replacement after completion of bearing replacement where expansion joints and bearings are replaced at the same location.

(b) Removal.

1. Protect traffic on adjacent travel lanes and below bridge from debris. Protect facilities below the bridge from damage due to debris. Use tarps, shielding, debris nets, or other protection devices to prevent debris from entering travel lanes or damaging other facilities.

2. Do not damage existing aluminum railing attached to top of existing barrier. Where existing posts for aluminum railing are located within removal limits of barrier, temporarily remove or support post as required.

3. Do not damage existing PENNDOT ITS fiber optic conduits attached to the exterior of the bridge barriers. Where existing conduit supports are located within the removal limits of the barrier, temporarily remove and provide temporary support for the existing conduits.

4. Saw-cut perimeter of removal limits to a depth of 1". Remove portion of deck slabs, and barriers, as indicated.

5. Remove or cut steel elements of the existing dam as close as practical to the base of the element as indicated or required. Grind rough edges smooth.

6. Remove existing steel elements of the existing dam in their entirety by unbolting, as required. Fill all unused holes with bolts of the same diameter. Steel supports that do not interfere with the installation of the new dam may be cut as close as practical to the base of the element as indicated or as required. Grind rough edges smooth.

7. Take care to not damage existing conduit embedded in the barrier. Replace any conduit damaged during construction with an approved conduit material at no additional cost to the Department. Replace conduit expansion/ deflection devices during construction with an approved device.

8. Take care to not damage existing reinforcement bars that are to remain in the finished construction. For any bars bent by removal operations, bend bars back into final position for the finished work. Clean exposed reinforcement by sandblasting. Coat exposed reinforcement with epoxy paint.

9. Clean and prime paint top flange of existing diaphragms, floorbeams, and girders that will be in contact with new concrete in accordance with the Special Provision “Zone Painting Existing Structural Steel.”

(c) Installation.

1. Reinforcement. Place reinforcement bars in accordance with Section 1002.3.

2. Conduit Expansion/Deflection Devices. Replace existing conduit expansion/deflection devices with new devices in accordance with Section 1101.09(a).

3. Concrete. Place concrete in accordance with Section 1001.3. Apply concrete bonding compound to existing concrete surfaces that are to be in contact with new concrete in accordance with Section 1001.3(m). Do not tool the transverse joint while finishing the concrete.

4. Neoprene Strip Seal Dam. Install dam in accordance with Section 1026.3. Place top surface of dam extrusion to match existing roadway cross slope and grade. Install a continuous seal along length of joint. Splicing of seal is not permitted.

5. Aluminum Railing. After extrusion and seal have been installed, reset post and railing using new anchor bolts, nuts, and washers. Rotate railing and drill new hole for attachment if the existing hole is unusable. Use new fasteners to reattach railing. Repair or replace any railing components damaged as result of construction activities.

6. PENNDOT ITS Fiber Optic Conduits. After retainer and seal have been installed, reset conduit supports using new anchor bolts, nuts, and washers. Repair or replace any conduits or components damaged as result of construction activities.

7. Painting. Paint extrusions and hood plates in accordance with Section 1060.3.

MEASUREMENT AND PAYMENT - Linear Foot

Measured out-to-out along the centerline of exposed surfaces of seal and steel plates following the vertical and sloped faces of the barriers resulting in a true length as opposed to a horizontally projected length.

This item includes removal of existing expansion dam and portions of concrete deck, barrier, and backwall; protection of traffic; installing new reinforcement, new concrete, new conduit expansion/deflection fittings, and new strip seal dam; resetting existing aluminum bridge railing and conduit supports; and painting new hood plates.

Cleaning and priming top flanges are included in painting items.

00 - c90450 Items 9000-4500/5500/8500 - Repair Type 50, Concrete Bridge Deck Repair

Addendum:

Associated Item(s): 9000-4500, 9000-5500, 9000-8500

Header:

Provision Body:

DESCRIPTION – This work is removing and repairing deteriorated areas of the concrete bridge deck as a Type 2 partial depth repair.

MATERIAL – Section 1040.2

CONSTRUCTION – Section 1040.3

MEASUREMENT AND PAYMENT – Square Foot

00 - c90474 Items 9000-4740/5740 - Repair Type 74, Clean and Flush Scuppers and Downspouting

Addendum:

Associated Item(s): 9000-4740, 9000-5740

Header:

Provision Body:

DESCRIPTION - This work is cleaning and flushing existing bridge deck scuppers, drain boxes, and downspout systems to be fully functioning.

MATERIAL -

- Water – Section 720.2

CONSTRUCTION –

a. Cleaning. Clean all dirt and debris from all bridge deck scupper pans and drain boxes. Perform drain cleaning operations to unclog any obstruction within downspouts. Disassemble downspouting and remove any cleanout plugs as required to remove obstructions. Reassemble after removing clogs and obstructions. Dispose of this dirt and debris in a satisfactory manner.

b. Flushing. Discharge a sufficient volume of water into scuppers, drain boxes, and downspouts to wash away any remaining residue and to demonstrate that the system is clear and functioning properly. Prevent material cleaned from drainage system from entering streams or other bodies of water, and dispose of this material in a satisfactory manner.

c. Staging. Perform cleaning and flushing operations only after completion of all repairs and just prior to opening the structure to traffic.

MEASUREMENT AND PAYMENT – Lump Sum

Includes all scuppers and downspouting on the bridge structure.

00 - c90477 Item 9000-4770 - Repair Type 77, Replace Scupper Grate Hold-Down Bolts

Addendum:

Associated Item(s): 9000-4770

Header:

Provision Body:

DESCRIPTION - This work is removing and replacing scupper grate hold-down bolts.

MATERIAL -

- Hold-down Bolts - ASTM A307, galvanized.

CONSTRUCTION -

Remove hold-down bolts from the scuppers. Clean the existing threads of all dirt and contaminants. Replace and tighten the bolts.

MEASUREMENT AND PAYMENT - Lump Sum

00 - c90551 Items 9000-5510/8510 - Repair Type 51, Replace Joint Sealing Material

Addendum:

Associated Item(s): 9000-5510, 9000-8510

Header:

Provision Body:

DESCRIPTION – This work is removing and replacing the joint sealing material in transverse bridge deck construction joints.

MATERIAL –

- Epoxy Joint Sealing Material - ASTM C881, Type IV, Grade 2, Class E or F.

CONSTRUCTION –

(a) Clean transverse joints of all existing sealing material, bituminous material, and other foreign material in a manner that provides a clean, newly exposed concrete surface. Clean full depth of construction joint.

(b) Immediately before placing the joint sealing material, clean the joint faces by sandblasting and airblasting. Protect the surface of the deck from being sandblasted. For airblasting, use a compressed air stream of at least 100 pounds per square inch measured at the source. Use air free of oil, moisture, and other contaminants.

(c) Prepare the joint and place joint sealing material according to manufacturer's recommendations. Fill joint notch to 1/8" below deck surface and do not allow sealing material to spread over the deck surface.

(d) Do not allow vehicles or construction equipment to cross joint until joint sealing material has cured as determined by the manufacturer.

MEASUREMENT AND PAYMENT – Linear Foot

00 - c90557 Item 9000-5570 - Repair Type 57, Replace Aluminum Railing

Addendum:

Associated Item(s): 9000-5570

Header:

Provision Body:

DESCRIPTION – This work is removing and replacing previously damaged top and bottom rails of the existing aluminum bridge railing.

MATERIAL – Section 1013.2(a) and as follows:

- Railing. Use railing which is currently stockpiled at the PENNDOT Maintenance Yard in Bridgeville. Coordinate with PENNDOT Maintenance Yard representative to schedule pick up of railing. Provide truck, operator, and workmen, as needed to load and transport railing to site. Cut rails as required for transport.
- Anchor Bolts, Nuts, and Washers. Section 1105.02(c)s

CONSTRUCTION –

(a) Removal. The Engineer will delineate the limits of removal and replacement. Adjust removal limits as required for locating splices that will not interfere with railing posts. Remove top and bottom rails to the same limits. Remove portion of rails to neat lines, perpendicular to the rail. Finish the cut ends by grinding or other means.

(b) New Rail. Cut replacement rails to fit. Install replacement rails by splicing to existing rails using internal splice sleeves with a gap of approximately 1/2" between the ends of the existing and replacement rails. Provide new internal splice sleeves with an outside diameter of 1/16" to 3/32" less than the inside diameter of the existing rails. Extend the splice sleeve a minimum of 9" into the replacement and existing rails. Weld ends of the replacement and existing rails to the splice sleeve.

(c) Maintain the continuity and appearance of the existing railing.

MEASUREMENT AND PAYMENT – Linear Foot

Measured from end to end of the replacement top rail, not including splice material.

Replacement of top and bottom rails will be paid together based on the measured length of the replacement top rail.

00 - c90601 Item 9000-6001 - Design Roadway

Addendum: 5

Associated Item(s): 9000-6001

Header:

Provision Body:

DESCRIPTION - This work is the design and preparation of plans for the reconstruction of the roadways of the Glenfield Interchange (SR 8017) and part of the Glenfield Viaduct Interchange (SR 8092). This includes portions of the following roadways as specified in the Conceptual Plan (Design Field View Level) provided by the Department:

- SR 65 Northbound and Southbound
- SR 4033
- SR 8017 Ramp A1
- SR 8017 Ramp A2
- SR 8017 Ramp B1
- SR 8017 Ramp B2
- SR 8092 Ramp D
- SR 8092 Ramp E
- SR 8017 Ramp R
- SR 8017 Ramp S
- SR 8017 Ramp T

The roadway construction will consist of, but not be limited to, excavating the existing reinforced cement concrete pavement and replacing it with plain cement concrete pavement.

Also included is the construction of shoulders, drainage (where specified), pavement markings, impact attenuators, the repair and delineation of concrete barrier, construction of new concrete barrier, updating and delineation of guide rail, updating of signing, and

any other work indicated on the Conceptual Plan, special provisions, or contract documents that is not indicated as separate pay items in the bid proposal.

Geotechnical investigation and engineering services required for the design of erosion repair and rock slope remediation treatments are included. This includes any geotechnical exploration and testing, inspection of site conditions, test borings, sampling of the test boring materials, as required to provide sufficient data for the design and construction of erosion repair and rock slope remediation treatments.

This item includes the preparation and submittal of plans, coordination of review comments with the Department, plan revisions and Professional Certification of final plans as required to receive approval from the Department. This item also includes coordination with utility companies throughout design as specified in the special provision entitled: "Utility Relocation Information for Design/Build Projects".

DESIGN -

A. General -

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

Provide the Design Engineer's P.E. Seal, valid signature in ink, the date signed, business name and address on the first sheet of all computations, including computations for partial submission. Provide the appropriate seal and signature on plan sheets in accordance with the Design Manuals.

Use a Design Firm that is a registered Business Partner with the Department. Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Submit to the Department, at or prior to the pre-construction meeting, the name and address of the Contractor's Design Engineer, including the firm's resume showing the experience and expertise, during the last five years, of two similar projects of comparable complexity on Pennsylvania State Highway (including Pennsylvania Turnpike Projects) or local system. Local projects must have been funded with Federal Aid Highway Funds. Also include an affidavit stating that the Design Engineer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. The Design Engineer will be approved or disapproved by the Department within five working days from time and date of submission. Unless otherwise indicated by the Department in writing, Design Engineer disapproval will not permit the extension of the construction completion date or price adjustment to any items in the contract.

All computations must be computed and checked by qualified personnel. Have the computations initialed by both the preparer and reviewer. Format all design computations on 8 ½" x 11" sheets printed on one side only. All computations must be neat and legible.

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

B. Information/Data Made Available to the Contractor by the Department.

- Conceptual Plan and Cross-Sections.
- Microstation CADD Files will be made available to the successful bidder. Submit a request to the District Executive agreeing to the terms and conditions for the release of the electronic files.
- The Department has obtained environmental clearance for this project in the form of a categorical exclusion evaluation (CEE).
- Design Exceptions.

C. Design Specifications -

Design the Final Roadway Construction Plan, including "Also" plans in accordance with the following (listed in order of predominance):

- Special Provisions
- Design Manual Parts 1, 2, & 3, Highway Design Publication latest Edition.
- Design Manual Part 4, Structures Design Publication latest Edition.
- Pennsylvania Department of Transportation Roadway Construction Standards, latest edition.

- A Policy on Geometric Design of Highway and Streets, 2004, AASHTO "Green Book"
- Publication 242 - Pavement Policy Manual.

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

D. Design Requirements –

1. Geometry.

Horizontal alignments are provided on the plans. Develop the vertical alignments and the superelevation data needed for construction.

2. Pavement Design

Perform a pavement design for all of the project roadways, except Ramps B1 and B2 of the Glenfield Interchange (SR 8017), Ramps D, E, H, & J of the Neville Island Interchange (SR 8015), and the SR 79 mainline bridge over the Ohio River; and submit a report for Department review and approval. A pavement design has already been completed for the aforementioned ramps.

Perform the design using Plain Cement Concrete Pavement. The results of core borings and California Bearing Ratio (CBR) tests will be provided by the Department.

A Value Engineering proposal of the pavement type must include a Life Cycle Cost Analysis (LCCA) and the application of the appropriate C factor to be determined by the Contractor and approved by the Department. If Value Engineering is performed, an LCCA must be performed for both concrete and asphalt types.

If placing the proposed pavement structure extends beyond the specified milestone date for Winter Suspension, design a temporary pavement as necessary to open the roadway. Include in the temporary pavement plan any temporary modifications to the drainage and safety features as well as pavements markings and signs. All temporary pavement markings shall be waterborne paint markings in accordance with Section 962.

3. Roadway Design

Perform Final Design for the reconstruction of the project roadways as specified in the Conceptual Plan provided by the Department. The roadway design scope of work will include the following parameters:

Specify Restricted Performance Specifications (RPS) plain cement concrete pavement for the SR 65 mainline but do not specify RPS for the ramps. Design roadway cross slopes to be reconstructed to match the existing conditions except at the few locations shown in the Conceptual Plans and Specifications. Most of the existing tangent sections have a 1.0% cross slope. Do not reconstruct the existing barrier, parapets or retaining walls. Repair any small portions that are damaged or deteriorated. Reconstruct all of the shoulders as full-depth Plain Cement Concrete Shoulders with continuous concrete shoulder rumble strips. Wherever existing shoulder backup is inadequate, provide shoulder backup in accordance with Publication 408, Section 205 except as follows. Use Aggregate - Type C or better, No. 2A stone, as specified in Sections 703.2 and 703.5 and also, apply a bituminous prime coat for any shoulder backup placed. Place at the same cross slope as the adjacent concrete shoulder. Also, provide for the repair of fill slope erosion. Runoff has eroded gullies on fill slopes at various locations throughout the project area.

Design all roadway and shoulder reconstruction so as to not reduce any vertical clearance.

Replace bridge approach slabs and pavement relief joints in accordance with BD-628 and RC-24M. The bridge approach slab at the Glenfield Viaduct is not to be replaced.

Remove roadway concrete pavement using the most cost effective technique.

Provide subbase material with a maximum absorption rate of 3.5% as determined by AASHTO T-85 and as specified in Publication 408, in Sections 703.2 and 703.5.

The existing concrete pavement from SR 65 NB Station 444+42 to Station 470+48 is newer pavement and does not need to be reconstructed. Clean and seal the joints in this section of pavement. All of the other work items cited in this specification, like cleaning of pipes or inlets, clearing vegetation, paint removal from concrete barrier, cleaning and sealing of concrete barrier joints, and updating guide rail and concrete barrier connections, also apply to this portion of the project. Line painting would not be included since the pavement is not to be replaced. The existing bituminous pavement from SR 65 SB Station 449+70 to Station 470+48 is newer pavement and does not need to be reconstructed.

Complete the design of the following improvements shown conceptually in the Conceptual Plan: Ramp A2, Ramp B1, Ramp B2, Ramp D, Ramp E, Ramp S, Ramp T, and SR 4033 (Segment 0010). The improvements to Ramps A2, B1, B2, E, S and T primarily involve slight realignments, widening and/or lengthening. Reconstruct Ramp D Station 508+75 to Station 513+08 at a 2.0% cross slope instead of matching the existing cross slopes. Do this to provide the superelevation needed for the two horizontal curves in this section of the ramp. Make the necessary adjustments to the adjacent curb and subsequent material.

Refer to the Design Exception documentation provided by the Department and implement all of the design and construction activities specified therein.

Increase the turning radius for the movement from SR 4033 SB Segment 0010 to Ramp T and the movement from SR 4033 NB Segment 0008 to SR 4033 NB Segment 0010 from as shown on the Conceptual Plan. Also, reconstruct a portion of SR 4033 Segment 0010, from Station 0+00 to Station 1+70, most of which is under the structure carrying SR 65 NB and Ramp A1. Trucks had been riding up on the curb and sidewalk resulting in the scraping of the bottom of the bridge beam. Ensure these work items do not reduce the minimum vertical clearance below the posted clearance of 13'-11".

Reconstruct the 5-leg intersection where Ramps R, S and T and SR 4033 Segment 0008 and SR 4033 Segment 0010 all meet. Phase this work to be done after all of the legs of the intersection have been reconstructed and use accelerated plain cement concrete, to minimize the closure time for the 5 legs of this intersection.

Reconstruct the deteriorated nose of the traffic island separating Ramp T from Ramp S at approximately Ramp T Station 525+06. Turning movement studies show that the proposed improvements to the SR 4033 turning radii, under the structure carrying SR 65 NB and Ramp A1, preclude any need to redesign the turning radius of this traffic island.

Realign Ramp B2 over into the gore area to increase the length of the parallel acceleration lane as shown on the Conceptual Plan. The construction work between Ramp B2 Sta. 276+10 to Sta. 282+52 is included in and will be paid for under the SR 79-A45 portion of the project since the quantities for this work have already been tabulated there. Present any anticipated quantity and cost overruns or under-runs with the Final Design submission for SR 65-A38.

Reconstruct Ramp B1 as shown on the Conceptual Plan. The construction work between Ramp B1 Sta. 478+81.5 to Sta. 483+35 is included in and will be paid for under the SR 79-A44 portion of the project since the quantities for this work have already been tabulated there.

Remove the last 243' of the concrete traffic island separating Ramp T from SR 65 NB (from where the acceleration lane of Ramp B2 ends to Ramp T Station 536+88) and replace with concrete pavement. This will provide more room for traffic to merge from Ramp T onto SR 65 NB.

Lengthen the beginning portion of Ramp A2 (Ramp S in the RMS System and Ramp A2 on the Conceptual Construction Plan) deceleration lane by removing the curb and part of the sidewalk on the left, as shown on the Conceptual Plan and constructing mountable curb at the new edge of sidewalk. Standard curbs should not be used on high-speed facilities. Most of the curbs in the high-speed portion of the project will be considered as existing conditions and therefore, design exceptions will not be necessary.

Widen the channelized portion of Ramp A2 (Ramp S in the RMS System and Ramp A2 on the Conceptual Construction Plan), making two lanes, one to SR 79 SB by staying left on Ramp A2 and one to SR 79 NB by continuing straight ahead onto Ramp S. Widen into the right "sidewalk" area through the existing concrete gutter as shown in the Conceptual Plan. Continue the widening of Ramp S as indicated in the Conceptual Plan. Perform drainage calculations to determine the required gutter size. Replace the existing inlet with a manhole and construct a new inlet in the lowest point of the relocated gutter and construct a pipe to tie-in to the existing inlet (proposed manhole).

Repair shoulder erosion and place 110' of Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier along Ramp D, SR 65 NB Station 409+40 to Station 410+52, Left. Provide additional geotechnical treatment of slope between Ramp D and Ramp E, from SR 65 NB Station 405+90 to Station 410+52. Refer to Section 10 for specific requirements.

Restripe the outside shoulder of Ramp E to increase the length of the acceleration taper as shown conceptually in the Conceptual Plan. Keep the paint line 1' off the inlet. Widen the end of Ramp E as shown conceptually in the Conceptual Plan.

Post all structures with a vertical clearance of 14'-6" or less.

Provide for the removal and disposal of all existing paint from barrier and curb according to the following project Special Provision: Removal and Disposal of Existing Paint from Barrier and Curb.

Provide for the cleaning and sealing of existing transverse and longitudinal joints in cement concrete barrier, in mountable or regular curbs, in traffic islands and in sidewalks according to the following project Special Provision: Cleaning and Sealing of Barrier Joints, Curb Joints, Traffic Island Joints and Sidewalk Joints.

Provide for clearing of any vegetation and debris throughout the entire project area that is blocking signs, interfering with driver sight distance, encroaching on guide rail, barrier, curbs, shoulders, sidewalks, or roadways, or interfering with drainage facilities like swales, ditches, or inlets. Clear any vegetation overhanging the roadway or shoulders up to a minimum height of 17'.

Prepare a Critical Path Method (CPM) Construction Schedule and submit for District approval. Because the construction plan for the Neville Island Interchange (SR 8015) work is already complete (the Final Design has already been approved) and the plans for the other two interchanges require further development, prepare the CPM Schedule within the following constraints:

- Perform all of the required construction for SR 0065, the Glenfield Interchange (SR 8017) and the Glenfield Viaduct Interchange (SR 8092) after the construction for the Neville Island Interchange (SR 8015) and the SR 79 mainline bridge over the Ohio River is complete to the point where long-term traffic delays or detours are no longer required, unless specifically directed otherwise by the Department.

3a. Supplemental Survey for Final Design

Before performing any final design survey work, complete the Quality Assurance/Quality Control Checklist and discuss with the District Chief of Survey. Do not proceed without the approval of the District Chief of Survey.

Prior to initiating surveys, develop a Traffic Control Plan in accordance with Publication 213 for implementation during surveys within existing transportation facilities.

Perform survey work according to the specifications and guidelines outlined in the following documents:

- Publication 122M, Surveying and Mapping Manual

- Strike Off Letter 430-99-20, QA/QC Control Checklist for Right-of-Way and Construction Plans

- Publication 213, Work Zone Traffic Control Manual

- Form D-428, Field Book

The Contractor will be responsible for establishing all alignments and referencing same by monumentation. Establish permanent benchmarks at intervals not to exceed 1,500' within project the area, but outside of the physical construction areas is not to be disturbed.

4. Typical Sections

Prepare Final Design typical sections based on the concepts shown in the Conceptual Plan provided by the Department.

5. Drainage

Design pipe culverts, inlets, pavement base drain, subsurface drain outlets, and miscellaneous structures that are required to be relocated or replaced within the limits of the reconstruction areas.

Replace/install new pavement base drain within the limits of the reconstruction areas.

All drainage facilities that are accessible are to be visually inspected to identify potential repair areas including cleaning of existing facilities. All drainage facilities that are in-accessible are to be inspected utilizing a closed circuit television system. Adequately flush and clean all drainage facilities prior to video inspection. Inspect lines, including stubs with either actual flow or simulated flow produced by adding water at an upstream manhole or inlet. The simulated flow must produce a visible, laminar flowing stream in the line of the full length of the line being inspected.

Use a premium high grade quality video tape specifically intended for preserving video libraries. The tape speed shall be SP. All television inspection is to be done in color and with sufficient lighting to result in clear properly exposed film.

Rebuild inlet and manhole boxes, located in the pavement and shoulders being reconstructed, as required and install new inlet tops, manhole tops, inlet grates and manhole covers. Provide for the cleaning of buried or silted-in inlets and pipes along with the replacement of any off-roadway inlet grates that are excessively corroded or damaged.

6. Guide Rail, Concrete Curb, and Concrete Barrier

Update existing guide rail within the limits of work to meet the current Department criteria (current at time of bid). This includes, but is not limited to updating the guide rail end treatments to current standards, resetting guide rail with new offset brackets (replacing metal offset brackets with composite, plastic or wood offset brackets) and replacing guide rail delineators and concrete barrier delineators. Do not replace existing concrete curb or concrete barrier unless specified in the Department's Conceptual Plan or it is severely deteriorated and you receive the approval of the District Project Manager.

Guide rail components removed from the project are to be the Contractor's property and the Contractor's responsibility to dispose of.

Determine length of need and warrants in accordance with the applicable design standards and criteria. Develop items and quantities.

Provide extra length guide rail posts (one foot longer length at no additional cost) when the minimum clearance from the rear face of the guide rail post to the fill slope break point cannot be maintained.

Provide appropriate treatments at the approach end of unprotected concrete barrier sites in accordance with Publication 408, Section 620, Publication 72M - Standards for Roadway Construction (RC-50M), and as indicated in the special provision, "Guide Rail to Concrete Barrier Approach Transition Retro-fits". All approach end safety treatments have to be approved by the District Safety Committee. Use 7' long tapered concrete end sections when appropriate.

There is no need to protect the approach end of the concrete barrier on the left side of Ramp T near Station 525+70 since all the approaching traffic come from a stop condition about 70' to 170' away and would therefore be traveling at a low speed. Replace the standard concrete curb along the traffic island immediately downstation from there, with mountable curb to accommodate the turning movements of exceptionally large trucks.

Replace the guide rail turndown end treatment on SR 65 NB (Station 404+25 to Station 404+62 Rt.) with an appropriate end treatment approved by the District Safety Committee.

Update the guide rail connection to the concrete barrier at SR 65 NB (Station 449+69 to Station 449+94 Lt.).

Provide an appropriate end treatment for the approach end of the concrete barrier at about Station 415+68 on the left side of NB SR 65. Use guide rail, a Thrie-Beam Connection and a parallel guide rail end treatment (e.g.- a Type III, Test Level 3 end treatment).

Update the guide rail connection to the concrete barrier at SR 65 SB Station 421+78 to Station 422+03 Lt.

Update the guide rail connection to the concrete barrier at SR 65 SB Station 433+95 to Station 434+20 Lt.

Extend the existing newer string of guide rail along the face of the curb of Ramp E, to the end of the retaining wall (Ramp E Station 3+47 to Station 4+52 Lt.) and remove the existing guide rail that is anchored on to the top of the retaining wall.

Repair the damaged guide rail and reattach to the parapet at Ramp E Station 8+70 to Station 8+89 Lt.

Update the guide rail connection to the concrete barrier at Ramp A1 Station 110+66 to Station 110+91 Rt.

Reset any guide rail throughout the entire project that is currently set back away from the face of the curb, up to the face of the curb. (Note that the guide rail, on SR 65 SB across from Ramp E, is currently set back away from the face of the curb.)

Patch and/or repair any damaged curb and barrier throughout the entire project. Repair any damaged guide rail and impact attenuators throughout the entire project.

Remove the curb and sidewalk adjacent to the concrete barrier at the end of Ramp B1, near the Glenfield Viaduct, and remove the overlapping guide rail (SR 65 SB Station 414+61 to Station 414+91 Lt.) so that the guide rail connects to the very end of the barrier. Update this guide rail connection to the barrier (Station 414+40 to Station 414+65).

Perform the following changes to the guide rail near SR 65 SB Station 416+50, on the right, across from Ramp B1 and along the end of the tapered portion of Ramp R's acceleration lane. The Ramp R guide rail currently runs along the face of the curb until near the end where it flares away from the curb to eventually connect to the Ramp R retaining wall that passes under the Glenfield Viaduct. Reset the guide rail so that it runs along the face of the curb throughout its length and stop it with a terminal section 15' beyond the end of the retaining wall that it is shielding (SR 65 SB Station 415+61 to Station 416+11 Rt.). There is no need to

connect it to the retaining wall since the curb is offset 4' from the retaining wall by a sidewalk. Remove the many trees and weeds that have grown up behind the guide rail along Ramp R.

Install an impact attenuator in front of the blunt end of the concrete barrier (SR 4033 Station 523+80 to Station 524+05 Lt.).

Install an impact attenuator in front of the blunt end of the guide rail in between Ramp R and SR 4033 (Segment 0008) (SR 4033 Station 523+65 to Station 524+02 Lt.). First move the guide rail back closer to the pier to make room for the attenuator.

Provide an appropriate end treatment for the approach end of the concrete barrier on the right side of Ramp T at about Station 530 +67. Use a Thrie-Beam Connection and taper the guide rail over across the sidewalk to connect to the back side of the barrier running parallel to SR 65 NB.

Widen Ramp A2 (Ramp S on the RMS diagram) and move the location of the approach end of the concrete barrier on the left (as shown on the Conceptual Plan), currently located at SR 65 SB Station 433+92. Then install an impact attenuator in front of this approach end (Station 433+92 to Station 434+17).

Reconnect the guide rail on the outside of SR 65 SB near Station 433+92, to the concrete barrier using a Thrie-Beam Connection or whichever method of connection is approved at that time. (Various methods are currently under consideration.)

Remove the concrete traffic island and mountable curb separating the two Ramp S lanes at the bus stop and replace with concrete pavement painted to delineate a traffic island.

Prepare a Pavement Joint Layout Plan and submit it for District approval.

There is not enough room to widen shoulders with substandard widths. These portions of the project are considered as existing conditions and therefore, design exceptions will not be necessary.

Reset the temporary concrete barrier on the outside shoulder of SR 65 NB from Station 463+62 to Station 467+12 so that the barrier sections are neatly lined up and parallel to the pavement edge minimizing the encroachment on the shoulder.

Design the type, size and location of ADA curb cut ramps and crosswalks using the preliminary information shown on the Conceptual Plan.

Resolve the snag point problem on the abutment of Ramp B1 by replacing the concrete barrier that buts up against the abutment with concrete barrier that is flush with the surface of the abutment wall. Currently, the concrete barrier running parallel to and along the outside of SR 65 SB, does not have a vertical face and a concrete curb at the base like the Ramp B1 abutment does. Therefore, part of the abutment sticks out further into traffic than the concrete barrier does, posing a risk to vehicles that might be sliding along the barrier. They would hit the exposed part of the abutment. Replace the existing barrier (SR 65 SB Station 420+69 to Station 421+09 Lt.) with a section that transitions from the existing shape to the shape of the abutment.

Design a new Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier from SR 65 NB Station 409+40 to Station 410+52, Left, in accordance with BD-627M. Refer to Section 10 for specific requirements.

7. Utilities

Provide utility design services in accordance with the following Special Provision: Item 9000-0250 - Locate Existing Underground Facilities.

8. Environmental

The design developed by the D/B Team must comply with the attached approved environmental document. The Department has obtained environmental clearance for this project in the form of a Categorical Exclusion Evaluation (CEE). The document can be obtained through the CEE Expert System - Approved Documents. Toward the end of the Final Design process, the D/B Team must submit a written statement to the District Environmental Manager for concurrence describing how the design will comply with Part B, Section E, "Resources to Be Avoided and Mitigation Measures", of the approved CEE, if applicable. In addition, the written statement must conclude that the scope of the project and impacts to resources has not changed. A concurrence signature line for both the D/B Team and the District Environmental Manager must be provided. Reevaluate the CEE if any changes to the scope of work occur or if any impacts to resources (e.g. - wetlands, streams, cultural resources, etc.) occur. The CEE Reevaluation must be approved by the District Environmental Manager prior to the project being let. Coordinate as needed with the District Environmental Unit to avoid any scheduling delays.

9. Soil Erosion and Sediment Pollution Control Plan / NPDES Approval

Prepare an Erosion and Sediment Pollution Control (E&SPC) Plan and obtain an NPDES Permit. In addition to evaluating the SR 65-A38 project area, also include the project areas of SR 79-A44 and A45, where there will be full-depth pavement replacement on Ramps B1 and B2.

Develop the Erosion and Sediment Pollution Control Plan/ NPDES Approval in coordination with the Allegheny County Conservation District. Include this plan in the Roadway Plans. Submit the plan to the Department for review and approval prior to submission to the Allegheny County Conservation District. No construction work will start until the Soil Erosion and Sediment Pollution Control Plan and NPDES permit are approved by Allegheny County Conservation District and submitted to the Representative. Also, before any work is started, the Prime Contractor and Sub Contractor involved with earth moving must become co-permittees with the Department on the approved NPDES Permit.

10. Geotechnical Design Requirements.

a. General

This work is the performance of geotechnical engineering services required for improvements to the Ramp D/SR 65 NB shoulder and supporting slope below Ramp D/SR 65 NB from Station 405+90 to Station 410+52 Left, including:

- The examination and repair of failed portions of the Ramp D/SR 65 NB shoulder.
- The examination and repair of eroded areas required to support a existing shoulder wall along the Ramp D/SR 65 NB shoulder.
- Design of a Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier to support the Ramp D/SR 65 NB shoulder where no existing shoulder wall exists.
- Design of slope improvements to prevent future erosion of the slope supporting Ramp D/SR 65 NB, above Ramp E.

A subsurface investigation is required as a part of this work.

b. Designer Qualifications

Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Submit to the Department, at or prior to the pre-construction meeting, the name and address of the Contractor's Geotechnical Design Engineer, including the firm's resume showing the experience and expertise, during the last five years, of two similar projects of comparable complexity on Pennsylvania State Highway (including Pennsylvania Turnpike Projects) or local system. Local projects must have been funded with Federal Aid Highway Funds. Also include an affidavit stating that the Geotechnical Design Engineer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. The Geotechnical Design Engineer will be approved or disapproved by the Department within 5 working days from time and date of submission. Unless otherwise indicated by the Department in writing, Geotechnical Design Engineer disapproval will not permit the extension of the construction completion date or price adjustment to any items in the contract.

c. Design Specifications

Provide geotechnical investigation and design services in accordance with all applicable sections of the following Department publications and documents:

1. Publication 222

2. Publication 293

3. Design Manual Part 2

4. Design Manual Part 3

5. Design Manual Part 4 (for Moment Slab with Toe Wall design)

6. BC-795M

7. Publication 408

d. Design Requirements.

1. Geotechnical Design.

Provide a repair of failed and/or distressed portions of the Ramp D/SR 65 NB shoulder, between SR 65 NB Station 405+90 to Station 410+52 Left, including undermined portions of an existing shoulder wall between Station 405+90 and Station 409+40, where erosion has impacted the Ramp D/SR 65 NB shoulder. The repair must prevent erosion, weathering, and/or loss of support that may impact the stability of the existing shoulder wall and the proposed Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier.

Provide an extension of the concrete shoulder wall, to support the SR 65 NB shoulder, from Station 409+40 to Station 410+52 (overhead sign foundation), Left. Design the wall in accordance with BD-627M, to include a Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier. BD-627M requires that the toe wall portion of the Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier must maintain a 3' minimum embedment in the slope below the shoulder. A specially designed moment slab and toe wall configuration may be provided, to include a taller toe wall to achieve the required minimum embedment, or external support of the standard 5' high toe wall via other slope treatments below the toe wall may be provided as an acceptable alternative. If the pavement design results in a pavement thickness less than 12", increase the width of the moment slab from 8' to the full width of the inside passing lane of NB SR 65 from NB SR 65 Station 405+90 to Station 408+30 (240'). This width varies from about 12' to about 20'. Design the width of the remainder of the moment slab, from NB SR 65 Station 408+30 to Station 410+52 (222'), to match the width of Ramp D, which varies from about 8' to about 18'.

Provide geotechnical treatments to prevent future erosion and weathering of the slope supporting Ramp D/SR 65 NB, above Ramp E, between Station 405+90 to Station 410+52 Left. The Contractor must provide sufficient detail to adequately demonstrate that the proposed treatment will prevent future surface erosion and meet PennDOT material and performance requirements. The proposed treatments or slope treatment manufactured product(s) must provide a minimum service life of 50 years. The treatment must provide positive drainage of the slope face. A global stability analysis is not required.

Design all treatments to be constructed completely within the Department's right-of-way.

Provide Type II sulfate resistant concrete in all concrete structural components.

Excavation by blasting is not permitted.

Provide positive connection from the existing subsurface drains that outlet on the slope face, or other proposed drainage within the treatment limits performed as a part of this work, to existing or proposed roadway drainage on Ramp E, in accordance with Section 5 of this provision. Do not allow drainage to flow over the surface of the slope.

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

No existing geotechnical data is available nor will be provided for this project.

Submit a Conceptual Geotechnical Design for review and approval, which specifically addresses evaluations performed of the site conditions and how the remediation requirements will be addressed via the proposed treatment(s). Include conceptual plans, typical sections, manufacturer's product data sheets and application information, and a list of standard design and construction items or items that deviate from standard design and construction. Provide calculations if necessary to support any design modifications to the standard BD-627M design of the Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier.

Upon approval of the Conceptual Geotechnical Design, commence with the geotechnical investigation as per Section 10.d.2.

Prepare and submit a Geotechnical Letter Report summarizing investigations undertaken, analyses performed, and recommended geotechnical design information for final design of the slope remediation treatment(s). Cost comparisons are not required. Include all construction details, special provisions, material properties, design loads, design assumptions and required construction sequence(s).

Include plans, typical sections, and details of the slope stabilization treatment as appendices to the Geotechnical Letter Report. Any delay in submission and acceptance of a proposed design will not extend the contract time. Any component orders or fabrication done prior to acceptance of the plans will be at the Contractor's risk.

Provide additional information, as requested by the Department's District Geotechnical Engineer or Chief Geotechnical Engineer, to evaluate any details throughout the life of the contract.

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

Provide as-built roadway cross-sections including all as-constructed geotechnical treatments.

2. Geotechnical Investigation.

Develop and submit a subsurface investigation program concurrently with Conceptual Geotechnical Design submission, in accordance with DM-4, Chapter 6, Publication 293, and the following:

a. Prepare the Schedule of Borings in accordance with Publication 222, Attachment I. Provide a sufficient number of borings to support the proposed designs. At a minimum, provide three borings to support the design of the Moment Slab (At Grade) with Toe Wall and Typical C.I.P. Barrier design. Extend borings to sufficient depths to collect sufficient data to support the depth termination criteria for the contractor designed toe wall.

b. Submit the plan and schedule to the Department for review and approval prior to mobilization of any investigative equipment to the site for collection of subsurface data.

c. Obtain all required permits for performance of subsurface investigations.

d. Obtain drilling services from a firm currently listed on the Department's List of Prequalified Drilling Contractors. Advance the borings in accordance with the methods provided in Publication 222.

e. Provide full time drilling inspection services with personnel qualified as PENNDOT Level 2 Drilling Inspectors in accordance with Publication 222, and accepted by the District Geotechnical Engineer (DGE). Submit the names and qualifications of proposed drilling inspectors to the District Geotechnical Engineer for approval. All proposed personnel shall be available for personal interview with the DGE, upon request. Provide a minimum of one full time Level 2 Drilling Inspector during all subsurface exploration activities. Provide a minimum of one drilling inspector for each operating drilling machine.

f. Log and classify materials in accordance with BC-795M and Publication 293 requirements. Prepare typed Engineer's boring logs on forms provided in DM-4. Require the drilling contractor to prepare independent boring logs. Submit both the typed Engineer's boring logs and typed driller's boring logs to the District Geotechnical Engineer for review within two weeks of completion of drilling operations.

g. Store all soil and rock samples in core boxes constructed in accordance with Publication 222. Deliver all soil samples and core samples to the PENNDOT District 11-0 Maintenance Facility in Bridgeville upon completion of subsurface exploration activities. Contact Tom Gilchrist (412-429-4924) to arrange core box delivery.

No separate payment will be made for the development and performance of the subsurface investigation.

3. Laboratory Testing

A laboratory testing program is not required. If deemed necessary by the contractor to support the Contractor's design of the proposed treatments, develop a laboratory testing program in accordance with the following:

a. Develop and submit a laboratory testing schedule concurrently with Conceptual Geotechnical Design submission, Include anticipated types of tests, boring and sample numbers to be tested, and appropriate test method designation, as warranted. Also indicate the purpose for the test and what portion of the proposed design the test results are to be used for.

b. Utilize the guidelines of Publication 293, Section 2.4, in the development of the laboratory testing plan.

c. All laboratory tests must be performed by an AAP accredited AASHTO laboratory, specifically accredited to perform the specified test. Include any certifications with the submission of the laboratory testing results as a part of the Geotechnical Letter Report.

d. No separate payment will be made for the development and performance of the laboratory testing program.

11. Design Signing and Pavement Markings.

Develop and submit a Signing Plan and a Pavement Marking Plan in accordance with applicable publications, including but not limited to the FHWA's MUTCD and PENNDOT Publications 111M, 212 and 236M, for review and approval by the District Traffic Unit. Base these plans on the information provided in the Conceptual Signing Plan and the Conceptual Pavement Marking Plan provided by the Department. The signing referenced in the Department's Conceptual Plan for Ramps A2 and S, is only for existing conditions. Design any additional signs that will be needed for the proposed modifications to Ramp A2 and S shown in the

Conceptual Plan or for any other modifications throughout the entire project. Use the District's Design Exception Report when preparing the Pavement Marking Plan to ensure the gap acceptance lengths and tapers are maximized.

Verify that all existing sign lighting is functioning properly. Repair/replace, in kind, any existing sign lighting that is not functioning properly.

If it is determined that any additional signs, including new overhead sign structures, are needed for the proposed modifications to Ramp A2 and S or for any other modifications throughout the entire project, design the additional overhead sign structures, additional signs, and/or additional sign lighting as required.

Show final gore markings, cross-hatching and legends as an approved durable pavement marking. Edge lines and lane lines may be waterborne pavement markings. Include Snowplowable Raised Pavement Markers in accordance with TC-8602 and delineation in accordance with TC-8604.

Replace existing signs within the project limits any signing not included in the conceptual plan based on a field evaluation of signage and the following criteria:

- Visibly damaged.
- Missing, based on attached Existing Sign Inventory.
- Without high intensity sheeting (Type 3 or Type 4 for ground mounted; Type 9 for overhead).

Include applicable sign nomenclatures, sizes, mounting types, etc., for all project signs. Provide sign fabrication details for all signs not shown in Publication 236M.

The "Stop Sign Ahead" sign for SR 4033 SB (Segment 0008) and the "Yield" sign for Ramp R are side-by-side, about 4' apart. Since that could confuse motorists, relocate these signs farther apart, longitudinally.

Resign Ramp S for two-lane traffic and bus traffic.

Re-establish any existing pavement markings not included in the conceptual plan, within the project limits.

Place lane direction arrows and "Wrong Way" markings down on the two lanes of SR 4033 (Segment 0008) and other associated ramps near the 5-leg SR 4033 intersection with Ramps R, S and T. These pavement markings are to indicate the direction of traffic and wrong entrance.

When construction on Ramps B1, B2, E, and R is complete, request a formal re-evaluation by the District Safety Review Committee as to whether to replace the yield sign at the end of each ramp with a stop sign. Comply with whatever decision they arrive at.

12. Cross-Sections.

Verify and compute quantities based on information provided. Develop any intermediate sections necessary to complete the work. Immediately notify the Department of any errors found on the cross-sections that were provided by the Department. Do not perform work in the area(s) in question until the error is verified. Correct the cross-section.

13. Final Safety Review.

When the plan is 60% to 70% complete, and prior to final submission, schedule a Final Safety Review. The Contractor's Design Engineer will be responsible for addressing all comments. A final review will be conducted by the District to insure that all comments have been addressed. Include the Final Safety Review in the Critical Path Method (CPM) schedule for the project.

14. Submissions.

Pavement Design:

Submit five bound draft reports on 8 1/2" x 11" bond paper, for District review and approval. Make all necessary changes as directed and resubmit six copies of the report for final District review and approval and transmittal to Central Office and FHWA for their review and approval. Any issues which need addressed for acceptance of any portion of the design will not extend the contract time. No work will be permitted until the Pavement Design has been approved by the Department and FHWA.

Conceptual Geotechnical Design Submission:

Submit three complete paper sets to the Department, unless otherwise directed. Arrange for and attend a design review meeting with the District Geotechnical Engineer.

Geotechnical Letter Report Submission:

Submit three complete paper sets to the Department, unless otherwise directed.

Final Design Submission:

Submit eight complete paper sets to the Department, unless otherwise directed. Submit one complete paper set to FHWA for concurrent review. Also, submit six partial paper sets for the District Safety Review. These partial sets can exclude the cross sections and the structure plans. Direct all submissions to the Representative. No approvals will be given until all relevant design calculations and quantities are submitted. Include the anticipated submissions in the CPM. In addition, utilize a file transfer protocol (ftp) site for submissions unless directed otherwise. Requirements for the ftp are as follows:

- Establish an FTP server of sufficient capacity for the transfer of design related files to the Department, FHWA and review consultant.
- Provide server logon exit points to authenticate users on the server.
- Protect passwords by using TLS/SSL or similar encryption.
- If problems occur with the file security, use FTP exit programs to restrict the FTP operation that users can perform.
- Immediately notify the Department when a security breach (Hack) into the FTP is suspected.
- Maintain the site for the life of the contract.

15. Review Times (Review times are for complete submissions).

Preliminary Plans - Twenty (20) working days for the first submission; twenty (20) working days for each subsequent submission.

Conceptual Geotechnical Design Submission - Twenty (20) working days for the first submission to commence after the design review meeting; twenty (20) working days for each subsequent submission.

Geotechnical Letter Report Submission - Twenty (20) working days for the first submission; twenty (20) working days for each subsequent submission.

Final Plans - Twenty (20) working days for the first submission; twenty (20) working days for each subsequent submission.

Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 P.M. will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

- New Year's Day
- Dr. Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day.

16. Final Roadway Drawings

After all applicable reviews and all comments have been addressed to the satisfaction of the District Executive, submit Final Roadway Construction Plans in accordance with Design Manual Part 3. Include in the final submission, original 22" x 34" drawings and eight sets of 22" x 34" prints.

Final Roadway Construction Plans will include, but not be limited to:

- Final Roadway Plans (including Plan, Profile, Typical Sections, Item Summary, Tabulation of Quantities and Cross-Sections, as required).
- Highway Lighting Plan
- Signing and Pavement Marking Plan
- Erosion and Sediment Pollution Control Plan

As part of the Item Summary Sheet(s), include a Construct Roadway Component Item Schedule indicating all items required for Item 9000-6011 - Construct Roadway. Identify component items by using Standard Construction Item numbers and descriptions for the standard items and 9000 item numbers for non-standard items. Identify quantities, units of measure, and unit cost for each component item.

Provide a complete set of computations, including any submitted previously, for the design and additional calculations as needed by the Department to evaluate any details throughout the life of the contract.

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

Provide an electronic version of the final project plan files in Microstation format. The final project plan files will be considered the Department's Intellectual Property.

17. As-Built Plans.

Provide original, 22" x 34" As-Built Roadway Plans. Comply with DM 1/1A criteria.

All as-built plans are the sole responsibility of the Design/Build team and must be submitted to the District within three months of final inspection acceptance.

MEASUREMENT AND PAYMENT - Lump Sum

Incremental payment is based upon the following schedule:

- Preliminary Plan Review - 10%
- Geotechnical Design Approval - 10%
- Final Safety Review Approval - 25%
- Final Roadway Plan Approval - 40%
- As-Built Plans Approval - 15%

00 - c90602 Item 9000-6002 - Design Highway Lighting

Addendum:

Associated Item(s): 9000-6002

Header:

Provision Body:

DESCRIPTION - This work is the design and preparation of plans to repair and provide operational maintenance to the lighting systems of the underpasses of the Glenfield Interchange (SR 8017) and part of the Glenfield viaduct Interchange (SR 8092). This work will consist of repairing damaged components of the lighting system, replacing light bulbs and repairing or replacing any non-functional components of the lighting system.

DESIGN -

In accordance with the applicable sections of the Specifications, Publication 408, and the following additional requirements:

Inspect the components of the lighting system in the underpasses only. Submit a report to the Department detailing required work. Prepare specifications for repairs as directed by the Department. This work is to be done to maintain the existing system only.

The Contractor will field verify the luminaire wattage, light distribution; offsets and mounting heights of the existing lighting system. Use of the as-built plans in place of field verification is not permitted. The lighting design will be submitted to the Department for approval as per Design manual 1-A, Chapter 7, Section 7.4.D, pp. 7-7 to 7-12. Contact the Department to review the field verification results and to establish design criteria prior to the first plan submission.

Where replacement of luminaires is needed, replace all luminaires with Department approved luminaires. Highway lighting components removed from the project are to be the Contractor’s property and the Contractor’s responsibility to dispose of.

The above list may not be all inclusive. It is the contractor's responsibility to provide a complete and accurate design.

Provide within the design, means (possibly temporary) to energize and make functional the lighting installed before the winter suspension. Installed lighting will be used during the winter suspension and during construction the following year. All existing lighting still in place is to be energized and utilized during winter suspension.

Provide a testing item for each year of construction to allow installed lighting to be operational over winter suspension and in the second construction season.

At the Ramp A2 Underpass:

- Provide for the replacement of five wall packs
- Provide for the replacement of a junction box cover (JB-11) (36”x36”)
- Incase an exposed sign lighting feed in conduit.

At the SR 65 NB Underpass (under SR 79 Bridge):

- Provide for the replacement of six undermount lights.

At the SR 4033 Underpass (under SR 65 NB & Ramp A1 Bridge):

- Provide for the replacement of six undermount lights.

Review Times (Review times are for complete submissions).

Preliminary Plans - Ten (10) working days for the first submission; ten (10) working days for each subsequent submission.

Final Plans - Ten (10) working days for the first submission; ten (10) working days for each subsequent submission.

Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 P.M. will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

• New Year's Day

• Dr. Martin Luther King, Jr. Day

• President's Day

• Memorial Day

• Independence Day

• Labor Day

• Columbus Day

• Veteran's Day

• Thanksgiving Day

• Day after Thanksgiving Day

• Christmas Day.

MEASUREMENT AND PAYMENT – Lump Sum

00 - c90605 Item 9000-6005 - Design Replace Expansion Joint with Neoprene Strip Seal Dam

Addendum:	1
Associated Item(s):	9000-6005

Header:

Provision Body:

DESCRIPTION - This work is the design and preparation of structure plan details for the replacement of the existing deck expansion joints with new neoprene strip seal expansion dams **utilizing AAA Accelerated Concrete for phased construction at the locations** indicated on the Department's Structure Plan S-29389 and in accordance with corresponding specification entitled "Construct Replace Expansion Joint with Neoprene Strip Seal Dam (3" Movement), S-29389". These structure plan details are to be incorporated into Structure Plan S-29389.

DESIGN - As follows and listed herein.

A. General

The Department's Structure Plan S-29389 represents the locations of required work that will meet safety, geometric, environmental, and load carrying capacity requirements for the project. Alternate methods of meeting the designated rehabilitation work may be used subject to the requirements specified herein. A Preliminary Structure Plan Details submission for the proposed work must be prepared and submitted for review and approval prior to developing the Final Structure Plan Details.

The Structure Plan S-29389 and all other applicable plans can be provided to the successful bidder in CADD Microstation format. Make request for this information to the District Bridge Engineer, Louis Ruzzi, P.E., in writing. Include a signed release form for electronic data (use attached Release for PENNDOT Electronic Design Project Files). The Contractor is responsible for all plan changes made to the approved plans due to the final design of the neoprene strip seal expansion dams. Follow procedures outlined in Design Manual 1A for plan changes.

No foundation submission is required for the project. Structure will utilize existing abutments, piers, superstructure, and deck. No analysis is required for abutments, piers, superstructure, and deck.

Provide design and drawings in the units of measurement shown on the Structure Plan S-29389.

Designs that take advantage of any errors and/or omissions in the Structure Plan S-29389, or discrepancies between the Structure Plan S-29389 and the Special Provisions, will not be accepted. In the event any such error, omission, or discrepancy is discovered, immediately notify the Department. Failure to notify the Department will constitute a waiver of all claims for misunderstandings, ambiguities, or other situations resulting from the error, omission, or discrepancy.

On the first sheet of the Preliminary Structure Plan Details and Final Structure Plan Details Submissions, provide the Design Engineer's P.E. seal, valid signature in ink, the date signed, business name, and address. Provide the Design Engineer's P.E. seal, signature, and date signed on the first sheet of all computations, including computations for partial plan submissions.

Designs copied directly from Department Standard Drawings need not be documented through independent computations. List such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph. Experimental or demonstration- type design concepts, products, structures, or elements not pre- approved by the Department for general usage at the time of bid, will not be allowed.

Types, concepts, construction sequencing, or other details that are not covered in the design and construction specifications or standards, or practice not commonly used in Pennsylvania are allowed only when specifically indicated herein. Where design or construction that deviates from standard practice is proposed, a conceptual design shall be submitted prior to the Final Structure Plan Details Submission for review and approval. The submittal shall contain conceptual plans, a list of items that deviate from standard design and construction, including but not limited to design methodology, the computer program that will be used in the design, construction sequencing, and any specialized construction techniques.

The following information/data will be made available to the Contractor during the advertisement period:

- Existing Bridge Plans:

  - S-9424, dated 1970, 168 sheets.

  - S-9682, dated 1970, 52 sheets.

  - S-25546, dated 2006, 54 sheets.

B. Design Specifications

Use PENNDOT Design Manual Part 4 for design policy and procedures and design criteria. Refer to the Bridge/Structures Related Effective Policy Letters" for design criteria. Refer to the "Bridge/Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and addenda (addendum) to the proposal.
- Design related Strike-Off Letters in effect on the date of project advertisement.
- PENNDOT Design Manual Part 4, Structures
- PENNDOT Bridge Design and Bridge Construction Standards
- AASHTO Guide Specifications for Horizontally Curved Highway Bridges
- AASHTO LRFD Bridge Design Specifications or, when applicable, AASHTO Standard Specifications for Highway Bridges

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

C. Design Requirements

1. General

- Permissible Bridge Geometrics. Maintain existing horizontal alignment and roadway profile. Bridge deck cross slopes will match the proposed superelevation cross slope as indicated.
- Existing Deck Expansion Joints (Span 21) - Install new neoprene strip seal expansion dams.
- Apply protective coating for Reinforced concrete surfaces.
- Slip-formed barriers are not allowed
- Do not use the BLC standard drawings.
- Formwork all repairs to deteriorated surfaces - No gunite spray.
- Shear and Moment Diagrams will not be required.

2. Geometry

Design the Final Structure Plan Details according to the geometrics shown on the Structure Plan S-29389, except changes will be allowed as follows:

- Horizontal Alignment: No Change Allowed
- Vertical Alignment: No Change Allowed
- Substructure Unit Locations: No Change Allowed

- Bridge Length: No Change Allowed
- Lane, Shoulder, and Sidewalk Widths: No Change Allowed
- Cross Slope: No Change Allowed
- Centerline Bearing locations: No Change Allowed

3. Seismic

Use the following for seismic design:

- Seismic Site Coefficient = 0.09

4. Superstructure

Incorporate the following requirements into the superstructure design:

- Deck Expansion Joints (Span 21): Install new neoprene strip seal expansion dams.

5. Substructure - Not Applicable

6. Temporary Bridges - Not Applicable

7. Maintenance of Traffic during Construction - Maintain traffic during construction in accordance with the special provisions entitled "Design Maintenance and Protection of Traffic Control Plan, S-29389" and "Construct Maintenance and Protection of Traffic Control Plan, S-29389" and the final Traffic Control Plan approved the District Traffic Unit once it is developed by the Contractor's Design Engineer.

According to DM4, Policies and Procedures, Section 1.11.3.4.

Submit one full-size copy for review of the Final Structure Plan Details and one copy of the Computations to the Pennsylvania Department of Transportation, District 11-0. Once the Final Structure Plan Details are reviewed and returned, resubmit one full-size copy for final approval.

1. Shop Drawings

The Contractor's designer is responsible for review and approval of all shop drawings. Provide District 11-0 with one copy of all fabricator submissions, approved shop drawings, and designer comments.

2. Revisions During Construction

According to applicable sections of DM4, Policies and Procedures, Section 1.11.4.

3. As-Built Plans

Prepare as-built plans according to DM4, Policies and Procedures, Section 1.11.4.5.

D. Submittal Review, Approval, and Distribution

1. Submittal Review, Approval, and Distribution

This is a Federal Oversight Project. The **consultant** review and approval process will be used **by** the District with consultation from Central Office and FHWA when deemed necessary by the District.

The Final Structure Plan Details will be recommended by the District Bridge Engineer.

The Contractor is required to submit a cover letter acknowledging review of and concurrence with all design submissions made to the Department. The Contractor's Design Engineer will date and seal all submissions.

Make all design submissions to the Pennsylvania Department of Transportation, District 11-0.

2. Review Times

Submittal reviews will be performed within the following time periods:

a. Preliminary Structure Plan Details Submission: Ten (10) working days for the first submission; five (5) working days for subsequent submissions.

b. Hydraulic Analysis/Permit Amendments - Not Applicable

c. Foundation Submission - Not Applicable

d. Partial Plans Submissions - Not Applicable

e. Utilities - Not Applicable

f. Final Structure Plan Details Submission: Ten working days for the first submission; five working days for subsequent submissions.

g. Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 P.M. will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

November 27 & 28, 2008 - Thanksgiving Holiday

December 25, 2008 - Christmas Day

January 1, 2009 - New Years Day

January 19, 2009 - Martin Luther King Junior Day

February 16, 2009 - President's Day

May 25, 2009 - Memorial Day

July 4, 2009 - Independence Day

MEASUREMENT AND PAYMENT - Lump Sum

Incremental payment will be made for the design based on the following schedule:

Preliminary Structure Plan Details Approval 20%

Final Structure Plan Details Approval 70%

As-Built Plans 10%

00 - c90611 Item 9000-6011 - Construct Roadway

Addendum:	5
Associated Item(s):	9000-6011

Header:

Provision Body:

DESCRIPTION - This work is the reconstruction of the roadways of the Glenfield Interchange (SR 8017) and part of the Glenfield Viaduct Interchange (SR 8092) and other associated work as specified in the corresponding specification entitled, “ITEM 9000-6001 – Design Roadway” and in accordance with the approved Final Design drawings.

MATERIAL - As indicated and as specified for each respective item included in the reconstructed roadways and associated work.

CONSTRUCTION -

In accordance with the applicable sections of the Specifications, Publication 408, and the following additional requirements:

Phase the construction as follows:

Perform all of the required construction for SR 65, the Glenfield Interchange (SR 8017) and the Glenfield Viaduct Interchange (SR 8092) after the construction for the Neville Island Interchange (SR 8015) and the SR 79 mainline bridge over the Ohio River is complete to the point where detours are no longer required, unless specifically directed otherwise by the Department.

The Department will entertain suggested changes to the construction phasing from the contractor. Submit requests to the Department Representative.

Provide Construction Surveying, Type B in accordance with Section 686. The contractor will be responsible for establishing all alignments and referencing same by monumentation. Establish permanent benchmarks at intervals not to exceed 1,500' within project the area, but outside of the physical construction areas is not to be disturbed.

Perform erosion repair and rock slope remediation treatments to failed and/or distressed portions of the Ramp D/SR 65 NB shoulder, between SR 65 NB Stations 405+90 to 410+52 Left.

Provide seeding and mulching for the installation, maintenance, and removal of the erosion and sediment pollution control measures as required by the Allegheny County Conservation District and the approved plan.

Do not commence work until the Final Roadway Plan and corresponding Traffic Control Plan are approved by the District Executive and the District Traffic Engineer.

If utility relocations are required as part of some alternate method of construction, be responsible for the cost of the utility relocations in excess of those indicated in the contract documents. Additional contract time will not be considered for additional utility relocation work associated with an alternate construction method.

When reconstructing the roadway, remove any unsuitable material from the subgrade as directed. Unsuitable material is to be identified, excavated, and backfilled in accordance with the special provisions entitled, "Special Rolling Modified" and "Class 1A Excavation Modified".

Remove roadway concrete pavement using the most cost effective technique.

Locate any existing underground highway or sign lighting facilities and avoid disturbing or damaging them in any way. Facilities that are damaged must be repaired or replaced entirely to the satisfaction of the Inspector-in-Charge at no additional cost to the Department. Locating the existing facilities will be paid for separately under the Special Provision for Item 9000-0250.

Remove all trees, bushes, and weeds that are encroaching on Ramp E and other roadways throughout the entire project area. Clear away the brush that is currently obstructing the yield sign near the end of Ramp E.

MEASUREMENT AND PAYMENT – Lump Sum

Complete and submit the Construct Roadway Component Item Schedule prepared as part of the Item Summary Sheet(s) for "ITEM 9000-6001 – Design Roadway" with a unit price for each component item. All items included in the Construct Roadway Component Item Schedule are paid for as part of the contract Lump Sum price for ITEM 9000-6011 – Construct Roadway. The total price paid will not exceed the amount bid for ITEM 9000-6011 regardless of quantities actually constructed. The total price paid will not be less than the amount bid for ITEM 9000-6011 regardless of quantities actually constructed.

Submit the Construct Roadway Component Item Schedule prior to the roadway plan approval. Include the appropriate items in partial plan submissions.

The Ramp B2 construction work between Ramp B2 Sta. 276+10 to Sta. 282+52 is included in and will be paid for under the SR 79-A45 portion of the project since the quantities for this work have already been tabulated there.

The Ramp B1 construction work between Ramp B1 Sta. 478+81.5 to Sta. 483+35 is included in and will be paid for under the SR 79-A44 portion of the project since the quantities for this work have already been tabulated there.

00 - c90622 Item 9000-6022 - Construct Highway Lighting

Addendum:

Associated Item(s): 9000-6022

Header:

Provision Body:

DESCRIPTION - This work is the construction of highway lighting in accordance with Specifications, Publication 408/2007, and the approved design highway lighting plan. This item of work also includes coordination with utility companies, as needed, throughout construction.

MATERIAL - As indicated and as specified in the sections of the Specifications, Publication 408/2007 for each respective item included in the design of highway lighting plan.

CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408; Special Provisions for each respective item; and any additional requirements specified herein.

Do not commence construction until the highway lighting plans are approved by the Bureau of Design-Lighting Section. Highway lighting components removed from the project are to be the Contractor’s property and the Contractor’s responsibility to dispose of.

MEASUREMENT AND PAYMENT - Lump Sum

a. General

All items of work are to be included in and paid for as part of the contract Lump Sum price, except as indicated otherwise herein.

Submit an Item Summary Sheet to the Department Engineer prior to performing any construction work as part of this item. Make the total at the end of this Item Summary Sheet equal to the Lump Sum price shown for this item.

b. Complete the Item Summary Sheet included in the Final Highway Lighting Plan by providing a unit price for each item listed. If necessary, the approximate quantity shown for any item on the Item Summary Sheet may be revised to reflect the Contractor's final estimating. Ensure that the sum of the extension (final estimated quantity multiplied by unit price) for each item is equal to the Lump Sum price bid. The completed Item Summary Sheet becomes part of the contract. No payments will be made for this item until the completed Item Summary Sheet is submitted and approved.

All of the Contractor's costs for the work necessary to complete the construction are to be included in one or more of the items listed on the Item Summary Sheet. Payment of the Lump Sum price will be made based on the quantity of each item of work satisfactorily completed during the applicable payment period.

The contract Lump Sum price will not be adjusted if the actual quantities of work necessary to complete the construction exceed or are less than the quantities provided by the Contractor on the submitted Item Summary Sheets. If the Department's representative determines that conditions differ materially from those indicated, causing an increase or decrease in the cost or time for performance of the work, or if increases or decreases in quantities are required due to a change directed by the Department representative, adjusted payment will be made as specified in Section 110.03.

00 - c90655 Item 9000-6055 - Construct Replace Expansion Joint with Neoprene Strip

Addendum: 2

Associated Item(s): 9000-6055

Header:

Provision Body:

DESCRIPTION - This work is the construction for the replacement of the existing deck expansion joints with new neoprene strip seal expansion dams as indicated on the Department's Structure Plan S-29389 and in accordance with corresponding specification entitled "Design Replace Expansion Joint with Neoprene Strip Seal Dam (3" Movement), S-29389".

MATERIAL - In accordance with:

- Class AAA Accelerated Cement Concrete
- **Section 409.2 - Superpave Asphalt Mixture Design, HMA Wearing Course, PG 76-22, 10 to < 30 Million ESALs, 9.5 mm Mix, SRL-E**
- **Section 460.2 - Bituminous Tack Coat**
- Section 706.1 - Epoxy Bonding Compound
- Section 1001.2 - Cement Concrete Structure
- Sections 709.1 and 1002.2 - Reinforcement Bars
- Section 1026.2 - Neoprene Strip Seal Dam

CONSTRUCTION - In accordance with applicable portions of Sections 706, 709, 1001, 1002 and 1026, applicable portions of Design Manual Part 4 Policies and Procedures, and the following Standard Drawings:

- BC-736M (Reinforcement Bar Fabrication Details)
- BC-752M (Concrete Deck Slab Details)
- BC-767M (Neoprene Strip Seal Dam for Prestressed Concrete and Steel I-beam Bridges)

And as follows:

Perform strip seal dam installation in two phases each for both northbound and southbound. Perform this work on weekends using AAA Accelerated Concrete.

Remove bridge railing, posts, and any other miscellaneous items as required to perform the specified repairs. Set aside for reuse. Remove and dispose existing concrete deck and parapets, full width (phased construction) and depth, for a distance of 2' from the centerline of the existing deck expansion joint projecting perpendicular from the joint. Provide a 3/4" deep sawcut at all removal limits to create a neat removal line. Use pneumatic hammers not exceeding an impact rating of more than 30 foot-pounds or hand tools to remove all concrete. Do not use back hoes or other large equipment to remove concrete. All existing reinforcement bars longitudinal with the bridge (parallel to traffic) to remain. All existing reinforcement bars transverse with the bridge (perpendicular to traffic and parallel with the expansion joint) to be removed and replaced in kind and shape epoxy coated. Mechanical reinforcement splices will be required due to phased construction of the expansion dams. During removal operations, do not damage any portion of the bridge deck or structure that is to remain. Any area damaged beyond the removal limits to be repaired by the Contractor at no additional cost to the Department. Satisfactory dispose of all removed materials.

Install new neoprene strip seal expansion dam**s** and associated work prior to performing latex modified concrete operations and placement on Span 21.

Preparation - Obtain necessary survey and measurement data at each joint for proper fabrication and fit of all expansion dams. Expansion dams shall be continuous sections for each northbound and southbound roadways. Install new parapet cover plates custom fit for existing parapet shapes and new expansion dams in roadways in accordance with BC-767M. Submit preconstruction drawings in accordance with corresponding specification entitled "Design Replace Expansion Joint with Neoprene Strip Seal Dam (3" Movement), S-29389" to the District Bridge Engineer for approval prior to development of shop drawings and fabrication details.

Sandblast or wire brush all exposed reinforcement that is to remain to remove any rust, scale, and loose concrete debris from the existing reinforcement. Coat existing reinforcement that is to remain with approved epoxy paint prior to placing new concrete.

Repair - Install formwork and place new reinforcement in kind with existing conditions. Apply epoxy bonding compound in accordance with an approved manufacturer's specifications. Place concrete against contact surface while epoxy bonding compound is still tacky to ensure bond between contact surface and newly poured concrete. **Place concrete 2" below final finished grade to accommodate the proposed latex placement.** Cure concrete by an acceptable method. **Place and maintain temporary superpave wearing course prior to final placement of latex modified concrete.**

MEASUREMENT AND PAYMENT - Lump Sum

Bridge deck and parapet removal and reconstruction work, accelerated concrete, epoxy bonding compound, reinforcement bars, forms, removal and reset of bridge railing, neoprene strip seal expansion dams (for the movement specified), new parapet cover plates, superpave wearing course and any other material required for reconstruction and finishing are considered incidental to this item and will not be paid separately.

00 - c90700 Item 9000-7001 - Scarification Modified, S-29389

Addendum:

Associated Item(s): 9000-7001

Header:

Provision Body:

DESCRIPTION - This work is scarifying existing concrete bridge deck 1/2" uniform depth increments to a total uniform depth of 1" in preparation for placing a latex modified concrete wearing surface.

CONSTRUCTION - Section 1041.3 and as follows:

Section 1041.3(a) General. Add the following:

Remove a maximum of 1/2" depth with each scarification equipment pass.

Section 1041.3(b) Equipment. Revise second sentence to read:

The equipment used for scarification is required to remove 1/2" across the cutting path.

MEASUREMENT AND PAYMENT - Square Yard

For 1/2" uniform depth satisfactorily completed. When depths greater than 1/2" are specified, the Department will pay for each half inch increment of depth separately, regardless of how many passes are made with the scarifier.

00 - c90702 Item 9000-7002 - Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389

Addendum: 1

Associated Item(s): 9000-7002

Header:

Provision Body:

DESCRIPTION - This work is bridge deck preparation using hydrodemolition to remove unsound material. This item also includes the removal and disposal of concrete and debris, vacuuming, shielding, water control, additional removal of concrete, and other aspects of work necessary to prepare the deck for the placement of the new latex modified concrete overlay. **Perform this work during night time and/or weekend operations.**

CONSTRUCTION -

a. General. Perform hydrodemolition surface preparation over the entire top surface of the reinforced concrete bridge deck to provide a rough and bondable surface and to remove unsound concrete during the initial hydrodemolition surface preparation pass. Remove unsound concrete or original deck surface found after the initial hydrodemolition surface preparation pass at no

additional cost to the Department. Unsound concrete is defined as existing bridge deck concrete that is deteriorated, spalled, delaminated, or determined by the Engineer to be unsound.

b. Hydrodemolition.

1. Provide hydrodemolition equipment consisting of a computerized, self-propelled machine that utilizes a high pressure water jet stream to provide a rough and bondable surface while removing all unsound concrete, rust, and concrete particles from exposed reinforcement during the initial pass.

2. Prior to the commencement of the hydrodemolition surface preparation operation, calibrate the hydrodemolition equipment on an area of sound concrete 7' by 7' as designated by the Engineer to demonstrate the desired result of this specification which is providing a highly rough and bondable surface while not removing significant surface depth.

3. Move the hydrodemolition equipment to a second area 7' by 7' that is unsound as designated by the Engineer to demonstrate the desired result of this specification which is providing highly rough and bondable surface while removing unsound concrete during the initial pass.

4. Provide verification of the following settings to the Engineer:

- Water Pressure Gauge.
- Minimum water usage at 55 gallons per minute.
- Machine staging control (step).
- Nozzle size.
- Nozzle speed (travel).

5. If the equipment or end result is deemed unsatisfactory by the Engineer, remove the hydrodemolition equipment from the project site and provide another hydrodemolition unit for calibration. No additional contract time will be provided for this recalibration process if required.

6. The hydrodemolition surface preparation production may begin after the Engineer has approved the calibration and the above settings. Maintain and give to the Engineer the calibration and production settings prior to and during hydrodemolition surface preparation production by the Contractor.

7. Stop the surface preparation operation if it is determined that sound concrete is being removed or unsatisfactory results are being obtained, as determined by the Engineer. Perform appropriate recalibration or changes in equipment and methods prior to resuming the operation.

8. Perform calibration each time the hydrodemolition surface preparation is performed and as required to achieve the results specified.

c. Water Control. Submit a plan for approval to the Engineer for control and filtering of all water discharged during operation. Implement the plan during all hydrodemolition operations.

d. Shielding. Provide shielding, as required, to ensure containment of all dislodged concrete within the removal area in order to protect the traveling public from flying debris on, adjacent to, and below the work site.

e. Additional Removal of Concrete.

1. Remove any existing asphalt or concrete patching material with a pneumatic hammer not heavier than 30-pound class prior to the initial hydrodemolition surface preparation pass.

2. After the hydrodemolition surface preparation operation has completed the initial pass and the deck and approach slabs are dry and frost free, resound the deck to ensure that all unsound material has been removed.

3. Use pneumatic hammers not heavier than nominal 30-pound class, operated at no more than a 45° angle from horizontal, in areas that are inaccessible to the hydrodemolition equipment or in full-depth patching areas that require minor trim work to remove the remaining unsound concrete.

4. Remove unsound materials detected by the Engineer by pneumatic hammers (not heavier than 30 pound class) or by hydrodemolition at no additional cost to the Department.

5. Remove additional concrete around exposed reinforcement bars that are adjacent to unsound concrete to provide 3/4" clearance around the bar.

6. The requirement to provide a minimum 3/4" clearance around all reinforcing bars that have more than one-half the diameter exposed is waived, providing that the existing concrete is sound. The amount of steel exposed should be kept to a minimum.

f. Removal of Concrete and Debris.

1. All construction debris, milling debris, and dust is to be completely removed from the bridge deck surface prior to calibration and commencement of the hydrodemolition surface preparation operation.

2. Clean the hydrodemolition and milling debris with a vacuum system equipped with fugitive dust control devices and capable of removing wet debris and water all in the same pass. Blow dry the deck with air to remove excess water.

3. Perform cleaning in a timely manner, before debris and water is allowed to dry on the deck surface. Remove any material allowed to dry prior to sounding at no additional cost to the Department.

g. Reinforcement.

1. Splice or replace any reinforcing steel damaged or dislodged by these operations, with the same size bar, at no additional cost to the Department.

2. Existing epoxy coating removed from reinforcement as a result of these operations is not required to be repainted.

h. Technical Representation. Provide a non-working technical field representative on the project site during the calibration and the hydrodemolition surface preparation operation.

MEASUREMENT AND PAYMENT - Square Yard

Includes full surface area of deck regardless of the number of passes required to achieve satisfactory results.

Additional removal of concrete is incidental to this item of work and will not be paid for separately.

00 - c90703 Item 9000-7003 - Latex Modified Concrete Wearing Surface

Addendum:	1
Associated Item(s):	9000-7003

Header:

Provision Body:

DESCRIPTION - This work is construction of a one course wearing surface of latex modified concrete on in-service bridge deck at the indicated minimum depth. This work also includes mechanical transverse sawed grooves on the entire bridge deck surface. **Perform the installation of the latex modified concrete during night time and/or weekend operations.**

MATERIAL - Section 1042.2

CONSTRUCTION - Section 1042.3 and as follows:

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing latex modified concrete.

Remove unsound concrete and prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Where any portion of the latex modified concrete is to be placed adjacent to a sawcut or formed vertical construction joint, sandblast the vertical face prior to placement.

Construct longitudinal joints as indicated on Structure Plan (S-29389). No transverse joints are permitted between expansion dams unless constructed directly over existing transverse construction joint. All anticipated joint locations must be submitted to the Department for approval prior to placement.

Section 1042.3(a)1.1a Sandblasting or Water Blasting Equipment. Revise to read:

Prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Section 1042.3(c) Placing and Finishing:

Revise as follows. Revise the first sentence of the ninth paragraph to read:

Place and strike-off the mixture to a maximum of 1/4" above final grade.

Revise as follows. Replace the last paragraph with the following paragraph:

Straightedge and edge while the latex is still workable, as specified in Section 501.3(k)3. Do not texture the plastic latex concrete and promptly cure the wearing surface. After the latex has hardened, test the surface again as specified in Section 501.3(o). The bridge deck and approach slab surfaces will be textured with uniformly pronounced grooves sawed perpendicular to centerline. Vehicular traffic may travel across an un-grooved deck, however complete the transverse sawed grooves across the entire deck area within seven days after placing the latex concrete. Saw the grooves approximately 3.18 mm (0.125") wide with a tolerance of +0.4 mm (0.015"), 4.78 mm (0.188") deep with a tolerance of +1.6 mm (0.062"). Use a random groove pattern of 1.5", 1.75" and 2.0" center to center spacing with a tolerance of +3.175 mm (0.125"). Grooves will terminate 300 mm (12")+ from the curb line. Grooves will not be sawed any closer than 50 mm (2") nor further than 75 mm (3") from the edge of any joint. In the event that a single pass of the grooving machine cannot be made across the width of the bridge or approach slab, then the mating ends of the subsequent passes must not overlap previous grooves nor leave more than 25 mm (1") of surface ungrooved. Removal of all debris (slurry, etc.) resulting from the grooving operations must be continuous. Surfaces must be immediately left in a washed and clean condition, free of all slipperiness from the slurry, etc. All debris and surplus material removed from the grooving operations must be deposited in a truck, or other conveyance, and removed from the project.

MEASUREMENT AND PAYMENT - Square Yard

Scarification Modified, Concrete Bridge Deck Surface Preparation Hydrodemolition, and Concrete Bridge Deck Repairs, Type 3, will be paid separately.

Additional latex modified concrete for depths greater than 1 1/4" due to deterioration removed by hydrodemolition will be paid for separately in accordance with specification entitled "Latex Modified Concrete Wearing Surface, Variable Depth, S-29389". Placement of the latex modified concrete required including the 1 1/4" depth item and the variable depth item will be placed in one operation.

Finish grade elevation of the latex modified concrete to match original bridge deck grade elevation.

00 - c90704 Item 9000-7004 - Rapid Set Latex Modified Concrete Wearing Surface

Addendum: 2

Associated Item(s): 9000-7004

Header:

Provision Body:

DESCRIPTION - This work is construction of a one course wearing surface of rapid set latex modified concrete on in-service bridge deck at the indicated minimum depth. This work also includes mechanical transverse sawed grooves on the entire bridge deck surface. **Perform the installation of the rapid set latex modified concrete during weekend operations.**

MATERIAL - Section 1042.2 and as follows:

Section 1042.2(a) Cement. Revise to read:

Type I, IP, II, Section 701.1 or other rapid setting cement approved by the Engineer.

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing rapid set latex modified concrete.

Remove unsound concrete and prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Where any portion of the rapid set latex modified concrete is to be placed adjacent to a sawcut or formed vertical construction joint, sandblast the vertical face prior to placement.

Construct longitudinal joints as indicated in Structure Plan (S-29389). No transverse joints are permitted between expansion dams unless constructed directly over existing transverse construction joints. All anticipated joint locations must be submitted to the Department for approval prior to placement.

Section 1042.2(f) Revise by adding the following to the mix design physical properties and requirements table:

- 3 hour compressive strength (psi) (PTM Nos. 604 & 611) must meet or exceed 3000 psi.

CONSTRUCTION - Section 1042.3 and as follows:

Section 1042.3(a)1.1a Sandblasting or Water Blasting Equipment. Revise to read:

Prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Section 1042.3(c) Placing and Finishing:

Revise as follows. Revise the first sentence of the ninth paragraph to read:

Place and strike-off the mixture to a maximum of 1/4" above final grade.

Revise as follows. Replace the last paragraph with the following paragraph:

Straightedge and edge while the latex is still workable, as specified in Section 501.3(k)3. Do not texture the plastic latex concrete and promptly cure the wearing surface. After the latex has hardened, test the surface again as specified in Section 501.3(o). The bridge deck and approach slab surfaces will be textured with uniformly pronounced grooves sawed perpendicular to centerline. Vehicular traffic may travel across an un-grooved deck, however complete the transverse sawed grooves across the entire deck area within seven days after placing the latex concrete. Saw the grooves approximately 3.18 mm (0.125") wide with a tolerance of +0.4 mm (0.015"), 4.78 mm (0.188") deep with a tolerance of +1.6 mm (0.062"). Use a random groove pattern of 1.5", 1.75" and 2.0" center to center spacing with a tolerance of +3.175 mm (0.125"). Grooves will terminate 300 mm (12")+ from the curb line. Grooves will not be sawed any closer than 50 mm (2") nor further than 75 mm (3") from the edge of any joint. In the event that a single pass of the grooving machine cannot be made across the width of the bridge or approach slab, then the mating ends of the subsequent passes must not overlap previous grooves nor leave more than 25 mm (1") of surface ungrooved. Removal of all debris (slurry, etc.) resulting from the grooving operations must be continuous. Surfaces must be immediately left in a washed and clean condition, free of all slipperiness from the slurry, etc. All debris and surplus material removed from the grooving operations must be deposited in a truck, or other conveyance, and removed from the project.

Section 1042.3(d) Curing and Protection. Revise the second paragraph to read:

Promptly cover the surface with a single layer of clean, wet burlap as soon as the surface will support it without deformation. Wet cure only the surface for minimum 3 hours and until a compressive strength of 3000 psi is reached. Keep the curing material saturated during the wet cure period.

Delete Table A.

Section 1042.3(g) Application of Live Loads. Revise to read:

After latex placement, do not allow heavy equipment or vehicular traffic on the latex surface until the 3000 psi compressive strength is reached and the minimum 3 hour wet cure has elapsed.

MEASUREMENT AND PAYMENT - Square Yard

Scarification Modified, Concrete Bridge Deck Surface Preparation Hydrodemolition, and Concrete Bridge Deck Repairs, Type 3, will be paid separately.

Additional rapid set latex modified concrete for depths greater than 1 1/4" due to deterioration removed by hydrodemolition will be paid for separately in accordance with specification entitled "Rapid Set Latex Modified Concrete Wearing Surface, Variable Depth, S-29389". Placement of the rapid set latex modified concrete required including the 1 1/4" depth item and the variable depth item will be placed in one operation.

Finish grade elevation of the rapid set latex modified concrete to match original bridge deck grade elevation.

00 - c90705 Item 9000-7005 - Latex Modified Concrete Wearing Surface, Variable Depth

Addendum:

Associated Item(s): 9000-7005

Header:

Provision Body:

DESCRIPTION - This work is construction of latex modified concrete wearing surface of a variable depth where depths are in excess of 1 1/4". This includes locations were deteriorated deck concrete has been removed by hydrodemolition.

MATERIAL - Section 1042.2

CONSTRUCTION - Section 1042.3 and as follows:

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing latex modified concrete.

Remove unsound concrete and prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Where any portion of the latex modified concrete is to be placed adjacent to a sawcut or formed vertical construction joint, sandblast the vertical face prior to placement.

If phased construction is required, transverse joints are preferred in lieu of longitudinal joints. All anticipated joint locations must be submitted to the Department for approval prior to placement.

Section 1042.3(a)1.1a Sandblasting or Water Blasting Equipment. Revise to read:

Prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

MEASUREMENT AND PAYMENT - Cubic Yard

Scarification Modified, Concrete Bridge Deck Surface Preparation Hydrodemolition, and Concrete Bridge Deck Repairs, Type 3, will be paid separately.

Additional latex modified concrete for depths greater than 1 1/4" due to deterioration removed by hydrodemolition will be paid under this item. The latex modified concrete above the variable depth item will be paid for separately in accordance with specification entitled "Latex Modified Concrete Wearing Surface, 1 1/4" Depth, S-29389". Placement of the latex modified concrete required including the 1 1/4" depth item and the variable depth item will be placed in one operation.

The limits of payment are from above the prepared and roughen deck surface elevation to the bottom the Latex Modified Concrete Wearing Surface, 1 1/4" Depth.

00 - c90706 Item 9000-7006 - Rapid Set Latex Modified Concrete Wearing Surface, Variable Depth

Addendum:

Associated Item(s): 9000-7006

Header:

Provision Body:

DESCRIPTION - This work is construction of rapid set latex modified concrete wearing surface of a variable depth where depths are in excess of 1 1/4". This includes locations were deteriorated deck concrete has been removed by hydrodemolition.

MATERIAL - Section 1042.2

Section 1042.2(a) Cement. Revise to read:

Type I, IP, II, Section 701.1 or other rapid setting cement approved by the Engineer.

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing rapid set latex modified concrete.

Remove unsound concrete and prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Where any portion of the rapid set latex modified concrete is to be placed adjacent to a saw cut or formed vertical construction joint, sandblast the vertical face prior to placement.

If phased construction is required, transverse joints are preferred in lieu of longitudinal joints. All anticipated joint locations must be submitted to the Department for approval prior to placement.

Section 1042.2(f) Revise by adding the following to the mix design physical properties and requirements table:

- 3 hour compressive strength (psi) (PTM Nos. 604 & 611) must meet or exceed 3000 psi.

CONSTRUCTION - Section 1042.3 and as follows:

Section 1042.3(b) Surface Preparation. Deleting the first paragraph and replace with the following:

Perform Concrete Bridge Deck Surface Preparation Hydrodemolition and Concrete Bridge Deck Repairs, Type 3, prior to final surface preparation for placing rapid set latex modified concrete.

Remove unsound concrete and prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Where any portion of the rapid set latex modified concrete is to be placed adjacent to a saw cut or formed vertical construction joint, sandblast the vertical face prior to placement.

If phased construction is required, transverse joints are preferred in lieu of longitudinal joints. All anticipated joint locations must be submitted to the Department for approval prior to placement.

Section 1042.3(a)1.1a Sandblasting or Water Blasting Equipment. Revise to read:

Prepare surface by hydrodemolition in accordance with specification entitled "Concrete Bridge Deck Surface Preparation, Hydrodemolition, S-29389".

Section 1042.3(d) Curing and Protection. Revise the second paragraph to read:

Promptly cover the surface with a single layer of clean, wet burlap as soon as the surface will support it without deformation. Wet cure only the surface for minimum 3 hours and until a compressive strength of 3000 psi is reached. Keep the curing material saturated during the wet cure period.

Delete Table A.

Section 1042.3(g) Application of Live Loads. Revise to read:

After latex placement, do not allow heavy equipment or vehicular traffic on the latex surface until the 3000 psi compressive strength is reached and the minimum 3 hour wet cure has elapsed.

MEASUREMENT AND PAYMENT - Cubic Yard

Scarification Modified, Concrete Bridge Deck Surface Preparation Hydrodemolition, and Concrete Bridge Deck Repairs, Type 3, will be paid separately.

Additional rapid set latex modified concrete for depths greater than 1 1/4" due to deterioration removed by hydrodemolition will be paid under this item. The rapid set latex modified concrete above the variable depth item will be paid for separately in accordance with specification entitled "Rapid Set Latex Modified Concrete Wearing Surface, 1 1/4" Depth, S-29389". Placement of the rapid set latex modified concrete required including the 1 1/4" depth item and the variable depth item will be placed in one operation.

The limits of payment are from above the prepared and roughen deck surface elevation to the bottom the Rapid Set Latex Modified Concrete Wearing Surface, 1 1/4" Depth.

00 - c90707 Item 9000-7007 - Concrete Bridge Deck Repair - Type 3

Addendum:

Associated Item(s): 9000-7007

Header:

Provision Body:

DESCRIPTION - This work is removing and patching designated areas of deteriorated concrete of the bridge deck. Areas where deteriorated concrete or patching extends to the full depth of the deck, including deck overhang areas; and areas where barrier, or deck ends need to be patched as part of the repair. Type 3 repairs over existing steel beams/girders extend to top of the beam/ girder.

MATERIAL - Section 1040.2.

CONSTRUCTION - Section 1040.3 and as follows:

Section 1040.3(a) Deck Sounding. Replace second sentence with the following:

As directed, provide assistance to the representative for the purpose of sounding the deck surface with a hammer after hydrodemolition to delineate areas for repair.

MEASUREMENT AND PAYMENT - Section 1040.4 - Square Foot

As directed by Project Engineer.

00 - c90708 Item 9000-7008 - Saw and Seal Latex Modified Concrete Wearing Surface

Addendum: 1

Associated Item(s): 9000-7008

Header:

Provision Body:

DESCRIPTION - This work is the sawcutting of new latex modified concrete wearing surface directly above **existing transverse** construction joints in the underlying concrete bridge deck as directed, and sealing the reservoir.

MATERIAL -

a. Sealing Material - Section 705.4(a)

CONSTRUCTION -

a. General.

Locate and reference the location of each existing transverse joint before placing any latex modified concrete wearing surface. Make all sawcuts directly above the **existing transverse** joints.

Do not sawcut until the latex modified concrete wearing surface has properly cured and set. **Within rapid set latex limits, p**erform sawcutting before area is opened up to traffic. **Within the standard cure latex limits, perform sawcutting within 72 hours after placement.**

Make sawcuts only in the lane in which the existing joint is located. Extend the sawcuts through limits of the existing joint, including the shoulders.

b. Sawing.

Sawcut the latex modified concrete wearing **surface to** a depth of 1" and a width of **1/4"** directly above the existing or constructed transverse joints.

If wet sawing, immediately flush the **sawed joint** with water.

c. Sealing. Silicone Joint Sealing Material. Section 705.4(a) and as follows:

Do not place sealing material unless the **sawed joint** faces are thoroughly clean and dry. Do not place on the same day as wet sawing. Clean the reservoir by using compressed air immediately before placing sealing material. Use compressed air free of oil, moisture, or any other substance that would prevent bonding of sealing material to the **sawed joint** faces.

Do not place sealing material if the air temperature is less than 40°F, or above 90°F, unless otherwise allowed by the representative.

Fill the **sawed joint** with sealing material to a level 1/8" to 1/4" below the latex modified concrete wearing surface. Do not allow sealing material to spread over the latex modified concrete wearing surface.

MEASUREMENT AND PAYMENT - Linear Foot

00 - c90709 Item 9000-7009 - Repair Types 3A, 3B, 4A, 4B, and 4C, Drill Floorbeam

Addendum: 2

Associated Item(s): 9000-7009

Header:

Provision Body:

DESCRIPTION - This work is locating, power tool cleaning, drilling, grinding, sawcutting, testing crack arrest hole, installing new high-strength bolt, and spot painting repair area.

MATERIAL -

a. High-strength Bolts, Nuts, and Washers - Section 1105.02(d), ASTM A325 bolts
b. Caulking Compound - Section 705.8(b)
c. Aluminum-Filled Mastic Coating System with Epoxy Penetrating Sealer Substitute for Aluminum-Filled Epoxy Mastic Primer - Section 1071.2(a)

CONSTRUCTION -

a. General. Perform work in accordance with the indicated procedure.

b. Access. Provide access and work platforms to perform retrofit operations, testing, and to permit the inspection of the work. Provide access from below the bridge deck to perform all work. This access may be a rigging system consisting of steel cables and platforms or crane system. Take every precaution not to damage the structure and its components. Repair any damages to the structure and paint system at no additional cost to the Department.

c. Non-destructive Testing. Use magnetic particle testing in accordance with Section 1105.03(m) and as follows to locate crack tips prior to drilling, and verify crack removal after drilling:

1. Have non-destructive testing performed by independent personnel certified as Level II or Level III in accordance with ASNT Recommended Practice, SNT-TC-1A. In addition, provide Level III personnel that possess a currently valid ASNT Level III certificate for the applicable methods or an equivalent program as determined by the Department.
2. Require NDT Level II technicians engaged in non-destructive testing to work under the supervision of an NDT Level III as described above.
3. The Department has the authority to verify the qualifications of all NDT testing personnel to Level II requirements by retest or by other suitable means.
4. Report the results of all non-destructive tests to the Engineer within 24 hours of testing. Provide a written report indicating the location where tests were performed, date of testing, and testing results.

d. Retrofit with Crack Arrest Hole and High-strength Bolt

1. Locate and drill crack arrest hole accurately as indicated with respect to crack tip(s).
2. Grind inside surface and edges of hole smooth. Perform final grinding to remove all remaining imperfections from the coring and grinding operations with a stone wheel and finish with a sandpaper type "flapper" wheel, not rougher than 120 grit, to achieve a smooth surface.
3. Accurately sawcut web of girder from edge of girder web through fatigue crack or flaw to crack arrest hole as indicated.
4. After drilling and final grinding and sanding hole, test the inside surface of the bore hole to ensure that the crack tip(s) has been eliminated and there is no evidence of cracking in the hole. Report to the Engineer immediately if a crack is detected in the bore or beyond edge of crack arrest hole.
5. After work area has been prepared for paint and the primer paint has been fully dried, install new high-strength bolt as indicated and in accordance with Section 1050.3(c).
6. Caulk sawcut with caulking after primer painting repair area and after primer has fully dried.

e. Cleaning and Painting. Cleaning and painting of retrofit area is incidental to this item and will be performed in accordance with Items 9073-2001, 9075-2001, and 9077-2001 and Section 1071 except as follows:

Section 1071.1 DESCRIPTION - Revise to read:

This work is the spot painting of new and existing steel at various locations where fatigue retrofit steel repairs are performed. The specific spot areas that are to be power tool cleaned and painted are detailed in Section 1071.3(b) below and on project plans and drawings.

Section 1071.2(a) Coating System. Revise to read:

Approved aluminum-filled mastic coating system products selected from Section 1071.2(a), List 2 in Bulletin 15 with the exception that an epoxy penetrating sealer product as recommended by the coating manufacturer shall be substituted for the aluminum-filled epoxy mastic primer coat. Following the application of the epoxy penetrating sealer, the approved intermediate aluminum-filled epoxy mastic coat and urethane finish coat shall be applied.

Submit a letter from the coating manufacturer indicating that the epoxy penetrating sealer product is compatible with the coating system and suitable for the intended use.

Obtain all of the coating materials from one manufacturer. Do not mix components from different systems of the same manufacturer or other manufacturers.

The finish coat color shall match the existing finish coat color of the bridge. Submit paint color samples to the Engineer for approval prior to ordering any finish coat material.

Section 1071.3(a) General. Revise by adding the following:

Coordinate painting operations to comply with the requirements of Section 901.

Section 1071.3(b) Surfaces to be Painted. Revise to read:

Paint all previously painted surfaces and all surfaces of new metal located within the specific zone and specific spot repair areas as detailed below.

Areas of Spot Painting Repairs Include:

All of the affected steel surface area, including approximately 6" into the intact paint around the periphery, damaged by the steel fatigue retrofit work.

Section 1071.3(c) Surface Preparation. Revise to read:

Clean test section areas using the same equipment, materials, and procedures that would be used for the production cleaning. Provide safe access for close visual inspection and testing. Do not proceed with the production cleaning operation until the Inspector agrees that the surface of each test section is acceptable.

Spot Power Tool Cleaning. Spot power tool clean steel repair areas as designated in Section 1071.3(b) and in the project plans and drawings. Use vacuum shrouded power tools to spot clean all areas in accordance with SSPC-SP 3, Power Tool Cleaning. Cleaning shall remove all loose rust, loose paint, loose mill scale other foreign matter. Existing paint that remains on the periphery of the spot cleaned area is considered to be adequately adhered if it cannot be removed by probing with the blade of a dull putty knife in accordance with the procedure detailed within the SP 3 standard.

Determine the power tool cleaning condition by the use of SSPC-VIS 3.

Section 1071.3(d)4.e. Primer. Revise to read:

Epoxy Penetrating Sealer Coat. Apply immediately after cleaning, inspection, and acceptance of the surface. Apply the sealer coat the same day the surface is cleaned. If the surface remains un-painted overnight, re-inspect and re-clean as necessary before applying the sealer coat.

Section 1071.3(d)6.a. Primer Coat. Revise to read:

Epoxy Penetrating Sealer Coat. Apply the epoxy penetrating sealer coat to a total dry film thickness of 25 *m* to 50 *m* (1 to 2 mils) over the designated spot and zone cleaned surfaces prior to applying the aluminum-filled epoxy mastic intermediate coat and urethane finish coat.

The Inspector will determine thickness with a Magnetic Dry Film Thickness Gage, and measure thickness according to SSPC-PA 2-73T.

MEASUREMENT AND PAYMENT - Each

Includes access, retrofit, non-destructive testing, cleaning and painting.

00 - c90710 Item 9000-7010 - Repair Types 4D and 4E, Drill Floorbeam Web Crack

Addendum: 2

Associated Item(s): 9000-7010

Header:

Provision Body:

DESCRIPTION - This work is locating, power tool cleaning, drilling, grinding, sawcutting, testing crack arrest hole, furnishing and installing bolted web strengthening plates, and spot painting repair area.

MATERIAL -

a. Fabricated Structural Steel - Section 1105, except primer paint with an organic zinc-rich primer with minimum Class A, slip/creep resistance rating.
b. High-strength Bolts, Nuts, and Washers - Section 1105.02(d), ASTM A325 bolts
c. Caulking Compound - Section 705.8(b)
d. Aluminum-Filled Mastic Coating System with Epoxy Penetrating Sealer Substitute for Aluminum-Filled Epoxy Mastic Primer - Section 1071.2(a)

CONSTRUCTION -

a. General. Perform work in accordance with the indicated procedure.

b. Access. Provide access and work platforms to perform retrofit operations, testing, and to permit the inspection of the work. Provide access from below the bridge deck to perform all work. This access may be a rigging system consisting of steel cables and platforms or crane system. Take every precaution not to damage the structure and its components. Repair any damages to the structure and paint system at no additional cost to the Department.

c. Non-destructive Testing. Use magnetic particle testing in accordance with Section 1105.03(m) and as follows to locate crack tips prior to drilling, and verify crack removal after drilling:

1. Have non-destructive testing performed by independent personnel certified as Level II or Level III in accordance with ASNT Recommended Practice, SNT-TC-1A. In addition, provide Level III personnel that possess a currently valid ASNT Level III certificate for the applicable methods or an equivalent program as determined by the Department.
2. Require NDT Level II technicians engaged in non-destructive testing to work under the supervision of an NDT Level III as described above.
3. The Department has the authority to verify the qualifications of all NDT testing personnel to Level II requirements by retest or by other suitable means.
4. Report the results of all non-destructive tests to the Engineer within 24 hours of testing. Provide a written report indicating the location where tests were performed, date of testing, and testing results.

d. Retrofit with Crack Arrest Hole

1. Locate and drill crack arrest hole accurately as indicated with respect to crack tip(s). If required as indicated, remove the triangular portions formed if the two crack arrest holes intersect or as directed by the Engineer to form a crack arrest slot.
2. Grind inside surface and edges of hole or slot smooth. Perform final grinding to remove all remaining imperfections from the coring and grinding operations with a stone wheel and finish with a sandpaper type "flapper" wheel, not rougher than 120 grit, to achieve a smooth surface.
3. Accurately sawcut web of girder from edge of girder web through fatigue crack or flaw to crack arrest hole as indicated or required.
4. After drilling, sawing, and final grinding and sanding of hole or slot, test the inside surface of the bore hole or slot to ensure that the crack tip(s) has been eliminated and there is no evidence of cracking in the hole or slot. Report to the Engineer immediately if a crack is detected in the bore or beyond edge of crack arrest hole or slot.
5. After work area has been prepared for paint and the primer paint has been fully dried, caulk sawcut with caulking.

e. Web Strengthening. Furnish, fabricate, and install web strengthening plates as indicated and in accordance with applicable parts of Section 1050.3(c).

f. Cleaning and Painting.

1. Cleaning and painting of retrofit area is incidental to this item and will be performed in accordance with Items 9073-2001, 9075-2001, and 9077-2001, and Section 1071 except as follows:

Section 1071.1 DESCRIPTION - Revise to read:

This work is the spot painting of new and existing steel at various locations where fatigue retrofit steel repairs are performed. The specific spot areas that are to be power tool cleaned and painted are detailed in Section 1071.3(b) below and on project plans and drawings.

Section 1071.2(a) Coating System. Revise to read:

Approved aluminum-filled mastic coating system products selected from Section 1071.2(a), List 2 in Bulletin 15 with the exception that an epoxy penetrating sealer product as recommended by the coating manufacturer shall be substituted for the aluminum-filled epoxy mastic primer coat. Following the application of the epoxy penetrating sealer, the approved intermediate aluminum-filled epoxy mastic coat and urethane finish coat shall be applied.

Submit a letter from the coating manufacturer indicating that the epoxy penetrating sealer product is compatible with the coating system and suitable for the intended use.

Obtain all of the coating materials from one manufacturer. Do not mix components from different systems of the same manufacturer or other manufacturers.

The finish coat color shall match the existing finish coat color of the bridge. Submit paint color samples to the Engineer for approval prior to ordering any finish coat material.

Section 1071.3(a) General. Revise by adding the following:

Coordinate painting operations to comply with the requirements of Section 901.

Section 1071.3(b) Surfaces to be Painted. Revise to read:

Paint all previously painted surfaces and all surfaces of new metal located within the specific zone and specific spot repair areas as detailed below.

Areas of Spot Painting Repairs Include:

All of the affected steel surface area, including approximately 6" into the intact paint around the periphery, damaged by the steel fatigue retrofit work.

Section 1071.3(c) Surface Preparation. Revise to read:

Clean test section areas using the same equipment, materials, and procedures that would be used for the production cleaning. Provide safe access for close visual inspection and testing. Do not proceed with the production cleaning operation until the Inspector agrees that the surface of each test section is acceptable.

Spot Power Tool Cleaning. Spot power tool clean steel repair areas as designated in Section 1071.3(b) and in the project plans and drawings. Use vacuum shrouded power tools to spot clean all areas in accordance with SSPC-SP 3, Power Tool Cleaning. Cleaning shall remove all loose rust, loose paint, loose mill scale other foreign matter. Existing paint that remains on the periphery of the spot cleaned area is considered to be adequately adhered if it cannot be removed by probing with the blade of a dull putty knife in accordance with the procedure detailed within the SP 3 standard.

Determine the power tool cleaning condition by the use of SSPC-VIS 3.

Section 1071.3(d)4.e. Primer. Revise to read:

Epoxy Penetrating Sealer Coat. Apply immediately after cleaning, inspection, and acceptance of the surface. Apply the sealer coat the same day the surface is cleaned. If the surface remains un-painted overnight, re-inspect and re-clean as necessary before applying the sealer coat.

Section 1071.3(d)6.a. Primer Coat. Revise to read:

Epoxy Penetrating Sealer Coat. Apply the epoxy penetrating sealer coat to a total dry film thickness of 25 *m* to 50 *m* (1 to 2 mils) over the designated spot and zone cleaned surfaces prior to applying the aluminum-filled epoxy mastic intermediate coat and urethane finish coat.

The Inspector will determine thickness with a Magnetic Dry Film Thickness Gage, and measure thickness according to SSPC-PA 2-73T.

Determine the power tool cleaning condition by the use of SSPC-VIS 3.

MEASUREMENT AND PAYMENT - Each

Includes access, retrofit, web strengthening, non-destructive testing, cleaning and painting.

00 - c90711 Items 9071-2001 thru 9001 - Repair Type 33, Zone Painting Existing Structural Steel

Addendum:

Associated Item(s): 9071-2001, 9071-3001, 9071-4001, 9071-5001, 9071-8001, 9071-9001

Header:

Provision Body:

In accordance with Section 1070 except as follows:

Section 1070.1 DESCRIPTION - Replace with the following:

This work is cleaning and painting of portions of the structural steel as follows:

- Zone Painting - Zone cleaning and painting of new and existing steel members using a three-coat paint system that is comprised of an organic zinc-rich primer, an epoxy intermediate coat, and a urethane finish coat, including abrasive blasting/paint removal, soluble salt/chloride remediation, and the application of a three-coat paint system.
- Painting Primer Only - Surface preparation and primer coat painting using an approved organic zinc-rich primer on existing steel surfaces that will be in contact with new concrete and existing steel surfaces that will be in contact with new steel. This includes power tool cleaning/paint removal, soluble salt/chloride remediation, and application of an organic zinc rich primer only.

Section 1070.2(a) Coating System. Replace with the following:

Obtain material from a paint system from “NEPCOAT Qualified Products List B” for Organic Zinc Rich Primer, Epoxy or Urethane Intermediate, and Aliphatic Urethane Finish as listed below. (NEPCOAT is the Northeast Protective Coatings Committee.)

AMERON INTERNATIONAL

- Amercoat® 68HS Zinc Rich Epoxy Primer (See Note Below)
- Amercoat® 399 Fast Drying Epoxy
- Amercoat® 450H Gloss Aliphatic Polyurethane
- PPG INDUSTRIES
- Aquapon® 97-670 Zinc Rich Primer ABC
- Pitt-Guard® 97-946 All Weather DT Rust Epoxy
- Pitthane® 95-8800 HB Urethane Enamel

INTERNATIONAL PAINT INC

- Interzinc® 52 Epoxy Zinc Rich (See Note Below)
- Intergard 475HS Epoxy
- Interfine® 979 Polysiloxane

SHERWIN WILLIAMS COMPANY

- Zinc Clad® III HS Organic Zinc Rich Epoxy Primer
- Macropoxy® 646 Fast Cure Epoxy
- AcrolonTM 218 HS Acrylic Polyurethane

MAB PAINTS

- Ply-Tile Epoxy Organic Zinc Rich Primer (See Note Below)
- Ply-Mastic 650 HB Epoxy Coating
- Ply-Thane 890 HS Aliphatic Acrylic Urethane

NOTE: Not slip critical class; do not use on Class B slip critical surfaces.

Zone Painting - Obtain the three-coat paint system from one manufacturer. Do not mix components from different systems of the same manufacturer or other manufacturers. Use a three-coat paint system with an organic zinc rich primer that has a minimum Class A slip/creep resistance rating. Submit proof of a Class A slip/creep resistance test certification to the Engineer.

Painting Primer Only - Use the same primer as selected for the three-coat paint system for zone painting.

Match finish coat color with existing finish coat paint color. Use a color for the intermediate coat that contrasts with the primer and finish coats. Submit paint chips to the Engineer for approval prior to ordering any finish coat material.

Section 1070.3(a) General. Revise by adding the following:

1. Coordinate painting operations to comply with the requirements of Section 901.

2. Comply with items for Disposal of Bridge Waste, Containment, and Worker Health and Safety during all cleaning and painting operations. Provide containment in accordance with SSPC Class 1A for abrasive blast cleaning and Class 3P for vacuum-shrouded power tool cleaning (see Containment Requirements – Table 1 in the attachments).

3. The existing bridge structural members may contain lead paint and other toxic materials such as chromium, cadmium, and arsenic. Available testing results are indicated on the Plans.

4. Provide access and work platforms to perform cleaning and painting operations and inspection of the work. This access may be a rigging system consisting of steel cables and platforms or a crane system. Take every precaution not to damage the structure and its components. Repair any damages to the structure and paint system at no cost to the Department.

5. Obtaining an Allegheny County Health Department abrasive blasting permit and pay permit fee(s).

Section 1070.3(b) Surfaces to be Painted. Replace with the following:

1. Zone Painting - Paint all previously painted surfaces and all surfaces of new metal located within the specific zones as indicated. Paint all steel within the horizontal limits of the zone unless otherwise indicated. Overlap existing paint with intermediate and finish coats a minimum of 6 inches beyond the limits of zone painting.

2. Painting Primer Only –

2.a. Paint top flanges of girders, floorbeams, and diaphragms where concrete deck is removed for expansion dam replacement.

2.b. Paint portions of existing masonry plates that will be in contact with concrete where indicated for bearing replacement.

2.c. Paint existing steel surfaces that will be in contact with new steel, new bolts, new nuts, and new washers. This includes areas at bearing replacements (bottom flange of girder), jacking stiffener installations, and diaphragm replacements.

3. If new galvanized bolts are used, proceed as specified in Section 1070.3(d)4.c.

4. Do not paint aluminum and galvanized metal surfaces unless otherwise specified.

Section 1071.3(c) Surface Preparation. Replace with the following:

1. Zone Painting.

1.a. Blast-cleaning. Blast-clean all steel to a near-white condition, as defined in SSPC-SP 1085, within the limits of the zone painting areas. Determine the near-white blast condition by use of a Maryland Pictorial Standard, if shot blast is used, or SSPC-VIS 1-89, if grit is used. Blast clean to leave an anchor pattern, from 40 µm to 90 µm (1-1/2 mils to 3-1/2 mils) deep, in a dense, uniform pattern of depressions and ridges. Determine pattern depth by the Keane-Tator Surface Profile Comparator or Testex Replica Tape. Grind laminations raised by the blasting operation to a flush surface, and reblast the ground area to obtain the specified anchor pattern.

Before proceeding with the production blast-cleaning operation, prepare test sections on each structure of at least 1 m2 (9 square feet) in locations considered by the inspector to be representative of existing surface conditions and structural characteristics. Blast-clean test section areas using the same equipment, materials, and procedures that will be used for the production blast cleaning. Provide safe access for close visual inspection and testing. Do not proceed with the production blast cleaning operation until the inspector agrees that the surface of each test section has been prepared to conform with specified requirements.

Remove all mill scale from steel that is to be painted.

1.b. Acceptable Abrasives. Use expendable abrasives or recyclable metallic abrasives of steel grit or an operating mixture of steel shot/grit that produces a sharp, angular surface profile. If steel abrasives are used, use the necessary air-drying equipment to ensure that the abrasive does not rust. Do not use silica sand.

Recycle abrasive to create the least amount of waste practicable that does not affect the surface profile or cleanliness achieved. In no case can the abrasive be recycled less than 50 times prior to disposal. Submit a letter to the Engineer from the abrasive manufacturer indicating the number of recycles possible with the material.

Upon completion of the project, or upon recycling the abrasive up to the maximum number of times without affecting the surface profile or surface cleanliness, sample, test, and dispose of the abrasive material in accordance with Special Provision “Disposal of Bridge Waste.”

If the surface is pitted, slight residues of primer may remain in the bottom of pits. Slight residue of paint or rust in seams between plates and around bolt heads is acceptable and does not need to be completely removed.

1.c. Surface Roughening - Remove glaze from the existing coating and uniformly and densely roughen the entire surface 6" beyond the blast-cleaned area to ensure adhesion of the newly applied material. Use hand and power sanding.

1.d. Surface Cleaning - Clean dry-blasted surface and roughened paint surface with clean bristle, fiber, or hair brushes with compressed air or with vacuum. Remove traces of blast residue from the surface and from pockets and corners. Equip compressors with separators or traps to remove water and oil. If water is used in the cleaning procedure, ensure that surfaces, pockets, and corners are dry and clean before applying paint. Allow a minimum of 48 hours of ambient air drying; then remove rust bloom by dry blasting and clean to remove blast residue from surfaces, pockets, and corners. Do not use rust inhibitors.

1.e. Adhesion of Existing Coating - Verify that all loose and poorly adhered coatings have been removed and that the remaining coatings are sound and intact. Verify that the edges of the remaining coatings around the periphery of the prepared areas are tight and intact by probing with a putty knife in accordance with SSPC-SP3.

1.f. Remediation of Chloride or Ferrous Salts.

Remediate residual chloride or ferrous salts in previously rusted areas to a level of no greater than 10 micrograms per square centimeter chloride and 20 micrograms per square centimeter ferrous salt as determined by the chloride test kit.

Methods of remediation that may be suitable, depending upon site- specific conditions, include steam cleaning, water washing or scrubbing, wet abrasive blast-cleaning, or the incorporation of a fine abrasive into abrasive mixture. Identify the method(s) of remediation that will be used, including contractor-proposed alternatives.

2. Primer Only Painting.

2.a. Solvent Cleaning. Section 1060.3(b)1

2.b. Other Surface Cleaning. Section 1060.3(b)2

2.c. Vacuum-Shrouded Power Tool Cleaning. Power tool clean all steel scheduled for organic zinc rich primer application to bare metal in accordance with SSPC-SP 15, Commercial Grade Power Tool Cleaning, using vacuum shrouded power tools such as rotary impact tools, needle guns, or other profile producing tools. The surface profile is to be as recommended by the manufacturer

and in no case less than 1 mil. Determine the SP 15, Commercial Grade Power Tool Cleaning condition by the use of a SSPC-VIS 3.

2.d. Remediation of Chloride or Ferrous Salts. Remediate residual chloride or ferrous salts in previously rusted areas to a level of no greater than 7 micrograms per square centimeter chloride and 20 micrograms per square centimeter ferrous salts as determined by the chloride test kit.

Methods of remediation that may be suitable depending upon site-specific conditions include steam cleaning, water washing, or scrubbing. Identify the methods of remediation that will be used, including Contractor-proposed alternatives.

Section 1070.3(c)8 Cleanliness Before Painting. Revise by adding the following:

Equip compressors with separators or traps to remove water or oil. If water is used in the cleaning procedure, assure that surface pockets and corners are dry and clean before applying paint. Allow surfaces to thoroughly dry, then remove rust bloom by dry blast cleaning, and clean to remove blast residue from the surface, pockets, and corners. Do not use rust inhibitors.

Section 1070.3(d)9 Access for Representative Inspection. Revise by adding the following:

a. Bridge Paint Inspection Kit.

1. Furnish and maintain a bridge paint inspection kit consisting of the following new items for use by the Department during cleaning and painting operations. Ensure all equipment meets SSPC Specifications. Provide the following new items with the kit:

- Binoculars
- Magnetic Dry Film Gauge
- Shims
- Wet Film Gauge
- Sling Psychrometer
- Electronic Surface Thermometer
- SSPC Standards Specified herein
- Anchor Pattern/Profile Pull-off Tape (4 rolls)
- Hand-held Spring Micrometer
- Inspection Mirrors
- Psychrometric Tables
- Tooke Gauge
- Paint Adhesion Tester Kit with Handbook
- Padded Tool Box with a Lock and Keys Capable of Safely Carrying all the above Equipment.
- SSPC-VIS3: Visual Standard for Power and Hand Tool Cleaned Steel

2. Obtain the above material from one of the following or an approved equal.

KTA-Tator, Inc.
115 Technology Drive
Pittsburgh, PA 15275

Pacific Scientific
2431 Linden Lane
Silver Springs, MD 20910

ELCOMETER, Inc.
1893 Rochester Industrial Drive
Rochester Hills, MI 48309

Paul N. Gardner Company, Inc.
218-D Commercial Blvd., Suite 205
Lauderdale By-the-Sea, FL 33308-4491

3.Present the kit to the Engineer prior to beginning work. The kit becomes the permanent property of the Department.

4. Replace or repair any inspection instrument that becomes damaged or ceases to function properly within five calendar days of notification from the Engineer at no additional cost to the Department. Replace any consumables within five calendar days of notification from the Engineer at no additional cost to the Department.

b. Chloride Test Kit

1. Furnish and maintain a chloride test kit consisting of the following new items for use by the Department during cleaning and painting operations. Provide the following new items with the kit:

- Graduated Cylinder
- Beakers
- Syringes
- Chloride Ion Titrator Indicators
- Ferrous Ion Indicators
- Water Demineralizer
- pH Paper (Range 4-9)
- Extraction Cells (as required/50 minimum)
- Extraction Liquid
- Titration Set
- Carrying Case

2. Present the kit to the Engineer prior to beginning work. The kit becomes the permanent property of the Department.

3. Replace or repair any equipment that becomes damaged or ceases to function properly within five calendar days of notification from the Engineer at no additional cost to the Department. Replace any consumables within five calendar days of notification from the Engineer at no additional cost to the Department.

Section 1070.4 MEASUREMENT AND PAYMENT. - Lump Sum

Revise by replacing with the following:

The price also includes Vacuum-Shrouded Power Tool Cleaning/paint removal, soluble salt/chloride remediation and application of primer only to designated surfaces.

Measurement and payment for the disposal of waste generated under this item will be paid for in accordance with the Special Provision “Disposal of Bridge Waste.”

I10731B - c90731 ITEMS 9073-2001 THRU 9001 - DISPOSAL OF BRIDGE WASTE

Addendum:

Associated Item(s): 9073-2001, 9073-3001, 9073-4001, 9073-5001, 9073-8001, 9073-9001

Header:

Provision Body:

Section 9073.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for ensuring that all project waste is properly collected, handled, stored, classified, transported, and disposed of in accordance with applicable EPA and Pennsylvania DEP regulations. The Environmental Compliance Plan required under this Item is for the protection of the workers, the public, and the environment from exposure to harmful levels of dust, lead, and other toxic metals that may be present in the paint being removed or repaired.

2. Implement and maintain programs and procedures which comply with the requirements of this Item and all applicable Federal, State, County, and City regulations.

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

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

(b) Definitions

1. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act; commonly called Superfund. Federal laws addressing the clean up of hazardous waste sites. Amended in 1986 by Superfund Amendments and Re-Authorization Act (SARA). EPA implementing regulations are contained in 40 CFR 300-373.

2. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.

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

4. DEP - Pennsylvania Department of Environmental Protection

5. Department - Pennsylvania Department of Transportation

6. Disposal - The discharge, deposit, dumping, spilling, leaking or placing of any solid liquid waste or hazardous waste into or on any air, land or water, so that the solid liquid waste or hazardous waste, or any constituent thereof, may enter the environment or be emitted into the air, or discharged into any waters, including groundwaters.

7. Disposal Facility - A licensed facility where hazardous, residual, or non-hazardous waste is intentionally placed, and in which the waste will remain after closure.

8. Emission - A release of material to the air, water, or ground.

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

10. EPA Hazardous Waste Number - The Federal number assigned to each hazardous waste. The number assigned to lead waste is D008.

11. Flood Plain - A flat, low-lying portion of a stream valley subject to periodic (50 to 100 years) inundation during a flood.

12. Generator - Any facility owner, operator or person whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. The Department is the Generator for the work under this Item, and will obtain the EPA provisional ID Number.

13. Hazardous Waste (lead paint debris) - Waste that is classified as hazardous due to its concentrations of regulated hazardous substances. Wastes may be classified as hazardous based on the characteristics of toxicity, ignitability, corrosivity, and reactivity. Paint debris is typically classified as hazardous waste based on the characteristic of toxicity. This is determined by testing representative samples of the waste using the Toxicity Characteristic Leaching Procedure (TCLP). If the leachate contains any of the 8 metals or other substances in concentrations at or above limits established in 40 CFR 261, Identification and Listing of Hazardous Wastes, it is classified as hazardous (see Residual Waste).

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

15. Ignitability - A characteristic of waste that caused it to be classified as hazardous. Waste is determined to be ignitable if it is found to be capable of being set afire, or of bursting into flame spontaneously or by interaction with another substance or material, when tested in accordance with 40 CFR 261. Spent solvents and liquid paint waste typically fall into this category.

16. Leachate - The amount of a specific substance (e.g. lead) that is carried off or dissolved out of a material. The amount of leachable lead that classifies paint debris as being hazardous is 5 mg/L (ppm) when tested by TCLP.

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

18. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

19. mg/L - Milligrams per liter. Common units for reporting a concentration of a specific substance in units of mass per volume (e.g. amount of hazardous material contained in paint debris).

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

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

22. POTW - Publicly Owned Treatment Works

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

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

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

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

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

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

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

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

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

(c) Reference Standards and Regulations

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

2. Code of Federal Regulations (CFR)

- 29 CFR 1926, Occupational Safety and Health Regulations for Construction
- 40 CFR 261, Appendix II EPA, Toxicity Characteristic Leaching Procedure
- 40 CFR 262, Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263, Standards Applicable to Transporters of Hazardous Waste
- 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- o 40 CFR 265, Subpart C, Preparedness and Prevention

- 40 CFR 265, Subpart D, Contingency Plan and Emergency Procedures
- 40 CFR 265.16, Personnel Training
- 40 CFR 268, Land Disposal Restrictions
- 40 CFR 302, Designation, Reportable Quantities and Notification
- 40 CFR 355, Emergency Planning and Notification
- 49 CFR 171-179, Hazardous Materials Regulations

3. EPA Methods

- SW 846, Test Methods for Evaluating Solid Waste - Physical/Chemical Methods
- Method 3050, Acid Digestion of Sediment, Sludge, and Soils
- Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)

4. State, County, and City Regulations

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

5. Society for Protective Coating (SSPC)

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

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

- Waste Handling Plan: A written program that addresses the proper handling and disposal of all waste. Include the procedures that will be followed for the collection of representative samples of the waste; the procedures for the site handling, storage, and packaging of the waste; and contingency plans in the event of a spill.
- Transporter Information: The names, addresses, license or permit numbers, and qualifications of the proposed haulers of hazardous waste, non-hazardous waste, and waste water. Note that for work in Allegheny County, Article VIII has specific requirements for the permitting of solid waste transportation vehicles. Note the restrictions stipulated below for the use of Ohio transporters.
- Hazardous Waste Disposal Information: Advise legally permitted recycling or waste disposal facilities that bridge paint debris will be generated (e.g., abrasive/paint debris), and identify the toxic metals that the waste will likely contain. Based on that information, request a letter from one or more of the hazardous waste recycling or disposal facilities, stating that the facility can accept this type of waste, is authorized to accept the waste under the laws of the state of residence; has the required capability to treat and dispose of the materials; and will provide or assure the ultimate disposal method indicated

on the Uniform Hazardous Waste Manifest. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility. Note the restrictions stipulated below for the use of Ohio transporters.

- Restrictions on the Use of Ohio Hazardous Waste Transporters and Disposal Facilities: There are special restrictions on the use of Ohio hazardous waste transporters and disposal facilities. If the use of Ohio firms is proposed, have each proposed Ohio transporter and disposal facility complete the Certificate of Non-Affiliation Sheet (attached as Exhibit 1). Include the original sheet(s) with the submittals. Non-Hazardous and Other Waste Disposal Information: Submit the name and address of the permitted municipal waste landfill that will accept the non-hazardous and residual waste generated by the Contractor.

- Waste Water: Provide a letter from the proposed facility that will be accepting the waste water for disposal, indicating that the facility has the capability to handle and properly dispose of the water. Advise the facility of all of the toxic metals that may be present in the water. Provide the Department's Representative with the original letter signed by a legally authorized representative of the facility.

- Laboratory Qualifications: Provide the name, address, experience, and qualifications of the laboratory and/or firm that will be used for the waste sampling and analysis required under this Item.

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

SECTION 9073.2 MATERIAL

(a) Waste Containers

1. Hazardous and Residual Waste: Provide DOT-approved containers of the appropriate size and type for the hazardous waste generated on the project. Use containers that are resistant to rust and corrosion (painted, if constructed of steel), that have tight fitting lids or covers, and which are water resistant and leak proof.

2. Municipal/Construction Waste: Provide all containers for non-hazardous municipal/construction waste. Use containers that are free of loose debris when brought on-site.

3. Spent Solvents: Provide all containers for spent solvents. Do not mix spent solvents with spent abrasives, paint debris, water, or other waste.

(b) Container Maintenance

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

SECTION 9073.3 CONSTRUCTION

(a) General

1. The Department is the generator of the hazardous waste for permitting purposes, and will provide the EPA provisional identification number, but the Contractor is responsible for the collection, handling, storage, transportation and disposal of all wastes.

2. Recover all waste products generated during cleaning and painting work, including but not limited to rags, tape, disposable coveralls, filters, paint debris, and paint cans. Unless otherwise directed by the Department, contain the waste only within the legal right-of-way.

3. Select the location of the secured waste storage area together with the Department's Representative. Transport the waste to the secured storage area at the frequency agreed upon by the Department's Representative.

4. Conduct the work in strict accordance with Federal, state, and local regulations governing the collection, handling, transportation and disposal of waste. When collecting and storing the waste, comply with Section 9077 for the protection of the workers, and to prevent the dispersion of the debris or dust.

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

(c) Items Provided by the Contractor

1. Containerizing, testing (classifying), handling, and storage of all waste.

2. Contracting with licensed and/or permitted waste transporters for the transportation of all hazardous, residual, and non-hazardous waste, as well as waste water.

3. Contracting with licensed and/or permitted recyclers or disposers of all waste.

4. Locations for waste storage together with appropriate measures to assure that the area is secure (Note: storage locations must be approved by the Department).

5. Completed Waste Characterization Data Sheets for Department signature.

6. Completed hazardous waste manifests for Department signature.

7. Bill of Lading for non-hazardous waste.

(d) Waste Sampling, Testing, and Classification

1. Sampling

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

2. Testing

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

3. Classification

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

Arsenic - 5.0 mg/L
Barium - 100.0 mg/L
Cadmium - 1.0 mg/L
Chromium - 5.0 mg/L
Lead - 5.0 mg/L
Mercury - 0.2 mg/L
Selenium - 1.0 mg/L
Silver - 5.0 mg/L

Note that paint debris that is generated through the use of steel abrasives has been classified by the Department as hazardous for lead even though it passes the TCLP test. In Box 11 of the waste manifest, identify this waste as "paint chips-nonhazardous."

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

4. Laboratory Report

- Have the laboratory send the original test report directly to the Department's Representative with copies of the test results to the Contractor. Issue the reports no later than ten (10) calendar days after the representative samples are collected.
- Include the following minimum information in each report: Identity of the waste stream(s) analyzed, the number of samples collected and tested, dates of sampling and testing, laboratory test procedures utilized, the names and signatures of the individuals collecting the samples and conducting the laboratory tests, and an interpretation of the test results. Include copies of the chain-of-custody forms in the documentation.
- Prepare the Waste Characterization Data Sheet (WCDS) and provide to the Department's Representative for review and signature. Once approved, submit the original WCDS to the Department.

(e) Waste Handling, Packaging, and Storage

1. Comply with 40 CFR 262 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a for the on-site handling, packaging, and storage of all hazardous waste generated by the project.

2. Comply with Pennsylvania Title 25, Chapters 285 and 299 for the handling, packaging, and storage of residual and municipal construction non-hazardous waste. Comply with additional County and City regulations as applicable.

3. Do not place hazardous waste on the unprotected ground (e.g., cover the ground with impervious tarping). Locate in a secure area with signs around the perimeter, and shield adequately to prevent dispersion of the waste by wind or water. Contact the Department's Representative for approval of the storage location(s).

4. Collect and store the waste at the end of each working day in storage drums or containers such that no waste is left exposed overnight, at a minimum. Use DOT-approved containers for hazardous and residual waste storage.

5. Cover all containers immediately upon filling and confirm that all lids are attached except when filling. Verify that all labels remain intact.

6. Store non-hazardous waste separately from hazardous waste. Do not co-mix hazardous waste with non-hazardous waste. Do not mix different types of hazardous waste together unless specifically approved by the Department's Representative and the disposal facility.

7. Arrange containers in the storage area for easy accessibility. Stage the containers together in lots no greater than two rows of five containers each. Maintain a minimum lane clearance of 915 mm (36 inches) between each lot of ten containers.

8. Verify that all waste (hazardous, residual, and non-hazardous) is transported to the appropriate recycling or disposal facility within 90 days after waste is first placed into the container.

9. Improper waste storage is cause for immediate project shut down until appropriate corrective action is completed.

10. Train all personnel in the proper handling of the hazardous waste at the work site in accordance with 40 CFR 265.16. Include procedures in the Waste Handling Plan that will be followed in the event of a release or spill, required notifications, and methods to be used for cleanup. Maintain all training records on-site.

11. Do not fill any container or roll-off in excess of the capacity marked on the container. If delays during pick-up are caused by overfilled containers, remediate the situation at no additional cost to the Department.

12. Place the soil into separate containers and assume all costs for its disposal, if soil remediation is required as a result of Contractor activities.

(f) Labeling of Containers

1. Label all containers of project waste and debris immediately to identify the contents. Label containers of spent abrasive as "BRIDGE BLAST ABRASIVE WASTE, Contains Lead". Include the Contract Number and the Bridge Identification Number or SR and SEC Number. Provide similar labels on containers of other project waste and debris.

2. Apply hazardous waste labels after the TCLP test results are received, if the waste tests hazardous. Label each container or rolloff of hazardous waste in accordance with 40 CFR 262, 49 CFR 171-179, and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a. Include the following minimum information:

- Hazardous Waste. Federal law prohibits improper disposal. If found, contact the nearest police, or public safety authority, or the U.S. Environmental Protection Agency.
- Proper DOT Shipping Name
- Manifest Document Number
- Generator Name, Address, and EPA ID Number
- Date of Accumulation
- EPA Waste Number

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

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

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

(g) Waste Transportation and Disposal

1. Hazardous Waste

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

- Comply with all of the manifesting, certification, and reporting requirements for hazardous waste in accordance with 40 CFR 262, 40 CFR 268 and Pennsylvania Title 25, Chapters 260a-266a, 266b and 268a-270a, including certificates of final disposal for each shipment.
- Provide a certification for each manifested shipment that the waste was accepted by the recycling or disposal facility, and properly treated and disposed.

2. Residual and Non-Hazardous Municipal/Construction Waste

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

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

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

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

(i) Special Handling and Disposal Conditions for Waste Water

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

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

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

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

(j) Recordkeeping

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

SECTION 9073.4 MEASUREMENT AND PAYMENT-Lump Sum.

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

I10751B - c90751 ITEMS 9075-2001 THRU 9001 - CONTAINMENT

Addendum:

Associated Item(s): 9075-2001, 9075-3001, 9075-4001, 9075-5001, 9075-8001, 9075-9001

Header:

Provision Body:

Section 9075.1 DESCRIPTION -

(a) General

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

2. Design and use a containment system that is capable of controlling project emissions for the protection of the public and the environment in accordance with the criteria established in Section 9079, and controlling worker exposures in accordance with the requirements of Section 9077.

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

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

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

(b) Definitions

1. Containment System - Complete enclosure built around hazardous (toxic metal) paint removal areas designed to contain debris and prevent emissions to the environment.

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

3. DEP - Pennsylvania Department of Environmental Protection

4. Department - Pennsylvania Department of Transportation

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

6. Emission - A release of material to the air, water, or ground.

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

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

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

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

11. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

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

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

(c) Reference Standards and Regulations

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

2. Code of Federal Regulations (CFR)

- 29 CFR 1926, Occupational Safety and Health Regulations for Construction
- 29 CFR 1926.451, Scaffolding

3. State, County, and City Regulations

- State - Title 25, Chapter 123, Pennsylvania Department of Environmental Resources-Standards for Contaminants
- Allegheny County - Article XXI, 2105.51, Rules and Regulations of Allegheny County Bureau of Environmental Quality, Abrasive Blasting
- Philadelphia County - Regulation 2, Section 8, Philadelphia County Air Monitoring Regulation - Air Contaminated Fugitive Dust

4. Society for Protective Coating (SSPC)

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

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

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

(e) Department Review: Do not construe Department acceptance of Contractor submittals to imply approval of any particular method or sequence for conducting the work, or for addressing health and safety. Acceptance of the programs does not relieve the

Contractor from the responsibility to conduct the work in strict accordance with the requirements of this Item, or to adequately protect the health and safety of all workers involved in the project, the public, and the environment. The Contractor remains solely responsible for the adequacy and completeness of the programs and work practices, and adherence to them.

SECTION 9075.2 MATERIAL

(a) Supply all materials needed to contain project debris in accordance with the provisions of this Item. This includes ground covers, rigging, scaffolding, planking, and containment materials.

(b) Use materials that are free of loose dust and debris when brought onto each bridge site, and upon removal.

(c) Provide the Department's Representative with two portable light meters with a scale of 0.0 - 538 LUX (0.0 - 50.0 foot-candles).

SECTION 9075.3 CONSTRUCTION

(a) General

1. Use a containment system that maintains the work area free of emissions of dust and debris in accordance with all provisions of this Item.

2. Follow the containment requirements as specified in this Item and as stipulated in SSPC Guide 6 for the selected method of removal as summarized in Table 1 attached to this Section.

(b) Certification of Installation

1. Have a licensed Professional Engineer registered in the State of Pennsylvania certify that the containment system has been assembled as shown on the approved, signed and sealed drawings, after the containment system is installed.

2. Submit the certification to the Engineer before starting any work within the containment.

(c) Special Restrictions

1. Comply with the project-specific vertical clearance requirements established by the District.

2. Do not allow equipment and workers to be present or to operate over any lanes that are open to traffic, unless specifically approved by the Department.

(d) Enclosure System

1. Cover the floor or ground beneath the structure being prepared with air and dust impenetrable materials such as solid panels of plywood or flexible materials such as tarpaulins, if it serves as the base of the containment. Maintain the materials throughout the project to avoid loosing debris through rips, tears, or breaks in the coverings.

2. Verify that the platform and its components are designed and constructed to support at least 4 times its maximum intended load without failure with wire cables capable of supporting at least 6 times their intended load without failure, if a suspended or elevated platform is constructed to serve as the base of the containment. Strictly follow all applicable OSHA regulations regarding scaffolding. Cover the platform or scaffolding with air and dust impenetrable materials.

3. Remove debris from the containment materials and equipment prior to relocation to another point along the structure or within the facility. Clean to the extent that debris or dust are not dislodged by winds or physical contact during handling and transportation.

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

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

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

when wet methods of preparation are used. Chemical resistant materials are those resistant to chemical and solvent stripping solutions.

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

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

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

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

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

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

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

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

2. Coast Guard Issues and Notification

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

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

1. Maintain all navigational lighting throughout the project. Provide the lighting plan to the Department for approval in advance.

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

(h) Protection of Drainage Systems

1. Protect storm sewers and drains from the entrance of debris from project activities. Keep all protective systems clean and operational throughout the entire project. Remove all visible debris from the protective devices or from areas where rain water could carry the debris into drains or storm sewers at the end of each work day at a minimum. Conduct more frequent cleaning as directed by the Department's Representative.

2. Identify the methods that will be used to route run-off from the existing deck drains through the containment enclosure. Do not close any bridge deck drains without the explicit approval of the Department's Representative.

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

1. Remove loose dust and debris to the extent that they will not be dislodged during movement prior to relocating containment materials and equipment from one portion of the project to the next. Use compressed air for cleaning only if it is accomplished inside a contained area that is equipped with an operating ventilation system capable of capturing the dust and debris.

2. Remove all Contractor equipment and materials upon completion of project activities.

- Thoroughly HEPA vacuum, wash, or otherwise decontaminate reusable items until all loose surface dust and debris have been removed. These items include, but are not limited to, paint removal equipment, containment materials, ground covers, and scaffolding.
- Treat materials as a separate waste stream, and at no additional cost to the Department, dispose of properly, if adequate cleaning is not possible. Collect water used for cleaning and dispose of in accordance with the requirements of Section 9073.

3. Comply with Section 9079 for the clean up and clearance of the project site.

SECTION 9075.4 MEASUREMENT AND PAYMENT

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

I10771B - c90771 ITEMS 9077-2001 thru 9001 - WORKER HEALTH AND SAFETY

Addendum:

Associated Item(s): 9077-2001, 9077-3001, 9077-4001, 9077-5001, 9077-8001, 9077-9001

Header:

Provision Body:

Section 9077.1 DESCRIPTION -

(a) General

1. This Item provides the material and execution requirements for implementing a Lead (Toxic Metal) Health and Safety Program for the protection of Contractor workers in strict compliance with all of the applicable OSHA regulations. The program is for the

protection of workers from over exposure to lead and other toxic metals that may be present in the paint being removed or repaired.

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

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

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

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

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

(b) Definitions

1. Action Level - Employee exposure, without regard to the use of respirators, to an airborne concentration in micrograms per cubic meter of air (ug/m3) calculated as an eight hour time-weighted average (TWA). The Action Level for lead is 30 ug/m3.

2. CIH - Certified Industrial Hygienist

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

4. Department - Pennsylvania Department of Transportation

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

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

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

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

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

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

11. ug/m3 - Micrograms per cubic meter. Common units for reporting airborne concentrations of lead.

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

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

14. POTW - Publicly Owned Treatment Works

15. Permissible Exposure Limit (PEL) - Employee exposure, without regard to the use of respirators, to an airborne concentration in micrograms per cubic meter of air (ug/m3), calculated as an eight hour time-weighted average (TWA). The PEL for lead is 50 ug/m3 as an 8 hour TWA. If an employee works for longer than 8 hours in a given day, the PEL is reduced using the following formula: Permissible Limit = (PEL x 8) divided by (hours worked in the day)

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

(c) Reference Standards

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

2. Code of Federal Regulations (CFR)

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

3. State, County, and City Regulations

4. NIOSH Methods

- Method 7048, Cadmium
- Method 7082, Lead
- Method 7300, Chromium
- Method 7900, Arsenic

5. Society for Protective Coating (SSPC)

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

6. American Industrial Hygiene Association

- Environmental Lead Proficiency Analytical Testing Program (ELPAT)

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

- Lead (Toxic Metal) Health and Safety Compliance Program: A written project-specific compliance program, prepared under the direction of, and signed by, a Certified Industrial Hygienist (CIH), for the protection of Contractor workers from lead in accordance with 29 CFR 1926.62 and other toxic metals in the paint. Include the name of the competent person who will be making routine inspections of project activities to ensure compliance with the program. Verify that any Subcontractors working for the Contractor are included in the program or in a separate program which meets the requirements of this Item. If Subcontractors are operating under a separate program, include the program with the submittals.
- Personnel Qualifications: Provide the name, experience, and qualifications of both the CIH who will be overseeing the development of the compliance program, and the competent person who will be assigned to the project.

- Outside Laundry: Provide the name, address, and qualifications of the launderer, if one will be used, for the cleaning of reusable clothing. Provide a letter from the laundry indicating that it is permitted to handle clothing contaminated with lead and/or the other toxic metals of concern.
- Laboratory Qualifications: Provide the name of the laboratory and/or firm that will be used for the worker and area exposure monitoring required under this Item. Verify that the analytical laboratory is American Industrial Hygiene Association (AIHA) accredited for metals analysis and/or has successfully participated (previous 12 months at a minimum) in the AIHA ELPAT program.
- Personal Protective Equipment for Department Use: Acknowledge that all protective clothing and equipment, laundering or disposal, fit testing as needed, and hygiene facilities will be provided for two Department Representatives at each site for each shift.
- Training for Department Representatives: Acknowledge that site training in accordance with the requirements of 29 CFR 1926.62 will be provided for two Department Representatives at each site per shift if there is the potential for lead exposures on the project. Include training as appropriate for other toxic metals that are present in the paint.

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

SECTION 9077.2 MATERIAL

(a) Monitoring and Testing Equipment

1. Supply the instrumentation needed for the monitoring of worker and area exposures including all equipment needed for its operation (e.g., generators, batteries, power cords, fuel, etc.).

2. Use equipment that is free of loose dust and debris when brought onto each bridge site, and upon removal.

(b) Personal Protective Equipment and Hygiene Facilities

1. Provide all personal protective clothing and equipment (PPE) needed for contractor workers, and for two Department Representatives each shift, including proper cleaning and disposal.

2. Repair or replace PPE as required to assure that it continues to provide its intended purpose.

3. Use PPE and hygiene facilities that are free of loose dust and debris when brought onto each bridge site, and upon removal. Properly handle and dispose of all hygiene water, cleaning materials, and PPE that cannot be cleaned for reuse. Comply with Section 9073 for disposal.

SECTION 9077.3 CONSTRUCTION

(a) General

1. Conduct the work in strict accordance with Federal, state, and local regulations governing worker protection. All worker protection requirements apply to Contractor and Subcontractor personnel working for the Contractor who are exposed to lead and other toxic metals.

2. Requirements identified below are based primarily on the OSHA Lead in Construction Standard, 29 CFR 1926.62, but protect employees from exposure to any of the other toxic metals which may be present in the paint in addition to lead.

(b) Compliance Program

1. Develop a written Compliance Program under the direction of a CIH to establish and implement practices and procedures for protecting the health of those employees exposed to lead and other toxic metals contained in the paint. This program is in addition to other OSHA hazard communication and safety and health requirements of the project. Revise and update the program at least every six months during the portion(s) of the project which involve the disturbance of toxic metals. Verify that the CIH signs off on all six month reviews and revisions.

2. Establish methods for complying with this Item and any OSHA standards published for the toxic metals present in the paint (e.g., 29 CFR 1926.62 for lead, 29 CFR 1926.1127 for cadmium, and 29 CFR 1926.1118 for inorganic arsenic). Include statements that the workers will not be exposed above the PEL established for the metal as identified in 29 CFR 1926.55, when toxic metals are present in the paint for which OSHA has not developed a comprehensive health and safety standard.

3. Identify the methods of compliance that will be used to reduce worker exposures to toxic metals. Rely on respiratory protection only after feasible engineering and work practice controls have been first implemented to reduce airborne exposures.

4. Confirm that daily inspections of the work area will be made by a competent person. Identify the project competent person by name in the compliance program, his or her qualifications, and indicate the frequency of inspections that will be undertaken.

5. Include in the plan, a detailed checklist for site inspections by the competent person.

(c) Exposure Monitoring/Initial Protection

1. Collect representative personal air samples at the beginning of the paint removal work (at project start-up) to determine employee exposures to lead and other toxic metals that might be present in the coating. Tasks resulting in the potential exposure to toxic metals include, but are not limited to, paint removal activities, cleanup, and debris handling operations. Collect full shift (at least 7 hours) air samples for each job classification in each exposure area, including Department Representatives. Provide the Department with the results of the analysis within the same 5 day notification period required for the employees.

2. Protect workers during the initial monitoring to the anticipated exposure levels as dictated by 29 CFR 1926.62 and as specified below when lead is present. A few activities in addition to those dictated by OSHA are included. Use the same level of protection when other toxic metals are found in the coating, unless OSHA has developed a comprehensive health and safety standard for that metal (e.g., cadmium and inorganic arsenic). In those cases, implement the protection requirements of the standard for that metal.

- Assume an exposure of at least 500 ug/m 3 : Structures containing lead-containing coatings or paint (e.g., dry wall), manual scraping, manual sanding, heat gun applications, power tool cleaning with dust collection systems, and spray painting with lead paint. Although not identified in 29 CFR 1926.62, include chemical stripping, water washing, and the operation of abrasive grit recovery equipment in this category.

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

- Assume an exposure of more than 2,500 ug/m 3 : Activities involving lead containing coatings or paint on structures disturbed by abrasive blasting, welding, cutting, and torch burning.

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

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

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

(d) Action Level

1. The Action Level for lead is 30 ug/m 3 as an eight (8) hour Time Weighted Average (TWA), the Action Level for cadmium is 2.5 ug/m 3 as an 8 hour TWA, and the Action Level for inorganic arsenic is 5 ug/m3 as an 8 hour TWA. For other metals that are found in the coating, and for which no Action Level exists, establish the Action Level at 1/2 of the PEL.

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

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

(e) Permissible Exposure Limit

1. The PEL for airborne lead exposure is 50 ug/m 3 as an 8 hour TWA. The PEL for cadmium is 5 ug/m 3 as an 8 hour TWA, and for inorganic arsenic is 10 ug/m3 as an 8 hour TWA. The PELs for other metals can be found in 29 CFR 1926.55.

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

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

(f) Respiratory Protection

1. Use respiratory protection if necessary to maintain employees' exposures to lead and other toxic metals below the PEL after feasible engineering controls and work practices have been implemented . Require the use of respirators for all employees, inspectors, observers, or other personnel who enter areas where airborne exposures exceed or are expected to exceed the PEL, or when entering regulated areas.

2. Provide respiratory protection for two Department Representatives at each site for each shift, including fit tests. The Department is responsible for verifying that the Representatives are medically fit to wear respirators.

3. Develop a written Respiratory Protection Program in compliance with 29 CFR 1926.103, including commitments to provide the necessary medical examinations. Include the provisions of 29 CFR 1926.62 when lead is present. Include 29 CFR 1926.1127 when cadmium is present. Include 29 CFR 1926.1118 when inorganic arsenic is present. Address the selection, use, maintenance and inspection of respirators, and qualifications for respirator users.

4. Treat used respirator cartridges as hazardous waste and dispose of in accordance with Section 9073.

(g) Protective Clothing and Equipment

1. Provide protective clothing and equipment and ensure they are worn by all employees whose exposures exceed the PEL. Provide all required protective clothing and equipment for use by two Department Representatives at each site for each shift.

2. Do not allow workers to wear street clothing beneath protective clothing in any areas where exposures to toxic metals exceed the PEL.

3. Clean or replace the protective clothing as required by the appropriate OSHA standard for the toxic metal that is present. In the case of lead, clean or replace the clothing weekly if the airborne exposure levels are less than 200 ug/m 3 as an 8 hour TWA, or

daily if the exposure levels are greater than or equal to 200 ug/m 3 . In the case of inorganic arsenic, the threshold for dail versus weekly cleaning is 100 ug/m3. Do not use disposable clothing for any longer than one day.

4. Do not remove or clean the clothing by any means which reintroduces the toxic metals into the ambient air such as brushing, shaking, or blowing. Use vacuums equipped with HEPA filters for cleaning.

5. Store the used clothing in sealed containers.

- Label the containers with the following: "CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS," if the clothing is to be laundered and it has been exposed to lead. Modify the above text accordingly if the clothing has been exposed to cadmium, chromium, or inorganic arsenic.

- Label the containers as lead-contaminated clothing if the clothing is disposable. Apply hazardous waste labels as appropriate after testing.

6. Provide containers for the collection and retention of the water after filtration if the clothing is washed on site. Provide ample filtration (e.g., through a multi-stage filtration system ending in 5 microns or better if needed) until the water can be disposed of as non-hazardous. Conduct all required tests of the water, and comply with Section 9073 for its disposal.

(h) Housekeeping

1. Clean accumulations of dust or debris containing lead or other toxic metals daily, at a minimum. Clean more frequently if visible accumulations are observed that could be carried outside of the regulated area by wind, workers shoes, rain water, or other means. Containerize the debris for proper disposal.

2. Conduct all cleaning with HEPA-filtered vacuums and deposit all dust and debris in sealed containers. Do not use compressed air for housekeeping purposes unless it is used in conjunction with a ventilation system capable of capturing the resulting airborne particulate.

(i) Personal Hygiene Facilities and Equipment

1. Provide clean lavatory and hand washing facilities in accordance with OSHA sanitation standard 29 CFR 1926.51. Locate the hand washing facilities in close proximity to the paint removal operation, in an area that is convenient for washing prior to eating or smoking. Provide showers when exposures exceed the PEL. Confirm that all employees whose exposures exceed the PEL shower prior to leaving the project site.

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

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

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

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

(j) Medical Surveillance and Medical Removal Protection

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

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

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

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

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

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

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

(k) Employee Training and Information

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

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

(l) Signs and Regulated Areas

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

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

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

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

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

DANGER
INORGANIC ARSENIC

CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING
RESPIRATOR REQUIRED

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

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

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

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

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

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

(m) Recordkeeping

1. Retain all records related to training, medical examinations, blood analysis, exposure monitoring, respirator fit testing, inspections by a competent person, and other related project documentation on file at the project site.

2. Provide the Department with letter reports signed by a CIH which summarize all examination results that are indicative of worker exposures to (or which demonstrate proper protection from) toxic metals. In the case of lead, summarize the blood lead and ZPP results, indicate any observed trends, and identify worker removal provisions that were invoked based on the results. Provide summary reports of the test results prior to worker exposures to project activities, periodic surveillance results, and results upon completion of site exposures. Provide a copy of each report with an original signature within 10 calendar days after issuing the test results to the employees.

3. Retain all records for the duration of employment plus 30 years.

SECTION 9077.4 MEASUREMENT AND PAYMENT

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

00 - c90922 Item 9000-9200 - Repair Type 22, Repair Concrete Block Slope Wall

Addendum:

Associated Item(s): 9000-9220

Header:

Provision Body:

DESCRIPTION - This work is removal and replacement of portions of concrete block slope wall including cut-off wall.

MATERIAL -

- Precast Concrete Blocks - Section 713.2. Furnish concrete blocks of the same dimensions and exposed surface texture as the existing block.
- Class A Cement Concrete - Section 704
- Reinforcement Bars - Section 709.1, epoxy coated.
- Course Aggregate - Section 703.2, a suitable type.
- Fine Aggregate, Type A - Section 703.1
- Geotextile - Section 735, Class 2, Type B.
- Water - Section 720.2
- Mortar - Section 705.7(b)

CONSTRUCTION -

a. General. The exact limits of repair will be delineated by the Engineer.

b. Removal.

1. Cut-off Wall. Sawcut the perimeter of the cut-off wall at the removal limits to a minimum depth of 3/4". Remove portions of existing cut-off wall. Preserve a suitable projection of existing reinforcement bars extending from the remaining cut-off wall to splice with new bars in the new portions of the cut-off wall. Straighten and clean existing reinforcement that will remain.

2. Concrete Block. Remove existing concrete block as indicated and as directed. Remove blocks around the perimeter to permit interlock of the new concrete block with the adjacent remaining blocks and to match the existing pattern. Do not damage adjacent blocks that are to remain.

c. Cut-off Wall. Construct concrete cutoff walls as indicated and in accordance with applicable parts of Section 1001.3. Match surfaces, chamfers, dimensions, and alignment of existing cut-off wall.

d. Geotextile. Grade the repair area to a uniform surface. Place aggregate as required to fill in depressions and provide a uniform surface. Place geotextile in accordance with Section 212.3(c).

e. Precast Concrete Block. Set concrete block in accordance with Section 673.3(a). Match the existing pattern and joint width.

MEASUREMENT AND PAYMENT - Square Yard

00 - c94691 Item 9469-0100 - Longitudinal Joint Sealing for New Pavement Surfaces

Addendum:

Associated Item(s): 9469-0100

Header:

Provision Body:

DESCRIPTION - This work is sealing of longitudinal joints in new pavement surfaces with hot asphalt cement.

MATERIAL -

(a) Asphalt Cement. PG 64-22 - Section 702

CONSTRUCTION -

(a) Heating Procedure - Use a double wall kettle to heat and maintain asphalt cement between 130°C (265°F) and 160°C (320°F). Do not place sealant when the air temperature is below 4° C (40° F) or above 32° C (90° F), unless otherwise permitted by the Engineer.

(b) Surface Preparation. Apply sealant only to joints in pavement surfaces that are clean, dry, and free of any loose material and debris. Clean with a power broom as required.

(c) Sealant Placement. Utilize a pressure applicator with a wand or nozzle capable of applying hot asphalt sealant 3" +/-1" wide and 1/16"+/- 1/32" thick at specified temperature range. Center the sealant within 1" of the joint. Immediately level high spots with squeegee or wand. Remove and dispose of excess sealant at no additional cost to the Department.

(d) In areas with bituminous rumbles, finish the longitudinal joints after bituminous rumbles are installed.

(e) Finish all longitudinal joints before the application of pavement markings other than inlaid. For inlaid pavement markings finish all joints after the application of pavement markings.

MEASUREMENT AND PAYMENT - Linear Foot

00 - c95163 Item 9516-3061 - Concrete Pavement Patching, Type A

Addendum:

Associated Item(s): 9516-3061

Header:

Provision Body:

In accordance with Section 516 and as indicated.

00 - c96190 Item 9619-0001 - Reset Permanent Impact Attenuating Device

Addendum:

Associated Item(s): 9619-0001

Header:

Provision Body:

DESCRIPTION - This work is the removal and resetting of an existing permanent impact attenuating device in accordance with Section 619 and as directed.

MATERIAL - Section 619.2 and use existing material and manufacturer approved replacement parts.

CONSTRUCTION - Section 619.3. Revise by deleting (a) General.

MEASUREMENT AND PAYMENT - Revise to read:

Each. Includes removal of existing permanent impact attenuating device, temporary storage, and resetting of device.

00 - c96191 Item 9619-0610 - Permanent Impact Attenuator Device

Addendum:

Associated Item(s): 9619-0610

Header:

Provision Body:

In accordance with Section 619 and as follows:

Furnish impact attenuating devices as indicated. Also includes the removal and disposal of existing impact attenuator.

00 - c96200 Item 9620-0014 - Thrie-Bream to PA Bridge Barrier Transition

Addendum:

Associated Item(s): 9620-0014

Header:

Provision Body:

In accordance with Section 620 and as indicated on the Structure Plans S-25548 and S-25549.

00 - c99011 D11 Item 9901-0001 - Off-Duty Uniformed Police Officer

Addendum:

Associated Item(s): 9901-0001

Header:

Provision Body:

DESCRIPTION - This work is the scheduling and furnishing of off-duty uniformed police officers, to control and direct traffic, at intersections indicated and at other locations as directed.

CONSTRUCTION - Schedule and furnish off-duty uniformed police officers as recommended by the representative. Make all arrangements for the furnishing of off-duty uniformed police with the law enforcement agency or agencies having jurisdiction over the project site and other designated route(s) if applicable. The contractor is responsible for entering into an agreement with the law enforcement agency or agencies and informing the law enforcement agency or agencies that the amount billed for off-duty uniformed police services is to include the cost of workers' compensation insurance coverage as well as the cost of any other benefits paid as a result of union agreements or employment contracts in effect at the time the service is provided.

Police officers are to wear reflective material when controlling and directing traffic.

The durations of the construction phases are determined by the contract documents.

Provide a Quality Control Plan with the following information during the pre-construction meeting:

- Details of the providers billing system (including time card and spreadsheet samples).
- Scope and details of the Contractor's certified review of invoice submission including a cover letter stating the invoice is correct and accurate.
- Sample copy of the Contractor's payment request.
- Name of the Contractor's employee responsible for accuracy and authentication of police invoicing.
- Plan, frequency, and log of spot checking the effectiveness and attendance of the police officers, which includes the maintenance of a reporting system with a check-in/check out schedule.
- Copy of the agreement(s).

The representative may add or delete locations required for police officers.

MEASUREMENT AND PAYMENT - Dollar

The proposal will include a predetermined amount of money for Off-Duty Uniformed Police. The contract item will have a unit of measure of Dollar, a unit price of $1.00, and a quantity equal to the predetermined amount.

Due to the contingent or unpredictable nature of the work being performed, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under the Off-Duty Uniformed Police item as follows:

Force Account Basis. Section 110.03 (d). The furnishing of off- duty uniformed police will be paid as Services by Others and reimbursement will be limited to the invoiced cost for the service plus the applicable 2% markup. The minimum information that must be presented on the invoice is as follows:

1. Construction contract number
2. Police officer's name, badge no., and rank
3. Invoice number (Use the same number for any subsequent invoices covering the same billing period.)
4. Date police officer worked
5. Time police officer worked, including AM and PM
6. Location where police officer worked
7. Total hours worked
8. Hourly rate of each police officer invoiced

Forward the invoice and a copy of the updated log book to the Department's inspection staff within seven calendar days.

Payments will be made in accordance with the time frame for payment of subcontractors as specified in Section 110.05. Do not make payments to private entities. Only make payments to the Local Authority.

00 - c99012 Item 9901-0002 - Signal Timing Revisions

Addendum:

Associated Item(s): 9901-0002

Header:

Provision Body:

DESCRIPTION - This work is the retiming/revision of the operating parameters for the existing signalized intersections at the locations specified and as directed.

CONSTRUCTION - Submit a completed and executed form 952 "Application for Permit to Install and Operate Traffic Signals" to the District Traffic Engineer so that a temporary Traffic Signal Permit may be issued. Do not begin operation of the temporary signal until the Temporary Traffic Signal Permit has been issued.

Locations:

1. SR 8015 Segments 250 and 500 (Ramps H and J) at Neville Road

2. SR 8015 Segments 10 and 20 (Ramps D and E), at Neville Road

3. Other locations as directed.

Do not make any timing modifications or revisions without the approval and direction of the District Traffic Engineer or authorized representatives.

All timing adjustments are the responsibility of the contractor or subcontractor. Notify the Department and responsible municipality two days prior to implementing any timing changes.

All maintenance responsibilities of existing signals through the duration of the project will be provided by the contractor in which the signal is located.

Reset the timing modifications or revisions at the existing signalized intersections implemented to the original operating parameters at the end of construction.

MEASUREMENT AND PAYMENT - Hour. From the time arriving on project to the time leaving project. Includes all labor and equipment necessary to complete timing changes.

00 - c99013 Item 9901-0003 - Design Maintenance and Protection of Traffic Control Plan, SR 0065-A38

Addendum:	5
Associated Item(s):	9901-0003

Header:

Provision Body:

DESCRIPTION - This work is the design and plan preparation for required maintenance and protection of traffic for SR 0065, Section A38 which involves the reconstruction of most of the Glenfield Interchange (SR 8017) and most of the Glenfield Viaduct Interchange (SR 8092) as specified in corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, SR 0065-A38".

DESIGN -

A. General

Provide design and drawings in the units of measurement shown on the approved Plans.

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

Use a design firm that is a registered Business Partner with the Department. Provide the Design Engineer's P.E. Seal, valid signature in ink, the date signed, business name and address on the first sheet of all computations, including computations for partial submissions. Provide the appropriate seal and signature on plan sheets in accordance with the Design Manuals.

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

B. Designer Qualifications

Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.

C. Design Specifications

Design a Traffic Control Plan (TCP) in accordance with the most current edition of all Department Standards, Specifications, and Regulations. These include, but are not limited to the following:

- PA Code Title 67, Chapter 212, Official Traffic Control Devices
- PA Code Title 67, Chapter 213, Temporary Traffic Control Guidelines
- Design Manual, Part 2, Publication 13M
- Design Manual, Part 3, Publication 14M
- Traffic Engineering Manual, Publication 46

- Specifications, Publication 408/2007
- Traffic Signing Standards TC-8700 (Publication 111M)
- FHWA's Manual on Uniform Traffic Control Devices (MUTCD)
- Publication 236M, Handbook of Approved Signs
- Publication 35, Approved Construction Materials (Bulletin 15)
- Contract Special Provisions

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

D. Design Requirements

1. Maintenance of Traffic During Construction

a. Develop an Incident Management Plan (IMP). Provide traffic management details and coordination (police, EMS, local officials, fire departments, etc.) procedures for dealing with an incident. Submit the IMP and have it approved prior to starting work.

Cover or remove all signs not in use and all conflicting signs and all conflicting pavement markers.

Provide a list of 24-hour emergency phone numbers (i.e. emergency services and organizations, Contractor's representatives, Department representatives, County Maintenance Managers, etc.) and conceptual plan. Plan to include conceptual lane closures and/or conceptual detour relative to severity of the incident.

The Contractor is required to contact the District Traffic Management Center immediately for all lane closures and major incidents so that information may be provided to motorists and other stakeholders via district variable message signs, highway advisory radios, and the statewide road closure reporting and traveler information systems.

The Contractor is required to submit an Emergency Response Plan (ERP) at the pre-construction conference. The ERP should include: contact individuals for incidents that occur during non-working hours, alternate contact individuals, and maximum response times.

Interstate/Expressway permit is required for all work on SR 0079.

Following an incident, the contractor will conduct an After Action Review with the Department and emergency services and organizations to evaluate the plan. The Contractor will modify the plan as directed.

Provide electronic Speed Display Signs at the approaches to the work zones on SR 79 and SR 65. The exact locations of the speed display signs will be determined by the Representative.

Design any "Special Signs" for detours and local businesses.

If the maintenance and protection of traffic extends beyond one construction season, provide temporary pavement markings.

b. Develop a Traffic Control Plan for SR 0065 and its associated ramps in accordance with the Department Standards, Specifications and Regulations (as listed above), the "Construct Maintenance and Protection of Traffic Control Plan, SR 0065-A38" special provision and as follows:

Phase the construction and traffic control measures as follows:

Perform all of the required construction for SR 65, the Glenfield Interchange (SR 8017) and the Glenfield Viaduct Interchange (SR 8092) after the construction for the Neville Island Interchange (SR 8015) and the SR 79 mainline bridge over the Ohio River is complete to the point where detours are no longer required, unless specifically directed otherwise by the Department.

Design barrier and impact attenuators to meet current Department's criteria at time of advertisement for the required phase of construction.

Include an additional 500 SF of signs to be used at the discretion of the Department.

Utilize changable message signs and off-duty uniformed police officers as directed.

E. Submissions

1. Conceptual Submission

Submit schematic plans of phases and sequences that demonstrate the staging of construction and maintenance and protection of traffic on SR 0079 from the notice to proceed to project completion. Provide written narrative outlining the sequence of operations and traffic restrictions. Increase scale of the conceptual submission to show more plan coverage per sheet. Color code plans to differentiate active construction areas, previously constructed areas and areas open to traffic. Submit for Department approval within 30 working days after award of contract.

2. Preliminary Plan Submission

According to Design Manual, Part 3, Chapter 4. Submit plans at required scale indicating phases and sequences, barricades and construction area hatching and all signs and appropriate devices.

3. Final Plan and Computations Submission

According to Design Manual, Part 3, Chapter 4. Submit the plans at required scale indicating all phases and sequences, and all signs and devices. Provide tabulation of all items associated corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, SR 0065-A38" with breakdown of quantities for each phase.

4. Partial Submissions - Not Applicable.

F. Submittal Review, Approval, and Distribution

1. Submittal Review, Approval, and Distribution

According to Design Manual, Part 3, Chapter 4. This is a Federal Oversight Project. The Consultant review and approval process will be used by the District with consultation from Central Office and FHWA when deemed necessary by the District.

Submit all design deliverables in accordance with the accepted QC Plan. Include required documentation by Design Consultant with each submission. Any submission made without documentation of acceptance by the QC Design Manager will be rejected, without review by the Department.

2. Review Times (Review times are for complete submissions).

Submittal reviews will be performed within the following time periods:

a. Conceptual Submission: Ten working days for the first submission; ten working days for each subsequent submission.

b. Preliminary Submission: Ten working days for the first submission; ten working days for each subsequent submission.

c. Final Submission: Ten working days for the first submission; ten working days for each subsequent submission.

d. Partial Plans Submissions: Ten working days for the first submission; ten working days for each subsequent submission.

e. Utilities: Additional contract time will not be considered for additional utility relocation work associated with an alternate plan for maintenance and protection of traffic

f. Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 P.M. will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

• New Year's Day

• Dr. Martin Luther King, Jr. Day

• President's Day

• Memorial Day

• Independence Day

• Labor Day

• Columbus Day

• Veteran's Day

• Thanksgiving Day

• Day after Thanksgiving Day

• Christmas Day.

MEASUREMENT AND PAYMENT -

a. Design - Lump Sum. Payment for the design of the Traffic Control Plan will be made based on the following schedule:

• Preliminary Plan Approval - 45%

• Final Plan Approval - 50%

• Revisions During Construction 5%

b. Implemented Incident Management Plan - Force Account Work. Section 110.03(d).

Payment for partial submissions will be prorated based on the schedule percentage listed herein for the preliminary and final submission, and for the proportion of the number of phases being submitted as a portion of the total number of phases.

00 - c99014 Item 9901-0006 - Design Maintenance and Protection of Traffic Control Plan, S-29389

Addendum:	2
Associated Item(s):	9901-0006

Header:

Provision Body:

DESCRIPTION - This work is the design and plan preparation for required maintenance and protection of traffic for SR 0079, Section A40 (S-29389) which consists of the rehabilitation of the 27-span Steel Arch Bridge and approaches over the Ohio River as specified in corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389".

DESIGN -

A. General

Provide design and drawings in the units of measurement shown on the Approved Plans.

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

Use a Design Firm that is a Registered Business Partner with the Department. Provide the Design Professional Engineer's P.E. Seal, valid signature in ink, the date signed, business name and address on the first sheet of all computations, including computations for partial submissions. Provide the appropriate seal and signature on plan sheets in accordance with the Department's Design Manuals.

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

B. Designer Qualifications

Have the design completed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.

C. Design Specifications

Design a Traffic Control Plan (TCP) in accordance with the most current edition of all Department Standards, Specifications, and Regulations. These include, but are not limited to the following:

- PA Code Title 67, Chapter 212, Official Traffic Control Devices
- PA Code Title 67, Chapter 213, Temporary Traffic Control Guidelines
- Design Manual, Part 2, Publication 13M
- Design Manual, Part 3, Publication 14M
- Traffic Engineering Manual, Publication 46
- Specifications, Publication 408/2007
- Traffic Signing Standards TC-8700 (Publication 111M)
- FHWA's Manual on Uniform Traffic Control Devices (MUTCD)
- Publication 236M, Handbook of Approved Signs
- Publication 35, Approved Construction Materials (Bulletin 15)
- Contract Special Provisions

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

D. Design Requirements

1. Maintenance of Traffic During Construction

a. Develop an Incident Management Plan (IMP). Provide traffic management details and coordination (police, EMS, local officials, fire departments, etc.) procedures for dealing with an incident. Submit the IMP and have it approved prior to starting work.

Cover or remove all signs not in use and all conflicting signs and all conflicting pavement markers.

Provide a list of 24-hour emergency phone numbers (i.e. emergency services and organizations, Contractor's representatives, Department representatives, County Maintenance Managers, etc.) and conceptual plan. Plan to include conceptual lane closures and/or conceptual detour relative to severity of the incident.

The Contractor is required to contact the District Traffic Management Center immediately for all lane closures and major incidents so that information may be provided to motorists and other stakeholders via district variable message signs, highway advisory radios, and the statewide road closure reporting and traveler information systems.

The Contractor is required to submit an Emergency Response Plan (ERP) at the pre-construction conference. The ERP should include: contact individuals for incidents that occur during non-working hours, alternate contact individuals, and maximum response times.

Interstate/Expressway permit is required for all work on SR 0079.

Following an incident, the contractor will conduct an After Action Review with the Department and emergency services and organizations to evaluate the plan. The Contractor will modify the plan as directed.

b. Develop a Traffic Control Plan (TCP) for SR 0079 that accommodates the following:

- Rapid set latex modified concrete - Maintain a minimum of one 12' lane of traffic between Abutment 1 (Station 810+25) and Pier 17 (Station 834+91), and between Pier 25 (Station 851+26.50) and Abutment 2 (Station 855+73.50) in the northbound direction and between Abutment 1 (Station 810+25) and Pier 19 (Station 837+42) in the southbound direction, provide channelizing devices to delineate the work zone, and meet the requirements of PATA Figure 33 for an expressway at the posted speed limit under off peak restrictions (nights and weekends), refer to corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389" for specific restrictions. Incorporate PATA Figures 21 and 22 into the Traffic Control Plan for work near an exit or entrance ramp.

- Standard cure latex modified concrete - Maintain a minimum two 10'-6" lanes of traffic on the 10' shoulder side (outside) and maintain a minimum of two 11'-6" lanes of traffic on the 3' shoulder side (inside) between Pier 17 (Station 834+91) and Pier 25 (Station 851+26.50) in the northbound direction and between Pier 19 (Station 837+42) and Abutment 2 (Station 855 +73.50) in the southbound direction, provide channelizing devices to delineate the work zone, and meet the requirements of PATA Figure 33 for an expressway at the posted speed limit under long term restrictions, refer to corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389" for specific restrictions. Incorporate PATA Figures 21 and 22 into the Traffic Control Plan for work near an exit or entrance ramp.
- Strip seal dam installation - Maintain a minimum of one 12' lane in the northbound direction and the southbound direction, provide channelizing devices to delineate the work zone, and meet the requirements of PATA Figures 33 and 35 for an expressway at the posted speed limit under off peak weekend restrictions refer to corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389" for specific restrictions. Incorporate PATA Figures 21 and 22 into the Traffic Control Plan for work near an exit or entrance ramp.
- All other work – Utilize Publication 213 figures as required and as permitted by the corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389".

Coordinate the required maintenance and protection of traffic for SR 0079, Section A40 (S-29389) which consists of the rehabilitation of the 27- span Steel Arch Bridge and approaches over the Ohio River with the required construction and implementation of the maintenance and protection of traffic associated with Ramp D (SR 8015), Ramp E (SR 8015), Ramp H (SR 8015), Ramp J (SR 8015), Ramp B1 (SR 8017), and Ramp B2 (SR 8017).

Submit a typical section design for the Maintenance and Protection of Traffic During Construction for the work on SR 0079 in the 3 lane section.

Utilize changeable message signs as directed.

Include additional 500 SF of signs to be used at the discretion of the Department.

Provide temporary pavement markings and removal of temporary pavement markings as required by maintenance and protection of traffic phasing.

c. Traffic restrictions will be one or two lane(s) in each direction, as indicated above under Design Requirements Section 1.b in accordance with the requirements of PATA Figure 33 for an expressway at the posted speed limit, unless prior written approval from the District Traffic Engineer or authorized representatives is provided.

E. Submissions

1. Conceptual Submission

Submit schematic plans of phases and sequences that demonstrate the staging of construction and maintenance and protection of traffic on SR 0079 from the notice to proceed to project completion. Provide written narrative outlining the sequence of operations and traffic restrictions. Increase scale of the conceptual submission to show more plan coverage per sheet. Color code plans to differentiate active construction areas, previously constructed areas and areas open to traffic. Submit for Department approval within 30 working days after award of contract.

2. Preliminary Plan Submission

According to Design Manual, Part 3, Chapter 4. Submit plans at required scale indicating phases and sequences, barricades and construction area hatching and all signs and appropriate devices.

3. Final Plan and Computations Submission

According to Design Manual, Part 3, Chapter 4. Submit the plans at required scale indicating all phases and sequences, and all signs and devices. Provide tabulation of all items associated corresponding specification entitled "Construct Maintenance and Protection of Traffic Control Plan, S-29389" with breakdown of quantities for each phase.

4. Partial Submissions - Not Applicable.

F. Submittal Review, Approval, and Distribution

1. Submittal Review, Approval, and Distribution

This is a Federal Oversight Project. The Consultant review and approval process will be used by the District with consultation from Central Office and FHWA when deemed necessary by the District.

Submit all design deliverables in accordance with the accepted QC Plan. Include required documentation by Design Consultant with each submission. Any submission made without documentation of acceptance by the QC Design Manager will be rejected, without review by the Department.

2. Review Times (Review times are for complete submissions).

Submittal reviews will be performed within the following time periods:

a. Conceptual Submission: Ten working days for the first submission; ten working days for each subsequent submission.

b. Preliminary Submission: Ten working days for the first submission; ten working days for each subsequent submission.

c. Final Submission: Ten working days for the first submission; ten working days for each subsequent submission.

d. Partial Plans Submissions: Ten working days for the first submission; ten working days for each subsequent submission.

e. Utilities: Additional contract time will not be considered for additional utility relocation work associated with an alternate plan for maintenance and protection of traffic

f. Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 12 P.M. will be logged in as the next working day following receipt of the submission. If a submission is incomplete or otherwise requires additional information or data to properly complete the review, the review time will begin as specified for the submission when all required information is received. Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non-conforming submissions. Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

- New Year's Day
- Dr. Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day.

MEASUREMENT AND PAYMENT -

a. Design - Lump Sum. Payment for the design of the Traffic Control Plan will be made based on the following schedule:

- Preliminary Plan Approval - 45%
- Final Plan Approval - 50%
- Revisions During Construction 5%

b. Implemented Incident Management Plan - Force Account Work. Section 110.03(d).

Payment for partial submissions will be prorated based on the schedule percentage listed herein for the preliminary and final submission, and for the proportion of the number of phases being submitted as a portion of the total number of phases.

00 - c99015 Item 9901-0020 - Full Matrix Changeable Message Sign

Addendum:

Associated Item(s): 9901-0020

Header:

Provision Body:

DESCRIPTION - This work is the furnishing, installation, and operation of a full matrix changeable message sign.

MATERIAL - Full matrix changeable message sign listed in Bulletin 15.

CONSTRUCTION - Furnish, install, and operate full matrix changeable message signs as directed by the Inspector-in-Charge or as indicated. For the duration of the project, provide a qualified and experienced technician familiar with the programming and operation of the changeable message signs to transport, program, operate and maintain the variable message signs as directed. The technician shall be on call 24 hours a day, 7 days a week and be on the project site within 3 hours of notification. The Department will inform the Contractor where the changeable message signs are to be erected, when they are to be put into operation, and when to remove them or change locations.

MEASUREMENT AND PAYMENT - Each

Includes all charges associated with the maintenance and operation of these variable message signs on the project including, but not limited to, the cost of all service air time for the cellular telephone capabilities.

00 - c99016 Item 9901-0033 - Construct Maintenance and Protection of Traffic Control Plan, SR 0065-A38

Addendum:	1
Associated Item(s):	9901-0033

Header:

Provision Body:

DESCRIPTION - This work is the construction and implementation of the maintenance and protection of traffic according to the Traffic Control Plan bid in the corresponding specification entitled "Design Maintenance and Protection of Traffic Control Plan, SR 0065-A38" and in accordance with the approved traffic drawings.

MATERIAL - As indicated and as specified for each item included in the Traffic Control Plan developed from corresponding specification entitled "Design Maintenance and Protection of Traffic Control Plan, SR 0065-A38".

CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408, Special Provisions, and any additional requirements specified herein.

Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

- New Year's Day
- Dr. Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day.

Do not commence construction until the Traffic Control Plans are approved and signed by the District Traffic Engineer. Construction may commence on components of the project provided that partial Traffic Control Plans are approved and signed by the District Traffic Engineer.

Construct barrier and impact attenuating devices as designed and indicated.

The Contractor is responsible for scheduling and furnishing flagmen for maintenance and protection of traffic on SR 0065, as necessary.

All flagmen are to be in accordance with PENNDOT Publications 212 and 213.

ADVANCE REQUIREMENTS

Provide two weeks advance notice to affected municipalities, respective Emergency Services, local school districts, the Allegheny County Port Authority (412-854-7328) and Chuck Rompala at (412-566-5321), the Pennsylvania State Police (412-787-2000), PENNDOT Allegheny (412-781-3260) County Maintenance Manager and the appropriate State Representative or Senator, prior to beginning any work or imposing any traffic restrictions. Additionally, provide notification to all affected businesses and property owners four days prior to the erection of the Advance Construction Advisory signs. (District Construction Unit will provide typical form at pre-job conference.) Keep them informed at all times of changes to traffic restrictions as they occur.

Notify property owners ten days in advance of driveway restrictions affecting their properties.

Notify railroad when working above or in their right-of-way in accordance with their policies.

Make a survey along with the Project Manager or his authorized representative by videotaping and voice recording onto a DVD format the location of all existing pavement markings, existing signs, road conditions and all potential driveway and/or private problems within the project limits prior to beginning construction. Use this information in placing all pavement markings and signs. Provide an additional copy of the videotape to the Project Manager or his authorized representative before construction begins. Properly label the DVD with the Contract #, SPN, SR #(s), date video was taken and by whom. Contact the District Traffic Engineer before making any changes to the existing pavement marking patterns, or signs or other devices.

Section 901.1 DESCRIPTION -

> Revise the first sentence to read: This work is the furnishing, installing, maintaining and protection of traffic adjacent to and within the Work Zone including the Active Work Zone, and relocating of traffic control devices.

Section 901.3(h) Existing Department Signs. Revise first sentence of first paragraph to read:

> Remove all existing signs as required to accommodate construction operations.
>
> Reinstall these signs at the completion of the project and/or as directed by the Project Manager.

Ten days prior to construction, erect the Advance Construction Advisory signs on Type III barricades as depicted below.

65 INSIDE STATE ROUTE SHIELD ROAD WORK	Use 150 mm (6") Series C black letters on a reflective orange background with a 12 mm (1/2") black border and 150 mm (6") corner radius.
Begins (Date)	
DELAYS LIKELY	Cover the above "Begins (Date)" with "DELAYS LIKELY" when construction begins.

Erect signs at each limit of work and at the following locations:

Remove the signs when construction begins.

One week prior to a road closure, erect the Advance Advisory signs on Type III barricades as depicted below. Place signs in advance of the proposed road closure in both directions.

(Fill in Name) CLOSED NEXT WEEK (DATE)	Use 150 mm (6") Series C black letters on a reflective orange background with a 12 mm (1/2") black border and 150 mm (6") corner radius.
TOMORROW	Cover the above "NEXT WEEK" with the "TOMORROW" sign the day before closing the road.
FOLLOW DETOUR	Cover the above "TOMORROW" with the "FOLLOW DETOUR" sign the day of closing the road.

For above signs use Publication 36 W23-1 signs modified to fit condition - such as "RAMP TO I-79 SOUTH".

After the pre- job conference and before the closure, meet with the Project Manager and the District Traffic Engineer's representative to locate detour signing and identify conflicting signs which must be covered or removed.

Notify the District Traffic Engineer prior to implementing phase change.

TRAFFIC CONTROL/DEVICES REQUIREMENTS

Section 901.2 MATERIAL - Revise by adding the following sentence:

For **all** barricades, provide barricade rails constructed of non-metallic materials.

Section 901.3(i) Barricades. Revise sentence as follows:

When specified or indicated, furnish and install non-metallic barricades in accordance with MUTCD Section 6F.63, Publication 213 and/or the approved TCP.

The signs and traffic control devices listed or indicated on the Traffic Control Plan or Publication 213 represent the minimum requirements for this item and as such, are for information only. The number and types of traffic control signs and devices for this project will be predicated on the number and location of work sites, the extent of repairs and the planned sequence of operations.

For this project, provide fluorescent orange sheeting for all construction warning signs and channelizing devices.

All vinyl roll up material used to overlay overhead and all type (A, B, C, D, E, F) signs shall be reflectorized including the letters and shields.

Provide new traffic control signs and devices. Do not use reflective sheeting that is scratched, scarred, dirty or shows evidence of loss of reflectivity. Do not use signs or devices that are cracked, bent, dented or broken.

Replace reflective sheeting should it become damaged where reflectivity becomes impaired. Immediately repair or replace damaged, defaced or dirty signs, devices or barrier.

Mount all construction warning signs (W series) for long-term operations on Type III barricades. Include a Type B light on each W series sign. If it is not possible to mount construction warning or other signing as indicated or specified, the District Traffic Engineer will determine the method of mounting the signs.

Provide additional channelizing devices and barricades at intersections, major driveways and ramps to prevent vehicles from turning onto any lane closed for construction. Space channelizing devices at 1.5 m (5-foot) intervals or as directed by the District Traffic Engineer.

Use channelizing devices with Type C steady burn lights for all nighttime lane restrictions. Mount a light on each device used in transition areas and on every third device used in tangent sections.

Space channelizing devices in the tangent sections at one times the posted (regulatory) speed limit unless otherwise noted on the Traffic Control Plan or as directed by the Project Manager or the District Traffic Engineer's authorized representative.

Schedule shoulder construction operations so that the length of excavated area adjacent to traffic lanes is not open for more than two calendar days, over weekends or holidays.

For overnight operations, if located within 152 m (500 feet) of any residence or business use arrow panels that are electrically, solar or battery operated.

When working on entrance and exit ramp gore areas, the same Traffic Restriction Tables for main road SRs must be adhered to for ramp SRs.

Restrict lanes on limited access freeways and expressways in accordance with appropriate Publication 213 long-term figures. This also includes entrance and exit ramps.

On limited access freeways and expressways, place a Portable Three Line Changeable Message Sign, two miles in advance of the work area.

For any lane closures on freeways and expressways, use approved non-metallic drums.

When working within the travel lanes of a freeway or expressway, use of a shadow vehicle equipped with a truck-mounted impact attenuator to protect each work area **as shown in Publication 213. Placement** - Place shadow vehicle with mounted impact attenuator and arrow panel 100 feet up stream of each active construction area or as indicated on the PATA and/or as directed.

Erect "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with Type B lights attached on each intersecting road and major drive as shown in Publication 213, for the appropriate situation.

In accordance with Act 229 of 2002, the Contractor will install signs R22-1, W21 19 and W21-20 at each approach to a work zone, as shown in Publication 213 - 'Act 229 Guidelines'.

Provide a Traffic Control Supervisor or Supervisors and phone numbers where they can be reached on a 24-hour - 7 days a week basis for the duration of the project. The Traffic Control Supervisor must be knowledgeable of work zone traffic control including incident management. The Traffic Control Supervisor must have a thorough understanding of the Manual on Uniform Traffic Control Devices (MUTCD) and Publications 212 and 213. The Traffic Control Supervisor shall attend the pre-job meeting. The Supervisor's responsibilities are as follows:

Notify District Public Relations Office, affected municipalities and property owners of all traffic restrictions. Prepare News Releases and submit to the Project Manager for his concurrence prior to the final submission to the District Office.

Implement and maintain traffic control schemes. Place and maintain all traffic control signs and devices used on the project.

Conduct daily reviews and document the performance of traffic control signs, devices, off-duty uniformed police and temporary pavement markings during the day and night, adverse weather conditions and active and inactive construction operations, as directed. The Traffic Control Supervisor will present all MPT problems and discrepancies in writing to the Department's Project Manager by noon of each day.

Prepare and submit the proposed corrective action to the Department's Project Manager. Correct any deficiencies or damage discovered during the daily review immediately.

Maintain ongoing communication with the Inspector-in-Charge regarding operations and phasing that will impact transportation operations and traffic control in and around the project vicinity. Develop and maintain lists of phone numbers, e-mail addresses and fax numbers for the affected stakeholders, including, but not limited to: Municipalities, school districts, media outlets, emergency services, major businesses, transit companies, trucking firms and other major traffic generators in the project vicinity. Notify these groups of initiation of and changes to construction operations and traffic control patterns and phasing at least 48 hours in advance or as directed by the Inspector-in-Charge. Use signs to advise the public of impending changes in the traffic patterns.

Maintain a daily written record of all crashes, work zone incidents and maximum daily queue lengths for each traffic pattern for the life of the project. All feedback received from the public through phone calls, e-mails, in writing or in

person shall be documented. This information shall be submitted daily to the Inspector-in-Charge and maintained daily for reference by the District Traffic Unit upon request.

Notify the Traffic Management Center (TMC) 412-429-6030 or Jason Previte at 412-475-1862, fifteen (15) minutes prior to imposing any lane restrictions and prior to removing any lane restrictions.

Designate a representative to serve on Incident Management Committee.

When the work area encroaches on a crosswalk, sidewalk or other pedestrian walkway, submit a detailed plan for satisfactorily closing the walkway to pedestrian traffic to the Engineer. Include the number and type of devices to be used in accordance with the appropriate figure from Publication 213. Do not close any walkway without prior approval of the plan, and at all times adhere to the submitted plan unless otherwise directed.

Use a post mounted "NO GUIDE RAIL" (W21-9A) sign with a Type B light attached when existing guide rail is removed. Erect the first sign at a distance upstream from the removed guide rail section of 2 times the speed limit, in feet. Erect additional signs at intervals not greater than 804 m (1/2 mile).

Provide sufficient number of properly attired flaggers (vest; hard hat) to adequately control traffic flow through the work zone, which includes any intersecting streets in the work zone, and as directed.

Do not cause intermittent traffic stoppages for longer than 5 minutes. When traffic stoppages are necessary, position flaggers and signs as shown in Publication 213, PATA 10a. Do not stop traffic between 6 A.M. to 9 A.M. or 3 P.M. to 6 P.M.

Section 901.3(k) Work Area Pavement Markings. Revise the third paragraph by adding the following:

When installing painted standard pavement markings on roadways where traffic is to be maintained, install "WET PAINT DO NOT CROSS LINE" (R16-5) sign as directed.

Do not change any part of the Traffic Control Plan and/or Section 901 without prior written approval of the District Traffic Engineer or authorized representative. This includes but is not limited to:

- Traffic Control Phasing
- Location and hours of operation for all off-duty uniformed police officers.
- Times and/or dates when traffic may not be restricted.
- Any short-term or long-term detours.
- Item 0901-0240 Additional Traffic Control Signs. All locations and messages must be approved by the District Traffic Engineer.

Completely remove all existing conflicting pavement markings prior to installing any temporary markings. Do not paint over existing pavement markings. During inclement weather, where it is not possible to install pavement markings, install "NO PAVEMENT MARKINGS" (W21-16) signs with Type A light attached at intervals of 400 m (1/4 mile) and/or as directed by the Project Manager. In addition, as a minimum, place cones at one times the posted speed limit along the centerline of the travel lanes.

Use Type B lights with red lenses on all required stop sign installations.

Limit any lane closure to the length necessary to safely perform the required work.

Do not allow employees to park their personal vehicles on any traveled roadway, shoulder, median or seeded area along the highway.

When working at or within close proximity to a signalized intersection, provide off duty uniformed police officers to control and direct traffic at the intersection. Provide police officers to manually operate traffic signals or have the police officers place the signals in a flashing mode and direct traffic at the intersection. Give the municipality one week advance notice prior to working within a signalized intersection. Prior to removing the police officer at the end of the workday, return the traffic signals to normal operation.

Be advised that most of the boroughs and townships have noise ordinances. **O**btain the necessary permits prior to construction.

TRAFFIC/CONSTRUCTION RESTRICTIONS

Road Users Liquidated Damages will be assessed in the amount specified in the special provision entitled "Road User Liquidated Damages" for failure to open the roadway to unrestricted traffic within the allotted time.

I-79 (I-79 Pittsburgh Interchange to I-279 Split)

Note: **With the exception of** the work limitations outlined in the Traffic Control Plans, the Contractor must adhere to the following General and Holidays/Events Restrictions.

General Restrictions:

Mondays thru Fridays

- 6 A.M. - 9 A.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 9 A.M. - 3 P.M.: No travel lane closures permitted.
- 3 P.M. - 8 P.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 12 Midnight to 6 A.M. and 8 P.M. to 12 Midnight: Provide at least one lane in the direction of travel.

Saturdays and Sundays

Provide at least one lane in the direction of travel.

Memorial Day (Including the Saturday and Sunday before Memorial Day) - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Memorial Day -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 9 A.M. to 12 Noon: No travel lane closures permitted.
- 6 A.M. to 9 A.M. and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Labor Day (Including the Saturday and Sunday before Labor Day) - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Labor Day -

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 9 A.M. to 12 Noon: No travel lane closures permitted.
- 6 A.M. to 9 A.M. and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Independence Day - No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079. Additionally, no work affecting any travel lane, shoulder, associated ramp or gore area of SR 0079 on July **2, 3, 4, 5, 2010**.

Great Race

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Light Up Night

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 9 A.M. and 3 P.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.
- 9 A.M. to 3 P.M.: No travel lane closures permitted.

Three Rivers Regatta (Saturdays and Sundays)

- 12 Midnight to 6 A.M.: Provide at least one lane in the direction of travel.
- 6 A.M. to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Pittsburgh Vintage Grand Prix

- 12 Midnight to 6 A.M. and 8 P.M. to 12 Midnight: Provide at least one lane in the direction of travel.
- 6 A.M. to 8 P.M.: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Other Event Restrictions:

No travel lane restrictions are permitted in the inbound direction 2 hours before, or outbound direction 2 hours after the conclusion of Pittsburgh Steelers, Pittsburgh Pirate and Pittsburgh Penguin events at the North Shore Stadiums and Mellon Arena (including overtime/ extra innings and fireworks/ concerts/ etc. that are billed in conjunction with the sporting event). In accordance with Publication 408 Section 901.3(a), the Contractor must be aware that there may be instances where the District Traffic Engineer may implement restrictions for other unforeseen major events (i.e., events scheduled subsequent to contract execution).

Maintain traffic in accordance with the Traffic Control Plan. For all operations not covered by Traffic Control Plan, maintain traffic in accordance with the appropriate figures and notes in PA Publication 213.

Other Highway Restrictions:

On SR 0065, SR 4033 (Segment 0008), and SR 0079, when possible, maintain a minimum of one 11- foot wide lane of unobstructed traffic in each direction during working hours in accordance with the appropriate Publication 213 figures and/or as directed by the District Traffic Engineer's authorized representative. When an 11-foot lane is not possible, maintain an absolute minimum of one 10-foot wide lane. Do not locate a transition within a signalized intersection.

On SR 4033 (Segment 0010), maintain a minimum of one 10-foot wide lane for alternating traffic flow around the work area using flaggers in accordance with the appropriate Publication 213 figures and/or as directed by the District Traffic Engineer's authorized representative.

Keep the Glenfield Viaduct open to traffic at all times.

Do not close ramps that are being used as detours.

Interstate/Expressway Permits are required for all interstate or divided highways with ingress and egress at interchanges. Press Releases are required for all work within Department highway right-of-way. At least three days prior to any work or any change in traffic patterns for ongoing work on I-79,I-279, I-376, I-579, 22/30, 60, 22 and 422, obtain an Interstate/Expressway Permit from the District Traffic Engineer, and notify the following: the Pennsylvania State Police Parkway Station Commander (412-787-2000); District Press Officer (412-429-5010) and the District Traffic Management Center (412-429-6030) of any Traffic and/ or Construction restrictions on the Interstates and Expressways covered by this contract. The Interstate/Expressway Permit Form and Press Office Traffic Information Form (Press Release) are found in the Department web site through the following link: http:// www.dot.state.pa.us/ penndot/ districts/ district11.nsf/ D11Traffic? OpenFrameSet (go to "Commonly Used Traffic Forms"). The Contractor is responsible for completing all Press Releases and forwarding them to the Inspector-in-Charge (IIC). The Contractor is responsible for completing all Interstate/ Expressway Permit Forms for the IIC's signature and date. The IIC processes the Interstate/Expressway Permit and Press Release requests in accordance with established procedures.

When using the shoulder area on a bridge for a temporary traffic lane, verify that traffic can be maintained on the water table (shoulder) due to inlets and scuppers prior to shifting traffic onto shoulder.

Coordinate working schedule with any adjacent Department projects.

Place steel plates over inlet excavations in open travel lanes during non-working hours.

Do not use steel plates to bridge any pavement construction.

When using plates in open travel lanes, provide a metal plate of sufficient thickness and recess the plate so that the top of plate is flush with the roadway surface.

When working above a traveled roadway, provide falsework, netting or other means to prevent construction debris, including water, from falling to the roadway below.

When excavating for **Accelerated Concrete** replacement, excavate only that amount that can be replaced and the roadway opened to unrestricted traffic by the time allotted.

No grade deviations along the roadway are permitted at the end of the workday. Place temporary bituminous material around all manholes, inlet valve boxes and between different roadway elevations to provide a smooth transition. Place wedges with a rate of taper of 1 m (3-feet) horizontal length for each 25 mm (1-inch) of vertical depth. Remove wedges prior to the placement of the bituminous surface courses. Install and remove the temporary asphalt wedges at no additional cost to the Department. Place "BUMP" (W8-1) and "ROUGH ROAD" (W8-8) signs with Type B lights.

When setting or resetting temporary concrete barrier, work in the direction of adjacent traffic flow so that no blunt ends are exposed to oncoming traffic during non-working hours. Also, when removing temporary concrete barrier, work in the direction opposite to adjacent traffic flow so that no blunt ends are exposed to oncoming traffic during non-working hours. If a blunt end must be exposed to oncoming traffic during non-working hours, protect it using a temporary impact attenuator designed for 120 km/h (75 m.p.h.). When gaps in concrete barrier are maintained for Contractor access, provide enough devices to prevent access at the end of each workday. When barrier is being used in conjunction with temporary markings, place all temporary pavement markings prior to beginning barrier placement. Comply with Strike-Off Letter No. 432-02-04 dated May 9, 2002, titled Temporary Concrete Median Barrier NCHRP Report 350 Compliance, and under the Temporary Concrete Median Barrier NCHRP Report 350 Compliance, and under the Temporary Concrete Barrier item.

On roadways with speed limits of 35 MPH or greater, reduce the work zone speed limit to 10 MPH less than the normal speed limit. Erect R2-2-2 (WORK **ZONE** SPEED LIMIT) signs at the beginning of each work zone and at 0.5 mile intervals throughout the work zone. Utilize Speed Advisory Plaques (W13-1) on each approach to the work zone as specified in Publication 213, Table 4.

When performing short-term operations on one lane ramps, provide traffic control in accordance with the following:

A. When operations can be performed without encroaching upon the travel lane, provide traffic control in accordance with Publication 213, PATA 5.

B. When operations encroach upon a portion of the travel lane, maintain a minimum 3.04 m (10-foot) wide unobstructed travel lane. Erect traffic control signs and devices in accordance with the attached figure shown for a Stationary Short Term Operation - One Lane, Ramp Roadway - Minor Encroachment.

In addition to A and B above, place a "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with three orange flags attached on the left side of the ramp unless physically impossible.

If it is not possible to place the "WORK AREA AHEAD" signs at the required distance ahead of the work area, place them on the ramp as far from the work area as possible. Then place a "RAMP WORK AHEAD" (W21-4-1B) sign with three orange flags attached on the mainline roadway at a distance from the ramp work area equal to the required distance for the "WORK AREA AHEAD" sign.

Mount "RAMP" (R1-1-2) signs above all "STOP" or "YIELD" signs erected on ramps.

Contact the District Traffic Management Center at 412-429-6030 for any Traffic and/or Construction restrictions on the Parkways and Interstates covered by this contract three days prior to any scheduled work.

Notify the District Traffic Engineer's authorized representative in the Operations Section at 412-429-4973 two weeks prior to opening any portion of a closed roadway to traffic that has had any changes to the permanent traffic control devices, and has been determined by the Project Engineer to be opened.

When covering conflicting signs, do not place adhesive on the sign face. Place adhesive on the back of the sign. Any reflective sheeting damaged by adhesive constitutes damage to the sign. Replace the sign at no additional cost to the Department. For signs which are frequently covered and uncovered based upon work schedules, provide a cover which permits the entire sign face (including the border and margin) to be visible when the sign is uncovered.

When closing a lane on a freeway or expressway, erect a G70-1 (USE BOTH LANES TO MERGE POINT) ½ mile in advance of the lane closure. Erect a G70-2 (MERGE HERE TAKE YOUR TURN) sign 500 feet in advance of the lane closure.

Section 901.3(j)2 - Revise Footnote (2) to read:

Use channelizing devices with Type C steady burn lights attached. Space devices as follows:

1. **drop-offs between travel lanes - 7.5 m (25-foot) spacing**
2. **drop-offs between travel lane and shoulder - 7.5 m (25-foot) spacing**

3. **drop-offs in or beyond shoulder - two times the normal speed limit.**

When the condition is less than 7.5 m (25-feet), place a channelizing device at each end of the drop-off condition.

Section 901.3(m) Lateral Lane Restrictions. Revise the third paragraph to read:

Notify the Inspector-In-Charge (IIC) by completing and submitting form M-937R (Route/Bridge Restriction) at least 14 days before implementing or changing any lateral lane restriction which provides less than 16 feet of pavement and shoulder in each direction for oversized vehicles. Notify the IIC by completing and submitting form M-937RO (Route/Bridge Restriction Opening) at least seven days before removing the restriction. These forms are found on the Department website through the following link: http://www.dot.state.pa.us/penndot/districts/district11.nsf/D11Roadwork?OpenFrameSet (go to "Links to forms for construction related activities". Complete all route restriction forms and forward them to the IIC. The IIC processes the route restriction requests in accordance with established procedures.

MEASUREMENT AND PAYMENT - Lump Sum. All items of work are to be included in and paid for as part of the contract lump sum price, except as indicated otherwise herein.

00 - c99017 Item 9901-0066 - Construct Maintenance and Protection of Traffic Control Plan, S-29389

Addendum:	3
Associated Item(s):	9901-0066

Header:

Provision Body:

DESCRIPTION - This work is the construction and implementation of the maintenance and protection of traffic according to the Traffic Control Plan bid in the corresponding specification entitled "Design Maintenance and Protection of Traffic Control Plan, S-29389" and in accordance with the approved traffic drawings.

MATERIAL - As indicated and as specified for each item included in the Traffic Control Plan developed from corresponding specification entitled "Design Maintenance and Protection of Traffic Control Plan, S-29389".

CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408, Special Provisions, and any additional requirements specified herein.

Working days are weekdays, Monday through Friday. The following official Department holidays will not be included as working days:

- New Year's Day
- Dr. Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day.

Do not commence construction until the Traffic Control Plans are approved and signed by the District Traffic Engineer. Construction may commence on components of the project provided that partial Traffic Control Plans are approved and signed by the District Traffic Engineer.

Interstate/Expressway work approval permit required prior to restricting traffic on SR 0079. Approval(s) of this permit must be obtained through the District prior to commencing work on SR 0079.

The Contractor is responsible for scheduling and furnishing flagmen for maintenance and protection of traffic on SR 0079, as necessary.

All flagmen are to be in accordance with PENNDOT Publications 212 and 213.

ADVANCE REQUIREMENTS

Provide two weeks advance notice in writing to affected municipalities, respective Emergency Services, PENNDOT District 11-0 Permit Office, local school districts, Allegheny County Port Authority (412-854-7328) and Chuck Rompala at 412-566-5321, the Pennsylvania State Police (412-787-2000), PENNDOT Allegheny County Maintenance Manager (412-781-3200) and the appropriate State Representative or Senator, prior to beginning any work or imposing any traffic restrictions. Additionally, provide notification to all affected businesses and property owners four days prior to the erection of the Advance Construction Advisory signs. (District Construction Unit will provide typical form at pre-job conference.) Keep them informed at all times of changes to traffic restrictions as they occur.

Notify property owners ten days in advance of driveway restrictions affecting their properties.

Notify railroad when working above or in their right-of-way in accordance with their policies.

Make a survey along with the Project Manager or his authorized representative by videotaping and voice recording onto a DVD format the location of all existing pavement markings, existing signs, road conditions and all potential driveway and/or private problems within the project limits prior to beginning construction. Use this information in placing all pavement markings and signs. Provide an additional copy of the DVD to the Project Manager or his authorized representative before construction begins. Properly label the DVD with the Contract #, SPN, SR #(s), date video was taken and by whom. Contact the District Traffic Engineer before making any changes to the existing pavement marking patterns, or signs or other devices.

Ten days prior to construction, erect the Advance Construction Advisory signs on Type III barricades as depicted below.

(Fill in Name) ROAD WORK	Use 150 mm (6") Series C black letters on a reflective orange background with a 12 mm (1/2") black border and 150 mm (6") corner radius.
Begins (Date)	
DELAYS LIKELY	Cover the above "Begins (Date)" with "DELAYS LIKELY" when construction begins.

Erect signs at each limit of work and at the following locations:

After the pre-job conference and before the closure, meet with the Project Manager and the District Traffic Engineer's representative to locate detour signing and identify conflicting signs which must be covered or removed.

Notify the District Traffic Engineer prior to implementing phase change.

TRAFFIC CONTROL/DEVICES REQUIREMENTS

Section 901.2 MATERIAL - Revise by adding the following sentence:

> For all barricades, provide barricade rails constructed of non-metallic materials.

Section 901.3(i) Barricades. Revise sentence as follows:

> When specified or indicated, furnish and install non-metallic barricades in accordance with MUTCD Section 6F.63, Publication 213 and/or the approved TCP.

The signs and traffic control devices listed or indicated on the Traffic Control Plan or Publication 212 or Publication 213 represent the minimum requirements for this item and as such, are for information only. The number and types of traffic control signs and devices for this project will be predicated on the number and location of work sites, the extent of repairs and the planned sequence of operations.

For this project, provide fluorescent orange sheeting for all construction warning signs and channelizing devices.

Provide new traffic control signs and devices. Do not use reflective sheeting that is scratched, scarred, dirty or shows evidence of loss of reflectivity. Do not use signs or devices that are cracked, bent, dented or broken.

Replace reflective sheeting should it become damaged where reflectivity becomes impaired. Immediately repair or replace damaged, defaced or dirty signs, devices or barrier.

Mount all construction warning signs (W series) for long-term operations on Type III barricades. Include a Type B light on each W series sign. If it is not possible to mount construction warning or other signing as indicated or specified, the District Traffic Engineer will determine the method of mounting the signs.

Provide additional channelizing devices and barricades at intersections, major driveways and ramps to prevent vehicles from turning onto any lane closed for construction. Space channelizing devices at 1.5 m (5-foot) intervals or as directed by the District Traffic Engineer.

Use channelizing devices with Type C steady burn lights for all nighttime lane restrictions. Mount a light on each device used in transition areas and on every third device used in tangent sections.

Space channelizing devices in the tangent sections at one times the posted (regulatory) speed limit unless otherwise noted on the Traffic Control Plan or as directed by the Project Manager or the District Traffic Engineer's authorized representative.

For overnight operations, if located within 152 m (500 feet) of any residence or business use arrow panels that are electrically, solar or battery operated.

When working within the travel lanes of a freeway or expressway, use of a shadow vehicle equipped with a truck-mounted impact attenuator to protect each work area as shown in Publication 213. Placement - Place shadow vehicle with mounted impact attenuator and arrow panel 100 feet up stream of each active construction area or as indicated on the PATA and/or as directed.

Erect "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with Type B lights attached on each intersecting road and major drive as shown in Publication 213, for the appropriate situation.

In accordance with Act 229 of 2002, the Contractor will install signs R22-1, W21-19 and W21-20 at each approach to a work zone, as shown in Publication 213 - 'Act 229 Guidelines'.

Provide a Traffic Control Supervisor or Supervisors and phone numbers where they can be reached on a 24-hour - 7 days a week basis for the duration of the project. The Traffic Control Supervisor must be knowledgeable of work zone traffic control including incident management. The Traffic Control Supervisor must have a thorough understanding of the Manual on Uniform Traffic Control Devices (MUTCD) and Publications 212 and 213. The Traffic Control Supervisor shall attend the pre-job meeting. The Supervisor's responsibilities are as follows:

Notify District Public Relations Office, affected municipalities and property owners of all traffic restrictions. Prepare News Releases and submit to the Project Manager for his concurrence prior to the final submission to the District Office.

Implement and maintain traffic control schemes. Place and maintain all traffic control signs and devices used on the project.

Conduct daily reviews and document the performance of traffic control signs, devices, off-duty uniformed police and temporary pavement markings during the day and night, adverse weather conditions and active and inactive construction operations, as directed. The Traffic Control Supervisor will present all MPT problems and discrepancies in writing to the Department's Project Manager by noon of each day.

Prepare and submit the proposed corrective action to the Department's Project Manager. Correct any deficiencies or damage discovered during the daily review immediately.

Maintain ongoing communication with the Inspector-in-Charge regarding operations and phasing that will impact transportation operations and traffic control in and around the project vicinity. Develop and maintain lists of phone numbers, e-mail addresses and fax numbers for the affected stakeholders, including, but not limited to: Municipalities, school districts, media outlets, emergency services, major businesses, transit companies, trucking firms and other major traffic generators in the project vicinity. Notify these groups of initiation of and changes to

construction operations and traffic control patterns and phasing at least 48 hours in advance or as directed by the Inspector-in-Charge. Use signs to advise the public of impending changes in the traffic patterns.

Maintain a daily written record of all crashes, work zone incidents and maximum daily queue lengths for each traffic pattern for the life of the project. All feedback received from the public through phone calls, e-mails, in writing or in person shall be documented. This information shall be submitted daily to the Inspector-in-Charge and maintained daily for reference by the District Traffic Unit upon request.

Notify the Traffic Management Center (TMC) 412-429-6030 or Jason Previte at 412-475-1862 fifteen (15) minutes prior to imposing any lane restrictions and prior to removing any lane restrictions.

Designate a representative to serve on Incident Management Committee.

When the work area encroaches on a crosswalk, sidewalk or other pedestrian walkway, submit a detailed plan for satisfactorily closing the walkway to pedestrian traffic to the Engineer. Include the number and type of devices to be used in accordance with the appropriate figure from Publication 213. Do not close any walkway without prior approval of the plan, and at all times adhere to the submitted plan unless otherwise directed.

Use a post mounted "NO GUIDE RAIL" (W21-9A) sign with a Type B light attached when existing guide rail is removed. Erect the first sign at a distance upstream from the removed guide rail section of 2 times the speed limit, in feet. Erect additional signs at intervals not greater than 804 m (1/2 mile).

Provide sufficient number of properly attired flaggers (vest; hard hat) to adequately control traffic flow through the work zone, which includes any intersecting streets in the work zone, and as directed.

Do not cause intermittent traffic stoppages for longer than 5 minutes. When traffic stoppages are necessary, place a "FLAGGER" (W20-7A) sign 500' in advance of the work area and a "BE PREPARED TO STOP" (W20-10) sign 1000' in advance of the work area. Attach three orange flags to each sign. Station a second properly attired flagger, equipped with a W21-10 sign, in advance of the closed work area to slow traffic approaching the stopped traffic. Position this flagger approximately 400' beyond the end of the lines of stopped traffic. Refer to the traffic control plans for restrictions on stopping traffic. Do not stop traffic between 6 A.M. to 9 A.M. or 3 P.M. to 8 P.M.

Section 901.3(k) Work Area Pavement Markings. Revise the third paragraph by adding the following:

When installing painted standard pavement markings on roadways where traffic is to be maintained, install "WET PAINT DO NOT CROSS LINE" (R16-5) sign as directed.

Do not change any part of the Traffic Control Plan and/or Section 901 without prior written approval of the District Traffic Engineer or authorized representative. This includes but is not limited to:

- Traffic Control Phasing
- Location and hours of operation for all off-duty uniformed police officers.
- Times and/or dates when traffic may not be restricted.
- Any short-term or long-term detours.
- Item 0901-0240 Additional Traffic Control Signs. All locations and messages must be approved by the District Traffic Engineer.

Completely remove all existing conflicting pavement markings prior to installing any temporary markings. Do not paint over existing pavement markings. During inclement weather, where it is not possible to install pavement markings, install "NO PAVEMENT MARKINGS" (W21-16) signs with Type Blight attached at intervals of 400 m (1/4 mile) and/or as directed by the Project Manager. In addition, as a minimum, place cones at one times the posted speed limit along the centerline of the travel lanes.

Use Type B lights with red lenses on all required stop sign installations.

Limit any lane closure to the length necessary to safely perform the required work.

Do not allow employees to park their personal vehicles on any traveled roadway, shoulder, median or seeded area along the highway.

Be advised that most of the boroughs and townships have noise ordinances. Obtain the necessary permits prior to construction.

TRAFFIC/CONSTRUCTION RESTRICTIONS

Road Users Liquidated Damages will be assessed in the amount specified in the special provision entitled "Road User Liquidated Damages" for failure to open the roadway to unrestricted traffic within the allotted time.

I-79 (I-79 Pittsburgh Interchange to I-279 Split)

Note: With the exception of the work limitations outlined in the Traffic Control Plans, the Contractor must adhere to the following General and Holidays/Events Restrictions.

General Restrictions:

Mondays Thru Fridays

2 Lane Section

6 AM – 9 AM: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

9 AM – 3 PM: No travel lane closures permitted.

3 PM – 8 PM: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

12 Midnight to 6 AM and 8 PM to 12 Midnight: Provide at least one lane in the direction of travel.

3 Lane Section

6 AM – 8 PM: Provide at least two lanes in the direction of travel.

12 Midnight to 6 AM and 8 PM to 12 Midnight: Provide at least one lane in the direction of travel.

Saturdays and Sundays

- Provide at least one lane in the direction of travel.

Holidays/Events Restrictions:

Memorial Day (Including the Saturday & Sunday before Memorial Day) – No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Memorial Day –

12 Midnight to 6 AM: Provide at least one lane in the direction of travel.

9 AM to 12 Noon: No travel lane closures permitted.

6 AM to 9 AM and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Labor Day (Including the Saturday and Sunday before Labor Day) – No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Fridays before Labor Day –

12 Midnight to 6 AM: Provide at least one lane in the direction of travel.

9 AM to 12 Noon: No travel lane closures permitted.

6 AM to 9 AM and 12 Noon to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Independence Day – No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079. Additionally, no work affecting any travel lane, shoulder, associated ramp or gore area of SR 0079 on July 2, 3, 4, 5, 2010.

Great Race

12 Midnight to 6 AM: Provide at least one lane in the direction of travel.

6 AM to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Light Up Night –

12 Midnight to 6 AM: Provide at least one lane in the direction of travel.

6 AM to 9 AM and 3 PM to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

9 AM to 3 PM: No travel lane closures permitted.

Three Rivers Regatta (Saturdays and Sundays)

12 Midnight to 6 AM: Provide at least one lane in the direction of travel.

6 AM to 12 Midnight: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Pittsburgh Vintage Grand Prix

12 Midnight to 6 AM and 8 PM to 12 Midnight: Provide at least one lane in the direction of travel.

6 AM to 8 PM: No work permitted affecting any travel lane, shoulder, associated ramp or gore area of SR 0079.

Other Event Restrictions:

- **In accordance with Publication 408 Section 901.3(a), the Contractor must be aware that there may be instances where the District Traffic Engineer may implement restrictions for unforeseen major events (i.e., events scheduled subsequent to contract execution).**

Do not close ramps that are being used as detours.

Interstate/Expressway Permits are required for all interstate or divided highways with ingress and egress at interchanges. Press Releases are required for all work within Department highway right-of-way. At least three days prior to any work or any change in traffic patterns for ongoing work on I-79,I-279, I-376, I-579, 22/30, 60, 22 and 422, obtain an Interstate/Expressway Permit from the District Traffic Engineer, and notify the following: the Pennsylvania State Police Parkway Station Commander (412-787-2000); District Press Officer (412-429-5010) and the District Traffic Management Center (412-429-6030) of any Traffic and/ or Construction restrictions on the Interstates and Expressways covered by this contract. The Interstate/Expressway Permit Form and Press Office Traffic Information Form (Press Release) are found in the Department web site through the following link: http:// www.dot.state.pa.us/ penndot/ districts/ district11.nsf/ D11Traffic? OpenFrameSet (go to "Commonly Used Traffic Forms"). The Contractor is responsible for completing all Press Releases and forwarding them to the Inspector-in-Charge (IIC). The Contractor is responsible for completing all Interstate/ Expressway Permit Forms for the IIC's signature and date. The IIC processes the Interstate/Expressway Permit and Press Release requests in accordance with established procedures.

When using the shoulder area on a bridge for a temporary traffic lane, verify that traffic can be maintained on the water table (shoulder) due to inlets and scuppers prior to shifting traffic onto shoulder.

Coordinate working schedule with any adjacent Department projects.

Place steel plates over inlet excavations in open travel lanes during non-working hours.

Do not use steel plates to bridge any pavement construction.

When using plates in open travel lanes, provide a metal plate of sufficient thickness and recess the plate so that the top of plate is flush with the roadway surface.

When working above a traveled roadway, provide falsework, netting or other means to prevent construction debris, including water, from falling to the roadway below.

No grade deviations along the roadway are permitted at the end of the workday. Place temporary bituminous material around all manholes, inlet valve boxes and between different roadway elevations to provide a smooth transition. Place wedges with a rate of taper of 1 m (3-feet) horizontal length for each 25 mm (1-inch) of vertical depth. Remove wedges prior to the placement of the bituminous surface courses. Install and remove the temporary asphalt wedges at no additional cost to the Department. Place "BUMP" (W8-1) and "ROUGH ROAD" (W8-8) signs with Type B lights.

Reduce the work zone speed limit to 40 m.p.h. when lane widths are reduced to less than 12 feet in width.

On roadways with speed limits of 35 MPH or greater, reduce the work zone speed limit to 10 MPH less than the normal speed limit. Erect R2-2-2 (WORK ZONE SPEED LIMIT) signs at the beginning of each work zone and at 0.5 mile intervals throughout the work zone. Utilize Speed Advisory Plaques (W13-1) on each approach to the work zone as specified in Publication 213, Table 4.

When performing short-term operations on one lane ramps, provide traffic control in accordance with the following:

A. When operations can be performed without encroaching upon the travel lane, provide traffic control in accordance with Publication 213, PATA 5.

B. When operations encroach upon a portion of the travel lane, maintain a minimum 3.04 m (10-foot) wide unobstructed travel lane. Erect traffic control signs and devices in accordance with the attached figure shown for a Stationary Short Term Operation - One Lane, Ramp Roadway - Minor Encroachment.

In addition to A and B above, place a "ROAD WORK AHEAD" (W20-1, W30-1-6) signs with three orange flags attached on the left side of the ramp unless physically impossible.

If it is not possible to place the "WORK AREA AHEAD" signs at the required distance ahead of the work area, place them on the ramp as far from the work area as possible. Then place a "RAMP WORK AHEAD" (W21-4-1B) sign with three orange flags attached on the mainline roadway at a distance from the ramp work area equal to the required distance for the "WORK AREA AHEAD" sign.

Mount "RAMP" (R1-1-2) signs above all "STOP" or "YIELD" signs erected on ramps.

Contact the District Traffic Management Center at 412-429-6030 for any Traffic and/or Construction restrictions on the Parkways and Interstates covered by this contract three days prior to any scheduled work.

Notify the District Traffic Engineer's authorized representative in the Operations Section at 412-429-4973 two weeks prior to opening any portion of a closed roadway to traffic that has had any changes to the permanent traffic control devices, and has been determined by the Project Engineer to be opened.

When covering conflicting signs, do not place adhesive on the sign face. Place adhesive on the back of the sign. Any reflective sheeting damaged by adhesive constitutes damage to the sign. Replace the sign at no additional cost to the Department. For signs which are frequently covered and uncovered based upon work schedules, provide a cover which permits the entire sign face (including the border and margin) to be visible when the sign is uncovered.

When closing a lane on a freeway or expressway, erect a G70-1 (USE BOTH LANES TO MERGE POINT) ½ mile in advance of the lane closure. Erect a G70-2 (MERGE HERE TAKE YOUR TURN) sign 500 feet in advance of the lane closure.

Section 901.3(j)2 - Revise Footnote (2) to read:

Use channelizing devices with Type C steady burn lights attached. Space devices as follows:

- drop-offs between travel lanes - 7.5 m (25-foot) spacing
- drop-offs between travel lane and shoulder - 7.5 m (25-foot) spacing
- drop-offs in or beyond shoulder - two times the normal speed limit.

When the condition is less than 7.5 m (25-feet), place a channelizing device at each end of the drop-off condition.

Section 901.3(m) Lateral Lane Restrictions. Revise the third paragraph to read:

- Notify the Inspector-in-Charge (IIC) by completing and submitting Form M-937R (Route/Bridge Restriction) at least 14 days before implementing or changing any lateral lane restriction which provides less than 16 feet of pavement and shoulder in each direction for oversized vehicles. Notify the IIC by completing and submitting Form M-937RO (Route/Bridge Restriction Opening) at least seven days before removing the restriction. These forms are found on the Department website through

the following link: http://www.dot.state.pa.us/penndot/districts/district11.nsf/D11Roadwork?OpenFrameSet (go to "links to forms for construction related activities." Complete all route restriction forms and forward them to the IIC. The IIC processes the route requests in accordance with established procedures.

MEASUREMENT AND PAYMENT - Lump Sum. All items of work are to be included in and paid for as part of the contract lump sum price, except as indicated otherwise herein.

00 - c99919 Item 9990-0219 - Cloth Overlay Sign

Addendum:

Associated Item(s): 9990-0219

Header:

Provision Body:

DESCRIPTION - This work is furnishing, a reflectorized vinyl sign to cover conflicting overhead signs, and all type (A, B, C, D, E, F) signs and as directed.

MATERIAL - Use an approved 13 oz., reflectorized, vinyl roll-up material with 2" reinforced plastic seat belt material edging, equipped with a pocket and aluminum conduit (1/2" minimum) installation method, to cover the signs.

Signs are to be reflectorized with approved Type V sheeting, with legends digitally enhanced into the vinyl.

CONSTRUCTION - Cover and uncover the signs as shown on the Traffic Control Plan and as directed in accordance with the manufacturer's requirements.

MEASUREMENT AND PAYMENT - Square Foot of sign. Includes any incidental work (setting up of MPT, vehicles/equipment required) and mounting hardware.

Performance Bonds

Surety Company:	Federal Insurance Company	**Status:**	Accepted
Bonding Agency:	Seubert & Associates, Inc.	**Bond Number:**	82166288
Producer:	Josephine M Streyle/PennDOT BP-002229	**Bond Amount:**	$20,843,648.52
Co-Insurer:	No	**NAIC:**	20281

KNOW ALL MEN BY THESE PRESENTS, That we, *Swank Associated Companies, Inc.* of *200 HUNT VALLEY ROAD , NEW KENSINGTON, PA 15068* as PRINCIPAL,and Federal Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$20,843,648.52*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 22 day of July A.D. 2009.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows:This is a Design Build roadway and structure project which includes as-designed mainline and ramp work along SR 79. The project includes 10 structures of the Neville Island and Glenfield Interchanges. Design activities are limited to: concrete pavement roadway reconstruction, erosion and sedimentation pollution control, highway lighting, expansion joint replacement for Structure S-29389 (BMS#02007906500000), maintenance and protection of traffic for SR 0065-A38 and for Structure S-29389, and bridge preservation work for a 139 foot single span bridge (BMS# 02006501401735), a 144 foot single span bridge (BMS# 02801702600403), and a 32 foot tunnel (BMS# 02801707601426) including related approachment work.For the bridge preservation tasks including: latex overlays, spot/zone painting, steel repairs, expansion dam replacements, concrete deck and substructure repairs, resetting bearings, bituminous pavement, signing and pavement marking, and other miscellaneous construction, all within a length of 11,986 linear feet (2.270 miles) as indicated on the approved drawings included in the bid package for STATE ROUTE 65, SECTION A38, in ALLEGHENY COUNTY, GLENFIELD BOROUGH, NEVILLE and ROBINSON TOWNSHIPS, Commonwealth of Pennsylvania.This project being situated as follows:SR 0065 - From a point approximately 1050 feet west of Toms Run Road at Segment 0130/0131 Offset 1516/1642 to a point approximately 3430 feet east of Red Gate Road (SR 4028) at Segment 0160/0161 Offset 1713/1019.SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off- ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and willpromptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnishedor labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and becamecomponent parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilitiesin, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force andeffect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm,partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided,and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paidin full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgementfor such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that theCommonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to theprovisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shallbe incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materialsto be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for theperformance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shallnot in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators,successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, orforbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	Kathy H Holmes/PennDOT BP-000395	Submit	07/22/2009 07:10:12 AM
Producer Review	Josephine M Streyle/ PennDOT BP-002229	Sign	07/22/2009 07:42:04 AM
Contractor Review	John F Mccaskie/PennDOT BP-000395	Sign	07/22/2009 12:15:06 PM
BOD CMD Review	Christina M Troutman/ PennDOT	Accept	07/22/2009 12:33:46 PM

Payment Bonds

Surety Company:	Federal Insurance Company	**Status:**	Accepted
Bonding Agency:	Seubert & Associates, Inc.	**Bond Number:**	82166288
Producer:	Josephine M Streyle/PennDOT BP-002229	**Bond Amount:**	$20,843,648.52
Co-Insurer:	No	**NAIC:**	20281

KNOW ALL MEN BY THESE PRESENTS, That we, *Swank Associated Companies, Inc.* of *200 HUNT VALLEY ROAD , NEW KENSINGTON, PA 15068* as PRINCIPAL,and Federal Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$20,843,648.52*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 22 day of July A.D. 2009.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows:This is a Design Build roadway and structure project which includes as-designed mainline and ramp work along SR 79. The project includes 10 structures of the Neville Island and Glenfield Interchanges. Design activities are limited to: concrete pavement roadway reconstruction, erosion and sedimentation pollution control, highway lighting, expansion joint replacement for Structure S-29389 (BMS#02007906500000), maintenance and protection of traffic for SR 0065-A38 and for Structure S-29389, and bridge preservation work for a 139 foot single span bridge (BMS# 02006501401735), a 144 foot single span bridge (BMS# 02801702600403), and a 32 foot tunnel (BMS# 02801707601426) including related approachment work.For the bridge preservation tasks including: latex overlays, spot/zone painting, steel repairs, expansion dam replacements, concrete deck and substructure repairs, resetting bearings, bituminous pavement, signing and pavement marking, and other miscellaneous construction, all within a length of 11,986 linear feet (2.270 miles) as indicated on the approved drawings included in the bid package for STATE ROUTE 65, SECTION A38, in ALLEGHENY COUNTY, GLENFIELD BOROUGH, NEVILLE and ROBINSON TOWNSHIPS, Commonwealth of Pennsylvania.This project being situated as follows:SR 0065 - From a point approximately 1050 feet west of Toms Run Road at Segment 0130/0131 Offset 1516/1642 to a point approximately 3430 feet east of Red Gate Road (SR 4028) at Segment 0160/0161 Offset 1713/1019.SR 0079 - From a point approximately 3700 feet north of the SR 0051 NB off- ramp (Exit 64) at Segment 0644/0645 Offset 1753/1724 to a point approximately 1050 feet north of the SR 0065 NB off-ramp (Exit 65) at Segment 0654/0655 Offset 0686/0684.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in allrespects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligationsthereunder, including the plans, specifications, and conditions therein referred to and made a partthereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania fromany expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing outof the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any causewhatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway;then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under itor the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on thepart of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY orSURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder,notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/ her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	Kathy H Holmes/PennDOT BP-000395	Submit	07/22/2009 07:09:35 AM
Producer Review	Josephine M Streyle/ PennDOT BP-002229	Sign	07/22/2009 07:41:17 AM
Contractor Review	John F Mccaskie/PennDOT BP-000395	Sign	07/22/2009 12:13:40 PM
BOD CMD Review	Christina M Troutman/ PennDOT	Accept	07/22/2009 12:33:51 PM

Insurance

ICAG, LLC

8715 Cary Algonquin Road
847-639-1040
Cary, IL 60013

Company: Arch Insurance Company
Policy: ZAGLB9080900
Expiration: 01/28/2010

DBE Commitments

DBE: 5%
Approved: 5.06%

Perform Less Than 50% of Work Items: No
Good Faith Effort Evaluation: No

Status	Business Partner	Business	% of Bid	Submitted	Acknowledged
Conditionally Approved	Vantage Corporation	Subcontractor	0.58%	07/03/2009	07/01/2009
Approved	Callahan Paving Products, Inc.	Regular Dealer	2.23%	07/03/2009	07/02/2009
Approved	Mike Latimore d/b/a Latimore Trucking & Supply Co	Trucking	0.23%	07/03/2009	07/03/2009
Approved	Raudenbush Engineering, Inc.	Consultant	0.27%	07/03/2009	07/02/2009
Approved	Strongstown's B & K Enterprises, Inc.	Subcontractor	1.75%	07/03/2009	07/01/2009

Vantage Corporation

Prime

Contact: John McCaskie
Phone: 724-335-6000
DBE: 5%
Status: Conditionally Approved
Revision Number:

DBE

Business Partner: Vantage Corporation
Type: DBE
Contact: Wendy Giles
Phone: 412-429-4750
DBE JVT%:
Certification: 10472
Cert. Expiration: 09/30/2009

Agreement Amount: $119,964.00
% of Bid: 0.58
Mobilization: $7,400.00
Starting: 08/17/2009
Completion: 10/06/2010
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
9901-0002	SIGNAL TIMING REVISIONS	HOUR	12.000
9901-0002	SIGNAL TIMING REVISIONS	HOUR	12.000
9000-6022	CONSTRUCT HIGHWAY LIGHTING	LS	1.000
9000-6002	DESIGN HIGHWAY LIGHTING	LS	1.000
9000-2720	REPAIR TYPE 72, REPLACE NAVIGATION LIGHT POWER CHORD STRAIN RELIEF GRIP, S-25547	EACH	1.000
9000-2720	REPAIR TYPE 72, REPLACE NAVIGATION LIGHT POWER CHORD STRAIN RELIEF GRIP, S-25547	EACH	1.000
4956-0101	LOOP SENSOR	LF	145.000

Partial Items

Item	Description	Unit of Measure	Quantity
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000

9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
0608-0001	MOBILIZATION	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	John F Mccaskie/PennDOT BP-000395	Submit	07/01/2009 09:48:23 AM
Awaiting Acknowledgement	Leanne Pomponio/ PennDOT BP-002621	Acknowledge	07/01/2009 11:07:57 AM
Acknowledged	John F Mccaskie/PennDOT BP-000395	Submit	07/03/2009 10:26:40 AM
PennDOT Review	Kireston N Jackson/ PennDOT	Conditionally Approve	07/06/2009 10:01:08 AM

Callahan Paving Products, Inc.

Prime

Contact: John McCaskie
Phone: 724-335-6000
DBE: 5%

Status: Approved
Revision Number:

DBE

Business Partner: Callahan Paving Products, Inc.
Type: DBE
Contact: Terry Callahan
Phone: 215-443-5040
DBE JVT%:
Certification: 10452
Cert. Expiration: 07/31/2009

Agreement Amount: $463,990.80
% of Bid: 2.23
Mobilization: $0.00
Starting: 08/24/2009
Completion: 09/30/2010
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-9541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25554	LF	110.000
9000-9541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25554	LF	110.000
9000-9541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25554	LF	110.000
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9522	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25554	LF	39.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-9521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25554	LF	36.000
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000
9000-8521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25553	LF	76.000
9000-6055	CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	LS	1.000

9000-6055	CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	LS	1.000
9000-6055	CONSTRUCT REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	LS	1.000
9000-6005	DESIGN REPLACE EXPANSION JOINT WITH NEOPRENE STRIP SEAL DAM (3" MOVEMENT), S-29389	LS	1.000
9000-5551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	84.000
9000-5551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	84.000
9000-5551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	84.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-5521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25550	LF	39.000
9000-4541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25549	LF	84.000
9000-4541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25549	LF	84.000
9000-4541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25549	LF	84.000
9000-4530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH DRAIN TROUGH AND DOWNSPOUT, S-25549	LF	36.000
9000-4530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH DRAIN TROUGH AND DOWNSPOUT, S-25549	LF	36.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-4521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25549	LF	47.000
9000-3552	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25548	LF	43.000
9000-3552	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25548	LF	43.000
9000-3552	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (5" MOVEMENT), S-25548	LF	43.000
9000-3551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	36.000
9000-3551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	36.000
9000-3551	REPAIR TYPE 55, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	36.000
9000-3541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25548	LF	45.000
9000-3541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25548	LF	45.000
9000-3541	REPAIR TYPE 54, REPLACE NEOPRENE COMPRESSION SEAL WITH NEOPRENE STRIP SEAL DAM, S-25548	LF	45.000
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000

9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000
9000-3521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25548	LF	43.000
9000-2530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH TROUGH AND DOWNSPOUT, S-25547	LF	68.000
9000-2530	REPAIR TYPE 53, REPLACE EXPANSION DAM WITH TOOTH DAM WITH TROUGH AND DOWNSPOUT, S-25547	LF	68.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
9000-2521	REPAIR TYPE 52, REPLACE EXPANSION DAM WITH NEOPRENE STRIP SEAL DAM (4" MOVEMENT), S-25547	LF	38.000
8260-0012	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29282	LS	1.000
8260-0012	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29282	LS	1.000
8260-0011	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29281	LS	1.000
8260-0011	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29281	LS	1.000
8260-0010	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29280	LS	1.000
8260-0010	CONSTRUCTION OF REHABILITATION OF BRIDGE STRUCTURE, S-29280	LS	1.000
4505-0001	BRIDGE APPROACH SLAB	SY	640.000
4505-0001	BRIDGE APPROACH SLAB	SY	640.000
0516-2008	NEW PAVEMENT JOINT	LF	134.000
0516-2008	NEW PAVEMENT JOINT	LF	134.000
0516-2007	PATCHING JOINT	LF	877.000
0516-2007	PATCHING JOINT	LF	877.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	John F Mccaskie/PennDOT BP-000395	Submit	07/02/2009 05:50:54 PM
Awaiting Acknowledgement	Cindy Bradley/PennDOT BP-000822	Acknowledge	07/02/2009 07:40:36 PM
Acknowledged	John F Mccaskie/PennDOT BP-000395	Submit	07/03/2009 10:26:40 AM
PennDOT Review	Kireston N Jackson/ PennDOT	Approve	07/06/2009 09:53:07 AM

Mike Latimore d/b/a Latimore Trucking & Supply Co

Prime

Contact: John McCaskie
Phone: 724-335-6000
DBE: 5%
Status: Approved
Revision Number:

DBE

Business Partner: Mike Latimore d/b/a Latimore Trucking & Supply Co
Type: DBE
Contact: Donna Clay
Phone: 724-251-0120
DBE JVT%:
Certification: 11813
Cert. Expiration: 03/31/2010

Agreement Amount: $47,400.00
% of Bid: 0.23
Mobilization: $0.00
Starting: 03/15/2010
Completion: 09/30/2010
Business Type: Trucking

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
0203-0001	CLASS 1 EXCAVATION	CY	2,275.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	John F Mccaskie/PennDOT BP-000395	Submit	07/02/2009 05:52:31 PM
Awaiting Acknowledgement	Michael D Latimore/ PennDOT BP-001127	Acknowledge	07/03/2009 08:54:03 AM
Acknowledged	John F Mccaskie/PennDOT BP-000395	Submit	07/03/2009 10:26:40 AM
PennDOT Review	Kireston N Jackson/ PennDOT	Approve	07/06/2009 10:10:30 AM

Raudenbush Engineering, Inc.

Prime

Contact: John McCaskie
Phone: 724-335-6000
DBE: 5%
Status: Approved
Revision Number:

DBE

Business Partner: Raudenbush Engineering, Inc.
Type: DBE
Contact: David Whitlatch
Phone: 412-788-6789
DBE JVT%:
Certification: 10884
Cert. Expiration: 02/28/2009

Agreement Amount: $56,200.00
% of Bid: 0.27
Mobilization: $0.00
Starting: 08/17/2009
Completion: 07/30/2010
Business Type: Consultant

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6001	DESIGN ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	John F Mccaskie/PennDOT BP-000395	Submit	07/01/2009 08:49:47 AM
Awaiting Acknowledgement	Lodovico C Innocenti/ PennDOT BP-000380	Acknowledge	07/02/2009 03:09:48 PM
Acknowledged	John F Mccaskie/PennDOT BP-000395	Submit	07/03/2009 10:26:40 AM
PennDOT Review	Kireston N Jackson/ PennDOT	Approve	07/06/2009 10:10:42 AM

Strongstown's B & K Enterprises, Inc.

Prime

Contact: John McCaskie
Phone: 724-335-6000
DBE: 5%

Status: Approved
Revision Number:

DBE

Business Partner: Strongstown's B & K Enterprises, Inc.
Type: DBE
Contact: Joe Siwiak
Phone: 814-749-9100
DBE JVT%:
Certification: 10446
Cert. Expiration: 11/30/2009

Agreement Amount: $363,750.00
% of Bid: 1.75
Mobilization: $0.00
Starting: 08/24/2009
Completion: 10/06/2010
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
9619-0610	PERMANENT IMPACT ATTENUATOR DEVICE, TYPE V (STANDARD), TEST LEVEL 3, SPECIAL	EACH	1.000
9619-0001	RESET PERMANENT IMPACT ATTENUATING DEVICE	EACH	1.000
4937-0211	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (W/B)	EACH	94.000
4937-0210	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/B)	EACH	86.000
4931-0001	POST MOUNTED SIGNS, TYPE B	SF	223.000
0937-0333	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, YELLOW POST WITH YELLOW/BLANK SHEETING	EACH	35.000
0937-0331	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/RED SHEETING	EACH	8.000
0937-0330	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/BLANK SHEETING	EACH	48.000
0937-0301	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-1, YELLOW POST WITH YELLOW SHEETING	EACH	20.000
0937-0300	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-1, WHITE POST WITH WHITE SHEETING	EACH	20.000
0937-0215	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/R)	EACH	13.000
0937-0212	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/Y)	EACH	73.000
0937-0211	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (W/B)	EACH	170.000
0937-0210	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/B)	EACH	200.000
0937-0208	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (W/B)	EACH	50.000
0937-0207	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (Y/B)	EACH	200.000
0937-0201	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (W/B)	EACH	214.000
0937-0200	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (Y/B)	EACH	219.000
0936-0001	STRUCTURE MOUNTED EXTRUDED ALUMINUM CHANNEL SIGNS	SF	1,402.000
0935-0001	POST MOUNTED SIGNS, TYPE F	SF	113.000
0934-0002	POST MOUNTED SIGNS, TYPE E	SF	164.000
0933-0001	POST MOUNTED SIGNS, TYPE D	SF	57.000
0932-0001	POST MOUNTED SIGNS, TYPE C	SF	217.000

0930-0110	BREAKAWAY SYSTEM	EACH	2.000
0930-0101	STEEL S OR W BEAM POSTS	LB	311.000
0930-0004	POST MOUNTED SIGNS, TYPE A	SF	110.000

Partial Items

Item	Description	Unit of Measure	Quantity
9901-0066	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, S-29389	LS	1.000
9901-0033	CONSTRUCT MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN, SR 0065-A38	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	John F Mccaskie/PennDOT BP-000395	Submit	07/01/2009 10:08:06 AM
Awaiting Acknowledgement	Joseph Siwiak/PennDOT BP-001342	Acknowledge	07/01/2009 11:09:12 AM
Acknowledged	John F Mccaskie/PennDOT BP-000395	Submit	07/03/2009 10:26:40 AM
PennDOT Review	Kireston N Jackson/ PennDOT	Approve	07/06/2009 09:53:31 AM

Plans

Plans	Addendum
Roadway Plan - SR 0065	
Supplemental Plans	
Cross Section - Conceptual	
Existing Structure Plan	
Existing Structure Plan	
Other/Project-Specific Plan - Existing Highway Lighting	2
Other/Project-Specific Plan - Conceptual Signing Plan	
Other/Project-Specific Plan - Conceptual Pavement Marking Plan	
Other/Project-Specific Plan - Pavemant Marking Plan	
Structure Plan - S-29389	2
Structure Plan - S-29389	1
Structure Plan - Conceptual TS&L S-29280	
Structure Plan - Conceptual TS&L S-29281	
Structure Plan - Conceptual TS&L S-29282	
Structure Plan - S-25547	
Structure Plan - S-25548	
Structure Plan - S-25549	
Structure Plan - S-25550	
Structure Plan - S-25553	
Structure Plan - S-25554	
Structure Plan - S-29389	
Traffic Control Plan - SR 0079	

Attachments

Project-Specific Checklist Items	Addendum
Project Specific - Traffic Statistics for Pavement Design	2
Project Specific - Railroad Requirements and Permits	
Project Specific - CBR Values and Core Boring Data for SR 0065, A38	
Project Specific - Certificate of Non-Affiliation - a.k.a. Exhibit 1	
Project Specific - Containment Requirements - Table 1	
Project Specific - Abrasive Blasting Project Notice and Permit Application - Parts A & B (5 Sheets)	
Project Specific - NEPCOAT - Qualified Products - List B (2 Sheets)	
Project Specific - Preliminary Type, Size and Location Report for Ramp T over Ramp A2	
Project Specific - Preliminary Type, Size and Location Report for Ramp A2 under Ramp B2 and SR 0065	
Project Specific - Preliminary Type, Size and Location Report for SR 0065 NB and Ramp A1 over SR 4033	
Project Specific - PENNDOT Waste/Borrow Area (22 Sheets)	
Project Specific - Steel Escalation Option Form	
Project Specific - Design Exception Report	
Project Specific - Guide Rail to Parapet Retrofit Draft Standards	
Project Specific - Pedestrian Study	
Reviews	
None	
Contract Award Items	
Disclosure of Lobbying Activities - a.k.a. Standard Form LLL	
Federal Wage Rate - Modification No. 27	2
Local Agreements and Coordination	
None	
Environmental Clearances	
None	
Permits	
ACOE Permit	2
Environmental Due Diligence (EDD) - Contractor	
Environmental Due Diligence (EDD) - PennDOT	
US Coast Guard Navigation Permit Coordination - Authorization for no permit required	
Right of Way	
None	
Survey	
None	
Utilities Clearance	
None	
Utility Engineering	

None

Construction Items

Pre-Bid Construction Schedule

Structures and Geotechnical

Structure Policy Letter

Railroad Coordination

D4279A Railroad Crossing Data for Contractor - NS	3
D4279A Railroad Crossing Data for Contractor - CSXT	3

Railroad Property Access Permit

Traffic

None

Construction Coordination

None

Maintenance Items

None

Estimates

None

Comments: