

ECMS Highway Construction

Contract: 74302

Gulisek Construction LLC XX-XXXXXXX

Mt. Pleasant

724-696-3341 (phone)

724-696-4952 (fax)

lynn.tiernan@gulisek.com

Prime Business Partner

IndianaCounty

SR 3035, Section 451

South Two Lick Bridge

Location

X104-283-L1CE

Federal Project

P-70303507451-1040-362-1

WBS Element

October 4, 2012

Bid Opening

TABLE OF CONTENTS

Contract..... 4

Addenda 8

 Addendum: 1 8

Bid Items 9

Special Provisions 12

 G2A - a00002 PUBLIC BID OPENING LOCATION 12

 G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS 12

 G113B - a00113 CONTRACT PROVISIONS - RIGHT-TO-KNOW LAW 13

 G311A - a00311 ROAD USER LIQUIDATED DAMAGES (RULD)..... 14

 G1601A - a01601 E.E.O. COVERED AREA..... 15

 G1901A - a01901 INSURANCE--GENERAL APPLICATION 15

 G2201A - a02201 RAILROAD COMPANY CONTACT PERSON..... 16

 G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC 16

 G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS 17

 G4301D - a04301 UTILITIES--THE REQUIREMENT TO LIST INFORMATION 18

 G4802A - a04802 INDEX PRICE FOR DIESEL FUEL 22

 G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT 22

 G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS 22

 G7037D - a07037 CHANGES TO SPECIFICATIONS: SECTIONS 106, 108, 514, 515, 516, 676, AND 1107 27

 G7038B - a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938, 34

 N10401B - a10401 BRIDGE PARAPET 41

 S2011A - b02011 EMERALD ASH BORER QUARANTINE 42

 S6081C - b06081 SECTION 608 - MOBILIZATION..... 42

 S6092A - b06092-SECTION 609.2(g) MISCELLANEOUS MATERIALS 43

 00 - bCLASS AA CEMENT CONCRETE MODIFIED..... 43

 00 - bNOTICE TO CONTRACTOR 44

 00 - bSECTION 704 – CEMENT CONCRETE 44

 00 - bTEXTURIZING CONCRETE BRIDGE SURFACE WITH TRANSVERSE SAWED GROOVES . 44

 00 - c 9411-0484/9411-6450 WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE 45

 I3111B - c03111 ITEM 9311-0422 WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE, BASE COURSE, PG 64-22..... 49

 I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE..... 53

 P10191A - c10191 ITEM 9019-050 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES.(PENETRATING SEALERS) 55

 00 - c4461-0001 – Bituminous Prime Coat Modified..... 56

 00 - c4610-7002 – 6" PAVEMENT BASE DRAIN MODIFIED..... 57

 00 - c4630-0001 – PLAIN CEMENT CONCRETE CURB MODIFIED..... 57

00 - c5018-0001 - REMOVAL OF EXISTING BRIDGE MODIFIED 58

I30041D - c80041 8110-0001/8000-0001/8100-0001 ALTERNATE BRIDGE STRUCTURE 58

00 - c8110-0001 S-31269 PART B..... 64

00 - c8120-0001/8100-0001/8000-0001 - BRIDGE STRUCTURE, AS DESIGNED, S-31269 66

00 - c9000-0010 – REMOVE WOOD FENCE 68

00 - c9000-0011 – REPAIR OF ACCESS AND HAUL ROADS 68

00 - c9000-0020 – TEMPORARY CAUSEWAY 69

00 - c9000-0021 – WATER DIVERSION DEVICE 70

00 - c9000-0022 – TEMPORARY PUMP WATER BYPASS SYSTEM..... 70

00 - c9000-0023 – TEMPORARY PIPE 71

00 - c9000-0107 – RELOCATION OF GAS SERVICE LINE 72

00 - c9005-0500 – MANDATORY PRE-DRILLING FOR DRIVEN PILES AT ABUTMENTS..... 72

00 - c9601-0010 – 8" THERMOPLASTIC PIPE 73

Performance Bonds..... 74

Payment Bonds 78

Insurance..... 82

DBE Commitments 83

Plans 90

Attachments 91

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 Addendum is As follows:

Addendum No. 1, **A1,** dated 10/01/2012

THIS AGREEMENT, Made this *19* day of *October* A.D. *2012*, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *Gulisek Construction LLC* 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 *\$2,247,174.14* and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with Publication 408/2011-IE - 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:For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.
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 10/09/2013. 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: 74302

Certified Fund Available Under Activity Program: 362

Symbol:	010-008-26185-12/13-2
Amount:	\$2,247,174.14

Contract Workflow Status

Status	Name	Disposition	Date/Time
Draft	Becki G Mescher-Vuxta/ PennDOT	Award	10/11/2012 04:42:34 PM
Contractor Review	Clayton J Stahl/PennDOT BP-004853	Sign	10/16/2012 02:50:20 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/17/2012 08:48:31 AM
BOD Director Review	R. Wayne Willey/PennDOT	Sign	10/18/2012 07:01:43 AM
Chief Counsel Preliminary Review	Jeffrey M Spotts/PennDOT	Accept	10/18/2012 03:14:18 PM
Chief Counsel Final Review	Jeffrey M Spotts/PennDOT	Accept	10/18/2012 03:14:30 PM
Comptroller Review	Matthew P Eng/PennDOT	Accept	10/19/2012 07:44:39 AM
CMD Execute	Delores A Ritzman/PennDOT	Submit	10/19/2012 09:30:31 AM

Addenda

Addendum: 1

Description:

The description and location of the project is as follows:For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.

Estimated Project: \$2,521,780.80
Federal Project Status: PENNDOT Oversight Non-NHS
DBE: 6.00%
Structure Work: 70.00%
Wage Rates: Yes
Project Type: Standard
State Type of Work: BRIDGE REPLACEMENT
Prequalification Required: Yes
Pre-Bid Meeting: None
Scheduled Let: 10/04/2012 11:00:00 AM
New Let:
Let Date Move:
Anticipated NTP: 11/19/2012
Required Completion: 10/09/2013

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: 0601-7313 Added "AND" items to Eithier/Or items, 9000-0011

Special Provision

Removed the following special provision:
G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107
Revised the following special provision:
G311A - a00311 ROAD USER LIQUIDATED DAMAGES (RULD)

Other

Attached 1952 rehab plans.
The successful bidder will be given revised sheets.

Bid Items

Item	Description	Quantity	Unit Price	Item Total	Addendum
0201-0001	CLEARING AND GRUBBING	1.000	\$7,000.00	\$7,000.00	
0203-0001	CLASS 1 EXCAVATION	2,276.000	\$15.00	\$34,140.00	
0204-0001	CLASS 2 EXCAVATION	84.000	\$21.00	\$1,764.00	
0204-0150	CLASS 4 EXCAVATION	198.000	\$20.00	\$3,960.00	
0205-0281	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 1	627.000	\$37.50	\$23,512.50	
0205-0363	SELECTED BORROW EXCAVATION ROCK, CLASS R-3	192.000	\$28.75	\$5,520.00	
0205-0367	SELECTED BORROW EXCAVATION ROCK, CLASS R-7	80.000	\$36.75	\$2,940.00	
0205-0368	SELECTED BORROW EXCAVATION ROCK, CLASS R-8	1,915.000	\$35.50	\$67,982.50	
0212-0001	GEOTEXTILE, CLASS 1	1,008.000	\$1.15	\$1,159.20	
0212-0002	GEOTEXTILE, CLASS 2, TYPE A	41.000	\$1.65	\$67.65	
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	1,849.000	\$2.25	\$4,160.25	
0212-0016	GEOTEXTILE, CLASS 4, TYPE C	940.000	\$2.50	\$2,350.00	
0309-0422	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH	1,943.000	\$20.00	\$38,860.00	
0350-0106	SUBBASE 6" DEPTH (NO. 2A)	2,178.000	\$10.50	\$22,869.00	
0409-0484	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-M	1,954.000	\$8.95	\$17,488.30	
0409-6450	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	1,943.000	\$13.10	\$25,453.30	
0460-0001	BITUMINOUS TACK COAT	3,886.000	\$0.26	\$1,010.36	
4461-0001	BITUMINOUS PRIME COAT (MODIFIED)	271.000	\$3.10	\$840.10	
0601-7313	18" REINFORCED CONCRETE PIPE, TYPE B, 15' - 1.5' FILL	37.000	\$90.00	\$3,330.00	
0601-7313	18" REINFORCED CONCRETE PIPE, TYPE B, 15' - 1.5' FILL	133.000	\$90.00	\$11,970.00	1
0601-7327	24" REINFORCED CONCRETE PIPE, TYPE B, 15' - 2' FILL	61.000	\$95.70	\$5,837.70	
0605-2600	TYPE D ENDWALL	1.000	\$2,050.00	\$2,050.00	
0605-2711	TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	2.000	\$900.00	\$1,800.00	
0605-2731	TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	2.000	\$900.00	\$1,800.00	
0605-2740	TYPE S CONCRETE TOP UNIT AND GRATE	1.000	\$900.00	\$900.00	
0605-2750	TYPE D-H CONCRETE TOP UNIT AND GRATES	1.000	\$1,990.00	\$1,990.00	
0605-2850	STANDARD INLET BOX, HEIGHT < /= 10'	4.000	\$2,500.00	\$10,000.00	
0605-2882	TYPE D-H INLET BOX, HEIGHT < /= 10'	1.000	\$4,350.00	\$4,350.00	
0608-0001	MOBILIZATION	1.000	\$68,000.00	\$68,000.00	
0609-0003	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE B	1.000	\$15,000.00	\$15,000.00	
0609-0009	EQUIPMENT PACKAGE	1.000	\$3,500.00	\$3,500.00	
0610-7002	6" PAVEMENT BASE DRAIN	926.000	\$12.75	\$11,806.50	
4610-7002	6" PAVEMENT BASE DRAIN (MODIFIED)	82.000	\$18.50	\$1,517.00	
0612-0001	SUBGRADE DRAINS	88.000	\$31.50	\$2,772.00	
0615-0022	6" SUBSURFACE DRAIN OUTLETS	12.000	\$31.00	\$372.00	
0615-0040	SUBSURFACE DRAIN OUTLET ENDWALL	1.000	\$400.00	\$400.00	
0615-0066	66" RED SUBSURFACE DRAIN OUTLET MARKER	1.000	\$41.00	\$41.00	
0616-1202	CONCRETE END SECTIONS FOR 18" PIPE	1.000	\$1,250.00	\$1,250.00	1
0618-0001	CONCRETE COLLAR FOR PIPE EXTENSION	1.000	\$300.00	\$300.00	
0619-0051	ANCHORED BACKSLOPE TERMINAL, TYPE 1	1.000	\$666.25	\$666.25	

ECMS Highway Construction Contract 74302

0619-0470	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3 (ENERGY ABSORBING TERMINALS, TANGENT)	4.000	\$1,947.50	\$7,790.00	
0620-0010	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITHOUT INLET PLACEMENT	4.000	\$1,742.50	\$6,970.00	
0620-0015	THRIE-BEAM TO VERTICAL WALL BRIDGE BARRIER TRANSITION	4.000	\$2,152.50	\$8,610.00	
0620-0400	TERMINAL SECTION, SINGLE	2.000	\$51.25	\$102.50	
0620-0503	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)	838.000	\$2.05	\$1,717.90	
0620-1075	TYPE 2-S GUIDE RAIL	763.000	\$14.90	\$11,368.70	
0620-1100	TYPE 2-SC GUIDE RAIL	50.000	\$25.15	\$1,257.50	
4630-0001	PLAIN CEMENT CONCRETE CURB (MODIFIED)	119.000	\$63.00	\$7,497.00	
0677-0001	SELECTED MATERIAL SURFACING	169.000	\$45.00	\$7,605.00	
0686-0030	CONSTRUCTION SURVEYING, TYPE B, MODIFIED	1.000	\$3,750.00	\$3,750.00	
0686-0050	CONSTRUCTION SURVEYING, TYPE D	1.000	\$9,000.00	\$9,000.00	
0689-0003	CPM SCHEDULE	1.000	\$250.00	\$250.00	
0703-0020	NO. 1 COARSE AGGREGATE	150.000	\$44.00	\$6,600.00	
0703-0025	NO. 57 COARSE AGGREGATE	2.000	\$235.00	\$470.00	
0804-0013	SEEDING AND SOIL SUPPLEMENTS - FORMULA D	60.000	\$38.95	\$2,337.00	
0804-0014	SEEDING - FORMULA E	21.000	\$29.25	\$614.25	
0804-0020	SEEDING AND SOIL SUPPLEMENTS - FORMULA L	18.000	\$38.95	\$701.10	
0805-0021	MULCHING - HAY	3.000	\$307.50	\$922.50	
0805-0022	MULCHING - STRAW	1.000	\$307.50	\$307.50	
0805-0030	MULCHING - BONDED FIBER MATRIX	663.000	\$1.05	\$696.15	
0805-0050	MULCH CONTROL NETTING	2,178.000	\$0.80	\$1,742.40	
0806-0050	EROSION CONTROL MAT	1,086.000	\$1.55	\$1,683.30	
0806-0051	EROSION CONTROL MULCH BLANKET	356.000	\$1.55	\$551.80	
0845-0001	UNFORESEEN WATER POLLUTION CONTROL	1,000.000	\$1.00	\$1,000.00	
0850-0032	ROCK, CLASS R-4	15.000	\$55.00	\$825.00	
0855-0003	PUMPED WATER FILTER BAG	2.000	\$1,250.00	\$2,500.00	
0860-0002	INLET FILTER BAG FOR TYPE C INLET	2.000	\$135.00	\$270.00	
0865-0001	SILT BARRIER FENCE, 18" HEIGHT	350.000	\$5.25	\$1,837.50	
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	1.000	\$13,750.00	\$13,750.00	
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	20.000	\$1.50	\$30.00	
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	400.000	\$8.71	\$3,484.00	
0931-0001	POST MOUNTED SIGNS, TYPE B	89.000	\$41.00	\$3,649.00	
0935-0001	POST MOUNTED SIGNS, TYPE F	10.000	\$25.88	\$258.80	
0937-0104	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/B)	7.000	\$16.40	\$114.80	
0937-0106	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/B)	14.000	\$16.40	\$229.60	
0937-0112	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (Y/B)	7.000	\$10.25	\$71.75	
0937-0113	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (W/B)	14.000	\$10.25	\$143.50	
0937-0202	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE O, (Y/B)	6.000	\$16.40	\$98.40	
0937-0203	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE O, (W/B)	6.000	\$16.40	\$98.40	
0937-0210	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (Y/B)	2.000	\$30.75	\$61.50	
0937-0211	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE S, (W/B)	6.000	\$30.75	\$184.50	
0962-1000	4" WHITE WATERBORNE PAVEMENT MARKINGS	1,790.000	\$0.40	\$716.00	
0962-1005	4" YELLOW WATERBORNE PAVEMENT MARKINGS	1,790.000	\$0.40	\$716.00	
1002-0053	REINFORCEMENT BARS, EPOXY COATED	131,404.000	\$1.50	\$197,106.00	
1005-1106	STEEL BEAM BEARING PILES, HP14X89	300.000	\$127.00	\$38,100.00	
1005-1156	STEEL BEAM PILE TIP REINFORCEMENT, HP14X89	24.000	\$108.00	\$2,592.00	
5018-0001	REMOVAL OF EXISTING BRIDGE (MODIFIED)	1.000	\$135,000.00	\$135,000.00	
8120-0001	BRIDGE STRUCTURE, AS-DESIGNED, S-31269	1.000	\$1,141,709.18	\$1,141,709.18	
9000-0010	REMOVE WOOD FENCE	120.000	\$9.00	\$1,080.00	
9000-0011	REPAIR OF ACCESS AND HAUL ROADS	10,000.000	\$1.00	\$10,000.00	1
9000-0020	TEMPORARY CAUSEWAY	1.000	\$112,500.00	\$112,500.00	

ECMS Highway Construction Contract 74302

9000-0021	WATER DIVERSION DEVICE	182.000	\$52.00	\$9,464.00
9000-0022	TEMPORARY PUMP WATER BYPASS SYSTEM	1.000	\$2,900.00	\$2,900.00
9000-0023	TEMPORARY PIPE	32.000	\$60.00	\$1,920.00
9000-0107	RELOCATION OF GAS SERVICE LINE	1.000	\$9,000.00	\$9,000.00
9005-0500	MANDATORY PREDRILLING FOR DRIVEN PILES AT ABUTMENTS	308.000	\$195.00	\$60,060.00
9601-0010	8" THERMOPLASTIC PIPE	27.000	\$90.00	\$2,430.00

Contract Total: \$2,247,174.14

Bid Total: \$2,247,174.14

Special Provisions

G2A - a00002 PUBLIC BID OPENING LOCATION

Addendum:

Associated Item(s):

Header:

PUBLIC BID OPENING LOCATION

Provision Body:

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

G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Addendum:

Associated Item(s):

Header:

GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Provision Body:

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

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

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

(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

(fill in)% (fill in)%

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

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

(X) DSP7. Disadvantaged Business Enterprise Requirements. This is used on Federal - aid projects only. In conjunction with this contract a goal of 6% of the original contract amount has been established.

(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.

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

Addendum:

Associated Item(s):

Header:

CONTRACT PROVISIONS - RIGHT TO KNOW LAW

Provision Body:

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

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

b. If the Department needs assistance in any matter arising out of the RTKL related to this Contract, the Department will notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Department.

c. Upon written notification from the Department that it requires assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor will:

1. Provide the Department, within 10 calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Department reasonably believes is Requested Information and may be a public record under the RTKL; and

2. Provide such other assistance as the Department may reasonably request, in order to comply with the RTKL with respect to this Contract.

d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, notify the Department and provide, within 7 calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

e. The Department will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Department determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Department determine that the Requested Information is clearly not exempt from disclosure, provide the Requested Information within 7 calendar days of receipt of written notification of the Department's determination.

- f. Failing to provide the Requested Information within the time period required by these provisions, indemnify and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of this failure, including any statutory damages assessed against the Department.
- g. The Department will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.
- h. The Contractor may file a legal challenge to any Department decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, indemnify the Department for any legal expenses incurred by the Department as a result of such a challenge and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of the failure, including any statutory damages assessed against the Department, regardless of the outcome of such legal challenge. As between the parties, agree to waive all rights or remedies that may be available as a result of the Department's disclosure of Requested information pursuant to the RTKL.
- i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and continue as long as the Requested Information remains in the Contractor's possession.

G311A - a00311 ROAD USER LIQUIDATED DAMAGES (RULD)

Addendum: 1

Associated Item(s):

Header:
ROAD USER LIQUIDATED DAMAGES (RULD)

Provision Body:

Road User Liquidated Damages (RULDs) will be assessed as specified in Section 108.07(b) and as follows:

Unrestricted traffic is defined as opening the roadway/structure full width including shoulders and ramps as approved by the Representative with no further need for traffic restrictive devices.

24 hours in advance of the completion of portions of the work which control the assessment of liquidated damages, notify the Representative so that a mutual inspection can be performed. If the Representative determines that the work is completed satisfactorily, the travel lanes will be opened to unrestricted traffic and no further liquidated damages will be assessed for that portion of work.

Damage charges as outlined below will be assessed independent of and concurrent with, as appropriate, Construction Engineering Liquidated Damages (CELD) as specified in Section 108.07(a).

RULDs as specified will be deducted from money due or to become due.

Detour

RULDs in the amount of \$6500/Day will be assessed for each day/or portion of day that the detour Phase 2 for SR 3035 is not removed and traffic is open to unrestricted traffic in all lanes ~~158~~ 177 calendar days from the date detour Phase 1 was implemented.

G1601A - a01601 E.E.O. COVERED AREA

Addendum:

Associated Item(s):

Header:
E.E.O. COVERED AREA

Provision Body:

For the purpose set forth in the Executive Order 11246
the covered area for this contract is Indiana County,
which is within the Economic Area of Pittsburgh.
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:
Buffalo & Pittsburgh Railroad, Inc.
201 North Penn Street, PO Box 477
Punxsutawney, PA 15767
814-726-3552
William V. Gentilman, Property Manager

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":

Michael Yaros, Roadmaster

Buffalo & Pittsburgh Railroad, Inc.

201 North Penn Street, PO Box 477

Punxsutawney, PA 15767

814-726-3552

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.

G4301D - a04301 UTILITIES--THE REQUIREMENT TO LIST INFORMATION

Addendum:

Associated Item(s):

Header:

UTILITIES--THE REQUIREMENT TO LIST INFORMATION

Provision Body:

I. Cooperate with the public utility companies and local authorities in the placement, replacement, relocation, adjustment, or reconstruction of their structures and facilities during construction. Contact all utility representatives at least 15 calendar days before starting operations.	
PRIOR	Anticipated completion before the Notice to Proceed is issued. Use actual or anticipated completion date shown.
RESTRICTIVE	To be completed by the utility or string of utilities before operating without restriction. Number of calendar days will start from the actual notice to proceed that is issued to the contractor.
CONCURRENT	Simultaneous with, but not restricting, operations. Number of calendar days required.
COORDINATED	Phasing with specific construction operations. Number of calendar days required after completion of specific construction operations.
NOT AFFECTED	Identifies utility with facilities in the construction area not anticipated to be affected. Specific information may be provided by the utility.

INCORPORATED

Utility relocation work to be incorporated into the prime highway construction contract.

CONDITIONAL RESTRICTIONS AND TIME REQUIREMENTS Identify conditions affecting the utility's ability to perform a certain type of utility relocation work, i. e., certain times of the day, week, or year that a facility cannot be shut down, acquisition of Right-of-Way by the state, or demolition of buildings.

VERIZON

Contact: Mr. Michael Fowkes – Telephone No. 724.838.5805.

Construction Contact: Mr. John Rause – Telephone No. 412.832.3221.

NOT AFFECTED:

- (Aerial) S.R. 3035 Station 183+47, 30' RT. Existing pole# BTCO 5142/109 to remain.
- (Aerial) S.R. 3035 Station 185+00, 38' RT. Existing pole# BTCO 5142/110 to remain.
- (Aerial) S.R. 3035 Station 187+33, 45' RT. Existing pole# BTCO 5142/111 to remain.
- (Aerial) S.R. 3035 Station 189+07, 33' RT. Existing pole# BTCO 5142/112 to remain.
- (Aerial) S.R. 3035 Station 190+82, 28' RT. Existing pole# BTCO 5142/113 to remain.
- (Aerial) S.R. 3035 Station 204+79, 39' LT. Existing pole# BTCO 5142/62 to remain.
- (Aerial) S.R. 3035 Station 206+10, 18' LT. Existing pole# BTCO 5142/61 to remain.
- (Aerial) S.R. 3035 Station 206+75 to 207+05, 12' LT. Existing cable attached to railroad bridge to remain.
- (Aerial) S.R. 3035 Station 208+00, 20' LT. Existing pole# BTCO 5142/60 to remain.
- (Aerial) S.R. 3035 Station 209+48, 22' LT. Existing pole# BTCO 5142/59 to remain.

PENELEC

Contact: Mr. Edward J. Olshefski, Jr. – Telephone No. 814.269.6636.

Construction Contact: Mr. Jim Bath – Telephone No. 724.463.4903.

NOT AFFECTED:

- (Aerial) S.R. 3035 Station 183+47, 30' RT. Existing pole# 11739-X to remain.
- (Aerial) S.R. 3035 Station 185+00, 38' RT. Existing pole# 11738-X to remain.
- (Aerial) S.R. 3035 Station 187+34, 26' RT. Existing pole# 15138-X to remain.
- (Aerial) S.R. 3035 Station 187+76, 59' LT. Existing pole# 10421-X to remain.
- (Aerial) S.R. 3035 Station 188+04 to 188+45, LT./RT. Existing overhead transmission lines crossing road to remain.
- (Aerial) S.R. 3035 Station 189+07, 33' RT. Existing pole# 9556-X to remain.

(Aerial) S.R. 3035 Station 210+21, 26' RT. Existing pole# 11596-X to remain.

SALSGIVER INTERNET AND TELECOMMUNICATIONS

Contact: Mr. Adam C. Nulph – Telephone No. 724.295.1970.

NOT AFFECTED:

(Aerial) S.R. 3035 Station 182+50 to 192+00, RT. Existing aerial cable as a tenant on Verizon-owned poles to remain.

(Aerial) S.R. 3035 Station 204+50 to 210+50, RT. Existing aerial cable as a tenant on Verizon-owned poles to remain.

COMCAST

Contact: Mr. Doug Olszewski – Telephone No. 724.459.56600.

NOT AFFECTED:

(Aerial) S.R. 3035 Station 182+50 to 192+00, RT. Existing aerial cable as a tenant on Verizon-owned poles to remain.

PEOPLES NATURAL GAS:

Contact: Mr. Dave Hilty – Telephone No. 412.208.7205.

NOT AFFECTED:

(U/G) S.R. 3035 Station 182+50 to 183+15, 20' LT. Existing gas line to remain.

(U/G) S.R. 3035 Station 188+05 to 192+00, 20' LT. Existing gas line to remain.

(U/G) S.R. 3035 Station 204+50 to 210+50, varies 26' to 70' LT. Existing gas line to remain.

COORDINATED:

(U/G) S.R. 3035 Station 183+15 to 187+25, 20' LT. Contractor to stake edge of right of way and clear and grub in regards to the proposed gas line. Utility to shut off existing 6" gas line prior to bridge demolition; build new gas line in new location under the creek. Twenty eight (28) calendar days required. **CONDITIONAL RESTRICTION** and **TIME REQUIREMENTS**: Gas line cannot be relocated until the asphalt plant is closed down for the season. Work will take place while plant is shut down in between November and March.

(U/G) S.R. 3035 Station 187+25 to 188+05, 20' LT. Contractor to place PA One Call prior to guide rail placement. Utility to locate exact location and depth of gas line to avoid conflict with guide rail posts (approx. 4' deep). Three (3) calendar days required.

PETROLEUM DEVELOPMENT CORPORATION:

Contact: Mr. Larry Fetterman – Telephone No. 724.349-9070.

CONCURRENT:

(U/G) S.R. 3035 Station 188+65, LT./RT. (crossing under roadway). Utility to locate exact location and depth of gas line to avoid conflict with guide rail posts (approx. 4' deep). Three (3) calendar days required. **CONDITIONAL RESTRICTIONS** and **TIME REQUIREMENTS**: Since this utility is a private company, they must be notified two (2) weeks prior to guiderail placement so line can be marked out. This company will not respond to the PA ONE Call.

CENTRAL INDIANA COUNTY WATER AUTHORITY (CICWA):

Contact: Mr. Rob Nymick – Telephone No. 724.479-8005.

NOT AFFECTED:

(U/G) S.R. 3035 Station 182+50 to 183+50, varies 16' to 18' RT. Existing water line to remain.

(U/G) S.R. 3035 Station 184+25 to 184+75, varies 23' to 27' RT. Existing water line to remain.

(U/G) S.R. 3035 Station 184+75 to 185+50, varies 27' to 34' RT. Existing water line to remain, but is located in close proximity to proposed excavation and bridge abutment work; Contractor to exercise caution to not disrupt water service and adjust rock construction as needed.

(U/G) S.R. 3035 Station 185+50 to 186+50, varies 34' to 47' RT. Existing concrete encased water line to remain.

(U/G) S.R. 3035 Station 186+50 to 187+50, varies 47' to 51' RT. Exact location of existing water line unknown, but conflict is not anticipated. Contractor shall exercise caution during excavation.

CONDITIONAL RESTRICTION and TIME REQUIREMENTS: In event of conflict, CICWA

will make necessary field adjustments to water line. Fourteen (14) calendar days will be required.

(U/G) S.R. 3035 Station 187+50 to 189+05, varies 41' to 47' RT. Existing water line to remain.

CICWA (cont)

COORDINATED:

(U/G) S.R. 3035 Station 183+50 to 184+25, varies 18' to 23' RT. Contractor to place PA One Call prior to guide rail placement. Utility to locate exact location and depth of water line to avoid conflict with guide rail posts (approx. 4' deep). Three (3) calendar days required.

(U/G) S.R. 3035 Station 189+05, LT./RT. (crossing under roadway). Contractor to place PA One Call prior to guide rail placement. Utility to locate exact location and depth of water line to avoid conflict with guide rail posts (approx. 4' deep). Three (3) calendar days required.

PENNSYLVANIA AMERICAN WATER COMPANY (PAWC):

Contact: Mr. William J. Smith – Telephone No. 724.463-9830.

NOT AFFECTED:

(U/G) S.R. 3035 Station 204+50 to 205+60, 14' RT. Existing water line to remain.

(U/G) S.R. 3035 Station 205+60 to 207+25, varies 14' to 60' RT. Existing water line to remain.

(U/G) S.R. 3035 Station 208+10 to 210+50, 15' RT. Existing water line to remain.

RESTRICTIVE:

(U/G) S.R. 3035 Station 207+25 to 208+10, RT. Relocate water line to avoid conflict with proposed guide rail and lower roadway elevation. Note: PAWC should be aware that proposed roadway elevation will be lower than existing roadway elevation, so new water line will need to be low enough to have enough cover under proposed roadway. Ten (10) calendar days required.

CONDITIONAL RESTRICTIONS and TIME REQUIREMENTS: Anticipated completion date is March 1, 2013. Completion date is weather dependent.

COORDINATED:

(U/G) S.R. 3035 Station 205+60, LT./RT. (crossing under roadway). Contractor to place PA One Call prior to guide rail placement. Utility to locate exact location and depth of water line to avoid conflict with guide rail posts (approx. 4' deep). One (1) calendar day required.

G4802A - a04802 INDEX PRICE FOR DIESEL FUEL

Addendum:

Associated Item(s):

Header:

Index Price for Diesel Fuel

Provision Body:

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

G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT

Addendum:

Associated Item(s):

Header:

PRICE INDEX FOR ASPHALT CEMENT

Provision Body:

The price index for asphalt cement (PG 64-22), as determined by the Department is \$577.00/TON. Use this price index in accordance with Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS.

G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Addendum:

Associated Item(s):

Header:

PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Provision Body:

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

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

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

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

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

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

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

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

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

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

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

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

where:

P.R. = Price Rebate

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

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

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

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

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

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

where:

P.I. = Price Increase

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

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

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

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

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

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

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

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

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

where:

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

4.a.2. Type 2W Posts.

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

where:

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

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

4.a.3 Type 2S Posts.

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

where:

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

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

4.a.4 Rubbing Rail.

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

where:

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

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

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

where:

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

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

4.c.1 Steel H-Piles.

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

where:

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

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

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

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

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

where:

D = Diameter of the steel shell (inches)*

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

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

4.c.3 Pipe Piles.

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

where:

D = Diameter of the steel pipe (inches)*

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

* From the approved structure Plans or field measurements.

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

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

where:

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

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

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

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

where:

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

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

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

where:

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

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

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

- 5. Payment/Rebate.** The price adjustment will be paid, or rebated, upon approval of a contract adjustment to be prepared on a quarterly basis as applicable work is completed. Cumulative quarterly price adjustments amounting to less than \$1,000 will be disregarded.
- 6. Expiration of Contract Time.** When eligible materials are purchased after expiration of contract time and liquidated damages are chargeable, the value for SI used to compute the price adjustment will be either the index price for the month in which applicable steel material is invoiced or the index price at the time contract time expired, whichever is less.
- 7. Final Quantities.** Upon completion of the work and determination of final pay quantities, a final contract adjustment may be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for SI used in the price adjustment formula will be the average of all SI values previously used for computing price adjustments.
- 8. Inspection of Records.** The Department, through the Office of Inspector General, reserves the right to inspect the records of the prime contractor and its subcontractors and material fabricators and suppliers to ascertain actual invoicing dates and quantity information for the steel material used in the performance of applicable items of work.
- 9. Extra Work.** When applicable items of work, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of Section 110.03, no price adjustment will be made for fluctuations in the cost of the steel used in manufacturing the materials placed during performance of the extra work. The current price for steel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on a force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel.

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

Addendum:

Associated Item(s):

Header:

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

Provision Body:

SECTION 106—CONTROL OF MATERIAL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 108—PERFORMANCE AND PROGRESS

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

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

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

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

SECTION 514—DIAMOND GRINDING OF CONCRETE PAVEMENT

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

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

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

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

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

SECTION 515—SAWING AND SEALING OF BITUMINOUS OVERLAYS

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

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

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

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

Overlay Thickness	Reservoir
inches	inches
$\leq 1\frac{1}{2}$	1/2 deep by 1/2 wide
$> 1\frac{1}{2}$	1 deep by 1/2 wide

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

If wet sawing, immediately flush the reservoir with water.

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

SECTION 516—CONCRETE PAVEMENT PATCHING

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

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

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

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

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

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

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

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

(a) Cement Concrete—Class AA. Section 704

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

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

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

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

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

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

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

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

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

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

If it rains while the patch area is open, excavate an outlet through the shoulder at the lowest point of the patch as directed. Repair any damage to the existing shoulders as a result of this work, at no expense to the Department. After saw cutting the existing pavement, allow traffic on patch areas of existing pavement for a maximum of 72 hours. Do not allow saw cuts in excess of 1/2 inch in width to be opened to traffic.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Seal all saw-cuts extending beyond the patch limits.

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

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

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

SECTION 676—CEMENT CONCRETE SIDEWALKS

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

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

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

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

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

SECTION 1107—PRESTRESSED CONCRETE BRIDGE BEAMS

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

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

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

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

Addendum:

Associated Item(s):

Header:

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

Provision Body:

SECTION 101—ABBREVIATIONS AND DEFINITIONS OF TERMS

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

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

SECTION 103—AWARD AND EXECUTION OF CONTRACT

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

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

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

103.07 CANCELLATION OF CONTRACT—The contract may be canceled by either party if the Notice to Proceed is not issued on or before the Anticipated Notice to Proceed Date specified in the bid package or within 30 days of the Award of the contract, whichever is later. Extension(s) of the cancellation period will be made only by mutual written consent of the parties to the contract provided such written consent is given before the expiration of the cancellation period. Prices will not be renegotiated. The Secretary also reserves the right to cancel the contract any time before the actual Notice to Proceed Date. If the contract is canceled, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and

issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

SECTION 110—PAYMENT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sieve	Percent Passing
-------	-----------------

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

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

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

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

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

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

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

TABLE B

Mix Design Requirements for SMA Mixtures

AGGREGATE GRADATION REQUIREMENTS, PERCENT PASSING		
Sieve Size	9.5-mm Mixture	12.5-mm Mixture
19.0 mm (3/4 inch)	-	100
12.5 mm (1/2 inch)	100	90 – 99
9.5 mm (3/8 inch)	75 – 95	70 – 85
4.75 (No. 4)	30 – 50	28 – 40

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

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

(l) **Joints.** Section 409.3(k).

SECTION 695—DETECTABLE WARNING SURFACE

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

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

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

SECTION 930—POST MOUNTED SIGNS, TYPE A

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

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

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

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

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

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

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

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

SECTION 931—POST MOUNTED SIGNS, TYPE B

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

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

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

SECTION 932—POST MOUNTED SIGNS, TYPE C

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

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

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

SECTION 934—POST MOUNTED SIGNS, TYPE E

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

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

- Extruded Aluminum Channel Signs—Section 1103.02

- Treated Wood Posts—Section 1103.09(a)
 - Composite Posts—Section 1103.09(b)
 - Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, Rivets—Section 1103.11
 - Angles (Supports)—Section 1103.12(g)
 - Shim Bars and Plates (Supports)—Section 1105.02(a)2
- **SECTION 934.2(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.**Revise to read as follows:

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

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

SECTION 935—POST MOUNTED SIGNS, TYPE F

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

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

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

SECTION 938—DISTANCE MARKERS

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

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

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

SECTION 1012—PEDESTRIAN RAILING

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

(a)Railing.

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

- Other Aluminum Alloys—Section 1013.2(a)

Certify as specified in Section 106.03(b)3.

SECTION 1015—PROTECTIVE BARRIER

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

(a)Barrier.

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

Certify as specified in Section 106.03(b)3.

SECTION 1103—TRAFFIC SIGNING AND MARKING

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

1103.11MISCELLANEOUS MATERIALS—

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

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

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

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

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

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

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

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

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

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

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

- (h)**Butting Plates.**Fabricate from stainless steel, Type 304.
- (i)**Anchors.**Section 1105.02(c)2.From a manufacturer listed in Bulletin 15.
- (j) **Anti - Theft Sign Hardware.**

1.**System A.**

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

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

Furnish bolts having a mechanically deposited cadmium coating, ASTM B 696, or zinc, Type I coating as specified in Section 1105.02(s).
- **Nuts.** Square, pyramidal-shaped nuts with all four sides sloping at an angle of 41 degrees; 5/16-18 UNC threads; C-1010 cold-rolled steel, case hardened to Rockwell hardness of 55 to 60.

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

2.**System B.**

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

Provide 5/16-inch by 2 1/2-inch and 5/16-inch by 3-inch bolts with minimum 9/16-inch diameter one-way heads and threads to within 1 inch of head.
- **Nuts.** Section 1103.11(n) and as follows:

Provide nuts, Alloy 2011-T3, double-chamfered hexagon with self-locking conical shape 9/16-inch - 3/8-inch by 3/16-inch unit under the nut with 5/16-18 UNC threads. Hexagon portion should break away from self-locking unit with 5/16-18 UNC to 40 inch-pounds to 80 inch-pounds of torque.
- **Washers.** Nylon 1/8 inch thick by 1-inch minimum outside diameter with 480 inch-pounds maximum allowable applied torque.

- (k)**Banding.**Stainless steel, Type 201, 0.750 inch wide by 0.030 inch thick, with rounded edges for handling ease and safety. Buckles and other necessary hardware shall be of stainless steel, Type 304.
- (m)**Aluminum Bolts.**ASTM B 211/B 211M. Alloy 2024-T4, thread fit, ANSI Class 6g, and threads shall be within two threads of the head or a minimum of 1 3/4 inches.
- (n)**Aluminum Nuts.**ASTM B 211/B 211M. Alloy 2024-T6, thread fit, ANSI Class 6H (ANSI Class 2B, 18 UNC threads).

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.

S2011A - b02011 EMERALD ASH BORER QUARANTINE

Addendum:

Associated Item(s):

Header:

Emerald Ash Borer Quarantine

Provision Body:

This project contains regulated articles as defined by the Pennsylvania Department of Agriculture, Order of Quarantine that are located within the Pennsylvania Emerald Ash Borer (EAB) quarantine.

Regulated articles are:

- The EAB in any living stage of development;
- Ash trees of any size;
- Ash limbs, branches, stumps, and roots;
- Any cut, non-coniferous (hardwood) firewood;
- Non-coniferous (hardwood) bark and non-coniferous (hardwood) wood chips larger than 25.4 mm (1 inch) in two dimensions;
- Ash logs and lumber with either the bark or the outer 25.4 mm (1 inch) of sapwood, or both, attached;
- Any other article, product or means of conveyance determined by the Department to present a risk of spreading the EAB infestation.

Pennsylvania's EAB quarantine restricts the movement from the quarantined area of any regulated articles. Regulated articles are to remain onsite and within the quarantined areas at approved stockpile areas that will not interfere with construction operations, future maintenance operations, obstruct drainage, or cause water pollution, unless indicated otherwise.

This work will be considered incidental to other items of work.

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.One (1)
- b.One (1)

00 - bCLASS AA CEMENT CONCRETE MODIFIED

Addendum:

Associated Item(s):

Header:

CLASS AA CEMENT CONCRETE MODIFIED

Provision Body:

In accordance with Section 1001, Section 704 and as follows:

Section 704.1(b) Material. Revise as follows:

Coarse Aggregate, Type A, No. 8 for bridge and abutment barriers only.

Section 1001.2(a) Cement Concrete. Add the following paragraph:

Add synthetic fibers to Class AA cement concrete for barriers and curbs. Provide synthetic fibers complying with ASTM C1116, Type III. Use 100% virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement. Use a minimum of 1.5 pounds of fibers per cubic yard of cement concrete. Use fibers 3/4" in length. Provide a mix that is workable and one that does not contain fiber balls. Develop and submit the concrete mix design with fibers for Department review and approval at least 10 days prior to use.

00 - bNOTICE TO CONTRACTOR

Addendum:

Associated Item(s):

Header:

Provision Body:

The South Two Lick Creek Bridge detour cannot be installed until detour is removed underneath the Buffalo and Pittsburgh Railroad bridge (at Segment 110). The detours for the roadway underneath the Buffalo and Pittsburgh Railroad Bridge and South Two Lick Bridge cannot both be in place at the same time.

No detours are permitted to be in place from November 15 through March 15.

Coordination with Lindy Paving will be required throughout the construction to utilize their gated entry to access the Temporary Access Road. Areas of the Temporary Construction Easement (T.C.E) will be shared with Lindy Paving to insure continued and unobstructed operation of their facility. Contractor is to establish contact with Lindy Paving prior to accessing Temporary Construction Easement and performing any temporary construction within the T.C.E.

00 - bSECTION 704 – CEMENT CONCRETE

Addendum:

Associated Item(s):

Header:

Provision Body:

Section 704.1(b) MATERIAL. Revise as follows:

- o Cement – Section 701, except use Type II Portland Cement for Class A and Class AA in all piers, abutments and wingwalls below beam seat, and sleeper slabs.
- o Coarse Aggregate, Type A, No. 8 – Section 703.2 for barriers and curbs.

Table A Cement Concrete Criteria – Class A and AA Concrete; maximum Water Cement Ratio of 0.45 in all piers, abutments and wingwalls below beam seat, and sleeper slabs.

00 - bTEXTURIZING CONCRETE BRIDGE SURFACE WITH TRANSVERSE SAWED GROOVES

Addendum:

Associated Item(s):

Header:

Provision Body:

DESCRIPTION - This work is sawing transverse grooves in new concrete bridge deck surfaces, including new class AAA cement concrete bridge decks to provide a textured surface as indicated and directed.

CONSTRUCTION -

For class AAA cement concrete, do not begin grooving operations until directed by the Department Representative, the concrete has reached a compressive strength of 4000 psi as per PTM No. 604, and the grooving equipment live loads can be applied in accordance with Section 1001.3(q)2.2c.

Texturize the deck surface with uniformly pronounced grooves sawed perpendicular to the centerline. Saw the grooves approximately 0.125" wide with a tolerance of 0.015" and 0.188" deep with a tolerance of 0.062". Use a uniform groove pattern of 1.5" center-to-center spacing with a tolerance of +0.125".

Terminate grooves 18"+ from curb lines.

Do not saw grooves closer than 2" or further than 3" from the edge of any joint.

If areas of the deck surface exist where a single pass of the grooving machine cannot be made across the entire width of the deck surface then the mating ends of the subsequent passes must not overlap previous grooves nor leave more than 1" of surface un-grooved.

Remove and collect all debris (slurry, etc) resulting from the grooving operations in a continuous manner. Surfaces are to be immediately left in a washed and clean condition, free of all slipperiness from slurry, etc. Deposit all debris and surplus material removed from the grooving operations in a truck, or other conveyance, and remove them from the project.

MEASUREMENT AND PAYMENT - Square Yard. Measured as the finished grooved area. Payment is included with the Lump Sum Bridge bid price for the structure.

00 - c 9411-0484/9411-6450 WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE

Addendum:

Associated Item(s): 9411-0484, 9411-6450

Header:

ITEM 9411-0484 - WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE, WEARING COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-m

ITEM 9411-6450 - WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE, BINDER COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH

Provision Body:

DESCRIPTION – This work is the Standard and RPS construction of plant-mixed, dense-graded Warm Mix Asphalt (WMA) pavement course on a prepared surface using a volumetric asphalt mixture design developed with the Superpave Gyratory Compactor (SGC) using prescribed manufactured additives modifiers and/or plant process modifications according to these specifications and standard drawings. Use of reclaimed asphalt pavement (RAP) materials, is permitted using current requirements and policy as specified for Hot-Mix Asphalt (MA) pavement courses in Section 409 and Bulletin 27.

MATERIAL – Section 409.2 with additions and modifications as follows:

(a) Bituminous Material. Section 409.2(a) with additional subsections as follows:

3. WMA Technology Additives or Modifiers Blended at the Bituminous Material Supplier Refinery or Terminal. Provide refinery or terminally blended bituminous material modified with a WMA Technology additive or modifier from an approved manufacturer and source listed in Bulletin 15. Include in the bituminous material producer QC plan, the WMA Technology additive or modifier manufacturer name and source, dosage rates, blending method, QC testing, corrective action points, disposition of failed material, storage, handling shipping, and bill of lading information following the applicable requirements in Section 702. Include the WMA Technology Additive or Modifier and dosage rate on the bill of lading. Provide certification that the refinery or terminally blended bituminous material modified with the WMA Technology additive or modifier meets the requirements of Section 409.2(a) 1 or Section 409.2(a)2 for the specified grade.

4. WMA Technology Additives or Modifiers Blended at the Bituminous Mixture Producer Plant. For WMA Technology additives or modifiers blended with the bituminous material at the bituminous mixture production plant, prepare a Producer QC Plan as specified in Section 106 and conforming to the additional Producer QC Plan requirements in Section 409.2(e) 1.a and the additional Producer QC Plan requirements within this specification. Provide certification that the bituminous material blended with the WMA Technology additive or modifier at the bituminous mixture production plant meets the requirements of Section 409.2(a)1 or Section 409.2(a)2 for the specified grade.

(e) Composition of Mixtures. Section 409.2(e) with additions and modifications as follows:

1. Virgin Material Mixtures. Replace the first paragraph in Section 409.2(e)1 with the following:

Size, uniformly grade, and combine aggregate fractions, bituminous material, and either WMA technology additive(s), modifiers or no special additive (s) or modifier (s), if mixture temperature, workability, and compactability is achieved solely through plant mechanical modification to produce foamed asphalt in proportions to produce a JMF that conforms to the material, gradation, and volumetric Superpave Asphalt Mixture Design requirements as specified in Bulletin 27, Chapter 2A, for the specified nominal maximum aggregate size and design ESALs except as procedurally modified by the WMA Technology Technical Representative or manufacturer to address laboratory procedures when preparing, compacting, and testing WMA mixtures and to achieve a uniform blend. Develop a hot mix asphalt (HMA) JMF according to Section 409.2 and incorporate the WMA technology additive, modifier, or process into that JMF during production. Do not develop a volumetric WMA JMF based on incorporating the WMA technology additive, modifier or process during the volumetric asphalt mixture design process. For all WMA mixture JMFs, perform moisture sensitivity analysis on laboratory mixed and laboratory compacted specimens that include the WMA Technology additive, modifier, or process as required in Bulletin 27, Chapter 2A for HMA using the same mixing, compaction, and conditioning criteria used during the development of the volumetric asphalt mixture design for the HMA JMF and ensure the WMA Technology additive modifier, or process is not detrimental to the moisture resistance of the mixture.

1.a.2 Testing Plan with Action Points. Section 409.2(e)1.a.2 and add the following additional bullets:

- Blended bituminous material lot size/quantity and lot designation method.
- List of all tests to be performed on the blended bituminous material.
- Testing and certification of the blended bituminous material and WMA Technology additive or modifier for conformance to Section 409.4(a)1 or Section 409.2(a)2.
- Frequency of testing of the blended bituminous material.
- List action points to initiate corrective procedures for the blended bituminous material.
- Recording method to document corrective procedures for the blended bituminous material.
- Handling and disposition of blended bituminous material failing to meet the bituminous material specification requirements.

1.a.3 Materials Storage and Handling. Section 409.2(e)1.a.3 and add the following additional bullets:

- WMA Technology Additive or Modifier manufacturer name and source as listed in Bulletin 15.
- WMA Technology additive or modifier storage and handling prior to blending.
- All measuring, conveying, and blending devices for the WMA Technology and anti-strip additive (if required) including calibration procedures.

- WMA Technology additive or modifier and anti-strip additive (if required) method of introduction, dosage rates, blending with the bituminous material and method of automation, recordation, and printouts.
- Storage and handling of the blended bituminous material with the WMA Technology additive or modifier.
- WMA Production and Laboratory Mixture Temperature Range and Target.
- WMA Laboratory Compaction Temperature Range and Target.

1.c. Annual JMF Verification. Section 409.2(e)1.c and add the following to the end of the subsection:

Perform the annual JMF Verification for the WMA mixture JMF even if the equivalent HMA mixture JMF was previously annually verified.

1.d. Production. Section 409.2(e)1.d and add the following:

Prepare and test WMA mixtures, including SGC specimens for quality control using the same test methods, procedures, and frequencies as specified for HMA, except as modified by the WMA Technology Technical Representative and the Producer QC Plan. Maintain records of the testing of WMA and make available for review by the Representative when directed.

1.d.6 Degree of Particle Coating. Add new subsection to Section 409.2(e)1.d as follows:

For all WMA mixtures, sample the mixture according to PTM No. 1 and at the frequency in the producer QC Plan. Determine the degree of particle coating of the completed WMA mixture according to AASHTO T 195. Produce a WMA mixture with percent coated particles $\geq 95.0\%$, except $\geq 85.0\%$ for WMA mixtures containing slag aggregate. Increase the plant mixing time or make other plant adjustments if the required percent of coated particles is not met. Produce a WMA mixture capable of being handled, placed, and compacted without stripping the bituminous material from the aggregate.

Table A

Job-Mix Formula

Composition Tolerance Requirements of the Completed Mix

Section 409, Table A, Except revise the Temperature of Mixture (F) as follows:

Class of Material Type of Material Minimum* Maximum*

PG 58-28 Asphalt Cement 215 285

PG 64-22 Asphalt Cement 220 295

PG 76-22 Asphalt Cement 240 305

All other PG Binders Asphalt Cement 514 (Max temperature as specified in Bulletin 25 minus 25°F

* The minimum and maximum temperatures shown in Table A for each Class of Material are a master temperature range for a completed WMA mixture. The Producer must include a smaller completed mixture temperature range and compaction temperature range that does not exceed 50F and that does not fall outside the master temperature range in the Producer QC Plan. The Producer is required to produce the completed mixture within the smaller temperature range in the Producer QC Plan. The Producer is required to compact the completed mixture in the SGC for QC volumetric analysis at the midpoint of the compaction temperature range in the Producer QC Plan. The Producer QC Plan mixture temperature range and compaction temperature range are to follow the guidelines provided by the WMA Technology Technical Representative or Manufacturer.

(g) WMA Technologies (Additive(s), Modifiers, or Processes) and WMA Manufacturers. Add new subsection to Section 409.2 as follows:

Produce the WMA mixture using approved or provisionally approved WMA technologies including additives, modifiers, or processes from manufacturers listed in Bulletin 15. If blending WMA additives or modifiers with bituminous material, provide bituminous material modified with the WMA additive or modifier according to Section II. (a) 3 or Section II. (a) 4 within this specification. For WMA technology additives or modifiers blended with the bituminous mixture at the bituminous mixture production plant, prepare a QC Plan as specified in Section 106 and conforming to the additional Producer QC Plan requirements within this

specification. Submit the QC plan to the District Materials Engineer/District Materials Manager (DME/DMM) at least three (3) weeks before the planned start of blending WMA Technologies with bituminous material and do not start blending until the DME/DMM reviews the QC plan.

For more information on the approved WMA technologies listed in Bulletin 15, refer to the Internet website <http://www.warmmixasphalt.com/WmaTechnologies.aspx>

(h) Anti-Strip Additives. Add new subsection to Section 409.2 as follows:

Add a compatible liquid anti-strip additive at a minimum dosage rate of 0.25% by mass (weight) of the total bituminous material or, higher as needed, to WMA mixtures using WMA Technology that is categorized as a mechanical foaming process.

(i) WMA Technology Technical Representative. Add new subsection to Section 409.2 as follows:

If directed by the Department at the preconstruction conference, ensure that a Technical Representative, from the manufacturer of the approved WMA Technology used to produce the WMA mixture, is present during initial production and placement of the specified WMA pavement course. If the Department directs that a Technical Representative is not required to be present during initial production, provide the name and telephone number of a Technical Representative who can be on-call and in direct verbal contact with the Producer, Contractor and a Department Representative within a maximum 2 hour period after initial contact. Ensure that the Technical Representative is knowledgeable in the storage, handling, blending, mixture production, mixture QC testing, placement, and compaction using the WMA Technology. The Department will expect a WMA Technology Technical Representative to be present during initial production, placement and compaction when the Producer is using a WMA Technology for the first time. Submit any proposed deviations to this requirement in writing to the Representative for approval either before or at the preconstruction conference. After initial production of the specified WMA pavement course in a sufficient quantity to place 1 mile without any technical issues affecting the production, placement, and compaction of the WMA pavement course. As determined by the Department Representative upon review of the plant and field QC testing, the Department Representative will release the Technical Representative from being present. Upon release of the Technical Representative from being present, provide the name and telephone number of a Technical Representative who can be on-call and in direct verbal contact with the Producer, Contractor, and a Department Representative within a maximum 2 hour period after initial contact.

CONSTRUCTION – Section 409.3 with additions and modifications as follows:

(a) Paving Operation QC Plan: Section 409.3(a) and add the following:

Prepare and submit additional information specifically related to all aspects of the field control of WMA concrete paving operations to the Representative as part of the paving operation QC Plan that addresses all recommendations and direction from the WMA Technology Technical Representative. Describe the construction equipment and methods necessary to control the WMA paving operations including the testing, delivery, placement, compaction, and protection of the WMA concrete courses for all placement applications including handwork as specified in Section 409.3.

(c) Bituminous Mixing Plant. Section 409.3(c) and add the following:

Make any plant modifications needed to introduce WMA Technology additives, modifiers, or processes according to specific recommendations and direction from the WMA Technology Technical Representative or process manufacturer to achieve a uniform blend of the WMA Technology additive, modifier, or foaming process and to produce a WMA mixture meeting these specifications.

1. Batch Plant. Section 409.3(c)1 and add the following:

Dry the aggregate (s) according to the specific recommendations and direction from the WMA Technology Technical Representative and heat to a suitable temperature so that the resulting completed mixture temperature is within the mixture temperature range established in the Producer QC Plan and recommended or directed by the WMA Technology Technical Representative or manufacturer and that is within the master minimum and maximum temperature range in Table A within this specification. Ensure that the aggregate is free of unburned fuel oil when delivered to the pug mill.

2. Drum mixer Plant. Section 409.3(c)2 and add the following:

Produce a completed mixture that is within the mixture temperature range established in the Producer QC Plan and recommended or directed by the WMA Technology Technical Representative or manufacturer and that is within the master minimum and maximum temperature range in Table A within this specification. Ensure that the aggregate and completed mixture is free of unburned fuel oil.

(h) Spreading and Finishing. Section 409.3(h) with additions and modifications as follows:

1.a Placing. Section 409.3(h)1.a and add the following to the end of the subsection.

At the beginning of each day's paving, up to three (3) hauling equipment loads of WMA mixture are permitted to exceed the maximum temperature of mixture in Table A within this specification. This is to assist with warming the paver screed and other equipment in order to prevent dragging and sticking of WMA mixture to the equipment. For these loads, do not exceed the maximum temperature of mixture specified for HMA in Section 409, Table A.

MEASUREMENT AND PAYMENT – Section 409.4(a), with modifications as follows:

(a) Standard WMA Construction

1. WMA Courses.

1.a Warm Mix Asphalt (WMA), Wearing Course. Square Yard or Ton

1.b Warm Mix Asphalt (WMA), Wearing Course (Scratch). Ton

1.c Warm Mix Asphalt (WMA), Wearing Course (Leveling). Ton

1.d Warm Mix Asphalt (WMA), Binder Course. Square Yard or Ton

1.e Warm Mix Asphalt (WMA), Binder Course (Leveling). Ton

(b) RPS WMA Construction. Section 409.4(b), except replace HMA with WMA. Square Yard or Ton

I3111B - c03111 ITEM 9311-0422 WARM MIX ASPHALT (WMA), PLANT-MIXED BITUMINOUS CONCRETE, BASE COURSE, PG 64-22

Addendum:

Associated Item(s): 9311-0422

Header:

ITEM 9311-0422 WARM MIX ASPHALT (WMA), PLANT MIXED BIT. CONCRETE, BASE COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 4" DEPTH

Provision Body:

I. DESCRIPTION - This work is the Standard construction of a plant-mixed, dense-graded Warm Mix Asphalt (WMA) pavement base course on a prepared surface using a volumetric asphalt mixture design developed with the Superpave Gyratory Compactor (SGC) and using prescribed manufactured additives, modifiers and/ or plant process modifications in accordance to these specifications and standard drawings. Use of reclaimed asphalt pavement (RAP) materials is permitted using current requirements and policy as specified for Hot-Mix Asphalt (HMA) pavement courses in Section 409 and Bulletin 27.

II. MATERIAL - Section 409.2 with additions and modifications as follows:

(a) **Bituminous Material.** Section 409.2(a) with additional subsections as follows:

3. WMA Technology Additives or Modifiers Blended at the Bituminous Material Supplier Refinery or Terminal. Provide refinery or terminally blended bituminous material modified with a WMA Technology additive or modifier from an approved manufacturer and source listed in Bulletin 15. Include in the bituminous material producer QC plan, the WMA Technology additive or modifier manufacturer name and source, dosage rates, blending method, QC testing, corrective action points, disposition of failed material, storage, handling shipping, and bill of lading information following the applicable requirements in Section 702. Include the WMA Technology Additive or Modifier and dosage rate on the bill of lading. Provide certification that the refinery or

terminally blended bituminous material modified with the WMA Technology additive or modifier meets the requirements of Section 409.2(a)1 or Section 409.2(a)2 for the specified grade.

4. WMA Technology Additives or Modifiers Blended at the Bituminous Mixture Producer Plant. For WMA Technology additives or modifiers blended with the bituminous material at the bituminous mixture production plant, prepare a Producer QC Plan as specified in Section 106 and conforming to the additional Producer QC Plan requirements in Section 409.2(e)1.a and the additional Producer QC Plan requirements within this specification. Provide certification that the bituminous material blended with the WMA Technology additive or modifier at the bituminous mixture production plant meets the requirements of Section 409.2(a)1 or Section 409.2(a)2 for the specified grade.

(e) Composition of Mixtures. Section 409.2(e) with additions and modifications as follows:

1. Virgin Material Mixtures. Replace the first paragraph in Section 409.2(e)1 with the following:

Size, uniformly grade, and combine aggregate fractions, bituminous material, and either WMA technology additive(s), modifier(s) or no special additives or modifier(s), if mixture temperature, workability, and compactability is achieved solely through plant mechanical modification to produce foamed asphalt, in proportions to produce a JMF that conforms to the material, gradation, and volumetric Superpave Asphalt Mixture Design requirements as specified in Bulletin 27, Chapter 2A, for the specified nominal maximum aggregate size and design ESALs except as procedurally modified by the WMA Technology Technical Representative or manufacturer to address laboratory procedures when preparing, compacting and testing WMA mixtures and to achieve a uniform blend. Develop a hot mix asphalt (HMA) JMF according to Section 409.2 and incorporate the WMA technology additive, modifier, or process into that JMF during production. Do not develop a volumetric WMA JMF based on incorporating the WMA technology additive, modifier or process during the volumetric asphalt mixture design process. For all WMA mixture JMFs, perform moisture sensitivity analysis on laboratory mixed and laboratory compacted specimens that include the WMA Technology additive, modifier, or process as required in Bulletin 27, Chapter 2A for HMA using the same mixing, compaction and conditioning criteria used during the development of the volumetric asphalt mixture design for the HMA JMF and ensure the WMA Technology additive modifier, or process is not detrimental to the moisture resistance of the mixture.

1.a.2 Testing Plan with Action Points. Section 409.2(e)1.a.2 and add the following additional bullets:

- Blended bituminous material lot size/quantity and lot designation method.
- List of all tests to be performed on the blended bituminous material.
- Testing and certification of the blended bituminous material and WMA Technology additive or modifier for conformance to Section 409.4(a)1 or Section 409.2(a)2.
- Frequency of testing of the blended bituminous material.
- List action points to initiate corrective procedures for the blended bituminous material.
- Recording method to document corrective procedures for the blended bituminous material.
- Handling and disposition of blended bituminous material failing to meet the bituminous material specification requirements.

1.a.3 Materials Storage and Handling. Section 409.2(e)1.a.3 and add the following additional bullets:

- WMA Technology Additive or Modifier manufacturer name and source as listed in Bulletin 15.
- WMA Technology additive or modifier storage and handling prior to blending.
- All measuring, conveying and blending devices for the WMA Technology and anti-strip additive (if required), including calibration procedures.
- WMA Technology additive or modifier and anti-strip additive (if required) method of introduction, dosage rates, blending with the bituminous material and method of automation, recordation and print outs.
- Storage and handling of the blended bituminous material with the WMA Technology additive or modifier.
- WMA Production and Laboratory Mixture Temperature Range and Target
- WMA Laboratory Compaction Temperature Range and Target

1.c. Annual JMF Verification. Section 409.2(e)1.c and add the following to the end of the subsection:

Perform the annual JMF Verification for the WMA mixture JMF even if the equivalent HMA mixture JMF was previously annually verified.

1.d. Production. Section 409.2(e)1.d and add the following:

Prepare and test WMA mixtures, including SGC specimens for quality control using the same test methods, procedures and frequencies as specified for HMA, except as modified by the WMA Technology Technical Representative and the Producer QC Plan. Maintain records of the testing of WMA and make available for review by the Representative when directed.

1.d.6 Degree of Particle Coating.Add new subsection to Section 409.2(e)1.d as follows:

For all WMA mixtures, sample the mixture according to PTM No. 1 and at the frequency in the producer QC Plan.Determine the degree of particle coating of the completed WMA mixture according to AASHTO T 195.Produce a WMA mixture with percent coated particles ≥ 95.0%, except ≥ 85.0% for WMA mixtures containing slag aggregate.Increase the plant mixing time or make other plant adjustments if the required percent of coated particles is not met.Produce a WMA mixture capable of being handled, placed and compacted without stripping the bituminous material from the aggregate.

Table A
Job-Mix Formula

Composition Tolerance Requirements of the Completed Mix

Section 409, Table A, Except revise the Temperature of Mixture (F) as follows:

Class of Material	Type of Material	Minimum*	Maximum*
PG 58-28	Asphalt Cement	215	285
PG 64-22	Asphalt Cement	220	295
PG 76-22	Asphalt Cement	240	305
All other PG Binders	Asphalt Cement	215	(Max Temperature as specified in Bulletin 25 minus 25 °F)

* The minimum and maximum temperatures shown in Table A for each Class of Material are a master temperature range for a completed WMA mixture.The Producer must include a smaller completed mixture temperature range and compaction temperature range that does not exceed 50F and that does not fall outside the master temperature range in the Producer QC Plan.The Producer is required to produce the completed mixture within the smaller temperature range in the Producer QC Plan.The Producer is required to compact the completed mixture in the SGC for QC volumetric analysis at the midpoint of the compaction temperature range in the Producer QC Plan.The Producer QC Plan mixture temperature range and compaction temperature range are to follow the guidelines provided by the WMA Technology Technical Representative or Manufacturer.

(g) WMA Technologies (Additive(s), Modifiers, or Processes) and WMA Manufacturers. Add new subsection to Section 409.2 as follows:

Produce the WMA mixture using approved or provisionally approved WMA technologies including additives, modifiers or processes from manufacturers listed in Bulletin 15. If blending WMA additives or modifiers with bituminous material, provide bituminous material modified with the WMA additive or modifier according to Section II. (a) 3 or Section II. (a) 4 within this specification.For WMA technology additives or modifiers blended with the bituminous mixture at the bituminous mixture production plant, prepare a QC Plan as specified in Section 106 and also conforming to the additional Producer QC Plan requirements within this specification.Submit the QC plan to the District Materials Engineer/District Materials Manager (DME/DMM) annually at least 3 weeks before the planned start of blending WMA Technologies with bituminous material and do not start blending until the DME/ DMM reviews the QC plan.

For more information on the approved WMA technologies listed in Bulletin 15, refer to the Internet website <http://www.warmmixasphalt.com/WmaTechnologies.aspx>

(h) Anti-Strip Additives.Add new subsection to Section 409.2 as follows:

Add a compatible liquid anti-strip additive at a minimum dosage rate of 0.25% by mass (weight) of the total bituminous material or, higher as needed, to WMA mixtures using WMA Technology that is categorized as a mechanical foaming process.

(i) WMA Technology Technical Representative. Add new subsection to Section 409.2 as follows:

If directed by the Department at the preconstruction conference, ensure that a Technical Representative, from the manufacturer of the approved WMA Technology used to produce the WMA mixture, is present during initial production and placement of the specified WMA pavement course. If the Department directs that a Technical Representative is not required to be present during initial production, provide the name and telephone number of a Technical Representative who can be on-call and in direct verbal contact with the Producer, Contractor and a Department Representative within a maximum 2 hour period after initial contact. Ensure that the Technical Representative is knowledgeable in the storage, handling, blending, mixture production, mixture QC testing, placement and compaction using the WMA Technology. The Department will expect a WMA Technology Technical Representative to be present during initial production, placement and compaction when the Producer is using a WMA Technology for the very first time. Submit any proposed deviations to this requirement in writing to the Representative for approval either before or at the preconstruction conference. After initial production of the specified WMA pavement course in a sufficient quantity to place 1 mile without any technical issues affecting the production, placement and compaction of the WMA pavement course, as determined by the Department Representative upon review of the plant and field QC testing, the Department Representative will release the Technical Representative from being present. Upon release of the Technical Representative from being present, provide the name and telephone number of a Technical Representative who can be on-call and in direct verbal contact with the Producer, Contractor and a Department Representative within a maximum 2 hour period after initial contact.

III. CONSTRUCTION - Section 409.3 with additions and modifications as follows:

(a) Paving Operation QC Plan: Section 409.3(a) and add the following:

Prepare and submit additional information specifically related to all aspects of the field control of WMA concrete paving operations to the Representative as part of the paving operation QC Plan that addresses all recommendations and direction from the WMA Technology Technical Representative. Describe the construction equipment and methods necessary to control the WMA paving operations including the testing, delivery, placement, compaction, and protection of the WMA concrete courses for all placement applications including handwork as specified in Section 409.3.

(b) Weather Limitations. Section 409.3(b). Replace with the following:

Do not place base course on prepared surfaces that are wet or when the temperature of the air or the prepared surface is 35F or lower. If work is halted because of weather conditions, the Representative may allow the Contractor to place limited quantities of base course that are en route to the project.

(c) Bituminous Mixing Plant. Section 409.3(c) and add the following:

Make any plant modifications needed to introduce WMA Technology additives, modifiers, or processes according to specific recommendations and direction from the WMA Technology Technical Representative or process manufacturer to achieve a uniform blend of the WMA Technology additive, modifier or foaming process and produce a WMA mixture meeting these specifications.

1. Batch Plant. Section 409.3(c)1 and add the following:

Dry the aggregate (s) according to the specific recommendations and direction from the WMA Technology Technical Representative and heat to a suitable temperature so that the resulting completed mixture temperature is within the mixture temperature range established in the Producer QC Plan and recommended or directed by the WMA Technology Technical Representative or manufacturer and that is within the master minimum and maximum temperature range in Table A within this specification. Ensure that the aggregate is free of unburned fuel oil when delivered to the pug mill.

2. Drum mixer Plant. Section 409.3(c)2 and add the following:

Produce a completed mixture that is within the mixture temperature range established in the Producer QC Plan and recommended or directed by the WMA Technology Technical Representative or manufacturer and that is within the master minimum and maximum temperature range in Table A within this specification. Ensure that the aggregate and completed mixture is free of unburned fuel oil.

(h) Spreading and Finishing. Section 409.3(h) with additions and modifications as follows:

1.a Placing.Section 409.3(h)1.a and add the following to the end of the subsection.

At the beginning of each day's paving, up to 3 hauling equipment loads of WMA mixture are permitted to exceed the maximum temperature of mixture in Table A within this specification. This is to assist with warming the paver screed and other equipment in order to prevent dragging and sticking of WMA mixture to the equipment. For these loads, do not exceed the maximum temperature of mixture specified for HMA in Section 409, Table A

1.b Spreading and Finishing. Section 409.3(h)1.b and add the following:

If the indicated compacted depth of a WMA 25.0 mm base course is more than 6 inches, place the WMA base course in two or more layers of approximately equal compacted depth, with no layer less than 3 inches or more than 6 inches. If the indicated compacted depth of a WMA 37.5 mm base course is more than 8 inches, place the WMA base course in two or more layers of approximately equal compacted depth, with no layer less than 4 inches or more than 8 inches.

(l) Surface Tolerance. Section 409.3(l) but replace the requirement for defective pavement with the following:

The pavement is defective if irregularities are more than 1/4-inch.

(m) Tests for Depth. Replace Section 409.3(m) with the following:

Control the loose depth of each layer to construct the base course to the compacted depth indicated and within the specified tolerance. On the top lift and in the presence of the Inspector, drill full-depth cores at one random location selected by the Inspector according to PTM No. 1 in each 3,000 square yards of completed base course and at other locations the Inspector suspects are deficient.

The Inspector will measure the depth of the full-depth cores according to PTM No. 737. Pavement deficient in depth by 1/2 inch or more and that cannot be satisfactorily corrected is defective. After the Inspector completes depth measurements, backfill, compact, and seal core holes with the mixture used to construct the course. Immediately start correcting courses or pavement that are deficient in depth at the core location and proceed longitudinally and transversely until the depth is within 1/2 inch of the design depth.

IV. MEASUREMENT AND PAYMENT-Section 409.4(a), with modifications as follows:

(a) Standard WMA Construction. Replace HMA with WMA as follows:

1. WMA Courses. Section 409.(a)1 and add the following:

1.f Warm Mix Asphalt (WMA), Base Course. Square Yard or Ton

(b) WMA RPS Construction. Section 409.4(b), except replace HMA with WMA. Square Yard or Ton

I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE

Addendum:

Associated Item(s): 0609-0009

Header:
ITEM 0609-0009 EQUIPMENT PACKAGE

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	1
Document Scanner ⁽²⁾	
Laser Printer ⁽²⁾	
Color Printer ⁽²⁾	
Specialized Equipment	
Surveyor's Level & Measuring Rod	
Electronic Digitizer	
Digital Display Level	
Infrared Thermometer	
Laser Range Finder	
Paper Shredder	1
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.

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

Copier to be capable of printing and scanning 11" x 17" paper in color.

Microcomputer Systems. A total of 2 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.

P10191A - c10191 ITEM 9019-050 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES. (PENETRATING SEALERS)**Addendum:****Associated Item(s):****Header:**

ITEM 9019-0050 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES.(PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)

Provision Body:

I. DESCRIPTION - This work is applying a protective coating of the type specified and as directed.

II. MATERIAL - Section 1019.2 with revisions and additions as follows:

Section 1019.2(c) revise title as follows:

(c) Penetrating Sealers (for Reinforced Concrete Surfaces Not Exposed to Vehicular Traffic).

(d) Penetrating Sealers (for Reinforced Concrete Surfaces Exposed to Vehicular Traffic). Furnish a penetrating sealer from a manufacturer listed in Bulletin 15 as follows:

1. Silicates in Water. Certify as specified in Section 106.03(b)3. Meet the following requirements:

	Property	Test Method	Requirements
	Freeze/ Thaw Resistance	ASTM C 666, Procedure A, modified as follows:Use Class AA cement concrete for the test specimens. Test 4 specimens; 2 with sealer, 2 without sealer. Apply penetrating sealer to all sides of specimens as per manufacturer's recommendations. Repeat using Class AA cement concrete without air entrainment.	No visible cracking, powdering, hairline cracking or spalling.
	Chlorine Ion Penetration	Chloride Ion Penetration AASHTO T 259, Section 3.6, modified as follows:Use Class AA cement concrete with water/ cement ration of 0.55 for the test specimens. Apply penetrating sealer to top surface of specimens as per manufacturer's recommendations. Sandblast treated surface, removing approximately 2 mm (1/16- inch) before ponding with NaCl.	Maximum Chloride Content Absorbed: 1.6 mm (0.0625- inch) to 13 mm (0.5-inch) -0.31% >13 mm (0.5-inch) to 25 mm (1.0-inch) -0.06%
	Skid Resistance	ASTM E 274 and ASTM E 524 (Smooth Tire)	Acceptable to MTD

	Concrete Discolor- ation	Visual	Provide a penetrating sealer that does not discolor cement concrete
--	--------------------------	--------	---

III. CONSTRUCTION - Section 1019.3 with revisions and additions as follows:

(c) Penetrating Sealers (for Reinforced Concrete Surfaces Not Exposed to Vehicular Traffic).

- 1. Surface Preparation. Thoroughly dry and clean the surfaces of any dirt, debris, oil, grease and foreign matter which would prevent protective coating penetration, adhesion, or drying.
- 2. Application. Apply penetrating sealer, which does not discolor the concrete, to areas indicated in accordance with the manufacturer's specifications.

(d) Penetrating Sealers (for Reinforced Concrete Surfaces Exposed to Vehicular Traffic).

- 1. Storage. Keep the product under cover and at temperatures above freezing.
- 2. Surface Preparation. Thoroughly clean the surfaces of any dirt, debris, oil, grease, and foreign matter, which would prevent penetration, adhesion, or drying. For bridge decks, seal cracks greater than 2 mm (1/16-inch) as specified in Section 1091, as indicated, or as directed by theEngineer. For pavements and other areas, seal cracks greater than 2 mm (1/16-inch) as specified in Section 590. Repair surfaces as indicated or directed by the Engineer. Do not apply penetrating sealer until cement concrete is cured as specified in Section 1019.3(a)1.b, and crack sealers have completely cured.
- 3. Application. Follow manufacturer's recommendations for air and/ or surface temperatures and, if applicable, other climatic conditions, to properly apply the penetrating sealer. Each day before and during application, mix, stir, or otherwise prepare the penetrating sealer, if required, in accordance with the manufacturer's recommendations. Use rollers, brushes, sprayers, or other applicators, in accordance with the manufacturer's recommendations, to apply the penetrating sealer. Apply the penetrating sealer in two or more coats and at application rates as recommended by the manufacturer. Cure each coat in accordance with the manufacturer's recommendations. If for any reason and in the opinion of the Engineer, the penetrating sealer does not penetrate the surface, remove the penetrating sealer by sand blasting and reapply at no cost to the Department.

On new reinforced concrete surfaces, do not apply pavement markings until 7 days after the application of penetrating sealer.

On existing reinforced concrete surfaces, remove pavement markings, apply penetrating sealer, and cure the penetrating sealer in accordance with the manufacturer's recommendations before reapplication of pavement markings.

IV. MEASUREMENT AND PAYMENT - Section 1019.4 with additions as follows:

Includes the cost of additional sand or water blasting, if required, for surface preparation.

00 - c4461-0001 – Bituminous Prime Coat Modified

Addendum:

Associated Item(s): 4461-0001

Header:

ITEM 4461-0001 – BITUMINOUS PRME COAT MODIFIED

Provision Body:

In accordance with Section 461, except as follows:

Section 461.2(a) MATERIAL – delete

AE-P

Revise by adding the following:

E-3M Prime Polymer-Modified Cationic Emulsified Asphalt - Application Temperature C (F) Minimum 60(140) Maximum 80 (175)
Units are degrees.

As determined by the Engineer, repair the shoulder backup and E3M oil damaged by any construction activity at no additional cost to the Department.

00 - c4610-7002 – 6" PAVEMENT BASE DRAIN MODIFIED

Addendum:

Associated Item(s): 4610-7002

Header:

ITEM 4610-7002 – 6" PAVEMENT BASE DRAIN MODIFIED

Provision Body:

In accordance with Section 610 and as follows:

MEASURMENT AND PAYMENT -

(c) Class 4 Excavation. Revise by adding the following:

Class 4 Excavation for extra depth required to maintain positive drainage is incidental to the 6" Pavement Base Drain Modified.

(f) Additional Coarse Aggregate for Extra-Depth Pavement Base Drain. Revise by adding the following:

Additional Coarse Aggregate for Extra Depth Pavement Base Drain is incidental to the 6" Pavement Base Drain Modified.

00 - c4630-0001 – PLAIN CEMENT CONCRETE CURB MODIFIED

Addendum:

Associated Item(s): 4630-0001

Header:

ITEM 4630-0001 – PLAIN CEMENT CONCRETE CURB MODIFIED

Provision Body:

DESCRIPTION – This work is construction of Plain Cement Concrete Curb Modified with a 4" curb reveal.

MATERIAL – In accordance with Section 630.2.

CONSTRUCTION – In accordance with Section 630.3.

MEASUREMENT AND PAYMENT – Linear Foot.

00 - c5018-0001 - REMOVAL OF EXISTING BRIDGE MODIFIED

Addendum:

Associated Item(s): 5018-0001

Header:

ITEM 5018-0001 - REMOVAL OF EXISTING BRIDGE MODIFIED

Provision Body:

In accordance with Section 1018 and as follows:

Section 1018.3(a) General. Add the paragraphs:

1. Removal.

Bridge plans of the existing bridge over Two Lick Creek are not available. Rehabilitation plans of the bridge widening are available. Any reference or representations of the existing foundations in the plans are shown to indicate their general proximity. Exact limits of existing foundations are unknown. Subsurface conditions are reflected only in the structure boring logs provided with the Contract Plans.

Remove the existing structure in its entirety to a minimum of two feet below the proposed finished grade or as indicated on the contract plans for required construction of new work. Remove any portion of the structure that interferes with the construction of the new structure in its entirety.

Submit for approval a removal plan including calculations, drawings, proposed equipment and a written narrative prepared and sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Allow 10 working days for review of the first submission and 5 working days for review of subsequent submissions.

Detail the precautionary measures to be taken during removal operations to prevent debris from falling into the stream. Remove any debris that falls into the stream at the end of each working day.

Blasting is not permitted.

Do not proceed with removal operations until written approval of the removal plan has been received from the Representative. Approval does not relieve the Contractor of responsibility for damages caused by removal operations.

2. Disposal.

Unless otherwise specified, properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT – Lump Sum

I30041D - c80041 8110-0001/8000-0001/8100-0001 ALTERNATE BRIDGE STRUCTURE

Addendum:

Associated Item(s):

Header:

ITEM 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, S-31269
ITEM 8000-0001 PRESTRESSED CONCRETE BRIDGE STRUCTURE
ITEM 8100-0001 STEEL BRIDGE STRUCTURE

Construct one of the above at station 185+75.00.

Provision Body:

PART A

I. DESCRIPTION - This work is either construction of the bridge structure as designed or designing and constructing an equivalent bridge structure of an alternate design in place of the "as-designed" bridge structure.

II. DESIGN -

(a) General. If an alternate design bridge structure is bid, furnish, to the Department, preliminary conceptual design calculations and drawings for the alternate bridge structure, on reproducible tracing cloth or drafting film. Provide an alternate design equivalent to the original design and meeting applicable design criteria for strength and serviceability. Submit the alternate design to the District Bridge Engineer for acceptance. Refer to PENNDOT Design Manual Part 4, PP 1.10, Bridge Submissions-Construction Phase, for details on procedures for contractor submissions. If the equivalency of an alternate design cannot be clearly established, the Chief Bridge Engineer will arbitrate and the Chief Bridge Engineer's decision will be final. Furnish, with the preliminary conceptual design submission, a tabulation identifying the differences between the "as-designed" bridge structure and the alternate design bridge structure.

Any delay in submission and acceptance of a proposed alternate design or a revision, and/or approval of required permits, will not extend the contract time.

If an alternate design bridge structure is bid, and an acceptable preliminary conceptual design is not approved within 30 calendar days from the award date (6 days for the submission and 24 days for Department review), construct the "as-designed" bridge structure at no additional cost to the Department.

Alternate designs which take advantage of any errors and/or omissions in the plans for the "as-designed" bridge structure, or discrepancies between the "as-designed" bridge structure plans and the special provisions covering alternate designs, 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.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be allowed in the alternate design.

Only eligible types of bridge structures, as shown in the Project Items and Quantities, bid documents, or special provisions, are allowed as contractor-designed alternates.

Value Engineering will not be allowed for elements changed by an approved alternate design.

Use the same type foundation for an alternate design as that indicated for the "as-designed" bridge structure. Contractor-designed alternate foundation types will not be allowed, but Value Engineering of the as-designed foundation will be allowed.

Do not use Integral or Semi-Integral Abutment design as an alternate or as Value Engineering.

Have the alternate design completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

Submit an affidavit, before or along with the preliminary conceptual design submission, stating that the designer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. Also, submit a list of bridges designed for the Department within the past 5 years.

In identifying alternate design bridge structures, retain the "as-designed" bridge structure number, but suffix the numbers with the letters A, B, etc.

Show, on all sheets of the alternate design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, a business address, and the note "These drawings (S-XXXXXA) supersede drawings (S-XXXXX) approved (insert appropriate date)".

The Department will furnish tracings and design computations for the "as-designed" bridge structure to the successful bidder upon request.

Complete original plans for an alternate design entirely in either ink or pencil. Make changes in the same medium. Prepare alternate design plans using Department drafting standards.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations for the alternate design show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, and the date signed.

Provide a complete set of computations for the alternate design of the superstructure and/or substructure, including foundation. Reproduce and insert computations from the "as-designed" bridge structure, as needed. Provide additional calculations, as needed by the District Bridge Engineer 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 such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph.

Use PENNDOT Design Manual Part 4 for design policy procedures and criteria. All design related Strike-off Letters listed in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS", are applicable to the alternate 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 in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS."
- Design related Strike-off Letters in effect on the date of project advertisement. Refer to the list in PART B.
- PENNDOT Design Manual Part 4, "Structures"
- PENNDOT Bridge Design and Bridge Construction Standards
- AASHTO Standard Specifications for Highway Bridges, and interim specifications, as indicated for the "as-designed" bridge structure.

In the event that a clear order of predominance 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 arbitrate and the Chief Bridge Engineer's decision will be final.

Do not use BLC standards unless HS-20 design load is specifically allowed by the "as-designed" plans or in PART B.

Submit shop drawings on standard ANSI D size 863.6 mm × 558.8 mm (34 inch by 22 inch) to the District Bridge Engineer for review and acceptance. The Department is not responsible for work done without approved shop drawings.

If any provisions in PART B conflict with those in PART A, the provisions in PART B are to govern.

Within 60 calendar days after completion of the bridge structure, revise the structure drawings to show "as-built" conditions and submit them to the Representative. If caissons or piles are utilized, show, on the bridge elevation view, the maximum and minimum tip elevation and the average length for each substructure unit.

(c) Design Requirements. In the design of an alternate bridge structure, comply with PENNDOT Design Manual Part 4, "Structures", and other design criteria as specified for the "as-designed" bridge structure, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Provide clear span distances between faces of substructure units and underclearances of not less than the minimum values indicated for the "as-designed" bridge structure, except as noted in PART B.

The minimum underclearance for stream or river crossings is defined as the high water elevation for the design flood plus the specified debris clearance or as indicated for the "as-designed" bridge structure, whichever is less.

The minimum clearance for overpass structures is defined as the minimum required underclearance plus 75 mm (3 inches) or the minimum underclearance indicated for the "as-designed" bridge structure, whichever is less. Provide additional underclearance to compensate for foundation settlement if applicable to the alternate design.

Provide equivalent inspection and maintenance accessibility for the alternate bridge structure as for the "as-designed" bridge structure. In case of a disagreement on accessibility, the Chief Bridge Engineer's decision will be binding.

Do not change the indicated horizontal and vertical alignments, except as noted in PART B.

For an alternate bridge structure, design the substructure to be within the limits of allowable foundation pressures and allowable pile loads, as indicated for the "as-designed" bridge structure.

Provide structure and end structure drainage as indicated for the "as-designed" bridge structure.

1. Deck Joints. Provide the same type and number of expansion joints for an alternate bridge structure as specified for the "as-designed" bridge structure.

2. Bearings. Provide the same type bearings for an alternate bridge structure as specified for the "as-designed" bridge structure.

Provide an expansion dam support system as indicated for the "as-designed" bridge structure unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

3. Superstructure. If the as-designed bridge superstructure consists of curved girders, as shown on the structure drawings, the alternate design bridge superstructure is also to consist of curved girders.

Provide slab designs conforming to the requirements of Standard Drawing BD-601M. Use composite design only, unless the "as-designed" bridge structure utilized noncomposite design.

4. Super Load Bridge Beams. Do not use super load bridge beams (beams over 48 800 mm (160 feet) in length or total load over 894 kN (201,000 pounds) gross weight) unless included in the "as-designed" bridge structure or permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS". Verify that an oversize and/or overweight permit can be issued for superloads, before incorporating them into the alternate design.

If super load bridge beams are used, for transportation of these beams conform to the requirements of PENNDOT Design Manual Part 4, Appendix E, and the following:

- o Requests for waiver of any provisions of Chapter 179 of Title 67 will not be approved, except as noted herein.
- o Transportation equipment axles will not be permitted in excess of 120 kN (27,000 pounds), regardless of gross weight.

5. Alternate Prestressed Concrete Bridge Structure. Use the Department's prestressed concrete girder computer program to design precast prestressed concrete beams.

Prestressed Concrete Beams. Prestressed concrete beam sections, differing significantly from the standards specified herein, will be considered special sections and subject to the requirements of Section 1107.03(a)4. Do not deviate from the minimum flange and web thicknesses or section properties shown in the Bridge Design Standards.

The redesign of precast diaphragms as specified in PENNDOT DWG. #95-604-BQAD dated 11/20/96 from as designed cast-in-place diaphragms will be considered an alternate bridge structure also.

Use of low mass (lightweight) concrete for prestressed beams is not allowed.

- o Deck Slab. If the effective slab span is less than 1100 mm (3 1/2 feet), a minimum slab thickness of 190 mm (7 1/2 inches), using all No. 13 (No. 4) reinforcement bars, is allowed.
- o Prestressed Concrete Segmental Box Girders. Use either single or multiple cell box girders, trapezoidal in shape (inclined webs) or rectangular in shape (vertical webs). Provide for future deck removal and replacement in the design and details. Conform to design criteria specified for the "as-designed" bridge structure; and as follows:

Cast-in-place joints may be used to join precast segments, in place of match cast joints sealed with epoxy. If cast-in-place joints are used, shear keys may be omitted. However, if shear keys are omitted, striate and/or heavy score the surfaces to be joined to a minimum depth of 6 mm (1/4 inch). Use the same concrete mix for cast-in-place joints as for the precast segments, and ensure that strength development is the same.

Maintain a joint width as needed for coupling conduits, welding or lapping reinforcement, and placement of concrete, but in no case allow a joint width of less than 100 mm (4 inches) at the closest point. Keep adjacent concrete surfaces thoroughly wet or apply an approved bonding agent before placing concrete in the joint.

Identify anchor piers. Provide box girder diaphragms having sufficient openings to allow for continuous inspection of the inside of the box girder. Provide steel access doors with master locks, at each abutment, for each box. Provide diaphragms that are substantially solid at piers and abutments, except for access and utility holes.

Design adjacent prestressed box beam as a composite beam unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

6. Alternate Steel Bridge Structure. Do not use unpainted weathering steel unless permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not include longitudinal stiffeners in computing steel section properties.

7. Nonstandard Designs. Do not submit an alternate design bridge structure, either prestressed concrete or steel, which is not covered by the aforementioned Standards, or under PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

8. Pile- Supported Foundation. Base pile design for the alternate bridge structure on the same type, size, length, tip reinforcement, maximum design load, and driving criteria specified for piles for the "as-designed" bridge structure. Piles will be measured and paid for as specified herein.

Include test piles in the lump sum price bid for the bridge structure. Provide the same number of test piles per substructure unit for alternate designs as specified per substructure unit for the "as-designed" bridge structure.

Load test piles, when specified for the "as-designed" bridge structure, will be measured and paid for separately, as specified. Provide the same number of load test piles per bridge structure for an alternate design as specified for the "as-designed" bridge structure, located at a substructure unit as close as possible to the "as-designed" location.

Bearing piles, additional test piles, test pile extensions, load test pile extensions, and pile tip reinforcement will be measured and paid for separately as specified in Section 1005.4. Determine test pile extensions and load test pile extensions relative to the pile lengths indicated in the estimated quantities for the "as-designed" bridge structure or approved alternate bridge structure.

Record the bid quantities for bearing piles and pile tip reinforcement in the spaces provided in the Project Items and Quantities for the alternate design.

Base the estimated quantity for bearing piles used in an alternate design on maximum utilization of the allowable design load indicated for piles used in the "as-designed" bridge structure.

Calculate the lengths of bearing piles used in an alternate design as follows:

- o Determine the bearing pile length for each as-designed substructure unit, to the next longer 100 mm (foot), by dividing the quantity of bearing piles by the number of bearing piles for that unit, using the estimated quantities indicated for the "as-designed" bridge structure.
- o For alternate designs involving the relocation of substructure units, determine bearing pile lengths by straight line interpolation, to the next 100 mm (foot), using as-designed pile lengths and the average distance between as-designed substructure units in back and ahead of the relocated unit. Base the average distance between as-designed substructure units on measurements between the centerlines of piers (or centerline of bearing at abutments) along the centerlines of exterior girders or beams. If the alternate design bridge structure is longer than the "as-designed" bridge structure, provide bearing piles for the relocated abutment of the same length as the bearing piles for the as-designed abutment.
- o If one of the as-designed substructure units in back or ahead of a relocated unit is wholly supported on a spread foundation, determine the bearing pile length for the relocated unit, to the next 100 mm (foot), by a straight line interpolation, using the bearing pile length of the as-designed, pile supported unit and zero length at the spread foundation supported unit. However, do not use lengths of less than 3000 mm (10 feet) for determining the bid quantity.
- o For relocated substructure units, test pile lengths, which are included in the lump sum price for the alternate design bridge structure, are to be the average lengths determined using the procedures specified above. The load test pile length at a relocated substructure unit is to be the same as the bearing pile length at that unit.

o For the purpose of determining pile lengths at relocated substructure units, consider a unit relocated if the average distance from the closest, as-designed unit is 6000 mm (20 feet) or more. Determine the average distance as specified above.

Show the estimated quantities of as-designed load test piles, test piles, bearing piles, and pile tip reinforcement used in an alternate design on the alternate design plans when submitted for approval. Show test pile lengths, included in the lump sum price bid for the alternate bridge structure, and load test pile length, included in the lump sum price bid for load test piles, in the estimated quantities. Tabulate piling quantities using a format similar to that used for the "as-designed" bridge structure. Show alternate design bid quantities for load test piles, bearing piles, and pile tip reinforcement for comparison with approved, as-designed, estimated quantities.

Value Engineering of as-designed piles used in an approved alternate design bridge structure is allowed.

If as-designed piles for a relocated substructure unit in an alternate design cannot be driven, thereby necessitating a redesign of the substructure unit, furnish the revised design and complete construction drawings as part of the lump sum price bid for the alternate bridge structure.

If the as-designed pile layout can not be used in an alternate design involving a relocated substructure unit, alternate design piles will be measured and paid for as part of the lump sum price bid for the alternate bridge structure. Exclude from the bid all pile load tests specified for as-designed piles which are replaced by alternate design piles.

Compute the pay quantity for as-designed bearing piles incorporated into an alternate design as follows:

Case 1: If D and E are less than or equal to B, the Pay Quantity = D

Case 2: If D and E are greater than B, the Pay Quantity = D - (E-B)

Case 3: If E is greater than B but D is equal to or less than B, the Pay

Quantity = D

For all other cases, use D as the Pay Quantity.

where:

D = Actual acceptable driven quantity per structure

B = Bid quantity per structure entered in the Project Items and Quantities.

E = Estimated quantity per structure shown on the approved

alternate drawings.

III. MATERIAL - As indicated and as specified for the "as-designed" bridge structure; in accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the bridge structure.

IV. CONSTRUCTION - In accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for an alternate design, for acceptance, if other than those contained herein.

Erection methods are open, but submit the proposed method to the Chief Bridge Engineer for approval.

If utility relocations are required to accommodate the proposed locations of substructure units in an alternate design, be responsible for the cost of the utility relocations and any related delay claim costs.

V. MEASUREMENT AND PAYMENT - Lump Sum

For the type of alternate design bridge structure selected, subject to a reduction equal to the amount of the Contractor's share of the Department's engineering costs to be determined as follows:

- For each alternate bridge structure with lump sum bid item amount less than \$2,000,000 = 2% of the lump sum bid amount for structure
- For each alternate bridge structure with lump sum bid item amount over \$2,000,000 = \$40,000 plus 0.25% of the lump sum bid amount over \$2,000,000, total amount not to exceed \$85,000

Each alternate bridge structure involving a redesign from cast-in-place diaphragms to precast diaphragms will be subject to a reduction of \$300 per structure if contractor's bid lump for lump sum item is less than \$2,000,000 and a reduction of \$750 per lump sum item if structure is over \$2,000,000, for the amount of the Contractor's share of the Department's engineering cost.

The Contractor's share of the Department's engineering costs will be recovered by processing a contract adjustment (Alternate Design Review) to reduce the contract lump sum price by an amount equal to the Contractor's share.

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the alternate design bridge structure unless otherwise specified.

For an alternate design bridge structure, all items of work are to be included in and will be paid for as part of the contract lump sum price; except, bearing piles; pile tip reinforcement; pile load tests; dynamic pile testing; Class C cement concrete under footings; Class 3 excavation, reinforcement bars, and Class A cement concrete for pedestals; and caissons.

Placing deck concrete in excess of the indicated quantity will not be considered a change from the design. The contract lump sum price for each alternate bridge structure includes full compensation for all deck concrete.

(a) Bridge Structure As Designed. If the "as-designed" bridge structure is bid, submit the "Component Item Schedule", included with the Proposal, as specified in Section 103.01(a).

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Bridge Structure as Designed.

(b) Alternate Bridge Structure. If an alternate design bridge structure is bid, the apparent low bidder is required to submit a "Component Item Schedule for Alternate Design" as specified in Section 103.01(a). No adjustments will be made to the contract lump sum price bid for alternate design bridge structure for any field adjustments necessary to complete the structure.

Make the "Total" at the end of the "Component Item Schedule for Alternate Design" equal the amount of the lump sum bid for Alternate Bridge Structure.

(c) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an alternate design is bid. Include the cost of this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

00 - c8110-0001 S-31269 PART B

Addendum:

Associated Item(s):

Header:

8110-0001 S-31269 PART B

Provision Body:

Construct one of the above at S.R. 3035, Section 450, Segment 0080, Offset 1448, Station 185+75.00:

PART A

(Include Standard PennDOT Special Provision c80041.)

PART B SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31269

A. General

1. Use LRFD, Load and Resistance Factor Design Method, PennDOT Design Manual 4, September 2007, and AASHTO LRFD Bridge Design Specifications, 3rd Edition, 2004, for design.
2. Maintain the as-designed roadway width and geometry.
3. Maintain all required horizontal and vertical clearances shown on the plans.
4. Maintain alignment of the substructure units.
5. Provide a minimum waterway area of the bridge opening equal to or greater than the as-designed structure.
6. Do not use a structure which has a low chord elevation less than the "As-Designed".
7. Lightweight concrete is not permitted.
8. Provide epoxy coating on all reinforcement bars.
9. The new structure and all construction activity must remain within the existing right-of-way.
10. Provide Class AAA-P cement concrete for the bridge deck slab, end diaphragms, wingwalls above the abutment construction joint and approach slabs.
11. Provide polypropylene fibers in Class AA cement concrete for barriers and curbs.
12. Use Coarse Aggregate, Type A, No. 8 for barriers and curbs.
13. Use Type II Portland Cement for Class A and Class AA cement concrete in all piers, abutments and wingwalls below the beam seat, and sleeper slabs.
14. Use a maximum water cement ratio of 0.45 for Class A and Class AA cement concrete in all piers, abutments and wingwalls below the beam seat and sleeper slabs.
15. Use air entrained concrete for Class A, Class AA, and Class AAA-P concrete.
16. Maintenance of pedestrian traffic is not required during construction.

B. Geometry

Design the structure according to the geometrics shown on the "as-designed" bridge structure. No geometry changes will be allowed.

C. Superstructure

1. Do not use less than five (5) beams/girders in the superstructure.
2. Do not use precast panel forms for placing the concrete deck slab in lieu of metal stay-in-place form.
3. No deck joints are permitted on structure. Use joints at ends of approach slabs as indicated.

- 4. Do not use longitudinal construction joints in the deck slab.
- 5. Do not change the configuration, dimensions, or reinforcement of the barrier.
- 6. Do not use segmental concrete construction.
- 7. Only weathering steel and prestressed concrete I-beams are permitted. No prestressed concrete voided box beams are allowed.
- 8. Provide beams at equal spacing.
- 9. Precast concrete barriers are not permitted.
- 10. Do not slip form barriers.

D. Substructure

- 1. Design of new substructure units incorporating or founded on existing foundations is not permitted.
- 2. Provide epoxy-coated reinforcement in foundations.
- 3. Precast modular retaining walls are not allowed.
- 4. Do not use proprietary wall systems for abutments or wingwalls.

00 - c8120-0001/8100-0001/8000-0001 - BRIDGE STRUCTURE, AS DESIGNED, S-31269

Addendum:

Associated Item(s): 8000-0001, 8100-0001, 8120-0001

Header:

ITEM 8120-0001 - BRIDGE STRUCTURE, AS DESIGNED, S-31269
ITEM 8100-0001 - STEEL BRIDGE STRUCTURE
ITEM 8000-0001 – PRESTRESSED CONCRETE BRIDGE STRUCTURE

Provision Body:

Construct one of the above at S.R. 3035, Section 450, Segment 0080, Offset 1448, Station 185+75.00:

PART A

(Include Standard PennDOT Special Provision c80041.)

PART B SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31269

A. General

- 1. Use LRFD, Load and Resistance Factor Design Method, PennDOT Design Manual 4, September 2007, and AASHTO LRFD Bridge Design Specifications, 3rd Edition, 2004, for design.
- 2. Maintain the as-designed roadway width and geometry.

3. Maintain all required horizontal and vertical clearances shown on the plans.
4. Maintain alignment of the substructure units.
5. Provide a minimum waterway area of the bridge opening equal to or greater than the as-designed structure.
6. Do not use a structure which has a low chord elevation less than the "As-Designed".
7. Lightweight concrete is not permitted.
8. Provide epoxy coating on all reinforcement bars.
9. The new structure and all construction activity must remain within the existing right-of-way.
10. Provide Class AAA-P cement concrete for the bridge deck slab, end diaphragms, wingwalls above the abutment construction joint and approach slabs.
11. Provide polypropylene fibers in Class AA cement concrete for barriers and curbs.
12. Use Coarse Aggregate, Type A, No. 8 for barriers and curbs.
13. Use Type II Portland Cement for Class A and Class AA cement concrete in all piers, abutments and wingwalls below the beam seat, and sleeper slabs.
14. Use a maximum water cement ratio of 0.45 for Class A and Class AA cement concrete in all piers, abutments and wingwalls below the beam seat and sleeper slabs.
15. Use air entrained concrete for Class A, Class AA, and Class AAA-P concrete.
16. Maintenance of pedestrian traffic is not required during construction.

B. Geometry

Design the structure according to the geometrics shown on the "as-designed" bridge structure. No geometry changes will be allowed.

C. Superstructure

1. Do not use less than five (5) beams/girders in the superstructure.
2. Do not use precast panel forms for placing the concrete deck slab in lieu of metal stay-in-place form.
3. No deck joints are permitted on structure. Use joints at ends of approach slabs as indicated.
4. Do not use longitudinal construction joints in the deck slab.
5. Do not change the configuration, dimensions, or reinforcement of the barrier.
6. Do not use segmental concrete construction.
7. Only weathering steel and prestressed concrete I- beams are permitted. No prestressed concrete voided box beams are allowed.
8. Provide beams at equal spacing.
9. Precast concrete barriers are not permitted.
10. Do not slip form barriers.

D. Substructure

1. Design of new substructure units incorporating or founded on existing foundations is not permitted.

- 2. Provide epoxy-coated reinforcement in foundations.
- 3. Precast modular retaining walls are not allowed.
- 4. Do not use proprietary wall systems for abutments or wingwalls.

00 - c9000-0010 – REMOVE WOOD FENCE

Addendum:

Associated Item(s): 9000-0010

Header:

ITEM c

Provision Body:

DESCRIPTION – This work is the removal the existing wooden fence as indicated on the plans.

CONSTRUCTION – Remove existing wooden fence adjacent to Parcel 9 determined to be in conflict with earthwork activities. Do not disturb existing utility pole 5142/60. Do not remove or disturb existing gate.

MEASUREMENT AND PAYMENT – Linear Foot.

Includes all labor, tools, and equipment to remove existing wooden fence.

00 - c9000-0011 – REPAIR OF ACCESS AND HAUL ROADS

Addendum:

Associated Item(s): 9000-0011

Header:

ITEM 9000-0011 – REPAIR OF ACCESS AND HAUL ROADS

Provision Body:

DESCRIPTION – This work is the repair of damage to the road(s) identified herein when utilized for access to the project site, or to the local road(s) selected by the Contractor and approved by the Department for use as an alternate access route. Submit for approval any local road that will be utilized for hauling of construction materials and equipment 21 working days in advance of the first hauling activities. Perform repair work in accordance with the applicable sections of Publication 408 and as directed. If alternate route(s) other than those specified below are used, the Contractor is responsible for securing all approvals from the appropriate authorities and the Contractor is responsible for any damage caused to these alternate routes.

Present the hauling route(s) and schedule to the Engineer 21 working days in advance of the first hauling activities.

Video record the approved routes prior to any hauling activities and document existing deteriorated areas, in the presence of the local municipality representative, the Contractor and Project Engineer.

Repair or reconstruct roadway areas, that are determined to be damaged due to construction access/hauling.

Route:

State Route 3035 (Old Route 119) – Segment 0080 to Segment 0110. This is the portion of State Route 3035 that is located between the two project sites but outside the Limits of Work.

MATERIAL – Furnish material for repair work that is compatible with the existing roadway and consistent with the extent of repair required, as determined by the Engineer.

- o Superpave Asphalt Mixture, HMA Wearing Course, Section 409.2
- o Superpave Asphalt Mixture, HMA Base Course, Section 309.2
- o Tack coat Material, Section 702

CONSTRUCTION – Present a hauling route and schedule to the Engineer 21 working days in advance of the first hauling activities. Repair or reconstruct damaged roadway to restore the profile and/or cross-slope to prehauling or like condition, to the satisfaction of the Engineer. All hauling routes must be kept in a safe and passable condition at all times as determined by the Engineer. Contractor may be required to complete interim repairs as needed. Final repairs must be completed within 15 days of overweight hauling.

MEASUREMENT AND PAYMENT – Dollar. Includes Maintenance and Protection of Traffic, Mobilization, Superpave Wearing and Base Course, Tack Coat and necessary Excavation and sawcutting.

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.

All work performed as repair of access and haul roads will be paid under this item.

00 - c9000-0020 – TEMPORARY CAUSEWAY

Addendum:

Associated Item(s): 9000-0020

Header:

ITEM 9000-0020 – TEMPORARY CAUSEWAY

Provision Body:

DESCRIPTION – This work is the design, construction, maintenance, and removal of a temporary causeway required to demolish the existing bridge structure and construct the new bridge structure as indicated and directed.

MATERIALS –

- o Selected Borrow Excavation, Class R-3 – Section 205
- o Selected Borrow Excavation, Class R-6 – Section 205
- o Geotextile, Class 4, Type A – Section 212
- o Class 1 Excavation – Section 203
- o 60" Pipe – Section 601

CONSTRUCTION – Submit plans for the proposed causeway to the Department for review and approval prior to construction. If the causeway is constructed at an elevation greater than indicated, then provide hydraulic calculations for approval and obtain a revised waterway permit.

Install the causeway as indicated or otherwise approved using clean materials free of silt and debris.

Coordinate causeway construction with Item 5018-0001 Removal of Existing Bridge Modified.

Maintain the crossing to the satisfaction of the Representative.

Remove or breach the causeway during any flood stage that would cause damage in the vicinity. Reconstruct causeway after such an event at no additional cost to the Department.

Replace the causeway as directed in the event of a washout at no additional cost to the Department.

Use the causeway for demolition and construction purposes only.

Remove and dispose of materials when causeway is no longer needed. Restore the streambed and banks to original contours or as directed after removal of the causeway.

Coordinate construction of the causeway to minimize disturbance to Two Lick Creek.

MEASUREMENT AND PAYMENT – Lump Sum.

00 - c9000-0021 – WATER DIVERSION DEVICE

Addendum:

Associated Item(s): 9000-0021

Header:

ITEM 9000-0021 – WATER DIVERSION DEVICE

Provision Body:

DESCRIPTION – This work includes the furnishing, installation, maintenance, and removal of a temporary water diversion system of sandbags or concrete barrier.

MATERIAL –

- o Temporary Concrete Barrier – Section 627.2.
- o Polyethylene Liner – Polyethylene – 6 mil thickness.
- o Sandbags – Polyethylene or acrylic material. Aggregate – Type B Fine Aggregate per Section 703.1 or other suitable material approved by the Engineer.
- o Class 1 Excavation – Section 203.
- o Rock, Class R-3 – Section 850.

CONSTRUCTION – As indicated on the special details and as specified in the applicable section(s) of Publication 408.

MEASUREMENT AND PAYMENT – Linear Foot. Includes installation, maintenance, removal, and all required materials.

00 - c9000-0022 – TEMPORARY PUMP WATER BYPASS SYSTEM

Addendum:

Associated Item(s): 9000-0022

Header:

ITEM 9000-0022 – TEMPORARY PUMP WATER BYPASS SYSTEM

Provision Body:

DESCRIPTION - This work is the furnishing, installation, maintenance, and removal of a method to pump water around the construction area required for the extension of a culvert or swale as indicated.

MATERIALS –

- o Pump – Type and size to be determined by contractor.
- o Pipe – Section 601, type and size to be determined by the contractor.
- o Bags – Polyethylene or acrylic material.
- o Polyethylene – 6 mil thickness.
- o Rock – Section 850.

CONSTRUCTION –

(a) General. Prior to beginning this work, submit construction details for performing the stream diversion for review and approval. These details shall include: pump and pipe size; method and location of temporary pipe supports throughout the length of the pipe, at the inlet, and at the outlet; and energy dissipation and erosion protection at the pipe outlet.

(b) Installation. Prior to beginning culvert extension operations, construct the water diversion devices as indicated and as follows:

- o Fill the bags uniformly about three-fourths full and tie the choke chords.
- o Tuck in the bottom corners of the bags after filling.
- o Place the sandbags so that the planes between the layers have the same pitch as the foundation.
- o Place the bottom row of sandbags as headers. Place the subsequent rows of sandbags in alternate of stretches and headers with the joints broken between courses. Construct the top row of sandbags of headers where possible.
- o Place all bags so that side seams on stretches and choked ends on headers are turned toward the center of the dam and are not exposed.
- o Weave polyethylene sheet through sandbags toward upstream face of dike.

If possible, work should be scheduled so that it occurs during low-flow seasons, or at a minimum, so that it coincides with an expected period of dry conditions. In the event of rain, reconstruct the water diversion device if it is washed-out during high water conditions.

The pump around method shall remain in place until the culvert extension construction is complete, including the installation of the rock apron, or as directed by the Representative. Upon completion, remove the temporary bypass system and restore the area to its original condition.

MEASUREMENT AND PAYMENT – Lump Sum.

00 - c9000-0023 – TEMPORARY PIPE

Addendum:

Associated Item(s): 9000-0023

Header:

ITEM 9000-0023 – TEMPORARY PIPE

Provision Body:

DESCRIPTION – This work is the installation and removal of temporary 18-inch diameter storm pipes required to convey highway drainage beneath temporary rock construction entrances constructed for erosion and sedimentation control.

MATERIAL – In accordance with Section 601.3.

CONSTRUCTION – Install temporary pipe as indicated. Remove pipe after removal of rock construction entrance.

MEASUREMENT AND PAYMENT – Linear Foot. Includes excavation, AASHTO No. 8 aggregate for bedding, compacted No. 2A coarse aggregate, embankment, rock outlet protection (if required), removal, and disposal of temporary pipe and materials.

00 - c9000-0107 – RELOCATION OF GAS SERVICE LINE

Addendum:

Associated Item(s): 9000-0107

Header:

ITEM 9000-0107 – RELOCATION OF GAS SERVICE LINE

Provision Body:

DESCRIPTION – This work is relocation of an existing gas service line under public Right-of-Way and connection to the existing gas service line at the right-of-way line.

MATERIAL – Service line conforming to People’s Natural Gas (PNG) code & ASTM 2513 specifications for approximately 65' of thermoplastic gas pressure pipe (or approved equal) and associated piping and fittings to connect to existing gas service line.

CONSTRUCTION – Place as much of the new service line as possible before contacting PNG to shut off the gas service (this will eliminate the time the property owner is out of service). Contractor will have to contact PNG at 1-800-764-0111 for the shut off. Notify PNG that the line in question is a customer buried house line. Line will need to be pressure tested by a PNG certified contractor.

PNG CERTIFIED CONTRACTOR – Davis Brothers Heating & Air Conditioning, 1075 Water St., Indiana, PA 15701, (724) 456-6722 Shoenfelt Plumbing Heating & AC, 887 Old Route 119 Hwy N, Indiana, PA 15701, (724) 46307619 Anderson’s Heating and Air Conditioning Inc., 318 School St, Indiana, PA 15701, (724) 465-8923

00 - c9005-0500 – MANDATORY PRE-DRILLING FOR DRIVEN PILES AT ABUTMENTS

Addendum:

Associated Item(s): 9005-0500

Header:

ITEM 9005-0500 – MANDATORY PRE-DRILLING FOR DRIVEN PILES AT ABUTMENTS

Provision Body:

DESCRIPTION - This work is the mandatory augering, drilling, or boring holes for indicated bearing piles and test piles at abutments to the estimated pile tip elevations as shown on the plans and backfilling hole with aggregate.

MATERIAL -

- (a) Aggregate - Section 703.1 or AASHTO No. 10 as specified in Section 703.2, Table C.
- (b) Casing Pipe - Section 1006.2(a).

CONSTRUCTION -

- (a) Drill holes at pile locations and depths as shown on the plans. Deviations of drill hole from plan location and verticality are permitted provided the driven pile is as specified in Section 1005.3(b)2.
- (b) Drill a hole with a minimum diameter 3 inches larger than the largest cross sectional dimension of the pile.
- (c) Place pile in drill hole. For pile lengths less than 20 feet, backfilling the hole with aggregate prior to placing the pile is optional.
- (d) If casing is used, remove during backfilling operations unless otherwise specified.
- (e) Backfill drill hole with aggregate prior to obtaining required refusal. Ensure the pile achieves the pre-drilled length as a minimum.
- (e) Drive piles as specified in Section 1005 to the required tip elevation, bearing stratum, and driving resistance.

MEASUREMENT AND PAYMENT - Linear Foot.

- (a) Measured from the bottom of the hole elevation to the bottom of the abutment footing elevation. Includes mobilization, access to the foundations, drilling, maintaining an open hole, casing, and backfilling with aggregate. The cost of driving the piles is included with the pile item.
- (b) Payment will not be made for piles or pre-drilling piles that are driven to refusal at an elevation that is higher than pre-drilled elevation.

00 - c9601-0010 – 8" THERMOPLASTIC PIPE

Addendum:

Associated Item(s): 9601-0010

Header:

ITEM 9601-0010 – 8" THERMOPLASTIC PIPE

Provision Body:

In accordance with Section 601, except as follows:

DESCRIPTION – This work is the installation of a permanent 8" diameter thermoplastic pipe that is necessary to convey runoff from an existing drainage system to the proposed drainage system of the roadway as indicated.

CONSTRUCTION – Install 8" diameter thermoplastic pipe as indicated. Remove existing section of pipe as required to install proposed pipe.

MEASUREMENT AND PAYMENT – Linear Foot.

Performance Bonds

Surety Company: The Fidelity and Deposit Company of Maryland	Status: Accepted
Bonding Agency: Willis of Pennsylvania, Inc.	Bond Number: 8214680
Producer: Susan C Caputy/PennDOT BP-002066	Bond Amount: \$898,869.66
Co-Insurer: Yes	NAIC: 39306

KNOW ALL MEN BY THESE PRESENTS, That we, *Gulisek Construction LLC of 1145 State Route 31 , Mt. Pleasant, PA 15666* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$898,869.66*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligations thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/ her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/16/2012 10:39:14 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	10/16/2012 10:51:22 AM
Contractor Review	Clayton J Stahl/PennDOT BP-004853	Sign	10/16/2012 02:49:40 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/17/2012 08:46:15 AM

Surety Company: Travelers Casualty and Surety Company of America
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 105836457
Bond Amount: \$1,348,304.48
NAIC: 31194

KNOW ALL MEN BY THESE PRESENTS, That we, *Gulisek Construction LLC of 1145 State Route 31 , Mt. Pleasant, PA 15666* as PRINCIPAL, and Travelers Casualty and Surety Company of America a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$1,348,304.48*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligation thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/16/2012 10:40:03 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	10/16/2012 10:49:28 AM
Contractor Review	Clayton J Stahl/PennDOT BP-004853	Sign	10/16/2012 02:49:55 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/17/2012 08:47:36 AM

Payment Bonds

Surety Company: The Fidelity and Deposit Company of Maryland	Status: Accepted
Bonding Agency: Willis of Pennsylvania, Inc.	Bond Number: 8214680
Producer: Susan C Caputy/PennDOT BP-002066	Bond Amount: \$898,869.66
Co-Insurer: Yes	NAIC: 39306

KNOW ALL MEN BY THESE PRESENTS, That we, *Gulisek Construction LLC of 1145 State Route 31 , Mt. Pleasant, PA 15666* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$898,869.66*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company 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	Clayton J Stahl/PennDOT BP-004853	Submit	10/16/2012 10:37:40 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	10/16/2012 10:52:13 AM
Contractor Review	Clayton J Stahl/PennDOT BP-004853	Sign	10/16/2012 02:48:58 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/17/2012 08:46:00 AM

Surety Company: Travelers Casualty and Surety Company of America
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 105836457
Bond Amount: \$1,348,304.48
NAIC: 31194

KNOW ALL MEN BY THESE PRESENTS, That we, *Gulisek Construction LLC of 1145 State Route 31 , Mt. Pleasant, PA 15666* as PRINCIPAL, and Travelers Casualty and Surety Company of America a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *\$1,348,304.48*, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 16 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the replacement of the existing structure carrying SR 3035 over Two Lick Creek with a 2 span cont. composite steel plate girder bridge with minor approach work and lowering the road to increase vertical clearance of a Railroad overpass and other miscellaneous construction, as indicated on the approved drawings included in the bid package for SR 3035, Section 451 and 452, in Indiana County, Center Township and White Township from approximately 1.4 miles south of SR 3026 intersection at Segment 0080 Offset 1878 to approximately 3.0 miles North of SR 0119 intersection at Segment 0080 Offset 0928 and from approximately 5.4 miles north of SR 0119 intersection at Segment 0110 Offset 0470 to .3 miles South of SR 0422 intersection at Segment 0110 Offset 1070.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/16/2012 10:38:12 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	10/16/2012 10:50:16 AM
Contractor Review	Clayton J Stahl/PennDOT BP-004853	Sign	10/16/2012 02:49:24 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/17/2012 08:47:16 AM

Insurance

Willis Pennsylvania, Inc.

c/o 26 Century Blvd.
PO Box 305191
Nashville, TN 37230-5191

Company: Zurich American Insurance Company

Policy: GLO488312002

Expiration: 03/01/2013

DBE Commitments

DBE: 6%
Approved: 6.12%

Perform Less Than 50% of Work Items: No
Good Faith Effort Evaluation: No

Status	Business Partner	Business	% of Bid	Submitted	Acknowledged
Approved	Alvarez, Inc.	Subcontractor	3.06%	10/11/2012	10/11/2012
Approved	Brenda L Dixon D/B/A dixon contracting & supply	Regular Dealer	0.37%	10/11/2012	10/11/2012
Approved	Callahan Paving Products, Inc.	Regular Dealer	0.74%	10/11/2012	10/10/2012
Approved	Klapec Trucking Company	Regular Dealer	2.45%	10/11/2012	10/10/2012
Approved	Sherry Justice Sales LLC	Regular Dealer	0.14%	10/11/2012	10/11/2012

Alvarez, Inc.

Prime

Contact: Clayton J. Stahl, P.E.
Phone: 724-696-3341
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Alvarez, Inc.
Type: DBE
Contact: Mike Lang
Phone: 724-916-4151
DBE JVT%:
Certification: 1028
Cert. Expiration: 12/31/2014

Agreement Amount: \$68,700.00
% of Bid: 3.06
Mobilization: \$0.00
Starting: 11/19/2012
Completion: 10/09/2013
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8120-0001	BRIDGE STRUCTURE, AS-DESIGNED, S-31269	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/10/2012 02:55:37 PM
Awaiting Acknowledgement	Michael A Lang/PennDOT BP-000581	Acknowledge	10/11/2012 09:00:35 AM
Acknowledged	Clayton J Stahl/PennDOT BP-004853	Submit	10/11/2012 10:40:22 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/11/2012 10:58:55 AM

Brenda L Dixon D/B/A dixon contracting & supply

Prime

Contact: Clayton J. Stahl, P.E.
Phone: 724-696-3341
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Brenda L Dixon D/B/A dixon contracting & supply
Type: DBE
Contact: Brenda Dixon
Phone: 814-342-5203
DBE JVT%:
Certification: 10532
Cert. Expiration: 05/31/2009

Agreement Amount: \$8,379.94
% of Bid: 0.37
Mobilization: \$0.00
Starting: 11/19/2012
Completion: 10/09/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
0605-2882	TYPE D-H INLET BOX, HEIGHT < /= 10'	EACH	1.000
0605-2850	STANDARD INLET BOX, HEIGHT < /= 10'	EACH	4.000
0605-2750	TYPE D-H CONCRETE TOP UNIT AND GRATES	SET	1.000
0605-2740	TYPE S CONCRETE TOP UNIT AND GRATE	SET	1.000
0605-2731	TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	SET	2.000
0605-2711	TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	SET	2.000
0605-2600	TYPE D ENDWALL	EACH	1.000
9601-0010	8" THERMOPLASTIC PIPE	LF	27.000
4610-7002	6" PAVEMENT BASE DRAIN	LF	82.000
0610-7002	6" PAVEMENT BASE DRAIN	LF	926.000
0212-0016	GEOTEXTILE, CLASS 4, TYPE C	SY	940.000
0212-0016	GEOTEXTILE, CLASS 4, TYPE C	SY	940.000
0212-0016	GEOTEXTILE, CLASS 4, TYPE C	SY	940.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	1,849.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	1,849.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	1,849.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/10/2012 02:56:34 PM
Awaiting Acknowledgement	Brenda L Dixon/PennDOT BP-001363	Acknowledge	10/11/2012 09:04:07 AM
Acknowledged	Clayton J Stahl/PennDOT BP-004853	Submit	10/11/2012 10:40:22 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/11/2012 11:00:19 AM

Callahan Paving Products, Inc.

Prime

Contact: Clayton J. Stahl, P.E.
Phone: 724-696-3341
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Callahan Paving Products, Inc.
Type: DBE
Contact: Larry Diehm
Phone: 215-443-5040
DBE JVT%:
Certification: 10452
Cert. Expiration: 09/14/2013

Agreement Amount: \$16,721.98
% of Bid: 0.74
Mobilization: \$0.00
Starting: 11/19/2012
Completion: 10/09/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8120-0001	BRIDGE STRUCTURE, AS-DESIGNED, S-31269	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/10/2012 02:57:07 PM
Awaiting Acknowledgement	Brian Eberhart/PennDOT BP-000822	Acknowledge	10/10/2012 02:59:42 PM
Acknowledged	Clayton J Stahl/PennDOT BP-004853	Submit	10/11/2012 10:40:22 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/11/2012 11:00:45 AM

Klapec Trucking Company

Prime

Contact: Clayton J. Stahl, P.E.
Phone: 724-696-3341
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Klapec Trucking Company
Type: DBE
Contact: Bridget Lander
Phone: 814-676-1512
DBE JVT%:
Certification: 13733
Cert. Expiration: 01/31/2015

Agreement Amount: \$55,158.14
% of Bid: 2.45
Mobilization: \$0.00
Starting: 11/19/2012
Completion: 10/09/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	131,404.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	131,404.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/10/2012 02:57:40 PM
Awaiting Acknowledgement	Cindy Urban/PennDOT BP-005184	Acknowledge	10/10/2012 03:33:58 PM
Acknowledged	Clayton J Stahl/PennDOT BP-004853	Submit	10/11/2012 10:40:22 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/11/2012 11:01:19 AM

Sherry Justice Sales LLC

Prime

Contact: Clayton J. Stahl, P.E.
Phone: 724-696-3341
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Sherry Justice Sales LLC
Type: DBE
Contact: Sherry Justice
Phone: 724-543-1116
DBE JVT%:
Certification: 12990
Cert. Expiration: 11/30/2014

Agreement Amount: \$3,106.73
% of Bid: 0.14
Mobilization: \$0.00
Starting: 11/19/2012
Completion: 10/09/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
0616-1202	CONCRETE END SECTIONS FOR 18" PIPE	EACH	1.000
0615-0040	SUBSURFACE DRAIN OUTLET ENDWALL	EACH	1.000
0601-7327	24" REINFORCED CONCRETE PIPE, TYPE B, 15' - 2' FILL	LF	61.000
0601-7313	18" REINFORCED CONCRETE PIPE, TYPE B, 15' - 1.5' FILL	LF	170.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Clayton J Stahl/PennDOT BP-004853	Submit	10/10/2012 02:58:10 PM
Awaiting Acknowledgement	Sherry A Justice/PennDOT BP-004792	Acknowledge	10/11/2012 09:14:53 AM
Acknowledged	Clayton J Stahl/PennDOT BP-004853	Submit	10/11/2012 10:40:22 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	10/11/2012 11:01:58 AM

Plans

Plans	Addendum
Roadway Plan	
Supplemental Plans	
Cross Section	
Erosion and Sediment Pollution Control Plan - SR 3035 AT TWO LICK CREEK BRIDGE	
Erosion and Sediment Pollution Control Plan - SR 3035 UNDER RAILROAD OVEROASS	
Existing Structure Plan	1
Signing and Pavement Marking Plan	
Structure Plan	
Traffic Control Plan	

Attachments

Project-Specific Checklist Items	Addendum
Project Specific - Steel Escalation Option Form	
Reviews	
None	
Contract Award Items	
Disclosure of Lobbying Activities	
F.A.R. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS	
Federal Wage Rate	
Local Agreements and Coordination	
None	
Environmental Clearances	
None	
Permits	
DEP Section 401 Water Quality Certification	
DEP Water Obstruction and Encroachment Permit 105/404	
Environmental Due Diligence (EDD) - Contractor	
Environmental Due Diligence (EDD) - PennDOT	
US Army Corps of Engineers Section 404 Permit	
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	
Traffic	
None	
Construction Coordination	
None	
Maintenance Items	
None	

Estimates

None

Comments: