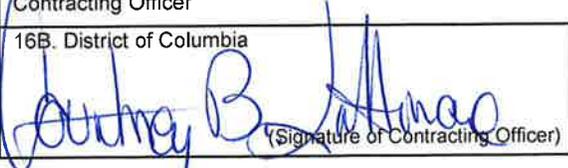


AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT		1. Contract Number DCKA-2012-B-0026	Page of Pages 1 | 63
2. Amendment/Modification Number Amendment 6	3. Effective Date See 16C	4. Requisition/Purchase Request No.	5. Solicitation Caption 16 th St., Reconstruction, Culvert Replacement Kalmia Rd.
6. Issued by: District Department of Transportation 55 M Street, SE Suite 700 Washington, DC 20003	Code	7. Administered by (If other than line 6) District Department of Transportation Planning, Policy and Sustainability Administration 55 M Street, SE 5 th floor Washington, DC	
8. Name and Address of Contractor (No. street, city, county, state and zip code)	Code	Facility	9A. Amendment of Solicitation No. DCKA-2012-B-0026
			9B. Dated (See Item 11) March 11, 2013
			10A. Modification of Contractor/Order No.
			10B. Dated (See Item 13)
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS			
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input checked="" type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning <u>2</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) BY separate letter or fax which includes a reference to the solicitation and amendment number. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such may be made by letter or fax, provided each letter or telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.			
12. Accounting and Appropriation Data (If Required):			
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTORS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14			
	A. This change order is issued pursuant to (Specify Authority): The changes set forth in Item 14 are made in the contract/order no. in item 10A.		
	B. The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data etc.) set forth in item 14, pursuant to the authority of 27 DCMR, Chapter 36, Section 3601.2.		
	C. This supplemental agreement is entered into pursuant to authority of:		
<input checked="" type="checkbox"/>	D. Other (Specify type of modification and authority)		
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.			
14. Description of Amendment/Modification (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.)			
Solicitation No.: DCKA-2013-B-0026- 16 TH St. Bridge and Kalmia Rd. is hereby modified as follows:			
A. The closing date is extended until Wednesday, June 12, 2013 at 2:00pm.			
B. Sheet 3 is deleted and replaced in its entirety with Sheet 3R (see attachment 3)			
C. Sheet 4 is deleted and replaced in its entirety with Sheet 4R (see attachment 4)			
Except as provided herein, all terms and conditions of the document referenced in item (9A or 10A) remain unchanged and in full force and effect.			
15A. Name and Title of Signer (Type or print)		16A. Name of Contracting Officer	
		Courtney Lattimore Contracting Officer	
15B. Name of Contractor	15C. Date Signed	16B. District of Columbia	16C. Date Signed
(Signature)		 (Signature of Contracting Officer)	5/31/13

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT		1. Contract Number DCKA-2012-B-0026	Page of Pages 2 63
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D. Sheet 38 is deleted and replaced in its entirety with Sheet 38R (see attachment 5)

E. Sheet 62 is deleted and replaced in its entirety with Sheet 62R (see attachment 6)

F. Sheet 41 is deleted and replaced

DELETE – NOTE: SEE SHEET 42 FOR SIGNING AND MARKING PLAN ON THE 16TH STREET BRIDGE.
REPLACE – NOTE: SEE SHEET 33 FOR SIGNING AND MARKING PLAN ON THE 16TH STREET BRIDGE.

G. Sheet 44,47,49,50

DELETE – NOTE: 1. REPLACE EXISTING BASIN WITH GRATE TYPE CATCH BASIN WITH SERPENTINE GRATE. REFER TO DCWASA STANDARD DWG NO. S -30.32 SHEET 1 AND 2 (SPEC APPENDIX – C).
REPLACE - NOTE: 1. REPLACE EXISTING BASIN WITH GRATE TYPE CATCH BASIN WITH SERPENTINE GRATE. REFER TO DCWASA STANDARD DWG NO. S -30.32 SHEET 1 AND 2 (DETAIL SEE SHEET 21).

H. Sheet 46 is deleted and replaced

DELETE – NOTE: 1. REPLACE EXISTING BASIN WITH GRATE TYPE CATCH BASIN WITH SERPENTINE GRATE. REFER TO DCWASA STANDARD DWG NO. S -30.32 SHEET 1 AND 2 (SPEC APPENDIX – C). ADJUST THE LOCATION OF DOUBLE GRATE TYPE CATCH BASIN IF IT IS IN CONFLICT WITH THE PEPCO 4-WAY CONDUIT.
REPLACE - NOTE: 1. REPLACE EXISTING BASIN WITH GRATE TYPE CATCH BASIN WITH SERPENTINE GRATE. REFER TO DCWASA STANDARD DWG NO. S -30.32 SHEET 1 AND 2 (DETAIL SEE SHEET 21). ADJUST THE LOCATION OF DOUBLE GRATE TYPE CATCH BASIN IF IT IS IN CONFLICT WITH THE PEPCO 4-WAY CONDUIT.

I. Sheet 78 is deleted and replaced

DELETE – NOTE: 4 FOR ALL CONSTRUCTION SEQUENCE DIMENSIONS ON BRIDGE 209 SEE SHEET NO. 73.
REPLACE – NOTE: 4 FOR ALL CONSTRUCTION SEQUENCE DIMENSIONS ON BRIDGE 209 SEE SHEET NO. 77.

J. Sheet 79 is deleted and replaced

DELETE – NOTE: 5 FOR ALL CONSTRUCTION SEQUENCE DIMENSIONS ON BRIDGE 209 SEE SHEET NO. 73.
REPLACE – NOTE: 5 FOR ALL CONSTRUCTION SEQUENCE DIMENSIONS ON BRIDGE 209 SEE SHEET NO. 77

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SPECIFICATIONS

K. Page 1

DELETE - BID FORM AND PROPOSALS: Pages a, b, c, d, and e, pages 1 thru xx, including PAY ITEM SCHEDULE.

REPLACE - BID FORM AND PROPOSALS: Pages a, b, c, d, and e, pages 1 through 28, including PAY ITEM SCHEDULE.

L. Appendices

ADD: STEEL-BACKED TIMBER GUARDRAIL SPECIFICATIONS (FHWA-SECTION 617-GUARDRAIL).
Attachment # 7

M. SPC. 1-C.2 SCOPE OF WORK

DELETE – Construction of a pavement consisting of eight (8) inches thick aggregate base, eleven (11) inches thick Superpave base course 25mm, two (2) inches thick Superpave Surface course 12.5, granite curb and PCC gutter.

REPLACE – Construction of a pavement consisting of eight (8) inches thick aggregate base, (10) inches thick PCC Pavement, granite curb and PCC gutter as per the plans.

N. SPC. 14- WORK AND STORAGE SPACE

ADD – After third paragraph:

“The Contractor shall provide photographic documentation of the work zone prior to construction. This documentation shall show the existing condition of the NPS land and the vegetation around the work area that may be affected during construction. At the end of construction, the NPS land will be repaired as needed at the Contractor’s expense to the satisfaction of the District and NPS.

All construction materials, fencing, trash, and temporary water, sewer and electrical facilities shall be removed from the project site, staging area and disposed of properly at the Contractor’s expense.

All costs associated with the establishment, occupation and removal of the work and storage area as described in this SP will not be measured for payment but shall be distributed among the various items of the project”

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O. SPC. 17 ADDITIONAL PARK SERVICE REQUIREMENTS

DELETE – In A. GENERAL first paragraph: "will apply for a permit from NPS upon request of the Contractor."

REPLACE – In A. GENERAL first paragraph: "(DDOT) has obtained permit from the NPS. The contractor shall adhere to all requirements of this section, the aforementioned document(s) in the Appendix as well as the requirements of the actual permit issued for work under this contract by the NPS to DDOT. Contractor shall provide post bond(s) and provide insurance(s) as per permit. A copy of the permit can be found in the Appendix to this specification."

ADD – At A. GENERAL beginning of second paragraph:

"For any additional temporary use of NPS land, the District of Columbia Department of Transportation (DDOT) will obtain permit from the NPS upon request of the contractor."

P. SPC.21 INCENTIVES, DISINCENTIVES AND LIQUIDATED DAMAGES

DELETE – In C. DISINCENTIVE FOR FAILURE TO COMPLETE ON TIME fourth paragraph: "Total disincentives charged will not exceed the maximum incentive amount of that part of the contract. The limit on the amount of disincentives deducted is the maximum incentive for each part of the project combined."

DELETE – In C. DISINCENTIVE FOR FAILURE TO COMPLETE ON TIME, 1. Part I at end of first paragraph: "The maximum disincentive for late opening of Kalmia Road and sidewalks to normal vehicular and pedestrian traffic is FIFTY THOUSAND DOLLARS AND NO CENTS (\$50,000)."

DELETE – In C. DISINCENTIVE FOR FAILURE TO COMPLETE ON TIME, 2. Part II at end of first paragraph: "The maximum disincentive for late opening of 16th Street Bridge and sidewalks to normal vehicular and pedestrian traffic is ONE HUNDRED FIFTY THOUSAND DOLLARS AND NO CENTS (\$150,000)."

DELETE – In C. DISINCENTIVE FOR FAILURE TO COMPLETE ON TIME, 2. Part II at end of third paragraph: "The maximum disincentive for late Part II Substantial Completion of Work is ONE HUNDRED THOUSAND DOLLARS AND NO CENTS (\$100,000)."

Q. SPC. 25

DELETE – Special Provision 25 WEEKEND WORK in its entirety.

REPLACE – With revised Special Provision 25 (NOT USED).

R. SPC.38 BRIDGE DEMOLITION ITEM 205 009

ADD – In the first paragraph, after "These four borings are required to confirm the soil information that is available from the original bridge construction.": "All borings shall meet the requirements of ASTM D1586 – Standard Penetration Test and Split-Barrel Sampling of Soils."

DELETE - The factored ultimate bearing capacity as indicated in the general notes is 14 TSF for the north abutment and wingwalls and 7 TSF for the south abutment and wingwalls.

REPLACE - The factored ultimate bearing capacity as indicated in the general notes is 7 TSF for the north abutment and wingwalls and 7 TSF for the south abutment and wingwalls.

DELETE - Part I (title only)

REPLACE - Part I – CULVERT REPLACEMENT ON KALMIA ROAD OVER ROCK CREEK TRIBUTARY WEST BEACH DRIVE TO EAST BEACH DRIVE

DELETE - Part II (title only)

REPLACE - Part II - RECONSTRUCTION OF 16th STREET BRIDGE OVER MILITARY ROAD AND MEDIAN BARRIER & STREETLIGHT IMPROVEMENTS ON MILITARY ROAD

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Q. SPC.38 BRIDGE DEMOLITION ITEM 205 009 CONTINUED

DELETE – A. GENERAL 2. PART II a. “Removal and disposal of the entire single span reinforced concrete Rigid Frame (Bridge 209) including superstructure slab, sidewalk slabs, wearing surface, curbs, parapets, fence and railings, substructure, including abutment walls, abutment footings, segments of wing walls, retaining walls and footings, as shown in the contract plans.”

REPLACE - A. GENERAL 2. PART II a. “Phased removal and disposal of the entire single span reinforced concrete Rigid Frame (Bridge 209) including superstructure, sidewalk, wearing surface, curbs, parapets, fence and railings, substructure, including abutment walls, footings, wing walls, retaining walls and footings, to the limits shown in the contract plans and as per the specifications. The contractor’s attention is required since the presence of asbestos in the sidewalk due to existing utility line is not known. The contractor shall field test the existence or non existence of asbestos before starting the bridge demolition work as per item 618 023; removal of asbestos containing conduits from the bridge sidewalk will be paid under pay item 618 023. Removing the concrete around the utility lines on the bridge, including exposing the utility lines for testing will be part of the demolition work and no separate payment will be made, it will be incidental to Demolition pay item.”

ADD – A. GENERAL 2. PART II h. “Providing temporary protection shield on the 16th Street Bridge and Military Road during bridge demolishing and phase construction of Bridge 209. In addition, install Median barrier on Military Road to protect the travelling public including installing orange fence on top of the barriers as per DDOT standards and specification on 16th Street and Military Road. The cost of installing and removing the orange fence on the barriers will be considered incidental to the demolishing work, no separate payment will be made.”

ADD – A. GENERAL 2. Part II Item I.

(I.) The existing Clear Channel bus shelter located on Military Road, NW west of the 16th Street bridge in conflict with contractors operations shall be temporarily removed and reinstalled by Clear Channel for a \$15,000 fee. The contractor shall provide a temporary 6’x24’ Covered Bus Shelter per drawing in Appendix at a location acceptable to WMATA Metro Bus for the duration of the contractor’s Phase 1 operations. The cost of the fee to remove and reinstall Clear Channel shelter and provide temporary shelter shall be included in the BRIDGE DEMOLITION Item 205 009

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Q. SPC.38 BRIDGE DEMOLITION ITEM 205 009 CONTINUED

DELETE – B. CONSTRUCTION METHODS first paragraph.

REPLACE - B. CONSTRUCTION METHODS first paragraph: "The contractor shall submit the procedure, and sequence of demolition operations plan, working drawings and calculations including type of equipment that will be used for bridge and culvert demolition to the Engineer for acceptance; all the submittals shall be prepared and signed and sealed by a Professional Engineer registered in the District of Columbia. The Engineers acceptance shall not relieve the Contractor from his responsibility s on the safety the public, DDOT's representatives, the workers and the structural integrity of the bridge during demolition and phased construction under this contract. The submittal shall also include Details for the temporary sheeting and shoring, protection shield, Bridge demolishing procedures and Calculations demonstrating that the stability and load resistance of the temporary support structure and remaining existing bridge structure for that phase is adequate during all phases of demolition and construction. The narrative shall include all proposed equipment types. Once the engineer has accepted the demolition plan and methodology, demolition may begin with installation of the temporary support system and protection shield after receiving the notice from the Engineer.

Material shall be removed daily and not allowed to accumulate on or adjacent to the project site. The Contractor shall also install and maintain tree protections within the contract limits including the staging area as per DDOT standards and NPS permits."

ADD – (B) (1) Support of Existing Structural Elements – after last paragraph: "The cost of stabilizing existing structure and removal of the existing bridge is considered incidental to Demolition pay item no separate measure and payment will be made. The contractor is advised to familiarize himself to existing structure and nature of the work involved."

DELETE – C. MEASUREMENT AND PAYMENT in its entirety.

REPLACE – C. MEASUREMENT AND PAYMENT

Payment for Demolition will be made at the contract lump sum price, which payment will include preparation of the demolition plan including all required working drawings and calculations, coordination with utility companies and NPS, borings, geotechnical engineering and report, construction of temporary support, removal and disposal of all materials, and furnishing all labor, tools, materials, equipment, and incidentals needed to complete the work as shown on the contract plans and specified above in this special provision.

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Q. SPC.38 BRIDGE DEMOLITION ITEM 205 009 CONTINUED

Part I

Payment will be made at the completion of demolition work for Part I.

30% of the payment under pay Item 205 009 will be for all the work mentioned above under Part I.

Part II

Payment will be made in two equal increments at the completion of the removal of the entire portion of each phase of the existing bridge removal.

70% of the payment under pay Item 205 009 will be for all the work mentioned above under Part II.

R. SP 41. REPLACE EXISTING BASIN WITH DUAL THROAT WATER QUALITY BASIN, ITEM 311 025

DELETE - The construction of all basins shall include the PCC Gutter as shown on the contract drawings. The construction of PCC Gutters shall be in conformance with 609. New connect pipe shall be paid for under Item 310 008, BASIN CONNECT PCC PIPE, CLASS III, 15 inch. Payment for PCC Gutters shall be made under Item 609 038 for the 12 Inch width in front of the basin.

REPLACE - The construction of all basins shall include the PCC Gutter as shown on the contract drawings and the Basin Connect PCC Pipe, Class III, 15 Inch. The construction of PCC Gutters shall be in conformance with 609. New connect pipe shall be paid for under Item 310 008, BASIN CONNECT PCC PIPE, CLASS III, 15 inch. Payment for PCC Gutters shall be made under Item 609 038 for the 12 Inch width in front of the basin.

s. SP 42. REPLACE EXISTING BASIN WITH GRATE TYPE WATER QUALITY BASIN, ITEM 311 027

DELETE - The construction of all basins shall include the PCC Gutter as shown on the contract drawings. The construction of PCC Gutters shall be in conformance with 609. New connect pipe shall be paid for under Item 310 008, BASIN CONNECT PCC PIPE, CLASS III, 15 inch. Payment for PCC Gutters shall be made under Item 609 038 for the 12 Inch width in front of the basin.

REPLACE - The construction of all basins shall include the PCC Gutter as shown on the contract drawings and the Basin Connect PCC Pipe, Class III, 15 Inch. The construction of PCC Gutters shall be in conformance with 609. New connect pipe shall be paid for under Item 310 008, BASIN CONNECT PCC PIPE, CLASS III, 15 inch. Payment for PCC Gutters shall be made under Item 609 038 for the 12 Inch width in front of the basin.

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T. SP 66. PREFABRICATED BRIDGE SUBSTRUCTURE, ITEM 703 021 (16TH STREET BRIDGE)

DELETE – D. MEASUREMENT AND PAYMENT in its entirety.

REPLACE – With revised paragraphs:

“D. MEASUREMENT AND PAYMENT

The unit of measure will be the job. No actual measurement will be made. Payment for PREFABRICATED BRIDGE SUBSTRUCTURE includes the fabrication, delivery and installation of precast concrete footings, abutment walls, backwalls, beam and girder seats, wingwalls, retaining walls, grade beams around the sewer line, footing leveling system, mechanical couplers and grout; the work also includes constructing closure pours, injecting non-shrink grout between precast concrete panels, clear sealing of the concrete, drilling and anchoring to existing wall, drilling and anchoring the precast concrete foundation panel to the concrete mat, waterproofing of the rear surface of the abutment walls, backwalls and wingwalls, placement of an impervious surface, drainage and outlet pipes (including perforated pipes behind the abutments), vertical pervious backfill, and other works as specified above in this pay item and miscellaneous materials required to construct the 16th Street Bridge over Military Road (Bridge # 209) north and south abutment bridge substructures, foundations, wingwalls, retaining walls, waterproofing materials and drainage systems behind both abutments. Payment for PREFABRICATED BRIDGE SUBSTRUCTURE at the contract lump sum price will also include the cost of all shop drawings, working drawings, temporary supports, labor, materials, equipment and incidentals needed to complete the work as specified on the contract plans and in the specifications.

Payment will be made in two equal increments at the completion of the bridge substructure portion of each of the two phases of the substructure work. Both the north and south abutments, wingwalls, retaining wall, backwalls components associated with the phase must be completed for that phase prior to payment for that phase.”

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<p>U. SP 68. PREFABRICATED BRIDGE SUPERSTRUCTURE, ITEM 706 023 (16th STREET BRIDGE)</p> <p>ADD – A. GENERAL after second paragraph: “The steel fabrication shall be performed by a Contractor/Subcontractor having current AISC Bridge QMS Certification for simple bridges.”</p> <p>DELETE – B. MATERIALS 1. Structural Steel: a. and b. in their entirety.</p> <p>REPLACE – B. MATERIALS 1. Structural Steel: a. Steel Girder/Beam – AASHTO M 270, Grade 50W with Non-Fracture Critical CVN testing at the H (heat) frequency of testing at 40 degrees testing temperature for the bottom flange and web. The required testing result is a Minimum Average Energy of 20 ft-lbf. Supplementary Requirement S4 – Fine Austenitic Grain Size is required.</p> <p>Miscellaneous Bridge Steel – The above steel materials shall be used for the other steel components required to be used on the bridge superstructure.</p> <p>b. Utility Supports – ASTM A 36 Structural steel may be used for these supports with ASTM A 325, Type 3 bolts and appropriate nuts and washers. Hanger rods shall be ASTM A 307 with appropriate nuts and washers.</p> <p>DELETE – C. CONSTRUCTION REQUIREMENTS 5. a. General second paragraph: “The fabricator shall be responsible for checking the effects of lifting on the prefabricated elements. The location of lifting points, calculations of the effects of lifting and the proposed lifting hardware shall be submitted to the Engineer.”</p> <p>REPLACE – C. CONSTRUCTION REQUIREMENTS 5. a. General second paragraph: “The fabricator shall be responsible for checking the effects of lifting on the prefabricated elements. The location of lifting points, calculations of the effects of lifting and the proposed lifting hardware shall be submitted to the Engineer signed and sealed by Professional Engineer licensed to practice in the District of Columbia.”</p> <p>V. SP 69. PAINT METAL WORK, ITEM 707 002</p> <p>DELETE – Special Provision 69 PAINT METAL WORK, ITEM 707 002 in its entirety.</p> <p>REPLACE – With revised Special Provision PAINT METAL WORK, ITEM 707 002 attached</p> <p>W. SP 74. CONCRETE BONDING AGENTS</p> <p>ADD – At end of second paragraph: “No measure and payment will be made; the cost of placing the concrete bonding agents as recommended by the bonding agent manufacture will considered as incidental and shall be reflected and distributed among all the pay items for the bridge superstructure and substructure bid pay items.”</p> <p>X. SP 75. CLEAN AND RESEAL EXPANSION JOINTS FOR ABUTMENTS AND WALLS, ITEM 708 015</p> <p>DELETE – In A. GENERAL entire paragraph.</p> <p>REPLACE - In A. GENERAL paragraph: “Work consists of removing and cleaning existing vertical joint material at bridge wingwall, and retaining walls and furnishing and installing new joint filler material as per the manufactures direction, at locations shown on the plans. Care shall be taken not to damage the existing water stops.”</p>			

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Y. SP 78. STEEL BACKED TIMBER (SBT) GUARDRAIL, ITEM 605 043

DELETE – A. GENERAL entire paragraph.

REPLACE - A. GENERAL paragraph: “Work consists of removal and disposal of the existing wooden railings and posts and the fabrication and installation of new Type-A Steel Backed Timber (SBT) Guardrail along ramp D at locations shown on the plans and standard details shown in the appendices to this SP. The work includes excavation, backfill, and concrete foundation to support the new post as shown on the contract plans.”

DELETE – B. MEASUREMENT AND PAYMENT entire paragraph.

REPLACE - B. MEASUREMENT AND PAYMENT paragraph: “The unit of measure will be the linear foot. Payment for STEEL BACKED TIMBER (SBT) GUARDRAIL will be made at the contract unit price bid per foot, complete in place, which payment will include removal and disposal of the existing wooden railings and posts, furnishing and installing new railings, including all labor, tools, materials, equipment and incidentals necessary to complete the specified work as per special provisions, contract plans and specifications.”

Z. SP 79. CLEAR AND GRUB, ITEM 201 005

DELETE – A. LIMITS entire paragraph.

REPLACE - A. DESCRIPTION paragraph: “This S.P. includes the removal of all vegetation adjacent to the abutments and wingwalls of the existing 16th Street Bridge over Military Road that will interfere with the demolition of the existing bridge and reconstruction of the new bridge.”

AA. SP 80. SUBFOUNDATION WORK MAT CONCRETE, ITEM 702 002

DELETE – Special Provision 80 SUBFOUNDATION WORK MAT CONCRETE, ITEM 702 002 in its entirety.

REPLACE – With revised Special Provision 80 SUBFOUNDATION WORK MAT CONCRETE, ITEM 702 002 attached

BB. BID PROPOSAL SCHEDULE

Schedule replaced in its entirety (see attachment #1)

CC. BID SUMMARY REPLACED IN ITS ENTIRETY

Bid summary replaced in its entirety (see attachment #2)

ATTACHMENT #1

(attachments are not counted as page)

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
SECTION 0001 KALMIA - PARTICIPATING BRIDGE WORK						
0010	000003 Employee Training	3040.000 HR	.	.	.	.
0020	000103 Materials Special Item - CY - 207 005 - GRAVEL FOR TRENCH UNDERCUT	40.000 CY	.	.	.	.
0030	000103 Materials Special Item - CY - 207 005 - GRAVEL FOR TRENCH UNDERCUT	10.000 CY	.	.	.	.
0040	000506 Unassigned Special Item -EACH - 617 043-RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER ONTO TEMP PORTABLE PCC BASE	4.000 EACH	.	.	.	.
0050	000506 Unassigned Special Item -EACH - 617 099 - FURINSH AND INSTALL BOLT-ON UPS SYSTEM (12? EQUALS 12 INCHES)	4.000 EACH	.	.	.	.
0060	000506 Unassigned Special Item -EACH - 617 119 - FURNISH AND INSTALL APS UNIT WITH CUSTOM MESSAGING	30.000 EACH	.	.	.	.
0070	000506 Unassigned Special Item -EACH - 617 121 - DDOT CCTV CAMERA AND ASSOCIATES EQUIPMENT	1.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0080	000506 Unassigned Special Item -EACH - 617 131 - FURNISH AND INSTALL CCTV CAMERA COMPLETE	1.000 EACH	.		.	
0090	000506 Unassigned Special Item -EACH - 617 133 - RELOCATE EXISTING CCTV CAMERA ONTO TEMPORARY TRAFFIC SIGNAL POLE	1.000 EACH	.		.	
0100	000506 Unassigned Special Item -EACH - 618 503 - PLUG AND PARGE PEPCO MANHOLE WALL	6.000 EACH	.		.	
0110	000509 Unassigned Special Item -LF - 616 043 - REMOVABLE PREFORMED PAVEMENT MARKING	2064.000 LF	.		.	
0120	000509 Unassigned Special Item -LF - 618 001 - REMOVE OVERHEAD SECONDARY	30.000 LF	.		.	
0140	000511 Unassigned Special Item -LS - 616 000 - TEMPORARY PEDESTRIAN ACCESS (KALMIA CULVERT)	LUMP		LUMP		.
0150	000511 Unassigned Special Item -LS - 617 135-FURNISH & INSTALL A WIRELESS BAT TERY-POWERED MAGNETOMETER DETECTION SYS.	LUMP		LUMP		.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026 PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0160	000511 Unassigned Special Item -LS - 703 021 - PREFABRICATED BRIDGE SUBSTRUCTURE (16TH STREET BRIDGE)	LUMP	LUMP			
0170	000511 Unassigned Special Item -LS - 703 023 - TEMPORARY SUPPORT FOR UTILITIE	LUMP	LUMP			
0180	000511 Unassigned Special Item -LS - 703 023 - TEMPORARY SUPPORT FOR UTILITIE	LUMP	LUMP			
0190	000511 Unassigned Special Item -LS - TREE TRIMMING AND PRUNING- 611051	LUMP	LUMP			
0200	000515 Unassigned Special Item -SY - GEOGRID	3960.000 SY				
0210	108002 Progress Photographs	LUMP	LUMP			
0220	108004 As-Built Drawings	LUMP	LUMP			
0240	201002 Clear and Grub	LUMP	LUMP			
0250	201991 Clear and Grub Special Item - LS - 201 005 - CLEARING AND GRUBBING	LUMP	LUMP			

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT		
			DOLLARS	CTS	DOLLARS	CTS	
0260	000511 Unassigned Special Item -LS - 205009- BRIDGE DEMOLITION 16TH STREET AND KALMIA RD.	LUMP	LUMP				
0270	202002 Common Excavation	5773.000					
		CY					
0280	204004 Borrow Embankment Fill	459.000					
		CY					
0290	205002 Structure Excavation	5460.000					
		CY					
0300	205004 Structure Hard Surface Excavation	1000.000					
		CY					
0310	206002 Structure Backfill	100.000					
		CY					
0320	206004 Borrow Structure Backfill	3425.000					
		CY					
0330	207002 Trench Excavation and Backfill	117.000					
		CY					
0340	207004 Trench Undercut Excavation	50.000					
		CY					
0350	207008 Borrow Trench Backfill	25.000					
		CY					

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0360	209002 Aggregate Base Course	2605.000 CY	.	.	.	.
0370	212002 Test Pit	12.000 EACH	.	.	.	.
0380	300007 Water and Sewer Service Special Item-LS - PCC COLLAR (REINFORCED)	LUMP	LUMP	.	.	.
0390	305004 Ductile Iron Pipe, 12 Inch 305 002 - DUCTILE IRON PIPE, 4 - 12 INCH	175.000 LF	.	.	.	.
0400	305018 Extra Fittingd - Contractor Furnished	2000.000 LBS	.	.	.	.
0410	309002 Sewer Manhole on Sewer 48 Inch and Less Dia.	47.000 VLF	.	.	.	.
0420	310002 Standard Basin	2.000 EACH	.	.	.	.
0430	310008 Basin Connect PCC Pipe, Class III, 15 Inch	100.000 LF	.	.	.	.
0440	310012 Basin Connect PCC Pipe, Class IV, 15 Inch	68.000 LF	.	.	.	.
0450	310992 Catch Basins Special Item -EACH - 311 025 - REPLACE EXISTING BASIN WITH DUAL THROAT WATER QUALITY BASIN	15.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0460	|311002 Adjust Sewer-Water-Utility Manhole Frame	11.000 EACH	.	.	.	.
0470	|311004 Reset Sewer-Water-Utility Manhole Frame	10.000 EACH	.	.	.	.
0480	|311010 Adjust Standard Basin Top	1.000 EACH	.	.	.	.
0490	|311991 Adjust, Rebuild&Replace Manhole&Catchbasin- Special Item -EA- 311 027-REPLACE EXISTING BASIN WITH GRAT E TYPE CATCH BASIN WITH SERPENTINE GRATE	10.000 EACH	.	.	.	.
0500	|311991 Adjust, Rebuild&Replace Manhole&Catchbasin- Special Item -EA- 311 063 - CLEAN SEWER STRUCTURE	25.000 EACH	.	.	.	.
0510	|313002 Abandon Basin Connecting Pipe	2.000 EACH	.	.	.	.
0520	|313006 Abandon Basin	1.000 EACH	.	.	.	.
0530	|314046 PCC Pipe, Class IV, Gasket, 15 Inch	25.000 LF	.	.	.	.
0540	|314991 Sewer Pipe Special Item - LF - 314 065 - CLEAN PCC PIPE	300.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026 PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0550	|314991 Sewer Pipe Special Item - LF - RCP PIPE, CLASS IV, 60 INCH	|8.000 LF	|.	|.	|.	|.
0560	|315002 Pipe Sewer TV Inspection - LS -	|LUMP	|LUMP	|.	|.	|.
0570	|315004 Pipe Sewer TV Inspection - LF - PIPE SEWER TV INSPECTION	|80.000 LF	|.	|.	|.	|.
0580	|402002 Superpave Base Course, 19 mm	|350.000 TON	|.	|.	|.	|.
0590	|402004 Superpave Base Course, 25 mm	|700.000 TON	|.	|.	|.	|.
0600	|402012 Sperrpave Surface Course, 12.5 mm	|395.000 TON	|.	|.	|.	|.
0610	|403002 Tack Coat	|6550.000 SY	|.	|.	|.	|.
0620	|407002 Temporary AC, Superpave Surface Course, 12.5 mm	|74.000 TON	|.	|.	|.	|.
0630	|502002 PCC Base	|1.000 CY	|.	|.	|.	|.
0640	|504006 PCC Driveway-Alley Entrance, 7 Inch	|56.000 SY	|.	|.	|.	|.
0650	|506014 Additional Standard Portland Cement	|25.000 BAGS	|.	|.	|.	|.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0660	604006 Stone Foundation Protection	1280.000 | TON	.	.	.	.
0670	605002 W Beam Guiderail	546.000 | LF	.	.	.	.
0680	605004 Double Beam Guiderail	13.000 | LF	.	.	.	.
0690	605006 W Beam Guiderail - Bolted Base	94.000 | LF	.	.	.	.
0700	605016 Guiderail Approach Terminal	2.000 | EACH	.	.	.	.
0710	605018 Guiderail Exit Terminal	5.000 | EACH	.	.	.	.
0720	605022 W Beam/Thrie Beam Transition Panel	1.000 | EACH	.	.	.	.
0730	605038 Remove W Beam/Thrie Beam Guiderail	8915.000 | LF	.	.	.	.
0740	605993 Steel Guiderails Special Item - LF - 605 043 - STEEL BACKED TIMBER (SBT) GUARDRAIL	250.000 | LF	.	.	.	.
0750	606002 Pavement Profiling (Milling)	3028.000 | SY	.	.	.	.
0760	607012 Vinyl Clad Chain Link Fence, 4 Ft. Ht.	160.000 | LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0770	607991 Misc. Fencing Special Item - LF - 607 045 - FENCE	218.000 LF	.	.	.	.
0780	607991 Misc. Fencing Special Item - LF - ORNAMENTAL SAFETY FENCE (KALMIA CULVERT)	42.000 LF	.	.	.	.
0790	608004 PCC Sidewalk, 4 Inch	645.000 SY	.	.	.	.
0800	608024 Brick Sidewalk on PCC Base	90.000 SY	.	.	.	.
0810	609008 PCC Curb and Gutter, 15 to 18 Inch Depth	170.000 LF	.	.	.	.
0820	609038 PCC Gutter, 7 to 10 Inch Depth x 12-24 Inch Width	173.000 SY	.	.	.	.
0830	609050 Repair-Replace PCC Curb and/or Gutter	33.000 CY	.	.	.	.
0840	609068 Furnish and Set 8"x12" Granite Straight Curb	1915.000 LF	.	.	.	.
0850	609070 Furnish and Set 8"x12" Granite Circular Curb, Radius Under 10 Ft.	90.000 LF	.	.	.	.
0860	609072 Furnish and Set 8"x12" Granite Circular Curb, Radius 10-100 Ft.	230.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0870	609086 Reset Stone Curb	50.000				
		LF	.		.	
0880	609200 PCC Wheelchair/Bicycle Ramp - New Construction	14.000				
		EACH	.		.	
0890	609202 PCC Wheelchair/Bicycle Ramp - Existing Construction	21.000				
		EACH	.		.	
0900	610018 Sod with 3 Inch Topsoil	1000.000				
		SY	.		.	
0910	611002 Remove Tree and Stump up to 6 Inch Dia.	10.000				
		EACH	.		.	
0920	611004 Remove Tree and Stump 6 to 12 Inch Dia.	10.000				
		EACH	.		.	
0930	611006 Remove Tree and Stump 12 to 18 Inch Dia.	7.000				
		EACH	.		.	
0940	611008 Remove Tree and Stump 18 to 24 Inch Dia.	11.000				
		EACH	.		.	
0950	611285 Amelanchier canadensis (Shadblow Serviceberry) 5 - 6 Ft. Ht. , B&B	36.000				
		EACH	.		.	
0960	611630 Liriodendron tulipifera (Tuliptree) 1 3/4 - 2 Inch Cal., B&B	4.000				
		EACH	.		.	

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0970	611704 Nyssa sylvatica (Blackgum) 1 3/4 - 2 Inch Cal., B&B	36.000 EACH	.	.	.	.
0980	611780 Platanus occidentalis (Sycamore) 1 3/4 - 2 Inch Cal., B&B	36.000 EACH	.	.	.	.
0990	611814 Quercus alba (White Oak) 1 3/4 - 2 Inch Cal., B&B	32.000 EACH	.	.	.	.
1000	612002 Mobilization	LUMP	LUMP	.	.	.
1010	614012 Portable Precast PCC Barrier	5634.000 LF	.	.	.	.
1020	614992 PCC Traffic Barriers Special Item - LF - 614 003 - STONE FACED PCC MEDIAN BARRIER	4460.000 LF	.	.	.	.
1030	614992 PCC Traffic Barriers Special Item - LF - 614 013 - MOVE PCC BARRIER	1282.000 LF	.	.	.	.
1040	614992 PCC Traffic Barriers Special Item - LF - 614 013 - MOVE PCC BARRIER	7268.000 LF	.	.	.	.
1050	615004 Three-Ply Membrane Waterproofing	240.000 SY	.	.	.	.
1060	616004 Construction Lane Closing	LUMP	LUMP	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1070	616006 Remove Lane Markings	8590.000 SF	.	.	.	.
1080	616008 Temporary Construction Sign Supports	65.000 EACH	.	.	.	.
1090	616012 Construction Warning and Detour Signs	985.000 SF	.	.	.	.
1100	616014 ReflectORIZED Traffic Cones	63.000 EACH	.	.	.	.
1110	616016 Flashing Amber Warning Lights, Type "B"	15.000 EACH	.	.	.	.
1120	616020 Sequential Arrow Boards	2.000 EACH	.	.	.	.
1130	616022 Construction Sign Warning Flags	17.000 EACH	.	.	.	.
1140	616024 Type III PVC Barricade	18.000 EACH	.	.	.	.
1150	616028 Traffic Drums	152.000 EACH	.	.	.	.
1160	616040 Thermoplastic Pavement Marking, 4 Inch	19518.000 LF	.	.	.	.
1170	616042 Thermoplastic Pavement Marking, 4 Inch Dash	3200.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1180	616044 Thermoplastic Pavement Marking, 6 Inch	2067.000 LF	.	.	.	.
1190	616050 Thermoplastic Pavement Marking, 12 Inch	686.000 LF	.	.	.	.
1200	616052 Thermoplastic Pavement Letter	8.000 EACH	.	.	.	.
1210	616054 Thermoplastic Pavement Arrow	19.000 EACH	.	.	.	.
1220	616090 Construction Zone Attenuator	14.000 EACH	.	.	.	.
1230	616100 Sand-Filled Impact Attenuator Module	11.000 EACH	.	.	.	.
1240	616110 PORTABLE CHANGABLE MESSAGE SIGN	8.000 EACH	.	.	.	.
1250	616122 Steel Protection Plate	8.000 EACH	.	.	.	.
1260	616992 Traffic Control Special Item - EACH - 616 057 - THERMOPLASTIC PAVEMENT MARKING, BICYCLE SYMBOL	4.000 EACH	.	.	.	.
1270	616994 Traffic Control Special Item - LF - 616 043 - REMOVABLE PERFORMED PAVEMENT MARKING, 4 INCH	400.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1280	616994 Traffic Control Special Item - LF - 616 047 - WATER FILLED TRAFFIC BARRIER	800.000 LF	.	.	.	.
1290	616994 Traffic Control Special Item - LF - 616 051 - THERMOPLASTIC PAVEMENT MARKING, 24 INCH	3000.000 LF	.	.	.	.
1300	617006 Remove Abandoned Traffic Signal Or Street Light Pole Foundat ion	72.000 EACH	.	.	.	.
1310	617024 Furnish And Install Galvanized Steel Transformer Base	42.000 EACH	.	.	.	.
1320	617038 Furnish And Install Pcc Foundation For Controller Cabinet	4.000 EACH	.	.	.	.
1330	617040 Furnish Temporary, Portable, Concrete Base For Model 336-S A nd Model 336-Ss Traffic Signal Controller Cabinet	4.000 EACH	.	.	.	.
1340	617042 Furnish Temporary, Portable, Concrete Base For 20 Foot Steel Traffic Signal Pole Mounted On A Transformer Base	27.000 EACH	.	.	.	.
1350	617046 Furnish And Install 20 Foot Tall Steel Traffic Signal Pole	42.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1360	617048 Furnish And Install 8 Foot Long Mast Arm With Clamp And Removable End Cap	14.000 EACH	.	.	.	.
1370	617050 Furnish And Install 7 Conductor 14 Awg Stranded Electrical Traffic Signal Cable	12000.000 LF	.	.	.	.
1380	617052 Furnish And Install 4 Conductor 18 Awg Shielded, Stranded Electrical Traffic Signal Cable	5900.000 LF	.	.	.	.
1390	617058 Furnish And Install 25 Pair 19 Awg Underground Communications Cable	4200.000 LF	.	.	.	.
1400	617060 Furnish And Install 25 Pair 19 Awg Overhead Communications Cable	1350.000 LF	.	.	.	.
1410	617068 Furnish Red Ball Led Module	68.000 EACH	.	.	.	.
1420	617070 Furnish Yellow Ball Led Module	68.000 EACH	.	.	.	.
1430	617072 Furnish Green Ball Led Module	68.000 EACH	.	.	.	.
1440	617076 Furnish Yellow Arrow Led Module	4.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1450	617078 Furnish Green Arrow Led Module	4.000 EACH	.	.	.	.
1460	617084 Furnish 12 Inch Overlay Lunar White Walking Person And Portl and Orange Raised Hand Led Module	58.000 EACH	.	.	.	.
1470	617086 Furnish 12 Inch Portland Orange Countdown Led Module	58.000 EACH	.	.	.	.
1480	617090 Furnish And Install 3 Section Conventional Traffic Signal He ad On A Pole (All Lenses 12?) 12? EQUALS 12 INCHES	47.000 EACH	.	.	.	.
1490	617094 Furnish And Install 5 Section Conventional Traffic Signal He ad On A Pole (All Lenses 12?) 12? EQUALS 12 INCHES	4.000 EACH	.	.	.	.
1500	617096 Furnish And Install 3 Section Conventional Traffic Signal He ad On A Mast Arm (All Lenses 12?) 12? EQUALS 12 INCHES	13.000 EACH	.	.	.	.
1510	617102 Furnish And Install 3 Section Optically Programmable Traffic Signal Head On A Pole (All Lenses 12?) 12? EQUALS 12 INCHES	7.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1520	617108 Furnish And Install 3 Section Optically Programmable Traffic Signal Head On A Mast Arm (All Lenses 12?) 12? EQUALS 12 INCHES	2.000 EACH	.	.	.	.
1530	617114 Furnish And Install 2 Section Conventional Pedestrian Signal Head On A Pole (12?) 12? EQUALS 12 INCHES	64.000 EACH	.	.	.	.
1540	617116 Furnish And Install 2 Section Optically Programmable Pedestrian Signal Head On A Pole (12?) 12? EQUALS 12 INCHES	4.000 EACH	.	.	.	.
1550	617120 Furnish And Install Microwave Vehicle Detector	2.000 EACH	.	.	.	.
1560	617124 Furnish And Install Traffic Signal Controller And Cabinet	4.000 EACH	.	.	.	.
1570	617126 Remove Abandoned Traffic Signal Controller Cabinet Foundation	4.000 EACH	.	.	.	.
1580	617130 REMOVE TRAFFIC SIGNAL POLE AND TRAFFIC SIGNAL EQUIPMENT	4.000 EACH	.	.	.	.
1590	617132 Remove Traffic Signal Controller And Cabinet	4.000 EACH	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1600	618016 Furnish and Install 36" x 36" x 36" Manhole	12.000 EACH	.	.	.	.
1610	618020 Remove Manhole over 24" x 24"	5.000 EACH	.	.	.	.
1620	618022 Furnish and Install 48" x 48" x 48" Manhole	14.000 EACH	.	.	.	.
1630	618072 Furnish and Install 1-2" Schedule 40 Rigid PVC Conduit	445.000 LF	.	.	.	.
1640	618100 Furnish and Install 1-4" Schedule 40 Rigid PVC Conduit	192.000 LF	.	.	.	.
1650	618148 Furnish and Install 6-4" Schedule 40 Rigid PVC Conduits (duct t bank)	266.000 LF	.	.	.	.
1660	618150 Furnish and Install 6-4" and 1-2" Schedule 40 Rigid PVC Conduits (duct bank)	122.000 LF	.	.	.	.
1670	618154 Furnish and Install 4-4" Schedule 40 Rigid PVC Conduit (duct bank)	920.000 LF	.	.	.	.
1680	618156 Furnish and Install 4-4" and 1-2" Schedule 40 Rigid PVC Conduits (duct bank)	35.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1690	618160 Furnish and Install 2-4" Schedule 40 Rigid PVC Conduit (duct bank)	806.000 LF	.		.	
1700	618162 Furnish and Install 2-4" and 1-2" Schedule 40 Rigid PVC Conduit (duct bank)	599.000 LF	.		.	
1710	618172 Clean and Rod Existing Conduit	100.000 LF	.		.	
1720	618178 Repair of Existing Underground Conduit	10.000 LF	.		.	
1730	618190 Furnish and Install #10 Stranded Wire	2600.000 LF	.		.	
1740	618196 Furnish and Install #8 Stranded Wire	1500.000 LF	.		.	
1750	618292 Furnish and Install #8 Stranded Ground Wire	1864.000 LF	.		.	
1760	618310 Furnish and Install #2 Stranded Ground Wire	2477.000 LF	.		.	
1770	618334 Remove Conductors in Conduits	10000.000 LF	.		.	
1780	618376 Furnish #0000 Tri-Plex Overhead Cable	30.000 LF	.		.	

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1790	618542 Furnish and Install 28'-6" Steel Pendant Pole with up to 8' Arm	28.000 EACH	.	.	.	.
1800	618582 Furnish and Install F&I up to 28'-6" Steel Pendant Pole with Twin up to 8' Arms	32.000 EACH	.	.	.	.
1810	618668 Remove arm from wood pole up to 8 ft. in Length	1.000 EACH	.	.	.	.
1820	618676 Furnish and Install 8 ft. Arm on Wood Pole	1.000 EACH	.	.	.	.
1830	618688 Remove arm from wood pole over 8 ft. in Length	2.000 EACH	.	.	.	.
1840	618690 Furnish and Install 12 ft. Arm on Wood Pole	2.000 EACH	.	.	.	.
1850	618720 Remove Luminaire from Wood Pole	3.000 EACH	.	.	.	.
1860	618722 Remove Luminaire from Steel Pole	54.000 EACH	.	.	.	.
1870	618742 Furnish and Install 150 Watt HPS Cutoff Luminaire	2.000 EACH	.	.	.	.
1880	618888 Furnish and Install 4" PVC Rigid U-Guard on Wood Pole	160.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1890	618991 ELECTRICAL WORK SPECIAL ITEM -LS- 618 005 - FURNISH AND INSTALL GROUNDING SYSTEM FOR BRIDGE STRUCTURE	LUMP	LUMP			
1900	618991 ELECTRICAL WORK SPECIAL ITEM -LS- 618 889 - TEMPORARY ROADWAY LIGHTING DESIGN AND CONSTRUCTION	LUMP	LUMP			
1910	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 109 - FURNISH AND INSTALL 10 FT. GROUND ROD IN EXISTING DC MANHOLE	1.000 EACH				
1920	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 395 - FURNISH & INSTALL 15" BC FOUNDATION FOR STREETLIGHT AND TRAFFIC SIGNAL	47.000 EACH				
1930	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 397 - FURNISH AND INSTALL SPREAD FOOTER FOUNDATION	2.000 EACH				
1940	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 435 - FURNISH AND INSTALL GALVANIZED TRANSFORMER BASE	30.000 EACH				
1950	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 541 - FURNISH AND INSTALL 30 X 24 X 18 CAST IRON JUNCTION BOX (INCHES)	4.000 EACH				

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1960	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 567 - REMOVAL OF STREETLIGHT POST	EACH 55.000	.	.	.	.
1970	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 755 - FURNISH AND INSTALL PHILIPS 135W80LED-RVM LUMINAIRE OR EQUIVALENT	EACH 71.000	.	.	.	.
1980	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 761 - FURNISH AND INSTALL 250W HPS TEARDROP FIXTURE W/LAMP AND PHOTOCCELL	EACH 1.000	.	.	.	.
1990	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 767 - FURNISH AND INSTALL PHILIPS 270W 160LED-RVM LUMINAIRE OR EQUIVALENT	EACH 15.000	.	.	.	.
2000	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618 779 - FURNISH AND INSTALL 400W HPS TEARDROP FIXTURE W/LAMP AND PHOTOCCELL	EACH 7.000	.	.	.	.
2010	618992 ELECTRICAL WORK SPECIAL ITEM -EACH- 618543 - FURNISH AND INSTALL 24 X 24 18 CAST IRON JUNCTION BOX (INCHES)	EACH 32.000	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2020	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 023 - REMOVAL OF TRANSITE CONDUIT	3900.000 LF	.	.	.	.
2030	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 147 - FURNISH N INSTALL 6-4" SCHEDULE 40 RIGID PVC CONDUITS	380.000 LF	.	.	.	.
2040	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 317 - FURNISH AND INSTALL #1/0 BARE COPPER WIRE (GROUNDING)	4500.000 LF	.	.	.	.
2050	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 345 - FURNISH AND INSTALL 6-4" DIA PVC COATED RIGID STEEL CONDUITS	100.000 LF	.	.	.	.
2060	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 347 - FURNIH AND INSTALL 1-4" RIGID PVC CONDUIT IN BARRIER WALL	4200.000 LF	.	.	.	.
2070	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 349 - FURNISH AND INSTALL 1-4" AND 1-2" DIA. RIGID PVC CONDUIT	600.000 LF	.	.	.	.
2080	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 355 - FURNISH AND INSTALL 2-4"AND 2-2" DIA. RIGID PVC CONDUIT	30.000 LF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2090	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 369 - FURNISH AND INSTALL 1-1/4" DIA. RIGID GALVANIZED METAL CONDUIT	190.000 LF	.	.	.	.
2100	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 371 - FURNISH AND INSTALL 4/0 RHW-2 COPPER CABLE W/SPLICES	7700.000 LF	.	.	.	.
2110	618993 ELECTRICAL WORK SPECIAL ITEM -LF- 618 379 - FURNISH AND INSTALL 500 MCM RHW-2 COPPER CABLE W/SPLICES	13500.000 LF	.	.	.	.
2120	618999 Payment to PEPCO for Connection, Disconnection, Inspection PAYMENT TO PEPCO	LUMP	LUMP	.	.	35880.00
2130	618999 Payment to PEPCO for Connection, Disconnection, Inspection PAYMENT TO PEPCO	LUMP	LUMP	.	.	.
2140	620002 Timber Ground Mounted Sign Posts, 4x4 Inch	132.000 LF	.	.	.	.
2150	620004 Timber Ground Mounted Sign Posts, 4x6 Inch	85.000 LF	.	.	.	.
2160	620014 Traffic Sign Panels	211.000 SF	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2170	620040 Federal Aid Project Sign	8.000 EACH	.	.	.	.
2180	620993 Traffic Signing Special Item - EACH - 620 022 METAL SIGN POST	40.000 EACH	.	.	.	.
2190	620993 Traffic Signing Special Item - EACH - 620 023 - TEMPORARY REMOVAL AND REINSTALLATION OF OVERHEAD SIGN	2.000 EACH	.	.	.	.
2200	620993 Traffic Signing Special Item - EACH - 620 035 - RELOCATE TRAFFIC/GUIDE SIGN	30.000 EACH	.	.	.	.
2210	624002 Engineer's Field Facilities	LUMP	LUMP	.	.	.
2220	625002 Field Layout	LUMP	LUMP	.	.	.
2230	626002 Protection Shield	LUMP	LUMP	.	.	.
2240	627991 Impact Attenuator Special Item - EACH - 627 007 - 5-BAY QUAD GUARD IMPACT ATTENUATOR (24 INCH WIDE)	2.000 EACH	.	.	.	.
2250	628002 Erosion and Sediment Control	LUMP	LUMP	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2260	700007 Structures Construction Special Item - LS - 706 023 - PREFABRICATED BRIDGE SUPERSTRUCTURE (16TH STREET BRIDGE)	LUMP	LUMP			
2270	700007 Structures Construction Special Item - LS - PRECAST THREE-SIDED ARCH BRIDGE PART 1	LUMP	LUMP			
2280	702002 Subfoundation Work Mat Concrete	689.000 CY				
2290	703002 PCC Footing	107.000 CY				
2300	703006 PCC Pier-Abutment-Wall	7.000 CY				
2310	703991 Concrete for Structures Special Item - CY - 703 015 - APPROACH SLAB	147.000 CY				
2320	703991 Concrete for Structures Special Item - CY - 703 025 - CLASS B CONCRETE	60.000 CY				
2330	703991 Concrete for Structures Special Item - CY - CONCRETE BARRIER	29.000 CY				
2340	704002 Reinforcing Steel	43905.000 LBS				

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2350	704004 Epoxy Coated Reinforcement Bars	35926.000 LBS	.	.	.	.
2360	706020 Bridge Bearings, (Each)	36.000 EACH	.	.	.	.
2370	707002 Paint New Metalwork	LUMP	LUMP	.	.	.
2380	707010 Epoxy Protective Coating	1050.000 SY	.	.	.	.
2390	708002 Stone Masonry, Class A	160.000 CF	.	.	.	.
2400	708011 Reset Stone Masonry	900.000 CF	.	.	.	.
2410	708013 Repoint Stone Masonry	700.000 LF	.	.	.	.
2420	708991 Stone Masonry Special Item - LF - 708 015 - CLEAN AND RESEAL EXPANSION JOINTS FOR ABUTMENTS AND WALLS	220.000 LF	.	.	.	.
2430	709991 Railing Special Item - LF - 709 005 - BRIDGE RAILING (16TH STREET BRIDGE)	850.000 LF	.	.	.	.
2440	714004 Latex-Modified Concrete Overlay	750.000 SY	.	.	.	.

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2450	717002 Armored Joint with Neoprene Strip Seal	162.000 LF	.		.	
2500	611014 Remove Tree and Stump 36 to 42 Inch Dia.	3.000 EACH	.		.	
2510	000003 Employee Training	1720.000 HR	.		.	
2520	000511 Unassigned Special Item -LS - 205 009 BRIDGE DEMOLOITION 16 STREET BRIDGE AND KALMIA CULVERT	LUMP	LUMP			.
2530	000511 Unassigned Special Item -LS - INCENTIVE FOR EARLY COMPLETION OF KALMIA CULVERT	LUMP	LUMP		\$50,000.00 *	
2540	000511 Unassigned Special Item -LS - INCENTIVE FOR EARLY COMPLETION OF 16TH STREET BRIDGE	LUMP	LUMP		\$150,000.00 *	
2550	000511 Unassigned Special Item -LS - INCENTIVE FOR ALL TRAFFIC AND SIDEWALKS BEING RETURNED TO NORMAL -16TH ST BRIDGE	LUMP	LUMP		\$50,000.00 *	
2560	000511 Unassigned Special Item -LS - PARTNERING	LUMP	LUMP		\$25,000.00 **	

SCHEDULE OF ITEMS

CONTRACT ID: DCKA2013B0026

PROJECT(S): BH-1103(029) & NH-1103(030)

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2570	000511 Unassigned Special Item -LS - INCENTIVE FOR EARLY COMPLETION OF PART II MAX.	LUMP	LUMP		\$50,000.00	*
	SECTION 0001 TOTAL					
	TOTAL BID					

- * See Special Provision No. 21
- ** See Special Provision No. 88

ATTACHMENT # 2

BID SUMMARY

Project: **Rehabilitation of 16th St. Bridge Over Military Road, Culvert Replacement on Kalmia Road and Median Barrier and St. Light Improvements on Military Road and Ramps**

IMPORTANT: Before completing this form please read the following sections of the Special Provisions:

Supplemental Instructions to bidders

Contract Time

Adjustment of Contract Time, Early Completion and Failure to Complete on Time

(a) Total Bid (from Schedule of Items total) _____

Time Bid

(b)Part 1 Kalima Road closure (must be between 60 and 90 consecutive calendar days)

_____ days (b)Subtotal 1 = _____

Subtotal 1= [(b) X \$3000.00]

(c)Part 2 16th Street/ Military Rd. closure-substantial completion (must be between 120 and 200 consecutive calendar days)

_____ days (c)Subtotal 2 = _____

Subtotal 2= [(c) X \$2500.00]

(d) Part 3 16th Street Bridge closure (must be between 70 and 100 consecutive calendar days)

_____ days (d)Subtotal 3 = _____

Subtotal 3= [(d) X \$2500.00]

Combined Total Bid = (a) +(b)Subtotal 1+ (c)Subtotal 2+ (d)Subtotal 3 =

\$ _____

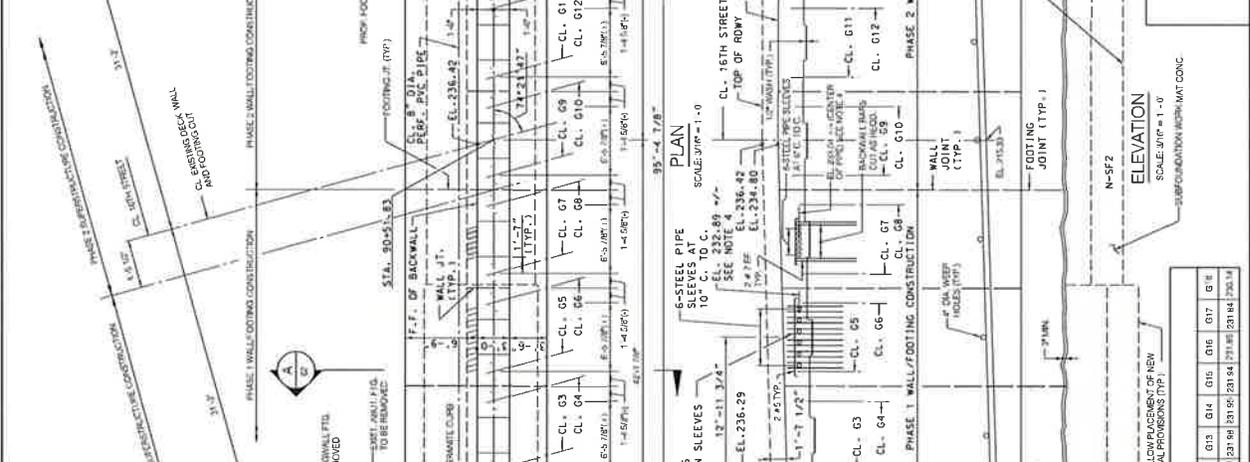
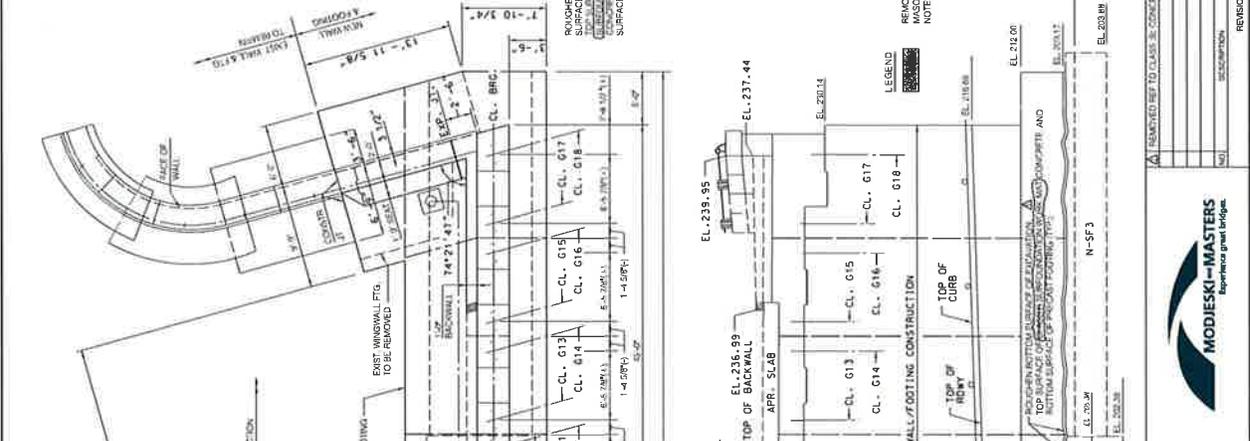
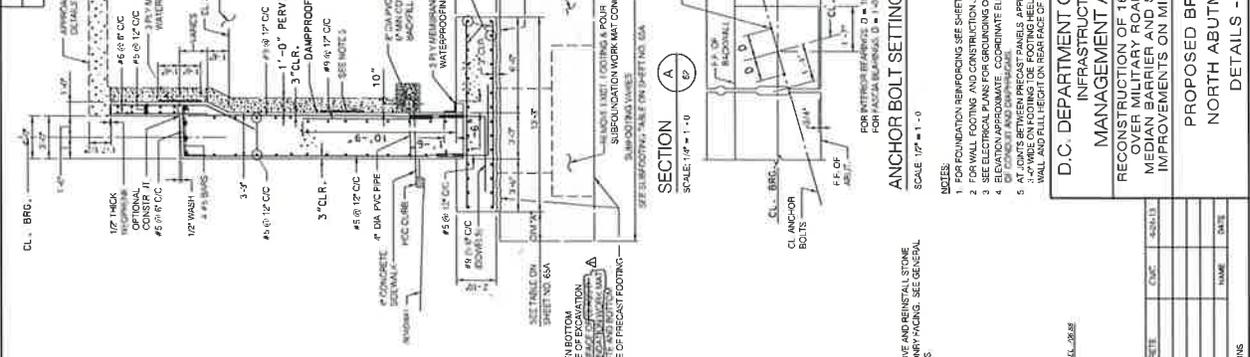
ATTACHMENT # 3

ATTACHMENT # 4

ATTACHMENT # 5

ATTACHMENT # 6

NO.	DATE	BY	PROJECT	SHEET NO.	TOTAL SHEETS
1					



GRID NO.	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16	G17	G18
NORTH ABUT.	789.25	791.15	791.24	791.34	791.44	791.54	791.64	791.74	791.84	791.94	792.04	792.14	792.24	792.34	792.44	792.54	792.64	792.74

REVISIONS

NO.	DESCRIPTION	NAME	DATE



MODJESKI-MASTERS
Experience great bridge.

ATTACHMENT # 7

Steel-Backed Timber Guardrail Special contract requirements (Special Provisions)

Section 617. GUARDRAIL

Section 617.--GUARDRAIL

Paragraph 617.2

617.02. Supplement as follows:

Paragraph 617.3

Operational Crash Cushions (GREAT System)635.19(b)

Paragraph 617.4

Section 710. FENCE AND GUARDRAIL

Guardrail posts for use with W-beam type guardrail may be steel or wood.

Paragraph 617.5

617.03 and 617.04. Supplement as follows:

Paragraph 617.6

Where it is not possible to maintain the 0.6 m minimum between the back of the guardrail post and the top of a slope 2:1 or steeper, increase the post length to 2.5 m.

Paragraph 617.7

Treat field cuts with two coats of preservative treatment applied with a brush or a sprayer. Field cuts shall not be in contact with the ground.

Paragraph 617.8

Field drill holes in the steel splice plates and field cut steel rails at joints only on curved sections or where required to correspond to the field cut wood rails at joints. Do not use a torch to cut holes, slots, plates, or rails.

Paragraph 617.9

617.10. Add the following pay item:

Pay Item Pay Unit

Paragraph 617.10

61708Operational crash cushion, (*description*) system - - - - - Each

Paragraph 617.11

61709Remove and reset (*description*) - - - - - Each

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Section 710.--FENCE AND GUARDRAIL

Paragraph 710.2

710.01 and 710.02. Supplement as follows:

Paragraph 710.3

Furnish barbed and woven wire with a Class 1 galvanized coating.

Paragraph 710.4

710.03. Supplement as follows:

Paragraph 710.5

Furnish ____ gage chain link fabric.

Paragraph 710.6

710.04. Supplement as follows:

Paragraph 710.7

Treat fence, gate, and bollard posts according to 716.03.

Paragraph 710.8

710.08. Supplement as follows:

Paragraph 710.9

Rough sawn timber tolerance shall apply only to the timber cross section and post length.

INCLUDE PARAGRAPHS 710.8 AND 710.9 ON TIMBER GUARDRAIL

Paragraph 710.10

710.09. Supplement as follows:

Paragraph 710.11

Furnish treated Southern Pine or Douglas Fir wood posts for guardrail conforming to AASHTO M 168.

INCLUDE THE ABOVE PARAGRAPHS ON ALL GUARDRAIL

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Steel-Backed Timber Guardrail

Section 617. GUARDRAIL

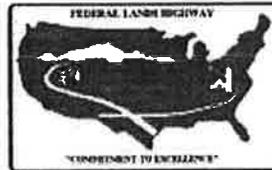
Section 710. FENCE AND GUARDRAIL

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS

FP-96
1996



U.S. Department of Transportation
Federal Highway Administration



Federal Lands Highways
"Commitment to Excellence"

Section 617. GUARDRAIL

Description

617.01 This work consists of constructing guardrail systems and modifying, removing, resetting, and raising existing guardrail systems.

(a) Guardrail systems are designated as follows:

G1 Cable guardrail

G2 W-beam (weak post)

G3 Box beam

G4 Blocked-out W beam standard barrier

G9 Blocked-out thrie beam standard barrier

MB4Blocked-out W beam median barrier

SBTSteel-backed timber guardrail/timber posts and block-out

SBTB Steel-backed timber guardrail/timber posts and no block-out

CRTW-beam guardrail and no blockout

SBLGSteel-backed log rail

(b) Steel guardrail types are designated as follows:

I Zinc-coated, 550 grams per square meter

II Zinc-coated, 1100 grams per square meter

IIIPainted rails

IV Corrosion resistant steel

(c) Steel guardrail classes are designated as follows:

A Metal thickness - 2.67 millimeters

B Metal thickness - 3.43 millimeters

(d) Terminal section types are designated as follows:

BCT Breakaway cable terminal

CRT Cable releasing terminal

MELT Modified eccentric loader terminal

G4-BATBack slope anchor terminal

Material

617.02 Provide material conforming to the following Section and Subsec tions:

Box beam rail 710.07

Concrete 601

Corrosion resistant steel rail710.06(b)

Galvanized steel rail 710.06(a)

Guardrail hardware 710.10

Guardrail posts 710.09

Precast anchors 725.11

Reflector tabs 710.10

Retroreflective sheeting type I or type II 718.01

Steel-backed timber rail 710.08

Welding 555.03

Wire rope or wire cable 709.02

Wood preservative treatment 716.03

Construction Requirements

617.03 Posts. When pavement is within 1 meter of the guardrail, set posts before placing the pavement.

Do not shorten guardrail posts unless the cut end is set in concrete. Do not shorten posts in terminal sections.

If an impenetrable object is encountered while placing posts, enlarge the hole to provide not less than 150 millimeters clearance on all sides, and to a minimum depth of 0.75 meters. Set the post in concrete to within 150 millimeters of the top of the hole. Backfill and compact the remaining 150 millimeters with acceptable material.

Drive posts into pilot holes that are punched or drilled. The dimensions of the pilot hole shall not exceed the dimensions of the post by more than 15 millimeters. Set posts plumb, backfill, and compact.

When longer posts are specified, do not use them in the terminal sections.

Stamp the post length on the top of all wood posts. Restamp numbers disturbed during installation. Stamp post length on all metal posts. Galvanize after stamping.

Alternate hole arrangements do not apply to posts in the anchorage assembly.

617.04 Rail Elements. Install the rail elements after the pavement adjacent to the guardrail is complete. Do not modify specified hole diameters or slot dimensions.

(a) Steel rail. Shop bend all curved guardrail with a radius of 45 meters or less.

Erect rail elements in a smooth continuous line with the laps in the direction of traffic flow. Use bolts that extend at least 6 millimeters but not more than 25 millimeters beyond the nuts. Tighten all bolts.

Paint all scrapes on galvanized surfaces that are through to the base metal with 2 coats of zinc-oxide paint.

(b) Timber rail. Equally space bolts along the front face of the timber rail to match the holes in the steel backing. Align timber guardrail along the top and front edges of the rail.

Field cut timber rails to produce a close fit at joints. Treat field cuts with 2 coats of chromated copper arsenate.

(c) **Log rail.** Construct log rail according to the plans.

617.05 Terminal Sections. Construct terminal sections at the locations shown. Terminal sections consist of posts, railing, hardware, and anchorage assembly necessary to construct the type of terminal section specified.

Where concrete anchors are installed, construct either cast-in-place or precast units. Do not connect the guardrail to cast-in-place anchors until the concrete has cured 7 days. Install end anchor cables tightly without slack.

Use either the steel tube anchor or the concrete anchor in the construction of the anchorage assembly for the type BCT terminal section.

When required by the contract, construct earth berms according to Section 204.

617.06 Connection to Structure. Construct connection to structure and, where required by the contract, reinforced concrete transition according to the plans.

617.07 Removing and Resetting Guardrail. Remove and store the existing guardrail, posts, and appurtenances. Remove and dispose of posts that are set in concrete. Replace all guardrail, posts, and hardware damaged during removal, storage, or resetting. Backfill all holes resulting from the removal of guardrail posts and anchors with granular material according to Section 209.

617.08 Raising Guardrail. Remove the existing guardrail and appurtenances. Replace and reset posts as needed. Replace all guardrail, posts, and hardware damaged during the removal and raising.

617.09 Acceptance. Material for guardrail will be evaluated under Sub sections 106.02 and 106.03.

Construction of guardrail will be evaluated under Subsections 106.02 and 106.04.

Earth berm construction will be evaluated under Section 204.

Structural excavation will be evaluated under Section 209.

Welding will be evaluated under Section 555.

Concrete will be evaluated under Section 601.

Measurement

617.10 Measure guardrail, except steel-backed timber guardrail and steel-backed log rail, by the meter along the face of the rail excluding terminal sections. Measure steel-backed timber guardrail and steel-backed log rail by the meter along the face of the rail including terminal sections. Measure transition sections from G9 rail to G4 rail as G9 rail.

Measure terminal sections by the each, except measure the following terminal sections as a part of

the rail:

- (a) Steel-backed timber guardrail terminal sections
- (b) Steel-backed log rail terminal sections
- (c) BCT anchorage assemblies constructed as a part of the CRT system

Measure removing and resetting guardrail and raising guardrail by the meter along the face of the rail including reset terminal sections.

Measure replacement posts (except replacement posts for posts damaged by construction operations) used in the removing, resetting, or raising guardrail by the each.

Measure connection to structure by the each.

Measure reinforced concrete transitions by the each.

Measure earth berms under Section 204.

Payment

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

Payment will be made under:

Pay Item Pay Unit

61701 Guardrail system ____, type ____, class ____ Meter

61702 Terminal section type ____ Each

61703 Removing and resetting guardrail Meter

61704 Raising guardrail Meter

61705 Replacement posts Each

61706 Connection to structure Each

61707 Reinforced concrete transition Each

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Section 710. FENCE AND GUARDRAIL

710.01 Barbed Wire. Furnish galvanized wire conforming to AASHTO M 280 or aluminum

coated wire conforming to AASHTO M 305 type I.

710.02 Woven Wire. Furnish galvanized fabric conforming to AASHTO M 279 or aluminum coated fabric conforming to ASTM A 584.

710.03 Chain Link Fence. Furnish fabric, posts, rails, ties, bands, bars, rods, and other fittings and hardware conforming to AASHTO M 181.

Furnish 4.5-millimeter coiled spring steel tension wire conforming to ASTM A 641M hard temper with a class 3 galvanized coating or an aluminized coating having a minimum coating mass of 120 grams per square meter of aluminum. Use the same coating on the tension wire as used on the rest of the chain link fence.

710.04 Fence Posts.

(a) **Wood.** Conform to AASHTO M 168.

Peel all bark, except for red cedar posts and bracing which do not require peeling. Trim all knots flush with the surface and season the wood.

For dimension lumber for fences or gates, use timber that is sound, straight, and reasonably free from knots, splits, and shakes. Provide an S4S finish.

(b) **Concrete.** Conform to Section 601.

(c) **Steel.** For line fence posts, conform to AASHTO M 281. For chain link fence, conform to AASHTO M 181.

710.05 Fence Gates. For frame gates used with chain link fences, conform to AASHTO M 181. Use the same chain link fabric in the gate and the fence.

710.06 Metal Beam Rail.

(a) **Galvanized steel rail.** Furnish W-beam or thrie beam rail elements fabricated from corrugated sheet steel conforming to AASHTO M 180 for the designated shape, class, type, and mass of coating specified.

(b) **Corrosion resistant steel rail.** Furnish W-beam or thrie beam rail elements and associated weathering steel hardware conforming to the following:

(1) Shapes and plates AASHTO M 222M

(2) Rail elements ASTM A 606 type 4

(3) Fasteners AASHTO M 164M type 3

710.07 Box Beam Rail. Furnish steel box beam rail elements conforming to the AASHTO-AGC-ARTBA *A Guide to Standardized Highway Barrier Hardware*, 1995 edition.

710.08 Steel-Backed Timber Rail. Furnish timber conforming to AASHTO M 168. Fabricate the 150 by 250-millimeter timber rail and the 100 by 225-millimeter blockouts from dry, well seasoned, and dressed rough sawn Douglas fir, southern pine, or other species having a stress grade of at least 10 megapascals.

Treat the timber rail and blockout elements with CCA, ACZA, or ACA preservative treatment conforming to AWPA C14 except the minimum retention shall be 9.6 kilograms per cubic meter.

Fabricate the steel backing elements from 9.5-millimeter structural steel conforming to AASHTO M 222M. For fastener hardware, conform to AASHTO M 222M.

710.09 Guardrail Posts.

(a) Wood posts. Do not use a wood guardrail post that has a through check, shake, or end split in the same plane as, or a plane parallel to the bolt hole and extending from the top of the post to within 75 millimeters of the bolt hole.

(b) Box beam posts. Conform to the AASHTO-AGC-ARTBA *A Guide to Standardized Highway Barrier Hardware*, 1995 edition.

(c) Steel-backed timber posts. Furnish 250 by 300-millimeter guardrail posts conforming to Subsection 710.08. Post lengths will be specified in the contract.

710.10 Guardrail Hardware. Conform to the AASHTO-AGC-ARTBA *A Guide to Standardized Highway Barrier Hardware*, 1995 edition.

Make all angles, channels, wide flanges, and plates not contained in the above standard conform to ASTM A 36M, except make the structural tubing for the short steel post conform to ASTM A 500 or ASTM A 513 grade 1008. Galvanize soil plates and structural tubing according to ASTM A 123. Do not punch, drill, cut, or weld the metal after galvanizing.

Manufacture reflector tabs from 4-millimeter aluminum or galvanized steel sheets. Use an adhesive that resists peeling with a force of 0.89 kilograms per centimeter of width. Use mildew resistant adhesive which has no staining effect on retroreflective sheeting.

710.11 Temporary Plastic Fence. Furnish plastic noncorrosive fence fabricated from polyethylene (HDPE) and UV stabilized for outdoor weathering. Conform to the following:

(a) Height 1200 mm min.

(b) Mesh openings 80 to 85 mm

(c) Color International orange

(d) Mass 0.25 kg/m min.

710.12 Crash Cushion Barrels. Furnish 900-millimeter diameter barrels made of high-density polyethylene structural foam or equal material. Furnish lids of the same material as the barrels, but of a thinner gauge. Furnish appropriate height cores made of polystyrene or equal material.

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