

# **VDOT**

**Virginia Department of Transportation**

## **REQUEST FOR PROPOSALS**

**A DESIGN-BUILD PROJECT**

**I-95 SAFETY IMPROVEMENTS AT ROUTE 3**

**From: 0.115 Miles South of Int. Route 3**

**To: 1.220 Miles North of Int. Route 3**

**City of Fredericksburg, Virginia**

**State Project No.: 0095-111-278**

**Federal Project No.: OC-095-2(535)**

**Contract ID Number: C00107715DB91**

**DATE: September 27, 2016**

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## **PART 1**

### **INSTRUCTIONS FOR OFFERORS**

#### **1.0 INTRODUCTION**

The Virginia Department of Transportation (VDOT) submits this Request for Proposals (RFP) to solicit design-build Proposals (Proposals) from those entities (Offerors) interested in contracting to serve as the Design-Builder for the I-95 Safety Improvements at Route 3 in the City of Fredericksburg, Virginia (Project). The purpose of this RFP is to determine which Offeror (the “Successful Offeror”) will be awarded the Design-Build contract (Design-Build Contract) for the Project.

The Project priorities are:

- Cost - provide the best price for the scope of work identified in this RFP

#### **1.1 Project Overview**

The Project is located in the City of Fredericksburg, Virginia and involves improvements to the safety and operations at the I-95 and Route 3 interchange. The southbound I-95 to westbound Route 3 exit ramp will be modified to provide a three lane approach to a two-phase signalized intersection at Route 3 (for westbound traffic) and a single free-flow lane to Carl D. Silver parkway. The eastbound Route 3 to northbound I-95 on-ramp will be replaced with a triple left turn from eastbound Route 3 onto the existing westbound Route 3 to northbound I-95 on-ramp. The triple left turn will be signalized stopping westbound Route 3 traffic, but not eastbound Route 3 through traffic. This improvement removes the northbound I-95 weave and the eastbound Route 3 weave. The realignment of the I-95 North to the Route 3 East ramp to improves ramp performance and safety by increasing the length of the merge area. The total project length is approximately 1.34 miles.

The Project includes, among other things the Design and Construction of (a) modification and realignment of the I-95 and Route 3 Interchange on-ramps and off-ramps, (b) pavement demolition and obscuring roadway (c) right of way acquisition, (d) drainage, (e) signals, (f) CCTV camera installation (g) signing and pavement marking, (h) stormwater management, (i) Transportation Management Plan, (j) erosion and sediment control, and (k) utility relocations within the Project limits. Refer to Part 2 of the RFP (Technical Requirements) for the scope of work, technical information and requirements.

#### **1.3 Procurement Overview**

VDOT will use a single-phase selection process on the Project. In accordance with the requirements of this RFP, interested Offerors will submit a Proposal consisting of a Letter of Submittal, Attachments to the Letter of Submittal, and Price Proposal consistent with Part 1,

Section 4.0. Additionally, the Offeror who submitted the lowest Proposal Price will submit the Post Notice of Intent to Award Submittals consistent with Part 1, Section 4.4.

An Offeror's Proposal must meet all requirements established by this RFP. Requirements of this RFP generally will use the words "shall", "will", or "must" (or equivalent terms) to identify a required item that must be submitted with an Offeror's Proposal. Failure to meet an RFP requirement may render an Offeror's Proposal non-responsive.

The Offeror whose Proposal is deemed responsive, who submitted the lowest Price Proposal, and whose Price Proposal is within VDOT's budget for design and construction will be recommended to the Chief Engineer for an award of a fixed price Design-Build Contract by the Commonwealth Transportation Board (CTB) The award of the contract will be made to the Successful Offeror in accordance with Part1, Section 8.0 of the RFP.

## **2.0 BACKGROUND INFORMATION**

### **2.1 Legislative Authority**

§33.2-209(B) of the Code of Virginia authorizes VDOT and the Commonwealth Transportation Board (CTB) to develop and award contracts using the Design-Build contracting method. In accordance with the law, VDOT completed the Finding of Public Interest (FOPI) dated September 26, 2016. The FOPI is available for inspection upon request.

### **2.2 Estimated Contract Value**

VDOT's current estimated contract value for this Project is approximately \$15,800,000.

### **2.3 Procurement Schedule and Project Milestones**

**2.3.1** VDOT currently anticipates conducting the procurement of the Project in accordance with the following list of milestones leading to award of the Design-Build Contract. This schedule is subject to revision and VDOT reserves the right to modify this schedule as it finds necessary, in its sole discretion.

.1	Advertise RFP	09/27/16
.2	Pre-Proposal Meeting w/ Offerors	10/03/16 (9:00 AM prevailing local time)
.3	Utility Meeting w/ Offerors	10/03/16 (10:00 AM prevailing local time)
.4	RFP Questions Due to VDOT	10/18/16 (4:00 PM prevailing local time)
.5	VDOT responses to Questions or Clarifications	11/01/16
.6	Letter of Submittal & Price Proposal Due	11/15/16 (4:00 PM prevailing local time)
.7	Open Letters of Submittal & Price Proposals	11/17/16
.8	Notice of Intent to Award	12/01/16
.9	CTB Approval/ Notice to Award	01/18/17

.10	Design-Build Contract Execution	02/15/17
.11	Notice to Proceed	02/21/17
.12	Final Completion	12/14/18

**2.3.4** VDOT has established the following milestones for contract completion dates for the Project, and Offerors shall base their proposals on such milestones.

- .1 Final Completion shall be no later than the date set forth in Part 1, Section 2.3.1.
- .2 If an Offeror proposes a Final Completion date earlier than that shown in Part 1, Section 2.3.1 above, then such proposed date will be deemed by VDOT as the contractual completion date for the Design-Build Contract for all purposes, including liquidated damages.

## **2.4 VDOT's Point of Contact**

VDOT's sole point of contact (POC) for matters related to the RFP shall be Stephen D. Kindy. VDOT's POC is the only individual authorized to discuss this RFP with any interested parties, including Offerors. All communications with VDOT's POC about the Project or this RFP shall be in writing, as required by applicable provisions of this RFP.

Name:	Stephen D. Kindy, P.E.
Address:	Alternative Project Delivery Division Virginia Department of Transportation 1401 East Broad Street Annex Building, 8 <sup>th</sup> Floor Richmond, VA 23219
Mailing Address:	1401 East Broad Street Richmond, VA 23219
Phone:	(804) 786-6016
Fax:	(804) 786-7221
E-Mail:	stephen.kindy@vdot.virginia.gov

VDOT disclaims the accuracy of information derived from any source other than VDOT's POC, and the use of any such information is at the sole risk of the Offeror.

All communications and requests for information shall be submitted by the Offeror's Point of Contact identified in the Letter of Submittal. Written communications to VDOT from Offerors shall specifically reference the correspondence as being associated with "I-95 Safety Improvements at Route 3, Project No. 0095-111-278."

## **2.5 RFP Information Package**

An RFP Information Package is available for interested Offerors on CD or DVD ROM for \$50.00. Interested Offerors should complete the RFP Information Package Order Form included as Attachment 2.5. The instructions for submittal and payment are included on the form.

The contents of the RFP Information Package are listed in Part 2 of the RFP.

## **2.6 RFP Documents**

**2.6.1** The documents included in this RFP (collectively the RFP Documents) consist of the following parts and any addenda, as well as any attachments and exhibits contained or identified in such sections:

PART 1 – REQUEST FOR PROPOSALS, INSTRUCTIONS FOR OFFERORS  
PART 2 – PROJECT TECHNICAL INFORMATION AND REQUIREMENTS  
INCLUDING RFP INFORMATION PACKAGE (CD-ROM)  
PART 3 – LUMP SUM DESIGN-BUILD AGREEMENT  
EXHIBIT 1 TO PART 3 – PROJECT SPECIFIC TERMS  
PART 4 – GENERAL CONDITIONS  
PART 5 – DIVISION I AMENDMENTS TO STANDARD SPECIFICATIONS

VDOT has developed standard template Part 3, 4 and 5 (July 2013) documents. These documents have been compiled into a standard package available for download at the following location: <http://www.virginiadot.org/business/design-build.asp>. Standard template Parts 2, 4 and 5 will be incorporated into the Final Contract by reference.

**2.6.2** Each Offeror shall review the RFP Documents and provide questions or requests for clarification, including but not limited to terms that it considers to be ambiguous or to which it takes exception. Such questions or requests for clarification will be submitted to VDOT's POC within the time specified in Part 1, Section 2.3.1 of this RFP. VDOT will review all questions and/ or requests for clarification received and, if it deems appropriate, in its sole discretion, may modify the RFP Documents through an Addendum. Offerors shall base their Proposals on the terms and conditions of the RFP Documents included in the latest issued Addendum.

**2.6.3** Addenda to the RFP Documents, if any, will be posted on the VDOT Project website. Hard copies of the RFP Documents and Addenda on file will be available upon request. If there is any conflict between the electronic format and hard copy of any RFP Documents or Addenda, the hard copy on file shall control.

## **2.7 Deviations from the RFP Documents**

No deviations from the requirements of the RFP Documents will be valid unless they are set forth in an Addendum prior to receipt of the Offeror's Letter of Submittal.

## **2.8 Obligation to Meet All of the Requirements of the RFP Documents**

If awarded the Design-Build Contract, the Design-Builder will be obligated to meet all of the requirements of the RFP Documents for the Contract Price and within the Contract Time(s). Offerors are on notice that VDOT's review of Attachments to the Letter of Submittal, as well as its issuance of any Addendum, shall not be construed as relieving the Design-Builder of this obligation. Offerors are on further notice that VDOT will review, comment and/or approve the Design-Builder's final design after the award of the Design-Build Contract, in accordance with Part 4, Article 2.

## **3.0 GENERAL PROCEDURES AND REQUIREMENTS**

Part 1, Section 3.0 provides general information, procedures and requirements related to the pre-submittal period to be followed by all Offerors.

### **3.1 Offeror's Pre-Submittal Responsibilities and Representations**

**3.1.1** Each Offeror shall be solely responsible for examining the RFP Documents, including any Addenda issued to such documents, and any and all conditions which may in any way affect its Proposal or the performance of the work on the Project, including but not limited to:

- .1 Examining and carefully studying the RFP Documents, including any Addenda and other information or data identified in the RFP Documents;
- .2 Visiting the Project Site and becoming familiar with and satisfying itself as to the general, local, and Site conditions that may affect the cost, progress, or performance of its work on the Project;
- .3 Contacting each utility owner with facilities existing within the project limits to determine the scope of work for each owner's utility relocation. The Offeror shall address all potential impacts with each affected utility owner and ensure resolution of all such impacts have been included in the Offeror's Letter of Submittal and Attachments and Price Proposals;
- .4 Addressing all potential impacts with third parties and ensuring all such impacts have been included in the Offeror's Letter of Submittal and Attachments and Price Proposals;

- .5 Becoming familiar with and satisfying itself as to all federal, state, and local laws and regulations that may affect the cost, progress, or performance of its work on the Project;
- .6 Determining that the RFP Documents are sufficient to indicate and convey understanding of all terms and conditions for the performance of Offeror's work on the Project; and
- .7 Notifying VDOT in writing, in accordance with the processes set forth in Part 1, Section 7.0, of all conflicts, errors, ambiguities, or discrepancies that Offeror discovers in the RFP Documents.

Any failure to fulfill these responsibilities is at the Offeror's sole risk and no relief will be provided by VDOT.

### **3.2 Pre-Proposal Meeting**

VDOT will hold a Pre-Proposal meeting of potential Offerors on the date and time set forth in Part1, Section 2.3.1 at the Fredericksburg District Office of the Virginia Department of Transportation, 86 Deacon Road, Fredericksburg, VA 22405 in the district auditorium.

### **3.3 Utility Meeting**

VDOT will hold a Utility Meeting of potential Offerors on the date and time set for in Part1, Section 2.3.1 at the Fredericksburg District Office of the Virginia Department of Transportation, 86 Deacon Road, Fredericksburg, VA 22405 in the district auditorium.

### **3.4 Acknowledgment of Receipt of RFP, Revisions and Addenda**

Offeror shall provide VDOT the Acknowledgement of Receipt of RFP, Revisions, and/or Addenda (Form C-78-RFP), set forth as Attachment 3.4, signed by the Offeror's Point of Contact or Principal Officer, with submission of the Proposal, which will serve as acknowledgement that Offeror has received this RFP.

## **4.0 CONTENTS OF PROPOSALS**

Part 1, Section 4.0 describes specific information that must be included in the Letter of Submittal, Attachments to the Letter of Submittal, Price Proposal, and Post Notice of Intent to Award Submittal. The format for the presentation of such information is described in Part 1, Section 6.0.

### **4.0.1 Offerors will submit a two part Proposal:**

- .1 The Letter of Submittal will consist of all information required under Part 1, Section 4.1 and Section 4.2 and will be submitted in a sealed package by the date and time set forth in Part 1, Section 2.3.1, and separate from that submitted for the Price Proposal. Offerors shall complete the Letter of Submittal Checklist, Attachment 4.0.1.1, and include it with their Letter of Submittal. The purpose of the Letter of Submittal checklist is to aid the Offeror in ensuring all submittal requirements have been included in the Offeror's Letter of Submittal and to provide a page reference indicating the location in the Letter of Submittal of each submittal requirement. It shall also include an original signed copy of Acknowledgement of Receipt of RFP, Revisions and/ or Addenda (Form C-78-RFP), Attachment 3.4.
- .2 The Price Proposal will consist of the information required by Part 1, Section 4.3, and will be submitted in a sealed package by the date and time set forth in Part 1, Section 2.3.1, and separate from that submitted for the Letter of Submittal. Offerors shall complete the Price Proposal Checklist, Attachment 4.0.1.2, and include it with their Price Proposal. The purpose of the Price Proposal Checklist is to aid the Offeror in ensuring all submittal requirements have been included in the submittal.

**4.0.2** Offerors shall be aware that VDOT reserves the right to conduct an independent investigation of any information, including prior experience, identified in a Proposal by contacting project references, accessing public information, contacting independent parties, or any other means. VDOT also reserves the right to request additional information from an Offeror during the evaluation of that Offeror's Proposal.

**4.0.3** If an Offeror has concerns about information included in its Proposal that may be deemed confidential or proprietary, the Offeror shall adhere to the requirements set forth by Part 1, Section 11.1.2.

#### **4.1 Letter of Submittal**

**4.1.1** The Letter of Submittal shall be on the Offeror's letterhead and identify the full legal name and address of the Offeror. The Offeror is defined as the legal entity who will execute the Contract with VDOT. The Letter of Submittal shall be signed by an authorized representative of Offeror's organization. All signatures on the Letter of Submittal shall be original and signed in ink.

**4.1.2** Declare Offeror's intent, if selected, to enter into a contract with VDOT for the Project in accordance with the terms of this RFP.

**4.1.3** Pursuant to Part 1, Section 8.2, declare that the offer represented by the Price Proposal will remain in full force and effect for one hundred twenty (120) days after the date the Proposal is submitted to VDOT ("Letter of Submittal & Price Proposal Due Date").

**4.1.4** Identify the name, title, address, phone and fax numbers, and e-mail address of an individual who will serve as the Point Of Contact for the Offeror.

**4.1.5** Identify the name, address and telephone number of the individual who will serve as the Principal Officer for the Offeror. (e.g., President, Treasurer, Chairperson of the Board of Directors, etc.).

**4.1.6** Identify whether the Offeror will be structured as a corporation, limited liability company, general partnership, joint venture, limited partnership or other form of organization. Identify the team members who will undertake financial responsibility for the Project and describe any liability limitations. If the Offeror is a limited liability company, partnership or joint venture, describe the bonding approach that will be used and the members of such organizations who will have joint and several liability for the performance of the work required for the Project. A single 100% performance bond and a single 100% payment bond shall be provided regardless of any co-surety relationship.

**4.1.7** Identify the full legal name of the Lead Contractor, the Lead Designer, and QAM firm for this Project. The Lead Contractor is defined as the Offeror that will serve as the prime/ general contractor responsible for overall construction of the Project and will serve as the legal entity who will execute the Contract with VDOT. The Lead Designer is defined as the prime design consulting firm responsible for the overall design of this Project. The QAM firm is defined as the firm proposed by the Offeror to provide the Quality Assurance Manager for the Project.

**4.1.8** State the Offeror's VDOT prequalification number and current VDOT prequalification status (active, inactive, etc.) in the Letter of Submittal. An 8.5" x 11" copy of the Offeror's VDOT prequalification certificate or evidence indicating Offeror is currently prequalified will be provided in the Attachments to the Letter of Submittal. The Offeror must be in good standing and prequalified to bid on the Project as outlined in VDOT's Rules Governing Prequalification Privileges at the time of the Letter of Submittal & Price Proposal Due Date. In order to prequalify as a Joint Venture, a completed "Joint Venture Bidding Agreement" must be submitted to and approved by VDOT and evidence of the approval shall be included in the attachments to the Letter of Submittal.

**4.1.9** Provide a written statement within the Letter of Submittal that the Offeror is committed to achieving a fourteen percent (14%) DBE participation goal for the entire value of the contract.

**4.1.10** Provide Final Completion Date. The proposed date herein shall be no later than the date set forth in Part 1, Section 2.3.1. Earlier Final Completion date will be deemed by VDOT as the contractual completion date for the Design-Build Contract for all purposes, including liquidated damages in accordance with Part 3, Section 5.5.

## **4.2 Attachments to the Letter of Submittal**

**4.2.1** Provide the full legal name and address of all affiliated and/or subsidiary companies of the Offeror on Attachment 4.2.1. Indicate which companies are affiliates and which companies are subsidiaries. An affiliate shall be considered as any business entity which is closely associated to another business entity so that one entity controls or has power to control the other entity either directly or indirectly; or, when a third party has the power to control or controls both; or where one business entity has been so closely allied with another business entity through an established course of dealings, including but not limited to the lending of financial wherewithal, engaging in joint ventures, etc. as to cause a public perception that the two firms are one entity. Firms which are owned by a holding company or a third party, but otherwise meet the above conditions and do not have interlocking directorships or joint officers serving, are not considered to be affiliates.

If the Offeror does not have any affiliated and/or subsidiary companies, other than the Offeror's legal business entity, indicate this on Attachment 4.2.1.

The Offeror shall not submit more than one Proposal for this Project. If more than one Proposal is submitted by an individual, partnership, Corporation, or any party of a Joint Venture, then all Proposals submitted by that individual, partnership, Corporation or Joint Venture shall be disqualified. If more than one Proposal is submitted by an affiliate or subsidiary company of an individual, partnership, Corporation or any party of a Joint Venture, then all Proposals submitted by that individual, partnership, Corporation or Joint Venture shall be disqualified.

**4.2.2** Execute and return the attached Certification Regarding Debarment Form(s) Primary Covered Transactions, set forth as Attachment 4.2.2(a) and Certification Regarding Debarment Form(s) Lower Tier Covered Transactions, set forth as Attachment 4.2.2(b) for the Lead Contractor, Lead Designer and QAM firm.

If Lead Contractor, Lead Designer and QAM firm are unable to execute the certification, then prospective participant shall attach an explanation to its Certification Regarding Debarment Form. Failure to execute the certification will not necessarily result in denial of award, but will be considered in determining the Offeror's responsibility. Providing false information may result in federal criminal prosecution or administrative sanctions.

**4.2.3** Provide an 8.5" x 11" copy of the Offeror's VDOT prequalification certificate or evidence indicating Offeror is currently prequalified as outlined in Section III H in VDOT's Rules Governing Prequalification Privileges shall be satisfied.

**4.2.4** Include a letter from a surety or insurance company (with a Best's Financial Strength Rating of A minus and Financial Size Category VIII or better by A.M. Best Co.) stating that the Offeror is capable of obtaining a performance and payment bond based on the current estimated contract value referenced in Part 1, Section 2.2, which bonds will cover the Project and any warranty periods. The letter of surety shall clearly state the rating categorization noted above

and reference the estimated contract value as identified in Part 1, Section 2.2, in a manner similar to the notation provided below:

*“As surety for [the above named Contractor], [XYZ Company] with A.M. Best Financial Strength Rating [rating] and Financial Size Category [Size Category] is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.”*

**4.2.5** All business entities on the Offeror’s proposed team must comply with the law with regard to their organizational structure, any required registration with governmental agencies and/or entities, and any required governmental licensure, whether business, commercial, individual, or professional in nature, and nothing herein is intended to contradict, nor to supersede, State and Federal laws and regulations regarding the same. All business entities on the Offeror’s proposed team shall be eligible at the time of their Proposal, under the law and relevant regulations, to offer and to provide any services proposed or related to the Project. All business entities on the Offeror’s proposed team shall satisfy all commercial and professional registration requirements, including, but not limited to those requirements of the Virginia State Corporation Commission (SCC) and the Virginia Department of Professional and Occupational Regulations (DPOR).

For the Lead Contractor, Lead Designer and QAM firm, provide full size copies of DPOR licenses and SCC registrations, or evidence indicating the same, should be included in the appendix of the Letter of Submittal. Additionally, the following information should be provided on Attachment 4.2.5:

- .1 The SCC registration information for the Lead Contractor, Lead Designer and QAM firm. Provide the name, registration number, type of corporation and status.
- .2 For this Project, the DPOR registration information for each office practicing or offering to practice professional services in Virginia. For the Lead Designer and QAM firm, provide the business name, address, registration type, registration number and expiration date.

Failure to comply with the law with regard to those legal requirements in Virginia (whether federal or state) regarding your organizational structure, any required registration with governmental agencies and/or entities, and any required governmental licensure, whether business, individual, or professional in nature may render your Proposal, in the sole and reasonable discretion of the Department, non-responsive and in that event your Proposal may be returned without any consideration or evaluation.

**4.2.6 Complete the Work History Forms for both the Lead Contractor and Lead Designer.**

Identify on the Lead Contractor Work History Form (Attachment 4.2.6(a)) three (3) projects that have completed construction in the last fifteen (15) years and were constructed by the Lead Contractor for this Project as identified in Part 1, Section 4.1.7. Relevant experience to be identified on the Lead Contractor Work History Form shall include:

1. Two (2) primary roadway construction projects with a minimum construction value of \$10,000,000 for the roadway work.
2. One (1) at grade interstate interchange construction/reconstruction project.
3. Demonstrated signal or intersection work on one of these projects.

If work identified on the Lead Contractor Work History Form was performed by an affiliated or subsidiary company of the Lead Contractor, explain the justification for utilizing an affiliated or subsidiary company to satisfy the relevant project experience on this Project and the control the Lead Contractor will exercise over the affiliated or subsidiary company on this Project. Additionally, identify the full legal name of the affiliated or subsidiary company, describe their role on this Project, and discuss how the Lead Contractor will be responsible for the work performed by the affiliated or subsidiary company on this Project. For all projects on the Lead Contractor Work History Form, identify the prime design consultant responsible for the overall project design of the projects listed on the Lead Contractor Work History Form.

Identify on the Lead Designer Work History Form (Attachment 4.2.6(b)) three (3) projects that have completed construction within the last fifteen (15) years and were designed by the Lead Designer for this Project identified in Part 1, Section 4.1.7. Relevant experience to be identified on the Lead Designer Work History Form shall include:

1. Two (2) primary roadway design projects with a minimum construction value of \$10,000,000 for the roadway work.
2. One (1) at grade interstate interchange design project.
3. Demonstrated signal or intersection work on one of these projects.

For all projects on the Lead Designer Work History Form, identify the prime/ general contractor responsible for overall construction of the projects listed on the Lead Designer Work History Form.

**4.2.7 Provide Conceptual Roadway Plans showing the general Project layout. Include 11" x 17" copies of (a) plan view indicating the number of lanes specified in the RFP Information Package, and (b) typical sections of the proposed improvements to I-95, I-95 Ramps, and Route 3. Minimally, the Conceptual Roadway Plans shall meet the requirements of the Design Criteria**

Table (Attachment 2.2 of Part 2), indicate that the limits of construction are within the existing/proposed right-of-way limits shown in the RFP Conceptual Plans, and, as applicable, identify:

- .1 Lane widths
- .2 Shoulder widths
- .3 Areas of pavement demolition
- .4 Areas of obscuring roadway
- .5 Median widths
- .6 Minimum pavement sections
- .7 Cross slopes
- .8 Noise barrier locations

### 4.3 Price Proposal

The information and attachments provided in Part 1, Section 4.3 shall be submitted on the due date and time set forth in Part 1, Section 2.3.1. If the sealed Price Proposal is not submitted on the above specified date and time, then the Offeror shall be deemed non-responsive and will be disqualified from participating in the design-build procurement for this Project. Offerors shall complete the Price Proposal Checklist, Attachment 4.0.1.2, and include it with their Price Proposal. The purpose of the Price Proposal Checklist is to aid the Offeror in ensuring all submittal requirements have been included in the submittal. Additionally, the Offeror shall:

**4.3.1** Specify, on the form set forth in Attachment 4.3.1, a Cost Breakdown Summary in whole numbers and the Proposal Price, in both numbers and words. Offerors are advised that the prices set forth above shall be considered full compensation to Offeror for all design and construction of this Project, to include: labor, material, equipment, permits, taxes, overhead, profit and any other expenses of any kind applicable to the work to be undertaken by Offeror associated with such work, including but not limited to any escalation, extended site overhead, acceleration of schedule, and/or shift of construction sequencing.

**4.3.2** Provide the required information set forth in Part 3, Section 6.3, Adjustments to Asphalt and Fuel Prices.

**4.3.3** Provide the Proposal Guaranty required by Section 102.07 of Division I Amendments of the VDOT Road and Bridge Specifications. A copy of the Proposal Guaranty Form C-24 may be found at <http://vdotforms.vdot.virginia.gov/>. **If the Price Proposal Guaranty is not submitted with the Price Proposal, then the Offeror shall be deemed non-responsive and will be disqualified from participating in the Design-Build procurement for this Project.**

**4.3.4** Provide the Sworn Statement Forms (C-104, C-105), as set forth in Attachments 4.3.4(a) and 4.3.4(b) respectively.

#### 4.4 Post Notice of Intent to Award Submittals

Within three (3) calendar days of Notice of Intent to Award, the Successful Offeror shall deliver to VDOT documents required by this Section for its review and approval. VDOT may seek clarifications on any such documents. If VDOT disapproves any such submittal, VDOT may, in its sole discretion, disqualify the Successful Offeror.

**4.4.1** Furnish an organizational chart showing the “chain of command” of all companies (including affiliated or subsidiary), including individuals responsible for pertinent disciplines, proposed on the Offeror’s team. Identify major functions to be performed and their reporting relationships in managing, designing and constructing the Project. The organizational chart should show a clear separation and independence of a contractual relationship of any kind with the Quality Control (QC) and Quality Assurance (QA) programs for construction activities. This includes separation between QA and QC inspection and field/ laboratory testing in accordance with the Minimum Requirements for Quality Assurance and Quality Control on Design Build and P3 Projects, January 2012.

**4.4.2** Provide the identity of and information about the following Key Personnel listed below. This information is to be provided on the Key Personnel Resume Form attached hereto as Attachment 4.4.2.

- .1 **Design-Build Project Manager (DBPM)** – This individual shall be responsible for the overall Project design and construction and shall have the necessary expertise and experience required to supervise and exercise a degree of control of the Work. Work is comprised of all Design-Builder’s design, construction, quality management, contract administration and other services required by the Contract Documents, including procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents in a timely manner. The individual should be capable of answering questions/inquiries relevant to the project. The DBPM shall be responsible for meeting the Design-Builder’s obligations under the Contract and avoiding and resolving disputes under Section 10.2.2 of RFP Part 4 - General Conditions of Contract. This individual shall also coordinate any required public outreach and public meetings.
- .2 **Quality Assurance Manager (QAM)** – This individual shall be from an independent firm that has no contractual relationship of any kind with the Quality Control (QC) firm and no involvement in construction operations (to include QC inspection and testing) for the Project. The QAM shall be responsible for the quality assurance (QA) inspection and testing of all materials used and work performed on the Project, to include monitoring of the contractor's quality control (QC) program. The QAM will ensure that all work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

- .3 **Design Manager (DM)** – This individual shall be responsible for coordinating the individual design disciplines and ensuring the overall Project design is in conformance with the Contract Documents. The Design Manager shall be responsible for establishing and overseeing a QA/QC program for all pertinent disciplines involved in the design of the Project, including, review of design, working plans, shop drawings, specifications, and constructability of the Project. This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.
- .4 **Construction Manager (CM)** – This individual, **who will be required to be on the Project site for the duration of construction operations**, shall be responsible for managing the construction process to include all Quality Control (QC) activities to ensure the materials used and work performed meet contract requirements and the “approved for construction” plans and specifications. This individual shall hold a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) or a statement shall be included indicating this individual will hold these certifications prior to the commencement of construction.

**4.4.3** In accordance with the requirements set forth in Part 1, Section 4.2.5, the following information should be provided on Attachment 4.4.3:

- .1 The SCC registration information for each business entity on the Offeror’s proposed team. Provide the name, registration number, type of corporation and status.
- .2 For this Project, the DPOR registration information for each office practicing or offering to practice professional services in Virginia for each business entity on the Offeror’s proposed team. Provide the business name, address, registration type, registration number and expiration date.
- .3 For this Project, the DPOR license information for each Key Personnel practicing or offering to practice professional services in Virginia. Provide the name, the address, type, the registration number, expiration date and the office location where each Key Personnel member is offering to practice professional services in Virginia.
- .4 For this Project, the DPOR license information for those services not regulated by the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, and Landscape Architects (i.e. real estate appraisal). Provide the name, address, type, the registration number, and the expiration date of the individual offering services in Virginia.

**4.4.4** Provide a Proposal Schedule for the entire Project outlining the Offeror’s proposed plan to accomplish the Work. The Proposal Schedule submission should include:

- .1 **Proposal Schedule:** The Proposal Schedule should depict the Offeror’s proposed overall sequence of work, and times during each work task and deliverable required to complete the Project will be accomplished. This shall include all Work necessary to achieve Final Completion by the date set forth in Part 1, Section 2.3.1. The Proposal Schedule should be organized using a hierarchical Work Breakdown Structure (WBS), broken down into major phases of the Project (i.e. project milestones, project management, Scope Validation Period, design, public involvement, environmental, right-of-way, utility, and construction, etc.) The Proposal Schedule should depict the anticipated project critical path (based on the longest path), reviews by Department, FHWA, other regulatory agencies; and work by suppliers, subcontractors, and other involved parties, as applicable.
- .2 **Proposal Schedule Narrative:** A Proposal Schedule Narrative shall be provided for the Proposal Schedule submitted that describes the Offeror’s proposed overall plan to accomplish the Work and, if applicable, to attain incentive(s) including, but not limited to the overall sequencing, a description and explanation of the Critical Path, proposed means and methods, and other key assumptions on which the Proposal Schedule is based.

In addition to hard copy, the Offeror shall provide “PDF” copies of the Proposal Schedule and narrative; as well as a back-up copy of the Proposal Schedule’s source document in any of the following electronic file formats: “XER”, “PRX”, “MPP”, or “MPX”, on a CD-ROM. Offerors are to note that in addition to the Proposal Schedule, the Design-Builder will develop and submit a Preliminary Schedule and a Baseline Schedule in accordance with Part 3, Section 11.1.

**4.4.5** Provide a Schedule of Items for the Price Proposal utilizing the Schedule of Items Form attached hereto as Attachment 4.4.5. This Schedule of Items shall identify the material quantities and costs of each proposed pay item that make up the total Contract Price. The material quantities and costs listed for each proposed pay item shall, to the extent possible, correspond to VDOT’s list of standard and non-standard pay items. Any items considered for price adjustments shall be identified. The value associated with each pay item shall be inclusive of all direct and indirect costs, overhead, profit and any other expenses of any kind. The values and quantities shall be clearly supported by the escrowed pricing documents.

Payment for mobilization shall not be scheduled prior to the initiation of construction work. The pay item for mobilization shall be distributed between two separate installments. The first installment of fifty percent (50%) of the Design-Builder’s total mobilization cost may be scheduled following partial mobilization and initiation of construction work. The second installment may be scheduled following completion of substantial mobilization, including

erection of the Design-Builder's offices and buildings, if any. Preliminary engineering items including, but not limited to, surveying, geotechnical investigations and utility coordination shall not be considered as construction work for the purpose of mobilization.

**4.4.6** Submit, for the Price Proposal, a proposed monthly payment schedule showing the anticipated monthly earnings schedule on which funds will be required.

**4.4.7** Provide the Escrow Proposal Documents in accordance with Part 1, Section 11.7

## **5.0 PROPOSAL EVALUATION AND RESPONSIVENESS REVIEW**

**5.0.1** VDOT will open and read the Price Proposals publicly on the date and time set forth in Part 1, Section 2.3.1.

**5.0.2** After opening the Price Proposals, VDOT will determine if the Proposal of the Offeror with the lowest Proposal Price for the Project is responsive.

**5.0.3** If VDOT considers the Proposal of the Offeror with the lowest Proposal Price to be non-responsive, then VDOT will determine if the Proposal of the Offeror with the next lowest Proposal Price is responsive.

## **6.0 PROPOSAL SUBMITTAL REQUIREMENTS**

Part 1, Section 6.0 describes the requirements that all Offerors must satisfy in submitting Proposals. Failure of any Offeror to submit its Proposal in accordance with this RFP may result in rejection of its Proposal.

### **6.1 Due Date, Time and Location**

**6.1.1** All Proposals must be received by the Due Date and time set forth in Part 1, Section 2.3.1. All submissions, including hand-delivered packages, US Postal Service regular mail, US Postal Service express mail, or private delivery service (FEDEX, UPS, courier etc.) must be delivered to the following individual at the following address:

Commonwealth of Virginia  
Department of Transportation (VDOT)  
Central Office Mail Center  
Loading Dock Entrance  
1401 E. Broad Street  
Richmond, Virginia 23219  
Attention: Stephen D. Kindy, P.E. (APD Division)

Neither fax nor email submissions will be accepted. Offerors are responsible for effecting delivery by the deadline above, and late submissions will be rejected without opening,

consideration, or evaluation, and will be returned unopened to the sender. VDOT accepts no responsibility for misdirected or lost Proposals.

## 6.2 Format

**The Proposal format is prescribed below. If VDOT determines that a Proposal does not comply with or satisfy requirements of this Section, VDOT may find such Proposal to be non-responsive and may be disqualified from participating in the design-build procurement for this Project.**

**6.2.1** Two (2) separate sealed parcels, one (1) containing the Letter of Submittal and Attachments to the Letter of Submittal and one (1) containing the Price Proposal shall be submitted by the due date and time set forth in Part 1, Section 2.3.1. Parcels shall be clearly marked to identify the Project and the Offeror, and to identify the contents as the “Letter of Submittal and Attachments” or “Price Proposal” as applicable.

**6.2.2** Each Offeror shall deliver one (1) copy of the Letter of Submittal and Attachments to the Letter of Submittal, which must bear original signatures, and one (1) CD-ROM or DVD-ROM containing the entire Letter of Submittal and Attachments to the Letter of Submittal in a single cohesive Adobe PDF file.

The Letter of Submittal and Attachments to the Letter of Submittal shall be securely bound and contained in a single volume with an identity on its front cover. **Three ring binders are not permissible.**

The Letter of Submittal and Attachments to the Letter of Submittal shall be:

- Typed on one (1) side only.
- Separated by numbered tabs with sections corresponding to the order set forth in Part 1, Section 4.0, except for that required by Part 1, Section 4.3 and 4.4.
- Be prepared on 8.5” x 11” white paper (Charts, schedules, exhibits and other illustrative information may be on 11” x 17” paper, but must be folded to 8.5” x 11”).
- Include page number references in the right hand corner.
- The Letter of Submittal Checklist and Form C-78-RFP shall be provided in the front of the Letter of Submittal

The format and appearance of the Work History Forms should not be modified. The Work History Forms shall not exceed one (1) page per project for each the Lead Contractor and the Lead Designer.

All printing, except for the front cover of the Letter of Submittal and any appendices, should be Times New Roman, with a font of 12-point. (Times New Roman 10 point font may be used for filling out information on charts, tables and/ or exhibits).

**6.2.3** Each Offeror shall deliver one (1) paper copy of the Price Proposal, which must bear original signatures on the Price Proposal Form, and one (1) CD-ROM containing the entire Price Proposal in a single cohesive Adobe PDF file.

The Price Proposal shall be securely bound and contained in a single volume. **Three ring binders are not permissible.** Additionally, the Price Proposal shall be typed on one (1) side only and separated by numbered tabs with sections corresponding to the order set forth in Part 1, Section 4.3. The Price Proposal Checklist shall be provided in the front of the Price Proposal

**6.2.4** Within three (3) calendar days of Notice of Intent to Award, the Successful Offeror shall deliver a sealed parcel containing one (1) paper copy of the Post Notice of Intent to Award Submittals, excluding the Escrow Proposal Documents, and one (1) CD-ROM containing the entire Post Notice of Intent to Award Submittals, excluding the Escrow Proposal Documents in a single cohesive Adobe PDF file.

The Post Notice of Intent to Award Submittals shall be securely bound and contained in a single volume. **Three ring binders are not permissible.** Additionally, the Post Notice of Intent to Award Submittals shall be typed on one (1) side only and separated by numbered tabs with sections corresponding to the order set forth in Part 1, Section 4.4.

Except for charts, schedules, exhibits, and other illustrative and graphical information, all information shall be prepared on 8.5" x 11" white paper. Charts, schedules, exhibits, and other illustrative and graphical information may be on 11" x 17" paper, but must be folded to 8.5" x 11". The format and appearance of the Key Personnel Resume Form should not be modified. The Key Personnel Resume Forms shall not exceed two (2) pages for each Key Personnel.

All printing, except for the front cover of the Post Notice of Intent to Award Submittals and any appendices, should be Times New Roman, with a font of 12-point. (Times New Roman 10 point font may be used for filling out information on charts, tables and/ or exhibits).

## **7.0 QUESTIONS AND CLARIFICATIONS**

**7.0.1** All questions and requests for clarification regarding this RFP shall be submitted to VDOT's POC in writing in electronic format (submission by email is acceptable). All questions and requests for clarification shall be submitted in Microsoft Office Word format. No requests for additional information, clarification or any other communication should be directed to any other individual. **NO ORAL REQUESTS FOR INFORMATION WILL BE ACCEPTED.**

**7.0.2** All questions or requests for clarification must be submitted by the due date and time set forth in Part 1, Section 2.3.1. Questions or clarifications requested after such time will not be answered, unless VDOT elects, in its sole discretion, to do so.

**7.0.3** VDOT's responses to questions or requests for clarification shall be in writing and may be accomplished by an Addendum to this RFP. VDOT will not be bound by any oral communications, or written interpretations or clarifications that are not set forth in an Addendum.

**7.0.4** VDOT, in its sole discretion, shall have the right to seek clarifications from any Offeror to fully understand information contained in the Proposal.

## **8.0 AWARD OF CONTRACT, PROPOSAL VALIDITY AND CONTRACT EXECUTION**

VDOT has determined that the Negotiation and Award of Contract will be made in the following manner:

### **8.1 Negotiations and Award of Contract**

**8.1.1** VDOT will review the Proposal submitted by the Offeror with the lowest Proposal Price. If the Proposal is responsive and the Proposal Price is within VDOT's budget for design and construction services, then VDOT will issue a Notice of Intent to Award to the Successful Offeror.

**8.1.2** Pursuant to 23 CFR 636.513, VDOT may conduct limited negotiations with the Successful Offeror to clarify any remaining issues regarding scope, schedule, financing or any other information provided by the Successful Offeror.

**8.1.3** Pursuant to 23 CFR 636.404, if the Proposal Price submitted by the Offeror with the lowest Proposal Price is not within VDOT's budget for design and construction services, VDOT may establish a competitive range among the Offerors who have submitted a responsive Proposal.

**8.1.4** Pursuant to 23 CFR 636.402, 636.404, and 636.406, prior to VDOT establishing a competitive range, VDOT may hold communications with only those Offerors whose exclusion from or inclusion in, the competitive range is uncertain. Communications will (a) enhance VDOT's understanding of Proposals; or (b) allow reasonable interpretation of the Proposal.

**8.1.5** Pursuant to 23 CFR 636.404, after VDOT establishes the competitive range, VDOT will notify any Offeror whose Proposal is no longer considered to be included in the competitive range.

**8.1.6** Pursuant to 23 CFR 636.506, 636.507, and 636.508, VDOT will hold discussions with all Offerors in the competitive range. Offerors are advised that VDOT may, in its reasonable discretion, determine that only one Offeror is in the competitive range.

**8.1.7** Pursuant to 23 CFR 636.510, VDOT may determine to further narrow the competitive range once discussions have begun. At which point, VDOT will notify any Offeror whose Proposal is no longer considered in the competitive range.

**8.1.8** Pursuant to 23 CFR 636.509, at the conclusion of discussions, VDOT, will request all Offeror(s) in the competitive range to submit a final Proposal revision, also called Best and Final Offer (BAFO). Thus, regardless of the length or number of discussions, there will be only one request for a revised Proposal (*i.e.*, only one BAFO).

**8.1.9** Pursuant to 23 CFR 636.512, VDOT will review the final Proposals in accordance with the review and selection criteria and complete a final ranking of the Offerors in the competitive range, and then VDOT will issue a Notice of Intent to Award to the Successful Offeror.

**8.1.10** Pursuant to 23 CFR 636.513, VDOT may conduct limited negotiations with the Successful Offeror to clarify any remaining issues regarding scope, schedule, financing or any other information provided by the Successful Offeror.

## **8.2 Proposal Validity**

**8.2.1** The offer represented by the Proposal will remain in full force and effect for one hundred twenty (120) days after the Letter of Submittal/Price Proposal Due Date set forth in Part 1, Section 2.3.1. If Award of Contract has not been made by the CTB within one hundred twenty (120) days after the Letter of Submittal/Price Proposal Due Date, each Offeror that has not previously agreed to an extension of such deadline shall have the right to withdraw its Proposal.

## **8.3 Submittals after Notice of Intent to Award**

**8.3.1** Within three (3) calendar days of Notice of Intent to Award, the Successful Offeror shall deliver to VDOT all of the information required by Part 1, Section 4.4.

**8.3.2** Within fifteen (15) days of Notice of Intent to Award, the Successful Offeror shall deliver to VDOT all pertinent documents in accordance with Section 103 of the Division I Amendments to the Standard Specifications.

**8.3.3** Failure to comply with submittal requirements provided in Part 1, Sections 8.3.1 and 8.3.2 above may result in disqualification of the Offeror by VDOT in its sole and reasonable discretion.

## **8.4 Contract Execution and Notice to Proceed**

**8.4.1** Upon Award of Contract, VDOT will deliver an executed copy of the Design-Build Contract to the Successful Offeror, who shall execute and deliver such copy to VDOT within seven (7) days of receipt.

**8.4.2** VDOT reserves the right to issue Notice to Proceed within fifteen (15) days after execution of the Design-Build Contract.

## **9.0 RIGHTS AND OBLIGATIONS OF VDOT**

### **9.1 Reservation of Rights**

**9.1.1** In connection with this procurement, VDOT reserves to itself all rights (which rights shall be exercisable by VDOT in its sole discretion) available to it under applicable law, including without limitation, the following, with or without cause and with or without notice:

- .1 The right to cancel, withdraw, postpone or extend this RFP in whole or in part at any time prior to the execution by VDOT of the Design-Build Contract, without incurring any obligations or liabilities.
- .2 The right to issue a new RFP.
- .3 The right to reject any and all submittals, responses and Proposals received at any time.
- .4 The right to modify all dates set or projected in this RFP.
- .5 The right to suspend and terminate the procurement process for the Project, at any time.
- .6 The right to waive or permit corrections to data submitted with any response to this RFP until such time as VDOT declares in writing that a particular stage or phase of its review of the responses to this RFP has been completed and closed.
- .7 The right to issue addenda, supplements, and modifications to this RFP.
- .8 The right to permit submittal of Addenda and supplements to data previously provided with any response to this RFP until such time as VDOT declares in writing that a particular stage or phase of its review of the responses to this RFP has been completed and closed.
- .9 The right to hold meetings and conduct discussions and correspondence with one or more of the Offerors responding to this RFP to seek an improved understanding of the responses to this RFP.
- .10 The right to seek or obtain data from any source that has the potential to improve the understanding and evaluation of the responses to the RFP, including the right to seek clarifications from Offerors.

- .11 The right to permit Offerors to add or delete firms and/or key personnel until such time as VDOT declares in writing that a particular stage or phase of its review has been completed and closed.
- .12 The right to add or delete Offeror responsibilities from the information contained in this RFP.
- .13 The right to waive deficiencies, informalities and irregularities in a Proposal, accept and review a non-conforming Proposal or seek clarifications or supplements to a Proposal.
- .14 The right to disqualify any Offeror that changes its submittal without VDOT approval.
- .15 The right to change the method of award at any time prior to submission of the Proposals.
- .16 The right to respond to all, some, or none of the inquiries, questions and/or request for clarifications received relative to the RFP.
- .17 The right to negotiate the allocation of prices identified for specific portions of the work depicted within a Price Proposal.
- .18 The right to disqualify and/or cease negotiations with an Offeror if VDOT, in its sole discretion, determines that the Offeror's Post Notice of Intent to Award Submittals are not acceptable or its Price Proposal contains unbalanced pricing among the specific portions of work identified therein.

## **9.2 No Assumption of Liability**

**9.2.1** VDOT assumes no obligations, responsibilities, and liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred or alleged to have been incurred by parties considering a response to and/or responding to this RFP. All of such costs shall be borne solely by each Offeror and its team members.

**9.2.2** In no event shall VDOT be bound by, or liable for, any obligations with respect to the Project until such time (if at all) a contract, in form and substance satisfactory to VDOT, has been executed and authorized by VDOT and, then, only to the extent set forth therein.

## **10.0 PROTESTS**

This Section simply summarizes protest remedies available with respect to the provisions of the Code of Virginia that are relevant to protests of awards or decisions to award Design-Build

Contracts by VDOT. This section does not purport to be a complete statement of those provisions and is qualified in its entirety by reference to the actual provisions themselves.

In accordance with §2.2-4360, of the *Code of Virginia*, if an unsuccessful Offeror wishes to protest the award or decision to award a contract, such Offeror must submit a protest in writing to VDOT's POC no later than ten (10) calendar days after the award or the announcement posting the decision to award, whichever occurs first. The written protest shall include the basis for the protest and the relief sought. No protest shall lie for a claim that the selected Offeror is not a responsible bidder.

Public notice of the award or the announcement of the decision to award shall be given by the public body in the manner prescribed in the terms or conditions of the Invitation to Bid or Request for Proposal. However, if the protest of any Offeror depends in whole or in part upon information contained in public records pertaining to the procurement transaction that are subject to inspection under § 2.2-4342, of the *Code of Virginia*, then the time within which the protest must be submitted shall expire ten (10) calendar days after those records are available for inspection by such Offeror under § 2.2-4342, of the *Code of Virginia*.

VDOT shall issue a decision in writing within ten (10) calendar days of the receipt of any protest stating the reasons for the action taken. This decision shall be final unless the Offeror appeals within ten (10) calendar days of receipt of the written decision, by instituting legal action in accordance with § 2.2-4364, of the *Code of Virginia*.

Pursuant to § 2.2-4362, of the *Code of Virginia*, an award need not be delayed for the period allowed a bidder or Offeror to protest, but in the event of a timely protest, no further action to award the Contract will be taken unless there is a written determination by the Commissioner, or his designee, that proceeding without delay is necessary to protect the public interest or unless the Design-Build Proposal would expire. Further, pursuant to §2.2-4361, of the *Code of Virginia*, pending a final determination of a protest or appeal, the validity of the contract awarded and accepted in good faith shall not be affected by the fact that a protest or appeal has been filed.

## **11.0 MISCELLANEOUS**

### **11.1 Virginia Freedom of Information Act**

**11.1.1** All Proposals submitted to VDOT become the property of VDOT and are subject to the disclosure requirements of Section 2.2-4342 of the Virginia Public Procurement Act and the Virginia Freedom of Information Act (FOIA) (Section 2.2—3700 et seq.). Offerors are advised to familiarize themselves with the provisions of each Act referenced herein to ensure that documents identified as confidential will not be subject to disclosure under FOIA. In no event shall the Commonwealth, the Commissioner of Highways, or VDOT be liable to an Offeror for the disclosure of all or a portion of a Proposal submitted pursuant to this request.

**11.1.2** If a responding Offeror has special concerns about information which it desires to make available to VDOT but which it believes constitutes a trade secret, proprietary information, or other confidential information exempted from disclosure, such responding Offeror should specifically and conspicuously designate that information as such in its Proposal and state in writing why protection of that information is needed. The Offeror should make a written request to the Alternate Project Delivery Office. The written request shall:

- .1 Invoke such exemption upon the submission of the materials for which protection is sought.
- .2 Identify the specific data or other materials for which the protection is sought.
- .3 State the reasons why the protection is necessary.
- .4 Indicate that a similar process with the appropriate officials of the affected local jurisdictions is or will be conducted. Failure to take such precautions prior to submission of a Proposal may subject confidential information to disclosure under the Virginia FOIA.

**11.1.3** Blanket designations that do not identify the specific information shall not be acceptable and may be cause for VDOT to treat the entire Proposal as public information. Nothing contained in this provision shall modify or amend requirements and obligations imposed on VDOT by applicable law, and the applicable law(s) shall control in the event of a conflict between the procedures described above and any applicable law(s).

**11.1.4** In the event VDOT receives a request for public disclosure of all or any portion of a Proposal identified as confidential, VDOT will attempt to notify the Offeror of the request, providing an opportunity for such Offeror to assert, in writing, claimed exemptions under the FOIA or other Commonwealth law. VDOT will come to its own determination whether or not the requested materials are exempt from disclosure. In the event VDOT elects to disclose the requested materials, it will provide the Offeror advance notice of its intent to disclose.

**11.1.5** Because of the confidential nature of the negotiation process associated with this Project, and to preserve the propriety of each Offeror's Proposal, it is VDOT's intention, subject to applicable law, not to consider a request for disclosure until after VDOT's issuance of a Notice of Intent to Award. Offerors are on notice that once a Design-Build Contract is executed, some or all of the information submitted in the Proposal may lose its protection under the applicable laws of the Commonwealth.

## **11.2 Conflict of Interest**

**11.2.1** Implementation guidelines for VDOT's policy on organizational conflicts of interest relating to Design-Build procurement are documented in the Alternate Project Delivery Office Memorandum IIM-APD-2.

<http://www.virginiadot.org/business/resources/LocDes/IIM-APD-2.pdf>

Each Offeror shall require its proposed team members to identify potential conflicts of interest of a real or perceived competitive advantage relative to this procurement. Offerors are notified that prior or existing contractual obligations between a company and a federal or state agency relative to the Project or VDOT's design build program may present a conflict of interest or a competitive advantage. If a potential conflict of interest or competitive advantage is identified, the Offeror shall submit in writing the pertinent information to VDOT's POC.

VDOT, in its sole discretion, will make a determination relative to potential organizational conflicts of interest or a real or perceived competitive advantage, and its ability to mitigate such a conflict. An organization determined to have a conflict of interest or competitive advantage relative to this procurement that cannot be mitigated, shall not be allowed to participate as a Design-Build team member for the Project. Failure to abide by VDOT's determination in this matter may result in a Proposal being declared non-responsive.

**11.2.2** Conflicts of interest and a real or perceived competitive advantage are described in state and federal law, and, for example, may include, but are not limited to the following situations:

1. An organization or individual hired by VDOT to provide assistance in development of instructions to Offerors or evaluation criteria for the Project.
2. An organization or individual hired by VDOT to provide assistance in development of instructions to Offerors or evaluation criteria as part of the programmatic guidance or procurement documents for VDOT's Design-Build program, and as a result has a unique competitive advantage relative to the Project.
3. An organization or individual with a present or former contract with VDOT to prepare planning, environmental, engineering, or technical work product for the Project, and has a potential competitive advantage because such work product is not available to all potential Offerors in a timely manner prior to the procurement process.
4. An organization or individual with a present contract with VDOT to provide assistance in Design-Build contract administration for the Project.

**11.2.3** VDOT reserves the right, in its sole discretion, to make determinations relative to potential conflicts of interest on a Project specific basis.

**11.2.4** VDOT may, in its sole discretion, determine that a conflict of interest or a real or perceived competitive advantage may be mitigated by disclosing all or a portion of the work product produced by the organization or individual subject to review under this section. If

documents have been designated as proprietary by Virginia law, the Offeror will be given the opportunity to waive this protection from disclosure. If Offeror elects not to disclose, Offeror may be declared non-responsive.

**11.2.5** VDOT has not identified any firms that would not be allowed to participate as a Design-Build team member due to a conflict of interest.

### **11.3 Ethics in Public Contracting Act**

VDOT may, in its sole discretion, disqualify the Offeror from further consideration for the award of the Design-Build Contract if it is found after due notice and examination by VDOT that there is a violation of the Ethics in Public Contracting Act, § 2.2-4367 of the *Code of Virginia*, or any similar statute involving the Offeror in the procurement of the contract.

### **11.4 Requirement to Keep Team Intact**

The team proposed by Offeror, including but not limited to the Offeror's organizational structure, the lead contractor, the lead designer, Key Personnel, and other individuals identified pursuant to Part 1, Section 4.4, shall remain on Offeror's team for the duration of the procurement process and, if the Offeror is awarded the Design-Build Contract, the duration of the Design-Build Contract. The Offeror shall not change or substitute any Key Personnel except due to voluntary or involuntary termination of employment, retirement, death, disability, incapacity, or as otherwise approved by the Department. Any proposed change of Key Personnel must be submitted in writing to VDOT's POC, who, in his sole discretion, will determine whether to authorize a change. Unauthorized changes to the Offeror's team at any time during the procurement process may result in the elimination of the Offeror from further consideration. Job duties and responsibilities of Key Personnel shall not be delegated to others for the duration of the Design-Build Contract.

### **11.5 Disadvantaged Business Enterprises (DBEs)**

**11.5.1** Any Design-Builder, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the United States Department of Transportation (USDOT) DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; VDOT's DBE Program rules and regulations, VDOT's Road and Bridge Specifications and Part 5 Exhibit 107.15 (Special Provision for Use of Disadvantaged Business Enterprise for Design-Build Projects).

**11.5.2** It is the policy of VDOT that DBEs, as defined in 49 CFR Part 26, shall have every opportunity to participate in the performance of construction/consultant contracts. The DBE contract goal for this procurement is identified in Part 1, Section 4.1.9. Offerors are encouraged to take all necessary and reasonable steps to ensure that DBEs have every opportunity to

compete for and perform services on contracts, including participation in any subsequent supplemental contracts. If a portion of the work on the Project is to be subcontracted out, Offerors must seek out and consider DBEs as potential subcontractors. DBEs must be contacted to solicit their interest, capability and qualifications. Any agreement between an Offeror and a DBE whereby the DBE promises not to provide services to any other Offeror or other contractors/consultants is prohibited.

**11.5.3** After Award of the Contract the Design-Builder shall submit documentation related to the use of DBEs for the Project in accordance with the procedures set for in Part 5 Exhibit 107.15 (Special Provision for Use of Disadvantaged Business Enterprise for Design-Build Projects). The DBE must become certified with the Virginia Department of Small Business and Supplier Diversity (SBSD) prior to the performance of any work for the Project. In the case where the DBE is to be utilized to achieve the DBE participation goal, the DBE must be certified prior to the submission to VDOT of Forms C-111 (Minimum DBE Requirements), C-112 (Certification of Binding Agreement with DBE Firms) and Form C-48 (Subcontractor/Supplier Solicitation and Utilization). If the DBE is a prime, the firm will receive full credit for the planned involvement of their own workforce, as well as the work they commit to be performed by DBE subcontractors. DBE primes are encouraged to make the same outreach. DBE credit will be awarded only for work actually performed by DBEs themselves. When a DBE prime or subcontractor subcontracts work to another firm, the work counts toward the DBE goals only if the other firm itself is a DBE. A DBE must perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce.

**11.5.4** DBE certification entitles a firm to participate in VDOT's DBE Program. However, it does not guarantee that the firm will obtain VDOT work nor does it attest to the firm's abilities to perform any particular type of work.

**11.5.5** When preparing bids for projects with DBE goals, VDOT encourages prospective bidders to seek the assistance of the following offices:

Department of Small Business and Supplier Diversity  
101 N. 14<sup>th</sup> Street  
11<sup>th</sup> Floor  
Richmond, VA 23219  
Phone: (804) 786-6585  
<http://www.sbsd.virginia.gov/>

Department of Supplier Diversity  
Equal Opportunity Programs Department  
1 Aviation Circle  
Washington, DC 20001  
Phone: (703) 417-8625  
[www.metwashairports.com](http://www.metwashairports.com)

Contractors are also encouraged to seek help from the VDOT Districts Equal Employment Opportunity (EEO) Offices, Central Office Civil Rights Office and the VDOT Business Opportunity and Workforce Development (BOWD) Center as listed below:

VDOT Central Office  
1221 East Broad Street  
Richmond, VA 23219  
(804) 786-2085

Lynchburg District  
4219 Campbell Avenue  
Lynchburg, VA 24506  
(434) 856-8169

Bristol District  
870 Bonham Drive  
Bristol, VA 24203  
(276) 669-9907

Northern Virginia District  
4975 Alliance Drive  
Fairfax, VA 22030  
(703) 259-1775

Culpeper District  
1601 Orange Road  
Culpeper, VA 22701  
(540) 829-7523

Richmond District  
2430 Pineforest Drive  
Colonial Heights, VA 23834  
(804) 524-6091

Fredericksburg District  
87 Deacon Road  
Fredericksburg, VA 22405  
(540) 899-4562

Salem District  
731 Harrison Avenue  
Salem, VA 24153  
(540) 387-5453

Hampton Roads District  
1700 N. Main Street  
Suffolk, VA 23434  
(757) 925-2519

Staunton District  
811 Commerce Road  
Staunton, VA 24401  
(540) 332-7888

BOWD  
1602 Rolling Hills Drive  
Suite 110  
Richmond, VA 23229  
Phone: (804) 662-9555

The following informational websites may also be of assistance:

[www.virginiadot.org/business/bu\\_bizDev.asp](http://www.virginiadot.org/business/bu_bizDev.asp)

[www.virginiadot.org/business/bu-civil-rights-home.asp](http://www.virginiadot.org/business/bu-civil-rights-home.asp)

**11.5.6** This Project has federal funding. In accordance with the Governor's Executive Order No. 20, VDOT requires utilization of Small, Women and Minority (SWaM) Businesses to participate in the performance of state funded projects. A list of Department of Small Business

and Supplier Diversity (SBSD) certified SWaM firms is maintained on the SBSB web site ([www.sbsd.virginia.gov](http://www.sbsd.virginia.gov)) under the SWaM Vendor Directory link. Offerors are encouraged to take all necessary and reasonable steps to ensure that SWaM firms have the maximum opportunity to compete for and perform services in the design-build contract. If the Offeror intends to subcontract a portion of the services on the Project, the Offeror is encouraged to seek out and consider SWaM firms as potential subconsultants. The Offeror is encouraged to contact SWaM firms to solicit their interest, capability and qualifications. Any agreement between an Offeror and a SWaM firm whereby the SWaM firm promises not to provide services to other Offerors is prohibited.

## **11.6 Trainee and Apprenticeship Participation**

**11.6.1** VDOT will require trainee and apprenticeship participation for this Project. The on-the-job trainee goal for this Project is three (3) individuals.

## **11.7 Escrow Proposal Documents**

### **11.7.1 Scope**

Pursuant to Part 1, Section 11.7.5.1 below, the Successful Offeror shall submit to the individual set forth in Part 1, Section 6.1.1, one copy of all documentary information generated in preparation of its Proposal within three (3) calendar days of Notice of Intent to Award. This material is hereinafter referred to as Escrow Proposal Documents (EPDs). The EPDs will be held in a secure location at the VDOT Central Office until immediately prior to award of the Project. The EPDs of the Successful Offeror will be transferred to and then held in escrow at the banking institution specified in Part 1, Section 11.7.6.

An Escrow Proposal Documents Checklist has been provided for reference in Attachment 11.7.1

### **11.7.2 Ownership**

- .1 The EPDs are, and shall always remain, the property of the Successful Offeror, subject to joint review by VDOT and the Successful Offeror, as provided herein.
- .2 VDOT stipulates and expressly acknowledges that the EPDs constitute trade secrets. This acknowledgement is based on VDOT's express understanding that the information contained in the EPDs is not known outside Successful Offeror's business, is known only to a limited extent and only by a limited number of employees of the Successful Offeror, is safeguarded while in Successful Offeror's possession, is extremely valuable to Successful Offeror and could be extremely valuable to Successful Offeror's competitors by virtue of its reflecting Successful Offeror's contemplated techniques of design and construction. VDOT further acknowledges that Successful Offeror expended substantial sums of money in

developing the information included in the EPDs and further acknowledges that it would be difficult for a competitor to replicate the information contained therein. VDOT further acknowledges that the EPDs and the information contained therein are made available to VDOT only because such action is an express prerequisite to Award of Contract. VDOT further acknowledges that the EPDs include a compilation of the information used in Successful Offeror's business, intended to give Successful Offeror an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation.

### **11.7.3 Purpose**

EPDs may be used to assist in the negotiation of price adjustments and change orders and in the settlement of disputes and claims.

### **11.7.4 Format and Contents**

- .1 Successful Offerors may submit EPDs in their usual cost estimating format provided that all information is clearly presented and ascertainable. It is not the intention of Part 1, Section 11.7 to cause the Successful Offeror extra work during the preparation of the Proposal, but to ensure that the EPDs will be adequate to enable complete understanding and proper interpretation for their intended use. The EPDs shall be submitted in the language (i.e., English) of the Specifications.
- .2 It is required that the EPDs clearly itemize the estimated costs of performing the work of each item contained in Successful Offeror's schedule of values. Cost items shall be separated into sub-items as required to present a detailed cost estimate and allow a detailed cost review. A hard copy of the quotes for the Lead Contractor, Lead Designer and for all subcontractors and subconsultants in the Offeror's Organization Chart shall be provided. The EPDs shall include: estimates for costs of the design professionals and consultants itemized by discipline both for development of the design, all quantity take-offs, crew size and shifts, equipment, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, and memoranda, narratives, drawings and sketches showing site or work area layouts and equipment, add/deduct sheets, geotechnical reviews and consultant reports, and all other information used by the Successful Offeror to arrive at the prices contained in the Proposal. Estimated costs shall be broken down into estimate categories for each bid items such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials and subcontract costs as appropriate. Plant and equipment, indirect costs, bond rates and calculations, insurance costs and financing should be detailed. The Successful Offeror's allocation of indirect costs, contingencies, and mark-up shall be identified.
- .3 All costs shall be identified. For bid items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor,

equipment, materials and subcontracts, as applicable, are included, and provided that indirect costs, contingencies, and mark-up, as applicable, are allocated.

- .4 RFP Documents provided by VDOT should not be included in the EPDs unless needed to comply with these requirements.

### **11.7.5 Submittal**

- .1 The EPDs shall be submitted in a sealed container to the individual set forth in Part 1, Section 6.1.1 above, which container shall be clearly marked on the outside with the Offeror's name, date of submittal, Project name, and the words "Escrow Proposal Documents."
- .2 Prior to Award of Contract, EPDs of the Successful Offeror will be transferred to the banking institution referenced in Part 1, Section 11.7.6 and will be examined, organized, and inventoried by representatives of VDOT, together with members of the Successful Offeror's staff who are knowledgeable in how the Proposal was prepared. This examination is to ensure that the EPDs are legible and complete. It will not include review of, and will not constitute approval of proposed construction methods, estimating assumptions, or interpretations of any RFP Documents or the Design-Build Contract. Examination will not alter any condition or term of the Design-Build Contract.
- .3 If all the documents required by this section, Part 1, Section 11.7, have not been included in the original submittal, additional documentation may be submitted, at VDOT's discretion, prior to Award of Contract.
- .4 If the Design-Build Contract is not awarded to the Successful Offeror, the EPDs of the next Offeror to be considered for award shall be processed as described above.
- .5 Timely submission of complete EPDs is an essential element of the Successful Offeror's responsibility and a prerequisite to Award of Contract.
- .6 If Successful Offeror's Proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds ten percent (10%) of the Total Proposal Price proposed by the Successful Offeror, shall provide separate Escrow Documents to be included with those of the Successful Offeror. Such documents shall be opened and examined in the same manner and at the same time as the examination described above for the Successful Offeror.
- .7 If the Design-Builder wishes to subcontract any portion of the work after Award of Contract, VDOT retains the right to require the Design-Builder to submit Escrow Documents from the subcontractor before the subcontract is approved.

### **11.7.6 Storage**

The Successful Offeror's EPDs shall be stored at SunTrust Bank (Escrow Agent) at the following address:

SunTrust Bank  
ATTN: Charles Henderson  
919 East Main Street, 7<sup>th</sup> Floor  
Richmond, Virginia 23219  
(804) 782-7087

Generally, the EPDs will be delivered to the Escrow Agent after the Escrow Review Meeting with VDOT. The Successful Offeror shall provide or have on file with the Escrow Agent a copy of the firm's current Tax Form W-9, Certificate of Incumbency, and Articles of Incorporation. The cost for storing the EPDs will be paid by the Successful Offeror to the Escrow Agent. This annual fee is currently \$2,500 with initial payment due at the time of document delivery to the Escrow Agent.

### **11.7.7 Examination**

- .1 The EPDs shall be examined by VDOT and the Design-Builder, at any time deemed necessary by VDOT.
- .2 VDOT may delegate review of EPDs to members of VDOT's staff or consultants. The foregoing notwithstanding, the EPDs and information contained therein may be used in the resolution of any claim or dispute before any entity selected to resolve disputes and in any litigation or arbitration commenced hereunder. No other person shall have access to the EPDs.
- .3 Access to the documents will take place in the presence of duly designated representatives of both VDOT and the Design-Builder, except that, if the Design-Builder refuses to be present or to cooperate in any other way in the review of the documents, VDOT may upon notice to the Design-Builder, review such documents without the Design-Builder being present.

### **11.7.8 Final Disposition and Return of EPDs**

The EPDs of the Successful Offeror will be returned once the work has been determined to be finally complete and the Successful Offeror has been notified in writing of the determination of Final Acceptance in accordance with RFP Part 4, Section 6.6. This release is contingent upon notification from the Department's Project Manager to the Department's Alternative Project Delivery (APD) Division that the Final Application for payment has been submitted by the Successful Offeror in accordance with RFP Part 4, Section 6.6.3. Upon receipt

of this notification, APD Division shall contact the Escrow Agent and authorize release of the EPDs. The Escrow Agent shall then contact and coordinate with the Successful Offeror for the transfer of the EPDs at a mutually convenient time at the expense of the Successful Offeror, as applicable.

### **11.7.9 Execution of Escrow Agreement**

The Successful Offeror, as a condition of Award of Contract, agrees to execute the Escrow Agreement in the form set forth in Attachment 11.7.9.

### **11.8 Administrative Requirements**

In addition to the specific submittal requirements set forth in Part 1, Sections 3.0 and 4.0 above, all Offerors shall comply with the following:

**11.8.1** All business entities, except for sole proprietorships, are required to be registered with the Virginia State Corporation Commission. Foreign Professional Corporations and Foreign Professional Limited Liability Companies must possess a Commonwealth of Virginia Certificate of Authority from the State Corporation Commission to render professional services. Any business entity other than a professional corporation, professional limited liability company or sole proprietorship must be registered in the Commonwealth of Virginia with the Department of Professional & Occupational Regulation, Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Decorators and Landscape Architects. Board regulations require that all professional corporations and business entities that have branch offices located in Virginia which offer or render any professional services relating to the professions regulated by the Board be registered with the Board. Registration involves completing the required application and submitting the required registration fee for each and every branch office location in the Commonwealth. All branch offices that offer or render any professional service must have at least one full-time resident professional in responsible charge that is licensed in the profession offered or rendered at each branch. All firms involved that are to provide professional services must meet this criteria prior to a contract being executed by VDOT.

**11.8.2** VDOT will not consider for award any Proposals submitted by any Offerors and will not consent to subcontracting any portions of the proposed Design-Build Contract to any subconsultants in violation of the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.

**11.8.3** All Offerors must have internal control systems in place that meet federal requirements for accounting. These systems must comply with requirements of 48 CFR 31, "Federal Acquisition Regulations, Contract Cost Principles and Procedures," and 23 CFR 172, "Administration of Engineering and Design Related Service Contracts."

**11.8.4** VDOT assures compliance with Title VI of the Civil Rights Act of 1964, as amended. The consultant and all subconsultants selected for this Project will be required to submit a Title VI

Evaluation Report (EEO-D2) when requested by VDOT to respond to the RFP. This requirement applies to all consulting firms with fifteen (15) or more employees.

**11.8.5** VDOT does not discriminate against an Offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

**11.8.6** Offerors shall note and comply with the requirements relative to the eVA Business-to-Government Vendor system. The eVA Internet electronic procurement solution, web site portal (<http://www.eva.state.va.us>), streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution through either eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service. For more detailed information regarding eVA, registrations, fee schedule, and transaction fee, use the website link: <http://www.eva.state.va.us>. All Offerors must register in eVA; failure to register will result in a Proposal being rejected.

**11.8.7** The required services may involve the handling of Critical Infrastructure Information/Sensitive Security Information (CII/SSI) material. Personnel handling CII/SSI material, visiting Critical Infrastructure (CI) facilities or performing bridge/tunnel inspections are required to sign CII/SSI Non-Disclosure Agreements and pass a fingerprint-based Criminal History Background Check (CHBC). An individual employee's failure to successfully pass the fingerprint-based CHBC will not negate the selection and Offerors will be allowed to replace those individuals. VDOT reserves the right to conduct fingerprint-based CHBC on all employees of the Design-Builder's team members, or on any proposed replacements during the term of the contract who will be involved in this Project. All costs associated with the fingerprint-based CHBC are the responsibility of the Offeror or Design-Builder. A VDOT issued photo-identification badge is required for each employee of the Offeror's or Design-Builder's team who will need access to VDOT CI facilities or who will be performing bridge/tunnel inspections. Based upon the results of the fingerprint-based CHBC, VDOT reserves the right to deny access to CII/SSI material and issuance of a VDOT security clearance or a VDOT issued photo-identification badge.

CII/SSI material includes box culvert inspection reports. Inspection reports are not included in the Information Package and CII/SSI Non-Disclosure Agreements are not required to respond to the RFP. VDOT's CII/SSI Policy Guide and the forms necessary to obtain CII/SSI material can be found using the following website link: [http://www.virginiadot.org/business/bridge\\_safety\\_inspection.asp](http://www.virginiadot.org/business/bridge_safety_inspection.asp). A completed CII/SSI form must be submitted to VDOT's Point of Contact provided in Section 2.4 prior to distribution of CII/SSI material.

## **11.9 Compliance with the Law in Virginia**

Failure to comply with the law with regard to those legal requirements in Virginia (whether federal or state) regarding your ability to lawfully offer and perform any services proposed or related to the Project may render your RFP submittal, in the sole and reasonable discretion of VDOT, non-responsive and/or non-responsible, and in that event your RFP submittal may be returned without any consideration for selection of contract award.

## 11.10 Attachments

The following attachments are specifically made a part of, and incorporated by reference into, these Instructions for Offerors:

- ATTACHMENT 2.5 -- RFP INFORMATION PACKAGE ORDER FORM
- ATTACHMENT 3.4 -- FORM C-78-RFP (ACKNOWLEDGEMENT OF RECEIPT OF RFP, REVISIONS, AND/OR ADDENDA)
- ATTACHMENT 4.0.1.1 -- LETTER OF SUBMITTAL CHECKLIST
- ATTACHMENT 4.0.1.2 -- PRICE PROPOSAL SUBMITTAL CHECKLIST
- ATTACHMENT 4.2.1 -- AFFILIATED/ SUBSIDIARY COMPANIES LIST
- ATTACHMENT 4.2.2(a) -- CERTIFICATION REGARDING DEBARMENT (PRIMARY COVERED TRANSACTIONS)
- ATTACHMENT 4.2.2(b) -- CERTIFICATION REGARDING DEBARMENT (LOWER TIER COVERED TRANSACTIONS)
- ATTACHMENT 4.2.5 -- LICENSE AND REGISTRATION INFORMATION - BUSINESSES
- ATTACHMENT 4.2.6(a) -- LEAD CONTRACTOR WORK HISTORY FORM
- ATTACHMENT 4.2.6(b) -- LEAD DESIGNER WORK HISTORY FORM
- ATTACHMENT 4.3.1 -- PRICE PROPOSAL FORM
- ATTACHMENT 4.3.4(a) -- FORM C-104 (BIDDER'S STATEMENT)
- ATTACHMENT 4.3.4(b) -- FORM C-105 (BIDDER'S CERTIFICATION)
- ATTACHMENT 4.4.2 -- KEY PERSONNEL RESUME FORM
- ATTACHMENT 4.4.3 -- LICENSE AND REGISTRATION INFORMATION - INDIVIDUALS
- ATTACHMENT 4.4.5 -- SCHEDULE OF ITEMS FORM
- ATTACHMENT 11.7.1 -- ESCROW PROPOSAL DOCUMENTS CHECKLIST
- ATTACHMENT 11.7.9 -- ESCROW AGREEMENT FORM
- ATTACHMENT 11.8.8 -- CII/SSI NON-DISCLOSURE AGREEMENT

END OF PART 1  
INSTRUCTIONS FOR OFFERORS

**ATTACHMENT 2.5**

**DESIGN-BUILD  
ORDER FORM**

**I-95 SAFETY IMPROVEMENTS AT ROUTE 3  
REQUEST FOR PROPOSALS (RFP) INFORMATION PACKAGE**

FIRM NAME \_\_\_\_\_

COMPLETE MAILING  
ADDRESS \_\_\_\_\_

\_\_\_\_\_  
(PLEASE GIVE BOTH STREET ADDRESS AND POSTAL DELIVERY ADDRESS)

FIRM TELEPHONE NUMBER \_\_\_\_\_ FIRM FAX NUMBER \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

SIGNED: \_\_\_\_\_

FOR QUESTIONS REGARDING THE RFP INFORMATION PACKAGE CONTACT:

**STEPHEN D. KINDY, P.E.  
VIRGINIA DEPARTMENT OF TRANSPORTATION  
1401 EAST BROAD STREET  
RICHMOND, VIRGINIA 23219  
(804) 786-6016**

TO ORDER THE RFP INFORMATION PACKAGE BY TELEPHONE/MAIL/FAX CONTACT:

**THE CONSTRUCTION DIVISION PLAN ROOM  
VIRGINIA DEPARTMENT OF TRANSPORTATION  
1401 EAST BROAD STREET  
RICHMOND, VIRGINIA 23219  
(804) 786-1898, 786-5161 OR 371-9868  
FAX TELEPHONE NO. (804) 786-2788** (Ordering by fax using a Master or Visa credit card is the preferred method)

MASTERCARD/VISA NO. \_\_\_\_\_

EXPIRATION DATE: \_\_\_\_\_

THE RFP INFORMATION PACKAGE WILL NOT BE ISSUED PRIOR TO RECEIPT OF PAYMENT

Dear Sir/Madam:

Please send the RFP Information Package designated below. Enclosed is check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ made payable to the Treasurer of Virginia.

RFP NO.	PROJECT	PACKAGES REQUESTED	TOTAL (\$50.00 per package, price includes 5% Virginia Sales Tax)
		#	\$
<b>C00107715DB91</b>	<b>0095-111-278</b>		

**FOR DEPARTMENTAL USE ONLY**

RFP PACKAGE MAILED \_\_\_\_\_  
TO BE MAILED \_\_\_\_\_

MAILED BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

**ATTACHMENT 3.4**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

RFP NO. C00107715DB91  
PROJECT NO.: 0095-111-278, P101, C201, C501

**ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA**

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.4, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFP – September 27, 2016  
*(Date)*
2. Cover letter of \_\_\_\_\_  
*(Date)*
3. Cover letter of \_\_\_\_\_  
*(Date)*

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PRINTED NAME

\_\_\_\_\_  
TITLE

**ATTACHMENT 4.0.1.1**  
**I-95 Safety Improvements at Route 3**  
**LETTER OF SUBMITTAL CHECKLIST AND CONTENTS**

Offerors shall furnish a copy of this Letter of Submittal Checklist, with the page references added, with the Letter of Submittal.

Letter of Submittal Component	Form (if any)	RFP Part 1 Cross Reference	Page Reference
<b>Letter of Submittal Checklist and Contents</b>	Attachment 4.0.1.1	Section 4.0.1.1	
<b>Acknowledgement of RFP, Revisions, and/or Addenda</b>	Attachment 3.4 (Form C-78-RFP)	Sections 3.4; 4.0.1.1	
<b>Letter of Submittal</b>	NA	Sections 4.1	
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	
Offeror's full legal name and address	NA	Section 4.1.1	
Authorized representative's original signature	NA	Section 4.1.1	
Declaration of intent	NA	Section 4.1.2	
120 day declaration	NA	Section 4.1.3	
Point of Contact information	NA	Section 4.1.4	
Principal Officer information	NA	Section 4.1.5	
Offeror's Corporate Structure	NA	Section 4.1.6	
Full Legal Name of Lead Contractor, Lead Designer, and QAM	NA	Section 4.1.7	
Offeror's VDOT prequalification information	NA	Section 4.1.8	
DBE statement confirming Offeror is committed to achieving the required DBE goal	NA	Section 4.1.9	
Final Completion Date	NA	Section 4.1.10	

**ATTACHMENT 4.0.1.1**

**I-95 Safety Improvements at Route 3**

**LETTER OF SUBMITTAL CHECKLIST AND CONTENTS**

<b>Letter of Submittal Component</b>	<b>Form (if any)</b>	<b>RFP Part 1 Cross Reference</b>	<b>Page Reference</b>
<b>Attachments to the Letter of Submittal</b>	NA	Section 4.2	
Affiliated and/ or Subsidiary Companies	Attachment 4.2.1	Section 4.2.1	
Certification Regarding Debarment Forms	Attachment 4.2.2(a) Attachment 4.2.2(b)	Section 4.2.2	
Offeror's VDOT prequalification information	NA	Section 4.2.3	
Evidence of obtaining bonding	NA	Section 4.2.4	
Full size copies of DPOR licenses and SCC registrations	NA	Section 4.2.5	
SCC registration information - businesses	Attachment 4.2.5	Section 4.2.5.1	
DPOR registration information - businesses	Attachment 4.2.5	Section 4.2.5.2	
Lead Contractor Work History Form	Attachment 4.2.6(a)	Section 4.2.6	
Lead Designer Work History Form	Attachment 4.2.6(b)	Section 4.2.6	
Conceptual Roadway Plans	NA	Section 4.2.7	

**ATTACHMENT 4.0.1.2**

**DESIGN-BUILD PRICE PROPOSAL  
CHECKLIST**

**Project Name: I-95 Safety Improvements at Route 3  
Contract ID Number: C00107715DB91**

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➤ **Contents of Price Proposal:**

- Cost Breakdown Summary in whole numbers and the Proposal Price, in both numbers and words (Attachment 4.3.1)**
  - Price Adjustment Information and Forms for Fuel, Asphalt and Steel, including identification of pay items and associated quantities eligible for adjustment (Part 3, Section 6.3, Attachments 6.3)**
  - Proposal Guaranty (C-24) required by Section 102.07 of Part 5, Division I Amendments to the Standard Specifications**
  - Sworn Statement Forms (C-104, C-105, Attachments 4.3.4(a) and 4.3.4(b))**
  - CD-ROM containing the entire Price Proposal in a single cohesive Adobe PDF file**
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**ATTACHMENT 4.2.2(a)**  
**CERTIFICATION REGARDING DEBARMENT**  
**PRIMARY COVERED TRANSACTIONS**

**Project No.: 0095-111-278**

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Firm

**ATTACHMENT 4.2.2(b)**  
**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**

**Project No.: 0095-111-278**

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
  
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

\_\_\_\_\_  
Signature                      Date    Title

\_\_\_\_\_  
Name of Firm

**ATTACHMENT 4.2.5**

**State Project No. 0095-111-278**

**SCC and DPOR Information**

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 4.2.5 and that all businesses listed are active and in good standing.

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFP Sections 4.2.5.1 and 4.2.5.2)</b>							
<b>Business Name</b>	<b>SCC Information (4.2.5.1)</b>			<b>DPOR Information (4.2.5.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>

**ATTACHMENT 4.2.6(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name:  Location:	Name:	Name of Client/ Owner: Phone: Project Manager: Phone: Email:	MM/YYYY	MM/YYYY			
<p>h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on <u>this</u> Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.</p>							

**ATTACHMENT 4.2.6(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name:  Location:	Name:	Name of Client.: Phone: Project Manager: Phone: Email:	MM/YYYY	MM/YYYY			
h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.							

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**ATTACHMENT 4.3.1**

**PRICE PROPOSAL FORM**

**4.3.1** Offeror shall specify the pricing information for the items below, the dollars amount shall be in whole numbers:

Price Proposal Cost Breakdown Summary;

Design Services, LS	\$ _____
Construction Services (exclude QA/QC), LS	\$ _____
Quality Assurance (QA) (Construction), LS	\$ _____
Quality Control (QC) (Construction), LS	\$ _____

Proposal Price; (Specify the Total Lump Sum price in both numbers and words, this price shall **equal** to the total sum of the items listed above)

Lump Sum (LS): \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Design-Builder: \_\_\_\_\_

Vendor No.: \_\_\_\_\_

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

PROJECT:

FHWA:

This form must be completed, signed and returned with bid; and failure to do so may result in the rejection of your bid. **THE CONTRACTOR SHALL AFFIRM THE FOLLOWING STATEMENT EITHER BY SIGNING THE AFFIDAVIT AND HAVING IT NOTARIZED OR BY SIGNING THE UNSWORN DECLARATION UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES.** A SEPARATE FORM MUST BE SUBMITTED BY EACH PRINCIPAL OF A JOINT VENTURE BID.

**STATEMENT.** In preparation and submission of this bid, I, the firm, corporation or officers, agents or employees thereof did not, either directly or indirectly, enter into any combination or arrangement with any persons, firm or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Article 1.1 or Chapter 12 of Title 18.2 (Virginia Governmental Frauds Act), Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia.

**AFFIDAVIT**

The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_  
County (City), STATE

\_\_\_\_\_  
(Name of Firm) By: \_\_\_\_\_ Title (print)  
(Signature)

STATE of \_\_\_\_\_ COUNTY (CITY) of \_\_\_\_\_

To-wit:

I \_\_\_\_\_, a Notary Public in and for the State and  
County(City) aforesaid, hereby certify that this day \_\_\_\_\_

personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_  
My Commission expires \_\_\_\_\_

Notary Public

**OR  
UNSWORN DECLARATION**

The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_  
County (City), STATE

\_\_\_\_\_  
(Name of Firm) By: \_\_\_\_\_ Title (print)  
(Signature)

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
AFFIDAVIT**

PROJECT: 0095-111-278, P101, R201, C501

FHWA: OC-095-2(535)

This form must be completed, signed, notarized and returned with bid; and failure to do so, may result in the rejection of your bid. A separate form must be submitted by each principal of a joint venture bid.

1. I, the firm, corporation or officers, agents or employees thereof have neither directly nor indirectly entered into any combination or arrangement with any person, firm or corporation or entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract, the effect of which is to prevent competition or increase the cost of construction or maintenance of roads or bridges.

During the preceding twelve months, I (we) have been a member of the following Highway Contractor's Associations, as defined in Section 33.1-336 of the Code of Virginia (1970). (If none, so state).

NAME	Location of Principal Office
_____	_____
_____	_____
_____	_____

2. I (we) have \_\_\_\_\_, have not \_\_\_\_\_, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that I/We have \_\_\_\_\_, have not \_\_\_\_\_, filed with the joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

**Note:** The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)], and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contract or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contract and subcontract unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

(Continued)

**ORDER NO.:**  
**CONTRACT ID. NO.:**

Form C-105  
page 2

3. The bidder certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated above; and
  - (d) Where the bidders is unable to certify to any of the statements in this certification, the bidder shall show an explanation below.

Explanations will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any explanation noted, indicate below to whom it applies, initiating agency, and dates of action. Providing false information may result in federal criminal prosecution or administration sanctions. The bidder shall provide immediate written notice to the Department if at any time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of change circumstances.

The undersigned is duly authorized by the bidder to make the foregoing statements to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_  
County (City), STATE

\_\_\_\_\_  
(Name of Firm) By: \_\_\_\_\_ (Signature) \_\_\_\_\_ Title (print)

STATE of \_\_\_\_\_ COUNTY (CITY) of \_\_\_\_\_

To-wit:

I \_\_\_\_\_, a Notary Public in and for the State and  
County(City) aforesaid, hereby certify that this day \_\_\_\_\_

personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_

My Commission expires \_\_\_\_\_

\_\_\_\_\_  
Notary Public

**ATTACHMENT 4.4.2**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>
a. Name & Title:
b. Project Assignment:
c. Name of Firm with which you are now associated:
d. Employment History: With this Firm ____ Years With Other Firms ____ Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
f. Active Registration: Year First Registered/ Discipline/VA Registration #:
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b>
<small>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</small>
h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

**ATTACHMENT 4.4.3**

**State Project No. 0095-111-278**

**SCC and DPOR Information - Individuals**

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 4.2.5 and that all individuals listed are active and in good standing.

<b>DPOR INFORMATION FOR INDIVIDUALS (RFP Sections 4.4.3.1 and 4.4.3.2)</b>						
<b>Business Name</b>	<b>Individual's Name</b>	<b>Office Location Where Professional Services will be Provided (City/State)</b>	<b>Individual's DPOR Address</b>	<b>DPOR Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>



ATTACHMENT 11.7.1

## ESCROW PROPOSAL DOCUMENTS CHECKLIST

Project Name: I-95 Safety Improvements at Route 3  
Contract ID Number: C00107715DB91

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➤ Format:

- Usual cost estimating format as long as information is clearly presented and ascertainable
- Submitted in the language (i.e., English) of the Specifications

➤ Subcontractors

- If Offeror's Proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds ten percent (10%) of the Total Proposal Price proposed by the Offeror, shall provide separate Escrow Documents to be included with those of the Offeror. Such documents shall be opened and examined in the same manner and at the same time as the examination described above for the highest-scored Offeror.

➤ Cost Items (All costs shall be identified)

- Clearly itemizes the estimated costs of performing the work of each item contained in Offeror's schedule of values.
- Cost items shall be separated into sub-items as required to present a detailed cost estimate and allow a detailed cost review.

- Includes estimates for:
    - design professionals and consultants itemized by discipline both for development of the design
    - all quantity take-offs
    - crew size and shifts
    - equipment
    - calculations of rates of production and progress
    - copies of quotes from subcontractors and suppliers
    - memoranda, narratives, drawings and sketches showing site or work area layouts and equipment
    - add/deduct sheets
    - geotechnical reviews and consultant reports
    - all other information used by the Offeror to arrive at the prices contained in the Proposal.
  
  - Broken down into estimate categories for each bid items such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials and subcontract costs as appropriate. Plant and equipment, indirect costs, bond rates and calculations, insurance costs and financing should be detailed.
  
  - Allocation of indirect costs, contingencies, and mark-up shall be identified.
  
  - For cost items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials and subcontracts, as applicable, are included, and provided that indirect costs, contingencies, and mark-up, as applicable, are allocated.
-

**ATTACHMENT 11.7.9**  
**ESCROW AGREEMENT**

**THIS ESCROW AGREEMENT** (Agreement) is made and entered into as of \_\_\_\_\_, 20\_\_\_\_, by and among the Virginia Department of Transportation (Department), \_\_\_\_\_ (“Successful Offeror”) and **Sun Trust Bank** (Escrow Agent) with reference to the following facts:

**WHEREAS**, Department has issued a Request for Proposals dated **September 13, 2016** (RFP) for the completion of the **I-95 Safety Improvements at Route 3**, in City of Fredericksburg, Virginia (Project); and

**WHEREAS**, Successful Offeror has submitted to Department a proposal (Proposal) in response to the RFP; and

**WHEREAS**, as part of the Proposal, Successful Offeror is submitting one copy of all information regarding the assumptions made in developing the Proposal, as required under Part 1, Section 11.7 of the RFP, in one (1) separately sealed and labeled boxes (EPDs); and

**WHEREAS**, Department and Successful Offeror wish to employ the services of Escrow Agent to act as the escrow holder with regard to the EPDs for the limited purposes set forth below, and Escrow Agent has agreed to serve as such escrow holder under the terms and conditions provided in this Agreement.

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements hereinafter set forth and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereby agree as follows:

**1. Deposit.** Successful Offeror hereby deposits with Escrow Agent the EPDs. Escrow Agent hereby acknowledges receipt of such EPDs, and such EPDs shall be held in escrow under the terms and conditions of this Agreement.

**2. Holding of EPDs.** Escrow Agent shall hold the EPDs in escrow in a designated area on the premises of Escrow Agent located at **919 East Main St., 7<sup>th</sup> Floor, Richmond, VA 23219** on a confidential basis. The EPDs shall be stored in an area which is locked at all times. No third party, including the employees of Escrow Agent, shall be allowed access to any of the EPDs except as provided in Section 3 hereof, although this shall not preclude employees of Escrow Agent from having access to the locked area for other purposes.

**3. Review of EPDs.** Escrow Agent shall provide facilities for joint review of the EPDs by representatives of Department and Successful Offeror in accordance with the terms of the RFP, upon at least one business days’ advance notice.

**4. Release of EPDs.** Escrow Agent shall release the EPDs as follows:

- a) The EPDs of the Successful Offeror shall be returned once the work is determined to be finally complete and the Successful Offeror has been notified in writing of the determination of Final Acceptance in accordance with RFP Part 4, Section 6.6. This release is contingent upon notification from the Department's Project Manager to the Department's Alternate Project Delivery Office (APDO) that the Final Application for Payment has been submitted by the Successful Offeror in accordance with RFP Part 4, Section 6.3.3.
- b) Upon receipt of this certification, APDO shall contact the Escrow Agent and authorize release of the EPDs. The Escrow Agent shall then contact and coordinate with the Successful Offeror for transfer of the EPDs at a mutually convenient time at the Successful Offeror's expense, as applicable.

**5. Representation and Warranty.** Successful Offeror represents and warrants to Department that, prior to delivery of the EPDs to Escrow Agent, the EPDs were personally examined by an authorized representative of Successful Offeror and that they constitute all the documentation and information used in the preparation of the Proposal.

**6. Rights of Escrow Agent.** If conflicting demands are made or notices served upon Escrow Agent with respect to this escrow, the parties hereto expressly agree that Escrow Agent shall have the absolute right at its election to do any of the following:

- a) withhold and stop all further proceedings in, and performance of, this escrow;
- b) file a suit in interpleader and obtain an order from the court requiring the parties to interplead and litigate in such court their several claims and rights amongst themselves, or
- c) deliver all EPDs with seals intact to another location to be selected by Department within thirty (30) days after Escrow Agent delivers notice thereof to Department.

**7. Fees.** Successful Offeror shall be responsible for an annual escrow fee of \$2,500 payable directly to the Escrow Agent within the required timeframe. If Successful Offeror fails to pick up the EPDs under Section 4(b), Successful Offeror shall pay any fees accruing thereafter.

**8. Notices.** All notices which may be or are required to be given or made by either party hereto to the other shall be in writing. Such notices shall be either personally delivered or sent by registered mail, postage prepaid, to:

If to the Successful Offeror:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_  
E-Mail Address: \_\_\_\_\_  
Phone #: \_\_\_\_\_

If to Department:

Virginia Department of Transportation  
1401 East Broad St.  
Richmond, VA 23219  
Attention: Stephen D. Kindy, P.E.  
E-Mail Address: [stephen.kindy@vdot.virginia.gov](mailto:stephen.kindy@vdot.virginia.gov)  
Phone #: (804) 786-6016

If to Escrow Agent:

Sun Trust Bank  
919 East Main St., 7<sup>th</sup> Floor  
Richmond, VA 23219  
Attention: Charles Henderson  
E-Mail Address: [Charles.Henderson@SunTrust.com](mailto:Charles.Henderson@SunTrust.com)  
Phone #: (804) 782-7087

or to such other addressees and such other places as any party hereto may from time to time designate by written notice to the others.

**9. Counterparts.** This Agreement may be executed in one or more counterparts, all of which together shall be deemed an original.

**10. Headings.** The title headings of the respective paragraphs of this Agreement are inserted for convenience only, and shall not be deemed to be part of this Agreement or considered in construing this Agreement.

**11. Governing Law.** The laws of the Commonwealth of Virginia, excluding its conflict of laws, shall govern this Agreement.

**12. Attorneys' Fees.** If either Department or Successful Offeror commences or engages in any action by or against the other party directly or indirectly arising out of or in connection with this Agreement, the prevailing party shall be entitled to have and recover from the losing party reasonable attorneys' fees and other costs incurred in the action and in preparation for said action and any subsequent appeal. All parties agree to indemnify and hold Escrow Agent harmless from and against all costs, expenses, and reasonable attorneys' fees in connection with any such action.

**IN WITNESS WHEREOF**, the parties hereto, each intending to be legally bound by this writing, have caused this Agreement to be executed the date first above written.

**VIRGINIA DEPARTMENT OF  
TRANSPORTION**

By: \_\_\_\_\_

Name: Jeffrey A. Roby

Title: Design-Build Program Manager

**SUCCESSFUL OFFEROR**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

The escrow provided for this Agreement is hereby accepted by Escrow Agent.

Sun Trust Bank:

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_



**Critical Infrastructure Information (CII)  
Sensitive Security Information (SSI)  
Individual Non-Disclosure Agreement**



Code of Virginia §36-105.3 and §44-146.22 and 49 CFR Part 1520 stipulates instituting procedures to ensure the safe storage and secure handling of information that should be protected and not disclosed. VDOT CII/SSI includes such information and is not subject to disclosure under FOIA (reference Code of Virginia §2.2-3705.2).

**Disclosure of CII/SSI in any manner that permits interception by unauthorized persons is prohibited.** CII/SSI may not be released to persons without a need-to-know except with written permission from VDOT (see *Handling CII/SSI* on page 3). CII/SSI includes information marked as such or other information relating to VDOT security or protected systems (see *Guide to Identifying Possible CII* on page 4).

All documents and materials provided are the sole and exclusive property of VDOT. They may not be modified, reproduced, republished, redistributed or presented for sale, completely or in part, and doing so may result in severe civil and criminal penalties. All documents and materials provided are only to be used in conjunction with contract or project # \_\_\_\_\_.

As an employee of (or contractor to) \_\_\_\_\_ I understand that:

1. Certain information which I will receive from Virginia Department of Transportation (VDOT) may contain CII/SSI.
2. I may learn of or have access to some or all of this information through a computer system or through my employment activities.
3. CII/SSI is valuable and sensitive and is protected by law and by strict VDOT policies. The intent of these laws and policies is to assure that CII/SSI will remain confidential - that is, it will be used only as necessary to accomplish VDOT's mission.
4. I have no right or ownership interest in any CII/SSI referred to in this Agreement.
5. Willful violation of this agreement may subject me to discipline which might include, but is not limited to, termination of employment or further VDOT related work and to legal liability.
6. I am obligated to protect this information from unauthorized disclosure in accordance with the terms of this agreement.
7. Unauthorized disclosure of CII/SSI could compromise safety and security of persons and is prohibited.
8. My execution of this agreement shall not nullify or affect in any manner any other agreement, non-disclosure or otherwise, which I have executed or may execute with VDOT or the Commonwealth of Virginia.
9. My obligations with respect to the confidentiality and security of all CII/SSI disclosed to me shall survive the termination of any agreement or relationship with VDOT.
10. I am required to conduct myself in a strict conformance to applicable laws and VDOT policies governing CII/SSI (see *Handling CII/SSI* on page 3).
11. VDOT may at any time revoke my authorization allowing access to CII/SSI.

Accordingly, as a condition of and in consideration of my access to CII/SSI, I agree that:

1. I will only access CII/SSI for which I have a need-to-know
2. I will use any CII/SSI that I obtain only as needed by me to perform my legitimate VDOT related duties.
3. I will not in any way divulge, copy, release, sell, loan, review, alter or destroy any CII/SSI except as properly authorized within the scope of my professional VDOT activities

Last Name, First name:



**Critical Infrastructure Information (CII)  
Sensitive Security Information (SSI)  
Individual Non-Disclosure Agreement**



4. I will safeguard the confidentiality of all CII/SSI at all times.
5. I will safeguard and will not disclose my access code or any other authorization I have that allows me to access CII/SSI and I accept responsibility for all activities undertaken using my access code and other authorization.
6. I will be responsible for my misuse or my wrongful disclosure of CII/SSI and for my failure to safeguard my access code or other authorization access to CII/SSI.

Each provision of this agreement is severable. If any administrative or judicial tribunal should find any provision of this agreement to be unenforceable, all other provisions shall remain in full force and effect.

I make this agreement in good faith, without mental reservation or purpose of evasion.

Printed name of Individual Staff Member	Date
Company Name	Phone Number
Company Address	Fax Number
Company City, State, Zip	E-mail Address
Signature of Individual Staff Member	

Authorized Agent for Company (person who signed the Company Agreement):

Printed Name of Authorized Agent	Title
Signature of Authorized Agent	Phone Number
VDOT Contact Name	

Return copy of signed agreement to \_\_\_\_\_.



**Critical Infrastructure Information (CII)  
Sensitive Security Information (SSI)  
Individual Non-Disclosure Agreement**



*(Retain this page and the next for reference)*

**Handling CII/SSI**

You are responsible for safeguarding Critical Infrastructure Information/Sensitive Security Information (CII/SSI) in your custody or under your control.

The extent of protection afforded CII/SSI shall be sufficient to reasonably foreclose the possibility of its loss or compromise.

The terms of this clause (*Handling CII/SSI*), including this paragraph, must be included in any dissemination of any document, in whole or in part, that contains CII/SSI.

Protection - CII/SSI shall be protected at all times, either by appropriate storage or having it under the personal observation and control of a person authorized to receive it. Each person who works with protected CII/SSI is personally responsible for taking proper precautions to ensure that unauthorized persons do not gain access to it.

Use and Storage - During working hours, reasonable steps shall be taken to minimize the risks of access to CII/SSI by unauthorized personnel. After working hours, CII/SSI shall be secured in a secure container, such as a locked desk, file cabinet or facility where contract security is provided.

Reproduction - Documents or material containing CII/SSI may be reproduced to the minimum extent necessary consistent with the need to carry out official duties provided that the reproduced material is marked and protected in the same manner as the original material.

Disposal - Material containing CII/SSI shall be disposed of by any method that prevents unauthorized retrieval (e.g. shredding, burning, returning to original source, etc.).

Transmission - CII/SSI shall be transmitted only by VDOT courier, US first class, express, certified or registered mail, or through secure electronic means.



**Critical Infrastructure Information (CII)  
Sensitive Security Information (SSI)  
Individual Non-Disclosure Agreement**



**Things to consider regarding the need to protect CII/SSI...**

- What impact could the information have if it was inadvertently transferred to an unintended audience?
- Does the information provide details concerning security procedures and capabilities?
- Could someone use the information to target personnel, facilities or operations?
- How could someone intent on causing harm misuse the information?
- Could the use of this information be dangerous if combined with other publicly available information?

**Before looking at the Guide, answer the following:**

Is the information customarily public knowledge? (Information that is accessible to the general public if there has been no deliberate attempt to keep it hidden or secret.)	
Does the general public have a need-to-know? (Access to, or knowledge or possession of, specific information required to carry out official duties) (Note: Contractors should be considered employees, not general public.)	
If "yes" to either, then it is <b>not</b> CII/SSI otherwise, continue to the guide.	X

<b>Guide to Identifying Possible CII/SSI</b>		
<b>If the item under consideration shows, describes or is listed below, it might be CII/SSI.</b>		<b>Y/N</b>
1	<p>Information, the disclosure of which would jeopardize the safety or security of any person or structure, including engineering and construction drawings and plans that reveal:</p> <ul style="list-style-type: none"> <li style="width: 50%;">• Critical structural components</li> <li style="width: 50%;">• Security equipment and systems</li> <li style="width: 50%;">• Ventilation systems</li> <li style="width: 50%;">• Fire protection equipment</li> <li style="width: 50%;">• Elevators</li> <li style="width: 50%;">• Telecommunications equipment and systems</li> <li style="width: 50%;">• Mandatory building emergency equipment or systems</li> <li style="width: 50%;">• Electrical systems</li> <li style="width: 50%;">• Other utility equipment and systems</li> </ul> <p><i>(COV § 2.2-3705.2 (2))</i></p>	
2	<p>Documentation or other information that describes the design, function, operation or access control features of any security system, manual or automated, used to control access to or use of any automated data processing or telecommunications system.</p> <p><i>(COV § 2.2-3705.2 (3))</i></p>	
3	<p>Plans and information to prevent or respond to terrorist activity, the disclosure of which would jeopardize the safety of any person, including:</p> <ul style="list-style-type: none"> <li style="width: 50%;">• Critical infrastructure sector or structural components</li> <li style="width: 50%;">• Operational, procedural, transportation, and tactical planning or training manuals</li> <li style="width: 50%;">• Vulnerability assessments</li> <li style="width: 50%;">• Staff meeting minutes or other records</li> </ul> <p>Engineering or architectural records or portions of, that reveals the location or operation of:</p> <ul style="list-style-type: none"> <li style="width: 50%;">• Security equipment and systems</li> <li style="width: 50%;">• Elevator equipment and systems</li> <li style="width: 50%;">• Ventilation equipment and systems</li> <li style="width: 50%;">• Fire protection equipment and systems</li> <li style="width: 50%;">• Emergency equipment and systems</li> <li style="width: 50%;">• Electrical equipment and systems</li> <li style="width: 50%;">• Utility equipment and systems</li> <li style="width: 50%;">• Telecommunications equipment and systems</li> </ul> <p>The same categories of records submitted to us for the purpose of antiterrorism response planning if accompanied, in writing, a statement that:</p> <ul style="list-style-type: none"> <li>• Invokes the protection of §2.2-3705.2</li> <li>• Specifically identifies the records or portions thereof which are to be protected</li> <li>• States why the protection of such records from public disclosure is necessary</li> </ul> <p><i>(COV § 2.2-3705.2 (4))</i></p>	
4	<p>Information including (drawings, manuals, or other records) which reveals:</p> <ul style="list-style-type: none"> <li style="width: 50%;">• Surveillance techniques</li> <li style="width: 50%;">• Alarm or security systems or technologies</li> <li style="width: 50%;">• Personnel deployments</li> <li style="width: 50%;">• Operational and transportation plans or protocols</li> </ul> <p><i>(COV § 2.2-3705.2 (6))</i></p>	
5	<p>Information concerning threats against transportation.</p> <p><i>(USC 49 CFR 1520 (5))</i></p>	

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## **PART 2**

### **TECHNICAL INFORMATION & REQUIREMENTS**

#### **1.0 DESIGN-BUILDER'S SCOPE OF WORK**

##### **1.1 Project Description**

The Project is located in the City of Fredericksburg, Virginia, and involves safety improvements at the I-95 and Route 3 interchange. The limits of the Project are from approximately 0.12 miles south of Route 3 to approximately 1.22 miles north of Route 3, for a total length of approximately 1.34 miles. It is noted that the description and length are approximate only and are based on the RFP Conceptual Plans included in the RFP Information Package. The final Project length may vary depending on the Design-Builder's final design; however, any change in the project limits requires approval by VDOT.

The southbound I-95 to westbound Route 3 exit ramp will be modified to provide a three lane approach to a two-phase signalized intersection at Route 3 (for westbound traffic) and a single free-flow lane to Carl D. Silver Parkway. The eastbound Route 3 to northbound I-95 on-ramp will be replaced with a triple left turn from eastbound Route 3 onto the existing westbound Route 3 to northbound I-95 on-ramp. The triple left turn will be signalized stopping westbound Route 3 traffic, but not eastbound Route 3 through traffic. This improvement removes the northbound I-95 weave and the eastbound Route 3 weave. The realignment of the I-95 North to the Route 3 East ramp to improves ramp performance and safety by increasing the length of the merge area.

A conceptual design has been developed and made available for public review via a Design Public Hearing held on July 19, 2016. The major design features of the Project were approved by the Chief Engineer on September 1, 2016. The conceptual design contained in the RFP Information Package reflects a basic line, grade, typical sections, minimum pavement structures, major cross drainage pipes, potential locations of stormwater management facilities and sediment traps, and general length and location of the noise barrier. These elements are considered to be the basic Project configuration. The Design-Builder is responsible for final design in accordance with the Contract Documents. The PDF copy of the RFP Conceptual Plans shall supersede the electronic drawing files (DGN) contained in the RFP Information Package.

##### **1.2 Anticipated Scope of Work**

The anticipated scope of work to be undertaken by the Design-Builder under the Design-Build contract for this Project will include, but is not limited to:

- Survey
- Developing and completing the design
- Acquiring the necessary environmental permits
- Acquiring rights of way and easements

- Coordinating and performing, or causing to be performed, required utility relocations, additions, and adjustments
- Roadway construction
- Milling and overlaying and/or building up of existing pavement
- Guardrail/barrier
- Retaining walls
- Final noise analysis
- Noise barrier walls
- Signs, sign structures, and foundations
- Traffic signals
- Overhead signs structures and other traffic control measures
- Intelligent Transportation System (ITS) components including Closed Circuit Television (CCTV) Cameras, Dynamic Message Signs (DMS), and Fiber Optic Communications (COMM) Infrastructure
- System integration, testing, maintenance until final acceptance, and documentation
- Lighting
- Traffic maintenance and management during all phases of construction
- Pavement markers and markings
- Storm drainage
- Storm water management facilities
- Quality Assurance and Quality Control for design and construction
- Stakeholder coordination and public outreach
- Pavement and shoulder demolition
- Obscuring of roadway
- Overall Project management and coordination with other active construction projects in the vicinity.
- Environmental Compliance

Descriptions and technical requirements of the anticipated work are set forth in Part 2, Section 2.

### **1.3 Anticipated Design Services**

Design services shall address all items necessary for construction and operation of the completed facility. Design services are anticipated to include, but are not limited, those services necessary to produce roadway construction plans relative to the technical disciplines listed in Part 2, Section 1.2 above. Other data collection and technical studies anticipated include, but are not necessarily limited to: geotechnical investigation, borings and analysis, materials analysis, pavement design, foundation design, traffic counts and analyses, and additional environmental studies and noise analyses (if warranted as described in Part 2, Section 2.4.8). Offerors should note that all work performed on this Project shall be completed using English Units.

#### **1.4 Anticipated Environmental Services**

The Design-Builder shall carry out environmental commitments during design and construction, as applicable, as identified in the Programmatic Categorical Exclusion (PCE) dated July 18, 2016; the Plans, the Specifications, and Estimates (PS&E) Re-evaluation Authorization (EQ-200); and the Environmental Certification/Commitments Checklist (EQ-103). All commitment compliance shall be supported by the appropriate documentation, to be provided by the Design-Builder to the VDOT Project Manager. Further details are provided in Part 2, Section 2.4.

The Design-Builder shall acquire all water quality permits for the Project in the Design-Builder's name (i.e. the Design-Builder will be the "Permittee") and shall provide for any necessary stream and/or wetland compensation required by permits to accomplish the work.

The Design-Builder shall be responsible for compliance with pre-construction and construction-related environmental commitments and permit conditions, as well as post-construction monitoring if required by regulatory agencies. The Design-Builder will assume all obligations and costs incurred by complying with the terms and conditions of the permits and environmental certifications. Any fines associated with environmental permit or regulatory violations will be the responsibility of the Design-Builder.

Any changes in scope or project footprint from that contained in the Contract Documents proposed by the Design-Builder, which are acceptable to VDOT, may require additional environmental technical studies and analysis to be performed by the Design-Builder at their cost. VDOT will be responsible for the coordination of any NEPA document re-evaluations with FHWA. The Design-Builder shall then carry out any additional environmental commitments that result from such coordination at its sole expense and at no additional cost and/or time delays to the Project.

#### **1.5 Anticipated Right-of-way and Utilities**

The Offeror's conceptual design included in its Proposal shall be wholly contained within the right-of-way limits shown on the RFP Conceptual Plans, with the exception of temporary construction, permanent drainage, and utility easements (other than permanent drainage easements for stormwater management facilities). Utility easements have not yet been identified or shown on the RFP Conceptual Plans. Deviations from the proposed right-of-way limits shown on the RFP Conceptual Plans will be subject to VDOT approval in accordance with Part 1, Sections 2.7 and 2.8.

The Design-Builder's final design shall also be contained within the right-of-way limits shown on the RFP Conceptual Plans, with the exception of temporary construction, permanent drainage, and utility easements (other than permanent drainage easements for stormwater management facilities) and where minor adjustments are required during the final design process, and only after approval by VDOT. If the Design-Builder proposes significant change to the right-of-way limits shown on the RFP Conceptual Plans, then this shall be considered a deviation of the Contract Documents and shall be addressed as described in Part 2, Section 2.0.

The Design-Builder's services shall include all work necessary for right-of-way acquisitions and to perform utility coordination, relocations, and/or adjustments as required by the Project. All right-of-way acquisition costs (compensation paid to landowners for right-of-way or permanent easement) will be paid by VDOT, and shall not be included in the Offeror's Price Proposal. All costs for utility relocations, excluding betterments, shall be included in the Offeror's Price Proposal. Utility betterments shall not be included in the Offeror's Price Proposal but shall be reimbursed to the Design-Builder through agreement with the requesting utility owner. Betterments must be requested by and/or approved by the affected utility owner and must meet Buy America requirements as described in Part 5, Exhibit 102.05(g.1) Use of Domestic Material.

The Limited Access shall be placed in accordance with the RFP Conceptual plans, with the exception of minor shifts otherwise allowed for in the Right-of-way provisions of this RFP. The Offeror's Proposal shall account for final approval of the Limited Access line by the Commonwealth Transportation Board, including but not limited to, the development of supporting documentation and schedule impacts. VDOT shall be responsible for making the request to the Commonwealth Transportation Board (CTB). The Design Builder shall be responsible for replacement of limited access fence impacted by the Project and where necessary installing new fence for new Limited Access lines.

## **1.6 Anticipated Construction Services**

The construction services to be undertaken by the Design-Builder for this Project are anticipated to include, but are not limited to: earthwork, roadway, sign structures (including all necessary excavation, and foundation work), retaining walls, noise barriers, the demolition and removal of portions of the existing pavements, milling and overlaying or building up of existing pavement and shoulders, obscuring of roadway, demolition and removal of existing structures, drainage and stormwater management, utility relocations/adjustments and coordination, transportation management plan, traffic control devices, erosion and sediment control, and compliance with all environmental requirements, commitments and permit conditions, as described in Part 2, Section 2.0 of this RFP. The Design-Builder shall provide construction engineering inspection and management, quality assurance and quality control, including plant quality assurance inspection and testing, but excluding items listed under Part 2, Section 2.13.2.

## **1.7 Coordination with Active and Anticipated Construction Projects**

The Design-Builder shall be responsible for coordinating with contractors of other active and anticipated construction projects in the vicinity of the I-95 Safety Improvements at Route 3 Project in accordance with Part 4, Section 3.6. In addition, the Design-Builder shall organize and conduct joint meetings (to which VDOT shall be invited) with other Contractors on a quarterly basis at a minimum, or as requested by VDOT. The ultimate purpose of these meetings is to facilitate achievement of the I-95 construction program milestones. It is expected that progress milestones will be jointly developed and mutually agreed to by the Design-Builder and Contractors for the projects listed below.

**Fall Hill Avenue Widening and Mary Washington Blvd Extension**

Location: Fall Hill Avenue at I-95

Project No.: U000-111-233, P101, R201, C501, B609, D608 (UPC # 88699)

Status: Design-Build contract was awarded in March 2014

VDOT Contact: Michael Coffey (540) 899-4225  
michaelt.coffey@vdot.virginia.gov

**Rappahannock River Crossing Project**

Location: I-95 South and Route 3 West

Project No.: 0095-111-259, P101 (UPC # 101595)

Status: Design-Build contract anticipated award December 2017

VDOT Contact: Bill Arel (540) 899-4494  
bill.arel@vdot.virginia.gov

In all cases, the active construction projects and their respective contractors shall have priority in scheduling activities and the Offeror's should take this into consideration in its Price Proposal.

**2.0 PROJECT TECHNICAL INFORMATION & REQUIREMENTS**

The Offeror's proposed conceptual design shall meet all requirements of the RFP. Any proposed deviations from the requirements of the RFP Documents by the Offerors shall be in accordance with Part 1, Sections 2.7 and 2.8.

The Design-Builder's final design shall meet or exceed all requirements included in the Contract Documents (which in some cases exceeds the minimum design standards). If the Design-Builder proposes any deviation that results in a modification to the Contract Documents then the Design-Builder shall follow the Value Engineering Proposals (VEP) process as described in Section 104.02 of Division I Amendments to the Standard Specifications (Part 5) (even though the proposed deviations may not qualify as a VEP), unless otherwise directed by VDOT. Ultimately, any modification to the Contract Documents requires VDOT approval.

**2.1 References and Information**

The design and construction work for the Project shall be performed in accordance with the applicable federal and state laws and VDOT Standards, Specifications and Reference Documents to include, but not limited to the documents listed herein. The Design-Builder must verify and use the latest version of the documents listed herein as of the date of the RFP or latest Addenda. The Design-Builder must meet or exceed the minimum roadway design standards and criteria.

**2.1.1 Standards and Reference Documents**

If during the course of the design, the Design-Builder determines that a specific Standard, Specification or Reference Document is required but is not listed herein, it is the responsibility of

the Design-Builder to identify the pertinent Standard, Specification, or Reference Document and submit to VDOT for review and approval prior to inclusion in the Contract Documents.

The VDOT 2007 Road and Bridge Specifications, and its associated Special Provision Copied Notes, contain pricing language under sections entitled “Measurement and Payment” that is not applicable in the Design-Build context of this RFP. Thus, in accordance with the hierarchy of documents, the Design-Builder will refer to Part 3, Articles 6 and 7, Part 4, Article 6, and applicable portions of the Division I Amendments (Part 5) to the Standard Specifications for more information regarding the pricing and payment to the Design-Builder. Similarly, other references below which contain pricing methodologies for the “Contractor” shall likewise not be used. The requirements as described in the text of Part 2 herein take precedence over the referenced documents listed below, unless otherwise indicated.

The standards and references for the Project are listed below in the following order: (a) Standards and Specifications; (b) Reference Manuals; (c) Special Provisions List including Special Provisions, Special Provision Copied Notes and Supplemental Specifications. Items (a) and (b) are published references that are available publicly, for which copies are not provided to the Offerors in the RFP Information Package, but these items are to be used as manuals for design and construction. Items listed in (c) are included in the RFP Information Package.

(a) Standards and Specifications

- 2011 Virginia Supplement to 2009 MUTCD, Revision 1, September 2013
- 23CFR625 – Design Standards for Highways
- 49CFR Part 24 – The Uniform Relocation Assistance and Real Properties Acquisitions Act of 1970
- AASHTO A Policy on Design Standards Interstate System, January 2005
- AASHTO A Policy on Geometric Design of Highways and Streets, 6<sup>th</sup> Edition, 2011
- AASHTO Guide for Design of Pavement Structures (Rigid Pavement and Flexible Pavement), 1993 Edition
- AASHTO Guide for Protective Screening of Overpass Structures, 1990
- AASHTO Guide for Roadway Lighting Design, 6<sup>th</sup> Edition, 2005
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004
- AASHTO Guide Specifications for Seismic Isolation Design, 2nd Edition, with 2000 Interim Revisions
- AASHTO Guide Specifications for Structural Design of Sound Barriers
- AASHTO Manual for Assessing Safety Hardware, First Edition, 2009
- AASHTO Roadside Design Guide, 4th Edition, 2011
- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals, 6th Edition, 2015 Interim Revisions
- Americans with Disabilities Act Accessibility Guidelines for State and Local Government Facilities
- Corps of Engineers EM-1110-2-1906, Laboratory Soils Testing, 1986

- DCR Technical Bulletin 1  
([http://dcr.state.va.us/soil\\_and\\_water/documents/tecbltn1.PDF](http://dcr.state.va.us/soil_and_water/documents/tecbltn1.PDF))
- DCR Virginia Erosion and Sediment Control Handbook, Third Edition, 1992
- DCR Virginia Stormwater Management Handbook, Vol. 1 and Vol. 2, First Edition, 1999
- DCR Virginia Stormwater Management Program Technical Bulletin 1 (See [http://www.dcr.virginia.gov/stormwater\\_management/documents/tecbltn1.PDF](http://www.dcr.virginia.gov/stormwater_management/documents/tecbltn1.PDF))
- Engineering Properties of Clay Shales, Report 1 by W. Heley and B. N. McIver
- FHWA 23CFR752 Landscaping and Roadside Development
- FHWA's Mitigation Strategies for Design Exceptions, July 2007
- FHWA's Standard Highway Signs including Pavement Markings and Standard Alphabets, 2004 Edition and 2012 Supplement (For use with the 2009 Manual on Uniform Traffic Control Devices for Streets and Highways), or most current Edition
- Guideline for Context Sensitive Solutions/Design, February 25, 2004
- Highway Traffic Noise Impact Analysis Guidance Manual, dated July 2015
- IEEE National Electric Safety Code
- IES RP-08-14, American National Standard for Roadway Lighting
- IES RP-19-01, Roadway Sign Lighting
- Manual of Uniform Traffic Control Devices (MUTCD), 2009 Edition and latest updates as of date of release of RFP or applicable addenda
- NCHRP Report 350 Recommended Procedures for the Safety Performance Evaluation of Highway Features
- Transportation Research Board Highway Capacity Manual, 2010 Edition
- VDOT Appraisal Guidelines
- VDOT Asbestos Inspection Procedures, May 14, 2004
- VDOT CADD Manual, 2012 (Revised April 2016)
- VDOT Construction Inspection Manual, April 2008
- VDOT Construction Manual, 2005 (including July 2008 revisions)
- VDOT Drainage Manual, Revised July 2016 (including current Errata Sheet)
- VDOT Guardrail Installation Training Manual (GRIT), February 2015
- VDOT Guide Manual for Causes and Repair of Cracks in Bridge Decks, dated September 25, 2009
- VDOT Guidelines for 1993 AASHTO Pavement Design, Revised May 2003
- VDOT Guidelines for the Installation of Marked Crosswalks, May 2012
- VDOT Instructional & Information Memorandums (I&IM), All Divisions
- VDOT Land Use Permit Regulations, 24 VAC 30-151, March 17, 2010
- VDOT Manual of Instruction for Material Division, including revisions through July 2011
- VDOT Materials Division Approved List
- VDOT Materials Division Memorandum Number MD299-07 for Materials Acceptance, October 4, 2007
- VDOT Policy for Integrating Bicycle and Pedestrian Accommodations
- VDOT Policy Manual for Public Participation in Transportation Projects, updated August 2011

- VDOT Post Construction Manual, May 2011 Edition
- VDOT Right-of-way Manual of Instructions, Third Edition, FHWA Update approved January 1, 2016
- VDOT Road and Bridge Specifications, 2007 (all except Section 100), including all revisions
- VDOT Road and Bridge Standards, Vol. I and Vol. II, 2008
- VDOT Road Design Manual, Vol. I, including all revisions
- VDOT Survey Manual, 2010 Edition, including 2011 revisions
- VDOT Traffic Engineering Design Manual, dated September 2, 2014
- VDOT Traffic Engineering Division Numbered Memoranda (Traffic Engineering (TE) and Mobility Management (MM))
- VDOT Traffic Operations and Safety Analysis Manual, Version 1.0, November 2015
- VDOT Utilities Manual of Instructions (January 2011, including October 2014 revisions)
- VDOT Virginia Work Area Protection Manual, June 2011, including all revisions
- VDOT's Minimum Requirements for Quality Assurance & Quality Control on Design Build and Public-Private Transportation Act Projects, January 2012
- VDOT's Project Management Policy PMO-Policy-2011-1, July 1, 2011
- FHWA's Highway Traffic Noise Analysis and Abatement Guidance dated December 2011
- VDOT's Noise Report Development and Guidance Document Version 5

(b) Reference Manuals

- AASHTO's Highway Safety Manual, 1<sup>st</sup> Edition, Vol. 1-3, 2010
- American National Standards Institute (ANSI)/Insulated Cable Engineers Association (ICEA) S-87-640-2006 requirements
- American Water Works Associations Standards
- American Welding Society Standards
- Bellcore/ Telcordia Standards
- Duncan, J.M. (April 2000) Factors of Safety and Reliability in Geotechnical Engineering, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Discussions and Closure, August 2001
- Field Partnering Guide for VDOT Projects, November 2005
- FHWA publications HDS-6, HEC-11, HEC-14, HEC-15, HEC-18, HEC-20, HEC-22, and HEC-23
- gINT<sup>®</sup> Manual
- Institute of Electrical and Electronics Engineer (IEEE) Standards
- International Mechanical Code
- International Telecommunication Union (ITU) Requirements
- ISEE Blasters Handbook (Current Edition)
- National Electric Code (NEC)
- National Electric Safety Code (NESC) Standards
- National Electrical Manufacturers Association (NEMA) Standards

- National Transportation Communications for ITS Protocol (NTCIP)
- Society for Protective Coatings (SSPC) Standards
- Telecommunications Industry Association (TIA) and Electronic Industries Alliance (EIA) Standards and Specifications
- U.S. Department of Agriculture Rural Utilities Service (RUS) 7 CFR 1755.900
- Underwriters Laboratories (UL) Standards
- VA Statewide Fire Prevention Code (referenced in Special Provision for Section 107.11 - Use of Explosives)
- VDOT Land Use Permit Regulations Guidance Manual, Revised November 8, 2011
- Virginia Calibration Methods, October 2008
- Virginia State Noise Abatement Policy, July 13, 2011
- Virginia Test Methods Manual, June 2010
- Virginia Uniform Statewide Building Code

(c) Special Provisions List, Special Provision Copied Notes and Supplemental Specifications

*Federal:*

- c100ai05 General Project Requirements, Supplemental Specifications (SSs), Special Provisions (SPs) and Special Provision Copied Notes (SPCNs), June 10, 2015 (SPCN)
- S100B00 Project Communication and Decision Making for Design-Build Projects, January 3, 2005c, Reissued August 2009
- SS51202 Supplemental Section 512—Maintaining Traffic Design-Build Projects, December 2, 2009

*Roadway/Drainage:*

- SPCN c302h00-0708 Precast Drainage Structures, January 14, 2008
- Special Provision for Flowable Backfill, March 11, 2010
- Special Provision for Right-of-way Monumentation and Final Boundary Stakeout, December 2, 2009
- Special Provision for Section 244 – Roadside Development Materials, August 29, 2008
- Special Provision for Pipe Culvert Replacement Or Rehabilitation, March 26, 2008
- Special Provision for Pipe Replacement, February 28, 2013
- Special Provision for Pipe Rehabilitation, December 11, 2013
- SS30204-0613 Supplemental Section 302 – Drainage Structures, March 14, 2013
- S107J20-0914 Special Provision for SWPPP General Information Sheets, September 3, 2014
- S107J31-1215 Special Provision for VPDES Construction Activities, October 26, 2015
- C107j12-1215 VPDES Construction Permits, October 26, 2015

- S107G01-0309 Storm Water Pollution Prevention Plan (SWPPP) General Permit for the Discharge of Storm water from Construction Activities Contractor and Subcontractor Certification Statement, February 19, 2009
- SS23203 – 0912 Supplemental Section 232 – Pipe and Pipe Arches, May 17, 2012

*Structures:*

- Special Provision for Architectural Treatment and Concrete Surface Color Coating, April 24, 2014
- SS40605-0316 Supplemental Section 406 for Reinforcing Steel, March 17, 2016
- Special Provision for Corrosion Resistant Reinforcing Steel, March 17, 2016
- Special Provision for Soil Nail Walls, June 7, 2011
- Special Provision for Drilled Shafts using self-consolidating concrete for Design Build and PPTA Projects, June 17, 2013
- Special Provision for Dynamic Pile Testing for End Bearing Piles for LRFD, December 10, 2009
- Special Provision for Dynamic Pile Testing for Friction Piles for LRFD for Design Build and PPTA Projects, July 16, 2012
- Special Provision for MSE Walls (Modular Cantilever Facing), December 10, 2009
- Special Provision for Quality Assurance/Quality Control (QA/QC) for the Construction of Deep Foundation Systems, December 10, 2009
- Special Provision for T-Wall Retaining Wall System, December 10, 2009
- Special Provision for Wave Equation Analysis for LRFD for Design Build and PPTA Projects, December 10, 2009
- Special Provision for Gravity Filled Polymer Crack Sealing, July 2008c
- Special Provision for Concrete Surface Penetrant Sealant, July 2008
- Special Provision for Metallization of Ferrous Metal Structures, July 2008
- Supplemental Section 408 for Bearing Devices and Anchors, December 20, 2010
- Special Provision for Crack Repair by Epoxy Injection, November 28, 2012
- SS40501-0609 Supplemental Section 405 Prestressed Concrete, December 20, 2010
- SS40703-0912 Supplemental Section 407 Steel Structures, January 2, 2012
- SS41401-0310 Supplemental Section 414, Riprap, January 25, 2010
- SS423 Supplemental Section 423, NBIS Inspection Using Bridge Device, April 16, 2012
- Special Provision for Ornamental Wire Fence, March 29, 2013
- SS40102-0912 Supplemental section 401 – Structure Excavation, April 17, 2012c

*Environmental:*

- S107E02-0910 Special Provision for Volatile Organic Compounds (VOC) Emissions Control Areas, August 12, 2010
- Special Provision for Sound Barrier Walls/Architectural Finishes dated August 5, 2016
- Virginia Department of Transportation Special Provision for Phase I and Phase II Environmental Site Assessments for Design-Build Projects dated June 25, 2013
- Virginia Department of Transportation Special Provision for Inspection of Structures For Asbestos Containing Materials (ACM) on Design-Build Projects dated June 22, 2009
- Virginia Department of Transportation Special Provision Copied Note-Demolition Notification for Structures not Requiring Asbestos Removal dated June 25, 2009
- Virginia Department of Transportation Special Provision for Asbestos Removal and NESHAP-Related Demolition Requirements For Structures on Design-Build Projects dated June 22, 2009
- Virginia Department of Transportation Special Provision for Asbestos-Containing Soil dated February 2, 2000
- Virginia Department of Transportation Special Provision for Removal or Connection of Asbestos Cement Pipe dated November 7, 2005

*Traffic:*

- S704E02-1211 Type B, Class VI Pavement Line Marking, October 21, 2011
- S704F01-1209 Transitory Pavement Markers (TPM), December 14, 2009
- SPCN Locating, Removing and Disposing of Recessed Pavement Markers and Raised Snow-Plowable Markers, October 17, 2010
- SPCN Uniformed Flaggers, September 29, 2008a
- Special Provision for Emergency Preemption Equipment, September 5, 2014
- Special Provision for High Tension Cable Barrier System, March 28, 2013
- Special Provision for Preformed Thermoplastic Pavement Markings, November 29, 2011b
- Special Provision for Replacement of Pavement Line Markings, Pavement Markers and Loop Detectors, September 27, 2011
- Special Provision for Square Tube Steel Sign Post, March 3, 2008
- Special Provision for Temporary Construction and Permanent Pavement Markings, November 8, 2011
- Special Provision for Section 703 – Traffic Signals, June 1, 2015
- Special Provision for Signal Poles (Mast Arm Poles), September 12, 2013
- SPCN for Section 512 – Type III Barricade, October 3, 2012

- SPCN for Section 105 and 512 – Personnel Requirements for Work Zone Traffic Control, June 11, 2009
- Special Provision for CG-12 Detectable Warning Surface, September 18, 2013
- Special Provision for Replacement of Guardrail, Median Barrier, Impact Attenuator, And Guardrail To Bridge Attachments, November 4, 2011
- Special Provision for Work Zone Traffic Control Management, January 14, 2008
- Supplemental Section 221 – Guardrail, January 6, 2012
- Supplemental Section 234 – Glass Beads for ReflectORIZING Traffic Markings, October 16, 2014
- Supplemental Section 247 – Reflective Sheeting, February 10, 2011
- Supplemental Section 512 – Maintaining Traffic, June 11, 2009
- Supplemental Section 700 – General, April 15, 2015
- Supplemental Section 701 – Traffic Signs, April 15, 2015
- Special Provision for Removal of Signal Equipment, January 7, 2015
- Special Provision for Section 238 Electrical and Signal Components (Retroreflective Backplates), August 19, 2015
- Special Provision for Uninterruptible Power Supply, January 12, 2016
- Special Provision for Video Detection System – Type III, October 6, 2015
- SPCN for Concrete Foundations for Signal Poles, July 1, 2012
- SPCN for Electrical Service (Breaker Box), September 17, 2013
- SPCN for Section 238.02 (H) 6. C. Pedestrian Signal Heads, July 16, 2012
- SPCN for Section 238.02 (H) 2. Circuit Breaker Box, November 24, 2014
- SPCN for Section 238.02 (H) 23. Splice Kits, July 26, 2012
- SPCN for Section 238.02 (H) 29. Stainless Steel Cables for Hanger Assemblies, May 29, 2012
- SPCN for Section 700.04(c) Test Bore, November 21, 2013
- SPCN for Section 700.04(c) Vented Rodent Barrier, April 2, 2004
- Special Provision for Model 336S Equipment Cabinet, May 29, 2012
- Special Provision for Field Router, May 29, 2012
- Special Provision for CCTV General Requirements, May 29, 2012
- Special Provision for Managed Field Ethernet Switch, May 29, 2012
- Special Provision for ITS – Ethernet Terminal Server, August 26, 2013

*Geotechnical/Materials:*

- S302B00-0708 Restoring Existing Pavement, January 14, 2008c
- SPCN c109g02-1209 Polymer Modified (PG 76-22 and PG 70-28) Asphalt Cement Adjustment, May 5, 2011
- SPCN c211gg0-0609 Section 211 Warm Mix Asphalt Pavement, December 7, 2009

- SPCN c248fg0-0708 Surface and Intermediate Mixes using Rap, January 14, 2008
- SPCN c315gg0-0609 Section 315 Warm Mix Asphalt Pavement, December 7, 2009
- Special Provision for Design-Build Tracking (DBT) Numbers, June 4, 2015
- Special Provision for Hydraulic Cement, January 28, 2008
- Special Provision for Hydraulic Cement Concrete Admixtures, January 28, 2008
- SS21706 Hydraulic Cement Concrete, July 29, 2013
- SS40402 Hydraulic Cement Concrete Operations, December 17, 2010
- Special Provision for Jack and Bore for DB Projects, October 13, 2009
- Special Provision for Lime Modification of Soils, revised November 23, 2009
- Special Provision for Low Permeability Concretes For Design-Build Projects, September 6, 2009
- Special Provision for Planing Asphalt Concrete Pavement, December 2010
- Special Provision for Section 315 – Asphalt Concrete Pavement, November 25, 2009
- Special Provision for Rideability, November 19, 2013
- Special Provision for Section 317 – Stone Matrix Asphalt (SMA), November 25, 2009
- Supplemental Section 248 – Stone Matrix Asphalt Concrete, April 1, 2012
- Supplemental Section 211 – Asphalt Concrete, December 18, 2012
- Supplemental Section 515 – Planing Or Milling Pavement, September 27, 2011
- C211hg0-1209 SPCN – Polishing Aggregate In Asphalt Concrete - Section 211—Asphalt Concrete, October 7, 2009
- Special Provision for Cold Planing (Milling) Asphalt Concrete Operations, September 27, 2011
- Special Provision for Corrosion Resistant Reinforcing Steel , March 17, 2016
- Supplemental Section 200 – General, September 28, 2012
- Supplemental Section 207 – Select Material, February 19, 2014
- Supplemental Section 208 – Subbase and Aggregate Base Material, February 19, 2014
- S30306-0914 Supplemental Section 303 – Earthwork, September 3, 2014
- Special Provision for Micro Tunneling for Design Build Projects, September 14, 2009
- Special Provision for Crushed Hydraulic Cement Concrete January 14, 2008
- Special Provision for Elastic Inclusion for Design Build Projects, November 24, 2009
- SPCN Crushed Glass, January 17, 2008
- Special Provision for Section 02768 - Hydraulic Cement Concrete Stamped, Colored & Reinforced, September 16, 2013
- Supplemental Section 212 – Joint Materials, June 28, 2011
- Supplemental Section 501 – Underdrains, Crossdrains, and Edgedrains, June 15, 2015

*General Conditions:*

- SS30101-0914 Supplemental Section for Clearing and Grubbing September 3, 2014
- Special Provision for Section 514 – Field Office Design-Build Projects, November 24, 2009
- Special Provision for Work Zone Traffic Control Management Design-Build Projects, revised November, 2009
- SS52200-0708 Supplemental Section 522 – Partnering Design-Build Projects, revised June 1, 2012

The above list of Special Provisions is not intended to be an all-inclusive list. The Design-Builder is responsible for achieving the Work in accordance with all current VDOT standards as of the date of the RFP issuance, including any revisions and/or addenda thereof. If a construction element is not adequately addressed within VDOT Standard Specifications or the Special Provisions listed for the purpose of the Design-Builder's design, it is the responsibility of the Design-Builder to develop an alternative specification that is acceptable to VDOT for that element of work.

In the event of a discrepancy between VDOT and non-VDOT Standards and References listed herein, the VDOT Road and Bridge Specifications, design standards, and manuals shall take precedence, with the following exception. If AASHTO or the MUTCD require that a higher or better standard be applied, then AASHTO and/or the MUTCD shall take precedence. In accordance with Part 2, Section 2.1.3 below, all deviations from AASHTO minimum specified design values shall be documented, justified, and approved by VDOT and FHWA.

Special Provisions included in this contract document or other Special Provisions approved by VDOT shall govern over the VDOT specifications, design standards and manuals. Special Provision Copied Notes approved by VDOT and requirements specified within the text of this RFP shall govern over both the Special Provisions and VDOT specifications, design standards and manuals.

### **2.1.2 RFP Information Package**

An RFP Information Package is available for interested Offerors on CD for \$50. Interested Offerors should complete the RFP Information Package Order Form included as Attachment 2.6 of Part 1. The RFP Information Package includes the following:

- Special Provision List: Special Provisions, Special Provision Copied Notes and Supplemental Specifications
- Conceptual Roadway Plans, including electronic reference files
- Programmatic Categorical Exclusion (PCE) dated July 18, 2016
- Preliminary Document Reevaluation for RW Authorization (EQ-201) dated August 24, 2016

- Preliminary Document Reevaluation for PSE Authorization (EQ-200) dated August 24, 2016
- Preliminary Environmental Certification/Commitments Checklist (EQ-103) dated August 24, 2016
- Cultural Resources Summary Report dated December 4, 2015
- Preliminary VDOT Permit Determination dated August 25, 2016
- Preliminary VDOT Fish, Plant and Wildlife Resources Form dated June 10, 2016
- Hazardous Materials Summary Report and comments dated March 23, 2016
- Final Air Quality Technical Report for the Rappahannock River Crossing, City of Fredericksburg, Stafford County, Spotsylvania County, dated September 2014
- Preliminary Noise Analysis for the Rappahannock River Crossing, City of Fredericksburg, Stafford County, Spotsylvania County, dated September 2014
- VDOT/USFWS coordination dated May 9, 2016
- Design Approval dated September 1, 2016
- Survey Files
- Geotechnical Data Report dated September 6, 2016
- Video inspection of existing roadway culverts crossing under Ramp A and Ramp B
- Interchange Modification Report dated July 6, 2016, and supplemental traffic analysis
- Virginia Department of Environmental Quality (VDEQ) approval of VSMP Grandfathering dated March 29, 2016
- Access Management Waiver dated November 20, 2016
- Sign Structure Inspection Reports

Requirements described in the Technical Information and Requirements (Part 2 of the RFP) shall supersede the information contained in the RFP Information Package, including the information depicted in the RFP Conceptual Plans. In the event that there is a discrepancy between the RFP Conceptual Plans (or other information contained in the RFP Information Package) and the Technical Information and Requirements (Part 2 of the RFP) herein, the Technical Information and Requirements (Part 2) shall take precedence.

Record roadway plans for this Project, which are not deemed a component of the RFP, can be provided to Offerors upon request. These plans are solely for the information of the Offeror, which each Offeror may use at their own risk and as they deem appropriate. The Department does not represent or warrant that the information contained in the plans is suitable for designing the Project. Offerors interested in obtaining the previously developed record plans should contact the Design-Build POC specified in Part 1, Section 2.4.

Culvert Inspection Reports will be made available to the Offeror with appropriate Critical Infrastructure Information/Sensitive Security Information (CII/SSI) documentation as described in Part 1, Section 11.8.8.

### **2.1.3 Design Exceptions and Design Waivers**

Design Exceptions will be required for any element of the design among the fourteen controlling criteria that do not meet AASHTO minimum design standards. Design Waivers will

be required for any element that meets AASHTO minimum design standards, but does not meet VDOT minimum standards or for any element other than the fourteen controlling criteria that do not meet AASHTO minimum design standards. The Design-Builder will be required to follow the process as described in the latest version of IIM-LD-227, S&B 70 regarding Design Exceptions and Design Waivers.

VDOT has identified the following design waiver, with respect to the RFP Conceptual Plans:

- Design Waiver No. 1 – Access Management Waiver for the VDOT spacing standards for commercial entrances, intersections and crossovers; for entrances near interchange ramps

Design Waiver No. 1 was prepared by VDOT and is included in the RFP Information Package. VDOT will be responsible for submitting the design waiver to the appropriate authority(-ies) for review and approval.

## **2.2 Mainline and Other Roadway Improvements**

The roadway inventory information and major design criteria are summarized in Attachment 2.2. The information contained in the Attachment shall serve as a basis for the Design-Builder to determine the appropriate criteria to apply to the design of the I-95, interchange ramps, and Route 3. Offerors are on notice that the entirety of the information contained in the Design Criteria Table and Part 2, Section 2.2 of this document including but not limited to the design criteria, and other notes and data, contain the minimum roadway geometric design requirements that the Design-Builder shall meet in its performance of the Work. By submitting its Proposal, Offeror certifies that the Project Concept presented in its Proposal is fully compliant with such minimum requirements. Unless otherwise approved by VDOT, no changes to or deviation from the listed criteria shall be allowed. Any schedule delays as a result of changes or deviations are the responsibility of the Design-Builder.

In addition to the I-95, Route 3, and ramp improvements depicted on the RFP Conceptual Plans (contained in the RFP Information Package), the Design-Builder is also responsible for making necessary improvements to Carl D. Silver Parkway.

### Functional Classification

I-95 is functionally classified as an urban interstate. The VDOT geometric design standard that will be utilized for I-95 will be GS-5 in rolling terrain with a minimum design speed of 70 mph.

Route 3 is functionally classified as an urban principal arterial (other). The VDOT geometric design standard that will be utilized for Route 3 will be GS-5 in rolling terrain with a minimum design speed of 45 mph.

Ramps A, B and Loop B, and Slip Ramp B are functionally classified as interchange ramps. The ramps shall be designed in accordance with VDOT geometric design standard GS-R

in rolling terrain. The minimum design speed for Ramp A shall be 30 mph with a minimum design speed of 50 mph at the on-ramp merge to I-95. The minimum design speed for Loop B shall be 25 mph. The minimum design speed for Ramp B shall be 25 mph with a minimum design speed of 50 mph at the off-ramp diverge from I-95.

If noise barriers are warranted, then the Design-Builder will locate the noise barrier, such that a future I-95 northbound two-lane collector distributor (CD) roadway can be accommodated. The CD roadway will be functionally classified as an urban interstate. The VDOT geometric design standard that will be utilized for the CD roadway will be GS-5 in rolling terrain with a minimum design speed of 60 mph. The RFP Conceptual Plans provide the horizontal and vertical alignment to locate the limits for the noise barrier grading. Deviations to these elements will require approval by VDOT.

The design vehicle for all I-95, interchange ramps, and Route 3 shall be a WB-67 vehicle. All triple turning maneuvers must be designed to accommodate trucks turning from all three lanes for Ramp B, or special design signing that restricts trucks to the appropriate lane(s) will be required. The Route 3 triple left turning movements onto Ramp A will require that the inside and outside lanes accommodate for WB-67 vehicle and the center lane accommodate for a SU-40 vehicle.

An Interchange Modification Report for the Project was approved on July 6, 2016 and is included in the RFP Information Package, as well as VDOT's Supplemental Traffic Analysis.

### **2.2.1 Route 3 and I-95 Northbound On-Ramp (Ramp A)**

Triple left turn lanes with a flush median shall be provided from eastbound Route 3 to the I-95 northbound on-ramp as shown on the RFP Conceptual Plans. A minimum of a two (2) foot wide flush median will be provided with interstate tubular markings to separate the left turn lanes from the eastbound through lanes. Westbound Route 3 shall provide for a shared right and separate right turn lane to convey traffic onto the I-95 northbound on ramp. This intersection will be signalized. The I-95 northbound on-ramp will require that a dual lane access to I-95 northbound be provided. The dual lanes shall provide a minimum of 500 feet from the painted nose before merging commences and will merge onto I-95 past Cowan Boulevard.

### **2.2.2 I-95 Northbound On-Loop (Loop D)**

The I-95 northbound on-ramp loop shall be demolished. Demolition shall include the removal and disposal of all pavement materials and shall include obscuring the existing roadway. The Route 3/I-95 ramp gore shall be reconstructed to provide for a 300 foot taper and for the construction of a through lane as depicted on the RFP Conceptual Plans.

### **2.2.3 Route 3 and I-95 Southbound Off-Ramp (Ramp B)**

The I-95 southbound off-ramp shall provide a dual lane exit from I-95, with one of the lanes designed as a choice lane. The I-95 southbound off-ramp approaching Route 3 shall provide for triple right turns onto westbound Route 3. The new intersection created by the off-

ramp triple right turns to westbound Route 3 shall be signalized. Route 3 at Loop B will be modified to allow for a choice lane that will allow access to both the loop and Route 3. A separate westbound ramp (Slip Ramp B) shall provide direct access to northbound Carl D. Silver Parkway. The slip ramp shall be separated by a two (2) foot wide median and will require the use of interstate tubular markers. Westbound Route 3 at Ramp B shall be reconfigured to accommodate two (2) additional through lanes. The entrance to the I-95 southbound Loop B shall be reconfigured to be a choice lane as depicted on the RFP Conceptual Plans.

#### **2.2.4 Route 3 and Carl D. Silver Parkway**

At the intersection with Carl D. Silver Parkway westbound Route 3, an extended westbound left turn lane, three through lanes, a westbound right and a westbound shared through right turn lane shall be provided. The westbound shared through right and right turn lane shall provide access from Route 3 onto northbound Carl D. Silver Parkway.

### **2.3 Retaining Walls**

Retaining wall structures shall be designed in accordance with the following requirements:

- Retaining walls shall be designed in accordance with VDOT and AASHTO specifications and requirements.
- Existing or new retaining walls shall be analyzed or designed for any additional loads imposed by sign structure supports or other structures.
- Only retaining wall systems for which FHWA has developed guidelines will be permitted for this project.
- Only retaining walls presenting an essentially vertical concrete face shall be used. Walls with vegetated and/or sloping faces shall not be allowed for this project.
- All components of the retaining walls shall be contained within VDOT's right-of-way.
- In addition to cast-in-place reinforced concrete cantilever walls, the retaining wall systems indicated on the VDOT Approved Retaining Wall Systems List shall be allowed, except as noted above and as noted on the list itself.
- Mechanically stabilized earth (MSE) walls shall be selected from VDOT's fully approved panel MSE wall systems (for which special provisions are included in the RFP Information Package).
- MSE walls that require traffic protection at the top shall utilize barriers or railings on moment slabs.
- Parapets located on top of MSE walls shall utilize low permeability concrete in accordance with the VDOT 2007 Road and Bridge Specifications.

- Retaining walls shall have metal railing except where top of wall is located adjacent to a roadway shoulder in which case the concrete barrier shape shall be used. Metal railing shall conform to VDOT Standard HR-1 and shall be galvanized.
- All exposed, vertical faces of retaining wall elements shall receive architectural treatments in accordance with the Special Provision for Architectural Treatment. Architectural treatment shall be dry stack and shall not be stained or painted.
- All retaining walls that require traffic protection shall be designed in accordance with AASHTO Section 13 – Railings.

## **2.4 Environmental**

### **2.4.1 Environmental Document**

FHWA has issued a NEPA decision for the Project. A copy of the Programmatic Categorical Exclusion (PCE) dated July 18, 2016 is included in the RFP Information Package. VDOT has also completed preliminary document re-evaluations for Right-of-Way (RW) Authorization (EQ-201) dated August 24, 2016; Plans, Specifications and Estimates (PS&E) Authorization (EQ-200) dated August 24, 2016, and a preliminary Environmental Certification/Commitments Checklist (EQ-103) dated August 24, 2016, which are included in the RFP Information Package.

Once the Design-Builder has completed the design, VDOT shall update and finalize the re-evaluation for RW Authorization (EQ-201) prior to RW authorization; and update and finalize the re-evaluation for PS&E Authorization (EQ-200), and update and finalize the Environmental Certification/Commitments Checklist (EQ-103) prior to the VDOT Project Manager releasing the Project for construction. If the Project includes phased work, then final versions of these documents shall be updated and finalized by VDOT prior to authorizing RW and construction for each phase. The VDOT Project Manager shall verify that the EQ-200, EQ-201 and EQ-103 forms have been updated and finalized prior to obtaining approval signatures for each title sheet submittal required for Right-of-way and Construction.

The Design-Builder shall carry out environmental commitments during design, right-of-way acquisition, and construction, as applicable, as identified in the PCE, the final document re-evaluations for RW and PS&E Authorization, and the final Environmental Certification forms. All commitment compliance shall be supported by appropriate documentation, to be provided by the Design-Builder to VDOT.

Any changes in the scope or footprint of the established basic Project concept, proposed by the Design-Builder and acceptable to VDOT, may require additional environmental technical studies and analysis to be performed by the Design-Builder at their cost. The Design-Builder will be responsible for notifying VDOT of plan revisions, scope changes, and providing any necessary studies and other necessary information to support VDOT's completion and re-evaluation of the NEPA document. VDOT will be responsible for the coordination of any environmental documentation re-evaluation with FHWA. The Design-Builder shall then carry

out any additional environmental commitments that result from such coordination at its sole expense and no additional cost and/or time delays to the Project.

The Design-Builder is solely responsible for any costs or schedule delays related to the permit acquisition, permit modifications, and NEPA document re-evaluations associated with Design-Builder's design changes and no time extensions will be granted. All costs associated with complying with these requirements shall be included in the Offeror's Price Proposal.

#### **2.4.2 Cultural Resources**

VDOT, in consultation with the Virginia State Historic Preservation Officer (VA SHPO), has determined that there are no historic properties present or affected by the Project as proposed in the RFP Conceptual Plans.

Please note that any changes to the design, alignment, right-of-way limits, or easements shown on the RFP Conceptual Plans may require review by VDOT and could require additional cultural resources studies and/or coordination with the VA SHPO. The Design-Builder is responsible for conducting all cultural resources studies necessitated by the proposed changes, while the VDOT is responsible for coordinating both the studies and the proposed changes with the VA SHPO. The Design-Builder shall then carry out any additional cultural resources commitments that result from such coordination at its sole expense and at no additional cost to the Project.

#### **2.4.3 Section 4(f) Resources**

There is no use of 4(f) resources on this Project.

#### **2.4.4 Water Quality Permits and Compensatory Mitigation**

The Design-Builder is responsible for obtaining all water quality permits required to construct the Project (including utility relocations by the Design-Builder). The Design-Builder will be the Permittee. Should the Design-Builder propose design changes acceptable to VDOT, permitting requirements may also change; the Design-Builder remains responsible for obtaining any and all necessary water quality permits and permit modifications required by the regulatory agencies.

The Design-Builder will obtain all necessary environmental clearances, permits, and approvals required to accomplish the work as noted in Part 4 (General Conditions of Contract), Article 2.6. The Design-Builder will be responsible for performing necessary design and fieldwork to support the acquisition of necessary water quality permits independently and directly from the regulatory agencies. The Design-Builder will be the Permittee.

VDOT completed a preliminary Permit Determination, dated August 25, 2016, concluding that water quality permits are required for the Project based on the RFP Conceptual Plans. The Offeror should note that the preliminary Permit Determination and wetland delineations are provided for informational purposes only. The Design-Builder will be

responsible for verifying permit requirements prior to construction. Regulatory agencies will make the final determination as to which state/federal water quality permits will be required during coordination with the Design-Builder.

The Design-Builder shall determine the applicability of water quality permits for the Project (to include utilities to be relocated by the Design-Builder for the Project). Should it be determined that water quality permits are required, the Design-Builder shall conduct the preliminary field assessment including, but not limited to, wetland delineation, stream assessment, and permit impact sketches. The Design-Builder shall also determine the required sequencing methodology to limit Project impacts to wetland systems. The Design-Builder shall utilize this information to obtain required permits.

If the Design-Builder determines water quality permits are not required based on information generated, the Design-Builder shall notify the VDOT Project Manager in writing, so that VDOT can authorize the Design-Builder to execute the Work. Any deviations that the Design-Builder makes to the Project footprint and/or scope may render the permit determination invalid and will require additional consideration.

If the Design-Builder determines that wetlands and/or stream mitigation is required to secure the permit authorization, the Design-Builder will provide the required compensatory mitigation. The Offeror shall account for all costs associated with water quality permit acquisition, as well as compensatory mitigation, in its Price Proposal.

The Design-Builder shall note that avoidance, minimization, and mitigation measures associated with permit acquisition will require close coordination between the Design-Builder and VDOT. If permit issuance is delayed or permits are denied, the Design-Builder will be responsible for any schedule delays and/or associated costs.

Should the Design-Builder propose design changes acceptable to VDOT, permitting requirements may also change; the Design-Builder remains responsible for obtaining all necessary water quality permits and permit modifications required by the regulatory agencies to accommodate the design changes.

The Design-Builder shall ensure that Project schedules accommodate any Special Provisions, Time of Year Restrictions (TOYR), and the duration of permit acquisition from the regulatory agencies. The Design-Builder shall be responsible for adhering to permit conditions and Special Provisions, as identified in the permit authorizations including but not limited to TOYR, avoidance and minimization recommendations, restoration of temporary impact areas, and countersinking culverts.

The Design-Builder shall be responsible for compliance with pre-construction, construction-related permit conditions, as well as post-construction monitoring if required by regulatory agencies. This shall include costs associated with acquiring water quality permits and additional compensatory mitigation for the Project if needed.

The Design-Builder shall provide to the VDOT Project Manager copies of all permits, documentation, and correspondence with regulatory agencies. Construction activities shall not impact regulated areas within the Project limits until all applicable water quality permits have been issued to the Design-Builder. The Design-Builder shall not proceed with work covered by the water quality permits until the VDOT Project Manager releases the work in writing. The VDOT Project Manager may release a portion or all of such work not in jurisdictional areas, but may order a suspension of the same work after its release. The Design-Builder shall not be allowed to begin work that pre-determines the work required in the jurisdictional areas until the permits are secured.

After receiving the VDOT Project Manager's release of the work, the Design-Builder shall notify the VDOT Project Manager and the regulatory permitting agencies in writing fourteen (14) days prior to beginning work in the jurisdictional areas covered by the water quality permits.

The Design-Builder shall allow environmental compliance inspections by VDOT, and/or regulatory agencies as required by permits and/or to facilitate any interim compliance reviews/assessments.

At the conclusion of the Project, the Design-Builder shall notify the VDOT Project Manager and the regulatory permitting agencies in writing of the completion of the work in the jurisdictional areas covered by the water quality permits. At the completion of the Project, the Design-Builder is required to transfer any Virginia Marine Resources Commission (VMRC) permit back to VDOT.

The Design-Builder shall carry out any additional permit conditions/commitments that result from change in footprint and/or scope (assuming it is approved by VDOT) at its sole expense and no additional cost to the Project; additionally the Design-Builder will be responsible for any schedule delays and associated costs.

All permitted construction activities shall be identified as hold points in the Design-Builder's CPM Schedule.

#### **2.4.5 Threatened and Endangered Species**

VDOT has performed preliminary database reviews to determine the Project's potential effects on threatened and endangered (T&E) species, indicating that the following state and federally listed T&E species were identified in the required search area: Dwarf Wedge Mussel and Northern Long Eared Bat (NLEB). A copy of VDOT's preliminary Fish, Plant, and Wildlife Resources Form dated June 10, 2016 is included in the RFP Information Package.

VDOT has recommended a may affect determination and applied the 4(d) rule; excepted from take for the NLEB and recommended a no effect for the Dwarf Wedge Mussel. This determination was coordinated with the USFWS on May 9, 2016. At the conclusion of the 30-day waiting period, on June 10, 2016, the USFWS had no comments and concurred with the effect determination. A copy of the VDOT/USFWS coordination is included in the RFP

## Information Package.

The Offeror shall be advised that new and updated T&E information is continually added to agency databases. The Design-Builder will be responsible for any subsequent coordination to obtain updated information, requirements, and clearances from environmental regulatory agencies that provide threatened and endangered species oversight. This additional T&E species coordination is also a standard component of the water quality permit acquisition process and may result in permit conditions for which the Design-Builder will be responsible. The Design-Builder is responsible for ensuring that all T&E species are correctly identified and impacts assessed, noting that more or less resources may be present than initially identified. Avoidance and minimization shall be implemented to the greatest extent possible. The Design-Builder shall provide to the VDOT Project Manager copies of all documentation and correspondence with regulatory agencies.

### **2.4.6 Hazardous Materials**

VDOT Hazardous Materials staff has reviewed the Project and found that there is no evidence of generating hazardous materials of concern or sites of environmental conditions/concerns within the Project area. As such, the Project was cleared on March 23, 2016, and no further hazmat work is required in support of the RFP Conceptual Plans. The VDOT Hazardous Materials Summary Report and comments are included in the RFP Information Package and constitutes Known Pre-existing Hazardous Materials as defined in Part 4, Article 4. Any changes in scope or project footprint from that contained in the Contract Documents proposed by the Design-Builder, which are acceptable to VDOT, requiring additional hazmat investigation, the Design-Builder shall comply with the following contract special provisions and guidance documents, as applicable:

- Virginia Department Of Transportation Special Provision For Phase I And Phase II Environmental Site Assessments For Design-Build Projects – June 25, 2013
- Virginia Department Of Transportation Special Provision For Inspection Of Structures For Asbestos Containing Materials (ACM) On Design-Build Projects - June 22, 2009
- Virginia Department Of Transportation Special Provision Copied Note-Demolition For Structures Not Requiring Asbestos Removal – June 25, 2009
- Virginia Department Of Transportation Special Provision For Asbestos Removal And NESHAP-Related Demolition Requirements For Structures On Design-Build Projects - June 22, 2009
- VDOT Asbestos Project Monitoring And Clearance Air Monitoring Procedures – February 26, 2010

- Virginia Department Of Transportation, Location and Design Division Instructional and Informational Memorandum: Guidelines for the Discharge of Storm Water at Sinkholes - August 15, 2002
- Virginia Department Of Transportation Special Provision For Asbestos-Containing Soil - February 2, 2000
- Virginia Department Of Transportation Special Provision For Removal Or Connection Of Asbestos Cement Pipe - November 7, 2005
- Virginia Department Of Transportation Asbestos Inspection Procedures – February 26, 2010

The Design-Builder shall manage solid waste, hazardous waste, and hazardous materials in accordance with all applicable federal and state environmental regulations and shall implement good housekeeping, waste minimization and pollution prevention practices.

Unless a structure has been otherwise classified, the Design-Builder shall assume all coated structures are Type B.

The Design-Builder shall perform asbestos inspections on all structures (including bridge structures if any) and, as applicable, perform asbestos abatement, abatement monitoring, notifications and demolition in accordance with VDOT procedures and specifications. Prior to demolition, asbestos abatement shall be performed for all structures found to contain regulated asbestos materials (RACM) and non-RACM that is expected to become friable (i.e. RACM) during the course of demolition. The Design-Builder shall make all appropriate abatement and demolition notifications as required by federal and state regulations.

Asbestos inspection, abatement and project monitoring shall be performed by individuals and firms licensed by the Virginia Department of Professional and Occupational Regulation. Asbestos abatements shall not be performed by an asbestos contractor who has an employee/employer relationship with, or financial interest in, the laboratory utilized for asbestos sample analysis nor shall the asbestos contractor have an employee/employer relationship with, or financial interest in, the asbestos inspector and project designer working on the Project. Copies of all asbestos inspection, monitoring and disposal records shall be provided to the VDOT Project Manager.

For any asbestos waste and other non-hazardous waste, the Design-Builder shall have the signatory responsibility for the waste shipping manifest(s) and/or bill(s) of lading. For hazardous waste the Design-Builder shall be considered the co-generator and shall be responsible for preparing the hazardous waste shipping manifest(s) for the VDOT representative's signature and as otherwise consistent with the signatory requirement under Section 411 of the VDOT 2007 Road and Bridge Specifications.

The Design-Builder shall be responsible for the development of a Spill Prevention, Control, and Countermeasure Plan as required by regulation and for submission of any required plan to the VDOT Project Manager prior to start of construction. In the event of spills or releases of petroleum products and other hazardous liquids or solid materials, the Design-Builder shall take immediate action to contain and eliminate the spill release, including the deployment of environmental protection measures to prevent the migration of the spill into the waters of the United States and of worker exposure protection measures. The Design-Builder shall notify the VDOT Project Manager immediately of all instances involving the spill, discharge, dumping or any other releases or discovery of hazardous materials into the environment and shall provide all required notifications and response actions.

The Offeror shall include in the Price Proposal all costs associated with complying with the above listed requirements except that asbestos abatement and abatement monitoring will be paid for, if and when necessary, under a Work Order in accordance with Article 9 of Part 4 (General Conditions of Contract).

The Design-Builder shall not acquire property until any required Phase I Environmental Site Assessment is complete and approved. This shall represent a hold point in the Design-Builder's CPM Schedule.

#### **2.4.7 Air Quality**

The Project has been assessed for potential air quality impacts and conformity with all applicable federal and state air quality regulations and requirements. The Air Quality Analysis for this Project was completed as part of the Rappahannock River Crossing Project (UPC 101595), dated September 2014 is provided in the RFP Information Package. The Air Quality Analysis identifies federal and state regulatory requirements that must be adhered to during construction of the Project.

The Project is located in an area that is currently in Attainment with the National Ambient Air Quality Standards (NAAQS), and in a volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC and NO<sub>x</sub> during construction of the Project. In addition, the following VDEQ air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-130-10 et seq., Open Burning restrictions; 9 VAC 5-45-760 et seq., Cutback Asphalt restrictions; and 9 VAC 5-50-60 et seq., Fugitive Dust precautions. The Design-Builder will be required to adhere to the limitations outlined in Special Provision 107E for Volatile Organic Compound Emissions Control Areas.

Construction activities will be performed in accordance with the VDOT 2007 Road and Bridge Specifications. The specifications require compliance with all applicable local, state, and federal air quality regulations.

## 2.4.8 Noise Mitigation

A preliminary noise evaluation was performed by VDOT and a more-detailed review shall be completed by the Design-Builder during final design. It was determined from the preliminary noise evaluation that mitigation measures are required for the Project. However, noise abatement measures that were found to be feasible and reasonable during the preliminary noise analysis may not be found to be feasible and reasonable during the final design noise analysis. Conversely, noise barriers that were not considered feasible and reasonable may meet the established criteria and be recommended for construction. A copy of the Rappahannock River Crossing Project (UPC 101595) Preliminary Noise Analysis (Preliminary Noise Analysis) dated September 2014 is included in the RFP Information Package.

A Final Design Noise Analysis shall be submitted to VDOT for review and approval. The Final Design Noise Analysis, consisting of a re-analysis of all noise sensitive receptors identified in the project area, will be required to confirm that noise mitigation is required. The final noise analysis shall account for the future I-95 CD lanes.

Noise walls, as shown on the RFP Conceptual Plans and/or the Preliminary Noise Analysis, shall be utilized for Proposal preparation purposes. The Offeror's Proposal shall include the worst-case scenario if there is a difference between the RFP Conceptual Plans and the Preliminary Noise Analysis. A post-award Final Design Noise Analysis, consisting of a re-analysis of all noise sensitive receptors identified in the Project area, will be required to confirm if noise mitigation is required. Based on results of the final noise analysis, one of the following scenarios will occur:

- If the final noise analysis indicates additional noise walls are required in excess of the Offeror's Proposal that's not due to changes in plan and profile as part of the Design-Builder's final design, VDOT shall compensate the Design-Builder for any additional walls above what was proposed.
- If the final noise analysis indicates a reduction of noise walls than that provided in the Offeror's Proposal regardless of any design changes, the Design-Builder shall credit VDOT for the amount of the reduction.
- If the final noise analysis warrants noise walls but some or all the walls are not desired by the public, the Design-Builder shall credit VDOT for the amount of the reduction.
- If the final noise analysis does not warrant noise walls but walls are desired by the public, VDOT shall compensate the Design-Builder for any additional walls above what was proposed.

If the results of the Final Design Noise Analysis dictate; the Design-Builder will provide permanent noise mitigation in compliance with the Virginia State Noise Abatement Policy, the Highway Traffic Noise Impact Analysis Guidance Manual (July 2015), FHWA's Highway

Traffic Noise Analysis and Abatement Guidance (December 2011), the VDOT Noise Report Development and Guidance Document Version 5, the Special Provision for Sound Barrier Walls, and the (updated January 2016) VDOT Road Design Manual. The noise barrier shall be located and constructed in such a manner to accommodate for the construction of a future CD road system as described in Part 2, Section 2.2. This includes all work associated with the design and construction of a noise barrier from Cowan Boulevard to Fall Hill Avenue.

The Design-Builder is prohibited from deviating on VDOT's noise barrier policy, guidance, or special provisions without allowance granted in this document or prior written approval from VDOT.

The final barrier endpoint(s) and dimension(s) shall be determined during the final design noise analysis. A draft Noise Abatement Design Report (NADR) shall be submitted for review and approved prior to the submittal of a final Noise Abatement Design Report (NADR). The NADR shall be conducted by an individual qualified in the field of highway traffic noise impact analysis as noted in Section 3.0 of the Highway Traffic Noise Analysis and Abatement Guidance Manual. The Noise Abatement Design Report (NADR) shall be furnished by the Design-Builder at its sole cost and expense. The NADR will utilize environmental traffic data (ENTRADA) spreadsheets with the appropriate design year. The Design-Builder shall be responsible for developing the ENTRADA for the Final NADR based on the approved design and/or latest design information. The final noise mitigation design will utilize the design year traffic volumes defined in the Preliminary Noise Analysis unless otherwise directed due to traffic updates.

Final design of noise abatement measures shall be based on the preliminary noise abatement design developed in the Preliminary Noise Analysis as noted in Section 10.5 of the Highway Traffic Noise Analysis and Abatement Guidance Manual.

Upon approval of the Final Design Noise Analysis the Department shall prepare a concurrence letter outlining the results of the analysis for the VDOT's Chief Engineer and FHWA. Once concurrence is achieved the Design-Builder shall prepare and mail letters "certified return receipt" to benefitted receptors to ascertain the desire to have noise barriers constructed as part of the Project. Upon completion of the citizen survey, VDOT shall prepare a second concurrence letter documenting the results, if necessary. All noise barriers should be named as presented within the NADR.

All noise barriers recommended for construction and concurred with by the Chief Engineer and FHWA are included in the scope of the Construction Project and shall be funded by the Design-Builder at its sole cost and expense. This includes barriers with conditions, as long as those conditions have been met.

Prior to submitting a noise barrier plan for VDOT's review, the Design-Builder will have the noise consultant that completed the NADR review the plan set and certify that the proposed design meets the noise abatement requirements. This certification will be included in the plan set when it is submitted to the Department for review.

If deviations in the horizontal or vertical alignment of a noise barrier (or the roadway alignment) are proposed following concurrence from VDOT's Chief Engineer or FHWA, then the Design-Builder shall perform any additional noise analysis and provide the results to the Department for review and approval prior to construction. This will include a plan and profile view of the roadway with the alignments recommended barrier and the proposed design. A justification of the deviation will be included with the plan set. The revised NADR chapter for the noise barrier for which modification is requested will be submitted with this additional information.

A key plan will be clearly labeled to show the location of the ground-mounted combo wall (noise barrier on retaining wall).

Plan view will provide the alignment of the noise barrier with the roadway plan view.

Profiles of the wall alignment will include the noise attenuation line and the existing and proposed elevation. If combo walls or bridge-mounted barriers are present along the alignment, the pattern of the line will be different so that all lines can be distinguished.

Stations of the roadway and noise barrier will be included on both the plan and profile views.

Access shall be provided by access doors for VDOT maintenance personnel. Noise barrier design shall also be coordinated with first responders to ensure access to fire hydrants and other emergency equipment. In lieu of access doors, gaps may be provided in the walls with a minimum 3:1 ratio of barrier overlap.

#### **2.4.9 Environmental Compliance**

The Design-Builder is responsible for compliance with all applicable state and federal environmental laws, regulations, and permits. If, at any time, the Design-Builder is not in compliance with all applicable environmental laws, regulations, Executive Orders, commitments, etc., the VDOT Project Manager has the authority to suspend work, in whole or in part, until such time as the deficiencies or non-compliant items have been corrected. Should any non-compliant item(s) be identified during construction, immediate and continuous corrective action shall be taken by the Design-Builder to bring the item(s) back into compliance.

The Design-Builder shall be responsible for any schedule delays and associated costs as a result of any delays and/or shut downs associated with non-compliance. Any monetary fines associated with violations and/or any environmental restoration activities required for resolving violations shall be the responsibility of the Design-Builder.

The Design-Builder shall carry out environmental commitments during design and construction, as applicable, as identified in the PCE, the final Document Re-evaluations for RW Authorization (EQ-201) and PS&E Authorization (EQ-200), and the Environmental Certification/Commitments Checklist (EQ-103). All commitment compliance shall be supported

by appropriate documentation, to be provided by the Design-Builder to the VDOT Project Manager.

The Design-Builder shall be responsible for compliance with pre-construction and construction-related environmental commitments and permit conditions. The Design-Builder shall assume all obligations and costs incurred by complying with the terms and conditions of the permits and certifications. Any fines associated with environmental permit or regulatory violations shall be the responsibility of the Design-Builder.

## 2.5 Survey

The Design-Builder is advised that the preliminary field survey and utility data provided is not represented to be complete for purposes of design and construction of the Project. The Design-Builder's scope of work shall include performing all surveying and utility designation that is necessary to design and construct the Project in accordance with VDOT's Survey Manual.

Preliminary field survey and utility data has been obtained for this Project and contains the general depiction of existing conditions which the Design-Builder is obligated to verify and finalize through survey before completing final design of the Project. The special accuracy of the preliminary survey is at the Class 1 Level with 1-foot contours. The survey is, bounded by photographic and LIDAR limits. The area includes I-95 from 1,500 feet south of Route 3 to Fall Hill Avenue and includes Route 3 from Carl D. Silver Parkway to Gateway Boulevard. The field survey was conducted using conventional and LiDar methods and data was collected within the tolerances defined in the VDOT Virginia Map Accuracy Standards. Preliminary field survey and utility data have been obtained, including, but not limited to the following:

- Vertical control (Based on NAVD88)
- Horizontal control (Based on NAD83)
- Planimetrics
- Property data and R/W
- Utilities (Level B sub-surface utility investigation within mapped limits)
- Digital Terrain Model

The Virginia Code 33.2-1011 requires that Notice of Intent letter "shall be sent to the owner by mail, at the address recorded in the tax records, **not less than 15 days prior** to the first date of the proposed entry. Notice of intent to enter shall be deemed made on the date of mailing." "The notice shall include the anticipated date such entry is proposed to be made and the purpose of such entry." Advance notification of property owners is required for all data collection efforts related to the development of highway plans. Copies of the letters and address labels shall be provided to the VDOT Project Manager for forwarding to the District Survey Manager as soon as they become available for VDOT approval.

The Design-Builder shall be responsible for obtaining any survey data, including all right-of-entry and land use permits, locating and/or designating underground utilities, digital terrain model (DTM), utility test holes and obtaining other related data necessary for the design,

right-of-way acquisition, limited access revisions, and construction of the Project. Additionally, the Design-Builder will be responsible for any update (property owner changes, subdivisions, etc.) that may occur; updates need to be reflected on the plans in order to acquire right-of-way and complete the final design. Any survey changes shall be verified and certified, and submitted in final documentation.

The Design-Builder will be responsible to reset or relocate any survey control damaged, destroyed or located within the footprint of the final design construction limits. The control will be established by a land surveyor licensed in the Commonwealth of Virginia with LD-200 information and supporting computations submitted to the VDOT Project Manager.

Prior to Project completion, the Design-Builder shall provide and set final VDOT RM-1 or RM-2 right-of-way monuments within the Project limits. The Design-Builder shall depict the monuments on the Right-of-way Plans in accordance with VDOT's Survey Manual.

## **2.6 Geotechnical Work**

A preliminary geotechnical subsurface investigation has been completed for the Project. The results of the subsurface exploration and associated laboratory test results are presented in the Geotechnical Data Report dated September 6, 2016, which is included in the RFP Information Package.

The data included in this RFP is being provided for Offeror's information in accordance with Section 102.04 of Part 5 (Division I Amendments). The Design-Builder shall perform a design-level geotechnical investigation to validate and augment the geotechnical information included in this RFP. The geotechnical engineering investigation performed by the Design-Builder shall meet or exceed both Chapter 3 of the VDOT Material Division's Manual of Instructions (MOI); the current AASHTO LRFD *Bridge Design Specifications*, 6<sup>th</sup> Edition, 2012 and VDOT Modifications; and Section 700.04 (c) of the VDOT 2007 Road and Bridge Specifications.

The Design-Builder shall collect appropriate data for geotechnical evaluation of pavements, embankments, soil cuts, soil and rock cuts, culverts, wall structures (retaining/mechanically stabilized earth), noise barriers, storm water management facilities, signal pole, high mast, or overhead signs, minor structures including drainage pipes, and any other earth-supported or earth-retaining structures or elements of highway design and construction required for the Project. The Design-Builder will be responsible for obtaining all necessary permits and utility clearances as required by VDOT, the Commonwealth of Virginia, or any other jurisdictional body or owner prior to accessing public or private property for the purpose of conducting geotechnical field work and shall provide the necessary traffic control in accordance with the Work Area Protection Manual. The Design-Builder shall complete laboratory tests in accordance with pertinent ASTM or AASHTO standards and analyze the data to provide design and construction requirements. Soils, rock, aggregate, asphalt, concrete and other materials tests shall be performed by a laboratory accredited through the AASHTO Accreditation Program (AMRL and CCRL) for each test it conducts for the Project, unless otherwise approved by VDOT.

The Design-Builder shall provide VDOT with all records of subsurface explorations and describe the soils encountered and their depth limits in accordance with the requirements outlined in Chapter 3 of the VDOT Materials Division MOI. The Design-Builder shall provide to VDOT electronic copies of all subsurface explorations in accordance with the boring log template available on the website included in Chapter 3 of the VDOT Materials Division MOI. The electronic files shall be provided by a certified professional geologist or a suitably qualified registered professional engineer in the Commonwealth of Virginia, in gINT© software. The gINT© file for the borings contained in Geotechnical Engineering Data Report, dated September 6, 2016, are provided in the RFP Information Package.

Unless otherwise addressed by AASHTO LRFD, the Design-Builder shall incorporate reliability assessments in conjunction with standard analysis methods in accordance with Chapter 3 of the VDOT Materials Materials MOI. An acceptable method for evaluation of reliability is given by Duncan, J.M. (April 2000) *Factors Of Safety and Reliability in Geotechnical Engineering*, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Discussions and Closure August 2001. The Design-Builder may propose to identify specific, non-critical features, and alternative methods for evaluating variability of subsurface conditions, reliability and minimum factors of safety, prior to submission of its design calculations and drawings. VDOT may, in its sole discretion, accept or reject such proposed methods.

The Design-Builder shall submit to the VDOT for its review all geotechnical design and construction memoranda and/or reports that summarize pertinent subsurface investigations, tests, and geotechnical engineering evaluations and recommendations utilized in support of their design/construction documents. This submittal shall be made at least ninety (90) days in advance of the submittal of any final design/construction documents that are dependent upon the geotechnical evaluations and recommendations. Technical specifications for construction methods that are not adequately addressed in the Standard Specifications shall be provided by the Design-Builder as part of the final design/construction documentation. Prior to submittal of any final design/construction documentation, the Design-Builder shall review the final design/construction documents to assure that it appropriately incorporated the geotechnical components and shall submit evidence of this review to accompany the final design/construction documentation. The Design-Builder shall reference the drawings that incorporate the pertinent results. The Design-Builder's Quality Assurance and Quality Control (QA/QC) Plan shall document how each specific geotechnical recommendation or requirement will be addressed in the final design/construction documentation. The results of the geotechnical investigation and laboratory results shall support design and construction efforts to meet the requirements outlined in this Section.

### **2.6.1 Minimum Pavement Sections**

Minimum pavement sections and anticipated locations for these sections shall be utilized for Proposal preparation purposes only. The anticipated locations for new pavement, mill and overlay, demolish and replace the pavement sections are provided on the RFP Conceptual Plans included in the RFP Information Package. The Design-Builder shall be required to validate the minimum pavement sections and to notify VDOT of its findings. If the Design-Builder's findings require a deviation from the RFP requirements, it shall notify VDOT during the Scope

Validation Period consistent with Part 4, Section 2.2. Acceptable changes to the minimum pavement sections are limited to increasing the thickness of the base or subbase layers specified below. Any changes to the minimum pavement sections provided in Part 2, Section 2.6.1 and/or location for the pavement sections shown on the RFP Conceptual Plans require approval by VDOT. The Design-Builder shall be responsible for the final design and construction of the pavements for this Project in accordance with the Contract Documents.

The Design-Builder shall photographically document the existing condition of all pavements within and adjacent to the Project limits prior to the Design-Builder's submission of final construction plans for VDOT's approval and provide all photos to the VDOT Project Manager. Photos shall be color digital images in .jpg format with 4 megapixels (approximately 2400 pixels wide x 1600 pixels high) or greater resolution. The Design-Builder shall be responsible for full-depth replacement of all pavement damaged resulting from Project construction activities, regardless of the method or location of the pavement damage.

The Design-Builder shall prepare and incorporate into the plans, typical sections, profiles and cross-sections the validated pavement sections in accordance with the applicable manuals noted in Part 2, Section 2.1. This includes drainage and subdrainage requirements to ensure positive drainage both within the pavement structure and on the pavement surface. The minimum pavement sections are as follows:

### **New Pavement and Pavement Widening**

The minimum pavement sections shall be based upon the following criteria: (a) a minimum soil CBR value of 10 within two (2) feet of subgrade, (b) all subgrade is compacted in accordance with the applicable sections of the VDOT 2007 Road and Bridge Specifications and applicable special provisions and, (c) all unsuitable materials have been removed or modified in accordance with Part 2, Section 2.6.3. Pavement designs shall be performed in accordance with AASHTO Design of Pavement Structures (1993) guidelines and Chapter VI of the VDOT Materials Division MOI (2011).

#### **I-95 Widening (North and Southbound Lanes)**

**Surface** – 220 lbs/SY Asphalt Concrete Type, SM 12.5 E

**Intermediate** – 220 lbs/SY Asphalt Concrete, Type, IM-19.0D

**Base** – 8 inches Asphalt Concrete Type, BM 25.0 A

**Subbase** – 8 inches Aggregate Base Material, Type I, 21B to be connected to VDOT Standard UD-4 edgedrain

#### **I-95 Shoulder Design (North and Southbound directions)**

**Surface** – 220 lbs/SY Asphalt Concrete Type, SM 12.5 A

**Intermediate** – 220 lbs/SY Asphalt Concrete, Type, IM-19.0D

**Base** – 8 inches Asphalt Concrete Type, BM 25.0A

**Subbase** – 8 inches Aggregate Base Material, Type I, 21B

**All Ramps (A, B and Loop B), Slip Ramp B, Route 3 east and Route 3 west**

**Surface** – 220 lbs/SY Asphalt Concrete Type, SM 12.5 E

**Intermediate** – 220 lbs/SY Asphalt Concrete, Type, IM-19.0D

**Base** – 6 inches Asphalt Concrete Type, BM 25.0A

**Subbase** – 8 inches Aggregate Base Material, Type I, 21B to be extended and daylighted

In locations where curb and gutter is available, install VDOT Standard UD-4 edge drains and tie to drop inlets for positive drainage.

**Ramps (A and B), Slip Ramp, Route 3, Loop B and Route 3 west Shoulder Design**

**Surface** – 220 lbs/SY Asphalt Concrete Type, SM 12.5 A

**Intermediate** – 220 lbs/SY Asphalt Concrete, Type, IM-19.0D

**Base** – 6 inches Asphalt Concrete Type, BM 25.0A

**Subbase** – 8 inches Aggregate Base Material, Type I, 21B to be extended and daylighted

**All Other Areas**

**Surface** – 220 lbs/SY Asphalt Concrete Type, SM 12.5 D

**Intermediate** – 220 lbs/SY Asphalt Concrete, Type, IM-19.0A

**Subbase** – 8 inches Aggregate Base Material, Type I, 21B

**Mill and Overlay**

For salvage/build-up areas, the existing pavement shall be milled two (2) inches and replaced with 220 lbs/SY, Asphalt Concrete Type, SM 12.5E

**Temporary Pavement**

The Design-Builder shall be responsible for any temporary pavement design. Temporary pavements shall be designed in accordance with the AASHTO Guide for the Design of Pavement Structures (1993 edition) and the VDOT Materials Division's MOI. All temporary pavement designs shall be submitted to VDOT for review. All temporary pavement shall be completely removed once it is no longer in service. All temporary pavement designs shall have a minimum six (6) inches of asphalt concrete and shall meet the following minimum design criteria:

- Design Life – 6 months minimum or as required for construction phasing, whichever is greater
- Reliability – eighty-five percent (85%) minimum
- Initial Serviceability – 4.2 minimum
- Terminal Serviceability – 2.8 minimum
- Standard Deviation – 0.49 minimum
- CBR value for subgrade soils determined through laboratory tests

The minimum pavement sections require that proper grading be maintained to direct surface water away from paved areas and to provide for efficient runoff from surrounding areas.

Any utility excavations or excavations for storm drains within pavement areas shall be backfilled with compacted structural fill in accordance with applicable sections of the VDOT 2007 Road and Bridge Specifications and applicable special provisions.

VDOT Standard Combination Underdrain (CD-1) shall be provided at the lower end of cuts. VDOT Standard Combination Underdrain (CD-2) shall be provided at grade sags and at the lower end of undercut areas.

## **2.6.2 Geotechnical Requirements**

Embankments and certain aspects of retaining wall design are not addressed by LRFD. Embankments and cut slopes shall be designed in accordance with Section 305 of the VDOT Materials Division's MOI. The maximum slope ratio to be used for cut and/or roadway embankment fill slopes shall not be steeper than 2H:1V. The Design-Builder is responsible for verifying the stability of all slopes, including those retained by structures.

All retaining walls shall be designed in accordance with applicable VDOT and AASHTO requirements, including Soil Design Parameters for Sound Barrier Walls, Retaining Walls and Non-Critical Slopes included in the RFP Information Package. If the Design-Builder elects to use mechanically stabilized earth (MSE) walls, the fill material used in the reinforced zone shall be a crushed aggregate with properties in accordance with VDOT's special provisions for approved proprietary MSE walls. The Design-Builder shall provide both global and external stability analysis utilizing a computer program acceptable to VDOT and submit the results of the analysis, including boring logs, laboratory data, and any other applicable data, to VDOT geotechnical engineers for review. The wall supplier shall provide to the Design-Builder, for submittal to VDOT, an internal stability analysis that validates the design of the wall. Retaining walls shall be designed to control settlements within tolerances identified by VDOT Guidelines for Preparation of Alternate Retaining Wall Plans.

Material and Construction requirements shall follow the VDOT Manual of the Structure and Bridge Division, Volume V – Part 11 “Geotechnical Manual for Structures” and applicable special provisions listed in Part 2, Section 2.1.1(c). Where undercutting and material replacement is required to reduce settlement or improve bearing capacity/global stability, areas requiring repair shall be clearly identified on the plans with notes provided to aid plan review, construction, and inspection.

Removed pavement material, unsuitable material, and hazardous materials shall be disposed of in approved offsite facility.

## **2.6.3 Unsuitable Materials**

Unsuitable Material is defined as material used as embankment fill, and in cut areas to a depth of at least two (2) feet below subgrade directly beneath pavements and at least two (2) feet

beneath the bedding of minor structures and laterally at least two (2) feet beyond the outside edge of the pavement shoulders and bedding limits of the minor structures that meets one or more of the following criteria: classifies as CH, MH, OH and OL in accordance with the Unified Soil Classification System (USCS); contains more than five (5) percent by weight organic matter; exhibits a swell greater than five (5) percent as determined from the California Bearing Ratio (CBR) test using VTM-8; exhibits strength, consolidation, durability of rock or any other characteristics that are deemed unsuitable by the Design-Builders' geotechnical engineer or as denoted in the Contract Documents for use in the Work. All materials within the uppermost three (3) feet of a pavement subgrade that exhibits a CBR value less than that stipulated in the pavement design shall also be considered unsuitable.

The anticipated locations and methods of treatment for unsuitable materials identified by the Design-Builder's qualified geotechnical engineer shall be shown on the design plans and cross sections. Saturated or very dry and/or loose or very soft coarse- and fine-grained soils that exhibit excessive pumping, weaving or rutting under the weight of construction equipment are also considered unsuitable unless they can be moisture conditioned through either mechanical or chemical means to an acceptable moisture content that allows adequate compaction to meet project specifications, and classification testing indicates they are not otherwise unsuitable. Topsoil, peat, coal and carbonaceous shale shall also be considered unsuitable material. All unsuitable material shall be disposed of and/or treated as discussed in Section 106.04 of the VDOT 2007 Road and Bridge Specifications at no additional cost to VDOT. Topsoil or other organic soils are also considered unsuitable for use in embankment fill other than as a cover for slopes for the purpose of establishing vegetative cover. When used as cover for slopes, the thickness of topsoil shall not exceed twelve (12) inches.

#### **2.6.4 Acid-Sulfate Soils**

The soils at the site are known to be potentially acidic due to the presence of acid sulfate soils. All structures in contact with on-site soils shall be designed to resist corrosion and to be functional for the design life indicated in the Contract Documents, unless specific testing determines that the soils are not currently or potentially acidic.

The acidic nature of the soils is also problematic for establishing vegetative growth; as such, all cut and fill surfaces shall be treated appropriately such that a high quality vegetative cover can be established and maintained.

The Design-Builder shall investigate for the presence of acid sulfate soils along the alignment (both naturally occurring and as a result of encapsulation) of the proposed construction, assess the potential impacts and implement appropriate avoidance and/or mitigation measures, if encountered. Prior to final seeding, the Design-Builder shall perform Acid-Base Accounting Tests per EPA Publication 600/2-78-054 at a rate of 20 tests per acre. The samples will be collected from the top six (6) inches of any area designated to receive seeding. Upon completion of the testing, the Design-Builder shall submit a written report containing the test results and plan for the application of lime. Lime shall be applied at 1.25 times the net neutralizer deficiency noted in the test results. As an example, if the net neutralizer deficiency is found to be 12.77 tons (calcium carbonate equivalent in tons per acre/1000 tons of material),

lime shall be applied at 15.96 tons per acre. In no case shall lime be applied at a rate of less than four (4) tons per acre, despite the results of the Acid-Base Accounting. In areas where the amount of lime needed is greater than four (4) tons per acre, the Design-Builder shall blend the lime into the upper six (6) inches of soil by disking or similar blending method to fully incorporate the lime in the soil.

Mitigation measures (singularly or in combination) that may be considered by the Design-Builder include, but are not limited to:

Avoidance

- Covering unexcavated, undisturbed acid sulfate soils with non-aggressive fill soils.

Minimization of Disturbance

- Adjust alignment and cut/fill areas to avoid acid sulfate soils.
- Design drainage structures and piping not to penetrate acid sulfate soil layers.
- Avoid activities resulting in fluctuations (lowering) of the groundwater table as they may lead to the exposure of potential acid sulfate soils to oxygen.

Neutralization

- Commonly used mitigation technique where acid sulfate soils are mixed with alkaline materials
- Alkaline materials may include fine agricultural lime, dolomite, magnesite, hydrated lime and sodium bicarbonate
- Must be supported by the appropriate level of field and laboratory testing.

**2.6.4.1 Vibration Control**

Control vibrations to less than 0.5 ips (inches per second) at the nearest structure. In addition to private/adjacent properties, this includes structures under construction and structures owned by VDOT. The Design-Builder will be responsible for repairing any and all damage to adjacent facilities and structures for construction-induced damage.

**2.6.4.2 Coordination and Review by Design-Builder's Geotechnical Engineer**

The Design-Builder's geotechnical engineer shall be on-site during grading operations or visit the site at sufficient intervals during construction to review slope excavation operations and verify the planned slope design is suitable or make modifications as approved by VDOT.

## **2.6.5 Pipe Installation Methods**

Culverts or utility pipes shall be installed by either conventional methods in accordance with Section 302.03 of VDOT's 2007 Road and Bridge Specifications, or Jack and Bore and/or by Micro-tunneling in accordance with the applicable Special Provisions contained in the RFP Information Package. Trenchless technology other than these methods of installation is not permitted unless otherwise approved by VDOT. Trenchless technology is required on all primary routes unless approval for using another method is given by VDOT. The Design-Builder's Design Engineer shall choose which of the allowable methods of installation is best suited for the ground and site conditions where the work is to be performed and that will meet the design requirements of the proposed culverts or utility pipes. The Design-Builder's Design Engineer shall be responsible to establish both the vertical and horizontal tolerances in support of the design. Such tolerances shall be noted on the Construction Plans. The design tolerance may be more stringent than what is called for in the both the Jack and Bore and Micro-Tunneling Special Provisions; however, under no circumstances shall the design tolerances used in design of either culverts or utility pipes exceed those specified in the VDOT 2007 Road and Bridge Specifications and the applicable special provisions. Performance requirements and tolerances stipulated in the special provisions shall also apply to conventional tunneling methods. If trenchless technology is used to complete roadway crossings, surface settlement monitoring must be performed to verify that there is no adverse impact on the stability and performance of the embankment and pavement structure above the pipe alignments in accordance with Section 302.03 of the VDOT 2007 Road and Bridge Specifications and the Special Provisions for Jack and Bore and/or Micro-Tunneling, as applicable.

## **2.7 Hydraulics**

The Design-Builder shall provide and/or perform all investigations, evaluations, analysis, coordination, documentation, and design required to meet all Hydrologic and Hydraulic, Drainage, Stormwater Management, Erosion and Sedimentation Control, Stormwater Pollution Prevention, and Virginia Storm Water Management Program permitting requirements of the standards and reference documents listed in Part 2, Section 2.1.

### **2.7.1 Drainage**

The drainage work shall include the design and construction of culverts, open channels, storm sewer systems, underdrains, bridge deck drainage assemblies and structures, downstream channel and flood protection measures, stormwater management facilities, and erosion and sediment control measures in compliance with the standards and reference documents listed in Part 2, Section 2.1 and the VDOT Erosion and Sediment Control and Stormwater Management Programs. All pipe culverts and storm sewer pipe for the Project shall be determined in accordance with the VDOT Drainage Manual and the VDOT 2008 Road and Bridge Standards and all joints shall be determined in accordance with IIM-LD-254. No buried metal pipe culverts shall be permitted. The Design-Builder shall provide VDOT two (2) paper and two (2) electronic copies on compact disc of a final drainage report incorporating all drainage calculations including pre and post development discharges, capacities, and supporting data such

as drainage areas (with maps), ground cover calculations, etc. in accordance with the documentation requirements as outlined in the VDOT Drainage Manual.

Included in the RFP Information Package is a video of the existing roadway culverts crossing under Ramp A and Ramp B.

For the purpose of developing the Price Proposal, the Offeror shall assume that all roadway culverts, excluding those video inspected by VDOT that crossing under Ramp A and Ramp B, located within the Project limits are structurally deficient and shall be plugged and abandoned in accordance with VDOT Road and Bridge Standard PP-1, removed, or replaced with adequate structures designed and constructed in support of the Design-Builder's final drainage design. If after award the Design-Builder investigates the structural condition of the existing culverts, and as a result proposes use (or repair) of some or all, then it shall be done only with VDOT's approval. The Design-Builder shall credit VDOT, the differential in cost for utilizing the existing or rehabilitated culverts in lieu of removing and replacing the culverts. The Design-Builder shall assess the structural condition and serviceability of the structure by performing a visual/video inspection of the existing culverts utilizing the assessment criteria for Post Installation Inspections presented in VDOT Supplemental Specification 30203. The Design-Builder shall provide VDOT with an inspection report documenting the assessment following the methodology as prescribed in the supplemental specification. The report shall include a certification from the Design-Builder's structural engineer attesting to the structural adequacy of the structures and specific recommendations relative to improvements to the structural condition and serviceability of the structures. The Design-Builder shall provide the report to VDOT for review and approval prior to proceeding to final design. With VDOT's approval, culverts deemed repairable shall be rehabilitated in accordance with VDOT's guidelines including, but not limited to those methods outlined in Chapter 8, Section 8.3.6.7 of the VDOT Drainage Manual and Special Provisions SU302001DB Pipe Rehabilitation and SU302002A Pipe Replacement.

For the purposes of developing the Price Proposal, the Offeror shall assume that existing storm sewer systems located within the Project limits, as defined in Part 2, Section 1.1 and which are a functional element of the proposed drainage design, are structurally deficient and that it shall be removed and replaced with adequate structures designed and constructed in support of the Design-Builder's final drainage design. VDOT has not evaluated the structural condition of the existing storm sewer system and as such does not warrant its structural adequacy.

Underdrain outfall locations are not shown in the RFP Conceptual Plans and it shall be the responsibility of the Design-Builder to develop the underdrain design including adequate outfall locations. The Design-Builder may, at its discretion, utilize access structures (i.e. manholes, cleanouts, etc.) in lieu of EW-12's in order to outfall an underdrain according to the guidelines set forth in the 2008 VDOT Road and Bridge Standards and the VDOT Drainage Manual while maintaining the ability for the underdrain to be accessed in the future for maintenance purposes.

## **2.7.2 Stormwater Pollution Prevention Plan (SWPPP)**

A SWPPP, including, but not limited to, an Erosion and Sediment Control (ESC) Plan and Narrative, a Pollution Prevention (P2) Plan, and a post construction Stormwater Management (SWM) Plan shall be prepared and implemented by the Design-Builder in compliance with applicable requirements of the standards and reference documents listed in Part 2, Section 2.1 including the Virginia Erosion and Sediment Control Law and Regulations and the Virginia Stormwater Management Program (VSMP) Law and Regulations.

It shall be the responsibility of the Design-Builder to have a qualified person within their team structure, other than the ESC and post construction SWM Plan designer, who is authorized and/or certified by the Virginia Department of Environmental Quality (VDEQ) to perform plan reviews, independently review and certify that the ESC Plans and Narrative and post construction SWM Plan for the Project are in accordance with VDOT's Approved ESC and SWM Standards and Specifications. Before implementing any ESC or post construction SWM measures not included in VDOT's approved ESC and SWM Standards and Specifications, a variance or exception respectively must be requested through the District Drainage Engineer in accordance with the latest versions of the VDOT Drainage Manual, IIM-LD-195, and IIM-LD-251.

The Design-Builder shall complete and submit the ESC and SWM Plan Certification form (LD-445C) to the VDOT Project Manager. The Design-Builder shall provide VDOT two (2) paper and two (2) electronic copies each on a CD of the final ESC Plan and Narrative, P2 Plan and post construction SWM Plan incorporating all calculations, analysis, documentation and evaluations required. The ESC Narrative shall specifically include calculations (with supporting data) documenting that the design meets the water quantity requirements for downstream channel flood protection in the ESC Law and the VSMP Regulations, as appropriate, for each location where stormwater is discharged from the Project site.

The Project requires coverage under the VPDES General Construction Permit for the Discharges from Construction Activities (VPDES Construction Permit). The Design-Builder is responsible for providing to the Department the necessary information for it to secure permit coverage for the Project. The permit fee will be paid by VDOT and it shall not be included in the Offeror's Price Proposal. The Design-Builder shall complete the applicable sections of the VPDES Construction Permit Registration form (LD-445), the VPDES Construction Permit Contact Information (LD-445A) along with the completed ESC and SWM Plan Certification form (LD-445C) and submit them to the VDOT Project Manager. The VDOT Project Manager will review the submitted information and, if complete and acceptable, process a request for coverage under the VPDES Construction Permit in accordance with VDOT's guidelines as outlined in the latest version of IIM-LD-242. If any information submitted by the Design-Builder is found to be incomplete and/or unacceptable, the assembly will be returned to the Design-Builder for corrective action and resubmission.

A working conceptual ESC and post construction SWM Plan and SWPPP for the entire Project must be submitted for review and approval with the initial application for permit coverage. This initial conceptual Plan submittal shall include the proposed total expected Land Disturbance Area and Land Development Area, including any off-site facilities, for the entire

Project. Where the Project will be constructed in segments, the Design-Builder shall submit a finalized ESC Plan, a post construction SWM Plan and a P2 Plan, including the expected Land Disturbance Area, for the proposed initial work segment in addition to the conceptual plan for the entire Project. It is expected that the individual work segment submittals will be self-sustaining and not incur a deficit in post construction SWM design requirements requiring mitigation on future work segments. Subsequent work segment submittals shall include required modifications to the Land Disturbance Area value. However, these modifications, in total, shall not exceed the initially submitted Land Development Area value. The Design-Builder shall not proceed with work to be covered by the permit until permit coverage is secured and the VDOT Project Manager releases the work in writing. It is noted that permit coverage, and subsequent release of work, can take up to ninety (90) days from the time that the Design-Builder submits a request for coverage that includes all required information. This represents a hold point in the Design-Builder's CPM Schedule. Design-Builder shall provide a completed SWPPP Certification form (LD-455E) before commencement of any land disturbing activity and shall complete and include the SWPPP General Information Sheets in the plan assembly per the latest version of the VDOT Drainage Manual. The SWPPP Certification form (LD-455E) and SWPPP General Information Sheets shall be updated with each work segment submittal as necessary.

The Design-Builder shall be responsible for compliance with construction-related permit conditions and shall assume all obligations and costs incurred by complying with the terms and conditions of the permit. Any fines associated with permit or regulatory violations shall be the responsibility of the Design-Builder. Upon completion of the entire regulated land disturbing activity (including final stabilization of all disturbed areas), the Design-Builder shall provide updated/revised Permanent Best Management Practice (BMP) information in Section VI of the SWPPP General Information Sheets for each post construction BMP placed into service on the Project, complete the VPDES Construction Permit Termination Notice form (LD-445D) and submit both documents (without signature) to the VDOT Project Manager for processing. The Design-Builder shall also have on-site during any land disturbing operations an individual or individuals holding a VDEQ Inspector Certification, a VDEQ Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) to ensure compliance with all VDEQ and VDOT erosion and sediment control plan implementation requirements.

### **2.7.3 Post-Construction Stormwater Management Facilities**

The Design-Builder shall be responsible for the design and construction of stormwater management facilities as required for the Project in accordance with the latest version of IIM-LD-195, and the other standards and reference documents listed in Part 2, Section 2.1 including the Virginia Stormwater Management Program Law and Regulations, and shall comply with the minimum geotechnical requirements contained therein. VDOT has identified potential locations for post construction stormwater management facilities as part of the RFP Conceptual Plans. However, these locations are preliminary and have not been fully evaluated to determine if these locations are suitable, feasible or sufficient to address all of the stormwater management requirements of the project. The Design-Builder, as part of their final design, shall evaluate these locations, and if found acceptable, develop a final post construction stormwater management plan.

If any of the locations are found to be unacceptable, the Design-Builder must identify other acceptable location(s) to meet the post construction stormwater management requirements of the Project. The Design-Builder is to insure proper ingress and egress to any stormwater management facility and that any specific proprietary facilities have proper maintenance details included in the Record (As-Built) Plans. When a stormwater management basin is located outside limited access fencing, maintenance access should be provided from a separate public road where economically feasible. When maintenance access can only be provided from a limited access roadway, a locked gate shall be provided.

The Design-Builder may elect to purchase nutrient credits in accordance with IIM-LD-251 to satisfy the post-construction water quality reduction requirements for the Project. It is the responsibility of the Offeror to investigate the availability of nutrient credits and as such their purchase shall be at their risk. All costs associated with the purchase of the nutrient credits shall be included in the Offeror's Price Proposal. The use of such nutrient credits shall be identified in the Design-Builder's SWPPP. Where the Design-Builder elects to purchase nutrient credits, the Design-Builder shall complete Attachment 2.4, the Nutrient Credit Assignment Agreement and shall submit the agreement to VDOT for execution. The agreement is to be used for the transfer of the ownership of nutrient credits from the purchaser to VDOT. The agreement is to be completed with the appropriate project specific information and a copy of the bill of sale between the Nutrient Credit Bank and the purchaser is to be attached as Exhibit A. A copy of the executed agreement is to be included with the BMP information submitted with the VDPES Construction Permit Termination form LD-445D.

#### **2.7.4 Other Drainage Requirements**

All drainage facilities (existing and newly constructed) located within the Project limits that are disturbed or extended as a part of the project and are functional elements of the final design shall be rendered in a serviceable condition, free from debris and physical obstructions. Accumulated debris resulting from project construction activities shall be removed by the Design-Builder, as such maintaining the original line and grade, hydraulic capacity or construction of the facility prior to the final acceptance of the Project.

An assessment of the serviceable condition (cleanness) of the existing drainage structures located within the Project limits should be conducted prior to the commencement of any land disturbing activities by the Design-Builder and provided to the VDOT Project Manager. The Design-Builder shall not be responsible for cleaning out existing debris accumulations in drainage facilities. Preexisting debris will be addressed by VDOT.

#### **2.8 Traffic Control Devices**

The Project shall include all Traffic Control Devices (TCD), including temporary and permanent installation of the following: traffic signals, signage, pedestrian actuated warning devices/signals, guardrail, pavement markings/markers, and delineation. All TCD designed and installed under the Project shall be in accordance with standards and references in Part 2, Section 2.1. The Signing and Pavement Marking Plans, Transportation Management Plan (TMP),

including Temporary Traffic Control/ Public Information and Traffic Operations Plans are required from the Design-Builder for final approval by VDOT and shall be included as a planned work package. The Design-Builder shall comply with the Special Provision for Personnel Requirements for Work Zone Traffic Control and the Special Provision for Work Zone Traffic Control Management, Design-Build Projects.

All existing TCD impacted by the Project shall be modified, upgraded, or replaced by the Design-Builder to meet current VDOT standards.

### **2.8.1 Signs**

The Design-Builder shall be responsible for modifications to existing signs and sign structures, and furnishing and installing all required new temporary and permanent signs and structures. The final lines of sight and sight distances must be considered in the placement of all Project signage.

An existing sign inventory shall be completed prior to site demolition in accordance with the VDOT Traffic Engineering Design Manual. This existing information shall be submitted at the same time as the first plan submittal for proposed signing.

The Design-Builder shall utilize the conceptual overhead sign plan included in the RFP Conceptual Plans when designing the permanent sign plans for the Project. The overhead signs, as shown in the RFP Conceptual Plans, represent the minimum overhead signing requirements for the Project.

All signs and sign structures to be removed during the construction of the Project shall be disposed of by the Design-Builder. Temporary relocation of signs may be necessary as part of this Project and it is the responsibility of the Design-Builder to perform all the required sign relocations. All existing signs shall remain in service and be legible and visible to the travelling public until such time that the sign is either replaced or the message is no longer applicable. Once a sign message is no longer applicable, the sign shall be immediately removed or covered by the Design-Builder. All covered signs (temporary or permanent) shall be covered in accordance with Section 6F.04 of the Virginia Work Area Protection Manual.

The Design-Builder shall evaluate overhead signs that are being installed, modified, or relocated for lighting needs per VDOT IIM-TE-380 and provide lighting if required. The sign lighting shall be designed and constructed in accordance with VDOT Traffic Engineering Design Manual, the VDOT 2008 Road and Bridge Standards, the VDOT 2007 Road and Bridge Specifications, Section 705, and the MUTCD. All conductor/communication cables shall be in conduit and junction boxes; no direct burial cable allowed. Power cables and communication cables shall be in separate conduit systems.

#### **2.8.1.1 Limits of Project Signing**

Any signs impacted by the work of the Design-Builder within the Project limits shall be evaluated for adequacy per the standards in Part 2, Section 2.1. For any impacted sign structures,

the Design-Builder shall either replace the sign structure or repair the sign structure in accordance with the Sign Structure Inspection Reports provided in the RFP Information Package. Any signing on nearby roadways beyond the Project limits that require relocation, replacement, or modification due to the proposed design shall be the responsibility of the Design-Builder, including off-site route shield and trailblazer assemblies along all routes affected by the Project.

### **2.8.1.2 Signing Plan Requirements**

The signing plans shall be designed in accordance with VDOT's Traffic Engineering Design Manual and other references in Part 2, Section 2.1. The signing plans shall be prepared at a one (1) inch = fifty (50) feet scale when plotted full size at thirty-five (35) inches by twenty-three (23) inches. The signing plans shall show the proposed sign message, MUTCD or Virginia Supplement sign designation (if applicable), size and location of all signs. The structure and foundation types used for mounting sign shall be noted on the signing plans. These signing plans shall show the location and messages of all existing signs. All existing sign removals and relocations shall be shown on the signing plans. The signing plans shall show the locations of all pedestrian-actuated warning devices/signals, but the design sheets for these features shall be included in the traffic signal plans. The signing plans also shall include the location and type of delineation devices (including pavement markings, pavement messages/arrows, raised and recessed pavement markers, post- and barrier-mounted delineators).

### **2.8.1.3 Design of Sign Panels and Locations**

Proposed and replaced sign panels shall be in accordance with the VDOT 2007 Road and Bridge Specifications and other references in Part 2, Section 2.1. Overhead sign structures shall be located, designed, fabricated, and constructed in accordance with applicable standards and specifications. The Design-Builder shall coordinate all sign locations with all proposed and existing signing, landscaping, fencing, signals, utility, drainage, and all other roadside features to assure proper clearances and adequate sight distances. Sign sizes shall adhere to the latest edition of the FHWA Standard Highways Signs Book, the current edition of the MUTCD, the 2011 Virginia Supplement to the 2009 MUTCD, and all applicable Traffic Engineering Division Numbered memoranda. All Advance Guide Signs shall be mounted on overhead sign structures; Supplemental Guide Signs may be ground mounted. No guide signs shall be mounted on bridges.

The Design-Builder shall use standard VDOT sign structures for new and relocated signs located within the right-of-way. Ground-mounted VDOT sign structures on I-95 shall use Standard SSP-VIA or SSP-VA structures, unless otherwise approved by VDOT. For all non-standard signs, the Design-Builder shall use GUIDSIGN software to design the sign panels. The use of non-standard warning and regulatory signs shall require the approval of the Office of the State Traffic Engineer in accordance with section 1A.10, paragraph 25 of the Virginia Supplement to the MUTCD. The Design-Builder shall utilize the 2009 edition of the MUTCD, 2011 Virginia Supplement to the 2009 MUTCD, the FHWA's Standard Highway Signs including Pavement Markings and Standard Alphabets to design all non-standard signs that do not have a MUTCD or VDOT standard sign designation. The Clearview font shall not be allowed as an alternative lettering style for this Project. Overhead signage shall be illuminated

using luminaire retrieval system in accordance with VDOT 2008 Road and Bridge Standards. Use of a LED illumination system will not be permitted.

The Design-Builder shall coordinate the permanent location of Supplemental Guide Signs (SGS), Specific Travel Services (Logo) Signs, General Motorist Services Signs (GMSS), Tourist Oriented Directional Signs (TODS), and all other signs maintained by the Integrated Directional Signing Program (IDSP) with the IDSP Manager. All impacts to IDSP signs shall be reviewed and approved by the IDSP Manager before relocation, fabrication, and installation. Whenever possible, all proposed, relocated, or modified IDSP signs shall not be installed in sign assemblies with other non-IDSP signs. IDSP signs shall be installed in accordance with Standards STP-1, Standards SSP-VA structures and foundations, or Standards SSP-VIA structures and foundation as appropriate and as approved by the IDSP Manager. The Design-Builder is responsible for all costs associated with the removal and replacement of IDSP signs.

## **2.8.2 Signals**

Where provided in the RFP Conceptual Plans, the Design-Builder shall use the conceptual signal plan design to develop the final signal plans for the Project. All traffic signal plans for new or modified permanent signals shall be reviewed and approved by VDOT. All traffic signals shall be designed in accordance with the VDOT 2008 Road and Bridge Standards, the 2009 MUTCD, the 2011 Virginia Supplement to the 2009 MUTCD, and IIM-SB-90.2/IIM TE-382.1.

The traffic signals shall include, but not be limited to, foundations, traffic signal poles, signal heads, conduit system, circuitry, detection devices, signal cabinets and control equipment, and signal related signing. The work shall include the coordination with the utility company for power service and coordination with VDOT for traffic signal installation. The Design-Builder shall be responsible for furnishing and installing all signal related equipment.

The following intersections with Route 3 shall be full traffic-actuated signalized intersections:

- Ramp A (I-95 northbound on-Ramp) – New Signal
- Ramp B (I-95 southbound off-Ramp) – New Signal
- Carl D. Silver Parkway – Modify Existing Signal

### **2.8.2.1 Requirements for Traffic Signals**

- The Design-Builder shall prepare signal plans at a scale of 1" = 25'.
- VDOT will provide the existing signal timings and phasing plans to the Design-Builder for all existing signals in the corridor. Any signal timing adjustments necessary during construction shall be handled by the Design-Builder. Seventy-two (72) hours prior to any adjustments, VDOT shall be notified with the nature of the changes and when they are to be implemented. The Design-Builder shall notify

VDOT prior to any planned traffic shifts or signal timing changes associated with the maintenance of traffic during construction.

- The Design-Builder shall be responsible of retiming the corridor. The Design-Builder will provide VDOT's Timing Group a Synchro analysis software file with all related documentation as part of the retiming approval process. Subject to VDOT's review and approval, the final signal timings and phasing plans shall be developed and implemented by the Design-Builder. Timing information should be compatible with the controllers being used. The Design-Builder shall contact James Haegele at (540) 582-7531 to submit the signal timings
- Any existing signal conduit that remains after construction shall be capped and abandoned and all signal cables removed and disposed of by the Design-Builder. All abandoned junction boxes shall be removed and the area restored.
- All unused wires in the signal heads shall be capped individually with crimp type caps.
- The Design-Builder shall use PVC or high density PE conduit for all underground installations. All conduits that are installed using directional boring shall be high density PE conduit. All exposed conduit shall be constructed of galvanized rigid steel. The Design-Builder shall use a box design (i.e. cross all four legs of the intersection). The minimum conduit size shall be two (2) inch diameter. However in all roadway crossings the minimum conduit size shall be three (3) inch diameter and an additional spare two (2) inch diameter conduit shall be installed. All wiring for intersection lighting shall be installed in a separate two (2) inch conduit. All conduits shall have a fill capacity of less than twenty-five (25) percent.
- Junction boxes shall conform to VDOT 2008 Road and Bridge Standard JB-S2. However, the Design-Builder shall install at least one JB-S3 for the junction box nearest to the signal controller cabinet.
- The Design-Builder shall furnish and install all signal related signing in accordance with the MUTCD.
- The Design-Builder shall salvage and deliver any controller cabinets and cabinet equipment, preemption equipment and detection equipment no longer necessary as a result of this project to VDOT. Prior to beginning construction, the Design-Builder shall meet with VDOT to review all equipment that will be salvaged. All equipment salvaged by the Design-Builder shall be delivered in the same condition as it existed in the field prior to construction. All cable, conduit, junction boxes and all other equipment not salvaged that is no longer necessary as a result of this project shall be disposed of by the Design-Builder. The Design-Builder shall deliver salvaged equipment to VDOT Signal Asset Management Shop, 4920 Mudd Tavern Rd. Woodford, Va. 22581. The Design-Builder shall contact Eugene Moss at (804) 840-

7627 at least forty-eight (48) hours prior to intended delivery of the equipment to arrange the delivery dates and times.

- The new traffic signal installation shall not be placed into full color operation on Sundays, Mondays, Fridays, Saturdays, holidays, or days preceding or following holidays, unless otherwise directed by the VDOT Central Region Operations Regional Traffic Engineer.
- A minimum of fourteen (14) calendar days prior to the proposed activation date of the signals, the Design-Builder shall contact both, Willie Gordon at (540) 899-4138 and Eugene Moss (804) 840-7627, to provide the anticipated schedule and to schedule a pre-turn on field review/meeting. All signal related signs and pavement markings shall be installed and all signal timings completed and approved prior to activation of Flash Mode.
- Following a successful pre-turn on review to the satisfaction of the VDOT Central Region Operations Regional Traffic Engineer or his designee, the Design-Builder will be authorized to begin the turn-on process. If the review is unsuccessful, all deficiencies shall be corrected to the satisfaction of the VDOT Central Region Operations Regional Traffic Engineer or his designee before the Design-Builder will be authorized to begin the turn-on process.
- VDOT will issue a press release with the anticipated dates for activation of Flash Mode and conversion to Full Color operation.
- A minimum of twenty four (24) hours prior to beginning the Flash Mode operation of the signal, the Design-Builder shall install a PCMS on both approaches of the Main Line and/or a Major Roadway with a message consisting of Phase 1 [NEW / SIGNAL / AHEAD] and Phase 2 [ON OR / ABOUT / DAY]. The DAY referenced shall be the day of the week that the Design-Builder expects to begin FULL COLOR operation of the signal. The designation of Major or Minor Roadways shall be at the discretion of the VDOT Central Region Operations Regional Traffic Engineer or his designee. All PCMS messages and abbreviations shall comply with Revision 1 of the 2011 Virginia Work Area Protection Manual.
- A minimum of twenty four (24) hours following the placement and proper operation of the PCMS(s), the Design-Builder may then energize the signal and place it in Flash Mode. The Design-Builder may only begin the Flash Mode operation of the signal on a Monday or a Tuesday, excluding any calendar week which includes a holiday, as defined in Section 108.02(b) of the VDOT 2007 Road and Bridge Specifications. Once the signal is operating in Flash Mode, the Design-Builder shall ensure that the signal continuously operates in Flash Mode for between 36 and 48 hours.

- On the scheduled day, following 36 to 48 hours of continuous Flash Mode operation, the Design-Builder shall activate Full Color operation of the signal. Activation of Full Color operation may only occur on a Wednesday or a Thursday, determined by the time and day of the beginning of Flash Mode operation, excluding any calendar week which includes a holiday, as defined in Section 108.02(b) of the VDOT 2007 Road and Bridge Specifications. At the commencement of Full Color operation, the PCMS(s) shall have a message of Phase 1 [SIGNAL / AHEAD] and Phase 2 [PREPARE / TO / STOP]. The PCMS(s) shall remain in place for a minimum of forty eight (48) hours following activation of Full Color operation. All PCMS messages and abbreviations shall comply with Revision 1 of the 2011 Virginia Work Area Protection Manual.
- Yellow aluminum signal head assemblies with twelve (12) inch LED lenses and solid aluminum backplates shall be provided on the Project.
- The traffic signal hanger assemblies (VDOT Standard SM-3) and traffic sign hanger assemblies (VDOT Standard SMD-2) to be installed on mast arms shall be stainless steel, 7x19, type 304 in accordance with Federal Specification RR-W-410E with a breaking load of 3,700 pounds. Ends shall be swaged to withstand a 4,200 pound pull.
- All signal heads should be aligned in the center of each lane. A dedicated signal head shall be provided for each lane.
- A VDOT Standard TS-2 signal cabinet shall be installed on a VDOT Standard CF-4 Foundation.
- The Design-Builder shall determine the appropriate type of left turn phasing to be used at each intersection. The phasing recommendations shall be submitted to VDOT for approval. The recommendations shall be based on analyses developed by the Design-Builder in accordance with the VDOT document Guidance for Determination and Documentation of Left Turn Phasing Mode, Version 1.0, February 2015.
- Right turn overlaps may be used when appropriate. If used the conflicting u-turn movement shall be prohibited or other type of regulatory sign installed to mitigate the conflict. All overlaps shall be approved by VDOT.
- System Detection Loops are required to be installed in each through lane of the mainline.
- The intersections shall be interconnected with traffic signal communications established with spread spectrum radio (SSR) or wireless Digi Modems.

- Intelligent Transportation System (ITS) cabinets shall be installed on a VDOT Standard CF-3 Foundation at each signal and camera location. The ITS cabinets shall be connected to the signal cabinets utilizing the 2-2" spare conduits in the CF-4 & CF-3 foundations. The Traffic Signal communications subsystem shall be operated and controlled from the VDOT Central Region Operations Traffic Operations Center (CRO TOC). All VDOT Traffic Signal Controllers and communications subsystems shall be connected to VDOT Resource Share Fiber assets within the limits of construction for the Project.
- All activities and requirements pertaining to Traffic Signal communications Devices and subsystems shall be coordinated with and approved by the VDOT Central Region Operations Regional Traffic Operations Manager (RTOM) or his Designee. These activities are to include but are not limited to Fiber-optic equipment approval, Communication Device Placement, determining requirements for temporary Traffic Signal equipment, allowable work hours, work zone activities, work zone conflicts, lane closures, duration of time in which Traffic Signal devices are permitted to be in a non-operational state, all procedures for utility locate requests throughout the Project limits, traffic control plans, Temporary traffic Patterns, Traffic Signal field acceptance Testing requirements and final Traffic Signal device acceptance requirements. Communication with all Traffic Signal systems from the CRO TOC shall be the responsibility of the Design-Builder within the Project limits and shall be operational at all times during the construction of the Project including the use of temporary Traffic Signals. The methods of secure communication shall be submitted at least thirty (30) days before prior to active use on the Project to VDOT for approval by the CRO RTOM or his designee.
- All materials proposed for use with or for Traffic Signal Communication devices shall be submitted to the VDOT Project Manager using VDOT C-25 forms for review and approval by the CRO RTOM or his designee. The VDOT 2008 Road and Bridge Standards shall be used as a guideline for Traffic Signal equipment selection and installation practices however, the CRO RTOM or his designee shall have final approval for the Design-Builder's proposed Traffic Signal Communication device selection, installation and final acceptance requirements based on regional system integration requirements. The Design-Builder shall submit Electronic Traffic Signal Communication Plan Sheets to VDOT for approval by the CRO RTOM or his designee prior to project construction commencement. The CRO RTOM shall have final authority in resolving all disputes related to CRO Traffic Signal Communication Devices, Traffic Signal Communication Plans, Temporary Traffic Plans, Traffic Signal Communication Fiber or Traffic Signal Communication Maintenance activities.
- The Design-Builder shall transmit Traffic Signal Communication data in a format compatible with the current VDOT Controlling Software. The Design-Builder shall be responsible for all related modifications and any changes that are necessary to the existing network or network devices for interoperability with the overall system. The

Design-Builder shall furnish a table of devices needing IP addresses by location (latitude and longitude) and device (ports used). VDOT shall integrate all devices at the CRO TOC. The Design-Builder shall furnish, install and integrate any additional equipment software, documentation, manuals, and software drivers necessary for functionality.

- The Design-Builder shall meet with VDOT at least thirty (30) days before beginning system integration or fiber splicing activities. The purpose of these meetings shall be to verify the Design-Builder's Traffic Signal Communication and integration plans by reviewing site survey information, splicing diagrams, IP addressing schemes, troubleshooting issues, and other design issues. In addition, at these meetings the Design-Builder shall identify any concerns regarding the integration and provide detailed information on how such concerns shall be addressed and/or minimized. The Design-Builder shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the design which includes, but is not limited to: technical, functional, and operational requirements; Traffic Signal Communications protocols; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other Traffic Signal Communication subsystems. System integration meetings shall be held on mutually agreeable dates. All action items resulting from the system integration meeting shall be satisfactorily addressed by the Design-Builder and reviewed and approved by VDOT.
- Upon completion of construction, the Design-Builder shall provide VDOT a comprehensive Traffic Signal Communication system design report in Microstation V8i format and PDF format on a Windows compatible CD/DVD. The report shall be a record set of all As-Built Record Plans verifying the as-built conditions for all installed and constructed Traffic Signal Communication systems including but not limited to final Traffic Signal Communication locations, Fiber-optic conduit and junction box locations, all power conduit and junction box locations, Fiber splice plans, Device Rack Elevation plans. The report shall include all necessary supporting data in accordance with VDOT criteria as specified by the CRO TROM or his designee.
- The Design-Builder shall submit to VDOT, as a separable subpart of the As-Built Record Plans, Five (5) certified 11"x17" copies of As-Built Record Plans verifying the as-built conditions for all installed and constructed Traffic Signal Communication systems.
- The Design-Builder shall submit for VDOT approval written documentation that all personnel involved in any configuration efforts of the Traffic Signal Communications subsystems have had previous experience in the configuration of at least two intelligent transportation and or equivalent Traffic Signal Communications subsystems that have been in satisfactory operation for at least one year. The

experience shall include Traffic Signal Controllers, Cameras, IP Network Equipment, DMS, CCTV, MVDS, and all other system components that comprise the existing and new system being installed on this Project. Submission of the written documentation shall be made four (4) weeks prior to installation of the Traffic Signal Communications subsystems.

- The Design-Builder shall furnish Street Name Signs and install them on the mast arm. Street name signs shall be designed in accordance with the 2011 Virginia Supplement to the MUTCD.
- Fourteen (14) AWG – seven (7) conductor wires shall be provided to each five (5) section traffic signal head. Fourteen (14) AWG – seven (7) conductor wires shall be provided to each three (3) & four (4) section traffic signal heads.
- The Design-Builder shall furnish and install vehicle detection at the locations listed in the Table 2.8. All loop detectors shall have their own amplifier channel. All loop detectors shall have an individual fourteen (14) AWG – two (2) conductor shielded wire. Prior to installation of any loop detectors, the Design-Builder shall contact Eugene Moss (804-840-7627). Stop Bar – Six (6) foot by fifty (50) foot inductive loops shall be installed for the all left turn lanes and for all lanes on the side street approaches.
- Generally, all stop bar loops shall be installed five (5) feet in front of the stop bar.
- Two six (6) foot by six (6) foot inductive loop for extension/dilemma zone detection shall be installed in each direction and in each lane. The Design-Builder shall follow the extension detector placement of the extension/dilemma zone detectors provided in Table 2.8.

**Table 2.8**

<b>Extension Detector Placement</b>							
Speed	Speed	1st Detector	Time to Stop Bar	2nd Detector	Time to Stop Bar	Time Difference	Minimum Passage Time
(MPH)	(FPS)	(Feet)	(Sec)	(Feet)	(Sec)	(Sec)	(Sec)
35	51.33	255	4.97	405	7.89	2.92	3
40	58.67	285	4.86	445	7.59	2.73	2.8
45	66	330	5	505	7.65	2.65	2.7
50	73.33	355	4.84	535	7.3	2.45	2.5
55	80.67	390	4.83	540	6.69	1.86	1.9

Notes:

- 1) 6' x 6' Loop Detectors should be installed in each approach lane.
- 2) The 1st Detector location is based on Table 13-6 - Dilemma Zone Boundaries for Automobiles in the ITE Traffic Engineering Handbook (5th Ed.).

- For connection of loop wire to the loop lead-in wires, the Design-Builder shall utilize splice kits that shall be packaged containing materials from a single supplier and shall consist of a plastic molded body with a two-part epoxy that provides a water-resistant seal and insulation for the conductor cables for at least 600 volts. All splices shall be located in a junction box.
- SE-5 (Metered) electrical service shall be installed at each signal. The service type will depend on the type of available power source and coordinate with the local electrical company. The Design Builder shall provide a circuit breaker box with each electrical service installed.
- The Design-Builder shall design and construct an intersection lighting system for all Signalized Intersections. The lighting systems shall be designed in accordance with VDOT's Traffic Engineering Design Manual, as well as the American National Standard Practice for Roadway Lighting Publication IES RP-8-14. The lighting design shall consist of furnishing and installing LED luminaires on signal poles and electrical cables for the intersection lighting shall not pass through the signal cabinet. The Design-Builder's lighting designer shall install conduit from the Electrical Service to the nearest junction box for intersection lighting. The lighting systems shall be constructed in accordance with the VDOT 2007 Road and Bridge specifications, the VDOT 2008 Road and Bridge Standards and the requirements of the National Electric Code (NEC).
- All approaches shall be monitored. The use of GPS preemption shall be considered at all intersections.
- The Design-Builder shall notify Mr. Eugene Moss (804) 840-7627 at least seven (7) days prior to working on the existing signal equipment or beginning any construction of signal work. At this time, the Design-Builder shall provide a primary contact with phone number and a secondary contact with phone number for signal maintenance.
- VDOT's Signal Asset Management section will perform a final inspection once all signal work has been completed. All punch-list items shall be address before the start of the 30 day burn test. Once all of the punch-list items have been satisfied by VDOT, the Design-Builder shall start the 30 day burn test. Following a successful 30 day burn test, VDOT will assume the maintenance and operations of the signal.
- An Uninterruptable Power Supply (UPS) is required for the signal and shall conform to the requirements set forth in the Special Provision for Uninterruptible Power Supply, October 27, 2014. The UPS cabinet shall be capable of connecting to a generator and installed next to the signal cabinet on the VDOT Standard CF-4 foundation.
- All signals shall be mounted on mast arms. Span wire mounted signals will not be permitted.

- VDOT's installation plans for the closed circuit television (CCTV) cameras installed adjacent to the lanes of I-95 have been included in the RFP Information Package. Impacts to the existing CCTV cameras along the northbound lanes of I-95 shall be avoided by all construction activities. CCTV cameras adjacent to the southbound lanes of I-95 impacted by this project shall be relocated by the Design-Builder; this work shall include the relocation of the camera, pole, foundation and all associated work elements and shall be coordinated with Dustin Alwood, P.E. (571-350-2010) of VDOT's Northern Region Operations. The Design Builder shall ensure that the camera remains at an uninterrupted and equivalent level of service throughout the duration of the Project. The Design Builder shall ensure that the CCTV camera will function with the same amount, or better, view shed of I-95 as the existing condition.
- The Design-Builder shall be responsible for all ITS devices installed and/or modified by the Project until final acceptance by VDOT. Prompt response is required to repair any damage caused by the Design-Builder. In the event the repair is not completed two (2) hours prior to the next traffic peak, VDOT will use its maintenance Contractor to restore critical systems and recover the costs for the work from the Design-Builder by means of a deductive work order.

### **2.8.3 Closed Circuit Television (CCTV) Cameras**

The Design-Builder shall be responsible for the installation of a functional CCTV subsystem in accordance with the criteria specified below and the other requirements of the Contract Documents.

The CCTV subsystem shall have the following video coverage criteria:

- 100% video coverage of all lanes of the I-95 mainline and ramps throughout the Project limits.
- 100% video coverage of interchanges and ramps throughout the Project limits.
- 100% coverage shall be defined as video coverage of all roadway, shoulder, guardrail, median, clear zone areas, sign structures and supports, and ITS cabinets located within the Project limits.
- All CCTV cameras shall be connected to VDOT Resource Share Fiber assets within the limits of construction for the Project.

The CCTV subsystem shall include, at a minimum, the deployment of the following field subsystem components:

- CCTV camera assembly
- CCTV support structure (pole type, foundation, sign truss, etc.)
- Pole mounted cabinet (where applicable)
- Video encoder (where applicable)

- Surge protection
- Uninterruptible Power Supply

The Design-Builder shall design, construct, and integrate the CCTV subsystem into the VDOT TOC Systems and Software. The design shall include all required supporting hardware and software necessary for full integration to the specified tie-in location of the network as defined by the CRO RTOM or his designee. The Design-Builder shall provide reasonable assistance to VDOT to ensure functionality of the CCTV subsystem and all ancillary components. The connection is subject to VDOT's reasonable approval.

The design shall include:

- Final CCTV pole locations
- Support structure design
- Pole-mounted CCTV cabinet design
- Utility coordination
- Power service
- Line-of-sight assessments

The CCTV subsystem shall be operated and controlled from the CRO TOC. The CCTV shall pan-tilt-zoom (PTZ) via the current Controlling Software. The CCTV cameras shall feature built-in electronic image stabilization. The CCTV cameras shall be wired for and have all firmware necessary to fully integrate into VDOT current Controlling Software. CCTV poles shall be installed in areas with sufficient room for off-highway staging to allow future maintenance without lane closures.

All activities and requirements pertaining to the ITS Devices shall be coordinated with and approved by the RTOM or his Designee. These activities are to include but are not limited to ITS equipment approval, ITS Device Placement, determining requirements for temporary ITS equipment, allowable work hours, work zone activities, work zone conflicts, lane closures, duration of time in which ITS devices are permitted to be in a non-operational state, all procedures for utility locate requests throughout the Project Limits, traffic control plans, ITS Device field acceptance Testing requirements and final ITS device acceptance requirements.

All materials proposed for use with or for ITS devices shall be submitted to VDOT using VDOT C-25 forms for approval by the RTOM or his designee. The VDOT 2008 Road and Bridge Standards shall be used as a guideline for ITS equipment selection and installation practices however, the RTOM or his designee shall final approval for the Design-Builder's proposed ITS device selection, installation and final acceptance requirements based on regional system integration requirements. The Design-Builder shall submit Electronic ITS Device Plan Sheets to VDOT for approval by the RTOM or his designee prior to project construction commencement. The Design-Builder shall submit Electronic ITS Fiber Plan Sheets to VDOT for approval by the RTOM or his designee prior to project construction commencement. The RTOM shall have final authority in resolving all disputes related to ITS Devices, ITS Plans, ITS Fiber or ITS Maintenance activities.

All ITS equipment supplied by the Design-Builder, with the exception of CCTV, shall be compatible with the latest NTCIP standards and the current TOC Controlling Software. The Design-Builder shall transmit data in a format compatible with the current Controlling Software. The Design-Builder shall be responsible for all related modifications and any changes that are necessary to the existing network or network devices for interoperability with the overall system. The Design-Builder shall furnish a table of devices needing IPs by location (latitude and longitude) and device (ports used). VDOT shall integrate all devices at the CRO TOC. The Design-Builder shall furnish, install and integrate any additional equipment software, documentation, manuals, and software drivers necessary for functionality.

The Design-Builder shall meet with VDOT at least thirty (30) days before beginning system integration or fiber splicing activities. The purpose of these meetings shall be to verify the Design-Builder's ITS and integration plans by reviewing site survey information, splicing diagrams, IP addressing schemes, troubleshooting issues, and other design issues. In addition, at these meetings the Design-Builder shall identify any concerns regarding the integration and provide detailed information on how such concerns shall be addressed and/or minimized. The Design-Builder shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the design which includes, but is not limited to: technical, functional, and operational requirements; ITS/communications; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other ITS subsystems. System integration meetings shall be held on mutually agreeable dates. All action items resulting from the system integration meeting shall be satisfactorily addressed by the Design-Builder and reviewed and approved by VDOT.

Upon completion of construction, the Design-Builder shall provide VDOT a comprehensive ITS system design report in Microstation V8i format and PDF format on a Microsoft Windows compatible CD/DVD. The report shall be a record set of all As-Built Record Plans verifying the as-built conditions for all installed and constructed ITS systems including but not limited to final ITS locations, Fiber-optic conduit and junction box locations, all power conduit and junction box locations, Fiber splice plans, Device Rack Elevation plans. The report shall include all necessary supporting data in accordance with VDOT criteria as specified by the CRO TROM or his designee.

The Design-Builder shall submit to VDOT, as a separable subpart of the As-Built Record Plans, Five (5) certified 11"x17" copies of As-Built Record Plans verifying the as-built conditions for all installed and constructed ITS systems.

The Design-Builder shall submit for VDOT approval written documentation that all personnel involved in any configuration efforts of the ITS have had previous experience in the configuration of at least two intelligent transportation systems that have been in satisfactory operation for at least one year. The experience shall include cameras, IP network equipment, DMS, CCTV, MVDS, and all other system components that comprise the existing and new system being installed on the Project. Submission of the written documentation shall be made four (4) weeks prior to installation of the ITS equipment.

## **2.8.4 Guardrail/Barrier**

The Design-Builder shall ensure that the clear zone within the Project limits is free from hazards and fixed objects. In the event that removal or relocation of hazard and fixed objects from the clear zone is not feasible, the Design-Builder shall design and install an approved guardrail barrier system and end treatments, where appropriate, for protection in accordance with NCHRP 350 or AASHTO Manual for Assessing Safety Hardware, First Edition. The same clear zone requirement applies to existing conditions affected by this Project where guardrail upgrade will be required. Existing sub-standard guardrail within the Project limits must be upgraded by the Design-Builder to meet current standards per Traffic Engineering Memorandum 366 and the VDOT Road Design Manual, Appendix I. This may require the upgrade of guardrail to the nearest logical termination point beyond the current Project limits.

Fourteen (14) days prior to installation of guardrail, the Design-Builder shall stake out proposed guardrail and shall also request VDOT field verification of the proposed layout. Accompanied by the Design-Builder, a VDOT Regional Traffic Operations representative will inspect the locations and advise on any necessary adjustments. All guardrail variations from the Released for Construction Plans must be incorporated into the plans via a formal plan revision. Additionally, the Design-Builder shall provide a copy of the manufacturer's recommendations for installation of all guardrail terminals to the VDOT Project Manager before the installation of any guardrail end treatment of terminating device.

Asphalt paving under guardrail shall be applied in accordance with VDOT Road and Bridge Standard MC-4 in all areas where guardrail is required.

## **2.8.5 Pavement Markings/Markers**

The Design-Builder shall include all required pavement markings, markers, and delineators. Pavement markings, markers, and delineators shall conform to the requirements of the MUTCD, the 2011 Virginia Supplement to the 2009 MUTCD, and applicable special provisions (included in the RFP Information Package). All pavement marking plans shall be in accordance with VDOT Traffic Engineering Design Manual, dated 2011.

Permanent pavement markings on I-95 and the interstate ramps shall be Type B, Class VI, patterned preformed tape rolled in during paving operations. All other pavement markings shall be Type B, Class I Thermoplastic.

All existing pavement marking and markers that do not conform to the final traffic patterns shall be removed via mill and overlay in accordance with Part 2, Section 2.6.1 and the standard and specifications listed in Part 2, Section 2.1. This work shall include Carl D. Silver Parkway markings which are in conflict between Route 3 and Trade Street.

Where sidewalk or shared use path crosses a side road or other signalized vehicle approach at a signalized intersection, the crosswalk shall be marked.

All new lane markings, edge lines, and center lines along Route 3, I-95, and the interstate ramps shall be supplemented with snow-plowable raised pavement markers. All permanent snow-plowable raised pavement markers shall be installed in accordance with VDOT Standard PM-8 and/or PM-9. Damaged existing snow-plowable raised pavement markers along Route 3 and other roadway, excluding the existing general purpose lanes of I-95 shall be replaced in accordance with VDOT Standard PM-8 and/or PM-9.

The Design-Builder shall modify the existing pavement marking messages on southbound Carl D. Silver Parkway between Route 3 and Trade Street assigning traffic to the appropriate lanes for I-95 northbound and southbound and Route 3 eastbound based on the new traffic pattern resulting from the Project. The new pavement marking messages shall utilize shield symbols per figure 3B-25 of the MUTCD.

## **2.9 Transportation Management Plan**

The Design-Builder shall prepare a Transportation Management Plan (TMP) in accordance with I&IM-241/TE-351 for all proposed work associated with the Project. The TMP shall document how traffic shall be managed during the construction of the Project. The TMP for I-95 is classified as a Type C, Category V and for all other roadways a Type B, Category IV. The Design-Builder shall coordinate all work in accordance with the TMP. The phases in the Design-Builder's sequence of construction shall be followed unless the Design-Builder submits and secures VDOT's approval for a sequence which will both expedite construction while lessening the effect of such construction upon the traveling public. The TMP shall incorporate and address the elements provided in Part 2, Section 2.9.

### **2.9.1 Maintenance of Traffic**

The Design-Builder's TMP shall include a Maintenance of Traffic (MOT) Plan detailing all phases of work, proposed lane closures, maintenance of traffic through the work area, and all construction accesses for approval by VDOT's Project Manager. This plan shall also address safe and efficient operation of adjacent public transportation facilities and State Highways. The plan shall also include coordination with local agencies and other contractors performing work in the vicinity of I-95, Route 3, and Carl D. Silver Parkway. This plan shall reflect the noted Scope of Work and all applicable VDOT Standards and Specifications regarding time of work. All existing pedestrian access shall be maintained. The TMP shall also accommodate safe and efficient snow removal operations and ensure proper drainage during all phases of construction. Access must be maintained to all businesses, residential communities, and private entrances at all times. The phases in the Design-Builder's suggested sequence of construction that accompany an approved work package shall be followed unless the Design-Builder submits and secures VDOT approval for a sequence which will both expedite construction while lessening the effect of such construction upon the traveling public.

If additional traffic counts are required, it will be the responsibility of the Design-Builder to collect such data. The Design-Builder shall note that any proposed detour utilizing local neighborhood streets that are maintained by developers or streets that are maintained by the City

of Fredericksburg will require the coordination with the developer/applicable locality, as appropriate and are subject to the terms and conditions of VDOT's approval.

All temporary traffic signal plans shall be submitted to VDOT for review and approval prior to construction phase, detour or traffic shift. Construction signs and temporary pavement markings shall be installed, maintained, adjusted, and removed by the Design-Builder throughout the duration of the Project.

All entrances, intersections or pedestrian access points/routes that will be affected by the work zone or by the traffic control devices will be maintained or an acceptable alternate must be provided by the Design-Builder. Bicycle and pedestrian accommodations shall be in compliance with Virginia's Work Zone Pedestrian and Bicycle Guidance Document.

If Traffic Barrier Service Concrete (TBSC) is warranted based on the criteria for determining the application of barrier per the 2011 Work Area Protection Manual and a completed Engineering and Traffic Investigation-Work Zone Channelization/Barrier Analysis, the guidelines provided in the VDOT Roadway Design Manual and IIM-LD-93.16 shall be utilized. Barrier shall be installed a minimum of two (2) feet offset from the nearest travel lane when utilized along I-95 or interstate ramps.

## **2.9.2 Incident Management Plan**

Any field work performed which impacts travel lanes or shoulders, including but not limited to construction, geotechnical investigations, and survey, shall have an incident management plan developed and approved by VDOT prior to the start of field work.

During incidents that close one or more lanes on I-95, all lane closures shall be removed and all travel lanes fully opened to traffic along Route 3, and in the same direction as the incident on I-95, and the interchange ramps. An incident shall be defined as any condition (including Design-Builder's work operations) that cause a traffic queue extending greater than five (5) miles on I-95 during the day, greater than six (6) miles on I-95 during the night, or one (1) mile on Route 3. The queue length shall be measured starting at the beginning of the physical work zone.

As part of the TMP, the Design-Builder shall submit an Incident Management Plan (IMP) for review and approval by VDOT. The intent of the IMP is to be prepared for incidents along the construction corridor. The Design-Builder shall coordinate with appropriate VDOT, EMS, and stakeholders during the development of the plan and hold a stakeholder meeting to brief them on the IMP. For incidents along I-95 and all other routes, the Design-Builder shall coordinate with the VDOT Northern Virginia Traffic Operations Center ("TOC"). The IMP shall address at a minimum the following with respect to incident management:

- 24/7 point of contact for emergency notification of incident by TOC;
- Emergency detour routes and sign layout plans in addition to TMP signage;
- Agency and stakeholder Responsibilities Matrix/Checklist;

- Pre-staged detour equipment and material needs (i.e.; barrels, portable changeable message boards, signage, etc.) as defined in the sign layout plans that shall be provided by the Design-Builder;
- Coordination with the TOC;
- Coordination with 1st responders and stakeholders;
- Law Enforcement, Fire, and Rescue access to the road network during incidents;
- Pre-planned Messages for various types of incidents for the PCMS; and
- Contact list for appropriate stakeholder response personnel.

The Design-Builder shall coordinate with VDOT and localities to determine allowable alternate routes and detours. The Design-Builder shall be responsible for all detour signage and traffic control measures required. As necessary, this work shall extend beyond the defined Project limits. Proposed changes to signal timing for any signals on detour routes shall be coordinated with the respective signal owner.

Upon notification from the TOC of an incident requiring a detour, the Design-Builder shall establish the detour within one (1) hour from 5:00 AM to 9:00 PM daily on I-95. The Design-Builder shall establish the detour within two (2) hours during all other times not referenced on I-95.

The Design-Builder shall coordinate with the TOC. Incident times shall be based on those recorded at the VDOT Traffic Operations Center Traffic Management System.

### **2.9.3 Lane and Road Closure Restrictions**

VDOT acknowledges that temporary lane closures may occasionally be required; however, temporary lane closures are only allowed at the sole discretion of VDOT when necessary to ensure the safety of the traveling public and no practical alternative exists. Offeror's Technical and Price Proposals shall be developed to meet the required lane, shoulder, or road closure restrictions specified in this section. Any deviations from these allowable lane closures may render an Offeror's Proposal non-responsive. Long term detours will not be permitted as a part of the Project.

Lane, shoulder, or road closures shall be detailed in the Design-Builder's Transportation Management Plan. Anticipated and proposed temporary lane and/or shoulder closures shall be reviewed and approved by VDOT. No work, including the installation or removal of channelizing devices or any other traffic control devices, may occupy a travel lane outside of the allowable lane closure times. Operations not within a travel lane (such as installing or removing signs) may be done outside of the allowable lane closure times in compliance with the 2011 Work Area Protection Manual, but all travel lanes shall remain open to traffic until the allowable lane closure time commences. The Design-Builder shall restore all lanes of traffic per the times specified in this section. Restoration of traffic shall mean the completion of all construction work, the removal of all traffic control devices, signs, workers, materials, and equipment from the closed travel lanes.

In addition to the Holidays set forth in Part 5, Section 108.02 (Limitation of Operations), the following shall also be considered Holidays, and therefore shall be subject to the same restrictions:

- Martin Luther King Jr. Day
- Lee Jackson Day
- President's Day
- September 11th
- Columbus Day
- Veteran's Day
- Thanksgiving: from noon on the Wednesday proceeding Thanksgiving Day until noon on the Monday following Thanksgiving day
- Peak Shopping Season: Every day and night from Thanksgiving (as defined above) to New Year's Day (Peak Shopping Season holiday restrictions only apply to complete ramp closures)

The Design-Builder may completely close ramps A and B in order to complete work during the hours permitted in the Allowable Lane Closure Times tables below and in accordance with the Holiday restriction of operations. Only one ramp may be closed at any given time and a detour plan shall be submitted and approved by VDOT. Closure of any ramp other than A or B will not be permitted at any time.

Interstate median crossover closures will not be permitted. The Design-Builder shall maintain emergency and authorized vehicle access to the crossovers at all times.

**Allowable Lane and Shoulder Closure Times:**

<b>Interstate 95 (Allowable Lane Closure Times – September to April)</b>			
<b>Northbound I-95 and Ramp A</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 4:30 AM 9:30 AM to 3:30 PM** 9:00 PM to 11:59 PM **Complete Ramp closures not permitted	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 3:00 AM
Friday	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 4:30 AM	12:00 AM to 3:00 AM
Saturday to Sunday	12:00 AM to 7:00 AM	Not Permitted	Not Permitted
<b>Southbound I-95 and Ramp B</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 7:00 AM 7:00 AM to 10:00AM** 9:00 PM to 11:59 PM **Complete Ramp closures not permitted	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 3:00 AM
Friday	12:00 AM to 6:00 AM 10:00 PM to 11:59 PM	12:00 AM to 4:30 AM	12:00 AM to 3:00 AM
Saturday to Sunday	12:00 AM to 7:00 AM	Not Permitted	Not Permitted

<b>Interstate 95 (Allowable Lane Closure Times – May to August)</b>			
<b>Northbound I-95 and Ramp A</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 4:30 AM 9:00 PM to 11:59 PM	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 3:00 AM
Friday	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 4:30 AM	12:00 AM to 3:00 AM
Saturday to Sunday	12:00 AM to 5:00 AM	Not Permitted	Not Permitted
<b>Southbound I-95 and Ramp B</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 7:00 AM 9:00 PM to 11:59 PM	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 3:00 AM
Friday	12:00 AM to 4:30 AM 10:00 PM to 11:59 PM	12:00 AM to 4:30 AM	12:00 AM to 3:00 AM
Saturday to Sunday	12:00 AM to 5:00 AM	Not Permitted	Not Permitted

<b>Route 3/Carl D. Silver Parkway (Allowable Lane Closure Times)</b>			
<b>Eastbound Route 3</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 4:00 AM 9:00 PM to 11:59 PM	12:00 AM to 4:30 AM 11:00 PM to 11:59 PM	12:00 AM to 4:00 AM
Friday	12:00 AM to 4:00 AM 10:00 PM to 11:59 PM	12:00 AM to 4:00 AM 11:00 PM to 11:59 PM	12:00 AM to 4:00 AM
Saturday to Sunday	12:00 AM to 9:00 AM 10:00 PM to 11:59 PM	12:00 AM to 9:00 AM 11:00 PM to 11:59 PM	12:00 AM to 4:00 AM
<b>Westbound Route 3 and Carl D. Silver Parkway (Both Directions)</b>			
<b>Day</b>	<b>Single Lane Closures, Shoulder Closures, Complete Ramp Closures</b>	<b>Two Lane Closure</b>	<b>Complete Mainline Closure 30 Minute Duration (Maximum)</b>
Monday to Thursday	12:00 AM to 9:00 AM 10:00 PM to 11:59 PM	12:00 AM to 7:00 AM	12:00 AM to 4:30 AM
Friday	12:00 AM to 9:00 AM 10:00 PM to 11:59 PM	12:00 AM to 7:00 AM	12:00 AM to 4:30 AM
Saturday to Sunday	12:00 AM to 9:00 AM 10:00 PM to 11:59 PM	12:00 AM to 9:00 AM 11:00 PM to 11:59 PM	12:00 AM to 4:00 AM

<b>Flagging of Route 3</b>		
<b>Flagging of All Traffic Signals</b>		
<b>Day</b>	<b>Signal Flagging</b>	<b>Complete Closure 30 Minute Duration (Maximum)</b>
Monday to Friday	12:00 AM to 4:00 AM 11:00 PM to 11:59 PM	Not Permitted
Saturday to Sunday	12:00 AM to 7:00 AM 11:00 PM to 11:59 PM	Not Permitted

<b>All Other Roadways (Allowable Lane Closure Times)</b>		
<b>Day</b>	<b>Lane Closure</b>	<b>Complete Closure 30 Minute Duration (Maximum)</b>
Monday to Friday	12:00 AM to 6:00 AM 9:00 AM to 3:30 PM 7:00 PM to 11:59 PM	Not Permitted
Saturday to Sunday	Not Permitted	Not Permitted

Note: The 15 and 30 minute blocks for complete road closures must be separated by 30 minutes to allow traffic to move through/clear the work zone.

These allowable hours shall be applicable to both stationary and mobile lane closures, as well as shoulder closures along I-95. VDOT will consider changes to the allowable lane closure hours only if the Design-Builder can demonstrate why the proposed work cannot be completed within the contract allowable lane closure hours. All requests shall include an assessment of the work zone traffic impacts using a sketch planning traffic analysis tool and/or an operational level traffic analysis software program as appropriate for approval by VDOT at least thirty (30) days prior to the operation impacting the lanes.

Detour plans will be required for any proposed temporary total road closures exceeding twenty (20) minutes, and are subject to VDOT review and approval as part of the Design-Builder's TMP. In addition to addressing the traffic analysis requirements in IIM-LD-241(TED-351), the Design-Builder shall demonstrate in its detour plan(s) efforts to minimize impacts to the community (including noise, access, additional travel time, etc.), and address geometry, safety (including accident analysis along the detour route), capacity, and existing roadway conditions.

Total closures of any roadway or intersection, and 2-lane closures of I-95 for such work as installation and removal of overhead sign structures, demolition of existing bridges, erection of bridge members or with substantiation of need by the Design-Builder will require:

- At minimum, four (4) weeks advance notice to VDOT (this shall include the District Construction Engineer, Regional Operations Director, and District Communications Manager). This advance notice will allow the Design-Builder and VDOT to coordinate on a public outreach campaign and/or advertising to reach affected motorists and target audiences. Alternate dates can be advertised in the event of inclement weather.
- The Design-Builder will be responsible for any costs associated with Internet, mobile, print and/or radio advertising to alert motorists and commercial traffic to the lane closures.

- The Design-Builder will be responsible for communicating with the TOC and neighboring states of Maryland and North Carolina to use variable message boards to encourage through travelers to consider taking an alternate route instead of I-95.
- If a total closure greater than thirty (30) minutes is required, it shall be approved separately with full Maintenance of Traffic and Traffic Management Plans.

The Design-Builder shall submit all lane and/or shoulder closure requests to the TOC and VDOT Project Manager for coordination purposes (for determination of conflicts with other projects, for instance) at least seven (7) days in advance of the proposed lane and/or shoulder closure and no later than close of business Wednesday the week prior to closure, stating the location, purpose, date, time, and duration of the closure. The Design-Builder shall confirm at least twenty-four (24) hours before any scheduled lane and/or shoulder closure and shall include a written reiteration of the proposed tasks and a listing of materials, labor, and equipment to be utilized, in order for TOC to post the information on the VDOT website and VA511 system.

The Design-Builder is responsible for providing advance notification via variable message and required static signing for lane and/or shoulder and complete road closures in accordance with the 2011 Virginia Work Area Protection Manual. Once a closing is in place, work shall commence immediately and shall progress on a continuous basis to completion or to a designated time.

If the Design-Builder is unable to remove the lane and/or shoulder closure by the stipulated time the Design-Builder will not be allowed further lane closures until the reasons for the failure are evaluated and the Design-Builder can provide assurance that the causes have been corrected. A formal submission as to the reasons for the failure to restore traffic lanes within the contract lane closure restrictions and the proposed corrective measures is to be provided to the VDOT Construction Manager within two (2) days of the occurrence. VDOT will respond to the adequacy of the submission within two (2) working days of receipt. No consideration for extension of time and no additional compensation will be granted for these days.

VDOT reserves the right to monitor traffic conditions impacted by the work and to make additional restrictions as may be necessary or as emergency situations dictate. Additional restrictions for other holidays or special local events may be necessary, however, in these situations VDOT will endeavor to inform the Design-Builder at the earliest and in no case less than forty-eight (48) hours prior to the event.

During the Construction Phase, the Design-Builder shall provide an emergency contact list of project personnel for internal use and have sufficient manpower and resources available to respond to any onsite emergency, including any work zone incidents.

#### **2.9.4 Lane Rental Charges**

Lane Rental charges for failure to remove active work zone elements from traffic lanes and shoulder areas and place end of day signage, if required, shall be assessed at the following monetary rates.

Active work zone elements shall be defined as equipment, personnel, channelizing devices, signage for lane closures and traffic shifts, and other items required for active work on the roadway.

<b>LANE RENTAL TABLE</b>		
<b>Ramp A Closure (Route 3 Westbound to I-95 Northbound)</b>		
<b>Failure To Restore All Lane Traffic By:</b>	<b>Amount</b>	<b>Cumulative Amount</b>
4:30 AM	\$1,000	\$1,000
4:45 AM	\$1,500	\$2,500
5:00 AM	\$2,000	\$4,500
5:15 AM	\$2,500	\$7,000
5:30 AM	\$3,000	\$10,000

After 5:30 AM, if the Design-Builder has failed to remove the active work zone elements the \$10,000 cumulative lane rental amount indicated above shall apply, plus \$400 for each minute thereafter, as determined by VDOT, until such time as traffic has been restored, all active work zone elements have been removed from the roadway, and end of day signage, if required, is placed in accordance with the 2011 Virginia Work Area Protection manual.

<b>LANE RENTAL TABLE</b>		
<b>Ramp B Closure (I-95 Southbound to Route 3 Westbound)</b>		
<b>Failure To Restore All Lane Traffic By:</b>	<b>Amount</b>	<b>Cumulative Amount</b>
4:30 AM	\$500	\$500
4:45 AM	\$750	\$1,250
5:00 AM	\$1,000	\$2,250
5:15 AM	\$2,000	\$4,250
5:30 AM	\$3,000	\$7,250

After 5:30 AM, if the Design-Builder has failed to remove the active work zone elements the \$7,250 cumulative lane rental amount indicated above shall apply, plus \$525 for each minute thereafter, as determined by VDOT, until such time as traffic has been restored, all active work zone elements have been removed from the roadway, and end of day signage, if required, is placed in accordance with the 2011 Virginia Work Area Protection manual.

If the Design-Builder is assessed these lane rental charges for failure to restore traffic lanes, the Design-Builder will not be allowed further lane closures until the reason for the failure are evaluated and the Design-Builder can provide assurance that the causes have been corrected. A formal submission as to the reasons for the failure to restore traffic lanes within the contract lane closure restrictions and the proposed corrective measures is to be provided to the VDOT Project Manager within two (2) days of the occurrence. No modification of the Contract Price or Contract time(s) will be granted or considered for these days.

VDOT may, at its sole discretion, waive lane rental charges for failure to open traffic if such cause is not related to or caused by the Design-Builder's operations. The Design-Builder shall record lane rental charges on a daily basis and submit tabulation along with certification from the Quality Assurance Manager that such tabulation is correct to the VDOT Project Manager for concurrence within two (2) days of the occurrence. At the Completion of the Project and prior to the final payment voucher, the VDOT Project Manager will initiate an adjustment to the Contract Price through a Work Order in accordance with Article 9 of Part 4 to consider all lane rental charge assessments.

### **2.9.5 Use of Virginia State Police**

The Design-Builder shall be responsible for coordinating through VDOT for Virginia State Police (VSP) service during Temporary Traffic Control operations involving lane closures and/or rolling lane closures, and any other operation as covered in Appendix C of the 2011 Virginia Work Area Protection Manual. VDOT shall be responsible for all costs incurred by VSP specific to the Project. The request for VSP must be made at least five (5) business days prior to the scheduled roadwork.

All lane and rolling lane closures shall be identified in the TMP and in accordance with Traffic Engineering Memorandum TE-352 and WAPM TTC-66.0.

### **2.9.6 Portable Changeable Message Signs**

Portable Changeable Message Signs (PCMSs) shall be used in advance of the work zone when closing or shifting lanes on I-95 and during other operations as required by the 2011 Work Area Protection Manual. The Design-Builder shall provide at least two (2) PCMSs along each direction of I-95, which are to be placed in advance of the Project when lane shifts or closures are in place. The PCMS shall be removed from the roadway when not in use. The Design-Builder shall coordinate the implementation of PCMSs with VDOT. The use of PCMSs shall not replace any traffic control device otherwise required per the MUTCD or the Virginia Work Area Protection Manual. PCMS messages shall be in accordance with Appendix D of the 2011 Virginia Work Area Protection Manual. PCMSs will also be required in accordance with the Signal Turn On Procedure outlined in Part 2, Section 2.8.2.1.

### **2.10 Public Involvement / Public Relations**

The Design-Builder shall be responsible for providing a point of contact for the internal use of the VDOT Fredericksburg District Communications Office to obtain project information or for reporting to the Design-Builder customer concerns throughout the duration of the Project.

The Design-Builder shall be responsible for coordinating preparation and release of information to the public with VDOT's Communications Office. The Design-Builder shall obtain VDOT's prior approval on all information to be released to the public.

During the Design and Construction phases, the Design-Builder shall:

- At the onset of the design phase, provide VDOT's Fredericksburg District Communications Office with a plan of work and overall project design/construction schedule to assist VDOT in the creation of a project page on VDOT's website.
- As soon as practically possible in the design phase, and prior to any Pardon Our Dust pre-construction meetings or stakeholder meetings, provide a rendering or renderings of the Project. The Rendering(s) should show detail views of changes at the I-95 southbound off-ramp at Route 3 westbound and the Central Park entrance, changes at Route 3 westbound at the I-95 northbound on-ramp, and changes at the I-95 northbound off-ramp to Route 3 eastbound (if changes are made at this location).
- Provide two (2) sets of printed display-size copies of rendering/renderings, mounted on display boards, which can be brought to public meetings as visual aids.
- Provide a weekly update on specific Project activities to VDOT's Fredericksburg District Communications Office. This list may be bulleted. The update should include any shoulder or lane closures for the upcoming week, and any potential impacts to I-95, Route 3, and commercial entrances or roads intersecting with Route 3. This weekly update will be provided to VDOT's Fredericksburg District Communications Office no later than 5:00 PM on Thursdays. This information may be posted to VDOT's website and shared with local media outlets to brief motorists and stakeholders on project impacts.
- Significant traffic impacts (complete I-95 or Route 3 stoppages, or closing two (2) or more lanes on I-95 or Route 3, or impacts to entrances to Central Park or Spotsylvania Towne Centre), should be communicated at least two (2) weeks in advance.
- By the last day of each calendar month, send up-to-date project photos for display on VDOT's website or for use in communications materials. Send additional Project photos as requested.
- Send up-to-date Project plan sheets for display on VDOT's website or for use in communications materials, as requested.
- Create thirty (30) project display boards (similar to size of a public meeting display board) that can be distributed to Route 3 area businesses with pre-printed tear off fact sheets (approximately two hundred (200) sheets each) containing project information on new lane configurations. Provide easels as necessary to support display boards. Provide additional sheets to re-attach to display boards as requested by VDOT.
- Create a one-page sheet, approximately 8.5 x 11 inches in size with project information on new lane configurations, as well as details on traffic impacts during

construction and where to find information. Sheet can be used on project display boards, and can be posted online at project website.

- Be responsible for all costs associated with holding public meetings, including required advertising for public meetings, mailed notices of upcoming meetings to residents or businesses as requested, printing of meeting materials and brochures/displays, and facility rental fees and audiovisual equipment and/or audiovisual equipment rental fees.
- Hold a “Pardon Our Dust” meeting for the general public a minimum of two (2) weeks prior to the start of construction (all aspects of the meeting will be coordinated and approved by VDOT). This meeting will be held in accordance with the VDOT Policy Manual for Public Participation in Transportation Projects. A Project presentation may be requested to be delivered at least once during this meeting, followed by time for audience questions. The Design-Builder’s Project staff will attend the meeting to assist with answering public questions. Provide two (2) sets of Project plan sheets for this meeting, mounted on display boards. Provide a PowerPoint presentation, if a presentation is requested by VDOT, and a meeting brochure.
- Hold a “Pardon Our Dust” meeting for public safety officials and other stakeholders a minimum of two (2) weeks prior to the start of construction (all aspects of the meeting will be coordinated and approved by VDOT). Invited attendees will include area law enforcement, fire/rescue, school officials, school transportation staff, public transit providers, etc. The Design-Builder’s Project staff will attend the meeting to brief audience on Project, potential impacts, and to assist with answering questions. Provide two (2) sets of project plan sheets for this meeting, mounted on display boards. Provide a PowerPoint presentation if requested, meeting brochure, and project contact list with phone numbers of key personnel that may be needed by stakeholders.
- Accompany VDOT’s Fredericksburg District Communications staff to attend periodic stakeholder/homeowner’s associations meetings as requested to perform project outreach throughout the Project.
- As requested by VDOT, be available to assist VDOT’s Fredericksburg District Communications Office with arranging media and/or stakeholder tours of the Project, and carry out tours with VDOT and Design-Builder personnel. Provide necessary personal protective equipment (PPE) for media/guests during tours.
- As requested by VDOT, be available to assist VDOT’s Fredericksburg District Communications Office with arranging project groundbreaking and/or ribbon-cutting project completion event for media and guests. Provide necessary PPE equipment for media and guests, and tent and/or chairs as needed.

- As requested by VDOT, provide information to VDOT's Fredericksburg District Communications Office to answer customer and media inquiries.
- Provide to VDOT's Project Manager an emergency contact list of Project personnel and response plan to respond to any onsite emergency, including any work zone incidents in accordance with IIM-LD-241.
- The VDOT Fredericksburg District Communications Office contact information is:

Kelly Hannon  
Communications Manager  
VDOT Fredericksburg District  
87 Deacon Road  
Fredericksburg, VA 22405  
540-374-3344 office  
540-656-0321 cell

Tina Bundy  
Communications Specialist  
VDOT Fredericksburg District  
87 Deacon Road  
Fredericksburg, VA 22405  
540-899-4560 office  
540-907-8325 cell

During the Construction Phase, the Design-Builder shall:

- Coordinate with the City of Fredericksburg, provide regular updates and appropriate notifications to City of Fredericksburg and other stakeholders and ensure compliance with all applicable City of Fredericksburg ordinances.

A public hearing was held for the Project on July 19, 2016. Applicable Public Hearing comments have been compiled and have been incorporated into the plans as deemed necessary by VDOT. Any public meetings held shall be conducted in accordance with the current VDOT Policy Manual for Public Participation in Transportation Projects.

## **2.11 Right-of-way**

The Design-Builder shall adhere to the requirements set forth in the Right of Way Manual of Instructions, 3<sup>rd</sup> Edition, FHWA Update January 1, 2016, Chapter 10, and Attachment 2 for the Technical Requirements, Part 2, Right of Way.

## 2.12 Utilities

All efforts and costs necessary for all utility designations, utility locates (test holes), conflict evaluations, cost responsibility determination, utility relocation designs, utility relocations and adjustments, utility reimbursements, replacement land rights acquisition and utility coordination shall be included in the Offeror's Price Proposal; provided, however, that the compensation paid to landowners for replacement land rights will be paid by VDOT as a part of the right-of-way acquisition costs and shall **NOT** be included in the Offeror's Price Proposal. Costs for any utility betterment(s) shall not be included in the Offeror's Price Proposal but shall be reimbursed to the Design-Builder through agreement with the requesting utility owner.

Utility information provided on the RFP Conceptual Plans identifies all known utilities, at the time of plan development, that are located within the Project limits. Aerial utilities are identified on the RFP Conceptual Plans and/or in the Survey files by the structure to which they are attached. However, it is the Offeror's responsibility to verify, to their satisfaction, the owner, type, size, height and number of cables attached to the structure when preparing their Price Proposal. All underground utility data was obtained and is depicted in accordance with CI/ASCE 38-02 SUE Quality Level B designation on the RFP Conceptual Plans and/or Survey files. However, it is the Offeror's responsibility to verify, to their satisfaction, the owner, type, size, number of cable/conduits, pipes, services, and horizontal and vertical (depth) location of underground utilities to include service connections and laterals with the utility owners when preparing their Price Proposal.

The Design-Builder shall be responsible for all utility designations, utility locates (test holes), conflict evaluations, cost responsibility determinations, utility relocation designs, utility relocations and adjustments, utility reimbursement, replacement land rights acquisition, utility coordination, and coordination of utility betterments required for the Project. The Design-Builder shall be responsible for all necessary utility relocations, adjustments, and betterments to occur in accordance with the accepted Baseline Schedule.

The Design-Builder shall be responsible for coordination of the Project construction with all utility owners that may be affected. The Design-Builder shall be responsible for coordinating the work of the Design-Builder, its subcontractors, and the various utilities. The Design-Builder shall initiate early coordination with all utility owners with facilities located within the Project limits. The resolution of any conflicts between utilities and the construction of the Project shall be the responsibility of the Design-Builder. No additional compensation or time will be granted for any delays, inconveniences, or damage sustained by the Design-Builder or its subcontractors due to interference from utility owners or the operation of relocating utilities or betterments.

The Design-Builder shall make all reasonable efforts to design the Project to avoid conflicts with utilities, and minimize impacts where conflicts cannot be avoided.

The Design-Builder shall identify and acquire any replacement utility easements or required right-of-way needs of all utilities necessary for relocation due to conflicts with the Project.

Utility owners and their respective contact information that are known to VDOT are provided below for reference only. It is the Design-Builder's responsibility to verify whether other utility owners exist within the Project limits and coordinate with them.

Dominion Power  
7500 West Broad Street  
Richmond, Virginia 23294  
Mr. Greg Sye  
Phone: (703) 201-5626  
Email: Greg.Sye@Dom.com

City of Fredericksburg  
715 Princess Anne Street  
Post Office Box 7447  
Fredericksburg, Virginia 22404  
Mr. Dave King  
Phone: (540) 372-1023  
Email: dking@fredericksburgva.gov

Comcast  
11101 University Boulevard  
Manassas, Virginia 20110  
Mr. John Filmeck  
Phone: (540) 553-1415  
Email: John\_Filmeck@comcast.com

Columbia Gas  
60 Commerce Parkway  
Fredericksburg, Virginia 22406  
Mr. David Godoy  
Phone: (540) 368-3218  
Email: godoy@nisource.com

Verizon South  
9401 Peabody Street  
Manassas, Virginia 20110  
Mr. William (Bill) Lacey  
Phone: (703) 369-9571  
Email: William.Lacey@verizon.com

Summit IG  
22375 Broderick Drive, Suite 165  
Dulles, Virginia 20166  
Mr. Steve Ragland  
Phone: (804) 317-4483  
Email: sragland@summitig.com

PEG Bandwith  
8532 Skip Jack Place  
Pasadena, Maryland 21122  
Mr. Michael Llamas  
Phone: (443) 827-1786  
Email: mllamas@pegbandwidth.com

Cox Communications  
1310 Belman Road  
Fredericksburg, Virginia 22401  
Mr. James Cummings  
Phone: (571) 237-8596  
Email: james.commings@cox.com

The Design-Builder shall provide all utility owners with roadway design plans as soon as the plans have reached a level of completeness adequate to allow them to fully understand the Project impacts. The utility owners will use the Design-Builder's design plan for preparing relocation plans and estimates. If a party other than the utility owner prepares relocation plans, there shall be a concurrence box on the plans where the utility owner signs and accepts the relocation plans as shown.

The Design-Builder shall coordinate and conduct a preliminary utility review meeting with all affected utility owner to assess and explain the impact of the Project. VDOT's Project Manager and VDOT's Regional Utilities Manager/Design Build Projects Utility Coordinator (or designee) shall be included in this meeting.

The Design-Builder shall verify the prior rights of each utility owner's facilities if claimed by a utility owner. If there is a dispute over prior rights with a utility, the Design-Builder shall be responsible for resolving the dispute. The Design-Builder shall prepare and submit to VDOT a Preliminary Utility Status Report within one hundred and twenty (120) days from the Date of Notice to Proceed that includes a listing of all utilities located within the Project limits and a conflict evaluation and cost responsibility determination for each utility. This report shall include copies of existing easements, As-Built plans or other supporting documentation that substantiates any compensable rights of the utility owner.

The Design-Builder shall obtain the following from each utility owner that has a utility located within the Project limits: relocation plans including letter of "no cost" where the utility owner does not have a compensable right; utility agreements including cost estimate and relocation plans where the utility owner has a compensable right; or letters of "no conflict" where the utility owner's facilities will not be impacted by the Project.

The Design-Builder shall review all relocation plans to ensure that relocations comply with the current editions of the VDOT Utilities Manual of Instruction, the Utility Relocation Policies and Procedures and the VDOT Land Use Permit Manual. The Design-Builder shall also ensure that there are no conflicts with the proposed roadway improvements and ensure that there are no conflicts between each of the utility owner's relocation plans. The Design-Builder shall prepare and submit to VDOT all relocation plans. The Design-Builder is expected to assemble the information included in the relocation plans in a final and complete form and in such a manner that VDOT may approve the submittals with minimal review. The Design-Builder shall meet with VDOT's Regional Utilities Manager/Design Build Projects Utility Coordinator (or designee) within forty-five (45) days from the date of Notice to Proceed to gain a full understanding of what is required with each submittal. The Design-Builder shall receive written approvals from VDOT prior to authorizing utilities to commence relocation construction. The utility owners shall not begin their relocation work until authorized by the Design-Builder. Each relocation plan submitted must be accompanied by a certification from the Design-Builder stating that the proposed relocation will not conflict with the proposed roadway improvement and will not conflict with another utility owner's relocation plan.

At the time the Design-Builder notifies VDOT that the Design-Builder deems the Project to have reached Final Completion, the Design-Builder shall certify to VDOT that all utilities have been identified and conflicts have been resolved and that those utility owners with compensable rights or other claims related to relocation or coordination with the Project have had their facilities relocated and their claims and compensable rights satisfied or will be satisfied by the Design-Builder.

The Design-Builder shall ensure the utility owners submit As-Built drawings upon completion of their relocation and/or adjustments. VDOT will issue an as-built permit to the utility owners after receipt of the permit application and the As-Built drawings. The Design-Builder shall accurately show the final location of all utilities on the As-Built drawings for the Project in accordance with Part 2, Section 2.15.9 of the RFP.

## 2.13 Quality Assurance / Quality Control (QA/QC)

The Design-Builder shall submit its Quality Assurance/Quality Control (QA/QC) for both design and construction to VDOT at the meeting held after the Date of Commencement as set forth in Part 4 General Conditions under Section 2.1.2. Along with the QA/QC Plan submittal, the Design Manager and Quality Assurance Manager (QAM) shall provide a presentation of the QA/QC Plan for both design and construction utilizing Project related scenarios. Project scenarios shall include, but not be limited to:

- Preparatory Inspection Meeting requirements, including incorporation of at least one each, Witness and Hold Point, as set forth in Sections 5.3 and 5.14 of the Department's guidance document for Minimum Requirements for Quality Assurance and Quality Control on Design Build and Public-Private Transportation Act Projects, January 2012 (January 2012 QA/QC Guide);
- At least one (1) material which VDOT retains responsibility for testing as identified in Table 5-2, January 2012 QA/QC Guide;
- Situation arising requiring the issuance of a Non-Conformance Report and subsequent review of the report, including completion of corrective measures and the issuance of a Notice of Correction of non-conformance work with proper log entries and proper interface with auditing and recovery requirements as set forth in Sections 5.10 and 5.11 of the January 2012 QA/QC Guide for non-conforming work resulting from:
  - defective equipment
  - construction activities/materials which fail to conform as specified;
- Inspection documentation capturing requirements as set forth in Section 5.20 and 5.21 of the January 2012 QA/QC Guide; as well as inspection of foundation and pavement subgrades that are to be performed and certified by the Design-Builder's licensed geotechnical engineer in accordance with the Contract requirements;
- Application for payment for Work Package which includes work element, including review and approval by Quality Assurance Manager; and
- Measures that will be implemented to ensure compliance with Buy America requirements on the Project.
- Detail two (2) sample entries in Materials Notebook showing completion of Form C-25, including subsequent submission and review by Department Project Manager as set forth in Section 5.21. Refer to Section 803.73 of VDOT's Manual of Instruction for Materials Division, Form TL-142S, for an example of a completed Materials Notebook and VDOT Materials Division Memorandum Number MD299-07 for Materials Acceptance – October 4, 2007.

### **2.13.1 Design Management**

The Design-Builder is responsible for design quality in accordance with VDOT's Minimum Requirements for Quality Assurance and Quality Control on Design Build and Public-Private Transportation Act Projects, January 2012 (January 2012 QA/QC Guide). The Design-Builder's Design Manager shall be responsible for establishing and overseeing a QA/QC program for all pertinent disciplines involved in the design of the Project, including review of design, working plans, shop drawings, specifications, and constructability of the Project. This individual shall report directly to the Design-Builder's Project Manager, and is responsible for all of the design, inclusive of QA and QC activities. Members of the Design QA and QC team are responsible for review of all design elements to ensure the development of the plans and specifications are in accordance with the requirements of the Contract Documents. Design QA should be performed by one or more member(s) of the lead design team that are independent of the Design QC. The Project design control plan will provide VDOT assurance that the design plans and submittals will meet all contract requirements. The QAM shall verify that all design related Work Packages submitted for payment have been certified by the Design Manager as being in conformance with the Contract Documents and the Design QA/QC Plan.

Appendix 2 of the January 2012 QA/QC Guide provides minimum requirements that shall be met for development of the Design QA/QC Plan.

### **2.13.2 Construction Management**

The Design-Builder shall develop, execute, and maintain a Construction QA/QC Plan for the full duration of the Contract in accordance with VDOT's January 2012 QA/QC Guide. The Design-Builder shall have the overall responsibility for both the QA and QC activities and shall be responsible for all QA activities and QA sampling and testing for all materials used and work performed on the Project. These QA functions shall be performed by an independent firm that has no involvement in the construction and QC program/activities. There shall be a clear separation between QA and construction, including separation between QA inspection and testing operations and construction QC inspection and testing operations, including testing laboratories. Two (2) independent, AMRL certified testing laboratories will be required, one for QA testing and one for QC testing.

The Quality Assurance Manager (QAM) shall have the authority to enforce the Contract requirements when deficient materials or unsatisfactory finished products fail to conform to Contract requirements. The QAM, in accordance with his/her assignment, shall be responsible to observe the construction in progress and to ensure the QA and QC testing and inspection is being performed in accordance with the Contract requirements. The Design-Builder shall establish and maintain a Quality Assurance Auditing and Nonconformance Recovery Plan (AR Plan) for uniform reporting, controlling, correction and disposition and resolution of nonconformance (including disputed nonconforming items) issues that may arise on the Project. The Design-Builder's AR Plan shall establish a process for review and disposition of nonconforming workmanship, material, equipment or other construction and design elements of the Work including the submittal of the design review process for field changes. All deficiencies (hereinafter referred to as a Non-Conformance), including those pertaining to rules, regulations,

and permit requirements, shall be documented by the QAM. A Non-Conformance Report (NCR) referenced by a unique number, shall be forwarded to the Contractor and VDOT within twenty-four (24) hours of discovery of the Non-Conformance. Non-conformance procedures are provided in Section 5.10.5 of the January 2012 QA/QC Guide.

The Design-Builder also shall be responsible for providing QA and QC testing for all materials manufactured off-site, excluding the items listed below:

- Prestressed Concrete Structural Elements (beams, girders (VDOT adopted Bulb-T sections), and piles)
- Structural Steel Elements (beams, girders, and sign structures)
- Pipe (concrete, steel, aluminum, and high density polyethylene) for culverts, storm drains, and underdrains
- Precast Concrete Structures
- Asphalt Concrete Mixtures
- Aggregate (dense and open graded mixes)
- Metal Traffic Signal and Light Poles and Arms

VDOT will provide plant QA and plant QC inspection and/or testing of these items. In the event that VDOT determines that materials fail to meet the tolerances in the VDOT 2007 Road and Bridge specifications, a NCR will be issued by the VDOT Project Manager and addressed to the Design-Builder's QAM for resolution. The Design-Builder is required to submit documentation of the source of materials, including the source of each material to be incorporated into the Project and the acceptance method that will be used for the material. A VDOT Form C-25 may be used to meet this requirement; however, the Design-Builder is required to submit a VDOT Form C-25, for all materials that VDOT retains responsibility for testing. The source of materials, C-25 is for informational purposes only and will not be approved or rejected by VDOT since it is the Design-Builder's responsibility to obtain materials that meet the contractual requirements. The Design-Builder will be responsible for providing QA and QC testing of all off-site materials that are not identified above, including materials obtained from off-site soil borrow pits.

The Design-Builder's QAM shall report directly to the Design-Builder's Project Manager and be independent of the Design-Builder's physical construction operations. The QAM shall establish quantities prior to commencing construction, and provide VDOT a total number of QC, QA (Independent Assurance (IA) and Independent Verification Sampling and Testing (IVST)), Owner's (the Department) Independent Assurance (OIA), and Owner's Independent Verification Sampling and Testing (OVST) required as a result of the quantities and the sampling and testing requirements as set forth in Table A-3 and A-4 of the January 2012 QA/QC Guide. VDOT will provide all OIA and OVST tests and, therefore, final determination of the actual number of OIA and OVST tests to be performed will be made by VDOT based on these quantities.

The QAM shall be responsible for the QA inspection and testing of all materials used and work performed on the Project to include observing the Contractor's QC activities, maintaining the Materials Notebook (including adherence to the Special Provision for Design-Build Tracking (DBT) numbers included in the RFP Information Package), documentation of all materials,

sources of materials and method of verification used to demonstrate compliance with the Contract requirements. This includes all materials where QA testing is to be performed by VDOT. The QAM shall be vested with the authority and responsibility to stop any work not being performed according to the Contract requirements. The construction QA and QC inspection personnel shall perform all of the construction inspection and sampling and testing work in accordance with the Contract requirements. This includes the documentation of construction activities and acceptance of manufactured materials. The Design-Builder's Quality Assurance firm shall have a presence on-site during any and all construction operations to ensure all construction work and QC activities are being performed in accordance with the Contract requirements. The QAM shall assign a Lead QA Inspector to the Project prior to the start of construction. This individual, who must be on the site full-time for the duration of all construction of the Project, shall be responsible to observe construction as it is being performed, to include all QC activities to ensure inspection and testing, and correction of any non-conformities of the Work are being performed in accordance with the Contract requirements. The Lead QA Inspector shall be supported by other QA inspectors under his/her direction to ensure at any time all construction operations and QC activities are being observed. The Lead QA Inspector shall report directly to the QAM.

All sampling and testing shall be performed by a laboratory that is accredited in the applicable AASHTO procedures by the AASHTO Accreditation Program (AAP). For test methods not accredited by AAP, the laboratory must comply with AASHTO R18 (most current Edition) and must be approved by the Department at its sole discretion. Two independent testing laboratories will be required, one for QA testing and one for QC testing. The entity(ies) performing QA operations, inspections, sampling, and laboratory testing and the entity(ies) performing QC operations, inspections, sampling, and laboratory testing shall be unique and independent from one another.

All construction QA and QC personnel shall hold current VDOT materials certifications for the types of materials testing that they are assigned to perform in accordance with Section 3.6 of the January 2012 QA/QC Guide, and for the safety and use of nuclear testing equipment as required by the Road and Bridge Specifications. The QA programs shall be performed under the direction of the QAM. The QC programs shall be performed under the direction of the Construction Manager. Substitution of Construction Manager and/or the QAM shall require VDOT approval. In addition, VDOT shall have the right to order the removal of any construction QA and QC personnel, including the QAM and the Construction Manager for poor performance at the sole discretion of the VDOT Project Manager. The QA/QC plan shall include rapid reporting of non-compliance to the VDOT Project Manager, and shall include the remedial actions to be taken as discussed in Sections 5.10 and 5.11 of the January 2012 QA/QC Guide.

The Design-Builder shall provide, prior to Final Application for Payment, a complete set of Project records that include, but are not limited to the following:

- Project correspondence
- Project diaries
- Test reports

- Invoices
- Materials books
- Certified survey records
- DBE/EEO records
- Warranties
- As-Built drawings
- Special tools

### **2.14.3 Project Documentation**

The Design-Builder shall maintain all project documentation electronically in an online location that is accessible to all personnel associated with the Project (to include contractor personnel, QC personnel, QA personnel, design personnel, right-of-way personnel, and VDOT personnel) at all times for the entire duration of the Project. Project personnel may have different read and write privileges as deemed appropriate by the VDOT Project Manager. The online document management filing structure for the project will follow the File Index identified in Attachment 2.14.3. For this Project, the online location shall be the project's OutsideVDOT SharePoint website. The purpose of the online document management system is for maintaining project documents; it does not replace any submission requirements, including but not limited to providing hard copies of plans, calculations, and reports, and uploading applicable documentation into VDOT's FALCON system.

Prior to submitting each monthly Application for Payment, the Design-Builder is responsible for uploading all pertinent project documentation associated with the work performed that month onto the online document management system. This includes all applicable QC and QA daily work reports, QC and QA test reports, and DBE/ EEO Documentation. Work packages will not be considered complete until all required QC and QA reports and materials documentation has been provided.

Prior to submitting the Semi-Final Application for Payment, the Design-Builder is responsible for uploading all project documentation identified in Attachment 2.14.3 onto the online document management system. Final Payment will not be processed until all applicable documentation has been provided.

### **2.14 Field Office**

The Design-Builder shall provide office space, equipment, and services consistent with requirements for a Type I Field Office with the following modifications:

- In lieu of "a facsimile machine with optional memory and service contract for preventative maintenance, including replacement printer cartridges", the Design-Builder shall provide a "multi-function printer, scanner, facsimile machine with the ability to print, copy, and scan documents up to 11" x 17" in size with a service contract for preventative maintenance, including replacement printer cartridges.

- In addition to the utility services listed in VDOT 2007 Road and Bridge Specification Section 514.02, the Design-Builder shall make suitable internet access available to VDOT personnel for their use in the performance of project management activities.

This field office should be configured and equipped for joint operations by Design-Builder and Department staff. The configuration and equipping of the field office shall be coordinated between the Design-Builder and the VDOT Project Manager prior to on-site placement of the field office. The field office will be operational throughout the duration of the Project construction and shall be removed upon final Project acceptance.

## **2.15 Plan Preparation**

### **2.15.1 GEOPAK and MicroStation**

When the Design-Builder is given the Date of Commencement, they will be furnished with the following software and files which run in WindowsXP or Windows7 only: GEOPAK (current version used by VDOT), MicroStation (current version used by VDOT) and VDOT Standard Resources Files, and all the design files used to develop the RFP Conceptual Roadway and Bridge Plans including aerial images, if available, and survey files.

### **2.15.2 Software License Requirements**

VDOT shall furnish a License Access Key for all the software products VDOT makes available to the Design-Builder. The License Access Key will be supplied upon request by the Design-Builder, based on the data provided on a completed Software License Form, LD-893, and subsequently reviewed and approved by the VDOT Project Manager.

The License Access Key is provided for use on the Project detailed on the request only for the duration specified for that Project. Any adjustment made to the Project schedule will be taken into consideration in adjusting the time the License Access Key is available. Justification for the number of license(s) requested **MUST** include the estimated number of total computer hours for the task of design, detailing, relating Project management and other computer based engineering functions requiring the software requested.

The appropriate use of the License Access Key provided to the Design-Builder will become the responsibility of the Design-Builder regardless of who on the team uses the License Access Key. The Design-Builder will be responsible for keeping track of the License Access Key provided to them or a team member and, upon completion of the Project, the prompt notification to the VDOT CADD Support Section of Project Completion and removal of the software from any system used solely for the Project for which it was obtained.

### **2.15.3 Drafting Standards**

All plans shall be prepared in U.S. customary units and in accordance with the most recent version of the VDOT Road Design Manual, Vol. I, VDOT CADD Manual and VDOT

I&IMs and VDOT's Manual of Structure and Bridge Division, Vol. V, Part 2, Design Aids and Typical Details.

#### **2.15.4 Electronic Files**

The Design-Builder shall submit all plans in accordance with the Department's policies and procedures (Right-of-way and/or Construction submittals, Released for Construction, and As-Builts) in electronic format using the provided CADD software. Files shall be submitted in both Microstation DGN and Adobe PDF formats, by way of VDOT's Falcon Consultant environment or FTP Server. The Design-Builder will complete form LD-443, the Falcon System Access and Security Agreement and form LD-894, the Falcon Access Request Form, for access to the Falcon Consultant environment. VDOT will furnish electronic files of all applicable standard detail sheets upon request by Design-Builder. The files will use standard VDOT cell libraries, level structures, line types, text fonts, and naming conventions as described in the most recent version of the VDOT CADD Manual and VDOT's Manual of the Structure and Bridge Division, Vol. V - Part 2, Design Aids and Typical Details. Files furnished to Design-Builder in electronic format shall be returned to VDOT and removed from Design-Builder and its designer's computer equipment upon completion of the Project.

#### **2.15.5 Plan Submittals**

In addition to electronic files as described in Part 2, Section 2.15.4 above, the Design-Builder shall prepare and distribute hard copy paper plans in the quantities as specified below, for each of the following deliverables (at a minimum, as other submittals and/or work packages may be necessary or desired):

- Right-of-way Plans
- Released for Construction Plans
- Right-of-way and/or Construction Revisions
- Record Plans (As-Built)
- Approved Shop Drawings
- Design Calculations

The Right-of-way and/or Construction plans may be submitted for approval in logical subsections (such as from station to station) or consisting of work packages such as: 1) clearing and grubbing along with erosion and siltation control, 2) grading and drainage, 3) final roadway, and 4) traffic control. A submittal schedule and planned breakdown of work packages shall be submitted to VDOT for review and approval as part of the planned Project Baseline schedule.

Right-of-way and/or Construction Plans shall be accompanied by 1) a VDOT LD-436 checklist filled out as appropriate for the specific submittal, and 2) a written notice signed by the Design-Build Design Manager that includes the following:

- The logical subsections or work packages for which review and approval is being requested

- Confirmation that the submittal has been checked and reviewed in accordance with the Design-Builder's approved QA/QC plan.
- Confirmation that the submittal either meets all requirements of the Contract Documents and Reference Documents or that any deviations from the Contract Documents and Reference Documents have been identified and previously approved by VDOT.

The Design-Builder shall submit all Right-of-way and/or Construction plans to VDOT and FHWA simultaneously, for review and approval. VDOT shall receive two (2) full-size sets and ten (10) half-size sets of each submission, with the exception of the Released for Construction Plans (see Part 2, Section 2.15.8 below). FHWA shall receive two (2) half-size sets of each submission. The plan submissions shall be delivered to the following addresses:

Virginia Department of Transportation  
Attention – Gale M. Dickerson, P.E.  
87 Deacon Road  
Fredericksburg, VA 22405

Federal Highway Administration  
Attention – S. Elliot Moore, P.E.  
400 N. 8<sup>th</sup> Street, Suite 750  
Richmond, VA 23219-4825

VDOT and FHWA shall have the right to review all Right-of-way and Construction Plans and provide comments regarding compliance with the requirements of the Contract Documents and Reference Documents. The Design-Builder shall be responsible for satisfying all such comments. Formal responses to VDOT and FHWA comments shall be provided in subsequent submittals.

VDOT and FHWA have the right to disapprove any design approach that is not in compliance with the requirements of the Contract Documents and Referenced Documents.

VDOT's written approval of any deviations from requirements of the Contract Documents and Reference Documents shall be attached to the plans submitted for review.

### **2.15.6 Right-of-way Plans**

Right-of-way Plans and any associated Design Calculations shall be submitted to VDOT and FHWA simultaneously for review. The time frame for plan review and approval shall be in accordance with the requirements of the Contract Documents. All VDOT and FHWA comments must be adequately addressed before the Right-of-way Plans will be approved. Notice to Commence Right-of-way Acquisition will be granted in accordance with Part 2, Section 2.11

above. The Design-Builder shall be responsible for the design details and ensuring that the design and right-of-way acquisition work are properly coordinated.

### **2.15.7 Construction Plans**

Construction Plans, and any associated Design Calculations, shall be submitted to VDOT and FHWA simultaneously for review. The time frame for plan review and approval shall be in accordance the requirements of the Contract Documents. All VDOT and FHWA comments must be addressed to the satisfaction of the commentator before Construction Plans are recommended for approval to the Chief Engineer. This plan milestone includes plans that may be submitted as soon as sufficient information is available to develop Construction Plans for certain portions or elements of the Project (or work packages). The Design-Builder shall meet commitments for review and approval by other entities/agencies as specified in other portions of the RFP and its attachments. The Design-Builder shall be responsible for the design details and ensuring that the design and construction work are properly coordinated.

### **2.15.8 Released for Construction Plans**

Released for Construction Plans are those that are issued for construction after approval by VDOT's Chief Engineer. Notice to Commence Construction will only be issued by the VDOT Project Manager upon approval of the Construction Plans (or Work Packages) by the Chief Engineer.

The Released for Construction Plans shall be distributed simultaneously to VDOT and FHWA. VDOT shall receive one (1) full-size set and five (5) half-size sets of Released for Construction Plans, along with all electronic files. FHWA shall receive two (2) half-size hard copy sets, along with all electronic files, of the Released for Construction Plans. The plans shall be delivered to the following addresses:

Virginia Department of Transportation  
Attention - Gale M. Dickerson, P.E.  
87 Deacon Road  
Fredericksburg, VA 22405

Federal Highway Administration  
Attention – S. Elliot Moore, P.E.  
400 N. 8<sup>th</sup> Street, Suite 750  
Richmond, VA 23219-4825

### **2.15.9 Record (As-Built) Plans**

The final plan milestone is Record (As-Built) Plans. As-Built Plans shall be prepared, signed and sealed by a Professional Engineer licensed in Virginia, and submitted to VDOT with the final application for payment. These plans will show all adjustments and revisions to the Construction Plans made during construction and serve as a permanent record of the actual

location of all constructed elements. Adjustments and revisions shall include but not limited to the following major items:

- Horizontal Alignment – All changes in horizontal alignment and curve data;
- Vertical Alignment – All changes in vertical alignment, benchmarks, grades and ditch flows;
- Drainage Structures and Stormwater Management – All changes in location, elevation, length and size of culverts, storm sewer pipes, drop inlets, manholes, and stormwater management facilities/BMPs;
- Earthwork and Pavement – Earthwork, sub-base, aggregate base, pavement quantity and/or material changes.

## **2.16 Virginia Occupational Safety and Health Standards**

The Project shall comply with Virginia Occupational Safety and Health Standards in accordance with Section 107.17 of the Division I Amendments to the Standard Specifications.

- At a minimum, all Design-Builder personnel shall comply with the following, unless otherwise determined unsafe or inappropriate in accordance with OSHA regulations:
- Hard hats shall be worn while participating in or observing all types of field work when outside of a building or outside of the cab of a vehicle, and exposed to, participating in or supervising construction.
- Respiratory protective equipment shall be worn whenever an individual is exposed to any item listed in the OSHA Standards as needing such protection unless it is shown the employee is protected by engineering controls.
- Adequate eye protection shall be worn in the proximity of grinding, breaking of rock and/or concrete, while using brush chippers, striking metal against metal or when working in situations where the eyesight may be in jeopardy.
- Approved high visibility Safety apparel shall be worn by all exposed to vehicular traffic and construction equipment.
- Standards and guidelines of the current Virginia Work Area Protection Manual shall be used when setting, reviewing, maintaining, and removing traffic controls.
- Flaggers shall be certified in accordance with the Virginia Flagger Certification Program.
- No person shall be permitted to position themselves under any raised load or between hinge points of equipment without first taking steps to support the load by the placing of a safety bar or blocking.

- Explosives shall be purchased, transported, stored, used and disposed of by a Virginia State Certified Blaster in possession of a current criminal history record check and a commercial driver's license with hazardous materials endorsement and a valid medical examiner's certificate. All Federal, State and local regulations pertaining to explosives shall be strictly followed.
- All electrical tools shall be adequately grounded or double insulated. Ground Fault Circuit Interrupter (GFCI) protection must be installed in accordance with the National Electrical Code (NEC) and current Virginia Occupational Safety and Health agency (VOSH). If extension cords are used, they shall be free of defects and designed for their environment and intended use.
- No person shall enter a confined space without training, permits and authorization.
- Fall protection is required whenever an employee is exposed to a fall six (6) feet or greater.

### **3.0 ATTACHMENTS**

The following attachments are specifically made a part of, and incorporated by reference into, these Technical Information & Requirements:

- ATTACHMENT 2.2 -- ROADWAY INVENTORY AND MAJOR DESIGN CRITERIA
- ATTACHMENT 2.3 -- ADDITIONAL FOUNDATION CRITERIA
- ATTACHMENT 2.4 -- NUTRIENT CREDIT ASSIGNMENT AGREEMENT
- ATTACHMENT 2.14.3 -- DESIGN-BUILD PROJECT FILE INDEX

All additional information is included in the RFP Information Package – referred to in Part 1, Section 2.8.4 of this RFP.

### **END OF PART 2 - TECHNICAL INFORMATION & REQUIREMENTS**

**SAFETY IMPROVEMENTS  
INTERSTATE 95 and ROUTE 3 UPC  
107715**

**Attachment 2.2**

**Design Criteria Table  
September 2016**

	<b>Interstate 95</b>	<b>Route 3</b>	<b>NB I-95 ON RAMP FROM EB RTE. 3 (Ramp A, Loop D)</b>	<b>SB I-95 ON LOOP FROM WB RTE. 3 (Loop B)</b>	<b>SB I-95 OFF RAMP TO WB RTE. 3 (Ramp B)</b>	<b>NB CD Roadway Design to determine soundwall location</b>
<b>Functional Classification</b>	Urban Interstate GS-5	Urban Principal Arterial (Other) GS-5	Interchange Ramp GS-R	Interchange Ramp GS-R	Interchange Ramp GS-R	Urban Interstate GS-5
<b>ADT (Design Year 2038)</b>	205,000 vpd for I-95 North of Route 3	107,000 vpd from I-95 Bridge to Carl Silver Parkway	40,100 vpd	5800 vpd	30,100 vpd	40,100 vpd
	165,900 vpd for I-95 South of Route 3	75,800 vpd from I-95 Bridge to Gateway Blvd				
<b>Truck Percentage (Design Hour)</b>	15%	4% from I-95 Bridge to Carl Silver Parkway 5% from I-95 Bridge to Gateway Blvd	5%	5%	5%	5%
<b>Design Speed (mph)</b>	70 MPH	45 MPH	50 MPH <sup>1</sup>	25 MPH	50 MPH <sup>2</sup>	60 MPH
<b>Number of Lanes</b>	See RFP Conceptual Plans	See RFP Conceptual Plans	See RFP Conceptual Plans	1	See RFP Conceptual Plans	2
<b>Minimum Lane Widths</b>	12 ft	11 ft min. and 12' within interchange areas.	12' <sup>3</sup>	18'	12' <sup>3</sup>	12'
<b>Superelevation Standard</b>	TC-5.11R e <sub>max</sub> 8.0%	TC 5.11ULS e <sub>max</sub> 2.0%	TC-5.11R e <sub>max</sub> 8.0%	TC-5.11R e <sub>max</sub> 8.0%	TC-5.11R e <sub>max</sub> 8.0%	TC-5.11R e <sub>max</sub> 8.0%
<b>Paved Shoulder Widths</b>	12 ft	4 ft Left / 8 ft Right	4 ft Left / 8 ft Right	4 ft Left / 8 ft Right	4 ft Left / 8 ft Right	4 ft Left / 10 ft Right
<b>Graded Shoulder Width</b>	14' cut and 14' in fill. If using guardrail the graded shoulder shall be 17'.	10' cut/fill 13' when used with guardrail.	6 ft Left / 10 ft Right. If using guardrail add 3' to graded shoulder.	6 ft Left / 10 ft Right. If using guardrail add 3' to graded shoulder.	6 ft Left / 10 ft Right. If using guardrail add 3' to graded shoulder.	14' cut and 17' in fill
<b>Curb and Gutter</b>	N/A	CG-7	N/A	N/A	N/A	N/A
<b>Terrain</b>	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling
<b>Minimum Radius</b>	1821 ft	795 ft	50 MPH: 760ft 30 MPH: 215ft	25 MPH: 135 ft	50 MPH: 760 ft 25 MPH: 135 ft	1204 ft
<b>Minimum Stopping Sight Distance</b>	730 ft	360 ft	50 MPH: 425' 30 MPH: 200'	25 MPH: 155'	50 MPH: 425' 25 MPH: 155'	570 ft
<b>Clear Zone<sup>4</sup></b>	30 ft with foreslope of 6:1 or flatter	20 ft with foreslope of 6:1 or flatter.	foreslopes 6:1 or flatter 50 MPH: 20-22 ft 30 MPH: 14-16 ft'	foreslopes 6:1 or flatter 25 MPH: 14-16 ft'	foreslopes 6:1 or flatter 50 MPH: 20-22 ft 25 MPH: 14-16 ft'	30 ft with foreslope of 6:1 or flatter
<b>Slope Standard</b>	CS-4	CS-4	CS-4	CS-4	CS-4	CS-4
<b>Minimum Vertical Clearance</b>	16'-6"	16'-6"	16'-6"	16'-6"	16'-6"	16'-6"

- Design speed shall be minimum of 50 MPH on ramp to I-95 functional area and transition to 30 MPH.
- Design speed shall be 50 MPH at I-95 off ramp exit from I-95. Off ramp to provide for a dual lane off ramp, with the outside design as a choice lane for SB I-95 traffic. 25 MPH minimum design speed applies to tie to Route 3.
- 12 ft will be used per lane on multi-lane ramps. Single lane ramps will be 16 ft wide, except 18' will apply to Loop B.
- Clearzone requirements depend on foreslope and backslope conditions, utilize Roadway Design Manual page A-21.
- The intent of this table is to describe absolute design minimums and not enumerate every required design feature. Design features shown in the RFP Concetual Plans exceeding these minimums shall be adhered to and shall supersede minimums shown within this table.

## **ATTACHMENT 2.3a**

### **Additional Foundation Criteria**

(August 25, 2015)

The following additional VDOT Modifications to the AASHTO LRFD Bridge Design Specifications, 7<sup>th</sup> Edition, 2014; and VDOT Modifications (IIM-S&B-80.5 dated August 25, 2015) are made as an intermediate measure to provide general guidance.

#### **Settlements:**

Plans shall incorporate one of the following **General Notes**.

The foundations for this structure have been designed to limit Total Settlement to ½". The total settlement ( $S_{TOT}$ ) is defined as the arithmetic sum;  $S_{TOT} = \text{Elastic Settlement} + \text{Consolidation Settlement} + \text{Secondary Settlement}$ . The superstructure and substructure elements above the footings has not been specifically analyzed or designed to accommodate total nor differential settlement.

OR

This structure has been analyzed and designed to accommodate settlement as noted below:

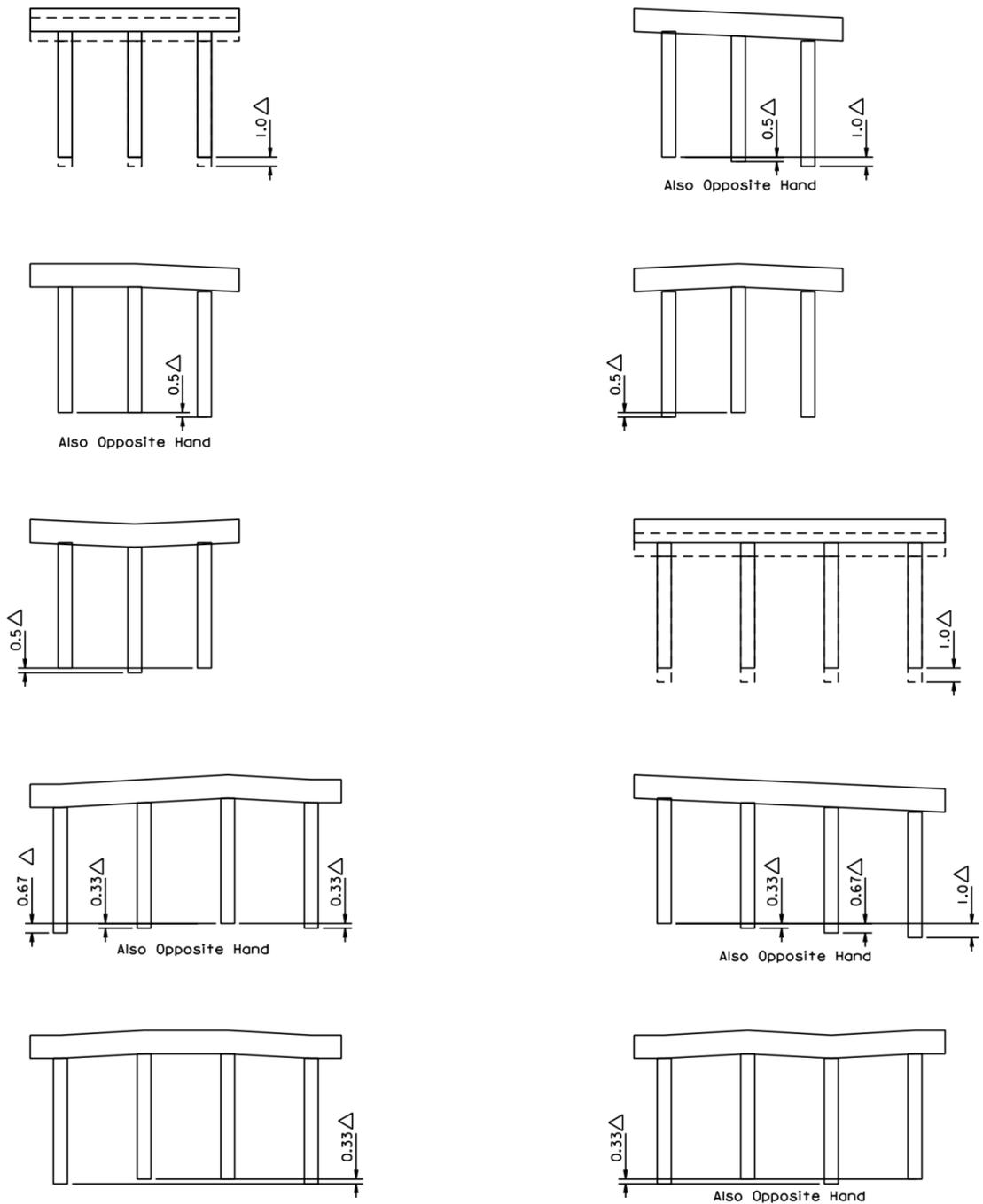
Total Settlement of (\_\_\_)" has been accommodated. The total settlement ( $S_{TOT}$ ) is defined as the arithmetic sum;  $S_{TOT} (___) = \text{Elastic Settlement (___)} + \text{Consolidation Settlement (___)} + \text{Secondary Settlement (___)}$ ". In addition, Differential Settlement of (\_\_\_)" between adjacent substructure units and (\_\_\_)" within a single unit has been accommodated.

#### **In order to facilitate the selection of the specific values for the General Note, the following Notes to Designer are provided:**

The following restrictions are placed on Settlements:

1. For beam and slab bridges conforming to superstructure types a, e, f, g, k, i as defined in AASHTO Table 4.6.2.2.2: when total settlement and differential settlement are limited to ½" no additional analysis is required.
2. During construction and after all settlements have occurred the bridge structure (consisting of the superstructure, substructure and associated elements in the load path) must meet all structural capacity requirements for all loading combinations requiring such analysis. In addition, the structure must meet all structural capacity requirements for all load combinations for the listed differential settlement.
3. The bearings and substructure shall be designed and detailed to accommodate increases or decreases in loads due to total or differential settlement shown on the plans. (Ref AASHTO 3.4.1; 3.12.6). The superstructure shall be designed and detailed to accommodate changes in loads, locations of inflections points or fatigue stress ranges.
4. Creep and/or shrinkage may only be used to offset settlement effects when it occurs **CONCURRENTLY** with settlement, and the designer is responsible for determining

- time rate of settlement and creep. [For instance, if all settlement is elastic (instantaneous), creep cannot be used to offset loads imposed]
5. Joint rotations and Bearing rotations due to settlement shall be considered in addition to all tolerances for rotations due to Live Load (LL) effects or for constructability.
  6. In no case shall anticipated settlements (or rotations due to settlement) as noted in the general note cause the structure to encroach on horizontal, vertical or navigation clearance envelopes. (e.g. if 2" of settlement is anticipated then the designer should add 2" to the planned minimum vertical clearance)
  7. In no case shall anticipated settlements (or rotations due to settlement) as noted in the general note cause the structure to encroach on horizontal, vertical or navigation clearance envelopes. (e.g. if 2" of settlement is anticipated then the designer should add 2" to the planned minimum vertical clearance)
  8. Settlements which change profile grade shall not:
    - a. Increase spread of drainage beyond limits specified in AASHTO.
    - b. Change performance or maintainability of utilities.
    - c. Introduce a low spot on the bridge.
    - d. Negatively impact rideability except as limited by the special provision for rideability. [When applicable]
  9. Coordinate predicted/expected settlement of the approach embankments and bridge structure to comply with contract rideability requirements.
  10. The structure must be capable of carrying an additional future wearing surface equal to the magnitude of the total anticipated settlement placed uniformly from curb to curb and abutment to abutment. All parapets and railings shall accommodate the additional layer of surfacing with no modification or reduction in crash test level after construction.
  11. Jacking and shimming shall not be allowed to correct differential settlement except as noted in the original design plans.
  12. Settlements shall be treated as a load condition with  $y_{SE} = 1.0$  for all AASHTO indicated groups. (Clarify AASHTO 3.4.1)
  13. When differential settlement at a single substructure unit is anticipated, both the superstructure and substructure shall be analyzed and detailed to account for the changes resulting from differential deflection. For continuous footings, settlement may be considered to be linear along the long axis of the footing. For isolated footings, in addition to the linear distribution of settlement, adjacent footings shall be analyzed for a linear proportion of the differential settlement at each footing (for a 3 column pier with 2 equal spaces, 50%, for a 4 column pier with 3 equal spaces, 33% of the total pier differential shall be used at each column. (including but not limited to the settlement conditions shown on the following page)
  14. Under no condition shall settlement be used to justify use of simple span configurations instead of continuous span configurations.



Examples of Possible Settlement patterns to clarify differential settlement proportioning as it is intended to be considered as part of settlement analysis (Patterns are selected for illustrative purposes, the pattern selection is not all inclusive, designer is responsible for determining Critical Pattern)

## ASSIGNMENT AGREEMENT

This Assignment Agreement (this “Agreement”), dated as of the [\_\_\_\_\_] day of [\_\_\_\_\_] , 201\_, is between [\_\_\_\_\_] (“Assignor”) and the Virginia Department of Transportation, an agency of the Commonwealth of Virginia (“Assignee”).

### RECITALS

**WHEREAS**, on [DATE] the Assignor purchased nonpoint source phosphorus from [GENERATOR/SELLER]; and

**WHEREAS**, Assignor purchased [\_\_] pounds of phosphorus credits and retired [\_\_] pounds of nitrogen credits associated with such phosphorus credits;

**WHEREAS**, such phosphorus credits were generated at [FACILITY NAME] located in [COUNTY/CITY], Virginia; and

**WHEREAS**, Assignor has received a Bill of Sale from [GENERATOR/SELLER] dated [\_\_\_\_\_] and evidencing the purchase and attached hereto as Exhibit A; and

**WHEREAS**, the purchase of such phosphorus credits is associated with [PROJECT/PERMIT]; and

**WHEREAS**, Assignor desires to assign its rights and obligations under the Bill of Sale to Assignee and Assignee desires to assume the same.

### AGREEMENT

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements set forth below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Recitals. The foregoing recitals are hereby incorporated by reference herein and made a substantive part hereof.

2. Assignment. Assignor hereby transfers, assigns, and conveys to Assignee all of Assignor’s right, title and interest in the phosphorus credits and associated nitrogen credits that are the subject of the Bill of Sale attached hereto as Exhibit A.

3. Assumption. Assignee hereby accepts all of Assignor’s right, title and interest in the phosphorus credits and associated nitrogen credits that are the subject of the Bill of Sale attached hereto as Exhibit A.

4. Counterparts. This Agreement may be executed in counterparts (including by

means of telecopied signature pages), any one of which need not contain the signatures of more than one party, but all such counterparts taken together shall constitute one and the same instrument.

5. Governing Law. All matters relating to the interpretation, construction, validity and enforcement of this Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia, including all matters of construction, validity and performance.

6. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

7. Amendment. Any provision of this Agreement may be amended or waived only in a writing signed by the Assignor and Assignee.

*This space intentionally left blank*

**IN WITNESS WHEREOF**, the Assignor and Assignee have caused their duly authorized representative to execute this Agreement as of the date first above written.

**ASSIGNOR:**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**ASSIGNEE:**

VIRGINIA DEPARTMENT OF TRANSPORTATION

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Attachment 2.14.3**  
**Design Build Project - File Index**

- 1. Contract Documents**
  - 1.1 Contract
  - 1.2 NTP Letter
  - 1.3 Start/Completion Date (C-5)
  - 1.4 Subcontractor Data – Sublets (C-31)
  - 1.5 Change Orders\*
  - 1.6 Stop Work Orders\*
  - 1.7 Contract Change Directives\*
- 2. Correspondence Files**
  - 2.1 Correspondence Log
  - 2.2 Contact Info/Email Distribution List
  - 2.3 Miscellaneous
- 3. Project Meeting Records**
  - 3.1 Kickoff Meeting
  - 3.2 Design Progress Meetings
  - 3.3 Construction Progress Meetings
  - 3.4 Pardon Our Dust
  - 3.5 Stakeholder/Public Meetings\*
- 4. Scope Validation**
  - 4.1 Issue Tracking Log
  - 4.2 Scope Validation Documentation
- 5. Financial**
  - 5.1 Monthly Pay Applications (including Adjustments & Stored Materials)
  - 5.2 Financial Audits
  - 5.3 Semi-Final Estimate
- 6. Schedules**
  - 6.1 Preliminary Schedule
  - 6.2 Baseline Schedule/Narrative
  - 6.3 Schedule Update (including Progress Earnings Schedule (C-13c), Schedule Narrative, and Monthly Progress Report)
- 7. Design Documents/Submittals\*\***
  - 7.1 Submittal Log
  - 7.2 Plans Submittals\*\*\* (including roadway, bridges, traffic signals, lighting, sound barriers, ITS, etc.)
  - 7.3 Drainage Computations
  - 7.4 Geotechnical Report
  - 7.5 Traffic Analyses (forecasts, operations, TMP, etc.)\*\*\*
  - 7.6 Released for Construction Plans (including revisions)
  - 7.7 Shop Drawings
  - 7.8 Design Waivers/Exceptions\*
- 8. Environmental/Permits**
  - 8.1 VPDES
  - 8.2 SWPPP
  - 8.3 Copies of Certifications (DCR & DEQ)
  - 8.4 C-107s
- 8.5 Disposal, Borrow Pit, Or Haul Road Agreement/Approval\*
- 8.6 Others (Noise Variance, Etc.)\*
- 9. Right Of Way**
  - 9.1 ROW Acquisition Plan
  - 9.2 Parcel Documentation (including Property Owner Notification Letters, Appraisals)\*\*\*
  - 9.3 Authorization to Commence Acquisition
  - 9.4 Recorded Documents/ Condemnations
  - 9.5 RW-24 Reports
- 10. Utilities**
  - 10.1 Utility Status Report
  - 10.2 Utility Relocation Plans\*
- 11. Construction (General)**
  - 11.1 Construction Authorization
  - 11.2 Daily Work Reports (DWRS)
    - 11.2.1 QC
    - 11.2.2 QA
  - 11.3 RFI Log
  - 11.4 Photographs
  - 11.5 Non-Conformance Log and Notices\*
  - 11.6 Contractor’s NOI/Claims\*
- 12. Safety**
  - 12.1 Emergency Contact List
  - 12.2 Safety Officer & WZC Letter
  - 12.3 Work Zone Safety Reports
  - 12.4 Accident/Incident Reports & Claims\*
- 13. Quality Assurance / Quality Control (QA/QC)**
  - 13.1 QA/QC Plan
  - 13.2 Preparatory Inspection Meetings (including Witness and Hold Points)
  - 13.3 Licenses & Certifications (Testing)
  - 13.4 Contractor Performance Evaluations
  - 13.5 CQIP/QAT Reviews\*
- 14. Materials Notebook**
  - 14.1 Source Of Material (C-25)
  - 14.2 Material Delivery Invoices (including Buy America Certification)
  - 14.3 Test Reports
    - 14.3.1 QC
    - 14.3.2 QA
  - 14.4 Concrete Tickets With TI-28a
  - 14.5 Stone Tickets (TI-102a)
  - 14.6 List of items approved by visual inspection\*
- 15. DBE/ EEO Documentation**
- 16. Close-Out & Acceptance**
  - 16.1 Punch-List
  - 16.2 As-Built Documentation\*\*\*
  - 16.3 Warranties, Guarantees & Insurance
  - 16.4 Final Acceptance Letter

\* Create these folders only as needed.

\*\* Include documentation associated with the plan submittals (All plans will be uploaded only to FALCON).

\*\*\* Create subfolders as needed.

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# Exhibit 1 to Part 3 Project-Specific Terms

(Date of Standard Exhibit 1 to Part 3: May 2014)

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**Part 3 (2013 Lump Sum Agreement Between Department and Design-Builder), Part 4 (2013 General Conditions of Contract Between Department and Design Design-Builder), and Part 5 (2013 Division I Amendments to the Standard Specifications General Provisions for Design-Build Contracts Between Department and Design-Builder) of the RFP are incorporated into this contract by reference. A copy of these documents can be found here: <http://www.virginia.gov/business/design-build.asp>**

**This Exhibit 1 to Part 3 contains project-specific terms that are hereby incorporated, as identified below, into Parts 3, 4 and 5.**

**Department and Design-Builder hereby agree any provisions in this Exhibit 1 that modify a specific clause of Parts 3, 4, or 5 shall supersede the clause contained in Parts 3, 4, or 5.**

The Agreement Date is [\_\_\_\_\_].

**The Parties to the Agreement are:**

**VIRGINIA DEPARTMENT OF TRANSPORTATION (“Department”),  
An agency of the Commonwealth of Virginia:**

Virginia Department of Transportation  
Attention: Chief Engineer  
1401 East Broad Street  
Richmond, VA 23219

**DESIGN-BUILDER:**

**[INSERT DESIGN-BUILDER INFORMATION]**

Project No.: **0095-111-278**  
Project: **I-95 Safety Improvements at Route 3  
City of Fredericksburg, Virginia**

**PART 3**  
**2013 LUMP SUM DESIGN-BUILD AGREEMENT BETWEEN**  
**DEPARTMENT AND DESIGN-BUILDER**

**2.1.4** The Department's Request for Proposals (RFP) is dated September 27, 2016.

**2.1.7** The list of all final modifications to the Proposal is as follows:

**[LIST PROPOSAL MODIFICATIONS BY NUMBER AND DATE]**

**5.2.1** The **Final Completion Date** is \_\_\_\_\_

**5.2.2** The **Early Completion** is in accordance with Attachment to Part 3 Article 5.

**5.3** **Adjustments** shall be in accordance with Attachment to Part 3 Article 5.

**5.5.1** Liquidated damages for failing to attain Final Acceptance by the Final Completion Date are **three thousand one hundred** dollars (\$**3,100**) per day.

**6.1** The **Contract Price** is [*written dollar value*] Dollars (\$[*numerical*]).

**6.3** The identification of eligible **Asphalt and/or Fuel** price adjustments for this contract is as follows:

**[LIST ASPHALT and/or FUEL, if any, eligible price adjustments for the Project]**

**9.1.1** The Department's Senior Representative is:

[*Name*]  
[*Title*]  
[*Address*]  
[*Telephone Number*]

**9.1.2** The Department's Representative is:

[*Name*]  
[*Title*]  
[*Address*]  
[*Telephone Number*]

**9.2.1** The Design-Builder's Senior Representative is:

[*Name*]  
[*Title*]  
[*Address*]  
[*Telephone Number*]

**9.2.2** The Design-Builder's Representative is:

[*Name*]

[*Title*]

[*Address*]

[*Telephone Number*]

**11.1.2** The **Baseline Schedule** shall be submitted within **ninety (90)** days of Design-Builder's receipt of the Department's Notice to Proceed.

### **PART 3 LUMP SUM AGREEMENT**

**7.1.5** If Design-Builder fails to make payment to the Subcontractor within the time frame and provisions specified in Section 7.1.3 and 7.1.4 above, the Subcontractor shall notify the Department and the Design-Builder's bonding company in writing. The Design-Builder's bonding company shall be responsible for insuring payment to the Subcontractor.

**7.1.6** Pursuant to VA. CODE §2.2-4354, Design-Builder agrees to provide the Department, within five (5) days of the Agreement Date, its federal employer identification number.

### **PART 4 2013 GENERAL CONDITIONS OF CONTRACT BETWEEN DEPARTMENT AND DESIGN-BUILDER**

**2.2.1** The duration of the **Scope Validation Period** is **ninety (90)** days.

**2.2.3 Submission Requirements for Scope Issues.** If Design-Builder intends to seek relief for a Scope Issue, it shall promptly, but in no event later than the expiration of the Scope Validation Period, provide Department in writing with a notice ("General Notice") of the existence of such Scope Issue, which General Notice shall generally explain the basis for such Scope Issue. Within twenty-one (21) days of the General Notice of a Scope Issue, Design-Builder shall provide Department with documentation that specifically explains its support for the Scope Issue ("Supporting Documentation"), which Supporting Documentation shall include, among other things: (a) the assumptions that Design-Builder made during the preparation of its proposal that form the basis for its allegation, along with documentation verifying that it made such assumptions in developing its proposal; (b) an explanation of the defect, error or inconsistency in the RFP Documents that Design-Builder could not have reasonably identified prior to the Agreement Date; and (c) the specific impact that the alleged Scope Issue has had on Design-Builder's price and time to perform the Work. For the avoidance of doubt: (1) Design-Builder shall not be entitled to raise in its Supporting Documentation any Scope Issues that were not previously addressed in a General Notice; and (2) Design-Builder shall have no right to seek any relief for any Scope Issues that have not been specifically identified in a General Notice provided to Department during the Scope Validation Period. The General Notice of Scope Issues and any Supporting Documentation shall be submitted in writing to Department's Alternate

Project Delivery Office Point of Contact listed in Part 1, Section 2.4 of the RFP Documents and to Department's Representative included in Exhibit 1 to Part 3, Section 9.1.2 simultaneously.

**6.2.1.2** QA/QC shall be an integral part of each activity. As part of each Application for Payment that includes completed activities, Design-Builder's designated quality assurance manager shall: (a) verify that the design included in each activity has been completed in accordance with the Contract Documents; (b) certify that the construction included in each activity has been completed in accordance with the Contract Documents; and (c) certify that all required QA/QC tests, measurements, permits or other requirements have been completed and all non-conformance reports relative to the respective activity have been resolved. The Quality Assurance Manager's certification for monthly Application of Payment for construction activities shall include the following statement: *As the Quality Assurance Manager, I certify, to the best of my knowledge, information and belief based upon and to the extent of (i) current on-site observations and field testing required to be performed and (ii) material certifications and test reports, that each Work Package shown herein as complete has been completed in accordance with the Contract Documents, and that all required QA/QC tests, measurements, permits or other requirements have been completed and all non-conformance reports relative to a respective Work Package have been resolved except for the attached list of open issues.*

The Design-Builder shall submit with the Application for Payment, evidence of the QA/QC reviews, including any checklists, summary data, high-level/outline calculations or design checks, and evaluations of the work and the qualifications of the responsible personnel that completed the work, etc., that the relevant QA or QC reviewer relied on to make its determination the work is complete and conforms to the requirements of the Contract Documents.

## **PART 5**

### **2013 DIVISION I AMENDMENTS TO THE STANDARD SPECIFICATIONS GENERAL PROVISIONS FOR DESIGN-BUILD CONTRACTS BETWEEN DEPARTMENT AND DESIGN-BUILDER**

The following shall supersede Part 5, Section 103.06 of the 2013 Division I Amendments to the Standard Specifications General Provision for Design-Build Contracts between Department and Design-Builder

#### **103.06—Documents Required as a Condition to Award**

The portion of the executed Contract submitted by the Successful Offeror shall include the following documents, unless the filing of any of them at a later date is specifically permitted by the RFP or Contract Documents, provided, however notwithstanding anything to the contrary in the Contract Documents, that the submission of an executed Agreement and Contract Bonds shall always be a precondition to Award

- (a) **Contract:** The Agreement executed by the Successful Offeror.
- (b) **Contract Bonds:** Contract Bonds shall conform to the requirements of Section 103.05.

(c) **Affidavits and Documents:** Affidavits and documents set forth in the RFP and executed by the Successful Offeror.

(d) **Progress Schedule:** (Not Used)

(e) **Insurance Coverages and Certificates of Insurance:** The Design-Builder shall procure and maintain the insurance coverages required below, in accordance with Paragraph (f) below. Design-Builder shall file certificates of insurance with the Department evidencing the coverages and limits within 15 days after notification of Award of the Contract.

.1. Workers' Compensation and Employer's Liability Insurance, with statutory workers' compensation (Coverage A) limits and employer's liability (Coverage B) limits of \$1 million bodily injury by accident or disease, each employee. If necessary, coverage shall be extended to cover any claims under the United States Longshoreman's Act and Harbor Workers Act and Jones' Act as may be appropriate for the Work.

.2 Commercial General Liability Insurance, including coverage for premises and operations, independent contractors, personal injury, product and completed operations, explosion, collapse and underground, and broad form contractual liability with limits of at least \$1 million per occurrence and \$2 million aggregate, applicable on a per project basis.

.3 Automobile Liability Insurance, with a limit of at least \$1 million combined single limit for bodily injury and property damage covering all owned (if any), non-owned, hired or borrowed vehicles on-site or off.

.4 Umbrella/Excess Liability Insurance in excess of the underlying limits noted above for employer's liability, commercial general liability, and automobile liability in the amount of: (a) \$5 million per occurrence and in the annual aggregate for Projects with a Contract Price less than \$15 million; and (b) \$20 million per occurrence and in the annual aggregate for Projects with a Contract Price greater than \$15 million.

.5 Architects/Engineers Professional Liability Insurance, covering Design-Builder's lead design engineer for acts, errors or omissions arising in connection with the Work for not less than: (a) \$2 million any one claim and in the aggregate for Projects with a Contract Price less than \$50 million; and (b) \$5 million any one claim and in the aggregate for Projects with a Contract Price greater than \$50 million. Such insurance shall be maintained throughout the duration of any warranty period and for at least three years after the expiration of any warranty period.

.6 Contractor's Pollution Liability Insurance, to indemnify for bodily injury or property damage or amounts which Design-Builder or its agents, Subcontractors, or employees are legally obligated to pay for clean-up/remediation arising out of the work undertaken pursuant to the Contract Documents. Such insurance shall have minimum limits of \$5 million any one claim and in the aggregate and shall remain in full force and effect for five years following Final Completion.

.7 Builder's Risk Insurance, to provide coverage for physical loss, destruction or physical damage to the work. Such insurance shall cover Design-Builder, the Department, and all Subcontractors and shall be maintained at a limit of at least 100% of the Contract Price. Such insurance shall include replacement cost coverage for materials, supplies, equipment, machinery, and fixtures that are or will be part of the Project. Coverages shall include but are not limited to the following: right to partial occupancy, earthquake, earth movement, flood, transit, temporary and permanent works, expediting expenses, debris removal, offsite storage, soft costs and commissioning and start-up.

(f) **Insurance Requirements:** Design-Builder shall ensure that all insurances required in Paragraph (e) above contain the following provisions:

.1 With the exception of workers' compensation and architect/engineers' professional liability insurance, the Department shall be named as an additional insured on all policies. Each such policy shall also include the appropriate severability of interest and cross-liability clauses to allow one insured to bring claim against another insured party.

.2 All insurance coverages shall be considered primary and non-contributory with regard to other insurances that might be available to Design-Builder or the Department.

.3 All insurers shall waive rights of subrogation against the Department for any claims covered by insurance required herein.

.4 Any inadvertent errors or omissions by Design-Builder in procuring the insurance required herein shall in no way prejudice the rights of the Department to collect under such policies.

.5 Any deductibles shall be the sole responsibility of Design-Builder.

.6 The insurance shall remain in full force and in effect and will remain in effect for the duration required by the Contract Documents.

.7 No insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Department.

.8 With the exception of workers' compensation and automobile liability insurance, the insurance policies shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project.

(g) **Additional Insurance Requirements:**

.1 Design-Builder shall require all Subcontractors to carry the same insurance, and in the same amounts, required by Paragraphs (e)(1), (e)(2) and (e)(3) above.

.2 Design-Builder shall file certificates of insurance with the Department evidencing the coverages and limits described above within the times required by Paragraph (e) above. The

certificates shall be executed by approved insurance companies authorized to do business in Virginia with a minimum "Best Rating" of "B +" or greater, and shall cover the Contract.

.3 The insurance coverage limits shall not be construed to relieve Design-Builder or Subcontractor(s) of liability in excess of such coverage, nor shall it preclude the Department from taking such actions as are available to it under any other provision of the Contract Documents or otherwise in law.

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**109.05 – Contract Price Adjustments**

(f) **Compensation:** The compensation as set forth in this Section shall be accepted by the Design-Builder as payment in full for work performed on the basis described in this Section 109.05. At the end of each day, the Design-Builder's Representative and the Inspector shall compare and reconcile records of the hours of work and Equipment, labor, and Materials used in such work. Such accounting may not include actual costs or labor rates where these are not available but shall be used to verify quantities, types of Materials or labor, and number and types of Equipment.

If all or a portion of the work is performed by approved Design Consultant(s), Subcontractor(s), and/or Sub-Subcontractor(s) the Design-Builder will be paid ten (10) percent of the subcontract net costs to cover the Design-Builder's profit and administrative cost. The amount resulting will not be subject to any further additives. The itemized statements of costs as required below shall be submitted on a form that separates the subcontracted portions of the labor, Materials, and Equipment from the other costs.

**DEPARTMENT:**

**DESIGN-BUILDER:**

Virginia Department of Transportation  
*(Name of Department)*

\_\_\_\_\_  
*(Name of Design-Builder)*

\_\_\_\_\_  
*(Signature)*

\_\_\_\_\_  
*(Signature)*

\_\_\_\_\_  
*(Printed Name)*

\_\_\_\_\_  
*(Printed Name)*

Chief Engineer  
*(Title)*

\_\_\_\_\_  
*(Title)*

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**END OF EXHIBIT 1 to PART 3  
PROJECT-SPECIFIC TERMS**

**ATTACHMENT to Part 3 Article 5**  
**PROVISION FOR “NO EXCUSES” INCENTIVES**

**5.2.2 Early Completion of the Project** The Department will pay the Design-Builder a payment in the amount of **three hundred and fifteen thousand Dollars (\$315,000.00)** to be known as a "no excuses" incentive payment if Work under the Contract Documents for the Project is completed at least ninety (90) days prior to the Final Completion Date, as submitted in the Offerors Letter of Submittal, defined under Part 1, Section 2.3.2. For every day less than the ninety (90) day period the Design-Builder takes to complete the Work of the Project, the “no excuses” incentive payment will decrease at a daily rate of **three thousand and five hundred Dollars (\$3,500.00)**. NO incentive payment will be paid for completing all Work after the Final Completion Date. The "no excuses" incentive payment will be paid in addition to and separate from the Contract Price. For the purposes of this provision, completion shall be defined as Final Acceptance of all Work completed in accordance with the Contract Documents for the Project in accordance with the process described in Part 4, Section 6.6.2.

**5.2.2.1 Acknowledgement of Delays**

The parties anticipate that delays may be caused by, or arise from, any number of events during the term of the Contract Documents including, but not limited to: work performed, work deleted, work orders, valid Scope Issues identified during the Scope Validation Period, supplemental agreements, force accounts, delays, disruptions, differing site conditions, utility conflicts, design changes or defects, time extension, extra work, overruns, nearby or adjacent projects, right of way issues, permitting issues, actions of suppliers, subcontractors or other contractors, actions of third parties, actions of local residences and business owners, shop drawing approval, process delays, expansion of the physical limits of the Project, weather (other than floods in excess of the base flood, hurricane force winds and tornados), weekends, holidays, suspension of contract time, extended or absorbed home office or job site overhead, lump sum maintenance of traffic adjustments, lost profits, prime mark-up impacts, conditions, circumstances, or potential damages on or pertaining to or as arising out of the Contract Documents, or other events, forces, or factors sometimes experienced in highway and bridge construction work. Further, all costs or impacts incurred by the Design-Builder (not previously identified and covered by work order, overrun, or force account) shall be the sole responsibility of the Design-Builder if the Design-Builder chooses to accept the “no excuses” incentive.

The “no excuses” incentive shall not apply to delays related to Unknown Hazardous Materials, wars, floods in excess of the base flood (as defined in the Division 1 Amendment), hurricane force winds, tornados, and earthquakes that cause ground accelerations in excess of AASHTO bridge design standards for the Site.

**5.2.2.2 Procedure to receive “no excuses” incentives**

The Design-Builder shall, in order to receive any “no excuses” incentive payments:

1. Obtain Department written concurrence of Final Acceptance, in accordance with the process described in Part 4, Section 6.6.2.

2. After receiving written concurrence of Final Acceptance, the Design-Builder shall sign a “Release of ALL Claims” form provided herein. The “Release of ALL Claims” form certifies that all Work has been completed and has attained the Departments Final Acceptance and includes a full and complete release and acknowledgement of satisfaction by the Design-Builder of any and all claims, causes, actions, issues, demands, disputes, and matters of controversy of any nature or kind whatsoever for all Work performed from the Agreement Date until Early Completion of Final Project. This release and acknowledgement of satisfaction shall be all-inclusive and absolute.

#### **5.2.2.3 Failure to Receive a “no excuses” incentive**

Should the Design-Builder, having satisfactorily completed the Work, fail to request the “no excuses” incentive payment for any reason, including but not limited to the Design-Builder choosing not to fully release and acknowledge satisfaction of any and all claims etc. as set forth in the “Release of ALL Claims” form, the Design-Builder shall have no rights to any “no excuses” incentive payment(s) whatsoever.

**5.3 Adjustments.** The Final Completion Date(s) for the Project, in the Department’s sole discretion, shall be subject to adjustment in accordance with the provisions described herein.

The Department in its sole discretion will determine Final Acceptance and the Final Completion Date(s). The Final Completion Date will not be adjusted for any reason, cause or circumstances whatsoever, unless determined otherwise by the Department in accordance with the requirement and procedures outlined in Part 4, Article 9. In the event that the Department approves adjustments to the Final Completion Date for the Project, a work order will be generated to clearly identify the date changes and the application, if any, of any incentive/disincentive (or liquidated damages) with regard to any revised Final Completion Date for the Project.

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**RELEASE OF ALL CLAIMS**

**Design-Build Project for \_\_\_\_\_**  
**Contract ID. No. \_\_\_\_\_**

Having completed the [*Project or Interim Milestone One*] as defined in the Attachment to Part 3 Article 5 of the above described contract, and in consideration of the agreed settlement sum of [*written dollar value*] Dollars (\$[*numerical*]), the sufficiency of which is hereby acknowledged, [*full company name*], [*nickname of company*], for itself and on behalf of its agents, employees, subcontractors, and material suppliers, or any combination thereof, and on behalf of its or their respective heirs, executors, administrators, successors, and assigns, hereby accepts said agreed settlement sum in full and final settlement of each and every claim of any nature, whether known or unknown, that exists for any reason against the Commonwealth of Virginia, Department of Transportation that is related in any way or degree to the Design-Build Project for Route 29 Solutions referenced above. Therefore, [*nickname of company*] does hereby release, acquit and forever discharge the Commonwealth of Virginia, its political subdivisions, departments, agencies and instrumentalities, the Comptroller of Virginia, the Commissioner of Highways, the Virginia Department of Transportation, directly and indirectly and in their official capacities, and their respective heirs, executors, administrators, successors, and assigns, of and from any and all actions, causes of actions, liability, rights, suits, contracts, claims and demands whatsoever, in law or in equity, for any and all injuries, damages, costs, expenses, attorney fees, consultant fees, or any other type of damage whatsoever, whether known or unknown. As set forth in the Attachment to Part 3 Article 5 of the above-described contract, and as further set forth by this documentary claims on work performed on the project before contract completion will be forever released and voided upon signature of this document.

In Further consideration of the above agreed upon final settlement sum, [*nickname of company*] expressly declares and agrees: 1) that the release of all claims herein shall not, and shall never be treated or considered as evidence of liability, nor as an admission of liability or responsibility at any time or in any manner whatsoever; and 2) that the Commonwealth of Virginia, its political subdivisions, departments, agencies and instrumentalities, the Comptroller of Virginia, the Commissioner of Highways, the Virginia Department of Transportation, directly and indirectly and in their official capacities will not be stopped from or otherwise barred from asserting, and they expressly reserve the right to assert, any claim or cause of action, known or unknown, they may have against [*nickname of company*] or any others; and 3) the payment of the agreed upon settlement sum is subject to (i) reduction by the amount of any outstanding debts owed to the Virginia Department of Transportation on this project and (ii) any set off by the Commonwealth of Virginia pursuant to the Virginia Debt Collection Act (Virginia Code Section 2.1-726, *et seq.*) and its implementing policies, procedures and regulations, provided however, the foregoing release will not extend to the Undersigned's right to contest the validity of such reduction or set-off but will be final in all other respects.

The Undersigned acknowledges under the above terms that this Release of all Claims has been fully and carefully reviewed and that all the terms and provisions contained herein are understood and agreeable.

I/we am/are authorized to execute this Release of all Claims on behalf of **[full company name]**, this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

By: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_  
City/County of \_\_\_\_\_, To Wit

I, the undersigned, a Notary Public in and for the City\County and State aforesaid, do hereby certify that \_\_\_\_\_, whose name is signed to the foregoing instrument, bearing date of the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ has this day acknowledged the same before me in my City\County and State aforesaid on behalf of **[full company name]**.

Given under my hand this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

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**EXHIBIT 6.3(a)**  
**ADJUSTMENT FOR ASPHALT**

**SPECIAL PROVISION FOR**  
**ASPHALT MATERIAL PRICE ADJUSTMENT for DESIGN-BUILD PROJECTS**

September 26, 2016

All asphalt material listed in the attached "Master Listing of Asphalt Material Items Eligible for Price Adjustment" will be adjusted in accordance with the provisions as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract. Any item added through a Work Order which contains Asphalt Material will not be subject to Price Adjustment unless specifically designated in the Work Order to be subject to Price Adjustment.

Each month, the Department will publish an average state-wide PG 64S-22 f.o.b. price per ton and an average PG 64E-22 f.o.b. price per ton developed from the average terminal prices provided to the Department from suppliers of asphalt cement to contractors doing work in Virginia. The Department will collect terminal prices from approximately 12 terminals each month. These prices will be received once each month from suppliers on or about the last weekday of the month. The high and low prices will be eliminated and the remaining values averaged to establish the average statewide price for the following month. That monthly state-wide average price will be posted on the Scheduling and Contracts Division website on or about the first weekday of the following month. In the event the average prices were to change 10 percent or more of the Base Index during the middle of the month, the Design Builder can submit a letter to the Department and the supplier that provides evidence of the difference in price. Upon receipt of the letter consideration will be given to extend additional adjustments as deemed necessary.

This monthly statewide average price will be the Base Index for all contracts on which Price Proposals are received during the calendar month of its posting and will be the Current Index for all asphalt placed during the calendar month of its posting. In the event an index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an index which is determined to best reflect the trend.

The amount of adjustment applied will be based on the difference between the Price Proposal/Contract Base Index and the Current Index for the applicable calendar month during which the work is performed. Calculations must be done for each type of Asphalt Material put in place each month, whether the Current Index is higher or lower than the Base Index. The calculation for the adjustment shall be shown as follows:

$$A = Q \times \%AC \times IC$$

Where: A = Asphalt Adjustment Dollar Amount

Q = Quantity of Asphalt Material put in place during the month

%AC = % of Asphalt Cement in the Asphalt Material as specified in the Job Mix Formula

IC = Numeric Dollar Difference, either positive or negative, between the Base Index and Current Index

*Example Calculation for Negative Price Adjustment (Credit back to VDOT):*

7,500 Tons of SM-12.5A put in place during the month (Q), Job Mix is 6.1% Asphalt Cement for SM-12.5A (%AC), Base Index for the Contract is \$515/Ton, Current Index is \$500/Ton, Difference of - \$15.00/Ton (IC)

$$7,500 \text{ Tons SM-12.5A} \times 6.1\% \times -\$15.00/\text{Ton} = -\$6,862.50 \text{ Adjustment Amount}$$

*Example Calculation for Positive Price Adjustment (Paid to the Design-Builder):*

10,000 Tons of BM-25.0A put in place during the month (Q), Job Mix is 5.2% Asphalt Cement for BM-25.0A (%AC), Base Index for the Contract is \$515/Ton, Current Index is \$560/Ton, Difference of + \$45.00/Ton (IC)

$$10,000 \text{ Tons BM-25.0A} \times 5.2\% \times \$45.00/\text{Ton} = +\$23,400.00 \text{ Adjustment Amount}$$

Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22 or PG 70-28, will be based on the indexes for PG 64-22. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The quantity of asphalt emulsion for surface treatments to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly application of payment for work packages completed; however, such adjustment will not be included in the total cost of the work for progress determination or for extension of contract time. Items the Design-Builder claims in its application of payment for asphalt adjustments must include supporting calculations certified by the Quality Assurance Manager (QAM). These calculations must be completed relative to the calendar month under which the work was performed and shall be submitted for either positive or negative adjustment.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment or failure to submit required cost and price data as noted hereinbefore may result in rejection of items for asphalt adjustment.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
**MASTER LISTING OF**  
**ASPHALT MATERIAL ITEMS ELIGIBLE FOR PRICE ADJUSTMENT**  
(10-27-09)

ITEM	DESCRIPTION	UNITS	SPECIFICATION
10062	Asphalt-Stab. Open-Graded Material	Ton	313
10416	Liquid Asphalt	Gal	311 312
10420	Blotted Seal Coat Ty. B	Sy	ATTD
10422	Blotted Seal Coat Ty. C	Sy	ATTD
10423	Blotted Seal Coat Ty. C-1	Sy	ATTD
10424	Blotted Seal Coat Ty. D	Sy	ATTD
10598	Ns Asphalt Concrete	Ton	315
10606	Asphalt Concrete Ty. SM-9.5	Ton	315
10607	Asphalt Concrete Ty. SM-12.5A	Ton	315
10608	Asphalt Concrete Ty. SM-12.5D	Ton	315
10609	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
10610	Asphalt Concrete Ty. IM-19.0A	Ton	315
10611	Asphalt Concrete Ty. IM-19.0D	Ton	315
10612	Asphalt Conc. Base Cr. Ty. BM-25.0	Ton	315
10613	Asphalt Concrete Ty. BM-37.5	Ton	315
10635	Asphalt Concrete Ty. SM-9.5A	Ton	315
10636	Asphalt Concrete Ty. SM-9.5D	Ton	315
10637	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
10639	Asphalt Concrete Ty. SM-19.0	Ton	315
10642	Asphalt Concrete Ty. BM-25.0A	Ton	315
10643	Asphalt Concrete Ty. BM-25.0D	Ton	315
10650	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	317
10651	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	317
10652	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	317
10653	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	317
10654	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	317
10655	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	317
10701	Liquid Asphalt Coating	Sy	ATTD
12505	Asphalt Concrete Curb Backup Material	Ton	315
13240	Asphalt Concrete Sidewalk	Ton	504
16110	Emul. Asph. Slurry Seal Type A	Sy	ATTD
16120	Emul. Asph. Slurry Seal Type B	Sy	ATTD
16130	Emul. Asph. Slurry Seal Type C	Sy	ATTD
16144	Latex Mod. Emul. Treat. Type B	Ton	ATTD
16145	Latex Mod. Emul. Treat. Type C	Ton	ATTD
16146	Latex Mod. Emul. Treat. Rutfilling	Ton	ATTD
16161	Modified Single Seal	Sy	ATTD
16162	Modified Double Seal	Sy	ATTD
16249	Nontracking Tack Coat	Gal.	ATTD

16250	Liquid Asphalt Matl. CMS-2 (Mod)	Gal	ATTD
16251	Liquid Asphalt Matl. CMS-2	Gal	ATTD
16252	Liquid Asphalt Matl. CRS-2	Gal	ATTD
16253	Liquid Asphalt Matl. CRS-2H	Gal.	ATTD.
16254	Liquid Asphalt Matl. RC-250	Gal	ATTD
16256	Liquid Asphalt Matl. RC-800	Gal	ATTD
16257	Ns Liquid Asphalt Matl.	Gal	ATTD
16260	Liquid Asphalt Matl. CRS-2L	Gal	ATTD
16325	NS Asphalt Concrete	Ton	N/A
16330	Asphalt Concrete Ty. SM-9.0A	Ton	315
16335	Asphalt Concrete Ty. SM-9.5A	Ton	315
16337	Asph. Conc. Ty. SM-9.5ASL (Spot Level)	Ton	315
16340	Asphalt Concrete Ty. SM-9.5D	Ton	315
16342	Asph. Conc. Ty. SM-9.5DSL (Spot Level)	Ton	315
16345	Asphalt Concrete Ty. SM-9.5E (76-22)	Ton	315
16350	Asphalt Concrete Ty. SM-12.5A	Ton	315
16352	Asph. Con. Ty. SM-12.5ASL (Spot Level)	Ton	315
16355	Asphalt Concrete Ty. SM-12.5D	Ton	315
16357	Asph. Con. Ty. SM-12.5DSL (Spot Level)	Ton	315
16360	Asphalt Concrete Ty. SM-12.5E (76-22)	Ton	315
16365	Asphalt Concrete Ty. IM-19.0A	Ton	315
16370	Asphalt Concrete Ty. IM-19.0D	Ton	315
16373	Asphalt Concrete Ty. IM-19.0A (T)	Ton	315
16374	Asphalt Concrete Ty. IM-19.0D (T)	Ton	315
16377	Asphalt Concrete Ty. BM-37.5	Ton	315
16379	Asphalt Concrete Ty. IM-19.0T	Ton	315
16390	Asphalt Concrete Ty. BM-25.0A	Ton	315
16392	Asphalt Concrete Ty. BM-25.0D	Ton	315
16395	Asphalt Concrete Ty. BM-25.0A (T)	Ton	315
16397	Asphalt Concrete Ty. BM-25.0D (T)	Ton	315
16400	Stone Matrix Asphalt SMA-9.5(70-22)	Ton	ATTD
16401	Stone Matrix Asphalt SMA-9.5(76-22)	Ton	ATTD
16402	Stone Matrix Asphalt SMA-12.5(70-22)	Ton	ATTD
16403	Stone Matrix Asphalt SMA-12.5(76-22)	Ton	ATTD
16404	Stone Matrix Asphalt SMA-19.0(70-22)	Ton	ATTD
16405	Stone Matrix Asphalt SMA-19.0(76-22)	Ton	ATTD
16490	Hot Mix Asphalt Treatment	Ton	ATTD
16500	Surf.Preparation & Restoration Type I	Ton	ATTD
16502	Surf.Preparation & Restoration Type li	Ton	ATTD
16504	Surf.Preparation & Restoration Type lii	Ton	ATTD
67201	NS Asphalt Concrete Overlay	Ton	315
67210	NS Asphalt Concrete	Ton	315
68240	NS Asphalt Concrete	Ton	315

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**Exhibit 6.3(b)**

Form C-16a  
August 9, 2013

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
ASPHALT PRICE ADJUSTMENT (PG76-22 or PG 70-28)  
DESIGN-BUILD PROJECTS**

**INSTRUCTIONS - This form is to be completed and returned ONLY when asphalt concrete items containing PG 76-22 or PG 70-28 is being utilized on the project.**

PROJECT NUMBER:

DISTRICT:

Bid Prices in this contract for items containing PG 76-22 or PG 70 asphalt cement were developed using a f.o.b. price of \$ \_\_\_\_\_ Per **IMPERIAL** ton for **PG 76-22 or PG 70-28**. This quote is project specific.

Price quotes signed by each supplier from which the Design-Builder proposes to obtain PG 76-22 or PG 70-28 shall be maintained by the Design-Builder. These quotes shall be retained on site during the life of the Contract for review by the Engineer upon request.

DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

\_\_\_\_\_  
(Firm or Corporation)

\_\_\_\_\_  
(Vendor No.)

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**EXHIBIT 6.3 (c)  
ADJUSTMENT FOR FUEL**

**VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
OPTIONAL ADJUSTMENT FOR FUEL  
DESIGN-BUILD PROJECTS**

June 30, 2011

In the event the Design-Builder elects to seek adjustment for fuel items designated in the Price Proposal\Contract as Price Adjustment Items such items will be subject to price adjustment as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract.

The Design-Builder will submit their monthly application for payment associated with eligible work packages with an adjustment up or down as appropriate for cost changes in fuel used on specific items of work identified in this provision. A master listing of standard items eligible for fuel adjustment is provided by the Department on its website at the following link <http://www.virginiadot.org/business/resources/masteroptionalfuelitems.pdf>. The listing on the web site also includes the corresponding fuel factor for each item. The fuel usage factor for each item is considered inclusive of all fuel usage.

The amount of adjustment will be computed from the change in the indexes and the on-site fuel use as shown in the Department's master listing of eligible items.

In order to be eligible for fuel adjustment under this provision, the Design-Builder shall clearly identify in within the Schedule of Values those pay items and the associated quantities it chooses to have fuel adjustment applied to in its work packages. Items the Design-Builder claims in its application of payment for fuel adjustments must be properly designated in order to be considered for adjustment. Items not properly designated or left out of the Design-Builder's Schedule of Values will automatically not be considered for adjustment.

The monthly index price to be used in the administration of this provision will be calculated by the Department from the Diesel fuel prices published by the U. S. Department of Energy, Energy Information Administration on highway diesel prices, for the Lower Atlantic region. The monthly index price will be the price for diesel fuel calculated by averaging each of the weekly posted prices for that particular month.

For the purposes of this provision, the base index price will be calculated using the data from the month preceding the receipt of bids. The base index price will be posted by the Department at the beginning of the month for all bids received during that month.

The current index price will be posted by the Department and will be calculated using the data from the month preceding the particular estimate being vouchered for payment.

The current monthly quantity for eligible items of work selected by the Design-Builder for fuel adjustment in its work packages will be multiplied by the appropriate fuel factor to determine the gallons of fuel to be cost adjusted. The amount of adjustment per gallon will be the net difference between the current index price and the base index price. Computation for adjustment will be made as follows:

$$S = (E - B) QF$$

Where; S = Monetary amount of the adjustment (plus or minus)

B = Base index price

E = Current index price

Q = Quantity of individual units of work

F = Appropriate fuel factor

Adjustments will not be made for work performed beyond the original contract time limit unless the original time limit has been changed by an executed Work Order.

If new pay items are added to this contract by Work Order and they are listed in the Department's master listing of eligible items, the Work Order must indicate which of these individual items will be fuel adjusted; otherwise, those items will not be fuel adjusted. If applicable, designating which new pay items will be added for fuel adjustment must be determined during development of the Work Order and clearly shown on the Work Order form. The Base Index price on any new eligible pay items added by Work Order will be the Base Index price posted for the month in which bids were received for that particular project. The Current Index price for any new eligible pay items added by Work Order will be the Index price posted for the month preceding the estimate on which the Work Order is paid.

When quantities differ between the last monthly application of payment prepared upon final acceptance and the final application of payment, adjustment will be made using the appropriate current index for the period in which that specific item of work was last performed.

In the event any of the base fuel prices in this contract increase more than 100 percent (i.e. fuel prices double), the Department will review each affected item of work and give the Design-Builder written notice if work is to stop on any affected item of work. The Department reserves the right to reduce, eliminate or renegotiate the price for remaining portions of affected items of work.

Any amounts resulting from fuel adjustment will not be included in the total cost of work for determination of progress or for extension of contract time.

I elect to use this provision

Date: \_\_\_\_\_

I elect not to use this provision

Signature: \_\_\_\_\_

Design-Builder: \_\_\_\_\_

Vendor No.: \_\_\_\_\_

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**Design-Build Project Schedule**

**April 15, 2014**

**Exhibit 11.1**

**1. General**

Design-Builder shall develop and maintain a project schedule, which shall be used by all involved parties to plan and execute all work required to complete the project. The project schedule will be used by the Department to monitor the project, assess progress, and evaluate the effects of time-related issues on the project. The project schedule shall be prepared, maintained, and submitted in accordance with this provision, unless otherwise directed in writing by the VDOT Project Manager.

**A. Scheduling Conference** – At the meeting held after the Date of Commencement, Design-Builder shall attend a Scheduling Conference with the VDOT Project Manager to discuss Design-Builder’s overall plan to accomplish the Work; the detail work plan for the initial one hundred and twenty (120) calendar days; and scheduling information, project specific requirements, and other key issues necessary for the preparation, maintenance and submittal of the project schedule.

**B. Project Scheduler** – For projects with awarded Contract Price of \$35 million or more, Design-Builder shall designate a Project Scheduler for the project and shall submit his/her qualifications for the VDOT Project Manager’s written approval prior to submission of the Preliminary or Baseline Schedule. The Project Scheduler must have at least three (3) years of verifiable experience in successfully preparing and maintaining schedules on large scale projects of similar type and complexity. Design-Builder shall provide current contacts for verification of the Project Scheduler’s qualifications and experience. The Project Scheduler shall be primarily responsible for the development and maintenance of the project schedule and shall be present in all scheduling meetings and discussions on major issues concerning the project schedule.

**2. Schedule Submission Requirements**

**A. Preliminary Schedule** – Unless otherwise stated in Exhibit 1, within fifteen (15) days of Design-Builder’s receipt of Department’s Notice to Proceed, Design-Builder shall submit to Department, for its review and approval, a Preliminary Schedule. At its discretion, Design-Builder may submit in lieu of the Preliminary Schedule, a Baseline Schedule according to Section 11.1.4 of the Agreement and Section 2.B below. Until such time as a Baseline Schedule has been approved by Department, Design-Builder shall provide an update of the Preliminary Schedule every month. The Preliminary Schedule will be used to monitor and assess progress of the Work until a Baseline Schedule is approved by the

Department. The Preliminary Schedule submission shall consist of:

1. **Preliminary Schedule**: A Preliminary Schedule prepared and submitted in the form of a Baseline Schedule as defined herein, showing at a minimum:
  - i) The detailed activities depicting the sequence and dates for any work planned during the first one-hundred and twenty (120) calendar days, including as applicable project milestones, review by the Department, FHWA, and other regulatory agencies; as well as environmental, permits, scope validation period, design, right-of-way, utility, and construction activities.
  - ii) Summary level activities depicting the sequence and general timing for work planned after the first one-hundred and twenty (120) calendar days. At Design-Builder's discretion, detailed activities may be shown in lieu of summary level activities.
  - iii) Quantities and dollar value of work associated with each activity for which Design-Builder expects to receive payment.
  - iv) The project critical path (based on the longest path).
2. **Preliminary Schedule Narrative**: A Preliminary Schedule Narrative describing the Design-Builder's overall plan to accomplish the entire scope of Work and the detailed plan for work planned during the initial one-hundred and twenty (120) calendar days. The narrative shall describe the sequence of work, means and methods, productivity, and other significant scheduling assumptions on which the Preliminary Schedule is based. The narrative shall also describe the project critical path (longest path), work planned during each construction season, and any known or foreseeable issues that may impact the schedule.
3. **Preliminary Earned Value Schedule**: A Preliminary Earned Value Schedule showing Design-Builder's anticipated monthly earnings for the entire Project. The Preliminary Earned Value Schedule shall be prepared using Department's Form C-13CPM, which shall be based on monthly costs data generated from the Preliminary Schedule. The Preliminary Earned Value Schedule submission shall include:
  - i) An Activity Cost-loading Report (ACR), showing a breakdown of the quantities and costs for each activity. The ACR shall be grouped by pay items and sorted by activity ID showing:
    - a) For each activity the Activity ID, Activity Name, Price/Unit, Budgeted Unit (quantity), Budgeted Cost, Actual Cost, Remaining Cost, and At Completion Cost.

- b) Pay item sub-totals of the budgeted units and costs for associated activities.
- c) The overall total budgeted cost for the Project.

ii) An Earned Value Schedule using the VDOT Form C-13CPM.

**B. Baseline Schedule** – Unless otherwise stated in Exhibit 1, within ninety (90) days of Design-Builder’s receipt of Department’s Notice to Proceed, Design-Builder shall submit to Department, for its review and approval, a Baseline Schedule showing the Design-Builder’s initial detailed plan to accomplish the entire scope of the Project according to the Agreement. If the Department does not approve such submission, Design-Builder shall revise and resubmit a Baseline Schedule to Department within seven (7) calendar days of its receipt of Department’s comments on such submission. This process shall continue until such time as the Department approves a Baseline Schedule. Upon approval of the Baseline Schedule, it will be established as the Project “**Schedule of Record (SOR)**”. The SOR is the official and only schedule with which all parties will plan and execute all work required to complete the Project and against which progress of the Project and the Design-Builder’s performance will be assessed. The Baseline Schedule submission shall consist of:

1. **Baseline Schedule:** A Baseline Schedule depicting the detailed activities required to complete the entire scope of the Project, including as applicable, work to be performed by subcontractors, the Department, and other involved parties. The Baseline Schedule shall be prepared according to the following:
  - i) Design-Builder shall prepare and maintain the Baseline Schedule using scheduling software that is capable of meeting all requirements of this provision. Design-Builder’s scheduling software shall be wholly compatible with the Department’s scheduling software system and shall have the capability of creating a back-up copy of the working schedule in “XER” format. The Department’s scheduling software system is the latest version of Primavera’s Project Management software (currently P6 version 7.0). At the Design-Builder’s request, secured access via the internet may be granted to allow the Design-Builder to develop and maintain its schedule in the Department’s scheduling software system. Submission of data from another software system where data conversion techniques or software is used to import into Primavera's scheduling software is not acceptable and will be cause for rejection of the submitted schedule.
  - ii) For each schedule submission, the Project ID shall be unique and shall be defined using the Contract ID as a prefix followed by the submission number (i.e. C00012345DB12\_B01, C00012345DB12\_U01, etc.).

- iii) The project “Must Finish By” date shall be defined with a specified date equal to the “Final Completion” date of the Contract.
- iv) The Baseline Schedule shall be developed using a hierarchical WBS, broken down by major phases of the Project, as applicable (i.e. project milestones, project management, design, public involvement, environmental, right-of-way, utility, and construction, etc.). Each major phase of the Project shall be broken down by phase, stage, or feature, as applicable. Each phase, stage, or feature shall then be further broken down into rational work packages, as applicable.
- v) Each work package shall be broken down into discrete and definable activities, with activity durations generally twenty (20) working days or less. Longer durations may be allowed as approved by the VDOT Project Manager for certain administrative or level of effort activities that are typically performed over longer periods of time. The Work shall be broken down in sufficient details to identify the phase, stage, feature, type of work, deliverable, and specific location in which the work occurs, including as applicable:
  - a) Project milestones;
  - b) Administrative activities such as key submittals, notifications, and review by the Department, FHWA, and other regulatory agencies. Activity durations for submissions and approvals or consents required by the Department shall be no less than the Department’s minimum review duration identified in Section 3.1 of the General Conditions of Contract;
  - c) Design activities showing all work required to complete each stage of design and deliverable;
  - d) Public involvement activities;
  - e) Scope Validation Period;
  - f) Environmental and permitting activities;
  - g) Right-of-way acquisition activities showing all lots/parcels;
  - h) Utility relocations and adjustments activities broken down by type and specific location;
  - i) Procurement, fabrication, delivery activities of materials;

- j) Construction start-up activities such as mobilization, staging area, surveying, clearing and grubbing, construction access, etc.;
  - k) Maintenance of Traffic activities;
  - l) Construction activities broken down by phase, stage, feature, type of work, and specific location, as applicable;
  - m) Other necessary miscellaneous activities that consume time such as installation and removal of temporary systems or structures such as causeways, shoring, etc.; as well as settlement period, load test, curing, demolition, testing and acceptance period, punch list, clean-up, demobilization, etc.
- vi) Each activity shall be named to identify the phase, stage, feature, type of work, and specific location in which the work occurs, as applicable.
  - vii) Activity calendars shall be assigned using project-level calendars. Use of global calendars is not allowed and shall be cause for rejecting the schedule.
  - viii) Activity codes shall be defined and assigned to the individual activities to allow for filtering, grouping, and sorting of activities by project phase, responsibility, area, phase, stage, feature, work type, Work Orders, DBE, and other major work category, as applicable. Activity codes shall be assigned using project-level activity codes. Use of global activity codes is not allowed and shall be cause for rejecting the schedule.
  - ix) Constraints shall be used sparingly and on a case by case basis, as necessary. Constraints such as “Mandatory Start” or “Mandatory Finish” that violate network logic are not allowed and shall be cause for rejecting the schedule. If the Contract includes a specified start-no-earlier-than milestone, then the Contract milestone activity shall be constrained with a “Start On or After” constraint, with a date equal to the date specified in the Contract. If the Contract includes a specified Interim Milestone or Substantial Completion Milestone, then the Contract interim completion milestone activity or substantial completion milestone activity shall be constrained with a “Finish On or Before” constraint, with a date equal to the date specified in the Agreement.
  - x) The Baseline Schedule shall be cost-loaded and shall be the basis for the monthly progress payments as well as for assessing progress. Each activity associated with a pay item for which Design-Builder expects to receive payment shall be cost-loaded, using the scheduling software “Material” resource type and according to the following:
    - a) A material resource shall be defined for each pay item shown in the

Schedule of Items submitted in the Proposal, or a subsequently revised Schedule of Items approved by the VDOT Project Manager. Pay item ID codes shall be congruent to the extent possible with the VDOT five-digit standard and non-standard pay item numbers (for example: 00100 – Mobilization).

- b) Each proposed pay item material resource shall indicate the Resource ID, Resource Name, Unit of Measure, and Price/Unit as shown in the Schedule of Items. The pay item material resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by the pay item number (i.e. C00012345DB12.00100).
  - c) The “Auto Compute Actuals” and “Calculate costs from units” boxes for each pay item material resource shall be marked.
  - d) A project-specific 20-80 resource curve shall be defined in the scheduling software using the Contract ID as a prefix and assigned to each assigned pay item resource to allocate costs to each associated activity over its duration based on the 20-80 earned value progress payment rules, according to Part 4, Article 6, and Section 6.2.
  - e) The budgeted units and cost for each assigned pay item resource shall be defined to indicate the quantity and dollar value of work that the activity represents.
  - f) The aggregate budgeted units and costs for all activities associated with a pay item shall equal the total quantity and value of the proposed pay item as shown in the Schedule of Items.
  - g) The aggregate budgeted costs for all activities shall equal the current total Contract Price. Current total Contract Price will be considered to mean the current Contract amount including the original Contract Price and any approved adjustments for authorized changes to the Work. Anticipated payments or payments for adjustments such as asphalt, fuel, steel, retainage, incentives, disincentives, etc., shall not be included.
- xi) For projects with awarded Contract Price of \$35 million or more, the Baseline Schedule shall be resource-loaded to indicate the labor (manpower), material (re-usable materials), and equipment (machinery or equipment) required to accomplish each activity that represents a major operation. The Baseline Schedule shall be resource-loaded according to the following:
- a) Project-specific labor resources using “Labor” resource type as

defined in the scheduling software shall be defined and assigned to indicate labor classification, trade, or crew that will perform the work. The labor Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.Pipe – Drainage Pipe Crew). Also, the Max Units/Time shall be defined for each labor resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.

- b) Project-specific material resources using “Material” resource type as defined in the scheduling software shall be defined and assigned to indicate re-usable material that will be used to perform the work. The material Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.CF1 – Column Forms Set #1). Also, the Max Units/Time shall be defined for each material resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.
  - c) Project-specific equipment resources using “Non-Labor” resource type as defined in the scheduling software shall be defined and assigned to indicate equipment or machinery that will be used to perform the work. The non-labor Resource ID shall be unique and shall be defined using the Contract ID as a prefix followed by a unique code (e.g. C00012345C01.CRN – Crane). Also, the Max Units/Time shall be defined for each non- labor resource to establish the daily availability limits. Budgeted Units shall be defined for each assignment to establish the total units of time required to perform the activity.
  - d) Assigned resource calendars shall be defined using the Contract ID as a prefix.
- xii) The project schedule software settings shall be defined according to the following Primavera P6 settings:
- a) Schedule dates shall be shown in the “Month-Day-Year” date format, with 2-digit numbers for the month, day, and year (e.g. 05-01-13).
  - b) Duration type for all activities shall be specified as “Fixed Duration & Units”.

- c) The “Drive activity dates by default” checkbox in the Project Details Resources tab shall be marked.
- d) The “Link Budget and At Completion Cost for not started activities” checkbox in the Project Details Calculation tab shall be marked.
- e) The “Reset Remaining Cost and Units to Original” in the Project Details Calculation tab shall be specified.
- f) The “Subtract Actual from At Completion” under “When updating actual units or costs” in the Project Details Calculation tab shall be specified.
- g) The “Recalculate Actual Units and Cost when duration % complete changes” checkbox in the Project Details Calculation tab shall be marked.
- h) The “Update units when costs changes on resource assignments” checkbox in the Project Details Calculation tab shall be marked.
- i) The “Link Actual and Actual This Period Units and Cost” checkbox in the Project Details Calculation tab shall be marked.
- j) Specify “Retained Logic” in the Scheduling Options dialog box for scheduling progressed activities.
- k) Specify “Longest Path” in the Scheduling Options dialog box for defining critical activities.
- l) Specify “Finish Float = Late Finish – Early Finish” in the Scheduling Options dialog box as the schedule calculation option to compute total float.

xiii) The project schedule shall be calculated using the precedence diagram network logic method (PDM) and the Critical Path Method (CPM). The use of resource-leveling to determine sequence, order, or timing of the activities is not allowed and shall be cause for rejecting the schedule.

2. **Baseline Schedule Narrative**: A Baseline Schedule narrative describing Design-Builder’s overall plan to accomplish the Work, as reflected on the Baseline Schedule including, as applicable:

- i) Project milestones including, as applicable Contract milestones and other key events such as start/finish dates for each major phase or stage of the project, major traffic switches, etc.

- ii) Work to be performed by the Department and other involved parties, including when the work must be performed.
  - iii) The proposed overall sequence of Work, including where the work will begin and how the work will progress.
  - iv) A description of the project critical path (based on the longest path).
  - v) Scheduling assumptions including, the proposed means and methods, anticipated daily production rates, and general procedures for accomplishing major operations that are expected to drive the schedule.
  - vi) A log identifying the schedule constraints used in the Baseline Schedule and reason for using each constraint.
  - vii) A description of the project calendar(s) used in the Baseline Schedule, identifying the Calendar ID, standard number of work days per week, number of shifts per day, and number of hours per day as well as the anticipated number of non-working days per month for each calendar with considerations, as applicable, for holidays, normal weather conditions; as well as for seasonal or other known or specified restrictions (i.e. traffic, local events, environmental, permits, utility, etc.).
  - viii) The Contractor's resource plan indicating the number of crews, crew make-up, and major equipment needed to accomplish the Work as planned. The resource plan shall also describe how Design-Builder plans on meeting the resource requirements.
  - ix) A log of the applicable DBE participation activities in the schedule for which the Design-Builder intends to claim credit for attaining the DBE goal required in the Contract. The list shall indicate the proposed start/finish dates and durations of the DBE participation activities.
  - x) Any known or foreseeable issues that may impact the schedule. Also, describe how the issues will impact the schedule and any actions taken or needed to avoid or mitigate the impact.
3. **Baseline Earned Value Schedule**: A Baseline Earned Value Schedule showing Design-Builder's anticipated monthly earnings for the entire Project. The Baseline Earned Value Schedule submission shall include:
- i) An Activity Cost-loading Report (ACR) generated from the Baseline Schedule, showing a breakdown of quantities and costs for each activity. The ACR shall be grouped by pay item and sorted by activity ID showing:
    - a) For each activity the Activity ID, Activity Name, Price/Unit,

Budgeted Unit (quantity), Budgeted Cost, Actual Cost, Remaining Cost, and At Completion Cost.

b) Pay item sub-totals of the budgeted units and costs for associated activities.

c) The overall total budgeted cost for the Project.

ii) An Earned Value Schedule using the VDOT Form C-13CPM, which shall be based on monthly costs data generated from the Baseline Schedule.

**C. Schedule Updates** – On or before the tenth (10<sup>th</sup>) day of each month and as part of the monthly reports required by Section 11.1.9 of Part 3 of the Agreement, Design-Builder shall submit to Department, for its review and approval, an update of the Baseline Schedule (“**Schedule Update**”). The Schedule Update shall reflect the current status of the Project and the plan to complete the remaining work as of the first (1<sup>st</sup>) day of the month (data date). If Department does not approve such submission, Design-Builder shall revise and resubmit a Schedule Update to Department within seven (7) calendar days of its receipt of Department’s comments on such submission. The Schedule Update submission shall consist of:

1. **Schedule Update:** A Schedule Update showing the as-built status of completed and ongoing activities; as well as the sequence and dates during which the remaining activities are scheduled to be completed as of the data date. The Schedule Update shall be based on the most recent approved Schedule and shall be prepared according to the following:

i) All activities that are completed prior to the current data date shall show actual start and finish dates. All on-going activities shall show actual start dates and remaining duration to indicate the amount of time required to complete the remaining work as of the current data date.

ii) Activity percent complete for on-going activities shall be based on amount of work completed as of the current data date relative to the total amount of work planned.

iii) Actual units and cost for each assigned work item resource shall be updated based on the 20-80 earned value progress rules (i.e. 20% at initiation and 100% at completion), in accordance with Part 4, Article 6, and Section 6.2.

iv) Activity logic shall be modified as necessary to correct out-of-sequence progress for on-going and remaining activities to reflect the Design- Builder’s current plan for completing the remaining work.

v) The project schedule shall be calculated using the current data date.

2. **Schedule Update Narrative**: A Schedule Update Narrative describing the current status of the project, any deviations from scheduled performance, and any changes in Design-Builder's work plan, and the current work plan for accomplishing the remaining work as of the data date. The Schedule Update Narrative shall include a description of:

- i) The current status of project milestones including a description of any deviations from the date(s) specified in the Contract. If a milestone activity is scheduled to occur later than the date specified in the Contract, provide an explanation stating why the milestone date is forecasted to occur late and any actions taken or proposed to correct the delay.
- ii) The current status of the Project in terms of progress earnings percent complete based on the actual total earnings to date relative to the current approved Contract value; as well as any progress deficiencies relative to planned progress as indicated on the SOR. If progress is falling behind, describe reasons for the deficiency and any actions taken or proposed to correct the progress deficiency.
- iii) The project critical path and any deviations from the SOR.
- iv) The work performed since the previous Schedule Update and any deviations from the work scheduled.
- v) Any major changes in the Contractor's work plan in terms of sequence of construction, shifts, means and methods, manpower, equipment, or materials.
- vi) Any changes made to the SOR since the previous submission. A Claim Digger report (or equivalent) may be used to identify the changes.
- vii) Number of days lost due to adverse weather or other factors during the current update period. Provide a list of the lost days, including a description and start/finish times of the weather event or factor; activities affected and how the activities were affected, and any impacts on the critical path or project milestones. Also, describe any actions taken or proposed to mitigate any resulting delays.
- viii) The status of pending issues such as access, permits, conflicts with other related or adjacent work, Work Orders, time extension requests, etc.
- ix) Any problems encountered or anticipated since the previous submission, including an explanation of any corrective actions taken or required to mitigate or avoid the effects.

- x) Work planned for the next update period and any actions needed to be taken by the Department or other involved parties.
2. **Schedule Update Earned Value**: A Schedule Update Earned Value showing the actual progress earnings to date and the projected earnings for each remaining month, as of the data date. The Schedule Update Earned Value submission shall include:
- i) An Activity Cost-loading Report (ACR) showing the updated cost data in the current Schedule Update as of the data date.
  - ii) An updated Form C-13CPM showing the actual earnings to date and projected monthly earnings for the remaining periods as of the data date based on cost data generated from the current Schedule Update.

**D. Revised Baseline Schedule** – If Department believes that the Work is being performed significantly different from the SOR, or major modifications in logic, activity duration, manpower, or cost are necessary, or are required to incorporate approved changes in the Work, it will submit a written request to Design-Builder. Design-Builder shall respond in writing within seven (7) days, either agreeing with Department’s proposed revision, and henceforth providing a “**Revised Baseline Schedule**”, as required by the VDOT Project Manager, or providing justification why the requested revisions should not be accomplished. If revisions cannot be agreed upon either through written correspondence or subsequent meetings, Department and Design-Builder shall agree to attempt to resolve the issues through the dispute resolution process of Article 10 in the General Conditions of Contract. If the Department and the Design-Builder cannot agree on the proposed revisions, the Design-Builder shall proceed under the previously approved Baseline Schedule. At no time shall Design-Builder continue to reflect items of non-concurrence from Department in the Schedule Updates. The Revised Baseline Schedule shall be prepared and submitted in the form of a Baseline Schedule, according to Section 2.B above, except it shall reflect the current status of the completed and on-going activities and actual earnings to date as of the current data date. Upon approval by the Department, the Revised Baseline Schedule shall replace any previously approved Baseline Schedule as the SOR for the remainder of the Project.

**E. Final As-built Schedule** – As part of its submission of Final Application for Payment, Design-Builder shall submit the final Schedule Update (**Final As-built Schedule**). The Final As-built Schedule shall show the actual start and finish dates for all activities in the schedule. Design-Builder shall certify in writing that the Final As-built Schedule accurately reflects the dates on which all activities contained in the schedule were actually performed. The Final As-built Schedule shall be submitted in the form of a Schedule Update according to Section 11.1.5 above.

### 3. Schedule Submittal Format and Reports

Unless otherwise approved in writing by the VDOT Project Manager, Design-Builder shall submit for each Preliminary Schedule, Baseline Schedule, Schedule Update, or Baseline Revision Schedule submission, the following submittal items and reports, in the formats specified below. Each electronic file submittal shall have a unique file name prefixed by the Contract ID to identify the Contract and type, number, item, and data date of the submission (e.g. C00012345DB01\_B01\_01-01-13.xer, C00012345DB01\_B01\_Narrative\_01-01-13.pdf, C00012345DB01\_B01\_FormC-13CPM\_01-01-13.xlsx, etc.). The submittals shall include.

1. A transmittal letter to the VDOT Project Manager, identifying the date of submittal and which Schedule is being submitted for review.
2. Two (2) sets of data compact disks (“CD”) containing a backup copy of the working schedule in the Primavera proprietary exchange format (“XER”) file format; as well as other required electronic file submittals as defined in Section 11.1.8.4 below. Each CD shall be labeled to indicate the Contract ID, type of submission, filename, and data date.
3. Two (2) sets of paper copies of the following schedule reports:
  - i) Schedule calculation log.
  - ii) A legible time-scaled bar-chart plot of the Schedule, organized by WBS, to show for each activity the Activity ID, Activity Name, Original Duration, Remaining Duration, Start and Finish dates, Activity Percent Complete, and Total Float. The bar-chart plot shall identify the project critical path (longest path).
4. Electronic file copies by email of the following:
  - i) A backup copy of the working schedule in “XER” file format.
  - ii) A copy of the time-scaled bar-chart plot of the project schedule in “PDF” file format.
  - iii) A tabular Predecessor and Successor Report (PSR) in “PDF” file format to show the predecessors and successors for each activity. The PSR shall be sorted by WBS and in ascending order by Activity ID and shall show for each activity:
    - a) Activity ID;
    - b) Activity Name;
    - c) Original Duration;
    - d) Remaining Duration;
    - e) Early Start;

- f) Early Finish;
- g) Late Start;
- h) Late Finish;
- i) Free Float;
- j) Total Float;
- k) Critical (“Yes” or “No”);
- l) For each predecessor/successor activity, show the Activity ID, Activity Name, Relationship Type, Lag, Free Float, Total Float, Driving (“Yes” or “No”), and Critical (“Yes” or “No”).

iv) A copy of the schedule narrative in “PDF” file format.

v) A copy of the Activity Cost-loading Report (“ACR”) in “PDF” file format.

vi) A working file copy of the Earned Value Schedule (Form C-13CPM) in “xls” or “xlsx” file format.

vii) A copy of the Earned Value Schedule S-Curve in “PDF” file format.

#### **4. Monitoring the Work and Assessing Progress**

The VDOT Project Manager will monitor the Work regularly and assess progress of the Work monthly relative to the SOR to identify deviations from Design-Builder’s scheduled performance and to determine if progress is satisfactory according to the following:

**A. Monthly Progress Meetings** – At the monthly progress meeting held in accordance with Part 4 General Conditions, Article 2, Section 2.1.8, Design-Builder shall furnish a detailed 4-week look-ahead schedule based on the current schedule update and shall discuss the current status of the project, on-going work, and work planned for the following four (4) weeks.

**B. Progress Evaluation** – Progress will be evaluated by the VDOT Project Manager at the time of the monthly progress pay application on the basis of the Design-Builder’s latest approved Schedule Update. The Design-Builder’s actual progress will be considered unsatisfactory if any of the following conditions occur:

- i) The actual total earnings percentage for work completed to date, based on the current Pay Application, falls behind the anticipated cumulative late earnings percentage indicated in the SOR by one (1) percent or more.
- ii) The current projected completion date of a Contract milestone is more than fourteen (14) days after the milestone completion date specified in the Agreement, as applicable.
- iii) The current calculated completion date of the project is more than thirty (30) days after the lattermost of the Final Completion date or its extension.

**C. Progress Deficiency and Schedule Slippage** – When a monthly progress evaluation shows that the actual progress of the Work is unsatisfactory, the VDOT Project Manager will issue a written notice of unsatisfactory performance to the Design- Builder. Within 14 days from the date of receipt of the VDOT Project Manager’s notice, Design-Builder shall respond by submitting a written statement describing any actions taken or proposed by the Design-Builder to correct the progress deficiency. If the Design-Builder’s response includes a proposed recovery plan, the current progress schedule update shall be modified accordingly to show the Design-Builder’s proposed recovery plan. Design-Builder may submit to the VDOT Project Manager a written explanation and supporting documentation to establish that such delinquency is attributable to conditions beyond its control. If the VDOT Project Manager approves the Design-Builder’s recovery plan, the modified progress schedule update showing the recovery plan will be treated as the current update and will not replace the SOR.

If the Design-Builder fails to respond within the time required, or the response is unacceptable, its prequalification status may be changed as provided in Section 102.01 of Part 5, and the Design-Builder may be temporarily disqualified from bidding on contracts with the Department as provided in Section 102.08 of Part 5, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate. The VDOT Project Manager may postpone taking these actions when a time extension is under consideration.

## **5. Schedule Impact Analysis (SIA)**

In the event of an excusable delay that extends the completion date of the project beyond the Final Completion date, for which Design-Builder is seeking an extension of the contract time limit, it shall submit a request for an adjustment to the Agreement within the time period specified in Article 8 of Part 4 – General Conditions, unless directed otherwise in writing by the VDOT Project Manager. For requests for prospective changes or delays Design-Builder shall prepare and submit a SIA based on the TIA method. For requests for other delays Design-Builder shall prepare and submit a SIA based on the Contemporaneous Impact Analysis method. The Design-Builder shall submit along with its request for an adjustment to the Contract a SIA statement and applicable SIA schedules in accordance with the following:

### **1. SIA Statement** – The SIA statement shall include the following.

- i) A description of the delay event, including time, date, and location of the event, if appropriate.
- ii) An explanation of why the delay constitutes a change to the Agreement, including references to applicable portions of the Contract.
- iii) A description of the activities or work items affected and any impact on the

project critical path, milestones, or completion date of the project, as applicable.

- iv) A description and reasons for any shifts in the project critical path relative to the preceding schedule update for each schedule update contemporaneous with the delay event, as applicable.
- v) A description and reasons for any revisions made to the SIA schedules since the previous submission, including added or deleted activities, and changes in logic, activity durations, calendars, and constraints.
- vi) A SIA summary showing for each SIA schedule as described herein, the data date and calculated completion dates for all applicable milestones and the project completion date. The SIA summary shall also show any differences in the calculated finish dates for each successive SIA schedule relative to the previous SIA schedule. Any schedule slippages shall be categorized appropriately as excusable compensable, excusable non-compensable, or non-excusable.
- vii) Any actions taken or needed to avoid or mitigate the delay impacts.
- viii) Any additional information needed to justify the request or facilitate timely resolution of the issue.

**2. SIA Schedules** – The SIA submission shall include as applicable:

- i) The SOR in place prior to the date the delay event started, showing the project critical path, affected activities, and any applicable milestones.
- ii) The most recently accepted project schedule update in place prior to the date the delay event started, showing the affected activities, project critical path, and any applicable milestones, including any variances in the durations and completion dates relative to the SOR.
- iii) A pre-delay schedule update showing the current status of the affected activities, project critical path, and any applicable milestones, including any variances in the durations and completion dates relative to the most recently accepted project schedule update in place prior to the date the delay event started.
- iv) Any contemporaneous project schedule updates submitted during the delay event showing the current status of the delay event, affected activities, project critical path, and any applicable milestones, including any variances in the durations and completion dates relative to the previous submission.
- v) A post-delay impacted schedule, showing the current status of the delay event, affected activities, project critical path, and any applicable milestones, including any variances in the durations and completion dates relative to the previous submission.

Correspondence Tracking Log for Project Records

VDOT Project: XYZ Project

Project:

CONTRACT ID #:

ID Number	Process	Description / Issue	Pay Package Reference	Date Received or Sent	From	To	Status (Open/Closed)	Record File Location Or Insert Hyperlink (ctrl + k)
	CORR	Correspondence						
	EMAIL	Email						
	MEET	Meeting Minutes						
	MEMO	Memo (Internal)						
	MISC	Miscellaneous Files						
C0001111DB00-1	CORR	VDOT to Design-Builder - Notice of Intent Letter	n/a	5/9/2007	VDOT	Design-Builder	Closed	
C0001111DB00-2	CORR	Performance and Payment Bonds	n/a	5/11/2007	Design-Builder	AAA	Closed	
C0001111DB00-3	CORR	Certificate of Insurance	n/a	5/15/2007	Design-Builder	CCC	Closed	
C0001111DB00-4	CORR	SWPP Certification Permit	n/a	5/15/2007	Design-Builder	Design-Builder	Closed	
C0001111DB00-5	CORR	C112 - Binding Agreements	n/a	5/17/2007	Design-Builder	BBB	Closed	
C0001111DB00-6	CORR	VDOT Request for Design-Builder Preconstruction Meeting	n/a	6/9/2007	VDOT	Design-Builder	Closed	
C0001111DB00-7	CORR	Design-Builder to VDOT - Escrow Document Review Meeting	n/a	6/15/2007	Design-Builder	VDOT	Closed	
C0001111DB00-8	CORR	VDOT to Design-Builder - CTB Award	n/a	6/21/2007	VDOT	Design-Builder	Closed	
C0001111DB00-9	MISC	Design-Builder Questions Regarding Final Contract Document Timeline	n/a	6/22/2007	Design-Builder	VDOT	Closed	
C0001111DB00-10	CORR	Design-Builder to VDOT - Preconstruction Meeting	n/a	7/17/2007	Design-Builder	VDOT	Closed	
C0001111DB00-11	CORR	VDOT to Design-Builder - Final Contract Documents	n/a	7/18/2007	VDOT	Design-Builder	Closed	
C0001111DB00-12	MEET	Preconstruction Meeting Minutes	n/a	7/23/2007	Design-Builder	VDOT	Closed	
C0001111DB00-13	CORR	VDOT to Design-Builder - Notice to Proceed	n/a	8/2/2007	VDOT	Design-Builder	Closed	
C0001111DB00-14	CORR	Design-Builder to VDOT Permit Application Request	1	8/2/2007	Design-Builder	VDOT	Closed	
C0001111DB00-15	EMAIL	Geotechnical Investigations - Preliminary Data	2	8/8/2007	Design-Builder	Design-Builder	Closed	
C0001111DB00-16	CORR	Design-Builder to VDOT - Flood Plain Study Inquiry	3	8/9/2007	Design-Builder	VDOT	Closed	
C0001111DB00-17	CORR	Payment Requisition # 1 - First submission	1,2,3	8/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-18	CORR	Payment Requisition # 1 - Second submission	1,2,3	8/13/2007	Design-Builder	VDOT	Closed	
C0001111DB00-19	MEMO	VDOT Acknowledgement of Receipt of Preliminary Roadway Plans	4	8/14/2007	VDOT	Design-Builder	Closed	
C0001111DB00-20	MEMO	VDOT to Design-Builder - ROW Plan Submittal 1 Comments	5	8/22/2007	VDOT	Design-Builder	Closed	
C0001111DB00-21	CORR	VDOT ID Outstanding Issues to Design-Builder	5	8/24/2007	VDOT	Design-Builder	Closed	
C0001111DB00-22	CORR	VDOT to Design-Builder - Comments Regarding Preliminary Roadway Plans	4	9/5/2007	VDOT	Design-Builder	Closed	
C0001111DB00-23	CORR	Payment Requisition # 2	4,5	9/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-24	MEMO	NVRPA Comments - Bridge Details	6	9/16/2007	NVRPA	Design-Builder	Closed	
C0001111DB00-25	CORR	Design-Builder to VDOT - Outstanding Issues	n/a	9/18/2007	Design-Builder	VDOT	Closed	
C0001111DB00-26	CORR	FWD: FOIA Request Mrs. Smith	n/a	9/20/2007	VDOT	Design-Builder	Closed	
C0001111DB00-27	CORR	FOIA Response to Mrs. Smith	n/a	9/23/2007	Design-Builder	VDOT	Closed	
C0001111DB00-28	MEMO	Memo to File - Reporting Requirements	n/a	9/25/2007	DDD	File	Closed	
C0001111DB00-29	CORR	Conflict of Interest Request for Determination	n/a	9/27/2007	OAG	VDOT	Closed	
C0001111DB00-30	CORR	VDOT Acknowledgement of Receipt of Final Roadway Plans	7	10/4/2007	VDOT	Design-Builder	Closed	
C0001111DB00-31	CORR	Payment Requisition # 3	6,7	10/10/2007	Design-Builder	VDOT	Closed	
C0001111DB00-32	CORR	VDOT to Design-Builder - Comments Regarding Final Roadway Plans	7	10/17/2007	VDOT	Design-Builder	Closed	
C0001111DB00-33	MEET	Permit Coordination Meeting Minutes	8	10/26/2007	VDOT	Design-Builder	Closed	
C0001111DB00-34	CORR	Town of Leesburg Comment - Utility Relocation Plans	9	10/27/2007	Design-Builder	VDOT	Open	

## Instructions for Use of the Log

### **General:**

This tracking log is intended to track project-specific documents.

### **Filling Out the Form:**

To add an item, use the next available ID Number,

Date Received' - Use date received by IPD. For outgoing correspondence, use correspondence date. If no date, electronic file, or fax use date stored in file name, top of fax, etc. Processes initiated on the last business day of the week shall be acknowledged before 5:00 PM on the next VDOT business day.

### **Insert Hyperlink:**

Hold down the "Control" key and press "k", then browse for the file.

**SPECIAL PROVISION COPIED NOTE FOR  
POLYMER MODIFIED (PG 76-22 and PG 70-28)  
ASPHALT CEMENT ADJUSTMENT  
DESIGN-BUILD PROJECTS**

August 9, 2013

When asphalt concrete mixtures require the use of Performance Graded asphalt cement PG 76-22 or PG 70-28, the Contractor shall show in the space provided on Form C-16A included in the Price Proposal submitted by the Contractor, the f.o.b. cost per ton for asphalt cement PG 76-22 or PG 70-28 upon which bid items containing PG 76-22 or PG 70-28 were developed.

During the life of the Contract, the Contractor shall document to the Department, by invoice signed by the supplier, his cost for PG 76-22 or PG 70-28 used. The Department will then adjust payments for asphalt concrete containing PG 76-22 or PG 70-28 by the difference in the actual f.o.b. price and the f.o.b. quote submitted with the Price Proposal. Adjustments will be made at the time for partial payments for asphalt concrete containing PG 76-22 or PG 70-28 in accordance with the requirements of Section 109.08 in the Division I Amendments (Part 5) of the design-build contract.

In the event the Design-Builder fails to show on Form C-16A of the Price Proposal the f.o.b. cost per ton for asphalt cement PG 76-22 or PG 70-28 upon which material items containing PG 76-22 or PG 70-28 were developed, or during the life of the contract fails to provide the appropriate invoices with the Current Index for asphalt cement PG 76-22 or PG 70-28 for the applicable calendar month during which the work was performed, the Department will base the price adjustment for asphalt concrete containing PG 76-22 or PG 70-28 asphalt cement on the indexes for PG 64-22 in accordance with the Special Provision For Asphalt Material Price Adjustment Design-Build Projects included in the Contract.

### **Exhibit 3.5.1**

#### **Governmental Approvals List**

The following will be the responsibility of the Department to obtain:

1. National Environmental Policy Act approval, Programmatic Categorical Exclusion (July 18, 2016) – completed by VDOT.
2. Preliminary Environmental Certification/Commitments Checklist (August 24, 2016) – completed by VDOT.
3. Preliminary Document Re-evaluation for Right-of-Way Authorization (August 24, 2016) – completed by VDOT.
4. Preliminary Document Re-evaluation for PSE (Plans, Specifications, and Estimates) Authorization (August 24, 2016) – completed by VDOT.
5. Final Environmental Certification/Commitments Checklist to be completed by VDOT as applicable.
6. Final Document Re-evaluation for Right-of-Way Authorization – to be completed by VDOT as applicable.
7. Final Document Re-evaluation for PSE (Plans, Specifications, and Estimates) Authorization- to be completed by VDOT as applicable.

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**Exhibit 102.05(g.1)**

**S102CF2-0813**

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**USE OF DOMESTIC MATERIAL**

July 26, 2013

**SECTION 102.05 PREPARATION OF BID** of the Specifications is amended to include the following:

In accordance with the provisions of Section 635.410(b) of Title 23 CFR, hereinafter referred to as "Buy America", except as otherwise specified, all iron and steel products (including miscellaneous steel items such as fasteners, nuts, bolts and washers) to be permanently incorporated for use on federal aid projects shall be produced in the United States of America regardless of the percentage they exist in the manufactured product or final form they take. Therefore, "Domestically produced in the United States of America" means all manufacturing processes must occur in the United States of America, to mean, in one of the 50 States, the District of Columbia, Puerto Rico or in the territories and possessions of the United States. Manufacturing processes are defined as any process which alters or modifies the chemical content, physical size or shape or final finish of iron or steel material) such as rolling, extruding, bending, machining, fabrication, grinding, drilling, finishing, or coating whereby a raw material or a reduced iron ore material is changed, altered or transformed into a steel or iron item or product which, because of the process, is different from the original material. For the purposes of satisfying this requirement "coating" is defined as the application of epoxy, galvanizing, painting or any other such process that protects or enhances the value of the material. Materials used in the coating process need not be domestic materials.

For the purposes herein the manufacturing process is considered complete when the resultant product is ready for use as an item in the project (e.g. fencing, posts, girders, pipe, manhole covers, etc.) or is incorporated as a component of a more complex product by means of further manufacturing. Final assembly of a product may occur outside of the United States of America provided no further manufacturing process takes place.

Raw materials such as iron ore, pig iron, processed, pelletized and reduced iron ore, waste products (including scrap, that is, steel or iron no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, or the like and steel trimmings from mills or product manufacturing) and other raw materials used in the production of steel and/or iron products may, however, be imported. Extracting, handling, or crushing the raw materials which are inherent to the transporting the materials for later use in the manufacturing process are exempt from Buy America. The use of foreign source steel or iron billet is not acceptable under the provisions of Buy America. For the purposes of this provision all steel or iron material not meeting the criteria as domestically produced in the United States of America will be considered as "foreign" material. All iron and steel items will be classified hereinafter as "domestic" or "foreign", identified by and subject to the provisions herein.

Domestically produced iron or steel ingots or billets shipped outside the United States of America for any manufacturing process and returned for permanent use in a project would not comply with "Buy America" requirements.

Buy America provisions do not apply to iron or steel products used temporarily in the construction of a project such as temporary sheet piling, temporary bridges, steel scaffolding, falsework or such temporary material or product or material that remains in place for the Contractor's convenience.

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Section 635.410(b) of Title 23 CFR permits a minimal amount of steel or iron material to be incorporated in the permanent work on a federal-aid contract. The cost of such materials or products must not exceed one-tenth of one percent of the contract amount or \$2500, whichever is greater. The cost of the foreign iron or steel material is defined as its monetary value delivered to the job site and supported by invoices or bill of sale to the Contractor. This delivered to site cost must include transportation, assembly, installation and testing.

In the event the total cost of all "foreign" iron and steel product or material does not exceed one-tenth of one percent of the total contract cost or \$2,500, whichever is greater, the use of such material meeting the limitations herein will not be restricted by the domestic requirements herein. However, by signing the bid, the Bidder certifies that such cost does not exceed the limits established herein.

**Waivers:**

With prior concurrence from Federal Highway Administration (FHWA) headquarters, the Federal Highway Division Administrator may grant a waiver to specific projects provided it can be demonstrated:

1. that the use of domestic steel or iron materials would be inconsistent with the public interest; or
2. materials or products requested for use are not produced in the United States in sufficient or reasonably available quantities and are of satisfactory quality for use in the permanent work.

The waiver request shall be submitted with supportive information to include:

1. Project number\description, project cost, waiver item, item cost, country of origin for the product, reason for the waiver, and
2. Analysis of redesign of the project using alternative or approved equal domestic products

In order to grant such a waiver the request for the waiver must be published in the Federal Register for a period not less than 15 days or greater than 60 days prior to waiving such requirement. An initial 15 day comment period to the waiver will be available to the public by means of the FHWA website: <http://www.fhwa.dot.gov/construction/contracts/waivers.cfm>. Following that initial 15 day period of review and comment the request for waiver will be published by the FHWA in the Federal Register. The effective date of the FHWA finding, either to approve or deny the waiver request, will be 15 days following publication in the Federal Register.

Only the FHWA Administrator may grant nationwide waivers which still are subject to the public rulemaking and review process.

**Alternative Bidding Procedures:**

An alternative bidding procedure may be employed to justify the use of foreign iron and/or steel. To qualify under this procedure the total project is bid using two alternatives, one based on the use of domestic products and the other, the use of corresponding foreign source steel and/or iron materials.

In accordance with the provisions of Section 103.02 the Contract will be awarded to the lowest responsive and responsible bidder who submits the lowest total bid based on furnishing domestic iron or steel unless such total exceeds the lowest total bid based on furnishing foreign iron and/or steel by more than 25 percent, in which case the award will be made to the lowest responsive and responsible

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bidder furnishing foreign iron and/or steel based upon furnishing verifiable supportive data. The bidder shall submit a bid based on permanently incorporating only domestic iron and/or steel in the construction of the project. The bidder may also submit a bid for the same proposed contract based on being allowed to permanently incorporate corresponding foreign iron and/or steel materials meeting the other contract requirements into the work on the contract. If he chooses to submit such a bid, that alternate bid shall clearly indicate which foreign iron and/or steel items will be permanently installed in the work as well as contain prices for all other items listed in the corresponding domestic proposal to complete a total "Foreign" bid.

In the event the contract is awarded to the bidder furnishing foreign iron and/or steel materials or items the provision for price adjustment of steel items will be permitted, however, price fluctuations shall use the U.S. index as stated in the Special Provision for Price Adjustment For Steel. The Contractor must indicate which corresponding eligible steel items he chooses price adjustment to apply. In the event the contract is awarded to a bidder furnishing foreign iron and/or steel items and during the life of that contract the Contractor discovers he can not furnish foreign iron and/or steel material as originally anticipated and agreed upon, he shall be responsible to honor the total bid price and furnish such iron and/or steel materials meeting the contract requirements from other sources as necessary to complete the work.

In the event the Contractor proposes to furnish "foreign" iron and steel and can verify a savings in excess of 25 percent of the overall project cost if bid using domestic materials, the Contractor shall submit a second complete paper bid proposal clearly marked "Foreign" including Form C-7 and supportive data supplement on all sheets. Supportive data shall list, but not be limited to, origin of material, best price offer, quantity and complete description of material, mill analysis, evidence or certification of conformance to contract requirements, etc. The "Foreign" bid shall be completed using the best price offer for each corresponding bid item supplying foreign material in the alternative bid and submit the same with the Contractor's "Domestic" bid. The Contractor shall write the word "Foreign" by the bid total shown on Form C-7 as well as last page of Schedule of Items showing the total bid amount. The bidder shall also contact the State Contract Engineer to inform him that he is also submitting an alternate "Foreign" paper bid..

The information listed on the supportive data sheet(s) will be used to provide the basis for verification of the required cost savings. In the event comparison of the prices given, or corrected as provided in Section 103.01 of the Specifications, shows that use of "foreign" iron and steel items does not represent a cost savings exceeding the aforementioned 25 percent, "domestic" iron and/or steel and prices given there for shall be used and the "100 percent Domestic Items Total" shall be the Contractor's bid.

**Certification of Compliance:**

Where domestic material is supplied, prior to incorporation into the Work, the Contractor shall furnish to the Department a certificate of compliance (such as may be furnished by steel mill test reports) that all steel and/or iron products supplied to the project except as may be permitted (one-tenth of one percent of the total contract cost or \$2,500, whichever is greater) and permanently incorporated into the work satisfies the domestic requirements herein. This certification shall contain a definitive statement about the origin of all products covered under the provisions of Buy America as stated herein.

In lieu of the Contractor providing personal certification, the Contractor may furnish a stepped certification in which each handler of the product, such as supplier, fabricator, manufacturer, processor, etc. furnishes an individual certification that their step in the process was domestically performed.

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**Exhibit 102.05(g.2)**

**SF010DF-0712**

May 1, 2012  
FHWA-1273 (Electronic Version)

The following Form **FHWA-1273** titled **REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS** shall apply to this contract:

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FHWA-1273 – Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

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- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

**ATTACHMENTS**

- A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

**I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services,

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purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
  - a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
  - b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
  - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found,

the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
  - d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
  - b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.
- 10. Assurance Required by 49 CFR 26.13(b):**
- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
  - b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-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 contracting agency deems appropriate.

- 11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all

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related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

**1. Minimum wages**

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (I) The work to be performed by the classification requested is not

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- performed by a classification in the wage determination; and
- (II) The classification is utilized in the area by the construction industry; and
  - (II) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the

plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired.

Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
    - (I) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
    - (II) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
    - (III) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
  - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
  - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview

employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

##### **a. Apprentices (programs of the USDOL).**

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize

apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
6. **Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of eligibility.**
  - a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
  - b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
  - c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

## V. **CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such

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laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
  - a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be

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included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
  - (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
  - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
  3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
  4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
  5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to

be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

#### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

**IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

**X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

**1. Instructions for Certification – First Tier Participants:**

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective

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first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

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excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
  - (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
  - (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**3. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated

may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--  
Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
  - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any

person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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**Exhibit 102.05(g.3)**

**SF030AF-0708**

Reissued July 2008

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals for female and minority participation, expressed in percentage terms of the Contractor's aggregate work force in each trade on all construction works in the covered area, are as follows:

Females- 6.9%

Minorities - See Attachment "A"

The goals are applicable to all the Contractor's construction work performed in the covered area, whether or not it is Federal or federally assisted. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications, set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established herein. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executives Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days the award of any construction subcontract in excess of \$10,000 at any tier for construction works under this contract. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the contract is to be performed.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY  
CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

1. As, used in this provision:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

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- c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;
- d. "Minority" includes:
- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors and Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the coverer area. Covered construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of

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their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, shall assign two or more women to each construction project. The Contractor shall specifically ensure that all foreman, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
  - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper or annual report; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
  - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents and General Foremen prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.

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- h. Disseminate the Contractor's EEO policy externally by including in any news media advertisement that the Contractor is "An Equal Opportunity Employer" for minority and female, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
  - i. Directs its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.
  - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of Contractor's workforce.
  - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
  - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for such opportunities through appropriate training or other means.
  - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
  - n. Ensure that all facilities and company activities are nonsegregated, except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
  9. Goals for women have been established. However, the Contractor IS required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the

Executive Order if a particular group is employed in a substantially disparate manner, that is even thought the Contractor has achieved its goals for women, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or nation origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate and make known to the Department a responsible official as the EEO Officer to monitor all employment related activity, to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors will not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**ATTACHMENT A**

<u>Economic Area</u>	<u>Goal (Percent)</u>
Virginia:	
021 Roanoke-Lynchburg, VA	
SMSA Counties:	
4640 Lynchburg, VA .....	19.3
VA Amherst; VA Appomattox; VA Campbell; VA Lynchburg	
6800 Roanoke, VA .....	10.2
VA Botetourt; VA Craig; VA Roanoke; VA Roanoke City; VA Salem	
Non-SMSA Counties .....	12.0
VA Alleghany; VA Augusta; VA Bath; VA Bedford; VA Bland; VA Carroll; VA Floyd; VA Franklin; VA Giles; VA Grayson; VA Henry; VA Highland;	

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	VA Montgomery; VA Nelson; VA Patrick; VA Pittsylvania; VA Pulaski; VA Rockbridge; VA Rockingham; VA Wythe; VA Bedford City; VA Buena Vista; VA Clifton Forge; VA Covington; VA Danville; VA Galax; VA Harrisonburg; VA Lexington; VA Martinsville; VA Radford; VA Staunton; VA Waynesboro; WV Pendleton.	
022 Richmond, VA		
	SMSA Counties:	
	6140 Petersburg - Colonial Heights - Hopewell, VA .....	30.6
	VA Dinwiddie; VA Prince George; VA Colonial Heights; VA Hopewell; VA Petersburg.	
	6760 Richmond, VA .....	24.9
	VA Charles City; VA Chesterfield; VA Goochland, VA Hanover; VA Henrico; VA New Kent; VA Powhatan; VA Richmond.	
	Non-SMSA Counties .....	27.9
	VA Albemarle; VA Amelia; VA Brunswick; VA Buckingham, VA Caroline; VA Charlotte; VA Cumberland; VA Essex; VA Fluvanna; VA Greene; VA Greensville; VA Halifax; VA King and Queen; VA King William; VA Lancaster; VA Louisa; VA Lunenburg; VA Madison; VA Mecklenburg; VA Northumberland; VA Nottoway; VA Orange; VA Prince Edward; VA Richmond VA Sussex; VA Charlottesville; VA Emporia; VA South Boston	
023 Norfolk - Virginia Beach - Newport News VA:		
	SMSA Counties:	
	5680 Newport News- Hampton, VA .....	27.1
	VA Gloucester; VA James City; VA York; VA Hampton; VA Newport News; VA Williamsburg.	
	5720 Norfolk - Virginia Beach - Portsmouth, VA - NC .....	26.6
	NC Currituck; VA Chesapeake; VA Norfolk; VA Portsmouth; VA Suffolk; VA Virginia Beach.	
	Non-SMSA Counties .....	29.7
	NC Bertie; NC Camden; NC Chowan; NC Gates; NC Hertford; NC Pasquotank; NC Perquimans; VA Isle of Wight; VA Matthews; VA Middlesex; VA Southampton; VA Surry; VA Franklin.	
Washington, DC:		
020 Washington, DC.		
	SMSA Counties:	
	8840 Washington, DC - MD - VA .....	28.0
	DC District of Columbia; MD Charles; MD Montgomery MD Prince Georges; VA Arlington; VA Fairfax; VA Loudoun; VA Prince William VA Alexandria; VA Fairfax City; VA Falls Church.	
	Non- SMSA Counties .....	25.2
	MD Calvert; MD Frederick; MD St. Marys; MD Washington; VA Clarke; VA Culpeper; VA Fauquier; VA Frederick; VA King George; VA Page; VA Rappahannock; VA Shenandoah; VA Spotsylvania; VA Stafford; VA Warren; VA Westmoreland; VA Fredericksburg; VA Winchester WV Berkeley; WV Grant; WV Hampshire; WV Hardy; WV Jefferson; WV Morgan.	
Tennessee:		
052 Johnson City - Kingsport - Bristol, TN - VA		
	SMSA Counties:	
	3630 Johnson City - Kingsport -Bristol, TN-VA .....	2.6
	TN Carter; TN Hawkins; TN Sullivan; TN Washington; VA Scott; VA Washington; VA Bristol.	
	Non-SMSA Counties .....	3.2
	TN Greene; TN Johnson; VA Buchanan; VA Dickenson; VA Lee;	

VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell;  
WV Mercer.

Maryland:

019 Baltimore MD

Non-SMSA Counties ..... 23.6

MD Caroline; MD Dorchester; MD Kent; MD Queen Annes; MD Somerset;  
MD Talbot; MD Wicomico; MD Worchester; VA Accomack; VA  
Northampton.

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**Exhibit 107.13**

SF001AF-0708

Reissued July 2008

**PREDETERMINED MINIMUM WAGE RATES**

U.S. DEPARTMENT OF LABOR  
OFFICE OF THE SECRETARY  
WASHINGTON  
**DECISION OF THE SECRETARY**

This case is before the Department of Labor pursuant to a request for a wage predetermination as required by law applicable to the work described.

A study has been made of wage conditions in the locality and based on information available to the Department of Labor the wage rates and fringe payments listed are hereby determined by the Secretary of Labor as prevailing for the described classes for labor in accordance with applicable law.

This wage determination decision and any modifications thereof during the period prior to the stated expiration date shall be made a part of every contract for performance of the described work as provided by applicable law and regulations of the Secretary of Labor, and the wage rates and fringe payments contained in this decision, including modifications, shall be the minimums to be paid under any such contract and subcontractors on the work.

The contracting officer shall require that any class of laborers and mechanics which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the contracting officer shall be referred to the Secretary for determination.

Before using apprentices on the job the contractor shall present to the contracting officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U.S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U.S. Bureau of Apprenticeship and Training.

The contractor shall submit to the contracting officer written evidence of the established apprentice-journeyman ratios and wage in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

Fringe payments include medical and hospital care, compensation for injuries or illness resulting from occupational activity, unemployment benefits, life insurance, disability and sickness insurance, accident insurance (all designated as health and welfare), pensions, vacation and holiday pay, apprenticeship or other similar programs and other bona fide fringe benefits.

By direction of the Secretary of Labor



E. Irving Manger, Associate Administrator  
Division of Wage Determinations  
Wage and Labor Standards Administration

General Decision Number: VA160135 01/08/2016 VA135

Superseded General Decision Number: VA20150135

State: Virginia

Construction Type: Highway

Counties: Alexandria\*, Arlington, Clarke, Culpeper, Fairfax, Fairfax\*, Falls Church\*, Fauquier, Fredericksburg\*, King George, Loudoun, Manassas Park\*, Manassas\*, Prince William, Spotsylvania, Stafford and Warren Counties in Virginia.

\*INDEPENDENT CITIES

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any

classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/08/2016

SUVA2013-010 09/20/2013

	Rates	Fringes
ASBESTOS WORKER.....	\$ 16.91	
CARPENTER (STRUCTURE).....	\$ 16.02	
CEMENT MASON/CONCRETE FINISHER....	\$ 21.71	
ELECTRICIAN.....	\$ 29.27	
FORM SETTER.....	\$ 14.00	
IRONWORKER, REINFORCING.....	\$ 34.18	

IRONWORKER, STRUCTURAL.....\$ 19.13

LABORER

Asphalt Raker.....\$ 15.85

Blaster.....\$ 35.00

Construction Worker I  
(Skilled Laborer).....\$ 15.77

Construction Worker II  
(Laborer).....\$ 14.14

Deckhand.....\$ 13.00

Fence Erector.....\$ 14.41

Flagger.....\$ 13.64

Grade Checker.....\$ 13.42

Guardrail Erector.....\$ 22.15

Landscape Worker.....\$ 11.97

Pipe Layer.....\$ 19.00

Power Tool Operator.....\$ 15.00

Sign Erector.....\$ 25.00

MASON (STRUCTURE).....\$ 17.64

PAINTER.....\$ 15.00

PLUMBER.....\$ 25.00

POWER EQUIPMENT OPERATOR:

Air Compressor.....	\$ 13.50
Asphalt Distributor.....	\$ 18.64
Asphalt Paver.....	\$ 19.35
Backhoe.....	\$ 20.59
Boom/Auger.....	\$ 20.29
Bulldozer (Utility).....	\$ 15.50
Bulldozer.....	\$ 20.40
Concrete Finish Machine Operator.....	\$ 18.54
Concrete Finisher Machine Screed Operator (Bridge)....	\$ 14.60
Concrete Paving Machine Operator.....	\$ 20.75
Concrete Pump Operator.....	\$ 33.00
Concrete Saw Operator.....	\$ 16.00
Crane, Derrick, Dragline (1 cm & under).....	\$ 24.53
Crane, Derrick, Dragline (over 1 cm).....	\$ 25.00
Crusher Tender.....	\$ 14.25
Drill Operator.....	\$ 15.70
Excavator (Gradall).....	\$ 19.32
Front End Loader (2 cm & under).....	\$ 19.00
Front End Loader (over 2 cm).....	\$ 20.42
Hydro Seeder.....	\$ 17.13

Log Skidder Operator.....	\$ 18.50
Mechanic.....	\$ 21.75
Mobile Mixer.....	\$ 17.00
Motor Grader (Fine Grade)...	\$ 27.25
Motor Grader (Rough Grade)..	\$ 13.58
Oiler, Greaser.....	\$ 14.00
Pavement Marking Operator...	\$ 17.00
Pavement Marking Truck Operator.....	\$ 16.72
Pavement Planing Groundman..	\$ 19.75
Pavement Planing Operator...	\$ 19.25
Pile Driver Operator.....	\$ 20.35
Pile Driver, Leadsman.....	\$ 21.32
Pipe Boring/Jacking Machine Operator.....	\$ 16.00
Plant Operator.....	\$ 14.88
Roller (Finish).....	\$ 17.94
Roller (Rough).....	\$ 17.06
Scraper Pan Operator.....	\$ 13.00
Shot Blast Machine Operator..	\$ 16.02
Shovel Operator (2 yds and under).....	\$ 16.00
Shovel Operator (over 2 yds).....	\$ 25.00
Slip-Form Paver.....	\$ 21.00
Slurry Seal Paver Machine Operator.....	\$ 13.75

Slurry Seal Paver Truck

Operator.....	\$ 10.32
Stabilizer Operator.....	\$ 15.70
Stone-Spreader.....	\$ 13.35
Subgrade Machine Operator....	\$ 19.00
Tractor Operator, Crawlers..	\$ 12.47
Tractor Operator, Utility....	\$ 12.25
Trenching Machine.....	\$ 29.87
Vacuum Machine.....	\$ 18.20

TRAFFIC SIGNALIZATION:

Traffic Signal Installation.....	\$ 21.16
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TRUCK DRIVER

Fuel & Lubricant Service

Truck Driver.....	\$ 17.73
Transit Mix Truck Driver....	\$ 15.00
Truck Driver (Multi-Rear Axle).....	\$ 16.69
Truck Driver (Single Rear Axle).....	\$ 17.50
Truck Driver (Tandem Rear Axle).....	\$ 16.91
Truck Driver, Heavy Duty....	\$ 17.29

WELDER.....	\$ 18.15
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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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END OF GENERAL DECISION.

**VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR SECTION 107.15  
FOR  
DESIGN-BUILD PROJECTS**

February 18, 2014

**Section 107.15** of the Specifications is replaced by the following:

**Section 107.15—Use of Disadvantaged Business Enterprises (DBEs) for Design-Build Projects**

**A. Disadvantaged Business Enterprise (DBE) Program Requirements**

Any Design-Builder, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the United States Department of Transportation (USDOT) DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; and the Virginia Department of Transportation's (VDOT or the Department) Road and Bridge Specifications and DBE Program rules and regulations.

For the purposes of this provision, Offeror is defined as any individual, partnership, corporation, or Joint Venture that formally submits a Statement of Qualification or Proposal for the work contemplated there under; Design-Builder is defined as any individual, partnership, or Joint Venture that contracts with the Department to perform the Work; and subcontractor is defined as any supplier, manufacturer, or subcontractor performing work or furnishing material, supplies or services to the contract. The Design-Builder shall physically include this same contract provision in every supply or work/service subcontract that it makes or executes with a subcontractor having work for which it intends to claim credit.

In accordance with 49 CFR Part 26 and VDOT's DBE Program requirements, the Design-Builder, for itself and for its subcontractors and suppliers, whether certified DBE firms or not, shall commit to complying fully with the auditing, record keeping, confidentiality, cooperation, and anti-intimidation or retaliation provisions contained in those federal and State DBE Program legal requirements. By submitting a Proposal on this contract, and by accepting and executing this contract, the Design-Builder agrees to assume these contractual obligations and to bind the Design-Builder's subcontractors contractually to the same at the Design-Builder's expense.

The Design-Builder and each subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Design-Builder shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Design-Builder to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Design-Builder exercises the right of appeal within the required timeframe(s) specified herein. Appeal requirements, processes, and procedures shall be in accordance with guidelines stated herein and current at the time of the proceedings. Where applicable, the Department will notify the Design-Builder of any changes to the appeal requirements, processes, and procedures after receiving notification of the Design-Builder's desire to appeal.

All time frames referenced in this provision are expressed in business days unless otherwise indicated. Should the expiration of any deadline fall on a weekend or holiday, such deadline will automatically be extended to the next normal business day.

## **B. DBE Certification**

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified as Disadvantaged Business Enterprises by the Virginia Department of Minority Business Enterprise (DMBE) or the Metropolitan Washington Airports Authority (MWAA) in accordance with federal and VDOT guidelines. DBE firms must be certified in the specific work listed for DBE contract goal credit. A directory listing of certified DBE firms can be obtained from the Virginia Department of Minority Business Enterprise' website: <http://www.dmb.e.virginia.gov>.

## **C. Bank Services**

The Design-Builder and each subcontractor are encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services and the fees charged for services typically will not be eligible for DBE Program contract goal credit.

## **D. DBE Program-Related Certifications Made by Offerors/Design-Builders**

By submitting a Proposal and by entering into any contract on the basis of that Proposal, the Offeror/Design-Builder certifies to each of the following DBE Program-related conditions and assurances:

1. That the Offeror/Design-Builder agrees to comply with the project construction and administration obligations of the USDOT DBE Program, 49 CFR Part 26 as amended, and the Standard Specifications setting forth the Department's DBE Program requirements.
2. Design-Builder shall comply fully with the DBE Program requirements in the execution and performance of the contract. Design-Builder acknowledges that failure to comply may result in enjoyment from participation in future Department or State procurements and/or other legal sanctions.
3. To ensure that DBE firms have been given full and fair opportunity to participate in the performance of the contract. The Design-Builder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had, and will have, an opportunity to compete for and perform work on the contract. The Design-Builder further certifies that the Design-Builder shall not discriminate on the basis of race, color, age, national origin, or sex in the performance of the contract or in the award of any subcontract. Any agreement between a Design-Builder and a DBE whereby the DBE promises not to provide quotations for performance of work to other Design-Builders are prohibited.
4. Design-Builder shall make good faith efforts to obtain DBE participation in the proposed contract at or above the goal. The Offeror shall submit a written statement as a part of its Statement of Qualifications and/or Proposal indicating the Offeror's commitment to achieve the minimum requirement related to DBE goal indicated in Request for Qualification (RFQ) and/or Request for Proposal (RFP) for the entire value of the contract. The Offeror, by signing and submitting its Proposal, certifies the DBE participation information that will be submitted within the required time thereafter is true, correct, and complete, and that the information to be provided includes the names of all DBE firms that will participate in the contract, the specific item(s) that each listed DBE firm will perform, and the creditable dollar amounts of the participation of each listed DBE.
5. Offeror further certifies, by signing its Proposal, it has committed to meet the contract goal for DBE participation. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents. By signing the Proposal, the Offeror certifies that good faith efforts will be made on work that it proposes to sublet; and that it will seek out and consider DBE firms as potential subcontractors and

subconsultants. The Design-Builder shall, as a continuing obligation, contact DBE firms to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation to substantiate its good faith efforts.

6. Design-Builder shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Design-Builder's own forces or those of an affiliate of the Design-Builder without the prior written consent of Department as set out within the requirements of this Special Provision.
7. Design-Builder shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for DBE firms. The designation and identity of this officer needs to be submitted only once by the Design-Builder.
8. Design-Builder shall comply fully with all contractual requirements and Legal Requirements of the USDOT DBE Program, and shall cause each DBE firm participating in the contract to fully perform the designated work items with the DBE firm's own forces and equipment under the DBE firm's direct supervision, control, and management. Where a contract exists and where the Design-Builder, DBE firm, or any other firm retained by the Design-Builder has failed to comply with federal or Department DBE Program requirements, Department has the authority and discretion to determine the extent to which the DBE contract regulations have not been met, and will assess against the Design-Builder any remedies available at law or provided in the contract.
9. If a bond surety assumes the completion of work, if for any reason VDOT has terminated the Design-Builder, the surety shall be obligated to meet the same DBE contract terms and requirements as were required of the original Design-Builder in accordance with the requirements of this specification.

#### **E. DBE Program Compliance Procedures**

The following procedures shall apply to the contract for DBE Program compliance purposes:

1. **Prequalification of Subcontractors:** All prospective DBE subcontractors shall prequalify with the Department in accordance with the *Rules Governing Prequalification*.
2. **DBE Goal, Good Faith Efforts Specified:** Design-Builder shall evidence attainment of the DBE commitment equal to or greater than the required DBE Goal through submission, to Department, of completed Form C-111, Minimum DBE Requirements; Form C-112, Certification of Binding Agreement; and Form C-48, Subcontractor/Supplier Solicitation and Utilization, as a part of the good faith efforts documentation set forth below:

**Design Phase:** Thirty (30) days after the Notice to Proceed for Design, the Design-Builder shall submit to Department for review and approval Forms C-111 and C-112 for each DBE firm to be utilized during the design phase to meet the DBE minimum requirement and Form C-48. Failure to submit the required documentation within the specified timeframe shall be cause to deny credit for any work performed by a DBE firm and delay approval of the Design-Builder's monthly payment.

**Construction Phase:** No later than thirty (30) days prior to the DBE firm undertaking any work, Design-Builder shall submit to Department for review and approval Forms C-111, C-112, and C-48. Failure to submit the required documentation within the specified timeframe shall result in disallowed credit of any work performed prior to approval of Forms C-111 and C-112 and delay approval of monthly payment.

The District Civil Rights Office (DCRO) will monitor good faith effort documentation quarterly to determine progress being made toward meeting the DBE minimum requirement established for the contract.

Forms C-48, C-49, C-111, and C-112 can be obtained from the VDOT website at:  
<http://vdotforms.vdot.virginia.gov/>

- 3. Good Faith Efforts Described:** Department will determine if Design-Builder demonstrated adequate good faith efforts, and if given all relevant circumstances, those efforts were made actively and aggressively to meet the DBE requirements. Efforts to obtain DBE participation are not good faith efforts if they could not reasonably be expected to produce a level of DBE firm participation sufficient to meet the DBE Program requirements and DBE Goal.

Good faith efforts may be determined through use of the following list of the types of actions the Design-Builder may make to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts of similar intent may be relevant in appropriate cases:

- (a) Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to DBE firms who have the capability to perform the work of the contract. Examples include: advertising in at least one daily/weekly/monthly newspaper of general circulation, as applicable; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. DBE firms shall have no less than five (5) business days to reasonably respond to the solicitation. Design-Builder shall determine with certainty if the DBE firms are interested by taking reasonable steps to follow up initial solicitations as evidenced by documenting such efforts as requested on Form C-49, DBE Good Faith Efforts Documentation.
- (b) Selecting portions of the work to be performed by DBE firms in order to increase the likelihood that the DBE Goal will be achieved. This includes, where appropriate, breaking out work items into economically feasible units to facilitate DBE firm participation, even when the Design-Builder might otherwise prefer to completely perform all portions of this work in its entirety or use its own forces;
- (c) Providing interested DBE firms with adequate information about the plans, specifications, and requirements of the contract in a timely manner, which will assist the DBE firms in responding to a solicitation;
- (d) Negotiating for participation in good faith with interested DBE firms;
  1. Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBE firms that were considered; dates DBE firms were contacted; a description of the information provided regarding the plans, specifications, and requirements of the contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBE firms to perform the work;
  2. Design-Builder should, using good business judgment, consider a number of factors in negotiating with subcontractors/subconsultants, and should take a DBE firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using DBE firms is not sufficient reason for a Design-Builder's failure to meet the DBE goal as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a Design-Builder to

perform the work with its own organization does not relieve the Design-Builder of the responsibility to make diligent good faith efforts. Design-Builders are not, however, required to accept higher quotes from DBE firms if the price difference can be shown by the Design-Builder to be excessive, unreasonable, or greater than would normally be expected by industry standards;

- (e) A Design-Builder cannot reject a DBE firm as being unqualified without sound reasons based on a thorough investigation of the DBE firm's capabilities. The DBE firm's standing within its industry, membership in specific groups, organizations, associations, and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the Design-Builder's efforts to meet the contract goal for DBE participation;
- (f) Making efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by Department or by Design-Builder;
- (g) Making efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in this Special Provision;
- (h) Effectively using the services of appropriate personnel from VDOT and from DMBE; available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/ women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

#### **F. Documentation and Administrative Reconsideration of Good Faith Efforts**

Design-Builder must provide Form C-49, DBE Good Faith Efforts Documentation, of its efforts made to meet the DBE goal within the time frames specified in this provision. The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the Design-Builder. Design-Builder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain the DBE firm's participation in the proposed work.

However, Design-Builder shall timely submit its completed and executed forms C-111, C-112, C-48, and C-49, as aforementioned. Failure to submit the required documentation within the specified time frames shall be cause to disallow DBE goal credit and delay approval of the Design-Builder's monthly payment.

**During the Contract:** If a DBE, through no fault of the Design-Builder, is unable or unwilling to fulfill his agreement with the Design-Builder, the Design-Builder shall immediately notify the Department and provide all relevant facts. If a Design-Builder relieves a DBE subcontractor of the responsibility to perform work under their subcontract, the Design-Builder is encouraged to take the appropriate steps to obtain another DBE firm to perform the remaining subcontracted work for the amount that would have been paid to the original DBE firm. In such instances, Design-Builder is expected to seek DBE participation towards meeting the goal during the performance of the contract.

If at any point during the execution and performance of the contract it becomes evident that the remaining dollar value of allowable DBE goal credit for performing the subcontracted work is insufficient to obtain the DBE contract goal, and the Design-Builder has not taken the preceding actions, the Design-Builder and any aforementioned affiliates may be subject to disallowance of

DBE credit until such time as sufficient progress toward achievement of the DBE goal is achieved or evidenced.

**Project Completion:** If, at final completion, the Design-Builder fails to meet the DBE goal, and fails to adequately document that it made good faith efforts to achieve sufficient DBE goal, then Design-Builder and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding, responding, or participating on Department projects for a period of ninety (90) days and be removed from Department's prequalification list.

Prior to such enjoinder or removal, Design-Builder may submit documentation to the State Construction Engineer or other designee of Department to substantiate that failure was due solely to quantitative underrun(s), elimination of items subcontracted to DBEs, or to circumstances beyond Design-Builder's control and that all feasible means had been used to achieve the DBE goal. The State Construction Engineer, or such other designee, upon verification of such documentation shall determine whether Design-Builder has met the requirements of the contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Design-Builder may request an appearance before the Department's Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The Administrative Reconsideration Panel will be made up of Department Division Administrators or their designees, none of who took part in the initial determination that the Design-Builder failed to make the DBE goal or make adequate good faith efforts to do so. After reconsideration, Department shall notify the Design-Builder in writing of its decision and explain the basis for finding that the Design-Builder did or did not meet the DBE goal or make adequate good faith efforts to do so. The decision of the Administrative Reconsideration Panel shall be administratively final. If the decision is made to enjoin the Design-Builder from bidding or participating on other Department work as described herein, the enjoinder period will begin upon Design-Builder's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

#### **G. DBE Participation for Contract Goal Credit**

DBE participation on the contract will count toward meeting the DBE contract goal in accordance with the following criteria:

1. The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE firm will be counted toward meeting the DBE goal in accordance with the **DBE Program-Related Certifications Made by Offerors/Design-Builder's** section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the DBE firm itself or subcontracted by the DBE to other DBE firms.
2. When a DBE performs work as a participant in a joint venture with a non-DBE firm, the Design-Builder may count toward the DBE goal only that portion of the total dollar value of the subcontract equal to the distinctly defined portion of the work that the DBE firm has performed with the DBE firm's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to coordinate Department review and approval of the joint venture's organizational structure and proposed operation where the Design-Builder seeks to claim the goal credit.
3. When a DBE firm subcontracts part of the work to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE firm's subcontractor is a DBE firm. Work that a DBE firm subcontracts to a non-DBE firm, or to a firm that may be eligible to be a DBE firm, but has not yet been certified as a DBE firm, will not count toward the DBE. The cost of supplies and equipment a DBE subcontractor purchases or leases from

the Design-Builder or prime contractual affiliates, as in the case of a joint venture, will not count toward the DBE goal.

4. The Design-Builder may count expenditures to a DBE subcontractor toward the DBE goal only if the DBE performs a Commercially Useful Function (CUF) on that subcontract, as such term is defined in subparagraph H below.
5. A Design-Builder may not count the participation of a DBE subcontractor toward the DBE goal until the amount being counted has actually been paid to the DBE firm. Design-Builder may count sixty (60) percent of its expenditures actually paid for materials and supplies obtained from a DBE certified as a regular dealer, and one hundred (100) percent of such expenditures actually paid for materials and supplies obtained from a regular dealer of the goods or a manufacturer DBE firm.
  - (a) For the purposes of this Special Provision, a “regular dealer” is defined as a firm or person that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm or person shall be an established business that regularly engages, as its principal business and under its own name, in the purchase and sale or lease of the products or equipment in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.
  - (b) A DBE firm or person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business where it keeps such items in stock if the DBE firm both owns and operates distribution equipment for the products it sells and provides for the work, provided further that the DBE firm or person has been certified with an appropriate North American Industry Classification System (NAICS) code for supply of such bulk items. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis to be eligible for credit to meet the DBE goal credit.
  - (c) If a DBE regular dealer is used for DBE goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the DBE regular dealer, which shall be responsible for distribution of the goods or materials.
  - (d) For the purposes of this Special Provision, a manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the contract and of the general character described by the project specifications. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material, or purchase and substantially alter goods and materials to make them suitable for construction use before reselling them.
  - (e) A Design-Builder may count toward the DBE goal the following expenditures to DBE firms that are not regular dealers or manufacturers for DBE program purposes:
    1. The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive or greater than would normally be expected by industry standards for the same or similar services.

2. The entire amount of that portion of the contract that is performed by the DBE firm's own forces and equipment under the DBE firm's supervision. This includes the cost of supplies and materials ordered and paid for by the DBE firm for work, including supplies purchased or equipment leased by the DBE firm, except Design-Builder supplies and equipment a DBE subcontractor purchases or leases from the Design-Builder or its affiliates.
- (f) Design-Builder may count toward the DBE goal one hundred (100) percent of the fees paid to a DBE trucker or hauler for the delivery of material and supplies required on the project job site, but not for the cost of those materials or supplies themselves, provided that the trucking or hauling fee is determined by Department to be reasonable, as compared with fees customarily charged by non-DBE firms for similar services. Design-Builder shall not count costs for the removal or relocation of excess material from or on the job site when the DBE trucking company is the manufacturer of or a regular dealer in those materials and supplies. The DBE trucking firm shall also perform a CUF on the project and not operate merely as a pass through for the purposes of gaining DBE goal credit. Prior to entering into a trucking subcontract, Design-Builder shall determine, or contact the Department Civil Rights Division or its district offices for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project. See section on **Miscellaneous DBE Program Requirements; Factors used to Determine if a DBE Trucking Firm is Performing a CUF.**
- (g) Design-Builder will receive DBE goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases, or other work arrangements provided that those fees are determined by Department to be reasonable and not excessive as compared with fees customarily charged by non-DBE firms for similar services. For the purposes of this Special Provision, a broker is defined as a person or firm that regularly engages in arranging for delivery of material, supplies, and equipment, or regularly arranges for the providing of project services as a course of routine business, but does not own or operate the delivery equipment necessary to transport materials, supplies or equipment to or from a job site.

#### **H. Performing a Commercially Useful Function (CUF)**

No credit toward the DBE goal will be allowed for payments or reimbursement of expenditures to a DBE firm if that DBE firm does not perform a CUF on that contract. A DBE firm performs a CUF when the DBE is solely responsible for execution of a distinct element of the work and the DBE firm actually performs, manages, and supervises such work with the DBE firm's own forces or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. To perform a CUF the DBE firm alone shall be responsible and bear the risk for the material and supplies used on the contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE firm's own forces and equipment, and paying for those materials and supplies. The amount the DBE firm is to be paid under the subcontract shall be commensurate with the work the DBE actually performs and the DBE goal credit claimed for the DBE firm's performance.

**Monitoring CUF Performance:** It shall be the Design-Builder's responsibility to confirm that all DBE firms selected for subcontract work on the contract, for which he seeks to claim credit toward the DBE goal, perform a CUF. Further, the Design-Builder is responsible for and shall confirm that each DBE firm fully performs the DBE firm's designated tasks in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. For the purposes of this Special Provision the DBE firm's equipment will mean either equipment directly owned by the DBE as evidenced by title, bill of sale or other such documentation, or

leased by the DBE firm, and over which the DBE has control as evidenced by the leasing agreement from a firm not owned in whole or part by the Design-Builder or an affiliate of the Design-Builder.

Department will monitor Design-Builder's DBE involvement during the performance of the contract. However, Department is under no obligation to warn the Design-Builder that a DBE firm's participation will not count toward the goal.

**DBE Firms Must Perform a Useful and Necessary Role in Contract Completion:** A DBE firm does not perform a CUF if the DBE firm's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE firm participation.

**DBE Firms Must Perform The Contract Work With Their Own Workforces:** If a DBE firm does not perform and exercise responsibility for at least thirty (30) percent of the total cost of the DBE firm's contract with the DBE firm's own work force, or the DBE firm subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involve, Department will presume that the DBE firm is not performing a CUF and such participation will not be counted toward the DBE goal.

**Department Makes Final Determination On Whether a CUF Is Performed:** Department has the final authority to determine, in its sole discretion, whether a DBE firm has performed a CUF on the contract. To determine whether a DBE is performing or has performed a CUF, Department will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Design-Builder or by employees or equipment of the Design-Builder shall be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated. When a DBE firm is presumed not to be performing a commercially useful function the DBE may present evidence to rebut the Department's finding. Department has the final authority to determine, in its sole discretion, whether a DBE firm has performed a CUF on the contract.

#### **I. Verification of DBE Participation and Imposed Damages**

Within fourteen (14) days after subcontract execution between Design-Builder and DBE subcontractors (or subcontract execution between DBE subcontractors and DBE subcontractors), Design-Builder shall submit to the DCRO, a copy of the fully executed subcontract agreement for each DBE firm used to claim credit in accordance with the requirements stated on Form C-111. The subcontract shall be executed by both parties stating the work to be performed, the details or specifics concerning such work, and the price which will be paid to the DBE subcontractor. Because of the commercial damage that the Design-Builder and its DBE subcontractor could suffer if their subcontract pricing, terms, and conditions were known to competitors, the Department staff will treat subcontract agreements as proprietary Design-Builder trade secrets with regard to Freedom of Information Act requests. In lieu of subcontracts, purchase orders may be submitted for haulers, suppliers, and manufacturers. These too, will be treated confidentially and protected. Such purchase orders must contain, as a minimum, the following information: authorized signatures of both parties; description of the scope of work to include contract item numbers, quantities, and prices; and required federal contract provisions.

The Design-Builder shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each quarter during the life of the contract in which participation occurs and verification is available. The information shall be indicated on Form C-63, DBE and SWAM Payment Compliance Report. The Department reserves the right to request proof of payment via copies of cancelled checks with appropriate identifying notations. Failure to provide Form C-63 to the DCRO within five (5) business days after the reporting period

may result in delay of approval of the Design-Builder's monthly payment. The names and certification numbers of DBE firms provided by the Design-Builder on the various forms indicated in this Special Provision shall be exactly as shown on DMBE's latest list of certified DBEs. Signatures on all forms indicated herein shall be those of authorized representatives of the Design-Builder as shown on the Prequalification Application, Form C-32 or the Prequalification/Certification Renewal Application, Form C-32A, or authorized by letter from the Design-Builder. If DBE firms are used which have not been previously documented with the Design-Builder's minimum DBE requirements documentation and for which the Design-Builder now desires to claim credit toward the contract goal, the Design-Builder shall be responsible for submitting necessary documentation in accordance with the procedures stipulated in this Special Provision to cover such work prior to the DBE firm beginning work. Form C-63 can be obtained from the VDOT website at: <http://vdotforms.vdot.virginia.gov/>

Design-Builder shall submit to the Department's Project Manager with a copy to the DCRO, a narrative with each project schedule submission, as required in the Special Provision for Design-Build Project Schedule (Part 3, Exhibit 11.1). The project schedule narrative shall include a log of applicable DBE participation activities in the Design-Builder's project schedule for which the Design-Builder intends to claim credit for attaining the DBE goal required in the contract. The log shall include the proposed start/finish dates, durations, and dollar values of the DBE participation activities.

Narratives or other agreeable format of schedule information requirements and subsequent progress determination shall be based on the commitment information shown on the latest Form C-111 as compared with the appropriate Form C-63.

Prior to beginning any major component of the work to be performed by a DBE firm not previously submitted, Design-Builder shall furnish a revised Form C-111 showing the name(s) and certification number(s) of any such DBEs for which Design-Builder seeks DBE goal credit. Design-Builder shall obtain the prior approval of the Department for any assistance it may provide to the DBE firm beyond its existing resources in executing its commitment to perform the work in accordance with the requirements listed in the **Good Faith Efforts Described** section of this Special Provision. If Design-Builder is aware of any assistance beyond a DBE firm's existing resources that Design-Builder, or another subcontractor, may be contemplating or may deem necessary and that have not been previously approved, Design-Builder shall submit a new or revised narrative statement for Department's approval prior to assistance being rendered.

If the Design-Builder fails to correctly complete and any of the required documentation requested by this Special Provision within the specified time frames, the Department will withhold payment until such time as the required submissions are received by Department. Where such failures to provide required submittals or documentation are repeated, Department will move to enjoin the Design-Builder and any prime contractual affiliates, as in the case of a joint venture, from bidding, responding or participating Department projects until such submissions are received.

#### **J. Documentation Required for Semi-final Payment**

Design-Builder must submit Form C-63 to the DCRO sixty (60) days prior to date of final completion, set forth on the Baseline Schedule (as updated from time to time in accordance with the contract). The form must include each DBE firm used on the contract and the work performed by each DBE firm. The form shall include the actual dollar amount paid to each DBE firm for the accepted creditable work. The form shall be certified under penalty of perjury, or other applicable legal requirements, to be accurate and complete. Department will use this certification and other information available to determine applicable DBE credit allowed to date by Department and the extent to which the DBE firms were fully paid for that work. The Design-Builder acknowledges by the act of filing the form that the information is supplied to obtain payment regarding the contract as a federal participation contract. A letter of certification, signed by both the Design-Builder and

appropriate DBE firms, will accompany the form, indicating the amount, including any retainage, if present, that remains to be paid to the DBE firm(s).

**K. Documentation Required for Final Payment**

In anticipation of final payment, Design-Builder shall submit a final Form C-63 marked "Final" to the DCRO, within thirty (30) days of the anticipated date of final completion, as set forth on the Baseline Schedule (as updated from time to time in accordance with the contract). The form must include each DBE firm used on the contract and the work performed by each DBE firm. The form shall include the actual dollar amount paid to each DBE firm for the creditable work. Department will use this form and other information available to determine if Design-Builder and DBE firms have satisfied the DBE goal and the extent to which credit was allowed. Design-Builder acknowledges by the act of signing and filing the form that the information is supplied to obtain payment regarding the contract as a federal participation contract.

**L. Prompt Payment Requirements**

Design-Builder shall make prompt and full payment to the subcontractor(s) (including DBE subcontractors) of any retainage held by Design-Builder after the subcontractor's work is satisfactorily completed.

For purposes of this Special Provision, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted as required by the contract documents by Department. If Department has made partial acceptance of a portion of the contract, then Department will consider the work of any subcontractor covered by that partial acceptance to be satisfactorily completed. Payment will be made in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

Upon Department's payment of the subcontractor's portion of the work as shown on the application for payment and the receipt of payment by Design-Builder for such work, the Design-Builder shall make compensation in full to the subcontractor for that portion of the work satisfactorily completed and accepted by the Department. For the purposes of this Special Provision, payment of the subcontractor's portion of the work shall mean the Design-Builder has issued payment in full, less agreed upon retainage, if any, to the subcontractor for that portion of the subcontractor's work that Department paid to Design-Builder pursuant to the applicable application for payment.

Design-Builder shall make payment of the subcontractor's portion of the work within seven (7) days of the receipt of payment from Department in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

If Design-Builder fails to make payment for the subcontractor's portion of the work within the time frame specified herein, the subcontractor shall notify the Department and the Design-Builder's bonding company in writing. Upon written notice from the subcontractor, the Design-Builder's bonding company and Department will investigate the cause for non-payment. Barring mitigating circumstances that would make the subcontractor ineligible for payment, the Design-Builder's bonding company shall be responsible for insuring payment to the subcontractor in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

By accepting and executing this contract, the Design-Builder agrees to assume these obligations, and to bind the Design-Builder's subcontractors contractually to these obligations.

Nothing contained herein shall preclude Design-Builder from withholding payment to the subcontractor in accordance with the terms of the subcontract in order to protect the Design-Builder from loss or cost of damage due to a breach of the subcontract by the subcontractor.

#### **M. Miscellaneous DBE Program Requirements**

**Loss of DBE Eligibility:** When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:

1. When a Design-Builder has made a commitment to use a DBE firm that is not currently certified, thereby making the Design-Builder ineligible to receive DBE goal credit for work performed, the ineligible DBE firm's work does not count toward the DBE goal. Design-Builder shall meet the DBE goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the DCRO that it has made good faith efforts to do so.
2. When a Design-Builder has executed a subcontract with a DBE firm prior to official notification of the DBE firm's loss of eligibility, Design-Builder may continue to use the firm on the contract and shall continue to receive DBE credit toward DBE goal for the subcontractor's work.
3. When Department has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the contract before VDOT has issued the notice of its ineligibility shall count toward the contract goal.

**Termination of DBE:** If a DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the contract for any reason, Design-Builder must promptly request approval to substitute or replace that DBE firm in accordance with this section of this Special Provision.

Design-Builder, shall notify DCRO in writing before terminating and/or replacing the DBE firm that is being used or represented to fulfill DBE-related contract obligations during the term of the contract. Written consent from the DCRO for terminating the performance of any DBE firm shall be granted only when the Design-Builder can demonstrate that the DBE firm is unable, unwilling, or ineligible to perform its obligations for which the Design-Builder sought credit toward the DBE goal. Such written consent by the Department to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE with another DBE. Consent to terminate a DBE firm shall not be based on the Design-Builder's ability to negotiate a more advantageous contract with another subcontractor whether that subcontractor is, or is not, a DBE firm.

1. All Design-Builder requests to terminate, substitute, or replace a DBE firm shall be in writing, and shall include the following information:
  - (a) The date the Design-Builder determined the DBE to be unwilling, unable, or ineligible to perform.
  - (b) The projected date that the Design-Builder shall require a substitution or replacement DBE to commence work if consent is granted to the request.
  - (c) A brief statement of facts describing and citing specific actions or inaction by the DBE firm giving rise to Design-Builder's assertion that the DBE firm is unwilling, unable, or ineligible to perform;
  - (d) A brief statement of the DBE firm's capacity and ability to perform the work as determined by the Design-Builder;

- (e) A brief statement of facts regarding actions taken by the Design-Builder, that Design-Builder believes constitute good faith efforts toward enabling the DBE firm to perform;
  - (f) The current percentage of work completed by the DBE firm;
  - (g) The total dollar amount currently paid for work performed by the DBE firm;
  - (h) The total dollar amount remaining to be paid to the DBE firm for work completed, but for which the DBE firm has not received payment, and with which the Design-Builder has no dispute;
  - (i) The total dollar amount remaining to be paid to the DBE firm for work completed, but for which the DBE firm has not received payment, and over which the Design-Builder and/or the DBE firm have a dispute.
2. Design-Builder's Written Notice to DBE of Pending Request to Terminate and Substitute with another DBE.

Design-Builder shall send a copy of the "request to terminate and substitute" letter to the affected DBE firm and make best efforts to ensure its receipt by the DBE firm, in conjunction with submitting the request to the DCRO. The DBE firm may submit a response letter to the DCRO and Department within two (2) business days of receiving the notice to terminate from the Design-Builder. If the DBE firm submits a response letter, then Design-Builder shall, as part of its subcontract, obligate the DBE firm to explain its position concerning performance on the committed work. The Department will consider both the Design-Builder's request and the DBE firm's response and explanation before approving the Design-Builder's termination and substitution request.

If, after making its best efforts to deliver a copy of the "request to terminate and substitute" letter, the Design-Builder is unsuccessful in notifying the affected DBE firm, the Department will verify that the DBE firm is unable or unwilling to continue performing its subcontract let with respect to the contract. Department will timely approve the Design-Builder's request for a substitution.

3. Proposed Substitution of Another Certified DBE

Upon termination of a DBE firm, Design-Builder shall use reasonable good faith efforts to replace the terminated DBE firm. The termination of such DBE firm shall not relieve Design-Builder of its obligations under this Special Provision, and the unpaid portion of the terminated DBE firm's subcontract will not be counted toward the DBE goal.

When a DBE substitution is necessary, the Design-Builder shall submit an amended Form C-111 to the DCRO for approval with the name of another DBE firm, the proposed work to be performed by that DBE firm, and the dollar amount of the work to replace the unfulfilled portion of the work of the original DBE firm.

Should Design-Builder be unable to commit the remaining required dollar value to the substitute DBE firm, the Design-Builder shall provide written evidence of good faith efforts made to obtain the substitute value requirement. Department will review the quality, thoroughness, and intensity of those efforts. Efforts that are viewed by Department as merely superficial or pro-forma will not be considered good faith efforts to meet the DBE goal. Design-Builder must document the steps taken that demonstrated its good faith efforts to obtain participation as set forth in the **Good Faith Efforts Described** section of this Special Provision.

**Factors Used to determine if a DBE Trucking Firm is performing a CUF:**

The following factors will be used to determine whether a DBE trucking company is performing a CUF:

1. To perform a CUF, the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE trucking firm is responsible by subcontract under the contract. There shall not be a contrived arrangement, including, but not limited to, any arrangement that would not customarily and legally exist under customary construction project subcontracting practices for the purpose of meeting the DBE goal;
2. The DBE firm must own and operate at least one fully licensed, insured, and operational truck used in the performance of the contract work. This does not include a supervisor’s pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the subject materials or supplies;
3. Design-Builder is eligible to receive full credit toward the DBE goal for the total reasonable amount the DBE firm is paid for the transportation services provided on the subcontract under the contract using acceptable trucks the DBE firm owns, insures, and operates using drivers that the DBE employs and manages;
4. The DBE trucking firm may lease trucks from another DBE firm, including from an owner-operator who is a DBE firm. Design-Builder is eligible to receive credit for the total fair market value actually paid for transportation services the lessee DBE firm provides to the DBE firm that leases trucks from such lessee DBE firm on the contract;
5. The DBE firm may also lease trucks from a non-DBE firm, including an owner-operator. Design-Builder may be eligible to receive DBE goal credit for the services of a DBE firm who leases trucks from a non-DBE firm up to the total value of the transportation services provided by non-DBE lessees, *not to exceed the value of transportation services provided by DBE-owned trucks on the contract*. For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

**Truck Counting**

Design-Builders may count for credit against the DBE goal the dollar volume attributable to no more than twice the number of trucks owned by a DBE firm or leased from another DBE firm.

As an example, DBE credit would be awarded for the total transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

<u>Firm X</u>	
Truck 1	Owned by DBE
Truck 2	Owned by DBE

<u>Firm Y</u>	
Truck 3	Leased from DBE
Truck 4	Leased from DBE

**Firm Z**

Truck 5	Leased from Non-DBE
Truck 6	Leased from Non-DBE
Truck 7	Leased from Non-DBE
Truck 8	Leased from Non-DBE
Truck 9	Leased from Non-DBE*
Truck 10	Leased from Non-DBE*

**Credit = 8 Trucks**

DBE credit would be awarded for the total transportation services provided by DBE firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

In all, full DBE credit would be allowed for the participation of eight (8) trucks (twice the number of DBE trucks owned and leased) and the dollar value attributable to the Value of Transportation Services provided by the 8 trucks.

\* With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.

6. For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm that has leased the truck at all times during the life of the lease.

**N. Suspect Evidence of Criminal Behavior**

Failure of Design-Builder or any subcontractor to comply with the Standard Specifications, this Special Provision, or any other contract document wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted prosecution.

**Suspected DBE Fraud**

In appropriate cases, Department will bring to the attention of the United States Department of Transportation any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or "Program Fraud and Civil Penalties" rules provided in 49 CFR Part 31.