VDOT

Virginia Department of Transportation

REQUEST FOR PROPOSALS

A DESIGN-BUILD PROJECT

Route 29/ Charlottesville Bypass Project

From: Existing Route 29/ Route 250 Bypass To: Existing Route 29, north of the Rivanna River South Fork

Albemarle County, Virginia

State Project No.: 0029-002-844

Contract ID Number: C00102419DB44

DATE: September 27, 2011

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PART 1 REQUEST FOR PROPOSALS

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 Route 29/ Charlottesville Bypass Project in Albemarle County, 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.

2.0 BACKGROUND INFORMATION

2.1 **Project Description**

The Project is located in Albemarle County, Virginia, and includes the construction of a new four-lane divided, limited access bypass to the west of existing Route 29. The purpose of the project is to relieve congestion on existing Route 29 and to improve the movement of through traffic. The limits of the project extend from Route 29/250 Bypass and the North Grounds of the University of Virginia on the south end to existing Route 29 north of the South Fork Rivanna River on the north end. The project shall include maintaining the following existing public crossing roads along the corridor: Barracks Road: Lambs Road; Roslyn Ridge Road; and Earlysville Road. Modifications to existing Route 29/250 Bypass at the southern terminus and existing Route 29 at the northern terminus, necessary to implement the project, shall be included. Further, all modifications to crossings on Route 29/250 Bypass (i.e. Old Ivy Road, Ivy Road, CSXT Railroad) shall be included, as necessary to implement the Project. Access to the new highway will be provided through termini at both ends, with no intermediate public access points to crossroads or adjacent properties, except a private access point for the Rivanna River Water Authority's facilities. The proposed bypass is estimated to be 6.24 miles long. Refer to Part 2 "Technical Requirements" for the scope of work, technical information, and requirements.

2.2 Legislative Authority

2.2.1 Section 33.1-12(2)(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") on August 10, 2011. The FOPI is attached hereto as Attachment 2.2.1.

2.3 **Procurement Overview of the Project**

VDOT will use a <u>single-phase, two-step</u> selection process for the selection of the Successful Offeror. In accordance with the requirements of this RFP, interested Offerors will

submit their qualifications in accordance with Section 4.0 below. All Offerors that are deemed to be responsive based on their Qualifications Submittal (Step 1) will be invited to submit a Proposal (Step 2), consisting generally of a Letter of Submittal, Attachments to the Letter of Submittal, and the Price Proposal. Award of a fixed price Design-Build Contract shall be made in accordance with Section 8 hereof to the Offeror providing a responsive Proposal and the lowest Price Proposal.

2.4 **Right-of-Way & Utilities**

Right-of-Way acquisition is part of the scope of work for this Project. The Offeror's proposed design shall not exceed the right-of-way limits indicated in the RFP plans. If Design-Builder's proposed design requires additional construction easements beyond the right-of-way limits indicated in the RFP Plans, it will be the responsibility of Design-Builder to coordinate directly with the affected property owners to acquire such construction easements in accordance with the requirements of Part 2, Section 2.13. Design-Builder shall be solely responsible for assuming all costs and risks associated with exceeding such right-of-way limits, including any public hearings that may be required, and no modifications to the Contract Price or Contract Time will be granted or considered.

Services for utility relocations, adjustments and coordination are anticipated to include all work necessary to perform the relocations, adjustments and coordination of utilities as detailed by VDOT in the RFP.

2.5 **Budget**

2.5.1 VDOT has allocated a budget of \$244.5 million for the Project.

2.6 **Project Milestone Schedule**

2.6.1 VDOT plans to conduct 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.

Project Milestones		Date
1.	Advertise RFP	09/27/11
2.	Informational Meeting for potential Offerors	10/6/11 (9:00 am EST)
3.	Utility Scoping Meeting	10/6/11 (11:00 am EST)
4.	RFP Step 1 Questions Due to VDOT	10/21/11 (4:00 pm EST)
5.	VDOT Responses to RFP Step 1 Questions	11/04/11
6.	VDOT Issue Addendum # 1	11/08/11
7.	Qualifications Submittal Due Date	11/29/11 (4:00 pm EST)
8.	Notification to Responsive Offerors	12/13/11
9.	RFP Step 2 Questions Due to VDOT	01/06/12 (4:00 pm EST)

Request for Prop Part 1 Instructions for (Route 29 / Charlottesville Bypass Albemarle County, Virginia State Project No. 0029-002-844 Contract ID No. C00102419DB44
10.	VDOT Responses to RFP Step 2 Questions	01/27/12
11.	Proprietary Meetings	Week of 02/06/12
12.	VDOT Issue Addendum # 2 (if necessary)	TBD
13.	Proposal Due Date	04/17/12 (4:00 pm EST)
14.	Open Price Proposals	05/08/12
15.	Notice of Intent to Award	05/14/12
16.	Post Notice of Intent Submittal Due Date	05/17/12
17.	CTB Award	06/20/12
18.	Design-Build Contract Execution	07/18/12
19.	Notice to Proceed # 1	07/20/12
20.	Notice to Proceed # 2	09/28/12 (estimated)
21.	Substantial Completion	04/15/16
22.	Final Completion	07/15/16

2.6.2 VDOT will review questions regarding the Qualifications Submittal (Step 1) and may only respond to the questions related to the Qualifications Submittal by the date set forth above for VDOT Response to RFP Step 1 Questions.

2.6.3 VDOT has established that Substantial and Final Completion for all Work under the Design-Build Contract shall be no later than the date(s) set forth in, Section 2.6.1 above. If an Offeror proposes Substantial and Final Completion date(s) earlier than those shown in Section 2.6.1 above, then such proposed dates will be deemed by VDOT as the contractual completion date(s) for the Design-Build Contract for all purposes, including liquidated damages.

2.7 Status of NEPA

In accordance with the requirements of the National Environmental Policy Act ("NEPA") and in cooperation with FHWA, a Draft Environmental Impact Statement (DEIS) was approved by FHWA on May 11, 1990, a Final Environmental Impact Statement (FEIS) was approved by FHWA on January 20, 1993 and a Record of Decision (ROD) was issued by FHWA on April 8, 1993. An Environmental Assessment (EA) was approved by FHWA on November 4, 1994 and a Finding of No Significant Impact (FONSI) was issued by FHWA on July 6, 1995. A Reevaluation and Final Section 4(f) Evaluation was approved by FHWA on March 13, 2000. A Revised ROD was issued by FHWA on March 13, 2000. A Revised ROD was issued by FHWA on March 13, 2000. A Draft Supplemental Environmental Environmental Impact Statement (DSEIS) was approved by FHWA on January 29, 2002, a Final Supplemental Environmental Impact Statement (FSEIS) was approved by FHWA on May 29, 2003, and a ROD was issued by FHWA on September 22, 2003. These documents are included in the RFP Information Package.

VDOT and FHWA will revisit NEPA to establish whether the Environmental Impact Statement remains valid. This NEPA related work is expected to be completed in September 2012. As a result, this work might not be completed prior to the award of the Design-Build Contract; therefore, VDOT will be using a Notice To Proceed in two phases. Since Federal regulations limit the amount and type of work that can be performed prior to the completion of the NEPA process, the Offerors shall be familiar with the regulations, limits, and shall comply with the intent of the law. Work that is authorized in the first phase Notice to Proceed (NTP # 1) will focus on

preliminary design activities in accordance with Title 23 CFR 636.109 and Appendix A, FHWA Order Number 6640.1A, "FHWA Policy on Permissible Project Related Activities During the NEPA Process," dated October 1, 2010. In addition, Right of Way purchase and utility relocation will be prohibited during first phase NTP # 1; this work will be allowed upon FHWA completion of the NEPA related work. The second phase Notice to Proceed (NTP # 2) will be authorized after the NEPA work is completed by the FHWA. Upon the issuance of second phase NTP # 2, the Design-Builder shall commence Work on the Final Design, Right of Way Purchase, Utilities Relocation and Construction in accordance with the Design-Build Contract. Under no circumstances shall the Design-Builder commence Work on the Final Design, Right of Way Purchase, Utilities Relocation and Construction until such time as the NEPA related work is completed and VDOT issues the second phase NTP # 2.

2.8 VDOT's Point of Contact and Project Reference

2.8.1 VDOT's sole Point of Contact ("POC") for this Project shall be the person designated below. 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:	Jeff Roby, P.E.
Address:	Alternate Project Delivery Office
	Virginia Department of Transportation
	1401 East Broad Street
	Richmond, VA 23219
Phone:	(804) 786-1103
Fax:	(804) 786-7221
E-mail:	Jeffrey.roby@vdot.virginia.gov

2.8.2 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 Offeror.

2.8.3 All written communications to VDOT from Offerors shall specifically reference the correspondence as being associated with "Route 29/ Charlottesville Bypass Project."

2.8.4 An RFP Information Package is available on CD-ROM for \$50.00. Interested Offerors should complete the RFP Information Package Order Form included as Attachment 2.8.4. The instructions for submittal and payment are included on the form.

2.9 **RFP Documents**

2.9.1 The documents included in this RFP (collectively the "RFP Documents") consist of the following sections, 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 (May 2010) 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

2.9.2 Each Offeror shall review the proposed RFP Documents and provide comments regarding any aspect of such documents to which it has any concern, including but not limited to terms that it considers to be ambiguous or to which it takes exception. Such comments will be submitted to VDOT's POC within the time set forth in Section 2.6.1 of this RFP. VDOT will review all comments received and, if it deems appropriate, in its sole discretion, may modify such documents through an Addendum. Offerors shall base their Proposals on the terms and conditions of the Design-Build Contract included in the latest issued Addendum.

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

2.10 Deviations from the RFP Documents

2.10.1 If awarded the Design-Build Contract, an Offeror will be obligated to meet all of the requirements of the RFP Documents. If VDOT is willing to modify a requirement, VDOT will issue an Addendum as appropriate, provided, however, that: (a) VDOT shall have the sole discretion as to the acceptability of any such modifications; and (b) no modifications from the requirements of the RFP Documents will be valid unless they are agreed to by VDOT and set forth in an Addendum.

2.11 Compliance with Registration and License Requirements

2.11.1 All Offerors and Proposals 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, individual, or professional in nature, and nothing herein is intended to contradict, nor to supersede, state and federal laws and regulations regarding the same. At the time of submitting Proposals, all Offerors shall be eligible under applicable law and relevant regulations, to offer and to provide any services proposed or related to the Project. Unless otherwise exempted by § 54.1-401, 54.1-402, or 54.1-402.1, any person, partnership, corporation,

or other entity offering or practicing architecture, engineering, or land surveying shall be registered or licensed in accordance with the provision of *Chapter 4*, *Title 54.1 of the Code of Virginia*. Offerors 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"):

All business entities, except for sole proprietorships, are required to register with the Virginia State Corporation Commission (A Business Registration Guide is available on the Internet at http://www.state.va.us/scc/division/clk/brg.htm). Foreign Professional corporations and Foreign Professional Limited Liability Companies (i.e., organized or existing under the laws of a state or jurisdiction other than Virginia) 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 proprietorships that do not employ other individuals for which licensing is required must be registered in the Commonwealth of Virginia with the Department of Professional & Occupational Regulation, Virginia Board for Architects, Professional Engineers, Land Surveyors and Landscape Architects (http://www.state.va.us/dpor). Board regulations require that all branch offices of professional corporations and business entities located in Virginia which offer or render any professional services relating to the professions regulated by the Board be registered with the Board. All branch offices which offer or render any professional service must have at least one full-time resident professional in responsible charge who is licensed in the profession offered or rendered at each branch. All firms involved that are to provide professional services must meet these criteria at the time of submitting a response to the Request for Qualification and/or the Request for Proposal to the Department. Individual engineers shall meet the requirements of Chapter 4, Title 54.1 of the Code of Virginia.

2.11.2 Failure to comply with the provisions of Section 2.11.1 above may render the Proposal, in the sole and reasonable discretion of the VDOT, non-responsive.

3.0 GENERAL PROCEDURES AND REQUIREMENTS

This 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 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; and
 - .4 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.

3.1.2 Each Offeror is responsible for promptly giving VDOT written notice, in accordance with the processes set forth in Section 7.0 below, of: (a) all conflicts, errors, ambiguities, or discrepancies that Offeror discovers in the RFP Documents; and (b) aspects of the RFP Documents that Offeror does not understand. Any failure to do so shall be at Offeror's sole risk, and no relief for error or omission will be provided by VDOT.

3.2 **Pre-Proposal Meeting**

3.2.1 VDOT will hold an Informational Meeting with potential Offerors on the date and time set forth in Section 2.6.1 above at the VDOT Culpeper District Auditorium located at 1601 Orange Road, Culpeper, Virginia, 22701. No more than three (3) representatives from each Offeror (inclusive of any member of Offeror's team) will be allowed to participate in the Pre-Proposal Meeting.

3.3 Utility Scoping Meeting

VDOT will hold a Utility Scoping meeting with potential Offerors on the date and time set forth in Part 1, Section 2.6.1 at the VDOT Culpeper District Auditorium located at 1601 Orange Road, Culpeper, Virginia, 22701. No more than three (3) representatives from each Offeror (inclusive of any other member of Offeror's team) will be allowed to participate in the Utility Scoping meeting.

3.4 Proprietary Meetings

3.4.1 VDOT may invite each Offeror that submits a responsive Qualifications Submittal to participate in a Proprietary Meeting with VDOT and its representatives or consultants, with the anticipated dates for such meetings set forth in Part 1, Section 2.6.1. Each meeting would be private, in that only one Offeror would meet with VDOT at a time, and is expected to last no longer two (2) hours per Offeror. Offerors are not required to accept an invitation to the Proprietary meeting.

3.4.2 The purpose of the Proprietary Meetings is to give each Offeror, in a confidential setting, an opportunity to ask questions and discuss concerns related to the Project, details of the Project

scope, and administrative procedures, and for the Offeror to discuss any proposed deviations to RFP, if desired. The meetings are also intended to enable VDOT to express, among other things, whether the Offeror is pursuing an approach that will not meet the RFP Documents or is otherwise unacceptable to VDOT. At least three (3) working days before each meeting the Offeror shall submit to VDOT in writing the names and functions of each of its attendees and the issues and questions to be discussed. No more than five (5) team members may attend such meetings.

3.4.3 The Offeror shall prepare minutes of its Proprietary Meeting with VDOT and furnish the minutes in Microsoft Word format, for review and approval to VDOT within three (3) business days of the meeting by 5:00 P.M. prevailing local time. VDOT reserves the right to edit and return such meeting minutes to the Offeror to reflect VDOT's understanding of the meeting. Because of the proprietary nature of these meetings, neither the agenda nor the minutes will be subject to disclosure until after the award of the Design-Build Contract. If meeting minutes are not provided in accordance with the aforementioned time restriction, everything discussed at the meeting will be considered null and void and any understanding reached during the meeting will not be applicable between the parties to the meeting.

3.4.4 While the discussions in these Proprietary Meetings are intended to be confidential, nothing shall preclude VDOT from exercising any rights that it may have under this RFP, including the right to issue a clarification or revision of the RFP, or an Addendum, as a result of what is discussed in such meetings.

3.4.5 Nothing herein shall be construed to preclude VDOT from speaking with any Offeror at any time prior to the opening of the Price Proposals, and VDOT expressly reserves all such rights to do so.

3.5 Acknowledgment of Receipt of RFP, Revisions and Addenda

3.5.1 Offeror shall provide VDOT the Acknowledgement of RFP, Revisions, and/or Addenda Sheet (C-78), set forth as Attachment 3.5.1, with submission of the Proposal, which will serve to acknowledge that Offeror has received this RFP and identify Offeror's representative, who shall be Offeror's single point of contact for the receipt of any documents, notices and addenda associated with this RFP.

4.0 CONTENTS OF QUALIFICATIONS SUBMITTALS, PROPOSALS AND POST-NOTICE OF INTENT SUBMITTALS

4.1 General

4.1.1 This Section 4.0 describes the contents of the Qualifications Submittals to be submitted by all Offerors, the contents of the Proposals that may be submitted by Offerors with a responsive Qualifications Submittal, and the documents that are required to be submitted by the Successful Offeror after the issuance of the Notice of Intent to Award Contract. The format for the presentation of the Qualifications Submittals and Proposals is described in Section 6.0.

4.1.2 The Qualifications Submittal will consist of the Letter of Submittal #1 (Section 4.2) and Attachments to the Letter of Submittal #1 (Section 4.3). A Letter of Submittal #1 Checklist has been provided for reference in Attachment 4.1.2. The purpose of the checklist is to aid the Offeror in meeting and organizing the submittal requirements.

4.1.3 Only those Offerors with a responsive Qualifications Submittal will be allowed to submit a Proposal. The Proposal will consist of the Letter of Submittal #2 (Section 4.4), Attachments to the Letter of Submittal #2 (Section 4.5), and the Price Proposal (Section 4.6). A Letter of Submittal #2 Checklist has been provided for reference in Attachment 4.1.3. The purpose of the checklist is to aid the Offeror in meeting and organizing the submittal requirements for the Letter of Submittal #2.

4.1.4 Offerors shall be aware that VDOT reserves the right to conduct an independent investigation of any information, including prior experience, identified in the Qualifications Submittal and/ or 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 Qualifications Submittal and/ or Proposal.

4.1.5 Offerors shall note that entire Qualifications Submittal and Proposal submitted in response to this RFP, including but not limited to the Price Proposal, is considered neither confidential nor proprietary and will be subject to full disclosure under the Virginia Freedom of Information Act in the Code of Virginia.

4.2 Letter of Submittal # 1

4.2.1 Provide Letter of Submittal # 1 on the Offeror's letterhead. The Letter of Submittal # 1 shall:

.1 Identify: (a) the individual who is both the official representative and point of contact for the Offeror relative to all matters associated with this RFP and the Qualifications Submittal; and (b) the name of the principal officer (e.g., President, Treasurer, Chairperson of the Board of Directors, etc.) of the legal entity with whom the Design-Build Contract will be executed. Along with the names of such individuals, the letter shall identify such individual's title, address, phone and fax numbers, and e-mail addresses.

.2 Identify whether the Offeror will be structured as a corporation, limited liability company, general partnership, joint venture, limited partnership or other form of organization.

.3 Provide a written statement within the LOS #1 that the Offeror is committed to achieving an eleven percent (11%) DBE participation goal for the entire value of the contract.

.4 Be signed by an authorized representative of the Offeror's organization, with all signatures being original and signed in ink.

4.3 Attachments to the Letter of Submittal #1

4.3.1 Provide the following Attachments to the Letter of Submittal #1:

.1 <u>Exhibit No. 1</u>. Provide an 8.5" x 11" copy of the Offeror's VDOT prequalification certificate or evidence indicating Offeror is currently prequalified.

.2 <u>Exhibit No. 2</u>. Provide a listing, in tabular format, of any business entity on the Offeror's proposed team who is practicing or offering to practice professional services in Virginia, including, but not limited to, those practicing or offering to practice engineering, surveying, hydrologic and hydraulic analysis and landscape architecture. To validate Offeror's compliance with Section 2.11 above, for each such entity, provide full size copies of the SCC and DPOR supporting registration documentation.

(a) The SCC registration information shall include the name, registration number, type of corporation and status of the business entity.

(b) The DPOR registration information for each office practicing or offering to practice any professional services in Virginia shall include the business name, address, registration type, registration number and expiration date.

.3 <u>Exhibit No. 3</u>. Provide names and detailed addresses of all affiliated and/or subsidiary companies of the Offeror and any business entity on the Offeror's proposed team, as well as any business entity listed above in Section 4.3.1.2 Exhibit No. 2. 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, are not considered to be affiliates. If Offeror has no affiliated and/or subsidiary companies, Offeror should include a statement in the Letter of Submittal indicating the same. If Offeror is unsure whether an entity is or is not an affiliate, doubt should be resolved in favor of affiliation and the entity should be listed accordingly.

.4 <u>Exhibit No. 4</u>. Offeror shall indicate, by executing and returning the attached Certification Regarding Debarment Form(s) Primary Covered Transactions, set forth as Attachment 4.3.1.4(a) and the attached Certification Regarding Debarment Forms(s) Lower Tier Covered Transactions, set forth as Attachment 4.3.1.4(b), if Offeror, or any affiliated and/or subsidiary companies, or any subconsultant, subcontractor, or any other person or entity identified as a member of Offeror's proposed team or associated therewith in the capacity of owner, partner, director, officer or any other position involving the administration of Federal or State funds:

(a) Is currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any federal agency.

(b) Has been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years.

(c) Has a proposed debarment pending; or has been indicted, convicted, or had a civil judgment rendered against it or them by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

Any of the above conditions will not necessarily result in denial of award, but will be considered in determining the Offeror's responsibility. For any condition noted, indicate to whom it applies, the initiating agency, and the dates of action. Providing false information may result in federal criminal prosecution or administrative sanctions. For the avoidance of doubt, Attachments 4.3.1.4(a) and 4.3.1.4(b) shall be separately completed and executed by Offeror, any affiliated and/or subsidiary companies, and all subconsultants, subcontractors and any other person or entity identified as a member of Offeror's proposed team.

.5 <u>Exhibit No. 5</u>. Offeror shall provide sufficient information to communicate the experience of the Offeror's team on similar projects. Offeror shall identify relevant projects and experience on the Lead Contractor Work History Form (Attachment 4.3.1.5(a)) and Lead Designer Work History Form (Attachment 4.3.1.5(b)). A narrative description should be included on the Work History Form for each project.

The Offeror shall list three (3) highway construction projects completed by the Lead Contractor on primary or interstate highways that (a) had a minimum contract value of \$50,000,000, and (b) were completed within the last fifteen (15) years. The Offeror should focus on what the Offeror considers most relevant in demonstrating its qualifications to serve as the lead contractor for this Project. For each project listed in the Lead Contractor Work History Form, identify the lead designer working on such project. Relevant experience to be identified on the Lead Contractor Work History Form shall include:

- 1. At least one (1) highway construction project with a minimum construction value of \$15,000,000 for the roadway work that includes the following primary activities:
 - a. Rock excavation by blasting or mechanical means
 - b. Major grading on new alignment
- 2. At least one (1) major bridge structures construction project, to include straight or curved bridges with a minimum construction value of \$15,000,000 for the bridge work
- 3. At least one (1) interchange construction project on a limited access highway

The Offeror shall list three (3) highway construction projects designed by the Lead Designer on primary or interstate highways that (a) had a minimum construction value of \$50,000,000 and (b) were completed within the last fifteen (15) years. The Offeror should focus on demonstrating its Lead Designer's qualifications in developing geometric design, structural design, geotechnical design, drainage design, railroad coordination, utility relocation, Right of Way acquisition, environmental compliance and transportation management plans for complex highway projects.

For each project listed in the Lead Designer Work History Form, identify the lead contractor working on such project. Relevant experience to be identified on the Lead Designer Work History Form shall include:

- 1. At least two (2) interchange design projects on limited access highways with a minimum construction value of \$15,000,000 each for the roadway work.
- 2. At least one (1) major bridge structures design projects, to include straight or curved bridges with a minimum construction value of \$15,000,000 for the roadway work.

.6 <u>Exhibit No. 6.</u> Offeror shall provide the identity of and information about the Key Personnel listed below. This information is to be provided on the Key Personnel Resume Form attached hereto as Attachment 4.3.1.6. Included with such information shall be full size copies of individual registrations/licenses/certifications from appropriate governmental bodies as required below. For each Key Personnel practicing or offering to practice professional services in Virginia, the Successful Offeror shall provide the DPOR registration number and the expiration date for such Key Person and the office location where each Key Personnel is offering to practice professional services in Virginia.

(a) **Design-Build Project Manager** – This individual shall be responsible for the overall Project design, construction quality management and contract administration for the Project. This person shall be assigned to the Project full time and required to be onsite for the duration of the Project once construction activities commence.

(b) Quality Assurance Manager (QAM) – This individual shall be from an independent firm that has no involvement in construction operations for the Project, and 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 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 person shall be assigned to the Project full time and required to be onsite for the duration of the Project once construction activities commence.

<u>Licensure/Certification/Training Requirements</u>: This individual shall report directly to the Design-Build Project Manager and shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

(c) **Design Manager** – 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 quality assurance and quality control ("QA/QC") program for all pertinent disciplines involved in the design of the Project, including, but not limited to, review of design, working plans, specifications, and constructability of the Project.

<u>Licensure/Certification/Training Requirements</u>: This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

(d) Construction Manager – This individual, who will be required to be assigned to and on the Project site full time 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 person shall be assigned to the Project full time and required to be onsite for the duration of the Project once construction activities commence.

<u>Licensure/Certification/Training Requirements</u>: This individual shall hold a Virginia Department of Conservation and Recreation ("DCR") 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.

(e) Lead Structural Engineer – This individual should serve as the lead structural engineer for the Project, responsible for structural design of the bridges and retaining walls. The Lead Structural Engineer shall be available to review designs and to verify and modify designs, if necessary, based on field conditions and construction activities related to dismantling and removing portions of existing structures, installing foundation structures, handling and erecting bridge girders, and making superstructure and substructure repairs.

<u>Licensure/Certification/Training Requirements</u>: This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

(f) Lead Roadway Engineer – This individual should serve as the lead roadway engineer for the Project, responsible for roadway design of the highways and interchanges. The Lead Roadway Engineer shall be available to review designs and to verify and modify designs, if necessary, based on field conditions and construction activities.

<u>Licensure/Certification/Training</u> <u>Requirements</u>: This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

(g) Lead Geotechnical Engineer – This individual should serve as the lead geotechnical engineer for the Project, responsible for geotechnical design of the retaining walls, foundations, rock slopes and pavement structure. The Lead Geotechnical Engineer shall be available to review designs and to verify and modify designs, if necessary, based on field conditions and construction activities.

<u>Licensure/Certification/Training Requirements</u>: This individual shall be a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

(h) Lead Utility Engineer – This individual should serve as the lead utility engineer for the Project, responsible for utility design of in-plan utilities and the coordination of all utility relocations. The Lead Utility Engineer shall be available to review designs and to verify and modify designs, if necessary, based on field conditions and construction activities.

(i) Lead Safety Engineer – This individual should serve as the lead safety engineer for the Project, responsible for ensuring a safe work environment during the construction of the project. The Safety Engineer shall be available to review designs, and suggest modifications to the designs, if necessary, based on field conditions and construction activities.

This person shall be assigned to the Project full time and required to be onsite for the duration of the Project once construction activities commence.

(j) Environmental Compliance Manager – This individual should serve as the environmental compliance manager for the Project, responsible for ensuring compliance with all environmental commitments during the construction of the project. The Environmental Compliance Manager shall be available to review designs and suggested modifications to the designs, if necessary, based on field conditions and construction activities.

This individual shall be assigned to the Project full time and required to be onsite for the duration of the Project once construction activities commence.

(k) **Right of Way Manager** – This individual shall be responsible for coordinating all right-of-way acquisition services. The Right of Way Manager will ensure that the acquisition process is in compliance with all applicable laws and regulations.

<u>Licensure/Certification/Training Requirements</u>: This individual shall be from a firm that is a member of VDOT's prequalified right-of-way contracting consultants

(I) **Public Relations Manager** – This individual should serve as the public relations manager for the Project, responsible for managing all external project communication with project stakeholders, the media and the general public during the design and construction of the project.

.7 <u>Exhibit No. 7.</u> Offeror shall furnish an organizational chart showing the "chain of command" to include, minimally, the Key Personnel identified in Section 4.3.1.6 and identifying major functions to be performed and their reporting relationships in managing, designing and constructing the Project. The organizational chart should also include identification of design subconsultants, specialty subconsultants, major subcontractors and the entities responsible for

implementing the Successful Offeror's proposed QA/QC program including reporting relationships.

4.4 Letter of Submittal # 2

4.4.1 Provide Letter of Submittal #2 on the Offeror's letterhead. The Letter of Submittal #2 shall:

.1 Identify any changes that have been made to the Offeror's organizational structure or Key Personnel since VDOT received the Offeror's Qualifications Submittal. If no changes have been made, indicate as such.

.2 Consistent with Section 8.2.1 below, declare that the offer represented by the Proposal will remain in full force and effect for one hundred twenty (120) days after the date the Proposal is actually submitted to VDOT ("Proposal Due Date").

.3 Be signed by an authorized representative of the Offeror's organization, with all signatures being original and signed in ink.

. 4 Identify the name, address and telephone number of the principal officer of the legal entity with whom a Design-Build contract with VDOT would be written (e.g., President, Treasurer, Chairperson of the Board of Directors, etc.).

.5 Certify that the Offeror's proposed project concept that is submitted with Letter of Submittal #2 is fully compliant with the minimum design requirements that are outlined in Tables 1 and 2 included in Part 2, Section 2.5 and all other requirements of this RFP.

.6 Provide Substantial Completion and Final Completion Dates. The proposed dates herein shall be no later than the date(s) set forth in Section 2.6.1. The earlier Substantial and Final Completion date(s) will be deemed by VDOT as the contractual completion date(s) for the Design-Build Contract for all purposes, including liquidated damages in accordance with Section 2.6.2.

4.5 Attachments to Letter of Submittal #2

4.5.1 Provide the following Attachments to the Letter of Submittal # 2:

.1 Exhibit No. 1. The Offeror shall submit their conceptual roadway plans for the Project. Minimally, these plans shall:

- 1. Meet the Level of Service requirements listed in Part 2, Section 2.5 of this RFP. Supporting documentation shall be provided that includes a summary of the traffic operations software output data used for the operational analysis and shows the Level of Service for each roadway identified in Part 2, Section 2.5, Table 2;
- 2. Indicate that the limits of construction are within existing/proposed right-of-way limits shown in the RFP Plans;

- 3. Indicate a maximum grade of 4.5% on the mainline through Stillhouse Mountain;
- 4. Include all information indicated on the Roadway Conceptual Design Checklist, Attachment 4.5.1.1.

.2 Exhibit No. 2. The Offeror shall submit their conceptual bridge plans for each proposed bridge structure on the Project. Minimally, these plans shall:

- 1. Include bridges at each of the locations required in Addendum;
- 2. Include all information indicated on the Bridge Conceptual Design Checklist, Attachment 4.5.1.2.

.3 Exhibit No. 3. Offeror shall provide a Proposal Schedule for the entire Project. The Proposal Schedule should include: (i) a detailed work plan for all activities for the entire duration of the Project; (ii) a narrative description of the proposed schedule; (iii) logic relationships, durations, critical path based on the longest path and interim milestones; (iv) permitting and design review submittals by VDOT; and (v) identify all work authorized by NTP # 1 and prior to issuance of NTP # 2. The NTP # 2 should be shown as a hold point in the Proposal Schedule. In addition to hard copy, the Offeror shall provide the Proposal Schedule's source document in electronic format, e.g. .xls, etc., on a CD-ROM. Offerors are to note that in addition to the Proposal Schedule, the Design-Builder will develop and submit a Baseline Schedule in accordance with Part 3, Section 11.1.2. The Design-Builder will update the Proposal Schedule monthly until the Baseline Schedule is approved by VDOT.

.4 Exhibit No. 4. The Offeror shall provide a schedule of values consistent with the Price Proposal. This schedule of values shall identify the associated costs of each project activity identified in the Proposal Schedule. The value associated with each activity 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 Escrow Proposal Documents that are submitted in accordance with Section 11.6.1.

.5 Exhibit No. 5. The Offeror shall submit a proposed monthly payment schedule showing the anticipated schedule on which funds will be required and the associated dollar value for the work. The value of the monthly payment schedule shall correlate with the Proposal Schedule and schedule of values.

4.6 Price Proposal

4.6.1 Each Offeror shall complete the Price Proposal Checklist, Attachment 4.6.1, and include with its 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.

4.6.2 Offeror shall specify, on the form set forth in Attachment 4.6.2, 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 services, 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.

4.6.3 Offeror shall provide the Proposal Guaranty (C-24) required by Section 102.07 of Part 5, Division I Amendments to Section 100 of the VDOT Road and Bridge Specifications. If the Price Proposal Guarantee 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. A copy of the Proposal Guaranty Form C-24 may be found at http://vdotforms.vdot.virginia.gov/.

4.6.4 Offeror shall provide the Sworn Statement Forms (C-104, C-105), as set forth in Attachments 4.6.4(a) and 4.6.4(b), respectively.

4.6.5 Offeror shall provide the required information set forth in Part 3 (Lump Sum Agreement), Section 6.3, Adjustments to Asphalt, Fuel and Steel Prices on the forms set forth in Attachments 4.6.5(a), 4.6.5(b), 4.6.5(c) and 4.6.5(d), respectively.

4.6.6 For those DBE's whom Offeror intends to use as a subcontractor, Offeror shall provide the Minimum DBE Requirements Form (C-111; Attachment 4.6.6(a)), and/or DBE Good Faith Effort Documentation Form (C-49; Attachment 4.6.6(b)), if applicable (including Good Faith Effort supporting documentation), and Certification of Binding Agreement Form (C-112; Attachment 4.6.6(c)).

4.7 **Post Notice of Intent to Award Submittals**

Within three (3) days of Notice of Intent to Award, or the date specified in Section 2.6.1, whichever is later, 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.

4.7.1 Escrow Proposal Documents. Provide the Escrow Proposal Documents in accordance with Section 11.6.1.

5.0 EVALUATION AND RESPONSIVENESS REVIEW OF QUALIFICATIONS SUBMITTAL AND PROPOSAL

5.1 Qualifications Submittal

5.1.1 VDOT will review each Qualifications Submittal from each Offeror to determine whether it is responsive.

5.1.2 Prior to determining responsiveness, VDOT in its sole discretion, may seek clarification on the contents of the Qualifications Submittal through any means VDOT desires, including but not limited to, holding interviews, asking written questions of the Offeror(s), seeking written

clarifications, conducting discussions on the Qualifications Submittal documents, and soliciting updated documents during the responsiveness review process.

5.1.3 The Qualifications Submittal will be reviewed and evaluated to determine if the qualifications "pass or fail" based on the requirements outlined in Section 4.3.1. Failure to meet all of the requirements listed in Section 4.2 and 4.3 may deem an Offeror's Qualifications Submittal non-responsive.

5.1.4 If VDOT determines that a Qualifications Submittal does not comply with or satisfy requirements of the RFP Documents, VDOT may find such Qualifications Submittal to be non-responsive. In such event, the Offeror whose Qualifications Submittal was found to be non-responsive will be notified in writing of VDOT's determination and not be allowed to submit a Proposal for the Project.

5.1.5 Following VDOT's responsiveness determination, VDOT will notify all Offerors whose Qualifications Submittal was found to be responsive to submit a Proposal for the Project.

5.2 Proposal Submittal

5.2.1 VDOT will review each Proposal from each Offeror that submitted a responsive Qualifications Submittal to determine whether the Proposal is responsive.

5.2.2 Prior to determining Proposal responsiveness, VDOT in its sole discretion, may seek clarification on the contents of the Letter of Submittal #2 and Attachments through any means VDOT desires, including but not limited to, holding interviews, asking written questions of the Offeror(s), seeking written clarifications, conducting discussions on the Proposal documents, and soliciting updated documents during the responsiveness review process.

5.2.3 The Attachments to Letter of Submittal #2 will be reviewed and evaluated to determine whether the submittal shall "pass or fail" based on the requirements outlined in Section 4.5.1. Failure to meet all of the requirements listed in Section 4.4 and 4.5 may deem an Offeror's Proposal non-responsive.

5.2.4 If VDOT determines that a Letter of Submittal #2 and its Attachments do not comply with or satisfy requirements of the RFP Documents, VDOT may find such Proposal to be non-responsive. In such event, the Offeror whose Proposal was found to be non-responsive will be notified in writing of VDOT's determination and the Price Proposal corresponding to the non-responsive Proposal will not be opened, but will be returned unopened, along with the non-responsive Proposal, to the Offeror.

5.2.5 Following VDOT's responsiveness determination, VDOT will open the Price Proposals submitted by Offerors with responsive Proposals. The Successful Offeror shall be the responsive Offeror with the lowest price.

6.0 QUALIFICATIONS SUBMITTAL AND PROPOSAL SUBMITTAL REQUIREMENTS

This Section 6.0 describes the requirements that all Offerors must satisfy in submitting Qualifications Submittals and Proposals. Qualifications Submittals and Proposals 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 Qualifications Submittal and/ or Proposal. Failure of any Offeror to submit its Qualifications Submittal or Proposal in accordance with this RFP may result in rejection of its Qualifications Submittal and/ or Proposal.

6.1 Due Date, Time and Location

6.1.1 All Qualifications Submittals and Proposals must be received by the Due Date set forth in Section 2.6.1 above. 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: Brenda L. Williams

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

6.2.1 Qualifications Submittal

6.2.1.1 One separate sealed parcel containing: the Letter of Submittal #1 and Attachments, shall be received by the Qualifications Submittal Due Date set forth in Section 2.6.1. If such parcel is not received by the above specified date, then the Offeror shall be deemed non-responsive and will be disqualified from participating in the procurement for this Project. Parcels shall be clearly marked to identify the Project and the Offeror, and to identify the contents as: the Letter of Submittal #1 and Attachments.

6.2.1.2 Each Offeror shall deliver one (1) copy of the Letter of Submittal #1 (with original signatures) and Attachments. Additionally, one CD-ROM containing the entire Letter of Submittal

#1 and Attachments in a single cohesive Adobe PDF file should be included with the hard copy of the Letter of Submittal #1 and Attachments.

The Letter of Submittal #1 and Attachments 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 #1 and Attachments shall be:
 - Typed on one (1) side only.
 - Separated by numbered tabs with sections corresponding to the order set forth in Section 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".
- All printing, except for the front cover of the Letter of Submittal #1 and any appendices, must be
 - Times New Roman, with a font of 12-point.
 - Times New Roman 10 point font may be used for filling out information on the Work History Forms and the Key Personnel Resume Forms. (Note, the format and appearance of the Work History Form and the Key Personnel Resume Form should not be modified)
 - Include page number references in the lower right hand corner.

6.2.2 Proposal

6.2.2.1 Two separate sealed parcels containing: (a) the Letter of Submittal #2 and Attachments; and (b) the Price Proposal, shall be received by the Proposal Due Date set forth in Section 2.6.1. If such parcels are not received by the above specified date, then the Offeror shall be deemed non-responsive and will be disqualified from participating in the procurement for this Project. Parcels shall be clearly marked to identify the Project and the Offeror, and to identify the contents as: (a) the Letter of Submittal #2 and Attachments; and (b) the Price Proposal.

6.2.2.2 Each Offeror shall deliver ten (10) identical paper copies of the Letter of Submittal #2 and Attachments, one (1) of which must bear original signatures. Additionally, one CD-ROM containing the entire Letter of Submittal #2 and Attachments in a single cohesive Adobe PDF file shall be included with the hard copy of the Letter of Submittal #2 and Attachments.

Each copy of the Letter of Submittal #2 and Attachments shall be securely bound and contained in a single volume with an identity on its front cover, in the upper right-hand corner, as "Copy _____ of 10 Copies." Three ring binders are not permissible.

• The Letter of Submittal #2 and Attachments shall be:

- Typed on one (1) side only.
- Separated by numbered tabs with sections corresponding to the order set forth in Section 4.
- Except for charts, schedules, exhibits, design concepts graphics and other illustrative and graphical information, all information shall be prepared on 8.5" x 11" white paper.
- Charts, schedules, exhibits, design concept graphics and other illustrative and graphical information may be on 11" x 17" paper, but must be folded to 8.5" x 11".
- All printing, except for the front cover of the Letter of Submittal #2 and any appendices, must be
 - Times New Roman, with a font of 12-point.
 - Arial, with a font of 10-point is acceptable for charts, schedules, exhibits, design concept graphics and other illustrative and graphical information.
 - Include page number references in the lower right hand corner.

6.2.2.3 The Price Proposal shall be provided in hard copy, with only one copy being submitted and one CD-ROM containing the entire Price Proposal in a single cohesive Adobe PDF file.

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). 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 dates and times set forth in Section 2.6.1 above. Questions or clarifications requested after such times 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. VDOT will issue an Addendum to this RFP, if needed. VDOT will not be bound by any oral communications, or written interpretations or clarifications that are not issued in writing or set forth in an Addendum.

7.0.4 VDOT, at its sole discretion, shall have the right to seek clarifications from any Offeror to fully understand information contained in the Qualifications Submittal and/ or Proposal.

8.0 AWARD OF CONTRACT, PROPOSAL VALIDITY AND CONTRACT EXECUTION

8.1 Negotiations and Award of Contract

8.1.1 Upon completion of the responsiveness review of the Proposals, it is anticipated that the Assistant Division Administrator for Alternate Project Delivery will: (a) recommend the Offeror

who submitted the lowest Price Proposal, whose Proposal is responsive and within VDOT's budget, to the Chief Engineer for approval of an award of a fixed price Design-Build Contract by the CTB; and (b) issue a Notice of Intent to Award to such 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 Price Proposal 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 Offeror's whose exclusion from or inclusion in, the competitive range is uncertain. Communications will: (a) enhance VDOT's understanding of Proposals; (b) allow reasonable interpretation of the Proposal; or (c) facilitate VDOT's evaluation process.

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, 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 each Proposal will remain in full force and effect for one hundred twenty (120) days after the Proposal Due Date set forth in Section 2.6.1. If Award of Contract has not been made by the CTB within one hundred twenty (120) days after the 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) days of Notice of Intent to Award, or the date specified in Section 2.6.1, whichever is later, the Successful Offeror shall deliver to VDOT all of the information required by Section 4.5 above.

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 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 # 1

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 # 1 within fifteen (15) days after execution of the Design-Build Contract.

8.5 Contract Execution Prior to the Completion of the NEPA Related Work

The NEPA related work is not expected to be completed prior to Contract execution. In conformance with 23 CFR 636.109(c), VDOT is required to receive prior FHWA concurrence before awarding a Design-Build contract and before the Design-Builder is allowed to proceed with preliminary design work under the Design-Build contract.

VDOT will use a two phased Notice to Proceed (NTP) for the Project (for Phase One NTP # 1 and for Phase Two NTP # 2). NTP # 1 will authorize the Design-Builder to proceed with preliminary design in accordance with 23 CFR 636.109(b)(1) and as defined in FHWA Order Number 6640.1A.

Pursuant to 23 CFR 636.109 (b) (6), the Design-Builder will not be allowed to prepare the NEPA related work or have any decision-making responsibility with respect to the NEPA related work. VDOT will be solely responsible for completing and obtaining FHWA's approval of the NEPA related work.

If the Scope of Work for the Project, as described in Part 2 of this RFP, is changed as a result of the NEPA related work, VDOT may, at its sole discretion, issue a Work Order in accordance with Part 4, Article 9 of this RFP to include any additional work required by the NEPA related work OR terminate the Contract for convenience in accordance with Part 4, Article 11 of this RFP.

Upon the issuance of NTP # 2, the Design-Builder shall commence work which will generally consist of Final Design, Right of Way Acquisition, Utilities Relocation and Construction. Under no circumstances shall the Design-Builder commence Work on Final Design, Right of Way Acquisition, Utility Relocation, or Construction until such time as the NEPA related work is completed and VDOT issues the Phase Two NTP # 2.

In the event that VDOT terminates the Contract for convenience, the Design-Builder will be paid for the NTP # 1 Work pursuant to the Contract, and the Design-Builder will not be entitled to any further future compensation under the 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 terminate evaluations of responses received at any time.
- .6 The right to suspend and terminate the procurement process for the Project, at any time.
- .7 The right to revise and modify, at any time prior to the Proposal Submittal Date, factors it will consider in evaluating responses to this RFP and to otherwise revise its evaluation methodology.

- .8 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.
- .9 The right to issue addenda, supplements, and modifications to this RFP, including but not limited to modifications of evaluation criteria or methodology and weighting of evaluation criteria.
- .10 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.
- .11 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 and evaluation of the responses to this RFP.
- .12 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.
- .13 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.
- .14 The right to add or delete Offeror responsibilities from the information contained in this RFP.
- .15 The right to use assistance of outside technical and legal experts and consultants in the evaluation process.
- .16 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.
- .17 The right to disqualify any Offeror that changes its submittal without VDOT approval.
- .18 The right to change the method of award at any time prior to submission of the Proposals.
- .19 The right to respond to all, some, or none of the inquiries, questions and/or request for clarifications received relative to the RFP.

- .20 The right to negotiate the allocation of prices identified for specific portions of the work depicted within a Price Proposal.
- .21 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 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.

9.2.2 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.

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*.

Request for Proposals	Route 29 / Charlottesville Bypass
Part 1	Albemarle County, Virginia
Instructions for Offerors	State Project No. 0029-002-844
	Contract ID No. C00102419DB44

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 Qualifications Submittals and 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. of the *Code of Virginia*). 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 Commonwealth Transportation Commissioner, or VDOT be liable to an Offeror for the disclosure of all or a portion of a Qualifications Submittal and/ or Proposal submitted pursuant to this request not properly identified as confidential.

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 Qualifications Submittal and/ or Proposal and state in writing why protection of that information is needed. The Offeror should make a written request to the Assistant Division Administrator for Alternate Project Delivery Division. 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 Qualifications Submittal or 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 Qualifications Submittal or 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 Qualifications Submittal or 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 evaluation and negotiation process associated with this Project, and to preserve the propriety of each Offeror's Qualifications Submittal and 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 Qualifications Submittal or 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 Innovative Project Delivery Division Memorandum IPD 07-02.0 dated August 1, 2007.

(http://www.virginiadot.org/business/resources/IPD_07_02_0.pdf)

11.2.2 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.

11.2.3 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.

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

11.2.5 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.

11.2.6 Offerors shall note that portions of the documents contained in the RFP will include work product developed by **PB Americas, Inc, Stratacomm, Alpha Corporation and ECS Group of Companies**. The information contained in these studies is for informational purposes only. The interpretation and recommendations contained in these documents were made solely for the purpose of these previous contracts and shall not be relied upon by the Offerors in the design and construction of this project. **PB Americas, Inc., Stratacomm, Alpha Corporation and ECS Group of Companies** will not be allowed to participate as a Design-Build team member. Any Qualifications Submittal or Proposal received in violation of this requirement will be rejected.

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 Disadvantaged Business Enterprises

The Disadvantaged Business Enterprises ("DBE") contract goal for this procurement is eleven percent (11%).

11.4.1 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. 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.

11.4.2 If a DBE is not certified, the DBE must become certified with the Virginia Department of Minority Business Enterprises ("VDMBE") prior to the Proposal Due Date. 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 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.

11.4.3 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.

11.4.4 This Project has federal funding. In accordance with the Governor's Executive Order No. 33, VDOT requires utilization of Small, Women and Minority ("SWaM") Businesses to participate in the performance of state funded projects. VDOT also encourages the utilization of SWaM Firms to participate in the performance of federally funded projects. A list of the DMBE certified SWaM firms is maintained on the DMBE web site (http://www.dmbe.state.va.us/) 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.

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

Virginia Department of Minority Business Enterprises 111 East Main Street, Suite 300 Richmond, VA 23219 Phone: (804) 786-2260 Toll Free (VA Only) 1-800-223-0671 www.dmbe.virginia.gov

Metropolitan Washington Airports Authority

Equal Opportunity Programs Department 1 Aviation Circle Washington, DC 20001 Phone: (703) 417-8625 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

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

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

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

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

BOWD 1602 Rolling Hills Drive Suite 110 Richmond, VA 23229 Phone: (804) 662-9555 Lynchburg District 4219 Campbell Avenue Lynchburg, VA 24506 (434) 856-8168

Northern Virginia District 14685 Avion Parkway Chantilly, VA 20151 (703) 383-2341

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

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

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

The following informational websites may also be of assistance:

• <u>www.virginiadot.org/business/bu_bizDev.asp</u>

• <u>www.virginiadot.org/business/bu-civil-rights-home.asp</u>

11.5 Trainee and Apprenticeship Participation

11.5.1 VDOT will require trainee and apprenticeship participation for this Project. The on-the-job trainee goal for this Project is <u>three</u> (3) individuals.

11.6 Escrowed Proposal Documents

11.6.1 Scope

Pursuant to Section 11.6.5.1 below, the Successful Offeror shall submit to the individual set forth in Section 6.1.1 above, on the Post Notice of Intent Submittal Due Date, one copy of all documentary information generated in preparation of its Proposal. 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 this Section 11.6.6.

An Escrow Proposal Documents Submission Checklist has been provided for reference in Attachment 11.6.1

11.6.2 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.

11.6.3 Purpose

EPDs may be used to assist in the negotiation of price adjustments and change orders and in the settlement of disputes and claims. They will not be used for pre-award evaluation of the Successful Offeror's anticipated methods of construction or to assess the Successful Offeror's qualifications for performing the Work.

11.6.4 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 this Section 11.6 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 of the Specifications (i.e., English).
- .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. 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.

11.6.5 Submittal

- .1 The EPDs shall be submitted in a sealed container to the individual set forth in 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 Section 11.6.6 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 11.6 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.

11.6.6 Storage

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

SunTrust Bank ATTN: Emily J. Hare 919 East Main Street 7th Floor Richmond, Virginia 23219 (804) 782-5400 The cost for storing the EPDs will be paid by the Successful Offeror.

11.6.7 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.

11.6.8 Final Disposition and Return of EPDs

The EPDs of the Design-Builder will be returned to the Offeror at such time as the Design-Build Contract has been completed, final payment has been made, and all claims or disputes arising under or related to the Design-Build Contract have been fully and finally resolved and/or adjudicated.

11.6.9 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 11.6.9.

11.7 Administrative Requirements

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

11.7.1 All Offerors and RFP submittals must comply with the law and nothing herein is intended to contradict, nor supersede, any applicable State and Federal laws and regulations. All Offerors shall be eligible at the time of their RFP submittal, under the law and relevant regulations, to offer and to provide all services proposed and related to the Project. Unless exempted by §§ 54.1-401, 54.1-402, or 54.1-402.1 of the *Code of Virginia*, any person, partnership, corporation, or other entity offering or practicing architecture, engineering, or land surveying shall be registered or licensed in accordance with the provision of *Chapter 4, Title 54.1 of the Code of Virginia*. Offerors shall satisfy at the time of their RFP submittal all commercial and professional registration

requirements, including, but not limited to the requirements of the State Corporation Commission and the Department of Professional and Occupational Regulations.

11.7.2 In accordance with VA Code § 2.2-4311.1, the Successful Offeror will be required to certify that it does not, and to agree that it shall not, during the performance of the Design-Build Contract, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986. In addition, the Offeror's subcontractors (at all tiers) will be required to provide the same certification and agreement in their subcontract agreements.

11.7.3 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."

11.7.4 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.

11.7.5 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.

11.7.6 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 Qualifications Submittal or Proposal being rejected.

11.7.7 The required services may involve the handling of Critical Infrastructure Information/ Sensitive Security Information ("CII/SSI") material. Firm(s) handling CII/SSI material will be required to sign non-disclosure agreements. Individuals with the firm(s) that handle CII/SSI material will be required to sign non-disclosure agreements. Once negotiations have been completed and prior to executing a contract, personnel handling CII/SSI material, visiting Critical Infrastructure ("CI") facilities or performing bridge/tunnel inspections may be required to 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 or on any proposed replacements during the term of the contract who will be involved in this project. All costs associated with the fingerprintbased CHBC are the responsibility of the Design-Builder. A VDOT issued photo-identification badge is required for each employee of the 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 issuance of a VDOT security clearance or a VDOT issued photo-identification badge.

CII/SSI material includes bridge inspection reports. Bridge inspection reports are not included in the Information Package and CII/SSI Non-Disclosure Agreements are not required to purchase the Information Package. Firms desiring to obtain a copy of the bridge inspection report must request a CII/SSI Non-Disclosure Agreement form using the contact information found on the Information Package Order form and return a signed copy for each individual with access to the report.

11.8 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 the Department, non-responsive and/or non-responsible, and in that event your RFP submittal may be returned without any consideration or evaluation for selection of contract award.

11.9 Attachments

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

ATTACHMENT 2.2.1	 FINDING OF PUBLIC INTEREST (FOPI)
ATTACHMENT 2.2.1 ATTACHMENT 2.8.4	 RFP INFORMATION PACKAGE ORDER FORM
ATTACHMENT 3.5.1	 FORM C-78 (ACKNOWLEDGEMENT OF REVISIONS)
ATTACHMENT 4.1.2	 LETTER OF SUBMITTAL #1 CHECKLIST
ATTACHMENT 4.1.3	 LETTER OF SUBMITTAL #2 CHECKLIST
ATTACHMENT 4.3.1.4(a)	 CERTIFICATION REGARDING DEBARMENT
	(PRIMARY COVERED TRANSACTIONS)
ATTACHMENT 4.3.1.4(b)	 CERTIFICATION REGARDING DEBARMENT
	(LOWER TIER COVERED TRANSACTIONS)
ATTACHMENT 4.3.1.5(a)	 LEAD CONTRACTOR WORK HISTORY FORM
ATTACHMENT 4.3.1.5(b)	 LEAD DESIGNER WORK HISTORY FORM
ATTACHMENT 4.3.1.6	 KEY PERSONNEL RESUME FORM
ATTACHMENT 4.5.1.1	 ROADWAY CONCEPTUAL DESIGN CHECKLIST
ATTACHMENT 4.5.1.2	 BRIDGE CONCEPTUAL DESIGN CHECKLIST
ATTACHMENT 4.6.1	 PRICE PROPOSAL CHECKLIST
ATTACHMENT 4.6.2	 PRICE PROPOSAL FORM
ATTACHMENT 4.6.4(a)	 FORM C-104 (BIDDER'S STATEMENT)
ATTACHMENT 4.6.4(b)	 FORM C-105 (BIDDER'S CERTIFICATION)
ATTACHMENT 4.6.5(a)	 ADJUSTMENT TO ASPHALT

ATTACHMENT 4.6.5(b)	 ADJUSTMENT TO ASPHALT
ATTACHMENT 4.6.5(c)	 ADJUSTMENT TO FUEL
ATTACHMENT 4.6.5(d)	 ADJUSTMENT TO STEEL
ATTACHMENT 4.6.6(a)	 FORM C-111 (MINIMUM DBE REQUIREMENTS)
ATTACHMENT 4.6.6(b)	 FORM C-49 (DBE GOOD FAITH EFFORTS
	DOCUMENTATION)
ATTACHMENT 4.6.6(c)	 FORM C-112 (CERTIFICATION OF BINDING
	AGREEMENT FORM)
ATTACHMENT 11.6.1	 ESCROW PROPOSAL DOCUMENTS CHECKLIST
ATTACHMENT 11.6.9	 ESCROW AGREEMENT FORM

END OF PART 1 INSTRUCTIONS FOR OFFERORS

Finding of Public Interest for the Use of Design-Build Contracting Method U.S. Route 29 Bypss, Albemarle County UPC: 16160

The Virginia Department of Transportation (VDOT) has a need to improve the traffic operations along the U.S. Route 29 corridor in Albemarles County and in the City of Charlottesville. The total length of the proposed improvements is approximately six and one-half miles and includes a new four lane limited access highway and two new interchanges. VDOT has determined that the use of Design-Build contracting will expedite delivery and provide an opportunity for timely obligation of available funding.

Employing the Design-Build contracting method satisfies the following transportation needs:

<u>Expedited Project Completion</u>: U.S. Route 29 carries approximately 56,000 vehicles per day just north of the Charlottesville city limits. U.S. Route 29 is a principal arterial route that serves not only the local Charlottesville-Albemarle County area, but is regional north-south transportation corridor. The road is part of the National Highway System and currently experiences congestion during peak hours that causes vehicles to block intersections and queue across major intersections. In addition, there are at least thirteen traffic signals along the segment to be circumvented which delay vehicles travelling through the area. VDOT has determined that the Design-Build contracting method will optimize the use of available funds and enable earlier project completion and, therefore, is in the public interest.

The proposed schedule is as follows:

- o Issue Request for Proposals: Fall 2011
- Execute Contract: Winter/Spring 2012
- o Complete Project: Fall/Winter 2015

VDOT has a clear understanding of the project scope of work. Anticipated risks include geotechnical data, re-evaluation of FSEIS, traffic data updates, ongoing right of way acquisition and utility relocations. These risks will either be mitigated or allocated to VDOT or the design-builder in the RFP.

Based on review of this public interest finding and the objective criteria previously adopted by the Commonwealth Transportation Board regarding the use of design-build contracts, I find that use of design-build contracting for the proposed project is in the best interest of the Commonwealth of Virginia.

Original with signatures on file in the VDOT Location and Design Division

Recommended for Approval:

Malcolm T. Kerley, P.E. Chief Engineer

Date

Approval:

Gregory A. Whirley. Date Acting Commonwealth Transportation Commissioner

ATTACHMENT 2.8.4

DESIGN-BUILD ORDER FORM ROUTE 29 BYPASS REQUEST FOR PROPOSALS (RFP) INFORMATION PACKAGE AND SUPPLEMENTAL RFP INFORMATION PACKAGE

FIRM NAME_____

COMPLETE MAILING ADDRESS____

	(PLEASE GIVE BOTH STREET ADDRESS A	ND POSTAL DELIVER	RY ADDRESS)
FIRM TELEPHONE N	NUMBER	_ FIRM FAX NUMB	ER
E-MAIL ADDRESS _			
SIGNED:			
FOR QUESTIONS RE	GARDING THE RFP INFORMATION PACKA	AGE CONTACT:	
	TRGINIA DEPARTMENT OF TRANSPORT EFF ROBY, P.E.	TATION	
TO ORDER THE RF	P INFORMATION PACKAGE BY TELEPHOI	NE/MAIL/FAX CONTA	CT:
V 14 R (8	HE SCHEDULING AND CONTRACT DIVIS IRGINIA DEPARTMENT OF TRANSPORT 401 EAST BROAD STREET ICHMOND, VIRGINIA 23219 404) 786-1898,786-5161 OR 371-9868 AX TELEPHONE NO. (804) 786-2788 (Orde	TATION	ster or Visa credit card is the
preferred method)		0, 0	
	MASTERCHARGE/VISA NO		
	MASTERCHARGE/VISA NO		
I			
I	EXPIRATION DATE:		
THE RFQ INFORMA Dear Sir/Madam:	EXPIRATION DATE: TION PACKAGE WILL NOT BE ISSUED PRI formation Package designated below. Enclosed	OR TO RECEIPT OF PA	AYMENT
THE RFQ INFORMA [®] Dear Sir/Madam: Please send the RFP In made payable to the <u>T1</u>	EXPIRATION DATE: TION PACKAGE WILL NOT BE ISSUED PRI formation Package designated below. Enclosed reasurer of Virginia. TO VIEW THE RFP GO TO THE WEBS	OR TO RECEIPT OF PA is check No ITE ADDRESS LISTED	AYMENTin the amount of \$
THE RFQ INFORMA [®] Dear Sir/Madam: Please send the RFP In made payable to the <u>T1</u>	EXPIRATION DATE: TION PACKAGE WILL NOT BE ISSUED PRI formation Package designated below. Enclosed easurer of Virginia.	OR TO RECEIPT OF PA is check No ITE ADDRESS LISTED	AYMENTin the amount of \$
THE RFQ INFORMA [®] Dear Sir/Madam: Please send the RFP In made payable to the <u>T1</u>	EXPIRATION DATE: TION PACKAGE WILL NOT BE ISSUED PRI formation Package designated below. Enclosed reasurer of Virginia. TO VIEW THE RFP GO TO THE WEBS	OR TO RECEIPT OF PA is check No ITE ADDRESS LISTED	AYMENTin the amount of \$

FOR DEPARTMENTAL USE ONLY

FOR DEPARTMENTAL RFP PACKAGE MAILED_____ TO BE MAILED_____

MAILED BY_____ CHECKED BY_____

Form C-78-RFP

ATTACHMENT 3.5.1

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

RFP NO.

PROJECT NO.:

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 3.5.1, 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	
		(Date)
2.	Cover letter of	
		(Date)
3.	Cover letter of	
		(Date)
4.	Cover letter of	
		(Date)
5.	Cover letter of	
		(Date)

ATTACHMENT 4.1.2

Route 29 Bypass Project

LETTER OF SUBMITTAL #1 CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this checklist, with the page references added, with the Letter of Submittal #1 Attachments.

Letter of Submittal #1 Component	Form (if any)	RFP Part 1 Cross Reference	Attachment Page Reference
Letter of Submittal #1 Checklist and Contents	Attachment 4.1.2	Section 4.1.2	
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.5.1 (Form C-78-RFP)	Sections 3.5.1	
Letter of Submittal #1 (on Offeror's letterhead)		Sections 4.2	
Offeror's official representative information	NA	Section 4.2.1.1(a)	
Principal officer information	NA	Section 4.2.1.1(b)	
Offeror's Corporate Structure	NA	Section 4.2.1.2	
DBE Participation Goal commitment			
Authorized representative's original signature	NA	Section 4.2.1.3	
Letter of Submittal #1 Attachments		Section 4.3	
Exhibit # 1	NA	Section 4.3.1.1	
Exhibit # 2	NA	Section 4.3.1.2	
Exhibit # 3	NA	Section 4.3.1.3	
Exhibit # 4	Attachment 4.3.1.4(a) Attachment 4.3.1.4(b)	Section 4.3.1.4	
Exhibit # 5	Attachment 4.3.1.5(a) Attachment 4.3.1.5(b)	Section 4.3.1.5	
Exhibit # 6	Attachment 4.3.1.6	Section 4.3.1.6	
Exhibit # 7	Attachment 4.3.1.7	Section 4.3.1.7	

ATTACHMENT 4.1.3

Route 29 Bypass Project

LETTER OF SUBMITTAL #2 CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this checklist, with the page references added, with the Letter of Submittal #2 Attachments.

Letter of Submittal #2 Component	Form (if any)	RFP Part 1 Cross Reference	Attachment Page Reference
Letter of Submittal #2 Checklist and Contents	Attachment 4.1.3	Section 4.1.3	
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.5.1 (Form C-78-RFP)	Sections 3.5.1	
Letter of Submittal #2 (on Offeror's letterhead)		Sections 4.4	
Identification of changes to the Offeror's organizational structure since Letter of Submittal # 1	NA	Section 4.4.1.1	
120 day declaration	NA	Section 4.4.1.2	
Authorized representative's original signature	NA	Section 4.4.1.3	
Principal officer information	NA	Section 4.4.1.4	
Certification of proposed project concept	NA	Section 4.4.1.5	
Substantial and Final Completion Dates	NA	Section 4.4.1.6	
Letter of Submittal #2 Attachments		Section 4.5	
Exhibit # 1	NA	Section 4.5.1.1	
Exhibit # 2	NA	Section 4.5.1.2	
Exhibit # 3	NA	Section 4.5.1.3	
Exhibit # 4	NA	Section 4.5.1.4	
Exhibit # 5	NA	Section 4.5.1.5	

<u>ATTACHMENT 4.3.1.4(a)</u> <u>CERTIFICATION REGARDING DEBARMENT</u> <u>PRIMARY COVERED TRANSACTIONS</u>

Project No.: ___

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 4.3.1.4(b) CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: _____

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 4.3.1.5(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

					Project.	s current qualifications relevant to this	or - three (3) projects which best illustrate	Work by Lead Contractor
e of Work for Which		f. Estimated Value (Final or Estimated Contract Value	Original Contract Value	e. Contract Completion Date (Actual or Estimated)	d. Contract Completion Date (Original)	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Designer.	a. Project Name & Location
	TOTAL:	TOTAL:	TOTAL:					(1)
ACTIVITIES:	PRIMARY AC	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:					
	TOTAL:	TOTAL:	TOTAL:					(2)
ACTIVITIES:	PRIMARY AC	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:					
	TOTAL:	TOTAL:	TOTAL:					(3)
ACTIVITIES:	PRIMARY AC	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:					
	PRIMARY .							

ATTACHMENT 4.3.1.5(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

b. Narrative describing nature of	c. Client/Owner/Project Manager who	d. Contract	e. Contract	f. Estimated Value (in Thousands)		
Firm's Responsibilities; Identify the Lead Contractor	can verify Firm's responsibilities. Include address and current phone number.	Completion Date (Original)	Completion Date (Actual or Estimated)	Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Whic Firm Was/Is Responsible
				TOTAL:	TOTAL:	TOTAL:
				PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:
				TOTAL:	TOTAL:	TOTAL:
				PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:
				TOTAL:	TOTAL:	TOTAL:
				PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:	PRIMARY ACTIVITIES:
	Firm's Responsibilities; Identify the	Firm's Responsibilities; Identify the Lead Contractorcan verify Firm's responsibilities.Include address and current phone	Firm's Responsibilities; Identify the Lead Contractorcan verify Firm's responsibilities.CompletionInclude address and current phoneDate	Firm's Responsibilities; Identify the Lead Contractorcan verify Firm's responsibilities.CompletionCompletionInclude address and current phoneDateDate (Actual)	Firm's Responsibilities; Identify the Lead Contractor can verify Firm's responsibilities. Include address and current phone number. Completion Date (Original) Completion Date (Actual or Estimated) Original Contract Value Image: Contractor None Image: Contractor TotAL: Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Image: Contractor Ima	Firm's Responsibilities: Lead Contractor Completion Include address and current phone number. Completion Date (Original) Original Contract Value Final or Estimated Contract Value Image: Contractor Noriginal Original Original Original Original Contract Value Completion Date (Original) Original Contract Value Completion Value Original Contract Completion Date (Original) Original Contract Value Contract Value Contract Contract Value Contract Value Contract Value Contract Contract Value Contract Value Contract Value Contract Value Contract Contract Value Contract Contract

ATTACHMENT 4.3.1.6

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title:
b. Project Assignment:
c. Name of Firm with which you are now associated:
 d. Years experience: With this FirmYears With Other FirmsYears Please list chronologically your employment history, position and general experience or fields of practice for the last fifteen(15) years:
e. Education: Degree(s)/Year/Specialization:
f. Active Registration: Year First Registered/ Discipline/VA Registration #:
 g. Document the extent and depth of experience and qualifications relevant to the Project. 1. Note your specific responsibilities and authorities for each assignment, not those of the firm. 2. Note whether experience is with current firm or with other firm. 3. Provide beginning and end dates for each assignment. (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

Attachment 4.5.1.1

ROADWAY CONCEPTUAL DESIGN CHECKLIST

State Project Number: Route 29 Bypass

Project Location: Charlottesville

VDOT District: Culpeper

	ROADWAY
_ 7	A. Minimum Design Speed is shown for each roadway identified in Part 2, Section 2.5, Table 2(see IIM - 117)
	B. Ramps, Loops, Frontage Roads, and Bridges are labeled (see RDM - 2E)
(C. Geometrics shown on the plan sheets for each roadway identified in Part 2, Section 2.5, Table 2 are designed in accordance with
	applicable standards. Specifically:
_	1. Lane widths (see RDM - App. A)
_	2. Shoulder widths (include additional width for guardrail installation)(see RDM - App. A)
_	3. Slopes (see RDM - 2E; RBS - Sect. 700)
_	4. Median width (see RDM - 2E)
_	5. Clear zone (Lateral Offset) (see RDM - App. A)
_	6. Ditch width/depth (see RDM - App. A)
_	7. Curb & Gutter width (see RDM - 2E)
_	8. Sidewalk width (see IIM - 55; RDM - App. A)
	D. Typical Sections for each roadway identified in Part 2, Section 2.5, Table 2 are provided and designed in accordance with
_	applicable standards. Specifically identify:
_	1. Mainline
_	2. Acceleration and Deceleration Lanes
_	3. Ramps
	3. Connections
_	4. Turn Lanes
_	E. Bicycle Facilities are shown as identified in Part 2, Section 2.2, Table 1 or as otherwise required(see RDM - App. A)
_	F. Horizontal Curve Data (Design speed, LS, superelevation rate, widening) is shown and each horizontal curve is designe
_	in accordance with applicable standards (see RDM - 2D)
(G. Vertical curve data (grade, stopping sight distance, design speed, "K" value) is shown and each vertical curve is designed
_	in accordance with applicable standards (see RDM - 2D)
_	H. Profiles for each roadway identified in Part 2, Section 2.5, Table 2 are provided and designed in accordance with applicable standards
_	Specifically:
_	1. Existing profile is shown with a dashed line and labeled (RDM - 2C)
_	2. Proposed profile shown and labeled (grade, spline, change of grade) (RDM - 2D)
ļ	. Minimum Vertical Clearances at underpasses and overpasses shown(RDM - 2D, App. A)
,	J. Construction baseline and stationing (including Begin and End for Roadway and Bridges) are indicated (RDM - 2D)

Attachment 4.5.1.2

BRIDGE CONCEPTUAL DESIGN CHECKLIST

State Project Number: Route 29 Bypass

Project Location: Charlottesville

VDOT District: Culpeper

Bridge Structures

	Specifically:
	1. Plan View
	a. length of spans
	b. width of bridge deck from face-to-face of rails
	c. location of ordinary high water mark (where applicable)
	d. horizontal clearance (where applicable).
	e. existing bridges to be replaced are indicated (where applicable)
2	2. Elevation View
	a. length of bridge (from beginning to end of bridge)
	b. minimum vertical clearance for grade separation structures
	c. elevation of ordinary high water mark (where applicable)
	d. retaining walls, riprap and slope protection are indicated (whichever is applicable)
	e. existing ground profile along Centerline/Baseline.
	g. finished grade
3	3. Typical Section
	a. type/material of beam or girder
	b. geometrics consistent with Volume V, Part II, Chapter 6 for the classification and design speed
4	4. Foundation Types
	a. abutment type determined using the Vol. V, Part 2, Chapter 20 - Selection Algorithm
-	b. transverse joints (and joint type) identified above piers (where applicable)

ATTACHMENT 4.6.1

DESIGN-BUILD PRICE PROPOSAL CHECKLIST

Project Name:	
Contract ID Number:	

Contents of Price Proposal:

Proposal Price, in both numbers and words (Attachment 4.6.2)
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 4.6.5(a)-(d))
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 4.6.4(a) and 4.6.4(b))
DBE Requirements Forms (C-111, C-49 and C-112) as applicable (Attachments 4.6.6(a), 4.6.6(b) and 4.6.6(c))

ATTACHMENT 4.6.2

PRICE PROPOSAL FORM

4.8.1 Offeror shall specify, the following pricing information, in both numbers and words:

.1 Proposal Price; Lump Sum _____

(\$____)

Date: _____

Signature: _____

Design-Builder:

Vendor No.: _____

Attachment 4.6.4(a) Form C-104 (BIDDER'S STATEMENT)

ORDER NO.: CONTRACT ID. NO.: C00102419DB44

Form C-104 Rev. 12-9-99

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 <u>EITHER</u> BY SIGNING THE AFFIDAVIT AND HAVING IT NOTARIZED <u>OR</u> 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			
By:			
(Name of Firm)	(Signati	ure)	Title (print)
STATE of CO	OUNTY (CIT	Y) of	
То-ч	vit:		
	, a	Notary Public in a	and for the State and
County(City) aforesaid, hereby certify that this day			
personally appeared before me and made oath that he is and that such statements are true and correct.	duly authori	zed to make the	above statements
Subscribed and sworn to before me this	day of		, 20
	My Commis	sion expires	
Notary Public			
UNSWORN DEC	LARATION		
The undersigned is duly authorized by the bidder to n submitted on behalf of the bidder for contracts to be let b		0 0	
Signed atCounty (City), STATE	, this	_ day of	, 20
By:			
(Name of Firm)	(Signatu	ıre)	Title (print)

Attachment 4.6.4(b) FORM C-105 (BIDDER'S CERTIFICATION)

ORDER NO.: CONTRACT ID. NO.: 00102419DB44

Form C-105 Rev. 12-9-99

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION AFFIDAVIT

PROJECT:

FHWA:

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)

Attachment 4.6.4(b) FORM C-105 (BIDDER'S CERTIFICATION)

ORDER NO.: CONTRACT ID. NO.: 00102419DB44

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 d	day of	, 20
County (City), STATE		-	
By:			
(Name of Firm)	(Signature) Title	e (print)
STATE of CO	OUNTY (CITY)	of	
То-и	vit:		
	, a No	tary Public in and for th	ne State and
County(City) aforesaid, hereby certify that this day			
personally appeared before me and made oath that he is and that such statements are true and correct.	duly authorized	d to make the above st	atements
Subscribed and sworn to before me this	day of		, 20
	My Commissio	on expires	
Notary Public	-	-	

ATTACHMENT 4.6.5(a) ADJUSTMENT FOR ASPHALT SPECIAL PROVISION FOR ASPHALT MATERIAL PRICE ADJUSTMENT DESIGN-BUILD PROJECTS

October 7, 2009

In the event the Design-Builder elects to seek adjustment for asphalt 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. If new pay items which contain Asphalt Material are established by Work Order, they 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 64-22 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 Contract Division website on or about the first weekday of the following month.

This monthly statewide average price will be the <u>Base Index</u> for all contracts on which bids 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. Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22, 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 progress estimate of 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.

In order to be eligible for asphalt price adjustment under this provision, the Design-Builder shall clearly identify in its Price Proposal those pay items and the associated quantities it chooses to have asphalt price adjustment applied to in its work packages. Items the successful Design-Builder chooses for asphalt price adjustment must be specifically designated in writing in the Design-Builder's Price Proposal to be considered complete for asphalt adjustment. Items not properly designated or left out of the Design-Builder's Price Proposal will automatically not be considered for 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.

__I elect to use this provision

__I elect not to use this provision

Date:_____

Signature:_____

Design-builder:_____

Vendor No.:

Commonwealth of Virginia Virginia Department of Transportation Page 1 of 1

ATTACHMENT 4.6.5 (b)

Form C-16a 7-13-05

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION PRICE ADJUSTMENT

INSTRUCTIONS - This form is to be completed and returned <u>ONLY</u> when asphalt concrete items are designated for price adjustment on the bid price sheets.

PROJECT NUMBER:

DISTRICT:

Bid Price	s in this contract for items containing	ng PG 64-22 asphalt ce	ment were	developed using an f.o.b.
price of	\$	_per IMPERIAL ton for	PG 64-22.	This quote will be averaged
into the m	nonthly price index.			

Bid Prices in this contract for items containing PG 76-22 asphalt cement were developed using an f.o.b.

price of \$ per IMPERIAL ton for PG 76-22. This quote is project specific.

Price quotes signed by each supplier from which the Design-Builder proposes to obtain PG 64-22 or PG 76-22 shall be maintained by the successful bidder. These quotes shall be retained on site during the life of the Contract for review by the Engineer upon request.

___ I elect to use this provision

___ I elect not to use this provision

DATE: _____

SIGNATURE:_____

(Firm or Corporation)

(Vendor No.)

ATTACHMENT 4.6.5 (c) ADJUSTMENT FOR FUEL

VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR OPTIONAL ADJUSTMENT FOR FUEL DESIGN-BUILD PROJECTS

October 7, 2009

The Department will adjust monthly progress payments 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 its Price Proposal those pay items and the associated quantities it chooses to have fuel adjustment applied to in its work packages. Items the successful Design-Builder chooses for fuel adjustment must be specifically designated in writing in the Design-Builder's Price Proposal to be considered complete for fuel adjustment. Items not properly designated or left out of the Design-Builder's Price Proposal 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 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 Engineer 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 unit 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

__I elect not to use this provision

Date:_____

Signature:_____

Design-builder:_____

Vendor No.:_____

ATTACHMENT 4.6.5 (d) ADJUSTMENT FOR STEEL

VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR PRICE ADJUSTMENT FOR STEEL DESIGN-BUILD PROJECTS

October 7, 2009

In the event Design-Builder submits a design that incorporates steel items, the Department will adjust monthly progress payments associated with eligible work packages up or down as appropriate for cost changes in steel used on specific items of work identified in the Price Proposal/contract in accordance with this provision. Provided at the end of this provision is a master listing of standard bid items the Department has determined are eligible for steel price adjustment. Inventoried materials from the listing of eligible items are specifically excluded for consideration. In addition, concrete items where reinforcing steel is normally included in the unit bid price for the item such as (but not limited to) drop inlets, median barriers, sound barrier walls, bridge railing and parapets, are not eligible for consideration under this provision.

The requirements of this provision shall apply only to material cost changes that occur between the date of the opening of the Price Proposal and the date the material is shipped to the fabricator. To be eligible for this price adjustment, Design-Builder is required to fill out the accompanying Form for Price Adjustment for Eligible Steel Items on Design-Build Projects and submit the same with its Price Proposal for the Project. By signing the Form and submitting it with its Price Proposal Design-Builder declares its intention to participate in the price adjustment in its contract with the Department. For the purposes of this provision, the prices listed on the Form for Price Adjustment for Eligible Steel Items on Design-Build projects are fixed for cost and adjustment calculations regardless of quantities incorporated into final design. Further, in order for steel items to be eligible for adjustment, once shipped to the fabricator, the items shall be specifically stored, labeled, or tagged, recognizable by color marking, and identifiable by project for inspection and audit verification.

Design-Builder shall upon request furnish documentation supporting the price per pound for eligible steel items as shown on the Form for Price Adjustment for Eligible Steel Items on Design-Build Projects furnished with its Price Proposal. Design-Builder must use the format as shown with this Form; no other format for presenting this information will be permitted. Design-Builder shall certify that all items of documentation are original and were used in the computation of the price per pound amount for the represented eligible pay items for the month the Price Proposal was opened. This documentation shall support the base line material price ("Base Price") of the steel item only. Base price per pound shall not include the following cost components: fabrication, shipping, storage, handling, and erection.

Failure to submit all documentation required or requested supporting the per pound prices on eligible steel items will result in Design-Builder being ineligible for a price adjustment of any or all steel items.

Price adjustment of each qualifying item under consideration will be subject to the following condition:

There is an increase or decrease in the cost of eligible steel materials in excess of 10 percent up to a maximum of 60 percent from the Base Price when compared with the latest published price index ("Price Index") in effect at the time material is shipped to the fabricator.

The Price Index the Department is using is based on The U.S. Department of Labor, Bureau of Labor Statistics, Producers Price Index (PPI) which measures the average price change over time of the specific steel eligible item from the perspective of the seller of goods. The Master List table provided at the end of this provision indicates the Producers Price Index (PPI) steel category index items and the corresponding

I.D. numbers to which VDOT items will be compared. **Please note**: The Producers Price Index (PPI) is subject to revision 4 months after original publication, therefore, price adjustments and payments will not be made until the index numbers are finalized.

The price adjustment will be determined by computing the percentage of change in index value beyond 10 percent above or below the index on the date of opening of Design-Builder's Price Proposal to the index value on the date the steel material is shipped to the fabricator (Please see included sample examples). Weights and date of shipment must be documented by a bill of lading provided to the Department. The final price adjustment dollar value will be determined by multiplying this percent increase or decrease in the index (after 10%) by the represented quantity of steel shipped, by the Base Price per pound subject to the limitations herein.

Price increase/decrease will be computed as follows:

$A = B \times P \times$	Q	
Where;	A =	Steel price adjustment in lump sum dollars
	B =	Average weighted price of steel submitted in Design-Builder's Price Proposal for project in price per pound as listed on the Form for Price Adjustment for Eligible Steel Items on Design-Build Project
	P =	Adjusted percentage change in PPI average from shipping date to date of opening of Price Proposal minus 10% (0.10) threshold
	Q =	Total quantity of steel in pounds shipped to fabricator for specific project

The need for application of the adjustments herein to extra work will be determined by the Engineer on an individual basis and, if appropriate, will be specified on the Work Order.

This price adjustment is capped at 60 percent. This means the maximum "P" value for increase or decrease that can be used in the above equation is 50% (60%-10% threshold).

Calculations for price adjustment shall be shown separate from the monthly progress payment for work packages and will not be included in the total cost of work for determination of progress or for extension of contract time.

Upon Department review and due process consideration for redress by Design-Builder, any apparent evidence to unbalance the price supplied by Design-Builder in favor of items subject to price adjustment will result in ineligibility for Department participation under this provision.

FORM FOR PRICE ADJUSTMENT FOR ELIGIBLE STEEL ITEMS ON DESIGN-BUILD PROJECTS Must be supplied with Price Proposal for Department Participation

(All prices to be supported by project-specific quotes)

DATE FOR RECEIPT OF PRICE PROPOSAL

Note: All prices (costs) are to include any surcharges on materials quoted. Vendors must include this surcharge with their cost. All prices (costs) are F.O.B. from the originating mill.

ltem Number	Item Description	Quantity	Unit	Unit Price	Supplier	Date of Quote

We/I, the undersigned, understand that by supplying prices for the steel items listed above and signing this form we are declaring our desire to apply the Special Provision For Steel Adjustment for Design-Build Projects to this Price Proposal and contract. The terms and conditions for participation are as stated in the Special Provision For Steel Adjustment for Design-Build Projects.

Design-Builder

Date

Sample Calculation of a Price Adjustment (increase)

Project bid on April 28, 2004.

Project has 450,000 lb. of eligible structural steel.

Design Builder's *f.o.b. supplier price for structural steel submitted in the Price Proposal is \$0.2816 per pound. *free on board

Adjusted** BLS Producers Price Index (PPI) most recently published average at time of opening of the Price Proposal is 139.6.

All eligible steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 161.1

Adjustment formula is as follows:

A = B X P X Q

Where; A = Steel price adjustment in lump sum dollars

- B = Average weighted price of steel submitted in the Price Proposal for Design-Build project in \$ per pound
- P = Adjusted percentage change in PPI average from shipping date to date of submitted Price Proposal minus 10% (0.10) threshold
- Q = Total quantity of eligible steel shipped to fabricator in October 2004 for this project in pounds
- B = \$0.2816
- $\mathsf{P} = (161.1 139.6) / 139.6 0.10 = 0.054$
- Q = 450,000 lb.
- $A = 0.2816 \times 0.054 \times 450,000$
- A = \$6,842.88 pay adjustment to Design-Builder

Sample Calculation of a Price Adjustment (decrease)

Project bid on April 28, 2004.

Project has 450,000 lb. of eligible structural steel.

Design-Builder's *f.o.b. supplier price for structural steel submitted in the Price Proposal is \$0.2816 per pound. *free on board

Adjusted BLS Producers Price Index (PPI) most recently published average at time of opening of the Price Proposal is 156.6.

All eligible steel shipped to fabricator in same month, October 2004.

Adjusted BLS Producers Price Index (PPI) most recently published average for month of October is 136.3

Adjustment formula is as follows:

A = B X P X Q

Where; A =	Steel price adjustment in lump sum dollars	
------------	--	--

- B = Average weighted price of steel submitted in the Price Proposal for Design-Build project in \$ per pound
- P = Adjusted percentage change in PPI average from shipping date to date of submitted Price Proposal minus 10% (0.10) threshold
- Q = Total quantity of eligible steel shipped to fabricator in October 2004 for this project in pounds
- B = \$0.2816
- $\mathsf{P} = (156.6 136.3)/156.6 0.10 = 0.030$
- Q = 450,000 lb.
- A = 0.2816 x 0.030 x 450,000
- A = \$3,801.60 credit to Department

MASTER LISTING

STANDARD BID ITEMS ELIGIBLE FOR STEEL PRICE ADJUSTMENT

March 18, 2009

BLS Series I. D.

ITEM NUMBER	ITEM DESCRIPTION	UNITS	Number WPU used in \$ adjust.
00519	SHEET PILE, STEEL	SF	avg. 1017 & 101
00540	REINF. STEEL	LB	101704
00542	EPOXY COATED REINF. STEEL	LB	101704
00560	STRUCTURAL STEEL JB-1	LB	avg. 1017 & 101
11030	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
11181	PATCH.HYDR.CEM.CONC. PAVE.	SY	101704
13290	GUARDRAIL GR-8 (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13292	GUARDRAIL GR-8A (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13294	GUARDRAIL GR-8B (NCHRP 350 TL-3)	LF	avg. 1017 & 101
13310	GUARDRAIL TERMINAL GR-6 (NCHRP 350)	LF	avg. 1017 & 101
13320	GUARDRAIL GR-2	LF	avg. 1017 & 101
13323	GUARDRAIL GR-2A	LF	avg. 1017 & 101
13331	RAD. GUARDRAIL GR-2	LF	avg. 1017 & 101
13333	RAD. GUARDRAIL GR-2A	LF	avg. 1017 & 101
13335	GUARDRAIL GR-3	LF	avg. 1017 & 101
13341	GUARDRAIL TER. GR-6(WEATHERING STEEL	LF	avg. 1017 & 101
13351	GUARDRAIL GR-8	LF	avg. 1017 & 101
13352	GUARDRAIL GR-8A	LF	avg. 1017 & 101
13353	GUARDRAIL GR-8B	LF	avg. 1017 & 101
13355	GUARDRAIL GR-10	LF	avg. 1017 & 101
13421		LF	avg. 1017 & 101
13450	MEDIAN BARRIER MB-5	LF	avg. 1017 & 101
13451	MEDIAN BARRIER MB-5A	LF	avg. 1017 & 101
13452 13545	MEDIAN BARRIER MB-5B REINF. STEEL	LF LB	avg. 1017 & 101 101704
14502	REINFORCING STEEL	LB	101704
15290	PATCH.CEM.CONC.PAVE.TY.CRCP-A	SY	101704
15290	PATCH.CEM.CONC.PAVE.TY.UKCP-A	SY	101704
15305	PATCH.CEM.CONC.PAVE.TY. IV-A	SY	101704
17323	GUARDRAIL BEAM *	LF	avg. 1017 & 101
17325	RADIAL GUARDRAIL BEAM *	LF	avg. 1017 & 101
17327	RUB RAIL	LF	avg. 1017 & 101
17353	CABLE GR-3	LF	avg. 1017 & 101
17521	GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17523	RADIAL GUARDRAIL BEAM (WEATHERING STEEL)	LF	avg. 1017 & 101
17525	RUB RAIL (WEATHERING STEEL)	LF	avg. 1017 & 101
22501	FENCE FE-W1	LF	avg. 1017 & 101
22643	FENCE FE-CL	LF	avg. 1017 & 101
22645	FENCE FE-CL VINYL COATED	LF	avg. 1017 & 101
23043	WATER GATE FE-4 TY.III	LF	avg. 1017 & 101
23501	FENCE FE-W1 (FABRIC ONLY)	LF	avg. 1017 & 101
45522	4" STEEL ENCASE. PIPE	LF	101706
45532	6" STEEL ENCASE. PIPE	LF	101706

45562	16" STEEL ENCASE. PIPE	LF	101706
45572	18" STEEL ENCASE. PIPE	LF	101706
45582	24" STEEL ENCASE. PIPE	LF	101706
45584	24" JACKED STEEL ENCASEMENT PIPE	LF	101706
45592	30" STEEL ENCASE. PIPE	LF	101706
50402	SIGN POST STEEL 3"	LF	101706
50404	SIGN POST STEEL 4"	LF	101706
50406	SIGN POST STEEL 6"	LF	101706
50410	SIGN POST STEEL 10"	LF	101706
50412	SIGN POST STEEL 12"	LF	101706
50414	SIGN POST STEEL 14"	LF	101706
50416	SIGN POST STEEL 16"	LF	101706
50418	SIGN POST STEEL 18"	LF	101706
51317	SIG. POLE MP-1 20' ONE ARM 30'	EA	101706
51319	SIG. POLE MP-1 20' ONE ARM 32'	EA	101706
51325	SIG. POLE MP-1 20' ONE ARM 38'	EA	101706
51327	SIG. POLE MP-1 20' ONE ARM 40'	EA	101706
51329	SIG. POLE MP-1 20' ONE ARM 42'	EA	101706
51331	SIG. POLE MP-1 20' ONE ARM 44'	EA	101706
51337	SIG. POLE MP-1 20' ONE ARM 50'	EA	101706
51339	SIG. POLE MP-1 20' ONE ARM 52'	EA	101706
51341	SIG. POLE MP-1 20' ONE ARM 54'	EA	101706
51344	SIG. POLE MP-1 20' ONE ARM 56'	EA	101706
51346	SIG. POLE MP-1 20' ONE ARM 58'	EA	101706
51347	SIG. POLE MP-1 20' ONE ARM 60'	EA	101706
51348	SIG. POLE MP-1 20' ONE ARM 62'	EA	101706
51368	SIG.POLE MP-1 20'TWO ARMS 36'& 42'	EA	101706
51400	SIG.POLE MP-1 CO.LU.ONE ARM 38	EA	101706
51402	SIG.POLE MP-1 CO.LU.ONE ARM 40	EA	101706
51408	SIG.POLE MP-1 CO.LU.ONE ARM 46	EA	101706
51412	SIG.POLE MP-1 CO.LU.ONE ARM 50	EA	101706
51414	SIG.POLE MP-1 CO.LU.ONE ARM 52	EA	101706
51416	SIG.POLE MP-1 CO.LU.ONE ARM 54	EA	101706
51418	SIG.POLE MP-1 CO.LU.ONE ARM 56	EA	101706
51420	SIG.POLE MP-1 CO.LU.ONE ARM 58	EA	101706
51422	SIG.POLE MP-1 CO.LU.ONE ARM 60	EA	101706
55162	LIGHTING POLE LP-1 30'-4'	EA	101706
55163	LIGHTING POLE LP-1 30'-6'	EA	101706
55166	LIGHTING POLE LP-1 30'-12'	EA	101706
55169	LIGHTING POLE LP-1 35'-6'	EA	101706
55171	LIGHTING POLE LP-1 35'-10'	EA	101706
55176	LIGHTING POLE LP-1 40'-8'	EA	101706
55185	LIGHTING POLE LP-2 TYPE A	EA	101706
55186	LIGHTING POLE LP-2 TYPE B	EA	101706
55187	LIGHTING POLE LP-2 TYPE C	EA	101706
55188	LIGHTING POLE LP-2 TYPE D	EA	101706
55189	LIGHTING POLE LP-2 TYPE E	EA	101706
55190	LIGHTING POLE LP-2 TYPE F	EA	101706
55192	LIGHTING POLE LP-2 TYPE H	EA	101706
60452	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
61700	REINF. STEEL	LB	101704
61704	CORROSION RESISTANT REINF. STEEL	LB	101704
61705	EPOXY COATED REINF. STEEL	LB	101704
61750	STRUCT.STEEL HIGH STRG.PLT.GIRDERS	LB	avg. 1017 & 101
61811	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
			0

61812	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
61813	STR.STEEL PLATE GIRDER ASTM A709 GRADEHPS50W	LB	avg. 1017 & 101
61814	STR.STEEL PLATE GIRDER ASTM A709 GRADEHPS70W	LB	avg. 1017 & 101
61820	STR.STEEL ROLLED BEAM ASTM A709 GRADE 36	LB	avg. 1017 & 101
61821	STR.STEEL ROLLED BEAM ASTM A709 GRADE50	LB	avg. 1017 & 101
61822	STR.STEEL ROLLED BEAM ASTM A709 GRADE50W	LB	avg. 1017 & 101
61990	STEEL GRID FLOOR	SF	avg. 1017 & 101
64110	STEEL PILES 10"	LF	avg. 1017 & 101
64112	STEEL PILES 12"	LF	avg. 1017 & 101
64114	STEEL PILES 14"	LF	avg. 1017 & 101
64768	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101
64778	DRIVING TEST FOR 14" STEEL PILE	LF	avg. 1017 & 101
65200	REINF. STEEL	LB	101704
65204	CORROSION RESISTANT REINF. STEEL	LB	101704
65205	EPOXY COATED REINF. STEEL	LB	101704
67086	PED. FENCE 6'	LF	avg. 1017 & 101
67088	PED. FENCE 8'	LF	avg. 1017 & 101
67089	PED. FENCE 10'	LF	avg. 1017 & 101
68100	REINF. STEEL	LB	101704
68104	CORROSION RESISTANT REINF. STEEL	LB	101704
68105	EPOXY COATED REINF. STEEL	LB	101704
68107	STR.STEEL PLATE GIRDER ASTM A709 GRADE50	LB	avg. 1017 & 101
68108	STR. STEEL PLATE GIRDER ASTM A709 GR50W	LB	avg. 1017 & 101
68109	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS50W	LB	avg. 1017 & 101
68110	STR. STEEL PLATE GIRDER ASTM A709 GR.HPS70W	LB	avg. 1017 & 101
68112	STR.STEEL ROLLED BEAM ASTM A709 GR.36	LB	avg. 1017 & 101
68113	STR.STEEL ROLLED BEAM ASTM A709 GR.50	LB	avg. 1017 & 101
68114	STR.STEEL ROLLED BEAM ASTM A709 GR. 50W	LB	avg. 1017 & 101
68115	STRUCT. STEEL	LB	avg. 1017 & 101
68270	REINF. STEEL BRIDGE APPR. SLAB	LB	101704
69060	SHEET PILES, STEEL	SF	avg. 1017 & 101
69100	REINF. STEEL	LB	101704
69104	CORROSION RESISTANT REINF. STEEL	LB	101704
69105	EPOXY COATED REINF. STEEL	LB	101704
69110	STEEL PILES 10"	LF	avg. 1017 & 101
69112	STEEL PILE 12"	LF	avg. 1017 & 101
69113	DRIVING TEST FOR 12" STEEL PILE	LF	avg. 1017 & 101
			5

____I elect to use this provision

____I elect not to use this provision

Date: _____

Signature: _____

Design-Builder:

Vendor No.: _____

Attachment 4.6.6(a)

FORM C-111 MINIMUM DBE REQUIREMENTS

Form C-111 Rev. 7-13-05

COMMONWEALTH OF TRANSPORTATION VIRGINIA DEPARTMENT OF TRANSPORTATION MINIMUM DBE REQUIREMENTS

PROJECT NO:

FHWA NO:

INSTRUCTIONS

SECTION II OF THIS FORM IS TO BE USED BY THE CONTRACTOR TO SUBMIT THE NAMES OF DBE FIRMS TO BE UTILIZED ON THE PROJECT. ADDITIONAL SHEETS TO SHOW THE ALLOWABLE CREDIT PER ITEM MAY BE ATTACHED IF NECESSARY. **NOTE**: IF 100% OF AN ITEM IS NOT TO BE PERFORMED OR FURNISHED BY THE DBE, DESCRIBE THE PORTION AND PERCENTAGE TO BE PERFORMED OR FURNISHED BY THE DBE.

. .

SECTION I:

	L	BE REQUIREMENT	11 %	
<u>SECTION II:</u> F	PERCENT AT	TAINED BY BIDDER	%	
NAME(s) A CERTIFICATION DBE(s) TO BE	NO. OF	TYPE OF WORK & ITEM NO(s)	PERCENT OF WORK	AMT. OF ALLOWABLE CREDIT PER ITEM
			TOTAL: \$	
Total Contract Va	lue \$	X Required DBE	% =\$	

I/WE CERTIFY THAT THE PROPOSED DBE (S) SUBMITTED WILL BE USED ON THIS CONTRACT AS STATED HEREON AND ASSURE THAT DURING THE LIFE OF THE CONTRACT, I/WE WILL MEET OR EXCEED THE PARTICIPATION ESTABLISHED HEREON BY THE DEPARTMENT.

	By
BIDDER	SIGNATURE
	By
TITLE	DATE

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION **DBE GOOD FAITH EFFORTS DOCUMENTATION**

--DO NOT DETACH--

THIS INFORMATION MUST BE SUBMITTED WITH YOUR BID PROPOSAL IF YOUR BID DOES NOT MEET THE PROJECT DBE REQUIREMENTS, OR WHEN REQUESTED BY VDOT

CONTRACT I.D. NUMBER
PROJECT NUMBER
FHWA NUMBER
DISTRICT
DATE BID SUBMITTED
BIDDER'S NAME
SIGNATURE
TITLE
VENDOR NUMBER
DBE GOAL FROM BID PROPOSAL

CONTRACT I.D. NO._____DATE SUBMITTED___

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER______SIGNATURE_____

TITLE_____

NAMES OF CERTIFIED DBES AND THE DATES ON WHICH THEY WERE SOLICITED TO BID ON THIS PROJECT

INCLUDE THE ITEMS OF WORK OFFERED AND THE DATES AND METHODS USED FOR FOLLOWING UP INITIAL SOLICITATIONS TO DETERMINE WHETHER OR NOT DBES WERE INTERESTED.

NAMES AND VENDOR NUMBERS OF DBEs SOLICITED	DATE OF INITIAL SOLICITATION	ITEM(S) OF WORK	FOLLOW-UP METHODS AND DATES

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

ATTACH COPIES OF SOLICITATIONS, TELEPHONE RECORDS, FAX CONFIRMATIONS, ELECTRONIC INFORMATION, ETC.

CONTRACT I.D. NO._____DATE SUBMITTED_____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER____

_____SIGNATURE____

TITLE

DBE(s) CALLED	TELEPHONE NUMBER	DATE CALLED	TIME CALLED	CONTACT PERSON OR VOICE MAIL STATUS

TELEPHONE LOG

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

CONTRACT I.D. NO._____DATE SUBMITTED___

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

BIDDER SIGNATURE

TITLE____

ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS

IDENTIFY THOSE ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS OR THOSE ITEM(S) THE BIDDER IDENTIFIED AND DETERMINED TO SUBDIVIDE INTO ECONOMICALLY FEASIBLE UNITS TO FACILITATE DBE PARTICIPATION. FOR EACH ITEM LISTED. SHOW THE DOLLAR VALUE AND PERCENTAGE OF THE TOTAL CONTRACT AMOUNT. IT IS THE BIDDER'S RESPONSIBILITY TO DEMONSTRATE THAT SUFFICIENT WORK TO MEET THE GOAL WAS MADE AVAILABLE TO DBE FIRMS.

ITEM(S) OF WORK MADE AVAILABLE	BIDDER NORMALLY PERFORMS ITEM(S) (Y/N)	ITEM(S) BROKEN DOWN TO FACILITATE PARTICIPATION (Y/N)	AMOUNT IN DOLLARS	PERCENTAGE OF CONTRACT

NOTE: INFORMATION REQUIRED FOR THIS SECTION CONTINUED ON SHEET 5 ATTACH ADDITIONAL PAGES IF NECESSARY

CONTRACT I.D. NO._____DATE SUBMITTED__

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

_____SIGNATURE_____ BIDDER

TITLE

ADDITIONAL INFORMATION REGARDING ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS (Continued From Sheet 4)

ITEM(S) OF WORK MADE AVAILABLE, NAMES OF SELECTED FIRMS AND DBE STATUS, DBES THAT PROVIDED QUOTES. PRICE QUOTE FOR EACH FIRM. AND THE PRICE DIFFERENCE FOR EACH DBE IF THE SELECTED FIRM IS NOT A DBE.

ITEM(S) OF WORK MADE AVAILABLE(CONT.)	NAME OF SELECTED FIRM AND VENDOR NUMBER	DBE OR NON-DBE	NAME OF REJECTED FIRM(S)	QUOTE IN DOLLARS	PRICE DIFFERENCE IN DOLLARS

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

IF THE FIRM SELECTED FOR THE ITEM IS NOT A DBE, PROVIDE THE REASON(S) FOR THE SELECTION ON A SEPARATE PAGE AND ATTACH.

PROVIDE NAMES, ADDRESSES, AND TELEPHONE NUMBERS FOR THE FIRMS LISTED ABOVE.

____DATE SUBMITTED___ CONTRACT I.D. NO.

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

BIDDER SIGNATURE

TITLE

ADVERTISEMENTS OR PROOFS OF PUBLICATION.

NAMES AND DATES OF EACH PUBLICATION IN WHCH A REQUEST FOR DBE PARTICIPATION FOR THE PROJECT WAS PLACED BY THE BIDDER. ATTACH COPIES OF PUBLISHED ADVERTISEMENTS OR PROOFS OF PUBLICATION.

PUBLICATIONS	DATES OF ADVERTISEMENT

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

CONTRACT I.D. NO._____DATE SUBMITTED___

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER_____

SIGNATURE

TITLE___

NAMES OF AGENCIES CONTACTED TO PROVIDE ASSISTANCE

NAMES OF AGENCIES (SEE SPECIAL PROVISION FOR 110.04) AND THE DATES THESE AGENCIES WERE CONTACTED TO PROVIDE ASSISTANCE IN CONTACTING, RECRUITING, AND USING DBE FIRMS. IF THE AGENCIES WERE CONTACTED IN WRITING, ATTACH COPIES OF SUPPORTING DOCUMENTS.

NAME OF AGENCY	METHOD AND DATE OF CONTACT	RESULTS

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

CONTRACT I.D. NO. DATE SUBMITTED

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

BIDDER SIGNATURE

TITLE

TECHNICAL ASSISTANCE AND INFORMATION PROVIDED TO DBES

EFFORTS MADE TO PROVIDE INTERESTED DBES WITH ADEQUATE INFORMATION ABOUT THE PLANS, SPECIFICATIONS, AND REQUIREMENTS OF THE BID DOCUMENTS TO ASSIST THE DBES IN RESPONDING TO A SOLICITATION.

IDENTIFY THE DBES ASSISTED, THE INFORMATION PROVIDED, AND THE DATE OF CONTACT. ATTACH COPIES OF SUPPORTING DOCUMENTS.

DBEs ASSISTED	INFORMATION PROVIDED	DATE OF CONTACT

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

CONTRACT I.D. NO. DATE SUBMITTED

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

BIDDER SIGNATURE

TITLE

EFFORTS MADE TO ASSIST DBES OBTAIN BONDING, LINES OF CREDIT, **INSURANCE. ETC.**

EFFORTS MADE TO PROVIDE INTERESTED DBES IN OBTAINING BONDING, LINES OF CREDIT, INSURANCE, NECESSARY EQUIPMENT, SUPPLIES, MATERIALS, OR RELATED ASSISTANCE OR SERVICES, EXCLUDING SUPPLIES AND EQUIPMENT THE SUBCONTRACTOR PURCHASES OR LEASES FROM THE PRIME CONTRACTOR OR ITS AFFILIATES.

IDENTIFY THE DBES ASSISTED, THE ASSISTANCE OFFERED, AND THE DATES OF SERVICES OFFERED AND PROVIDED. ATTACH COPIES OF SUPPORTING DOCUMENTS.

DBEs ASSISTED	ASSISTANCE OFFERED	DATES SERVICES OFFERED AND/OR PROVIDED

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

CONTRACT I.D. NO._____DATE SUBMITTED__

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY **REPRESENTS THE INFORMATION CONTAINED HEREIN.**

BIDDER_____SIGNATURE____

TITLE_____

ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS

ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS

NOTE: ATTACH ADDITIONAL PAGES, IF NECESSARY

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION CERTIFICATION OF BINDING AGREEMENT

Project No.:

Federal Project No.:_____

It is hereby certified by the below signed Contractors that there exists a written quote acceptable to both parties preliminary to a binding subcontract agreement stating the details concerning the work to be performed and the price which will be paid for the aforementioned work. A copy of the fully executed subcontract agreement shall be submitted to the Engineer within fourteen (14) working days after contract execution.

It is further certified that the aforementioned mutually acceptable quote and fully executed subcontract agreement represent the entire agreement between the two parties and that no conversations, verbal agreements, or other forms of non-written representations shall serve to add to, delete, or modify the terms as stated.

The prime Contractor further represents that the aforementioned mutually acceptable quote and fully executed subcontract agreement shall remain on file for a period of not less than one year following completion of the prime's contract with the Department or for such longer period as provisions of governing Federal or State law or regulations may require.

Contractors further jointly and severally represent that said binding agreement is for the performance of a "commercially useful function" as that term is employed in 49 C.F.R. Part 26.55 (c), (d).

DBE/WBE Contracto	r				
	Ву:	Signature		Title	
			Date:		
Prime Contractor:					
	Ву:				
		Signature		Title	
			Date:		

Note: This document is not intended to, nor should it be construed to, contain the entire text of the agreement between the contracting parties. This document does not take the place of, nor may it be substituted for, an official subcontracting agreement in those situations that may require such an agreement.

ATTACHMENT 11.6.1 ESCROW PROPOSAL DOCUMENTS CHECKLIST Project Name: Contract ID Number:		
Format:		
	Usual cost estimating format as long as information is clearly presented and ascertainable	
	Submitted in the language (i.e., English) of the Specifications	
Subcor	tractors	
	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 Ite	ems (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 11.6.9 ESCROW AGREEMENT

THIS ESCROW AGREEMENT ("Agreement") is made and entered into as of ______, 20___, by and among the Virginia Department of Transportation ("Department"), _____("Offeror") and Sun Trust Bank ("Escrow Agent") with reference to the following facts:

WHEREAS, Department has issued a Request for Proposals dated September 27, 2011 ("RFP") for the completion of the Route 29/ Charlottesville Bypass Project, in Albemarle, Virginia ("Project); and

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

WHEREAS, as part of the Proposal, 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 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. <u>Deposit</u>. 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. <u>Holding of EPDs</u>. Escrow Agent shall hold the EPDs in escrow in a designated are on the premises of Escrow Agent located at **919 East Main St.**, 7th 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. <u>**Review of EPDs**</u>. Escrow Agent shall provide facilities for joint review of the EPDs by representatives of Department and Offeror in accordance with the terms of the RFP, upon at least one business days' advance notice.

4. <u>Release of EPDs</u>. Escrow Agent shall release the EPDs as follows:

(a) Escrow Agent shall release the EPDs to Offeror, and Offeror shall pick up the EPDs at Offeror's expense, upon deliver by Department of a certificate certifying the Department has entered into a Design-Build Contract with another Offeror (the "Contractor") and that all EPDs of other Offerors are to be released.

(b) Escrow Agent shall release the EPDs to the Design-Builder and Department for delivery and retention to the Department as set forth in the Design-Build Contract at such time as it is notified by Department and the Design-Builder.

5. <u>Representation and Warranty</u>. 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 Offeror and that they constitute all the documentation and information used in the preparation of the Proposal.

6. <u>**Rights of Escrow Agent**</u>. 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. <u>Fees</u>. Offeror shall be responsible for any escrow fees. If Offeror fails to pick up the EPDs under Section 4(a), Offeror shall pay any fees accruing thereafter.

8. <u>Notices</u>. 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 Offeror:

Attention:

If to Department:

Virginia D	epartment of Transportation
1401 East 1	* *
Richmond,	VA 23219
Attention:	Jeffrey A. Roby

If to Escrow Agent:

-8
Sun Trust Bank
919 East Main St., 7 th Floor
Richmond, VA 23219
Attention: Emily J. Hare

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

10. <u>**Headings**</u>. 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. <u>Governing Law</u>. The laws of the Commonwealth of Virginia, excluding its conflict of laws, shall govern this Agreement.

12. <u>Attorneys' Fees</u>. If either Department or 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. RobyTitle:Design Build Program Manager

OFFEROR

By: _____

Name:	
Title:	

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

<u>Sun Trust Bank</u> :

By:	
Name:	_
Title:	

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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 Albemarle County, Virginia, and includes the construction of a new four-lane divided, limited access bypass to the west of existing Route 29. The purpose of the project is to relieve congestion on existing Route 29 and to improve the movement of through traffic. The limits of the project extend from Route 29/250 Bypass and the North Grounds of the University of Virginia on the south end to existing Route 29 north of the South Fork Rivanna River on the north end. The project shall include maintaining the following existing public crossing roads along the corridor: Barracks Road: Lambs Road; Roslyn Ridge Road; and Earlysville Road. Modifications to existing Route 29/250 Bypass at the southern terminus and existing Route 29 at the northern terminus, necessary to implement the project, shall be included. Further, all modifications to crossings on Route 29/250 Bypass (i.e. Old Ivy Road, Ivy Road, CSXT Railroad) shall be included, as necessary to implement the Project. Access to the new highway will be provided through termini at both ends, with no intermediate public access points to crossroads or adjacent properties, except a private access point for the Rivanna River Water Authority's facilities. The proposed bypass is estimated to be 6.24 miles long.

1.2 Anticipated Scope of Work

The anticipated Scope of Work to be performed by the Design-Builder includes, but is not limited to: (a) Final design plans compliant with current VDOT-AASHTO standards; (b) verification of documents supplied as part of the RFP Information Package, such as previous environmental clearance documentation; (c) remaining right-of-way acquisition services for the Project limits (d) applying for and obtaining construction permits and approvals as required as the Permittee, and fulfilling permit conditions; (e) construction of the Project; (f) quality assurance and quality control for design and construction; (g) utility coordination and utility relocation design; and (h) overall Project Management. Brief descriptions of this anticipated work are set forth below:

1.3 Anticipated Design Services

Design services shall include, but are not limited to: preparation of a final design traffic study, production of final design plans, survey, design of roadways, interchange ramps, Intelligent Transportation Systems, drainage structures, storm water management facilities, traffic control devices (e.g. signs, signals, pavement markings, guardrail, and marker plans), maintenance of traffic plans, landscaping design, drainage design, utility relocation design, lighting, verification of the geotechnical data provided by VDOT, geotechnical investigation, borings and analysis, materials analysis, hydraulic and hydrologic analysis, pavement design, and final noise abatement

determination and design. The Route 29 Bypass mainline design criteria has been revised to reflect current VDOT standards and policy and to utilize Imperial units. Thus, a substantial design effort is needed to fulfill VDOT requirements for Final Right-of-Way Plans and Final Construction Plans. Design services shall also include coordination with representatives from VDOT.

The Design-Builder shall prepare the final design to accommodate a future extension of Berkmar Drive, as generally presented on Exhibit B named Berkmar Drive Future Transportation Network located in the RFP Information Package. During final design development, the Design-Builder shall provide three (3) alternatives to conceptual level, for the future extension of Berkmar Drive.

The Design-Builder shall develop Preliminary Design-Build Plans, Final Right-of-Way Plans (for the northern and southern termini) and Final Construction Plans for mainline, the northern terminus, and the southern terminus to stay within the limits of existing and proposed R/W as presented on Exhibit A, as prepared by Parsons Brinckerhoff, dated September 23, 2011. The Design-Builder shall provide Final Right-of-Way Plans and plats for any necessary modifications to Leonard Sandridge Road.

The Design-Builder will be responsible for obtaining detailed survey and mapping necessary for Project final design in Imperial units and in MicroStation CAD platform in accordance with the current VDOT Survey Manual. The Design-Builder will be responsible for any conversion necessary for the right-of-way points for referencing into the imperial plans and for staking the metric right-of-way and easements on the ground.

The Design-Builder's Scope of Work shall include a Project Geotechnical Engineering Report in accordance with VDOT Manual of Instructions for Geotechnical Design, to meet the specific needs of their particular design. Any design and subsurface information provided by VDOT is provided FOR INFORMATION ONLY and must be validated, then augmented and certified by the Design Manager as necessary to provide the final design.

The RFP Supplemental Information Package includes a Project Goals Memo summarizing design development goals during preparation of existing project plans. The Design-Builder shall consider these goals during final design development.

Given the above disclaimers, the Design-Builder shall have no right to seek or obtain an adjustment in the Contract Price, Contract Time(s) or any other relief under the Contract for any claim that is based upon documents supplied in the Supplemental Information Package.

1.4 Anticipated Environmental Services

Environmental services shall address all items necessary for complying with the commitments identified in the May 11, 1990 Draft EIS, January 20, 1993 Final EIS and April 8, 1993 ROD; the November 4, 1994 EA and July 6, 1995 FONSI; the March 13, 2000 Reevaluation, Final Section 4(f)

Evaluation and Revised ROD approved by FHWA; the January 29, 2002 Draft SEIS, the May 29, 2003 Final EIS and September 22, 2003 ROD. 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 provide permanent noise mitigation in compliance with the Virginia State Noise Abatement Policy and the Highway Traffic Noise Impact Analysis Guidance Manual. The Design-Builder shall undertake Data Recovery of two archaeological sites: 44AB428 and 44AB430 consistent with the Data Recovery plan outlined in the January 29, 2002 Draft SEIS.

VDOT and FHWA will revisit NEPA to establish whether the Environmental Impact Statement remains valid. This NEPA related work is expected to be completed in September 2012. VDOT intends to hold a public meeting regarding NEPA related work in early 2012, with FHWA approval of the NEPA related work anticipated by September 2012. The Design-Builder will comply with all environmental commitments during design and construction as identified in all previous NEPA decision documents. This includes any NEPA related work currently being prepared for the project, as well as the Document Re-evaluation for Right-of-Way Authorization, Document Reevaluation for Plans, Specifications and Estimates Authorization and Environmental Certification/Commitments Checklist. Additional detail is provided under Section 2.4 Environmental.

The Design-Builder shall obtain all necessary environmental clearances and/or construction permits required to accomplish the work as noted in the General Conditions of the Contract, Section 2.3. The Design-Builder will be the Permittee. The Design-Builder shall be responsible for performing necessary design and field investigations required to support acquisition of necessary water quality permits through the appropriate regulatory agencies. Specifically the Design-Builder shall prepare a Jurisdictional Determination for wetlands located within the Project limits, and address required mitigation of wetlands impacts to meet water quality permit requirements.

The Design-Builder will be responsible for compliance with pre-construction and construction-related environmental commitments and will be responsible for compliance with preconstruction, construction-related 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 proposed by the Design-Builder that are acceptable to VDOT may require additional environmental technical studies and analysis. The Design-Builder will be responsible for any additional environmental studies or analysis to support the Design-Builders proposed changes in scope. VDOT will be responsible for the preparation of NEPA document reevaluations to address those changes. The Design-Builder shall be responsible for fulfillment of conditions and commitments throughout design and construction, as described in Section 2 of Part 2 of this RFP. Offerors should note that the Design-Builder will be solely responsible for any schedule delays and associated costs as described in Section 2 of Part 2 of this RFP due to deviations from these clearances; no time extensions will be granted.

1.5 Anticipated Utility Services

Services for utility relocations, adjustments and coordination shall include all work necessary to perform the relocations, adjustments and coordination of utilities, including the acquisition of utility easements as required by the Project. The Design-Builder shall design around and/or relocate affected utilities within non-limited access right-of-way, unless otherwise approved by VDOT. The Design-Builder is solely responsible for any schedule delays due to utility relocation associated with the Design-Builder's design and no time extensions will be granted. All costs for utility relocations, excluding betterments, shall be included in the Design-Builder's lump sum bid. Utility betterments requested by utility owners shall not be included in the lump sum bid, but shall be reimbursed to the Design-Builder through a separate agreement with the requesting utility owner. The Design-Builder shall contact each utility owner prior to submitting bids to determine the scope of each utility owner's relocation.

1.6 Anticipated Right-of-Way Services

Most real property interests, including rights-of-way and all easements both temporary and permanent, for the Project limits <u>south</u> of the South Fork of the Rivanna River, as depicted on Exhibit A (included in the RFP Information Package), have been secured by VDOT. Exceptions to current ownership in that area are: the state property portion of the University of Virginia (Rectors) property located adjacent to existing Route 29/250, and parcels 015/025, 024, 041, 042, 100/102 & 145/147.

The Design-Builder, acting as an agent on behalf of the Commonwealth of Virginia, shall provide all remaining right-of-way acquisition services for the Project for right-of-way and easements both temporary and permanent, including survey plats for each impacted parcel, for the Project limits <u>north</u> of the South Fork of the Rivanna River and the properties listed in the preceding paragraph, south of the South Fork of the Rivanna River. VDOT must issue a Notice to Commence Right-of-Way acquisition prior to any offers being made to acquire property. Similarly, VDOT must issue a Notice to Commence Construction once the property has been acquired prior to commencing construction on the property. The Design-Builder will <u>not</u> be responsible for the actual cost of the Project. All Right-of-Way acquisition costs (compensation paid to landowners for right-of-way or easements) will be paid by VDOT, and shall not be included in the Offerors Price Proposal.

Design-Builder's proposed design shall not exceed the proposed right-of-way limits indicated on Exhibit A.

Request for Proposals	Route 29 / Charlottesville Bypass
Part 2	Albemarle County, Virginia
Technical Information and Requirements	State Project No. 0029-002-844
-	Contract ID No. C00102419DB44

Prior to completion, the Design-Builder shall provide and set appropriate VDOT right-of-way monuments within the Project limits.

1.7 Anticipated Construction Services

Construction services are anticipated to include, but not be limited to, roadway and structures, traffic signals, overhead and ground signage, Intelligent Transportation Systems, Temporary Traffic Control, guardrail, stormwater management facilities, landscaping, all necessary earthwork, drainage, monumentation of right-of-way, erosion and sediment control and sound barrier walls if required, and compliance with all environmental requirements, commitments and permit conditions, as described in Section 2 of Part 2 of this RFP. The Design-Builder shall also provide construction engineering inspection and management, surveying, quality assurance and quality control, including plant quality assurance inspection and testing, but excluding items listed under Section 2.17.2 of Part 2 of this RFP.

The Design-Builder shall be responsible for compliance with pre-construction and construction-related permit conditions. The Design-Builder shall assume all obligations and cost 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.

2.0 PROJECT TECHNICAL INFORMATION & REQUIREMENTS

2.1 Standards and Reference Documents

2.1.1 Standards, Specifications and Reference Documents

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 that were current as of the advertisement date of the RFP for this project. The Design-Builder must verify and use the latest version of the documents listed herein. The Design-Builder must meet or exceed the minimum roadway design standards and criteria.

If during the course of the design, the Design-Builder determines that a specific Standard, Specification or Reference Documents is required but not listed herein, it is the responsibility of the Design-Builder to identify the pertinent Standard, Specification or Reference Document and submit it to VDOT for review and approval prior to inclusion in the Contract Documents.

- VDOT Drainage Manual (including current Errata Sheet)
- VDOT Hydraulic Design Advisories (all current)
- VDOT CADD Manual (Version 2009)
- VDOT QA/QC Requirements for Design-Build and PPTA Projects, August 2008

- VDOT 2006 Traffic Engineering Design Manual
- VDOT Right-of-Way Manual of Instructions, January 2011
- VDOT Utility Manual, January 2011
- VDOT 2010 Current Land Use Permit Manual
- VDOT Policy Manual for Public Participation in Transportation Projects (updated July 2009)
- VDOT Instructional & Information Memorandums ("I&IM") All Divisions
- VDOT Road and Bridge Standards, Vol. 1 and Vol. 2 (2008) including all revisions through August 2010
- VDOT Road and Bridge Specifications, 2007, including all revisions
- VDOT Manual of Structure and Bridge Division, Vol. V
- VDOT Manual of Instructions for Geotechnical Design ("MOI") Chapter 3 June 2011
- VDOT Guardrail Installation Training Manual ("GRIT") May 2011
- VDOT Road Design Manual, Vol. I
- VDOT Guidelines for 1993 AASHTO Pavement Design, Revised May 2003
- VDOT Survey Manual (2010 Edition)
- VDOT Manual of Instruction for Material Division
- VDOT 2011 Virginia Work Area Protection Manual
- VDOT Construction Manual, 2005
- VDOT Post Construction Manual, May 2011
- VDOT Construction Inspection Manual, April 2008
- VDOT Traffic Engineering Division Memoranda
- VDOT Active Construction Directive Memorandum
- VDOT Design-Build Template Part 3, 4 and 5 Documents, May 2010
- VDOT Policy for Integrating Bicycle and Pedestrian Accommodations
- VDOT Asbestos Inspection Procedures, May 14, 2004
- VDOT Asbestos Project Monitoring and Clearance Air Monitoring Procedures, May 14, 2004
- AASHTO "Green Book", 2004
- AASHTO A Policy on Geometric Design of Highways and Streets, 2004
- AASHTO A Policy on Design Standards Interstate System, January 2005
- AASHTO Roadside Design Guide, Third Edition, 2006 (updated Chapter 6)
- AASHTO Standard Specifications for the Design of Highway Bridges 2002 Interim Specifications and VDOT Modifications.
- AASHTO Guide Specifications for Seismic Isolation Design, Second Edition, with 2000 Interim Revisions
- AASHTO Minimum Requirements for Design level Geotechnical Investigations, 2004
- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals, Fifth Edition 2009
- AASHTO LRFD Bridge Design Specifications, Fifth Edition, and 2010 Interim Specification; and VDOT Modifications
- AASHTO Manual of Bridge Evaluation, 2008

- 23CFR650 Subpart C National Bridge Inspection Standards ("NBIS"), Subsection 650.301 or the latest revision(s)
- AASHTO Guide for Design of Pavement Structures (Rigid Pavement and Flexible Pavement) (1993 Edition)
- AASHTO Guide for Protective Screening of Overpass Structures, Second Edition 1990
- AASHTO Guide Design Specifications for Bridge Temporary Works, First Edition 1995, 2008 Interim
- AASHTO Construction Handbook for Bridge Temporary Works, First Edition 1995, 2008 Interim
- AASHTO Guide for the Development of Bicycle Facilities, 3rd Edition, 1999
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004
- USDOT FHWA Standard Highway Signs, 2004
- Bridge Welding Code: AASHTO/AWS-D1.5M/D1.5:2008, with 2009 AASHTO Interim
- National Electric Code ("NEC")
- Manual of Uniform Traffic Control Devices ("MUTCD"), 2009
- Virginia Supplement to MUTCD (2011)
- DCR Virginia Stormwater Management Handbook, First Edition 1999
- DCR Virginia Erosion and Sediment Control Handbook, Third Edition 1992
- American Water Works Associations Standards
- Americans with Disabilities Act Accessibility Guidelines for State and Local Government Facilities
- Transportation Research Board Highway Capacity Manual, Third Edition, 2000
- 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
- Special Provision for Railway-Highway (1/14/2008)
- Special Provision Copied Note for Section 211 for Surface and Intermediate Courses using RAP (9/24/07, reissued July 2008)
- Special Provision for Section 301 Clearing and Grubbing (11/15/2006)
- Special Provision for Section 305 Stabilized and Paved Shoulder Overlay (12/2/2009)
- Special Provision for Density Control of Embankments (11/26/2006)
- Special Provision for Low Permeability Concretes For Design-Build Projects (9/6/2009)
- Special Provision for Hydraulic Cement Concrete Operations for Massive Construction (9/14/2004)
- Special Provision for Reflective Crack Retardant Material (6/9/1998)
- Approved Retaining Wall Systems List (Included in the RFP Information Package) (2/25/2011)
- Special Provision for Sound Barrier Walls (9/26/2006)
- Special Provision for Retained Earth Walls (4/30/2002)
- Special Provision for Stabilized Earth Walls (4/19/2007)
- Special Provision for MSE Walls (Modular Cantilever Facing) (12/10/2009)

- Special Provision for Mechanically Stabilized Earth Walls (Segmental Block Facing) revised December 10, 2009
- Guidelines for Preparation of Alternate Retaining Wall Plans (3/6/2008)
- Special Provision for MSE General Notes (4/10/2009)
- Special Provision for Mechanically Stabilized Earth Walls (Segmental Block Facing) revised December 10, 2009
- Special Provision for ISOGRID Retaining Walls (4/30/2002)
- Special Provision for T-Wall Retaining Wall System (12/10/2009)
- Special Provision for Drilled Shafts (11/18/2009)
- Special Provision for Wave Equation Analysis for LRFD (11/10/2009)
- Special Provision for Dynamic Pile Testing for Friction Piles for LRFD (12/10/2009)
- Special Provision for Dynamic Pile Testing for End Bearing Piles for LRFD (12/10/2009)
- Special Provision for Powder Coating (8/14/2009)
- Special Provision for Architectural Stone Treatment (2/15/2010)
- Special Provision for Micropiles (1/20/2010)
- Special Provision for Structure Demolition (1/7/2010)
- Special Provision for Corrosion Resistant Reinforcing Steel (11/19/2009)
- Special Provision for Elastic Inclusion (11/24/2009)
- Supplemental Specification for Section 405 (SS40501-0609) Prestressed Concrete (8/7/2008)
- Supplemental Specification for Section 407 (SS40701-0310) Steel Structures (1/25/2010)
- Supplemental Specification for Section 412 (SS41201-609) Widening, Repairing and Reconstructing Existing Structures (8/5/2008)
- Supplemental Specification Section 413 (SS41301-609) Dismantling and Removing Existing Structures or Removing Portions of Existing Structures (8/5/2008)
- Supplemental Specification for Section 211 Asphalt Concrete (12/15/2009)
- Supplemental Specification for Section 212 Joint Materials (1/17/2008)
- Supplemental Specification for Section 214 Hydraulic Cement (1/28/2008)
- Supplemental Specification for Section 215 Hydraulic Cement Concrete Admixtures (1/28/2008)
- Supplemental Specification for Section 217 Hydraulic Cement Concrete (4/12/2010)
- Special Provision for Surface Preparation and Restoration Prior to Plant Mix Overlay (7/1/2010)
- Special Provision for Section 302.03 (g) Flowable Backfill (7/30/08 Reissued November 2009)
- Special Provision for Planning Asphalt Concrete Pavement (November 2009)
- Special Provision for Design-Build Tracking (DBT) Numbers (2/8/2008)
- Supplemental Specification for Section 315 Asphalt Concrete Pavement (12/12/2009)
- Special Provision for Lime Modification of Soils (11/23/2009)
- Supplemental Specification for Lime Stabilization (10/2/2008)
- Supplemental Specification for Section 315 Asphalt Concrete Pavement (12/7/2009)

- Special Provision Copied Note for Section 248 for Surface and Intermediate Mixes using RAP (1/14/2008)
- Special Provision Copied Note for Section 211 Warm Mix Asphalt (12 /7/2009)
- Special Provision Copied Note for Section 315 Warm Mix Asphalt Pavement (12/7/2009)
- Special Provision for Nontracking Tack Coat (12/5/2010)
- Special Provision for Minimum Requirements for QA & QC for Design-Build and PPTA Projects, dated January 25, 2010
- Project Communication and Decision Making for Design-Build Projects, dated August 2009
- Supplemental Specification Section 522 Partnering for Design-Build Projects, dated December 2, 2009
- Special Provision for Section 703 Traffic Signals (1/6/2009)
- Special Provision for Section 704 Type B, Class VI Pavement Line Marking (12/11/2009)
- Special Provision for Signal Poles (Mast Arm Poles) (12/2/2009)
- Special Provision for Uninterruptible Power Supply (12/2/2009)
- Special Provision for Spread Spectrum Radio Equipment (12/2/2009)
- Supplemental Specification for Section 238 Electrical and Signals Components (12/2/2009)
- Supplemental Specification for Section 512 Maintaining Traffic (12/2/2009)
- Special Provision Copied Note for Personnel Requirements for Work Zone Traffic Control (12/2/2009)
- Special Provision for Inspection of Structures for Asbestos Containing Materials ("ACM") on Design-Build Projects (6/22/2009)
- Special Provision for Asbestos Removal and NESHAP-Related Demolition Requirements for Structures on Design-Build Projects (6/22/2009)
- SPCN for Demolition Notification for Structures not Requiring Asbestos Removal (6/25/2009)
- Supplemental Specification for Traffic Signs (12/4/2009)
- Special Provision for Emergency Preemption Equipment (12/2/2009)
- Special Provision for Video Detection (12/2/2009)
- Special Provision for Electrical and Signal Components (3/4/2008)
- Special Provision for Section 700 General (12/4/2009)
- Special Provision for Section 701 Traffic Signs (12/4/2009)
- Special Provision for Delineators (12/4/2009)
- Special Provision for Pavement Markings and Markers (12/4/2009)
- Special Provision for Lighting Systems (12/4/2009)
- Supplemental Specification for Section 700 General (12/4/2009)
- Special Provision for Work Zone Traffic Control Management (11/2009)
- Supplemental Specification for Section 703 Traffic Signals (12/2/2009)
- Memo for Guidance for Planting in the Clear Zone and Landscaping for VDOT Projects (11/2/2000)
- Guidelines for Context Sensitive Solutions/Design (2/25/2004)
- FHWA 23 CFR 752 Landscaping and Roadside Development

• FHWA Order Number 6640.1A, "FHWA Policy on Permissible Project Related Activities During the NEPA Process," dated October 1, 2010

In the event of a discrepancy between VDOT and non-VDOT Standards and References listed herein, the VDOT specifications design standards and manuals shall take precedence. Special Provisions included in this contract document or other Special Provisions selected for use in design and construction of this Project that have been approved by VDOT shall govern over the VDOT specifications, design standards and manuals. Special Provision Copy 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. The design criteria noted herein shall govern over information on plans previously developed by Parsons Brinckerhoff.

In situations where the information provided in the RFP Information Package reflects the use of Metric units of measurement (i.e. meters, kilograms, cubic meters, etc.) and the applicable standard reflects the use of Imperial units of measurement (i.e. inches, pounds, cubic yards, etc.), the most current applicable standard shall be deemed to apply regardless of the units of measurement indicated. Any necessary conversion of units between systems of measurement will be accomplished in a manner which results in the use of standard industry values for sizes of materials or tolerances.

2.1.2 **RFP Information Package**

An RFP Information Package CD-ROM is available for the purchase as indicated in RFP Part 1, Section 2.8.4. The RFP Information Package includes the following:

- Special Provisions List, Special Provision Copied Notes and Supplemental Specifications
- Draft Environmental Impact Statement (DEIS), dated May 11, 1990
- Final Environmental Impact Statement (FEIS), dated January 20, 1993
- Record of Decision (ROD), dated April 8, 1993
- Environmental Assessment (EA), dated November 4, 1994
- Finding of No Significant Impact (FONSI), dated July 6, 1995
- Reevaluation Environmental Impacts and Previous Environmental, dated March 13, 2000
- Final Section 4(f) Evaluation, dated March 13, 2000
- Revised Record of Decision, dated March 13, 2000
- Draft Supplemental Environmental Impact Statement (DSEIS), dated January 29, 2002
- Final Supplemental Environmental Impact Statement (FSEIS), dated May 29, 2003
- Record of Decision, dated September 22, 2003
- Right of Way Reevaluation ("RW"), dated December 18, 2002
- Document Re-evaluation for Plans, Specifications and Estimates ("PS&E") Authorization, dated September 13, 2011
- Environmental Certification/Commitments Checklist dated September 13, 2011
- The Falcon System Access Security Agreement: Form LD-443
- Section 106 Evaluation and 1992 MOA
- Archaeological Data Recovery

- State Noise Abatement Policy, dated July 13, 2011
- Highway Traffic Noise Impact Analysis Guidance Manual, dated July 13, 2011
- Appendix D of the final SEIS: Selection of Final Mitigation Measures
- Final Section 4 (f) Evaluation figure depicting Public Schools, Public Parks and Recreation Areas
- Final Section 4(f) Evaluation figure depicting Historic Properties
- Final Section 4(f) Evaluation figure depicting Measure to Minimize Harm to the Albemarle County School Complex
- Section J. Measures to Minimize Harm from the Final Section 4(f) Evaluation
- Preliminary Site Assessment Report Route 29 Bypass (Proposed), March 1998
- Subsurface Investigations Report Proposed Route 29 Properties, July 1998
- Subsurface Investigations Faulconer Construction Property (Northern Section), April 1999
- CTB Resolution, dated October 15, 1987
- gINT Files for original subsurface investigations
- Exhibit A Right of Way and Project Limit Corridor Map, dated September 23, 2011
- Exhibit B Berkmar Drive Future Transportation Network
- Rt. 29 DB Checklist Excel File 2011 (not applicable refer to Part 1 Attachment 4.5.1.1 and Part 1 Attachment 4.5.1.2)
- Building Data Report, dated September 14, 2011
- Approved Retaining Wall Systems List
- 1998 Final Survey Mapping by RSA
- Digital Orthographic Photography dated 2009
- Attachment A LRFD Foundation Criteria
- Attachment B AASHTO Agenda Item
- Route 29 Bypass Plans Sheet Nos. 13 & 14

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

2.2 Status of Project Design Development

NOTE: ALL INFORMATION PROVIDED IN THIS SECTION IS FOR INFORMATION ONLY

The Route 29 Roadway Plans, prepared by Parsons Brinckerhoff, dated September 9, 1997 with right-of-way revisions through May 16, 2001 are included in the Supplemental Information Package and provided upon request. Said Plans depict the basic alignment of the Project, original interchange layout and geometrics, pavement design, tie-ins to existing roadways, the general location of utilities, drainage design, location of proposed stormwater management ponds, and the proposed right-of-way limits.

A Technical Memorandum on interchange design alternatives is currently being developed and will be released with an Addendum to this RFP.

The Supplemental Information Package, which is not deemed a component of the RFP, contains several documents that 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 Supplemental Information Package is reliable or accurate, or suitable for designing the Project. In fact, the Department is aware of multiple inaccuracies and inadequacies in the components of the package, and that the details contained therein are incomplete, not cohesive, and do not fully represent the Project.

Original survey base mapping, in MicroStation format and metric units, as prepared by Rouse-Sirine Associates, Ltd. and dated December 1998, as well as the Digital Orthographic Photography provided by Virginia Geographic Information Network, dated 2009, are included in the RFP Information Packet, and are <u>not</u> sufficient for Project final design. The original project survey data used to develop the existing plans was in Metric units using the MicroStation CAD drafting package platform, based on aerial photography obtained in May 1996 and final mapping dated December 1998. All right-of-way and easements owned by VDOT were acquired using metric unit plans. The areas acquired are recorded in the land acquisition records on a metric alignment and metric plus and offset distance references.

The original plans were developed by Parsons Brinckerhoff in Metric units using the Interactive Graphics Roadway Design System (IGrds), Computer Aided Civil Engineering (CAiCE) software, and the MicroStation CAD drafting package platform. The 1997 plan set includes, among other things: a Right-of-Way data sheet, Plan and Profile Sheets, Alignment Layout Sheets, Drainage Description Sheets, and locations of proposed Stormwater Management Facilities. The Design-Builder will have the obligation under the Contract to develop all plans required for VDOT review and approval and as necessary for Project construction, as these interface directly with its means and methods of performance.

Final Construction Plans dated October 2003, prepared by Parsons Brinckerhoff, for the interim construction of Leonard Sandridge Road (formerly known as the North Grounds Connector) are included in the Supplemental Information Package. The current Leonard Sandridge Road connects US Route 250 Bypass to Massie Road located in the North Grounds of the University of Virginia. The connector road was designed and constructed as an urban local street system with a design criterion of GS-8 and a design speed of 25 mph. There are two lanes 12 feet wide with six foot wide paved shoulders to incorporate an extra lane during university special events, using temporary cones for channelization. Seven foot shoulders are used in guardrail sections. The curb and gutter sections used are CG-6 with GR-2 guardrail. The alignment of the roadway was designed to be curvilinear, following the contours of the corridor where possible, to minimize land disturbance.

Given the above disclaimers, the Design-Builder shall have no right to seek or obtain an adjustment in the Contract Price, Contract Time(s) or any other relief under the Contract for any claim that is based upon documents supplied in the Supplemental Information Package.

2.3 Commonwealth Transportation Board Resolutions

CTB Resolutions with explicit direction related specifically to the Route 29 Bypass Project are included in the RFP Information Package. The following direction from the resolutions shall be considered and implemented during final design and construction:

CTB Resolution Dated March 16, 1995

- 1. Modifications to the Northern and Southern Terminus as presented at the February 13, 1995, Location Public Hearing, be approved as presented. If the Design-Builder proposes a modification to the northern and southern termini, such modifications shall be reviewed by the Department and approved by the Chief Engineer in accordance with existing VDOT policy for design approval.
- 2. As final design proceeds, that staff be instructed to consider the design presented by the Canterbury Hills Association to minimize impacts and that a complete traffic analysis be conducted to determine of the proposed at-grade intersection of the Northern Terminus will function adequately or will a grade-separated interchange be required. Any proposed layouts of the northern terminus shall comply with the Design Criteria and traffic LOS requirements noted within this RFP.

CTB Resolution Dated April 17, 1997

- 1. Modifications in the final design phase to modify the interchange at the northern termini to eliminate impacts to the Brook Hill property, which is likely eligible for listing in the National Register of Historic Places. The proposed R/W lines presented on Exhibit A (based on the project plans included in the RFP Supplemental Information) address this issue.
- 2. *Modification in the final design phase to reduce the Hydraulic Road bridge to reflect a two lane design.* (Please note 'Hydraulic Road' is now known as Earlysville Road.) Proposed final design for Earlysville Road bridge shall comply with this requirement.
- 3. Approval of the selection of the "Central Design Alternative" that shifts the Stillhouse Mountain alignment out of the mountainside. The proposed R/W lines presented on Exhibit A (based on the project plans included in the RFP Supplemental Information) address this issue.

- 4. A shift of the alignment of Lambs Road to the east to lessen impact to the west side of the proposed roadway in the final design phase. The proposed R/W lines presented on Exhibit A (based on the project plans included in the RFP Supplemental Information) address this issue.
- 5. An evaluation of ramp "D" on the south end of the project to see if the existing south bound Route 29 bypass can be utilized in lieu of constructing a whole new ramp "D". Such an evaluation was performed during development of the project plans included in the Supplemental Information Package. The proposed R/W lines presented on Exhibit A (based on the project plans included in the RFP Supplemental Information) address this issue.
- 6. Modifications to the North Grounds Connector road, which shall be no wider than 33'-0" curb to curb, and its right of way no wider than would be appropriate for a roadway of that width. The University of Virginia was responsible for the design and construction of Leonard Sandridge Road (formerly known as the North Grounds Connector) in the 2003-2006 timeframe. Additional information on this facility is provided in the RFP Supplemental Information. No additional right of way was conveyed to the VDOT as part of this university developed project.
- 7. The northbound access ramps "E" and "F" to the Route 250 Bypass revised to be relocated northward as close as is physically possible to the new alignment of the Route 250 Bypass, *i.e., as far distant as is possible from the new Darden School of Business and Law School.* The proposed R/W lines presented on Exhibit A (based on the project plans included in the RFP Supplemental Information) address this issue.
- 8. Every possible aesthetic measure taken to preserve and enhance the University's considerable investment in the setting and appearance of its new Darden School of Business and the Law School, including visual buffering using plant materials of appropriate size and scale, and density of coverage, as well as acoustic buffering using sound walls faced with materials compatible with those historically in use at the University. In addition, any stormwater detention ponds which may be required in the vicinity of the University as a result of the new Bypass or the North Grounds Connector road shall be designed in conformance with the principles of the University's Water Resources Management Plan. The final design shall comply with the above. Further, current University requirements with respect to aesthetic treatments, buffering, and stormwater detention facilities shall be followed with respect to proposed modifications to Leonard Sandridge Road (formerly the North Grounds Connector).
- 9. Concurrence from the Board of Visitors, of the University of Virginia, with the proposed design modifications on or before July 15, 1997. Any right of way acquisition of University of Virginia property necessary to construct the project shall be subject to the approval of the Board of Visitors of the University of Virginia. Further, modifications and connections to Leonard Sandridge Road necessary to construct the project shall be subject to the approval of the Board of Visitors of the University of Virginia.

- 10. That in the interest of public safety, pedestrians, persons riding bicycles or mopeds, horsedrawn vehicles, self-propelled machinery or equipment, and animals lead, ridden or driven on the hoof be prohibited from using this highway. The final design shall comply with the above, including specific project signage noting such restrictions.
- 11. The Route 29 Bypass be designated as a Limited Access Highway from 1.12km (0.7 mile) north of Route 29/250 interchange and 0.9km (0.5 mile) north of Rivanna River as designated on the public hearing plans and in accordance with the statutes of Virginia and in accordance with the Commonwealth Transportation Board Policies. The final design shall comply with the above. The limits of Limited Access to be acquired in accordance with VDOT Road Design Manual.
- 12. In accordance with Article 4, Chapter 1, Title 33.1, Section 33.1-24 pf the 1950 Code of Virginia and State Highway and Transportation Board Policy, the herein approved 10.04km (6.24 mile) segment of the Route 29 bypass be added to the Primary System of Highways and designated Virginia Route 29 Bypass. The final design shall comply with the above.

CTB Resolution Dated January 15, 1998

1. Based on a request from the University of Virginia, the Commonwealth Transportation Board rescinds the following from the April 17, 1997 approval: Modification to the North Grounds Connector road, which shall be no wider than 33'-0" curb to curb, and its right of way no wider than would be appropriate for a roadway of that width. The North Grounds Connector should be designed as presented at the public hearing as a four-lane, divided roadway with appropriate consideration as to noise abatement and with heavy landscaping on its margins and median giving the appearance of a well landscaped urban street. The University of Virginia was responsible for the design and construction of Leonard Sandridge Road (formerly known as the North Grounds Connector) in the 2003-2006 timeframe. Additional information on this facility is provided in the RFP Supplemental Information Package. The Design-Builder shall prepare final design plans to minimize impacts to the existing Leonard Sandridge Road, with modifications to such subject to the approval of the University of Virginia.

The Commonwealth Transportation Board (CTB) has provided specific direction throughout the project design development. The following CTB resolutions are included in the RFP Supplemental Information Package, for information only:

- CTB Resolution dated November 15, 1990
- CTB Resolution dated December 19, 1991
- CTB Resolution dated January 16, 1992
- CTB Resolution dated February 16, 1995

Specific direction from the CTB provided with the resolutions noted above is either irrelevant to the specific Route 29 Bypass project or has been rescinded in the CTB resolution of March 3, 1995.

2.4 Environmental

Design-Builder shall address all items necessary for complying with the commitments identified in the May 11, 1990 Draft EIS, January 20, 1993 Final EIS and April 8, 1993 ROD; the November 4, 1994 EA and July 6, 1995 FONSI; the March 13, 2000 Reevaluation, Final Section 4(f) Evaluation and Revised ROD approved by FHWA; the January 29, 2002 Draft SEIS, the May 29, 2003 Final EIS and September 22, 2003 ROD; The Commonwealth Transportation Board (CTB); the acquisition of water quality permits for the Project in the Design-Builder's name (i.e. the Design-Builder will be the "Permittee").

In the event of a discrepancy between VDOT and the NEPA commitments or conditions of approval, the NEPA commitments or conditions of approval shall take precedence.

2.4.1 Status of NEPA

In accordance with the requirements of the National Environmental Policy Act ("NEPA") and in cooperation with FHWA, a Draft Environmental Impact Statement (DEIS) was approved by FHWA on May 11, 1990, a Final Environmental Impact Statement (FEIS) was approved by FHWA on January 20, 1993 and a Record of Decision (ROD) was issued by FHWA on April 8, 1993. An Environmental Assessment (EA) was approved by FHWA on November 4, 1994 and a Finding of No Significant Impact (FONSI) was issued by FHWA on July 6, 1995. A Reevaluation and Final Section 4(f) Evaluation was approved by FHWA on March 13, 2000. A Revised ROD was issued by FHWA on March 13, 2000. A Draft Supplemental Environmental Impact Statement (DSEIS) was approved by FHWA on January 29, 2002, a Final Supplemental Environmental Impact Statement (FSEIS) was approved by FHWA on May 29, 2003, and a ROD was issued by FHWA on September 22, 2003. These documents are included in the RFP Information Package.

VDOT and FHWA will revisit NEPA to establish whether the Environmental Impact Statement remains valid. This NEPA related work is expected to be completed in September 2012. As a result, this work might not be completed prior to the award of the Design-Build Contract; therefore, VDOT will be using a Notice To Proceed in two phases. Since Federal regulations limit the amount and type of work that can be performed prior to the completion of the NEPA process, the Offerors shall be familiar with the regulations, limits, and shall comply with the intent of the law. Work that is authorized in the first phase Notice to Proceed (NTP # 1) will focus on preliminary design activities in accordance with Title 23 CFR 636.109 and Appendix A, FHWA Order Number 6640.1A, "FHWA Policy on Permissible Project Related Activities During the NEPA Process," dated October 1, 2010. In addition, Right of Way purchase and utility relocation will be prohibited during first phase Notice to Proceed (NTP # 2) will be authorized after the NEPA work is completed by the FHWA. Upon the issuance of second phase NTP # 2, the Design-Builder shall commence Work on the Final Design, Right of Way Purchase, Utilities Relocation and Construction in

accordance with the Design-Build Contract. Under no circumstances shall the Design-Builder commence Work on the Final Design, Right of Way Purchase, Utilities Relocation and Construction until such time as the NEPA related work is completed and VDOT issues the second phase NTP # 2.

2.4.2 Environmental Document

In accordance with the requirements of the National Environmental Policy Act ("NEPA") and in cooperation with FHWA, a Draft Environmental Impact Statement (DEIS) was approved by FHWA on May 11, 1990, a Final Environmental Impact Statement (FEIS) was approved by FHWA on January 20, 1993 and a Record of Decision (ROD) was issued by FHWA on April 8, 1993. An Environmental Assessment (EA) was approved by FHWA on November 4, 1994 and a Finding of No Significant Impact (FONSI) was issued by FHWA on July 6, 1995. A Reevaluation and Final Section 4(f) Evaluation was approved by FHWA on March 13, 2000. A Revised ROD was issued by FHWA on March 13, 2000. A Draft Supplemental Environmental Impact Statement (DSEIS) was approved by FHWA on January 29, 2002, a Final Supplemental Environmental Impact Statement (FSEIS) was approved by FHWA on May 29, 2003, and a ROD was issued by FHWA on September 22, 2003.

The following mitigation measures have been considered and shall be implemented in the Design-Builder's final design and construction:

- To minimize harm to the Albemarle County School Complex, the cross section of the bypass at this location has been reduced by eliminating the median, crossing the portion of the property near Tributary K on a bridge instead of a fill, and by suppressing the roadway to minimize visual and noise impacts. In addition, the alignment has been shifted to the degree possible to avoid any direct use of the trail behind Jack Jouett Middle School on the Albemarle County School Complex, and the trail behind Mary Greer Elementary School will be reconnected outside of the highway right-of-way. Finally, a fence will be installed along the right-of-way to prevent pedestrian access and disturbed slopes re-vegetated.
- A Section 106 Memorandum of Agreement was executed in 1992, which documents how the adverse effect to Schlessinger Farm will be taken into account. A copy of the MOA can be found in Appendix B of the 1993 FEIS. The MOA is included in the RFP Information Package
- To minimize impacts to the federally listed endangered James River spinymussel located in Ivy Creek, there will be time-of-year restrictions on construction and erosion and sedimentation control measures implemented. In addition, the bypass will cross Tributary K, a tributary to Ivy Creek, on a bridge at this location instead of a fill, further minimizing impacts to the James River spinymussel.
- The design modification at the southern terminus has helped to reduce the length of the bypass in the South Fork Rivanna River Reservoir watershed from 4.2 miles to 3.3 miles. An

extensive stormwater management plan has been developed to protect the South Fork Rivanna River Reservoir. This includes 17 stormwater retention ponds. Of these, the six retention ponds located in the reservoir watershed have been designed as wet ponds to achieve higher pollutant removal efficiency. In addition, concrete curb will be incorporated along fill sections within the reservoir watershed in order to capture 100 percent of the roadway runoff. The runoff will be collected .through a series of curb, median, and ditch inlets and conveyed to the stormwater retention ponds through concrete pipe systems. A monitoring program will be established to measure pollutant concentrations at several outfall locations before, during and after construction. A dry sump area will also be created at the outfall of each drainage system where runoff is conveyed to a wet pond. The sump area will be sized to hold a volume equal to the capacity of a tanker truck, approximately 1,100 cubic feet. Because of these efforts, runoff from approximately 10 acres of existing development outside the project right-of-way in the vicinity of Woodburn Road will be collected and conveyed to the proposed ponds for treatment. This runoff currently drains into the reservoir untreated. Concrete Jersey barrier will be installed along the shoulder of fill sections closest to the reservoir to prevent or provide more positive containment of errant vehicles, especially those carrying hazardous materials. Finally, rock check dams will be used in all of the fill ditches of the proposed roadway within the reservoir's watershed. Turbidity curtains will be used at three locations along the reservoir during construction. A full and detailed accounting of all mitigation measures committed to for purposes of protecting the reservoir from potential impacts can be found in Appendix D of the final SEIS. In addition to those measures already committed to, the Design-Builder shall include the following measures in the final design and construction:

- Baffles will be included in stormwater retention ponds 13-1 and 22-1 to increase the flowpath of runoff so that runoff will be retained longer allowing for more efficient pollutant uptake.
- Perimeter vegetation will be planted around the stormwater retention ponds to increase pollutant removal.
- The stormwater retention ponds will be lined with a membrane to keep any spill material from migrating. In addition, manually operated gate shut-off valves will be provided at the stormwater retention ponds as well.
- A variable-width median will be employed to reduce environmental impacts at sensitive locations and to provide a more aesthetic appearance. In addition, retaining walls will be used to reduce right-of-way impacts.
 - The alignment has been shifted to eliminate impacts to a pet cemetery on property owned by the Society of the Prevention of Cruelty to Animals. In addition, the alignment has been shifted to avoid impacts to the Agnor-Hurt Elementary School which was located in the path of the selected alignment.

FONSI Commitments

- The cemetery near Agnor-Hurt School will be displaced by the termini modifications but may be avoided using special design features. This possibility will be further explored during final design.
- Impacts to wetlands will be limited to the actual areas needed for permanent placement of the bridge piers and the temporary impacts associated with pier excavation and equipment access. Wetland impacts have been minimized in accordance with EO 11990.

Document Re-evaluations for Right-of-Way ("RW") Authorization dated December 18, 2002 and the Plans, Specifications and Estimates ("PS&E") Authorization, and an Environmental Certification/Commitments Checklist (dated September 13, 2011) have also been completed by VDOT. These documents are included in the RFP Information Package.

The reevaluations and certification are initial documents based on RFP plans and currently available information. VDOT shall complete an additional Document Re-evaluation for RW Authorization based on final RW plans and prior to RW authorization. Also, an additional Document Re-evaluation for PS&E Authorization and Environmental Certification/Commitments Checklist will be completed for each, individual construction work plan prior to the VDOT Project Manager releasing each construction authorization package for construction. The Design-Builder shall not proceed with construction until required environmental re-evaluations are completed, approved by FHWA, and the VDOT Project Manager provides written authorization to proceed with each construction package.

The Design-Builder shall carry out the environmental commitments during design, right-ofway acquisition, and construction, as applicable, as identified in each NEPA decision document, the Final Section 4(f) Evaluation, the Reevaluations for RW Authorization and PS&E Authorization, and the Environmental Certification/Commitments Checklists. All commitment compliance shall be supported by appropriate documentation, to be provided by the Design-Builder to the VDOT Project Manager.

The Offeror shall include in the Price Proposal all costs associated with complying with these requirements.

2.4.3 Section 4(f) Resources

During the process of conducting a Section 4(f) Evaluation for the project, VDOT identified two public school properties, Agnor-Hurt Elementary School and the Albemarle County School Complex, adjacent to the Project. VDOT also identified three historic properties, Westover, Schlessinger Farm, and Brook Hill, adjacent to the Project. One figure from the Final Section 4(f) Evaluation illustrates the locations of the public school, public parks and recreation areas. A second

figure illustrates the locations of the historic properties. Both figures are included in the RFP Information Package.

VDOT has attempted throughout the project's development to minimize impacts to all Section 4(f) resources, by either avoiding them entirely, or minimizing the encroachment on the resource to the extent possible. Section J. Measures to Minimize Harm from the Final Section 4(f) Evaluation has been included in the RFP Information package and specifies the measures that were developed as part of the Evaluation to minimize harm to the Albemarle County School Complex. The Design-Builder shall adhere to all of the commitments and measures to minimize harm that came out of the Final Section 4(f) Evaluation dated March 13, 2000.

These are:

- The alignment shall be shifted to the west as shown on Figure 30 (included in the RFP Information Package) to avoid the trail system at Jack Jouett Middle School. Only 771 feet of the trails at Greer Elementary School would be displaced and the displaced sections of the trail will be reconstructed on portions of the property outside the proposed right of way.
- The cross section will be reduced by narrowing the median's width.
- The cross section will be reduced by crossing the stream on bridge instead of earthen fill. (The Design Builder shall build a bridge over the tributary of Ivy Creek and a trail associated with the Albemarle County School Complex as depicted on the 1997 plans, sheets 13-14).
- The Design Builder shall not exceed the direct use of the Albemarle County School Complex indicated in the Final Section 4(f) Evaluation of 12.43 acres.
- The roadway profile will be lowered to reduce the amount of fill and to further reduce the visibility of the new road from activity areas on the school property.
- A fence will be constructed along the right of way to prohibit access on the roadway.
- Cut and fill slopes will be re-vegetated with indigenous tree species, beginning with plantings of seedlings or nursery stock that would gradually mature into larger trees that would help to screen most of the roadway fill from view.
- The County will be fully compensated for property required for the proposed right of way.
- County official indicated they prefer the current natural surface of the trails, so paving of the reconstructed trails should not occur.

There will be no Section 4(f) direct or constructive use of the Agnor-Hurt Elementary School or the Historic Properties of Westover, Schlessinger Farm, and Brook Hill. This resulted from the

fact that the project was designed to avoid any direct or constructive use of these resources. The Design-Builder shall note that any changes in scope proposed by the Design-Builder that is acceptable to VDOT and would involve a direct or constructive use of these resources will require additional environmental technical studies and analysis to be performed by the Design-Builder. VDOT will be responsible for the coordination of any further Section 4(f) Evaluations and associated 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 to the Project.

The Design-Builder shall avoid any other project-related activities on Section 4(f) resources, including but not limited to staging, borrow/disposal, and any temporary or permanent easements. The Design-Builder shall submit written notification to the VDOT Project Manager if the design plans or construction methods necessitate any activity on the resources. VDOT will determine whether additional coordination with FHWA or other agencies is necessary.

All costs associated with complying with these requirements shall be included in the Offeror's lump sum price.

2.4.4 Water Quality Permits

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.

All impacts in waters of the U.S. (including streams and wetlands) will be appropriately mitigated via measures that the regulatory agencies determine acceptable. The Design-Builder is responsible for ensuring that all wetlands and streams are correctly identified and delineated. The Design-Builder is responsible for obtaining jurisdictional verifications, coordination with permitting and environmental advisory agencies, permit application fees, compensation costs for all jurisdictional area impacts associated with the Design-Builder's final construction plans and construction support facilities (e.g. borrow, disposal, staging, etc. areas), and all other activities and costs required for permit acquisition and implementation. Avoidance and minimization of jurisdictional impacts shall be implemented to the greatest extent possible.

The Design-Builder shall be responsible for compliance with pre-construction, constructionrelated permit conditions, as well as post-construction monitoring if required by regulatory agencies.

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.

All costs necessary for permit acquisition and compensation shall be included in the Design-Builder's lump sum price. Any fines associated with environmental permit or regulatory violations shall be the responsibility of the Design-Builder.

2.4.5 **Threatened and Endangered Species**

VDOT has coordinated with Virginia Department of Game and Inland Fisheries (VDGIF), Virginia Department of Conservation and Recreation (VDCR), U.S. Fish and Wildlife Service (FWS), and Federal Highway Administration (FHWA) regarding federal and state listed threatened or endangered (T&E) species.

The Design-Builder shall be advised that new and updated T&E information is continually added to agency databases. The Design-Builder will be responsible for coordination with and obtaining 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.

The Design-Builder shall include in the lump sum price all costs associated with complying with these requirements.

2.4.6 Cultural Resources

VDOT has completed coordination with the Virginia State Historic Preservation Officer ("VA SHPO") in compliance with Section 106 of the National Historic Preservation Act. Three historic properties eligible for listing on the National Register of Historic Places, Westover, Schlessinger Farm, and Brook Hill were identified within the project's area of potential effects. The project was determined to have no effect on Brook Hill and no adverse effect on the Westover historic properties. The project will have an adverse effect on Schlessinger Farm and require adherence to the stipulations outlined in the Memorandum of Agreement dated October 1, 1992. The MOA is included in the RFP Information Package.

The Design-Builder shall avoid any project-related activities on the historic properties, including but not limited to staging, borrow/disposal, and any temporary or permanent easements. The Design-Builder shall submit written notification to the VDOT Project Manager if the design

plans or construction methods necessitate any activity on the historic properties. VDOT will determine whether the VA SHPO must be consulted.

If cultural resource technical studies of compensatory mitigation areas are needed to obtain the water quality permits necessary to construct the project, the Design-Builder shall conduct the necessary studies, coordinate with the SHPO, and implement the appropriate treatment actions resulting from the coordination. The Design-Builder will provide the VDOT Project Manager with a copy of the technical reports and correspondence related to compliance with this technical requirement.

The Design-Builder shall undertake Data Recovery of two archaeological sites: 44AB428 and 44AB430 consistent with the discussion in Section 4.9 Archaeological Resources outlined in the January 29, 2002 Draft SEIS. Section 4.9.2 Data Recovery is included in the RFP Information Package. The Design-Builder will provide the VDOT Project Manager with a copy of the technical reports and correspondence related to compliance with this technical requirement.

All costs associated with complying with these requirements shall be included in the Offerors lump sum price.

2.4.7 Hazardous Materials

VDOT performed a preliminary site assessment in March 1998, and subsurface investigations in July 1998 and April 1999, respectively, to determine the potential for hazardous material and/or contamination within the Project area. The Preliminary Site Assessment Report dated March 1997; Subsurface Investigation Report, dated July 1998; and Subsurface Investigation Report Faulconer Construction Property, dated April 1999 are contained in the RFP Information Package.

The Design-Builder shall consider the following conclusions and recommendations from the Preliminary Site Assessment during the final design and construction of the project:

- Heating oil release at 223 Montvue Drive;
- Possible demolition of several home sites which may have heating oil tanks, asbestos containing building materials (ACM) and lead based paint;
- Potential petroleum impact at the Summers Service Center and CITGO Gas Station (UST facility);
- Abandoned heating oil UST and metal debris stored at the machine shop (T.E. Wood property) located off Hydraulic Road;
- Abandoned former USTs and miscellaneous debris located along Hydraulic Road;

- Creosote coated poles and leaded cable behind the Sprint facility on Rio Road West.
- General site conditions noted at the Faulconer Construction Site;
- Illegal dump site and abandoned USTs located off Woodburn Road; and
- Rivanna Quarry and illegal dumping along Rio Mills Road.
- Several potential environmental problems were noted at the Faulconer Construction site located along Woodburn Road during the site visits where plan sheets indicated a temporary construction detour, permanent drainage easement, and cut area planned for the property. A limited subsurface investigation is recommended for the Faulconer site consisting of three to four soil borings. Groundwater sampling is also recommended by establishing temporary monitor wells, if groundwater is encountered. Laboratory testing should include analysis for petroleum, chlorinated solvents, and heavy metals.
- Additional investigation is also recommended at the properties identified at the Hydraulic Road intersection to determine the extent and potential for impact on roadway construction. One to two soil borings/temporary monitor wells should be established at the machine shop to test for petroleum, chlorinated solvents, and heavy metals. VDOT may also want to consider boreholes at the Summers Service Center site pending location of the geotechnical borehole that reported petroleum odors. Two hand auger borings established to five feet did not encounter petroleum impact at the Service Center property. Although no releases have been reported at the adjacent CITGO site, the deeper recommended borings would also indicate whether a potential release from the CITGO site would have an impact on the project.
- Shallow surficial hand auger borings should be considered at the Sprint facility on Rio Road West to determine if creosote has leached into the ground from the poles stored at the site.
- The scattered illegal dump sites identified near the proposed corridor do not appear to indicate a significant environmental liability other than non-hazardous disposal costs. VDOT should require the property owners to dispose of the debris prior to purchase.
- The heating oil release at 223 Montvue Drive is well documented and currently undergoing remedial activities. Roadway construction will encounter impacted material at this property. Arrangements should be made to minimize worker contact and for disposal of the impacted material, where applicable.

The Design Builder shall consider the following conclusions from the July 1998 Subsurface Investigations Report during the final design and construction of the project:

This investigation was conducted to determine if impacted soils or groundwater would be encountered during roadway improvements relative to suspected use of USTs and/or historical property usage. Residual, dissolved and vapor phase impact was detected at the T. E. Wood property. No subsurface impact was detected at the Faulconer Construction Company property. The metal detector survey at the SPCA did not detect any metal anomalies and, based upon the minimal potential for impact at the SPCA, no subsurface investigation was conducted at the site. Analytical results of the roof shingles along Woodburn Road (Parcel 101) did not detect any asbestos containing materials. No potential ACMs were identified along Hydraulic Road, near the trailer park. No impact is anticipated in the vicinity of the proposed storm water management basin. Potential liability considerations and concerns during right-of-way acquisitions or construction of the proposed Route 29 bypass is as follows:

- VDOT acquired the necessary property rights from the T. E. Wood property (Parcel 060 on sheet 20). The potential of soil and groundwater impact was initially identified at the Wood property during the PSA dated March 1998. Impacted soil and groundwater was confirmed at the Wood property on May 7, 1998. , As the ditch line extending across the Wood property will be a surficial cut. No impacted soils are anticipated during excavation of the proposed ditch line. The Design-Builder shall consider the potential soil and groundwater contamination in their final design.
- The abandoned UST (estimated capacity of 250-500 gallons) still remains at the Wood property. No residual liquids remain in the UST and no sub-grade work is proposed in the vicinity of the abandoned UST. However, VDOT should make the appropriate arrangements for removal of the tank. Impacted soils and potential impacted groundwater is anticipated during excavation and removal of this UST. According to VDEQ PC files, no PC # has been assigned to the Wood property. The TPH-DRO and VOC concentrations discovered during this investigation at this site exceed VDEQ reporting limits of 100 mg/kg (TPH) and will require reporting to the VDEQ.
- No impact is expected during roadway construction activities at the Faulconer Construction Company site or the Albemarle SPCA.
- No asbestos containing material was identified at the dump site along Woodburn Road or along Hydraulic Road near the trailer park.
- The water leaching from the hill slope in the vicinity of the proposed stormwater management system on Parcels 002, 008 and 067 is not impacted.

The Design Builder shall consider the following conclusions from the Faulconer Construction Company Subsurface Investigations Report during the final design and construction of the project: This investigation was conducted to determine if impacted soils or groundwater will be encountered during the, proposed construction activities. Potential environmental concerns associated with this property were also evaluated. During drilling activities no subsurface petroleum impact was detected. Localized areas of petroleum staining were observed around some of the heavy equipment stored on site. Potential liability considerations and concerns during right-of-way acquisitions of the proposed Route 29 bypass is as follows:

- Surficial soil contamination was observed in the AST and equipment storage area located along the fence line on the front of the property. Although the area tested was relatively free of petroleum contamination, areas of moderate petroleum impact may be discovered once the ASTs are removed from the area. Although soil disposal/treatment is not anticipated, if necessary, only moderate amounts will need to be removed from the property.
- Petroleum contamination from the holding pond is not expected to create a significant environmental liability. However, during construction a limited amount of soils immediately around the holding pond may require disposal. The heavier petroleum fractions detected in the pond are much less mobile than other petroleum products such as gasoline or diesel fuel. Migration of heavier petroleum fractions deep into the subsurface is unlikely and is not expected to pose an environmental concern.

The Design-Builder shall have asbestos inspections performed on all structures and buildings owned and/or to be acquired. All structures and buildings shall be inspected according to the Special Provision for Inspection of Structures for Asbestos Containing Material (ACM) on Design-Build Projects. Copies of all inspection results shall be provided to VDOT.

Asbestos abatement and monitoring shall be performed as appropriate prior to demolition or renovation and in accordance with the Special Provision for Removal of Asbestos from Structures for Design-Build Projects and with all federal and state regulations. The Design-Builder shall comply with the Special Provision Copied Note for Demolition Notifications for Structures not Requiring Asbestos Removal on all structures where ACM removal is not required.

Asbestos inspection, abatement, and project monitoring shall be performed by an independent Asbestos Inspector, abatement firm, and Project Monitor 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, Project Designer, or Project Monitor working on the Project.

Structures shown to have lead paint shall be removed in accordance with Section 413.02 and Section 411.08 and 411.09 of the VDOT Road and Bridge specifications.

All solid waste, hazardous waste, and hazardous materials shall be managed in accordance with all applicable federal, state, and local environmental regulations. 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 Design-Builder shall include in the price proposal all costs associated in complying with the above listed inspection and reporting requirements for asbestos and lead paint. The abatement and/or removal of asbestos and lead paint discovered to exist within the Project limits will be paid, if and when necessary, under a Work Order in accordance with Article 9 of Part 4 (General Conditions of Contract).

2.4.8 Air Quality

The following DEQ air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-50-60 et seq., Fugitive Dust precautions; and 9 VAC 5-130 et seq., Open Burning precautions.

All costs associated with complying with these regulations shall be included in the Offerors lump sum price.

2.4.9 **Noise Mitigation**

2.4.9.1 **Permanent Noise Mitigation**

The Design-Builder will provide permanent noise mitigation in compliance with the Virginia State Noise Abatement Policy and the Highway Traffic Noise Impact Analysis Guidance Manual. The final barrier location(s) and dimension(s) will be determined during the final design noise analysis. A Noise Abatement Design Report (NADR) shall be furnished by the Design-Builder at its sole cost and expense. The final noise mitigation design will utilize the design year traffic volumes defined in the reevaluation of the Preliminary Noise Analysis (date to be determined) and associated noise levels.

Upon approval of the Final Design Noise Analysis the Department shall prepare a concurrence letter outlining the results of the analysis for the Department's Chief Engineer and FHWA. Once concurrence is achieved, the Design-Builder shall prepare and mail to benefitted receptors. Upon completion of the citizen survey the Department shall prepare a second concurrence letter documenting the results. All sound walls 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 DesignBuilder at its sole cost and expense. This includes barriers with conditions, as long as those conditions have been met.

Prior to submitting a sound wall plan for the Department'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 are proposed following concurrence from the Chief Engineer or FHWA, then additional documentation will be provided with the plan set when the set is submitted to the Department for review. 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.

The Noise Abatement Section Manager's written approval of the barrier deviation will be required before the Department can approve AFC Construction Documentation.

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

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 may be provided by access doors for personnel. Gaps may be provided in the walls will a 3:1 ratio of barrier overlap.

Sound barrier walls will have a minimum setback from the back of the barrier of at least one foot. The area between the barrier and wall shall be filled to prevent debris from collecting in the area.

Sound barrier wall design will be coordinated with first responders to ensure access to fire hydrants and other emergency equipment.

General notes that state the following will be included:

• "Sound barrier walls will be designed and constructed in accordance with the Special Provisions for Sound Barrier included in the Agreement Requirements."

- "Sound Barrier walls will be designed and constructed in accordance with the roadway crosssections in the plans dated [insert date]/or sheets numbered [insert sheet numbers]."
- "Sound Barrier walls will be designed and constructed in accordance with the soil parameters included in the Geotechnical Data Report dated November 2011 and the Geotechnical Engineering Report [to be prepared by the Design-Builder] during final design."
- "Access doors will be determined prior to fabrication, with review and approval of VDOT maintenance staff."
- "All sound barrier walls will have sound absorptive finish, unless otherwise noted."

The Design-Builder is responsible for obtaining local noise ordinance variances prior to scheduling of night time operations.

The Design-Builder shall begin construction of new sound barriers within 60 days of the demolition of an existing sound barrier. The Design-Builder shall complete construction of any new sound barrier intended to replace an existing sound barrier within 180 days from the start of construction of that sound barrier. If the Contractor is unable to begin construction of a new sound barrier within the 60 day timeframe set forth in Section 2.4.9.1, the Design-Builder shall provide temporary noise mitigation to noise sensitive receptors where the existing noise barriers were removed.

The Offeror shall include in the lump sum price all costs associated with complying with these requirements.

2.4.9.2 **Construction Noise Mitigation**

The Design-Builder's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall be not more than 80 decibels. Noise-sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose. Such activities include those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.

Design-Builder shall monitor construction-related noise if requested by local agencies, the Department or neighboring property owners. If construction noise levels exceed 80 decibels, the Design-Builder shall take corrective action before proceeding with operations.

The Design-Builder shall be responsible for costs associated with the abatement of construction noise and the delay of operations attributable to non-compliance with these requirements.

Design-Builder shall determine whether certain portions of the Project that produce objectionable noise should be restricted or prohibited between 10 PM and 6 AM. If other hours are established by local ordinance, the local ordinance shall govern.

Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment. When feasible, the Design-Builder shall establish haul routes that direct his vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

These requirements are not applicable if the noise produced by sources other than the Design-Builder's operation at the point of reception is greater than the noise from the Design-Builder's operation at the same point.

The Offeror shall include in the lump sum price all costs associated with complying with these requirements

2.4.10 Environmental Compliance

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

As part of the mitigation measures adopted for this project in the September 22, 2003 ROD, a full-time Erosion and Sediment Control Inspector, certified by the Virginia Department of Conservation and Recreation, will be assigned to the project during construction to monitor the erosion and sediment control measures implemented for the project.

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 or any environmental restoration activities associated with violations shall be the responsibility of the Design-Builder.

The Offeror shall include in the Price Proposal all costs associated with complying with these requirements.

2.5 Roadway

The Design-Builder shall meet the minimum requirements identified in Table 1 and Table 2 below during the design and construction of the project.

Bikeways

All bikeways should be in accordance with VDOT standards. Please refer to table 1:

Tal	ole	1:	

Bicycle and Pedestrian Accommodations								
For roads crossing the Proposed US 29 Bypass								
Route	Street Name	Street Name Crossing Type Bicycle Pedestrian*						
654	Barracks Road29 overBicycle Lanes4' Paved Shldr.							
657	Lambs Road657 over4' Paved Shldr.4' Paved Shldr.							
1390	Roslyn Ridge Road1390 over4' Paved Shldr.4' Paved Shldr.							
743	Earlysville Road743 overBicycle Lanes4' Paved Shldr.							
659	59Woodburn Road659 overBicycle Lanes4' Paved Shldr.							
Information from the Albemarle County's Comprehensive Plan								
* Note:	* Note: There were no specific pedestrian recommendation for any of these facilities							
	However there was some general statement on the need for more trails							
	separate from the roadway rather than sidewalks							
	There was also a reference for a trail connecting communities that listed							
	Earlysville (Route 743) in particular.							

Functional Classification

All roads on the project are to be designed to the 2036 design year. Please see the following table for the VDOT/AASHTO geometric design standard, slope design standard, minimum design speed, and minimum and maximum grade for each road and ramp on the project. Note: a maximum grade of 4.5% shall be maintained on the mainline through Stillhouse Mountain. The Department is evaluating the impacts of a lower design speed on the mainline through Stillhouse Mountain. Based on the results of this evaluation, the Department may issue an addendum if the geometric standard requires revision.

Roadway Name	Main Line	Interchange Ramps	Route 250 Bypass	(1) Leonard Sandridge Road	Faulconer Drive	(1) Lambs Road (Route 657)	Roslyn Ridge Road	Earlysville Road (Route 743)	Squirrel Ridge Road	(1) Woodburn Road (Route 659)	Old Ivy Road	lvy Road
Design Speed (mph)	60	50% Mainline Speed	60	30	20	30	25	50	20	30	40	50
²⁾ Average Daily Traffic ea)	~ 32,300	-	~ 74,000	~ 13,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	~ 25,200
Percent Frucks (%)	~ 9	-	~ 8	~ 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	~ 9
Functional Class	Urban, Other Princiapl Arterial	Interchange Ramps	Urban, Other Principal Arterial	Urban Local Street System, Shoulder Design	Service Road	Urban Local Street System, Shoulder Design	Urban Local Street System, Shoulder Design	Urban Minor Arterial, Shoulder Design	Service Road	Urban Local Street System	Urban, Collector Street, Shoulder Design	Urban, Principal Arterial, Rolling Terrain, Shoulder Design
'errain	Rolling	-	Rolling	Rolling	-	Rolling	-	Rolling	-	Rolling	Rolling	Rolling
/DOT Geometric Design Standard	GS-5	GS-R	GS-5	GS-8	GS-9	GS-8	Subdivision Street	GS-6	GS-9	GS-8	GS-5	GS-5
Slope Design Standard	CS-4	CS-4	CS-4	GS-8	GS-9	GS-8	2:1	GS-6	GS-9	CS-3	GS-5	CS-4
Minimum Grade (%)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	0.5	0.5
Aaximum Grade (%)	6*	(GS-R)	6	(GS-8)	11	(GS-8)	-	7	11	(GS-8)	-	6
Median	40 ft. min, depressed (RDM Sec. 2E-3), GS-1 and GS-13 slopes Independent Grading: Variable width, GS-11 and CS-4 slopes	Not Applicable	Raised, grass, 16 ft, wide (face to face of curb)	-	-	-	-	-	-	-	-	Raised, grass, 4.8m wide (face to face of curb)
LOS	С	С	С	С	-	-	-	-	-	-	-	-
Notes:					1			1	1	1		I
(1)						an GS-4, Loo						
(2)	Traffic volu				ses only. ortation p		ctions will	be refined b	y the de	sign-build team t	hrough da	ta collec

Table 2: Criteria for Roadway Design

* A maximum grade of 4.5% shall be maintained on the mainline through Stillhouse Mountain. The Department is evaluating the impacts of a lower design speed on the mainline through Stillhouse Mountain. Based on the results of this evaluation, the Department may issue an addendum if the geometric standard requires revision.

Proposed Improvements

The Project includes construction of a new four-lane divided, limited access bypass to the west of existing U.S. Route 29 Business to relieve congestion on existing U.S. Route 29 Business and to improve the movement of through traffic. The construction would extend from U.S. Route 29/250 Bypass and the North Grounds of the University of Virginia on the south end to existing U.S. Route 29 north of the South Fork Rivanna River on the north end. In addition, the Project includes full directional termini at the southern end to connect to both US 29/250 Bypass and Leonard Sandridge Road, as well as a full directional interchange on the north end to connect to existing U.S. Route 29. Access to the new highway will be provided through termini at both ends, with no intermediate public access points to crossroads or adjacent properties, except a private access point for the Rivanna River Water Authority's facilities. This access point is to be provided off the northbound lanes at a location approximately 260 meters south of the Barracks Road crossing. All termini and ramp terminals shall be designed to accommodate, as a minimum, a WB-67 design vehicle from all directions.

New guardrail shall be designed and installed where required throughout the project limits. Existing guardrail within the construction limits that does not currently meet VDOT standards shall be brought up to current standards. In an effort to maintain a parkway-like feel, concrete median barriers shall not be included in the permanent construction except where shown on the original plans prepared by Parsons Brinckerhoff.

2.5.1 Termini

Southern Terminus

The southern terminus provides full access to and from proposed US Route 29 Bypass, US 29/250 Bypass, and Leonard Sandridge Road. It is anticipated, although not required, that US 29/250 Bypass will be configured such that it is the "mainline" with US Route 29 Bypass and Leonard Sandridge Road going over it, leaving US 29/250 Bypass free flow to through traffic. US Route 29 and Leonard Sandridge Road would then be accessed via ramps to and from US 29/250 Bypass. Full directional access shall be maintained for US 29/250 Bypass and Leonard Sandridge Road, but indirect access (e.g. median u-turns) is acceptable. The total terminus level of service (LOS) shall be "C" or better in the 2036 Design Year.

All merge and weave areas are considered separately from terminus level of service and must meet level of service C. LOS requirements shall be met in AM and PM peak hours in the 2036 Design Year. In addition, Leonard Sandridge Road is a route used by university traffic during sporting events. Queue lengths during peak hours and sporting events should be minimized on US 29/250 Bypass and at no time should turning vehicles impede the flow of traffic on US 29/250 Bypass, US 29, or US 29 Bypass.

Northern Terminus

The northern terminus provides full access to and from proposed US Route 29 Bypass and US 29. Full directional access shall be maintained for US 29. It is anticipated, although not required, that northbound US 29 and southbound US 29 Bypass will be configured such that they are free flow. The total terminus LOS shall be "C" or better in the 2036 Design Year.

All merge and weave areas are considered separately from terminus level of service and must meet level of service C. LOS requirements shall be met in AM and PM peak hours in the 2036 Design Year. Queue lengths during peak hours should be minimized on US 29 Bypass and US 29 and at no time should turning vehicles impede the flow of traffic on US 29 Bypass or US 29.

2.6 Structures

General

Construction and demolition of any superstructures and substructures shall be staged as necessary to maintain travel lanes on Route 29, Route 250 and secondary roads in accordance with the approved Traffic Management Plan to be developed by the Design-Builder. A demolition and erection plan shall be developed by the Design-Builder and submitted to VDOT for review and approval prior to proceeding with final design. The demolition and erection plan shall include, but is not limited to, details of protection of the underlying roadway and users.

The proposed bridges shall be designed using AASHTO *LRFD Bridge Design Specifications*, 5th Edition, 2010 Interim Specifications; most current version of VDOT Modifications (IIM-S&B-80 or latest revision).

AASHTO HL-93 loading shall be used for the live load design capacity.

The Design-Builder is prohibited from deviation from any of VDOT's bridge standards without allowance granted in this document or prior approval from VDOT. VDOT's Standard Details, including VDOT Design Aids, are available from the VDOT Website at <u>http://www.virginiadot.org/business/bridge-manuals.asp</u>. These standards, design aids and typical details shall be used to the maximum extent possible in the development of the plans. Future wearing surface loads and construction tolerance loads shall be utilized in accordance with IIM-S&B-80.

The proposed structures shall utilize low permeability concrete in accordance with the Special Provision for Low Permeability Concretes for Design-Build Projects.

Corrosion Resistant Reinforcing Steel shall be utilized in accordance with VDOT IIM-S&B-81. Plain deformed reinforcing bars shall conform to ASTM A615 Grade 60. Epoxy coated reinforcing steel shall not be used. The Design-Builder shall construct bridges over the trail system shown on sheets 13 and 14 located in the RFP Information Package from station 192+40.00 to 195+15.00. (Please be advised these plans are in metric units.)

Bridge Layout

The Offeror will be required to submit a preliminary type, size and location plan, including erection plan/framing plan, of the proposed bridges to VDOT for review and approval prior to proceeding with final design. Bridge type and layout shall be based on reducing long term maintenance costs for VDOT. Bridges shall be jointless and integral in accordance with VDOT S&B Manual – Vol. V Part 2, Chapter 20 unless geometry prohibits otherwise.

Minimum vertical clearance shall be 16'-6" (refer to the Structural Guidelines) and held across the full roadway cross section, including the paved and graded shoulders. All horizontal clearances shall meet guidelines of VDOT Vol. V Part 2.

As part of VDOT's requirements, a Major Structure Report including foundation recommendations for each proposed bridge shall be submitted for review and approval prior to the submittal of final foundation construction plans and shall be signed and sealed by a Professional Engineer registered and licensed in the Commonwealth of Virginia.

As part of VDOT's requirements, a hydraulic and/or hydrology study shall be performed for any water crossing and the results incorporated into the preliminary bridge drawings as per the VDOT Drainage Manual.

Superstructure

Either prestressed concrete or structural steel beams/girders may be used and shall be designed as composite with the cast-in-place deck. No timber bridge elements of any kind will be acceptable in the proposed structure.

For bridges using structural steel as primary beam/girder material, The use of steel box (or tub) girders is prohibited. The use of HPS (high performance steel) 70 ksi is permitted, but the use of HPS 100 ksi will not be permitted. Cover plates on continuous rolled beam sections and longitudinal stiffeners shall not be used. No field welding to structural steel members, primary or secondary, shall be permitted except as allowed by the VDOT Manual of Structure and Bridge Division, Vol. V. Bridge designs should not utilize fracture critical components. Every effort shall be made to avoid the use of fatigue prone details. Should VDOT determine that any fatigue prone detail is not warranted, the DB shall be responsible for all changes and associated costs. Weathering steel shall be used for all members when a bridge structure uses structural steel for main members, excluding structures deemed fracture critical.

Uncoated weathering steel may be used but is subject to FHWA Technical Advisory 5140.22 and the following:

- Painting of the steel shall be required for the following areas over and beyond the limits in the specifications:
 - o Jointless structures:
 - Structures over pedestrian traffic: All steel shall be painted
 - Structures over vehicular traffic: Paint the entire fascia surface
 - Structures not over traffic: Paint per VDOT Standard Specifications or the entire fascia surface (depending on district preference)
 - o Jointed structures:
 - Structures over pedestrian traffic: All steel shall be painted
 - Structures over vehicular traffic: Per the specification with exception to add the entire bottom flange and bottom 6" of web
 - Structures not over traffic: Paint per VDOT Standard Specifications

For bridges using concrete as primary beam/girder material, the VDOT Standard Bulb-T (PCBT) sections adopted by VDOT shall be utilized in accordance with VDOT S&B Vol. V. The usage of AASHTO shapes will require VDOT approval. The use of precast reinforced concrete three-sided structures or four-sided multi-cell boxes is not permitted. Segmental construction of any kind (post-tensioned box beams or spliced girders) is prohibited. Voided Slab sections may be used with VDOT approval. The use of HPC (high performance concrete) for prestressed concrete beams in excess of 8,000 psi concrete strength will be considered but ultimately will require approval by the State Structure and Bridge Engineer.

In Section 2.5.2.6.3 Criteria for Span to Depth Ratios shall be mandatory. In Section 2.5.2.6.2 of the AASHTO LRFD Bridge Design Specifications, all criteria for deflection shall be mandatory. A live load deflection of L/1000 shall be adhered to for bridges supporting pedestrian or bicycle traffic. All other bridges must meet a live load deflection limit of L/800.

Structural approach slabs will be required at each end of all bridges on this Project. Approach slabs and any sleeper pads shall be constructed with asphalt overlay and conform to the requirements of the VDOT *Manual of the Structure and Bridge Division*, Volume V – Parts 2 and 3.

Adequate drainage for the bridge structure must be provided; in particular, the designed system must be able to drain and control water that is on the deck. Bridge deck drainage analysis and design shall be performed in accordance with the latest version of FHWA Publication HEC21-Design of Bridge Deck Drainage, and the VDOT Drainage Manual. All deck drainage must comply with both water quality and water quantity requirements per VDOT guidance documents identified in the RFP, Virginia Stormwater Management Program Regulations, and any specific requirements or commitments identified in the RFP, with specific attention to water quality impacts to the South Rivanna River Reservoir.

Substructure

All substructure units shall meet the crash-load guidelines of AASHTO 3.6.5 "Vehicular Collision Forces" but with the revisions outlined in the Attachment B.

When spread footings are proposed, the Offeror shall conform to Section 401 of VDOT Road and Bridge Specifications 2007, Structure Excavation. The Design-Builder shall ensure that all recommendations related to the suitability of foundation material for spread footings at the time of construction are made in the field by a geotechnical engineer licensed in the Commonwealth of Virginia.

Miscellaneous

A VDOT Standard BR27C Railing shall be used on all bridges in accordance with VDOT S&B Manual – Vol. V Part 2. In the event a crash-test rating of TL-5 is required, the design-builder shall provide an acceptable barrier design and associated bridge conduit system details to VDOT for review and meet the requirements specified in the VDOT Structures and Bridge Manual Volume V Part 2, Chapter 25.

The bridges shall be designed to support the following utilities to include their associated structural supports and/or hangers:

- Highway lighting shall be accommodated on all bridges, including the installation of appropriate conduit system for proposed BCS-27C railings.
- Under-bridge lighting shall be provided on all bridges which pass over vehicular or pedestrian traffic.
- Conduit and cable for signal interconnection.
- Any other utilities for which the relocation design requires attachment to bridge superstructure

Architectural treatment shall be used on the following concrete bridge elements:

- Both faces of the bridge railing and terminal wall section(s) all bridges
 - Note: Aesthetic treatments on sides of elements exposed to traffic shall meet maximum relief guidelines given in VDOT Vol. V Part 2, Chapter 25.
- Exterior face of wingwalls for any bridges with vehicular or pedestrian traffic going under
- And/or pier(s) remaining visible to vehicular or pedestrian traffic either going over the bridge or under after construction completed for bridges.

All Aesthetics must meet the criteria outlined in VDOT Vol V Part 2, Chapter 25. Architectural treatment shall simulate coarse stone. Individual stone lengths shall vary randomly from 3" to 24". Stone relief shall resemble drystack stone and shall meet the requirements of the Structure and Bridge Manual Volume 5 Part 2 Chapter 25.03-5. Various formliners arranged in

various combinations shall be used to produce a continuous-coarsed stone pattern without obvious repetition of the pattern.

The steel railing shall be galvanized and after galvanization the steel shall be washed and painted in accordance with Section 411 of the VDOT Road and Bridge Specifications (Brown, Federal Color No. 595-20059).

2.6.1 Structure Load Ratings

The following structure load ratings analyses and reports will be required to be submitted by the Design-Builder to VDOT and approved prior to opening the structure to traffic (whether temporary or permanent traffic configuration). These represent hold points in the Design-Builder's CPM Schedule:

- 1. A load rating is required when a newly constructed structure or phased portion of the new structure is intended to carry traffic in a temporary configuration.
- 2. A final, As-Built, load rating analysis of the new structure reflecting traffic in its final configuration. This load rating should incorporate any As-Built changes that may have been made, which in the judgment of the Engineer will affect the load rating (e.g., minor changes to stiffener or diaphragm locations may not affect a load rating).

The structure load ratings shall be performed in accordance with VDOT Structure and Bridge Division Instructional and Informational Memorandum ("I&IM") Number IIM-S&B-86 or the latest revision; AASHTO Manual of Bridge Evaluation, 1st Edition, 2008; and 23CFR650 Subpart C – National Bridge Inspection Standards ("NBIS"), Subsection 650.301. The Design-Builder shall perform load ratings on bridge superstructures using Load and Resistance Factor Rating method for NBIS rating for the AASHTO HL-93 design loading, the blanket permit vehicle (90K and 115K) and Virginia's Legal Load vehicles as specified in IIM-S&B-86 or the latest revision.

All load ratings for the completed structure other than steel curved girders/beams shall be performed using the current VDOT approved version of the AASHTOW are VIRTIS software. Steel curved girders/beams shall be rated using DESCUS unless approved otherwise by VDOT. Any other computer based rating software shall be submitted for review and approval by VDOT to include a letter explaining the intended use of the software.

The Design-Builder shall prepare and deliver to VDOT a load rating report for the completed structure. This report shall contain a completed copy of VDOT's current load rating summary sheet referencing the controlling structural element(s) signed by a professional engineer licensed in Virginia, rating assumptions, pertinent analysis calculations and VIRTIS, DESCUS or other approved computer input as appropriate. In addition, a compact disk ("CD") containing the load rating input files for VIRTIS, DESCUS or other approved computer programs shall be delivered to the

Department with the report. The report shall be submitted within ninety days upon opening the structure or portion of the structure to traffic in accordance with IIM-S&B-86 or the latest revision.

No structure shall be placed into service if a Load Restriction (Posting) is required based upon the load rating analysis. The Design-Builder is responsible for all remedial measures and associated costs to make corrections to the design or as-built bridge.

2.6.2 Shop Drawings

The Design-Builder shall review and approve working/shop drawings and submit three approved sets to VDOT for the proposed bridge structure. Reference should be made to Article 105.10 of VDOT Road & Bridge Specifications 2007.

2.6.3 FHWA Bridge Construction Unit Cost Report

For the proposed bridge structure, the Design-Builder shall submit Estimated Quantities along with the associated unit costs for all standard and non-standard items in the final bridge plan submittal. The bridge unit cost data is required to complete VDOT's annual Bridge Construction Unit Cost Report which is provided to FHWA. This data shall be submitted to VDOT within 90 days of the VDOT's approval of the construction plan submittal.

2.6.4 Safety and Acceptance Inspection for the Proposed Bridges

Acceptance of a bridge structure will require the following two independent inspections by VDOT:

1. A satisfactory safety/inventory inspection by VDOT as described below is required prior to Substantial Completion and opening the structure or portion of the structure to public traffic. This safety/inventory inspection by VDOT will serve as the initial inspection of the structure. Data gathered will include location, date completed, alignment, description, horizontal/vertical clearances, structure element description and condition data, and traffic safety features. Such inspections will be required prior to opening any newly constructed portion or phase of the bridge to traffic.

2. A satisfactory final construction inspection by VDOT is required prior to Final Acceptance of the structure.

To facilitate inspection of the structure by VDOT, the Design-Builder shall ensure that all structural elements are accessible and shall provide adequate resources including:

- Man-lifts, bucket trucks, under bridge inspection vehicles, boats, or other equipment necessary to inspect the structure as well as properly trained staff of sufficient composition to support the inspections.
- Plans, procedures, personnel, and equipment to implement traffic control measures.

The Design-Builder shall provide a minimum of thirty (30) days notice to VDOT whenever it requires VDOT to undertake an inspection. The Design-Builder's notice to VDOT shall include asbuilt drawings, traffic control procedures, a description of the items to be inspected and an anticipated schedule for the inspections, all in accordance with the requirements contained in the Shop Drawings Section.

Unless otherwise approved by VDOT, structures shall be substantially complete (i.e. roadway, and slopes on the approaches and underneath the structure are already in place) before the final construction inspection will be performed.

2.6.5 Railroad Crossing

For the Southern interchange, the Design-Builder should consider alternatives that would avoid the replacement or modifications to the existing bridge structure carrying the CSX Railroad over existing Route 29/250. In the event that replacement or modifications are necessary all services and costs related to the railroad underpass shall be the responsibility of the Design-Builder.

The Design-Builder will be required to coordinate the design of the replacement structure or any structural modification with the CSX railroad and their consultant representative and to enter into a construction agreement with the Railroad prior to commencing any construction activities. Such agreement and related force account estimates are subject to the review and approval of VDOT.

This section provides information for work requirements and coordination with CSX by the Design-Builder. The Design-Builder shall incorporate the appropriate railroad design and construction requirements for railroad crossings and any roadway that may parallel or encroach on CSX railroad right-of-way. Designs impacting on CSX railroad right-of-way shall meet or exceed the applicable requirements or criteria, as provided by the railroads.

Additional requirements regarding the Design-Builder's designs, work and coordination, review, and approval of that work by CSX is found in the CSX Construction Submission Criteria, CSX Criteria for Overhead Bridges, CSX Special Provisions and CSX Insurance Requirements documents and in the Division I Amendments (Part 5) to the Standard Specifications, all as supplemented and/or amended herein and Special Provision Section 107.19 Railway-Highway Provisions.

Minimum allowable clearance above the highest rail is <u>twenty-three (23)</u> feet vertically, and <u>twenty five (25)</u> feet horizontally measured perpendicular from the centerline of the track, as depicted in the original plans (included in the Supplemental Information Package) but should be coordinated precisely with the Railroad. Design-Builder shall refer to CSX Criteria for Overhead Bridges and Standard Clearances for Overhead Structures.

The Design-Builder shall coordinate directly with CSX's General Engineering Consultant and VDOT during the design phase of the project. Up to forty-five (45) days will be required to review

all design submissions. Up to an additional forty-five (45) days will be required to review any subsequent submissions returned not approved. The Design-Builder shall coordinate all design for any proposed overpasses or underpasses of CSX with VDOT at the following address:

Mr(s)	
	-
	-
Telephone: ()	-

The Design-Builder shall coordinate all construction related correspondence for the construction for any proposed overpasses or underpasses of CSX directly with VDOT, acting as the Construction Monitoring Representative (CMR). Up to forty-five (45) days will be required to review all construction submissions. Up to an additional forty-five (45) days will be required to review any subsequent submissions returned not approved. Revision to Design-Builder's submissions may not be field approved. Any deviations from a previously accepted plan, including crane substitutions, will require a formal resubmission of the procedure for review and acceptance prior to performing any work. The Design-Builder shall coordinate with the following contact and address:

Upon receipt of notification, the CMR will direct the Design-Builder to the local CSX construction contact for the project. All communication and correspondence with VDOT, the CMR and CSX shall reference the location as: Albemarle County, VA and Milepost as _____, ____ Division, _____ Subdivision and OP#VA____.

The Design-Builder shall not enter into any agreement with any governmental authority with jurisdiction over any Governmental Approval, Utility Owner, Railroad, property owner, or other third party having regulatory jurisdiction over any aspect of the Project or Work or having any property interest affected by the Project or the Work that in any way purports to obligate VDOT, or states or implies that VDOT has obligation, to the third party to carry out any activity during or after the end of the Term, unless VDOT otherwise approves in writing in its sole discretion. The Design-Builder has no power or authority to enter into any such agreement with a third party in the name or on behalf of VDOT.

The Design-Builder must coordinate all work activities on, over or directly adjacent to Railroad right-of-way daily with Railroad's designated or authorized representative in order to complete this project safely and efficiently.

The Design-Builder must not use CSX right-of-way for storage of materials or equipment during construction. The CSX right-of-way must remain clear at all times. If the Design-Builder has no other means of storage of materials, CSX may allow the Design-Builder to apply for a Lease Agreement between CSX and the Design-Builder. The application is found online at <u>www.csx.com</u>. Said lease will be at the sole cost of the Design-Builder with no additional cost to or reimbursement from VDOT.

All grading or construction machinery that is left parked near the track unattended shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Design-Builder shall protect, defend, indemnify and save Railroad, as far as state law will allow, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Design-Builder's failure to immobilize grading or construction machinery.

Upon completion of the work, the Design-Builder shall remove from within the limits of the Railroad rights of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Design-Builder, and leave said rights of way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative. All erosion control items installed for the protection of Railroad property shall be removed after the Design-Builder has received approval from the railroad authorized CMR.

A Railroad Construction Agreement must be drafted between the Design-Builder, VDOT, and CSX. The Design-Builder shall abide by the provisions of the Railroad Construction Agreement. Periodically, throughout the project duration, the Design-Builder will be required to meet, discuss, and if necessary, take immediate action at the discretion of the CMR or Railroad personnel to comply with provisions of that agreement and these specifications.

This project will require use of CSX Flagmen to protect train operations from project activity in the area of the tracks. While CSX cannot guarantee the availability of flagmen at all requested times, every accommodation will be extended to the Contractor when forces are available. Flagging requests should be made to CSX Roadmaster, Mr. _____ at cell (___) ____ at least thirty (30) days in advance. Termination or cancellation of a flagman requires ten (10) days notice to avoid incurring costs.

The Department has estimated that <u>hours</u> for Railroad flagging service will be required for this Project if a complete bridge replacement is required. VDOT will reimburse CSX for the cost of this service as a project expense in accordance with the Railroad Construction Agreement and shall not be included in the Offerors Lump Sum Bid. If these estimated hours are exceeded and VDOT is required to reimburse CSX for the cost associated with the hours exceeding those established above,

the excess amount to reimburse CSX will be deducted from the payment due the Design-Builder's current Application of Payment. As such, the total Contract Amount will continue to be reduced accordingly.

No work shall be undertaken on, over or adjacent to the facilities owned by CSX until the flagman (or flagmen) is present at the job site. The Railroad has sole authority to determine the need for flagging required to protect its operations. The requirements of such services will be whenever the Design-Builder's personnel or equipment are or are likely to be, working on the Railroad's rightof-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent, that in the Railroad's opinion, the movement of trains must be controlled by flagging. The Design-Builder's work requiring railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of fifty (50) hours per week. The Design-Builder shall receive Railroad approval of work schedules requiring a flagman's presence in excess of forty (40) hours per week, and is additionally subject to the holidays, standard days off, or other work day restrictions of the Railroad. Please note: Actual track time available on any given day may vary. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for, or requested on an on-call basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. If, after the flagman is assigned to the project site, a Railroad emergency arises that requires the flagman's presence elsewhere, then the Design-Builder shall delay work on Railroad right-of-way until such time as the flagman is again available. VDOT will not be responsible for any additional payments to or claims from the Design-Builder resulting from any such delays and resulting expenses incurred by Design-Builder except that an extension of time may be considered.

Additional requirements regarding flagging are found in Division I Amendments (Part 5) to the Standard Specifications, Section 107.19 Railroad-Highway Provisions.

Insurance policies will be required to be in place and approved prior to any work commencing on or that could potentially impact CSX Railroad right-of-way and tracks. Design-Builder shall submit all required insurance information in accordance with the current CSX Railroad Insurance Standards for approval (Division I Amendments (Part 5) to the Standard Specifications, Section 107.19 and Special Provision 107.19 which contains additional information). The complete original policies should be submitted to:

Manager – Insurance CSX Transportation, Inc.

Phone:	
Fax:	
Email:	

The Design-Builder will be required to maintain all areas adjacent to, over, or impacting the railroad, until such time as final completion has been accepted by CSX/VDOT begins its maintenance of the area and provides a release of such maintenance. During the prosecution of work, however periodic, and during non-work periods, the Design-Builder will maintain its responsibilities with respect to CSX and the use of any right-of-way under CSX's control.

It will be the Design-Builder's sole responsibility to reimburse Railroad for actual loss and expense incurred or suffered by Railroad in the event Railroad must stop, delay or detour trains by reason of Design-Builder or any sub-contractor under contract to the Design-Builder actions which results in substandard clearances, fouling, blocking or creating any other obstruction or unsafe condition of Railroad's tracks and right-of-way which prevents the free passage and operation of trains on Railroad's tracks and right-of-way. VDOT will not be responsible for any additional payments to or claims from the Design-Builder resulting from any such delays and resulting expenses incurred by Railroad except that an extension of time may be considered.

Unless otherwise noted, the costs of all work required by this Section and any referenced material or requirements, including but not limited to, insurance, compliance with CSX safety requirements, planning, design standards, scheduling, correspondence, coordination, erection plans, shoring plans, track monitoring and demolition plans, designs by a registered Professional Engineer in the Commonwealth of Virginia, shall be included in the Offerors Lump Sum Bid. No separate measurement or payment will be made for the work involved or the costs of complying with the CSX design and construction requirements contained in the RFP documents and herein unless specifically listed as pay items in other contract documents.

2.7 Survey

In 1995, on behalf of VDOT, Parsons Brinckerhoff contracted with Rouse-Sirine Associates to prepare complete field survey and mapping conforming to then-current VDOT standards. Aerial photography with targets suitable for photogrammetric mapping was obtained in May of 1996 and final mapping was completed in December of 1998. The Design-Builder shall be responsible for setting all Right-of-Way Monuments in accordance with the VDOT Survey Manual. The Design-Builder will be responsible for providing new survey and mapping necessary to prepare project final design plans to meet current VDOT requirements.

Offerors should be aware that Virginia Code 33.1-94 requires that notice "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 Design-Builder will be responsible to reset or relocate any survey control damaged, destroyed or within the foot print of the final design construction limits. The control will be reestablished by a land surveyor licensed in the Commonwealth of Virginia with LD-200 information and supporting computations submitted to the Project Manager.

Request for Proposals	Route 29 / Charlottesville Bypass
Part 2	Albemarle County, Virginia
Technical Information and Requirements	State Project No. 0029-002-844
	Contract ID No. C00102419DB44

The Design-Builder shall be responsible for setting all Right-of-Way monuments according to the survey manual. RM-2 type monuments will be required.

2.8 Geotechnical Work

A supplemental preliminary subsurface geotechnical investigation is currently being prepared by VDOT. The results of the investigation will be documented in a Geotechnical Data Report (GDR) and provided to the Offerors via an Addendum to this RFP. The primary purpose of the geotechnical investigation will be to describe the near-surface nature of soils and characterization of, or depth to, rock for earthwork considerations, estimation of rock excavation quantities and structure foundation types and depths. The GDR will also provide minimum pavement structure design requirements for new mainline and shoulder areas and provide existing pavement structure information and overlay design for sections of Route 250 and Route 29. The minimum pavement structure design-Builder performs the final geotechnical engineering investigation.

In 1997, the Virginia Department of Transportation completed preliminary subsurface geotechnical investigations and the results are reported in the 1997 Geotechnical Study included in the Supplemental Information Package. A supplemental preliminary subsurface geotechnical investigation is currently being prepared by VDOT. The results of the investigation will be documented in a Geotechnical Data Report and provided to the prospective Design Builders. The primary purpose of the geotechnical investigation will be to provide information to the Design Builders regarding the depth of rock within the Project alignment, for use in determining rock excavation quantities and structure foundation types and sizes. The preliminary geotechnical data is provided for Design Builders' information in accordance with Section 102.04 of Division I Amendments to the Standard Specifications and should be verified by the Design-Builder. It shall be the responsibility of the successful Design-Builder to perform additional subsurface investigations sufficient to meet or exceed both Chapter 3 of the VDOT Manual of Instructions ("MOI") for Material Division and Section 700.04(c) of the VDOT Road and Bridge Specifications. Any design and subsurface information provided by VDOT must be validated, augmented, and certified by the Design Manager as necessary to provide the final design.

Design Builder's Scope of Work will include geotechnical engineering services in accordance with VDOT Manual of Instructions for Geotechnical Design. Such geotechnical engineering services shall meet the specific needs of the Design-Builder's particular design.

The Design-Builder is required to perform supplemental design level geotechnical investigations to validate the preliminary design information included in this RFP and any future addendums. The geotechnical engineering investigation performed by the Design-Builder shall meet or exceed both Chapter 3 of the VDOT Manual of Instructions ("MOI") for Material Division and Section 700.04(c) of the VDOT Road and Bridge Specifications.

The Design-Builder shall collect appropriate data for geotechnical evaluation of embankments, soil cuts, rock cuts, retaining walls, signal pole foundations, culverts, storm water management facilities, bridge structures, minor structures (including drainage pipes), and any other earth supported structures or elements of highway design and construction. The Design-Builder will be responsible for obtaining all permits required for any additional borings needed in performance of the Design-Builder's geotechnical investigation for this Project. 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, aggregate, 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.

In addition to being included in the Project Geotechnical Engineering Report, the Design-Builder shall provide electronic copies of all subsurface explorations in accordance with the boring log template available on the website address included in Chapter 3 of the VDOT MOI's for Materials Division. The electronic files shall be provided by a certified professional geologist or a registered professional engineer in the Commonwealth of Virginia, in gINT[©] software. Upon request, VDOT will provide the gINT files created from the previous and current investigations.

Where applicable, the Design-Builder shall incorporate reliability assessments in conjunction with standard analysis methods. 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 Geo-environmental Engineering, ASCE, Discussions and Closure August 2001. A suitable design will provide a probability of success equal to or greater than 99.9 percent. The aspects of this Project for which reliability assessments shall be made include the selection of soil parameters used in the design of all foundations and retaining walls and the factors of safety for slope stability. Except as mentioned above, reliability assessments need not be performed for structural foundations and retaining walls, which will be evaluated based on the required limit states in LRFD. 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. The Department may, in its sole discretion, accept or reject such proposed methods.

The Design-Builder shall submit to the Department for its review all geotechnical design and construction memoranda and/or reports that summarize pertinent subsurface investigations, test, and geotechnical engineering evaluations and recommendations utilized in support of their design/construction documents. This submittal shall be made at least 90 days in advance of the submittal of any final design/construction documents that is dependent upon the geotechnical evaluations and recommendations. To accommodate the actual design and construction schedule deemed appropriate by the Design-Builder, numerous Design Memoranda may be submitted in lieu of a Geotechnical Design Report, with a Final Geotechnical Design Report submitted after all Design Memoranda have been submitted and accepted. 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 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.

2.8.1 Minimum Pavement Sections

Minimum pavement sections and the anticipated locations for these sections will be provided for proposal preparation purposes only. If the Design-Builder confirms that the minimum pavement sections are inadequate for actual design/construction conditions, it shall notify VDOT during the Scope Validation Period of the necessary changes and proposed price adjustments, if any. Acceptable changes are limited to increasing the thickness of the base or subbase layers specified below. Any changes to the minimum pavement sections noted below must be approved by VDOT prior to implementation. The Design-Builder shall be responsible for the final design and construction of the pavements for this Project as approved by VDOT and in accordance with the Contract Documents.

The Design-Builder shall prepare and incorporate the validated pavement sections into the plans, typical sections, profiles and cross-sections in accordance with the applicable manuals noted in Section 2.1.1 of this document. This includes drainage and subdrainage requirements to ensure positive drainage both within the pavement structure and on the pavement surface.

A preliminary pavement design was prepared when the Project was originally developed. However, since the Project has been delayed and the preliminary report assumed that the Project would have been constructed years prior, the minimum pavement sections as well as the mill and pavement build-ups are being updated. The minimum pavement sections for new mainline, shoulder, and secondary roads will be included in the GDR set to be released in an Addendum to this RFP.

2.8.2 Geotechnical Requirements

2.8.2.1 Settlement

The Design-Builder shall analyze methods to minimize differential settlement of the approach to the bridge (bump at the bridge) for new construction and provide construction recommendations to address soil-structure interaction to accommodate the unique construction methods applied to this Project. All geotechnical work shall be completed to satisfy baseline and post-construction contract performance requirements. Design and construct pavements, subgrades, and embankments to include new construction at the tie-ins to existing bridge structures shall meet the following post-construction settlement tolerances:

- Total vertical settlement less than two inches over the initial 20-years, and less than one inch over the initial 20-years within 100' of bridge abutments.
- Settlement that will not impede positive drainage of the pavement surface especially within the travel lanes nor subject the roadway to flooding in area where it is applicable;
- Settlement that does not result in damage to adjacent or underlying structures, including utilities and that does not impede positive drainage of the pavement surface especially within the travel lanes.
- For pavement sections of approach slabs, bridge decks, and tie-ins to the Project, grade tolerances shall be measured with a 10-foot straightedge. The variation of the surface from the testing edge of the straightedge between any two contacts with the surface shall not be more than plus (+) 0.25-inch to minus (-) 0.125-inch at structures and (+/-) 0.25-inch at project tie-ins.

Humps, depressions and irregularities exceeding the specified tolerance will be subject to correction by the Design-Builder. The Design-Builder shall notify the Quality Assurance Manager ("QAM") and VDOT for any non-conformance items.

Settlement monitoring plates shall be installed in areas where the predicted settlement under the weight of the new embankment fill exceeds 5 inches and/or in areas where surcharging or wick drains are to be used to accelerate the time rate of settlement of the subgrade material beneath the embankment. The location, number and frequency of settlement monitoring plates to be installed and monitored shall be determined by the Design-Builder's Geotechnical Engineer of Record (GER) subject to approval by the Department. In no case shall the monitoring frequency exceed 2 weeks unless approved by the Department. The settlement plates shall be constructed and installed in accordance with Section 303.04(i) of the VDOT Road and Bridge Specifications. The GER shall verify in writing to the QAM that all monitoring plates were installed correctly. The settlement monitoring will be continued at the specified frequency until the required waiting period has been completed and the GER evaluates the data and confirms the rate of settlement has stabilized, the primary consolidation or elastic settlement is complete, and that the remaining long-term settlement will not exceed the tolerances included herein. All cost associated with the construction, installation, monitoring and analysis of the data shall be the responsibility of the Design-Builder and the total cost included in their bid estimate to include any costs associated with any surcharging and/or ground improvement techniques they plan to employ.

2.8.2.2 Structure Settlement

The Design-Builder shall consider settlement and design foundations (bridges, retaining walls, and other structures) based upon the criteria in Attachment A entitled Additional Foundation Criteria found in the RFP Information Package.

In summary, the additional foundation criteria found in the Supplemental Information Package provides two options for managing settlement of structures; a) limit total settlement to 0.5 inch and subsequently limits the need for a refined analysis of the superstructure and substructure or b) allow the Design-Builder to design the structure for their estimates of elastic, consolidation and secondary settlement (total settlement) and subsequently communicate the total and differential settlement in the General Note. In either case, a General Note is to be included on the plans that communicates the amount of settlement evaluated and accommodated by the structure.

In either case, the total vertical and/or differential settlements of the proposed structures shall not exceed the performance tolerance noted above for pavements and of the bridge decking. In addition, angular distortion between adjacent foundations greater than 0.008 radians in simple span and 0.004 radians in continuous span structures is not permitted unless first approved by the Department.

2.8.2.3 **Bridge Foundations**

Design-Builder shall investigate the bridge foundations areas and design foundations consistent with Chapter 3 of the VDOT Materials Manual of Instructions (MOI), AASHTO LRFD Bridge Design Specifications referenced in the RFP and with the following supplemental criteria:

• To determine subsurface conditions for all bridges within the Project, a minimum of two borings shall be drilled for each substructure unit. It should be noted that a number of borings have already been completed at the bridge substructure locations and if they are acceptable to the Design-Builder, can be counted as partially or fully satisfying this condition. Boring depths and laboratory testing shall provide information required for analyses and development of foundation designs based on AASHTO requirements as well as for design of temporary shoring for construction and other requirements in the RFP.

2.8.2.4 **Slope Stability**

Design stable cut slopes and embankment slopes and evaluate stability for interim construction stages, for the end of construction condition, and for design-life conditions. Design shall satisfy the following criteria:

- The maximum slope to be used for each cut and/or roadway embankment fill slopes shall be determined by the Design Builder.
- For soil embankment slopes, the slopes shall be no steeper than 2H:1V.

The following factors of safety are to be used with limit equilibrium methods of analysis to determine factors of safety for representative sections of all soil cut and soil embankment fill slope areas 10 feet or more in height and/or where slopes are supporting, or are supported by, retaining structures. The factors of safety listed in Table 3 below are valid for subsurface investigations performed in accordance with Chapter III of the Materials Division's Manual of Instructions or for site specific investigation plans approved by the District Materials Engineer. Approval of site specific investigation plans with reduced boring frequency may require higher factors of safety.

Table 3.	Minimum	Factors	of Safaty	for Soil	Cut/Fill Slopes
Table 5.	wiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Factors	of Safety	101 2011	Cut/Fill Slopes

Slope analysis parameters based on:	Factor of Safety		
	Involves Structure or	Non-Critical Slope	
	Critical Slope ¹		
In-situ or lab. tests and measurements ^{2,3}	1.5	1.3	
No site specific tests	N/A ³	1.5	

Notes:

- 1. A critical slope is defined as any slope that is greater than 25' in height, affects or supports a structure, impounds water or whose failure would result in significant cost for repair, or damage to private property
- 2. Site specific in-situ tests include both ground water measurements and SPT testing but may also include CPT or DMT
- 3. Parameters for critical slopes involving structures must be based on specific laboratory testing
- 4. Cut slopes in areas with pre-existing landslides or instability shall be designed based on residual drained friction angle.
- 5. Problem soils (very soft soils, very loose soils, fissured or heavily over-consolidated soils), must be analyzed using shear strength parameters determined from appropriate laboratory strength tests in accordance with accepted local engineering practice
- 6. The specific orientation of rock joints in rock where cuts are planned shall be investigated using methods sufficient to obtain joint/bedding orientation. Any rock slope/face, regardless of height, shall be analyzed using limit equilibrium methods taking into account any and all rock discontinuities and properties thereof.
- 7. Construction plans shall specify use of soil types consistent with the parameters used in slope analyses.
- 8. Incorporate reliability assessments as referenced above.

2.8.2.5 **Embankments**

The following specific minimum requirements are included for embankments constructed on the Project:

• See settlement requirements in Section 2.8.2.1. In addition, where settlement is anticipated in foundation or embankment soils, testing and analyses shall be provided to indicate that ninety percent (90%) of the predicted settlement will be completed by the end of construction, that there are no negative impacts on drainage infrastructure including pipes, gullies and swales, and that the maximum differential settlement between bridge foundations, abutments and approaches is less than 0.5 inch. Settlement monitoring including settlement plates and surface monuments (settlement points) shall be included to verify estimated results versus actual performance if warranted from Section 2.8.2.1.

• A minimum thickness of 3-feet of rock shall be placed at the base of all embankments and fills.

2.8.2.6 **Rock Cuts and Rock Excavation**

The design of cut slopes in rock shall satisfy the following procedures and minimum requirements:

- Review Existing Geologic Information: The Design-Builder shall review all available geologic information including published and unpublished geologic information and previously prepared geotechnical reports. In accordance with their approved QA/QC Plan, the Design-Builder shall submit to the VDOT PM in writing, a catalog of geological information examined. The catalog or list shall be certified by the Project Geotechnical Engineer.
- Perform a Field Reconnaissance: Perform a site reconnaissance that includes but is not limited to logging of rock exposures in and around the project area, measurement of the orientation and condition of bedding and joints and other discontinuities in exposures. Particular attention shall be given to material within the discontinuities, such as in-filling, weathered rock, soil, fault gouge and breccia, etc. The discontinuity information shall sufficient to be used in a stereonet analysis and any other relevant methods, including the risk of block, wedge, or toppling failures in the proposed rock cut slope.
- Laboratory Testing: The Design-Builder shall conduct laboratory testing on rock core samples consisting, at a minimum, of direct shear of joints, direct shear of saw cuts, point load and unconfined compressive strength testing for the development of design parameters.
- Rock Cut Slope Criteria: Design all rock slopes to provide a safety factor of at least 1.5 for critical slopes and 1.3 for non-critical slopes. Safety factors shall consider wedge, slab and toppling failure modes. Each slope shall be analyzed specifically and designed to the actual site-specific conditions encountered at the respective location.
 - Critical slopes include any cut or naturally-occurring section consisting of rock, greater than 25 feet in height, or any cut section greater than 25 feet in height with rock beds or veins greater than 1 foot in width, which affects or supports a structure, or whose failure would result in significant cost for repair or damage to private property; or any cut or naturally-occurring section consisting or rock, of any height, adjacent to an Interstate or primary route.
 - Non-critical slopes include any cut or naturally-occurring slope consisting of rock less than 25 feet in height, or any cut slope less than 25 feet in height with rock beds or veins greater than 1 foot in width that does not affect or support a structure, or whose failure would not result in significant cost for repair or damage to private property.
- Rockfall Containment Ditch: The Design-Builder shall include a rockfall containment ditch at road level to be incorporated into the final design. This ditch will be designed using either the "Ritchie Ditch" (Ritchie, 1963) or the "Oregon Ditch" (Pierson et al, 2001) criteria. The

ditch shall be designed to drain and prevent ponding of water. Rock fall fence barriers, draped fencing, guardrail or other rockfall control methods of any kind will not be allowed for the final design. The Design-Builder may propose alternative methods of rockfall protection during construction.

- Apply CRSP, Catchment Area Design Guide, or similar analytical method to evaluate rockfall potential of existing or proposed slopes. The analytical method used for assessing rockfall shall consider completed slope at the end of construction and the long-term slope conditions with weathering impacts, such as talus buildup. Demonstrate that no rock enters the travel lanes after 10 or more simulations of 100- to 1000-clast events.
- Develop Geologic Cross-Sections: The Design-Builder shall develop cross-sections showing the geologic and proposed cut configuration at a minimum of 50.00-foot intervals along the alignment to verify the effectiveness of the design. Changes and transitions in slope configurations and ratios based on design borings and field observations shall be smooth rather than rapid and frequent where variations between borings are obtained.
- Drainage Gullies: The Design-Builder shall review proposed cut slope areas for existing drainage ways that will be intersected by the cut causing water to be discharged over the face of the slope, increasing the potential for rockfalls and erosion of the slope.
- Blasting Control: The Design-Builder shall include as part of the design team a blasting consultant, approved by the Department, with a minimum of 5-years experience developing blasting plans and providing oversight of blasting operations on highway projects in rock having comparable geologic lithology. A resume to include qualifications and relevant experience of the person responsible for review of blasting plans and oversight of blasting operations shall be submitted to the Department for approval before review and approval of the blasting plans. The consultant shall review the blasting plans used by the blasting contractor to verify it includes the results of blasting on a test section. The consultant shall make regular visits to the site as excavation progresses to verify that the plan need not be modified. The Design-Builder may utilize an in-house blasting expert to perform the role of the blasting consultant providing they meet the same minimum requirements as the blasting consultant noted above, have been approved by the Department and are not directly involved in the development of the blasting plans.
- Test Blast: The Design-Builder's blasting consultant shall design a test blast that replicates the intended "weight per delay" and number of charges typical for a production blast. Seismic monitoring shall be provided for the test blast that includes monitoring points in proximity to the blast and at distances removed from the blast. Seismic records from the test blast shall be used to determine the regression of velocity and acceleration at various distances from the test blast. These data shall be used to control the weight per delay as the blasting program progresses. Provide results from test blast program to VDOT prior to production blasting.
- 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 contractor will be responsible for repairing any and all damage to adjacent facilities and structures for construction-induced damage.

• Coordination and Review by Project Geotechnical Engineer: The Project 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.

2.9 Hydraulics

2.9.1 General

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 Section 2.1.1.

2.9.2 Hydrologic and Hydraulic Analysis ("H&HA")

For bridges and major culvert crossings with total 100-year discharges exceeding 500-cfs, the Design-Builder shall deliver to VDOT an H&HA for the proposed structure improvements. These analyses shall be submitted to VDOT for review and approval at the 30% to 50% and final plan stages. The structures shall be designed by the Design-Builder to meet all applicable requirements in accordance with the standards and reference documents listed in Section 2.1.1, including current FEMA, FHWA, and VDOT guidelines as described in the VDOT Drainage Manual (including current Errata Sheet), Hydraulic Design Advisories and applicable IIMs.

If required, a scour analysis shall be performed in accordance with accepted design and analysis procedures. Once scour countermeasures and armoring are identified, the H&HA shall be updated to account for the scour countermeasures and armoring placement. These analyses shall be incorporated into a final report and be accompanied by a completed VDOT LD-293, LD-293C, LD-293D form. The Design-Builder shall provide VDOT two (2) paper and two (2) electronic copies on CD of the final H&HA Report and LD-293 (Adobe PDF format) and the HEC-RAS Files (in native format).

2.9.3 Drainage

The Design-Builder shall complete the final drainage design for the Project, including the design of culverts, open channels, storm sewers, adequate outfall analysis (in accordance with State Minimum Standard 19 of the Virginia Erosion and Sediment Control Regulations), stormwater management facilities, and erosion and sediment control as required and in compliance with the standards and reference documents listed previously in Section 2.1.1 of this document. The Design-

Builder shall provide VDOT two (2) paper and two (2) electronic copies on CD of a final drainage report incorporating all drainage calculations including pre and post development flows, capacities, and supporting data such as drainage areas (with maps), ground cover conditions, etc.

2.9.4 Stormwater Management Plan and Erosion and Sediment Control Plan

A Multiple Phased Erosion and Sediment Control ("ESC") Plan and Narrative, Stormwater Pollution Prevention Plan "SWPPP", 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 Section 2.1.1 of this document and the Virginia Erosion and Sediment Control Law and Regulations and the Virginia Stormwater Management Program (VSMP) Law and Regulations. A report titled "Evaluation of Stormwater Management Strategies Route 29 Charlottesville Bypass" prepared and submitted by Shaw Yu, Ph.D, Elizabeth Fassman, Jenny Zhen, and Marsha Wu of the University of Virginia and submitted to VDOT in October 2002, is included in the RFP Supplemental Information Package FOR INFORMATION ONLY to aid the Design-Builder in the development of a post construction Stormwater Management Plan. The Design-Builder shall meet current requirements regardless of what requirements are used in this report.

The Design-Builder shall certify that the Erosion and Sediment Control Plans and Narrative and post construction Stormwater Management Plan have been designed and reviewed in accordance with the Virginia Erosion and Sediment Control and Stormwater Management Program regulations, VDOT's approved ESC and SWM Standards and Specifications and VDOT policies and procedures, including applicable I&IM. Before implementing any ESC or post construction SWM measures not included in VDOT's approved Standards and Specifications a variance must be requested through the District Hydraulic Engineer (IIM-LD-11.26 and 195.7). A gualified person, other than the designer or VDOT personnel, who is certified as a DCR Plan Reviewer, shall independently review and certify the ESC Plans and Narrative and post construction SWM Plan. The Design-Builder shall complete and submit the ESC and SWM Plan Certification form (LD-445C) to the VDOT Project Manager certifying the ESC and post construction SWM plan for the Project is in accordance with VDOT's Approved ESC and SWM Standards and Specifications. The Design-Builder shall provide VDOT two (2) paper and two (2) electronic copies each on CD of the final ESC Plan and Narrative, SWPPP and SWM Plan including all calculations, analysis and evaluations required. The ESC Narrative shall specifically include calculations (with supporting data) documenting that the design meets Minimum Standard 19 of the Virginia Erosion and Sediment Control Regulations for each location that stormwater leaves the project site (outfall).

Coverage under the VSMP General Construction Permit is required for the Project. The Design-Builder shall coordinate and submit required information to the VDOT Project Manager. The Design-Builder shall complete the applicable sections of the VSMP Construction Permit Registration form (LD-445), VSMP Construction Permit Fee Registration form (LD-445B), ESC and SWM Plan Certification form (LD-445C) and submit this assembly 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 VSMP General Construction Permit in accordance with VDOT's guidelines outlined in IIM-242.3 or latest revision. Any information submitted by the Design-Builder found to be incomplete and/or unacceptable will be returned to the Design-Builder for corrective action and resubmission.

A ESC & SWM Plan and SWPPP for the entire Project must be submitted for review and approval with the initial application for the permit coverage. This Plan submittal shall include the proposed expected total Land Disturbance Area and Land Development Area, including any off-site facilities, for the entire Project. The Design-Builder shall not proceed with work 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 acquisition, and subsequent release of work can take up to 90 days from the time that the Design-Builder submits request for coverage. This represents a hold point in the Design-Builder's CPM Schedule. Design-Builder shall provide a completed Stormwater Pollution Prevention Plan (SWPPP) Certification form (LD-445E) before commencement of any land disturbing activity and shall complete and include the SWPPP General Information Sheets in the plan assembly in IIM-LD-246.2 or the latest revision. The Design-Builder shall be responsible for compliance with construction-related permit conditions and shall assume all obligations and cost 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 Permanent Best Management Practice information for each Best Management Practice on the Project, complete and sign the VSMP Construction Permit Termination Notice form (LD-445D) and submit it to the VDOT Project Manager for processing. The Design-Builder shall also have on-site during land disturbing operations an individual or individuals holding a DCR Inspector Certification, a DCR Responsible Land Disturber ("RLD") Certification and a VDOT Erosion and Sediment Control Contractor Certification ("ESCCC") to ensure compliance with all requirements.

2.9.5 Stormwater Management Facilities

The Design-Builder shall be responsible for design and construction of Stormwater Management Facilities as required for the Project in accordance with the Standards and Reference Documents listed in Section 2.1.1 of this document including I&IM-LD-195.7 and the Virginia SWM Handbook, and shall comply with the minimum geotechnical requirements contained therein. The original plan set identifies potential locations for proposed stormwater management facilities for the Project. However, these locations are preliminary and have not been fully evaluated to determine if these locations are suitable, feasible or sufficient to address all stormwater management requirements of the Project, meeting current VDOT guidance. The Design-Builder is to insure proper ingress and egress to any stormwater management facilities and that any specific proprietary facilities have proper maintenance details in the plans. The SWM Plan developed by the Design-Builder must meet the current regulatory requirements.

2.9.6 **Other Drainage Requirements**

All drainage facilities (new and existing) within the project area shall be cleaned out by the Design-Builder prior to final acceptance of the Project.

The Hydrologic and Hydraulic computations, provided by the Design-Builder to the Department, shall include Drainage Area mapping, Hydrologic computations, Hydraulic computations, and the following forms: LD-204, LD-229, LD-268, LD-269, LD-347 and the SWM and Temporary Sediment Basin Summary Sheet.

2.10 Traffic Control Devices

The Project shall include the design and installation of all signs (permanent and construction), pavement markings and markers, and guardrail required throughout the project limits. In addition, along Route 29 Bypass, the Project shall include edge line rumble strips, delineators, raised pavement markers, 2/10th and whole mile markers. Final striping and signing plans are required from the Design-Builder for approval by VDOT and shall be included as planned work packages. All existing traffic control devices within the project limits shall be modified or replaced as necessary to meet current VDOT standards. Additional traffic Control Device requirements include:

- <u>Design</u> The Design-Builder shall develop Traffic Control Device "TCD" designs that are not in conflict with existing and proposed utilities (both overhead and underground).
- <u>Electrical Service Requirements</u> The Design-Builder shall be responsible for all work, materials and costs associated with obtaining power and maintaining power throughout construction for all Traffic Control Devices.
- <u>Designation</u> The Design-Builder shall be responsible for locating and marking all underground utilities prior to any TCD installation work. In addition to Miss Utility of Virginia designation, at least seventy-two (72) hours prior to beginning TCD installation work, the Design-Builder shall contact VDOT Northwestern Region Operations (NWRO) Operations Maintenance Manager at (540) 332-9854 to determine the extent and location of all VDOT owned underground traffic signal equipment.
- <u>Testing of Electrical Service Grounding System</u> The Design-Builder shall test the electrical service grounding system for each electrical service in accordance with Section 700.04 of the VDOT Road and Bridge Specifications. Along with the Quality Assurance Manager, a representative from VDOT NWRO Operations Maintenance shall witness the testing of the system. The Design-Builder shall contact VDOT NWRO Asset Management at (540) 332-9854 at least seventy-two (72) hours prior to the intended testing to arrange the testing dates and times.
- <u>AutoTurn Simulation</u> The Design-Builder shall prepare an AutoTurn simulation that displays all turning movements and concurrent left turns at signalized termini. This simulation shall be submitted as a work package and be reviewed and approved by VDOT.

This work package shall be submitted with or prior to the signals, signing, and pavement marking work packages

2.10.1 Signs

The Project shall include all required modifications to existing signs and sign structures and all required new signs and sign structures. All guide signs shall be designed using the Clearview font in accordance with Traffic Engineering Memorandum TE-337. Any existing signs on adjacent roadways that require relocation/ replacement and any new interchange signs due to construction activities shall be the responsibility of the Design-Builder, and shall be designed and constructed using MUTCD and VDOT Standards. 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. All conductor/ communication cables shall be in conduit and junction boxes; no direct burial of cable will be allowed. Power cables and communication cables shall be in separate conduit systems. The Design-Builder shall accomplish the sign panel design using GUIDSIGN software. All Type V-A and Type VI-A sign post bolts shall be tightened to the appropriate torque values in the presence of the Quality Assurance Manager and documented. An approved sign plan for the project is required.

2.10.2 Pavement Markings / Markers

The Design-Builder shall provide and install all required pavement markings and raised snowplowable pavement markers according to VDOT standards and policies and the Traffic Engineering Design Manual. All delineators must be installed per Section 1300 of the "2008 Road and Bridge Standards" along all gore areas. All new markings including edgelines, centerlines, lane lines and skip lines shall be 6-inch, Type B – Class VI patterned preformed tape. All markings placed on concrete surfaces shall use Type B – Class VI Patterned preformed tape with black contrast. All preformed arrows and messages shall be Type B – Class I Thermoplastic. All temporary markings are to be Class II and the Type shall be in accordance with Section 512.03 (i) of the "2007 Road and Bridge Specifications." An approved pavement marking plan is required.

2.10.3 Guardrail

The Project shall include all necessary guardrail, fixed object attachments, end treatments and any incidental guardrail items. All substandard existing guardrail within the construction limits should be upgraded to current standards, as part of this project. Additionally, the Design-Builder shall provide a copy of the manufacturer's recommendations for installation of all guardrail terminals and shall contact the VDOT Project Manager two (2) weeks prior to the installation of guardrail for a site review.

2.10.4 Traffic Signals

Traffic signals shall include, but not be limited to foundations, traffic signal poles, signal heads, conduit system, junction boxes, circuitry, video detection devices, emergency preemption,

signal cabinets, control equipment, uninterruptible power supply ("UPS"), terminus lighting, signal interconnect conduit and wiring and signal related signing. Work shall include coordination with the utility company for power service and coordination with the Department for traffic signal installation. The following are requirements for all signals:

- <u>Plan Sheets</u> The Design-Builder shall prepare signal plans at a scale of 1'' = 25'.
- <u>Signal Equipment</u> All signal equipment and components including UPS System shall be in accordance to the NWRO Regional Signal Contract, its special provisions and section 703 of the current VDOT Road and Bridge Specifications.
- <u>Signal Timings</u> VDOT will provide the existing signal timings and phasing plans to the Design-Builder for all existing signals. Any signal timing adjustments necessary during construction shall be handled by the Design-Builder. Forty-eight (48) 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. Subject to VDOT review and approval, the final signal timings and phasing plans for the entire corridor with all of the signals running in coordination shall be developed and implemented by the Design-Builder. Design-Builder will provide a Sim-Traffic analysis software file and all related documentation for the signal timings to VDOT as part of the approval process. Timing information should be compatible with the controllers being used in the system.

<u>Signal Poles</u> – All permanent traffic signals shall use MP-1 combination luminaire signal poles with mast arms (Type III & Type IV poles in accordance to NWRO Regional Signal Contract and its special provisions). Luminary mounting height shall be 30'. Design-Builder shall provide pull cord access from the top of the light fixture to the electrical service point. The Design-Builder will install all luminaries to be mounted on signal poles and make the connection to the electrical service inside the controller cabinet. Signal poles and arms should be designed to accommodate the loading associated with the Design-Builder's plan development including, but not limited to signal heads, signs, video detection equipment, and emergency preemption equipment.

- <u>Signal Pole Foundations</u> All signal pole foundations shall conform to VDOT Standard PF-8. Test bores shall be performed in accordance with Section 700.04(c) of the Road and Bridge Specifications. Copies of all test bore and soil sample results shall be provided to VDOT. Foundation designs shall be prepared and sealed by a Professional Engineer licensed in Virginia. Loading shall be developed using the Design-Builder developed plans and the specified requirements for the project.
- <u>Signal Coordination</u> Route 29 from Earlysville Road intersection to the Airport/Proffit Road intersection is part of a coordinated system. Any proposed timing plans must be compatible with this existing coordinated system. Any timing changes to existing signalized intersections will require an operational analysis of the corridor to ensure corridor timing objectives are met.

- <u>Mast Arms</u> –Mast arm lengths and loading requirements as specified in the Regional Signal Contract and its special provisions.
- <u>Working Drawings</u> Working drawings for signal poles, mast arms, and foundation designs shall be submitted to VDOT for review and approval. All working drawings shall be submitted in accordance with Section 700.03 of the Road and Bridge Specifications and Section 105.02 of Part 5s of the RFP. All working drawings related to traffic control device structures and foundations will take a minimum of forty-five (45) days to review from receipt of the drawings.
- <u>Spare Wires</u> All spare wires in the controller cabinets shall be labeled in accordance with Section 700.04(g) of the Road and Bridge Specifications. All unused wires in the signal heads shall be capped individually with crimp type caps.
- <u>Signal Controller and Cabinet</u> The signal controller and cabinets shall have all necessary equipment and components required to make the signal operate in a fully functioning and conflict free matter. All signal cabinet foundations shall conform to VDOT Standard CF-4. Traffic signal uninterruptible power supply (UPS) shall be designed in accordance to NWRO Regional Signal Contract and Special Provisions.
- <u>Conduits</u> The Design-Builder shall use PVC conduit for all underground installations. All exposed conduit shall be constructed of galvanized rigid steel. The Design-Builder shall use a box design (i.e. cross all three-to-four legs of the terminus, unless this is determined to be impractical). In general, the minimum conduit size shall be two runs of three (3) inch diameter, namely for service and lighting and an additional spare two (2) inch diameter conduit shall be installed. Conduit associated with lighting shall be 2" PVC conduit, separate from signal conduit runs. However, in all roadway crossings the minimum conduit size shall also be two runs of three (3) inch diameter, and an additional spare two (2) inch diameter conduit shall be installed. All conduits shall have a fill capacity of less than twenty-five (25) percent. Conduit placed under existing pavement sections shall be directionally bored.
- <u>Junction Boxes</u> Junction boxes shall conform to VDOT standard JB-S2. The preferred junction box is size JB-S2. At least one JB-S3 shall be installed in close proximity to the signal controller cabinet. Separate junction boxes (Std. JB-S2) are required for street light service. A JB-S1 will be installed for the supplemental ground location of the electrical service grounding system.
- <u>Signal Related Signing</u> The Design-Builder shall furnish and install all signal related signing in accordance with the MUTCD. Terminus Lane Control Signs shall be installed on the mast arms for all lanes in advance of the terminus, for all new signals.
- <u>Full Color Operation</u> 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 Northwest Regional Traffic Operations Manager.

- <u>Pedestrian Accommodations</u> Route 29 Bypass is a non-pedestrian facility, however any signalized intersections at the north or south termini shall be evaluated to determine whether pedestrian accommodations or equipment are warranted. If they are warranted, the design-builder shall design and install all necessary pedestrian equipment.
- <u>Signal Heads</u> Yellow aluminum signal head assemblies with louvered or metal backplates, twelve (12) inch LED lenses and half visors shall be provided on through movement traffic signal heads and full tunnel visors on all protected turn movements.
- <u>Signal Head Wiring</u> The conduit and junction box system at each terminus shall accommodate fourteen (14) AWG four (4) conductor wires for signal head assemblies.
- <u>Signal Head Alignment</u> All signal heads should be aligned by 'lane line extended' methodology and in accordance with the MUTCD. A dedicated signal head shall be provided for each lane with the exception of dedicated right turn lanes.
- <u>Left Turns</u> The design builder shall determine the appropriate left turn treatments based on guidance from the FHWA "Traffic Signal Timing Manual".
- <u>Right Turns</u> Right turn overlaps may be used when appropriate. All overlaps shall be approved by VDOT Northwest Regional Traffic Operations Manager.
- <u>System Detection</u> The Design-Builder shall install video detection hardware, software and detection cameras mounted on mast arm signal brackets where applicable. Proposed location of video detection camera's and detection zones shall be displayed on signal design plans.
- <u>Preemption</u> All approaches to Project signalized termini shall be monitored with preemption hardware and wired with Opticom cable and confirmation lights in accordance with NWRO Regional Signal Contract and its special provisions. Confirmation lights shall require fourteen (14) AWG four (4) conductor wiring.

2.11 Transportation Management Plan (TMP)

The Design-Builder shall develop and incorporate a Transportation Management Plan ("TMP") in accordance with the requirements of L&D Memorandum IIM-LD-241.4. VDOT has determined this project to meet the criteria for a Type B project, Category 4. The TMP documents how traffic will be managed during the construction of the Project. The Design-Builder shall coordinate all work in accordance with the approved TMP. The TMP shall address safe and efficient operation of adjacent public transportation facilities and State Highways and shall reflect the Project's Scope of Work and all applicable VDOT Standards and Specifications regarding allowable work hours. The Design-Builder will be responsible for any changes to the TMP that result from any changes required during construction that affect any part of the TMP. The TMP shall incorporate and address the following elements at a minimum:

2.11.1 Temporary Traffic Control Plans

The Design-Builder shall develop and deliver Temporary Traffic Control Plans, which will detail all phases of work, proposed road closures, maintenance of traffic through the work area and all construction accesses for approval by VDOT. Each Phase shall include a narrative, which describes the Sequence of Construction to be used.

The Temporary Traffic Control Plans shall extend an appropriate distance beyond the construction tie-in locations to allow for the required length of any traffic shifts.

Construction signs shall be installed, maintained, adjusted, and removed as necessary by the Design-Builder throughout the duration of the project.

Minimum traffic lane widths: maintain a minimum of 11' lanes on Route 29/250 Bypass both eastbound and westbound and existing Route 29, and all secondary roadways shall be existing width or no less than 11' lanes.

The Design-Builder shall perform a traffic analysis to determine any time restrictions for any lanes closures or flagging operations for the project. No lane closures are allowed on the following routes except during the times listed. The following time restrictions will be used, unless the traffic analysis indicates differently:

- On U.S. Route 29 Albemarle County from Route 743 (Earlysville Rd.) to Route 33 (Greene County), one lane can be closed between 9:00 am to 3:00 pm and 7:00 pm to 4:30 am.
- On Route 631 (Rio Rd.) Albemarle County from Route 743 (Earlysville Rd.) to the Northern City Limits of Charlottesville, one lane can be closed between 9:00 am to 3:00 pm and 7:00 pm to 4:30 am.
- On Route 743 (Earlysville Rd.) Albemarle County from Route 631 (Rio Rd.) to the City Limit of Charlottesville, one lane can be closed between 9:00 am to 3:00 pm and 7:00 pm to 4:30 am.
- On Route 654 (Barracks Rd.) Albemarle County from City Limit of Charlottesville to Intersection Route 601 (Old Garth Rd.), one lane can be closed between 9:00 am to 3:00 pm and 7:00 pm to 4:30 am.

No lane closures will be allowed, in either the northbound or southbound direction of Route 29, on Saturdays, Sundays, holidays, or University of Virginia's Spring Graduation.

Any requests to close a lane or perform a flagging operation outside the above requirements shall be submitted to the Area Construction Engineer (ACE) Project Manager for approval, at least two (2) weeks prior to the planned work. The Design-Builder shall provide two (2) days advance notice prior to beginning any planned lane closures. The Design-Builder shall ensure that the

Staunton Traffic Operations Center (TOC) is notified at 1-866-597-1851 when lane closures or flagging operations are in place and again when they are removed.

A minimum buffer space of one (1) foot must be maintained between the edge of the traffic lane and any Channelizing devices.

Reductions in the speed limits within the work zones on Route 29 and Route 250 or the secondary roadways shall be reviewed and approved by the VDOT Northwest Regional Traffic Engineer in accordance with TE-350.1. The Design-Builder must complete a "Work Zone Speed Analysis" and provided it to the VDOT Project Manager for any reductions in the speed limits to be considered.

All preparatory or exploratory work to any existing facilities including, but not limited to, geotechnical investigations shall follow the Virginia Work Area Protection Manual.

2.11.2 Portable Changeable Message Signs

Portable Changeable Message Signs ("PCMS's") shall be used in advance of the work zone when closing lanes on US 29. The Design-Builder shall provide at least two (2) PCMS's along US 29, which are to be placed in advance of the Project in each direction. The Design-Builder shall provide additional PCMS's as required once fully developed Maintenance of Traffic plans are PCMS's shall also be used to provide en-route travel information about planned available. construction, delays or other sudden changes in travel conditions throughout the Project's duration. All PCMS's shall have the capability to be remotely controlled from the Staunton Traffic Operations Center ("TOC"). All PCMS's shall be equipped with CDMA modems with NTCIP Compatible for communication between the sign and the TOC. All PCMS's shall be Solar Tech, Vermac, or of an equivalent manufacture compatible with Staunton Traffic Operations Center Advanced Traffic Management System, OpenTMS, by Open Roads Consulting, Inc. The PCMS shall be placed in a semi-permanent location, protected from traffic but highly visible to the public. The PCMS shall be operational remotely before any lane closures associated with the Project are established. The Design-Builder shall coordinate the acquisition/implementation of PCMS's with the VDOT Project Manager.

2.11.3 Transportation Operations Strategies

The Design-Builder shall follow the Transportation Operations Strategies set-forth in the following sections:

2.11.3.1 Incident Management

In accordance with Section 2.11, the Design-Builder shall submit a TMP for review and approval. The TMP shall address at a minimum the following with respect to incident management:

• 24/7 point of contact for emergency notification of incident by Staunton TOC

- Equipment to be utilized in the event a detour is necessary
- Pre-staged detour equipment and materials needs
- Coordination with VDOT District Maintenance Section
- Signage of detour routes
- Coordination with VSP

The Design-Build Team shall contract Emergency Tow Wrecker Service for incident management to response during all lane closures to remove a disabled vehicle in the work zone. The service shall respond to any incident within the work zone on Route 29 at anytime lanes or shoulders are restricted. The service must be capable of towing any size vehicle, including light, medium, and heavy vehicles. The tow service must be capable of being on scene to remove multiple vehicles within 60 minutes from 6 AM-8 PM daily, critical construction activities, and during the limitation of operations as defined in this RFP when lanes or shoulders are restricted. The service must be capable of being on scene to tow within 90 minutes during all other times not referenced. The tow wrecker shall be in communication with the Staunton TOC. Wrecker service shall already be listed as a qualified wrecker from the VSP Police Assisted Tow list and have Towing & Recovery Association of America - TRAA Class 1 light duty, Class 6 medium duty, and Class 8 Heavy Duty towing vehicles. Towing shall consist of removing the disabled vehicle from the roadway to an approved disposal location. Towing vehicles shall be properly licensed and insured.

Design-Builder shall have an articulating wheel loader with minimum 3.0 cubic yard bucket and traffic lane control equipment available to assist VDOT Culpeper District Maintenance Section in snow removal operations within the work zone during winter months when lanes or shoulders are restricted. Activities shall be coordinated with the VDOT Culpeper District Maintenance Section. Design-Builder is also responsible for coordinating with VDOT Culpeper District Maintenance Section on regular maintenance items such as mowing and accident damage.

2.11.3.2 Traffic Cameras

The Design-Builder shall maintain two (2) traffic monitoring camera locations continuously through the duration of the Project. CCTV cameras shall be located in advance of the work zone to monitor queues and traffic patterns during lane closures on Route 29. All cameras shall have the capability to be remotely controlled from the Staunton Traffic Operations Center ("TOC"). The cameras shall be placed in a location that provides high visibility of the work zone traffic. The cameras shall be remotely operational before any lane closures associated with the project are established. The Design-Builder shall coordinate the acquisition/implementation of CCTV cameras with the VDOT Regional Traffic Operations Manager.

2.11.4 **Public Involvement**

The Design-Builder shall be responsible for providing a point of contact and phone number for the public to use in calling to request information or express concerns throughout the duration of the project. All information to be released to the public shall be approved and controlled by VDOT. The Design-Builder shall also be responsible for coordinating preparation and release of public information with VDOT's Culpeper District Office of Public Affairs.

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

- Hold informal meetings with affected stakeholders when necessary as directed by VDOT. These stakeholders will include but not be limited to local institutions (hospitals, schools, etc.) and Emergency service providers (Police, Fire and EMS Departments, Utilities, Transit, Parks and Recreation, etc.) All stakeholders shall be informed of meetings, as well as area medical agencies responsible for emergency transport of patients. Any meetings held will be in accordance with the VDOT Policy Manual for Public Participation in Transportation Projects, updated September 2004.
- Provide to VDOT's Culpeper District Office of Public Affairs on a weekly basis written information about the project suitable for posting by VDOT on its website. Such information will include a project overview, plan of work, overall project schedule, potential impacts to traffic, potential impacts Route 29 or 29/250 bypass (i.e., lane restrictions, detours), up-to-date project photos, and contact information.

During the Construction Phase, the Design-Builder shall:

- Provide an emergency contact list to Staunton TOC of project personnel and have sufficient manpower and resources available to respond to any onsite emergency, including any work zone incidents. All incidents within the work zone regardless of magnitude shall be reported to the Staunton TOC.
- Operate as a liaison between VDOT and the Design-Builder's Construction Manager to ensure compliance with local ordinances and provide appropriate notification to affected property owners and stakeholders.

2.12 Intelligent Transportation System

The Design-Builder shall develop a design plan to install and operate Intelligent Transportation System (ITS) infrastructure along the Route 29 Bypass and Route 29. Camera surveillance is required at south termini, north termini and a critical/strategic central location along Route 29 Bypass. The design-builder shall evaluate the best location to install one (1) weather station, the three (3) cameras and two (2) changeable message signs. Cameras, Signs and Weather stations shall be compatible and integrated with Staunton Traffic Operations Center, Advanced Traffic Management System, OpenTMS, by Open Roads Consulting. The Design-Builder shall also install at least two (2) additional, 2-inch conduits for future ITS use at all bridge crossings along the new alignment.

2.13 Right-of-Way

Most real property interests, including rights-of-way and all easements both temporary, utility and permanent, for the Project limits <u>south</u> of the South Fork of the Rivanna River, as depicted on Exhibit A (included in the RFP Information Package), except for the University of Virginia (Rectors) state property and parcels 015/025, 024, 041, 042, 100/102 & 145/147. have been secured by VDOT and will be available prior to award of the contract. Some of these properties are occupied by tenants and VDOT will have the properties vacated by providing a 90 day notice to the tenants and relocation benefits to the remaining original occupants. The Design-Builder upon the submission of the project schedule shall provide a timeframe, including the 90 days, for the vacation of the occupied properties.

Some of the VDOT provided right-of-way and easements have existing buildings and improvements. The Building Data Report (included in the RFP Information Package) shows those building and improvements present at the time of land acquisition. The Design-Builder's scope of work shall include hazardous material inspections of these existing buildings and improvements, and any additional buildings and improvements acquired by the Design-Builder, or found to be present in the existing right of way and easements, the removal of hazardous building material, the demolition of the existing buildings and improvements.

There are three (3) family cemeteries located on the right-of-way to be provided by VDOT. They are located at approximate stations 203+60 (on NBL centerline), 233+00 (left of SBL) and 233+40 (left of SBL). VDOT shall be responsible for all services and costs related to the relocation of these graves. VDOT anticipates that the disinterment will take approximately 270 days after the proposed design in those areas is determined. The Design-Builder shall plan his work to avoid these areas until the disinterment is completed.

The Design-Builder, acting as an agent on behalf of the Commonwealth of Virginia, shall provide all remaining right-of-way acquisition services for the Project's acquisition of fee right-ofway and permanent, temporary and utility easements, including survey plats, for the project limits north of the South Fork of the Rivanna River and for the University of Virginia (Rectors) state property and parcels 015/025, 024, 041, 042, 100/102 & 145/147 south of the river.. VDOT will assist the Design-Builder in obtaining an inter-agency transfer of the required University's state property. Adequate time (six months or more) should be allowed to complete the state property acquisitions after the final right-of-way requirements are approved. Right-of-way acquisition services shall include certified title reports, appraisal, appraisal review, negotiations, relocation assistance service and, parcel closings, to include an attorney's final certification of title. The Design-Builder's right-of-way acquisition consultant shall be on VDOT's prequalified right-of-way contracting consultant list (on VDOT's website) and the Design-Builder's right-of-way team shall include VDOT prequalified appraisers and review appraisers (also listed on VDOT's website). VDOT will retain authority for approving appraisal scope and appraiser, just compensation, relocation benefits, and settlements. VDOT must issue a Notice to Commence Right-of-Way Acquisition to the Design-Builder prior to any offers being made to acquire the property. This represents a hold point in the Design-Builder's Baseline Schedule. VDOT must also issue a Notice to

Commence Construction to the Design-Builder once the property has been acquired prior to commencing construction on the property. This also represents a hold point in the Design-Builder's Baseline Schedule. The Design-Builder will <u>NOT</u> be responsible for the right-of-way acquisition costs. As used in this RFP, the term "right-of-way acquisition costs" means the actual purchase price paid to a landowner for right-of-way, including fee, any and all easements, and miscellaneous fees associated with closings as part of the Project. All right-of-way acquisition costs will be paid by VDOT, and shall not be included in the Offerors Lump Sum Bid. Notwithstanding the foregoing provision, should additional right-of-way (whether fee or easements) be required to accommodate Design-Builder's unique solution and/or Contractor's means, methods and resources used during construction) above and beyond the right-of-way limits depicted on the preliminary drawings included in the RFP Supplemental Information Package, then all right-of-way acquisition costs for such additional fee or easements shall be paid by the Design-Builder. These costs would include (but not be limited to) the costs of any public hearings that may be required, actual payments to property owners and all expenses related to the additional acquisitions and associated legal costs as well as any additional monies paid the landowners to reach a settlement or pay for court awards.

The following responsibilities shall be carried out by either the Design-Builder or VDOT as specified in each bulleted item below:

- The Design-Builder shall acquire property in accordance with all Federal and State laws and regulations, including but not limited to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (the "Uniform Act") and Titles 25.1 and 33.1 of the 1950 Code of Virginia, as amended. The acquisition of property shall follow the guidelines as established by VDOT and other State and Federal guidelines that are required and the VDOT Right-of-Way Manual of Instructions, VDOT Utilities Manual, as well as IIM-LD-243.4 and Chapter 12 of the VDOT Survey Manual, which require individual plats to be prepared and recorded with each deed, easement agreement, certificate or other instrument relating to the acquisition of any interest in real property required for this project. All conveyance documents for the acquisition of any property interest shall also be accompanied by properly marked plan sheets and profile sheets.
- VDOT will designate a hearing officer to hear any Relocation Assistance appeals. VDOT agrees to assist with any out of state relocation by persons displaced within the rights of way by arranging with such other state(s) for verification of the relocation assistance claim.
- The Design-Builder shall submit a Project specific Acquisition and Relocation Plan to VDOT for VDOT Right-of-Way approval prior to commencing right-of-way activities. No offers to acquire property shall be made prior to the Acquisition and Relocation Plan approval. This represents a hold point in the Offerors CPM Schedule. The Acquisition and Relocation Plan shall describe the Design Builder's methods, including the appropriate steps and workflow required for title examinations, appraisals, review of appraisals, negotiations, acquisition, and relocation, and shall contain the proposed schedule of right-of-way activities including the specific parcels to be acquired and all relocations. The schedule shall include activities and time associated with VDOT's review and approval of just compensation, relocation benefits and administrative settlements. The plan shall allow for the orderly relocation of displaced

persons based on time frames not less than those provided by the "Uniform Act." This plan shall be updated as necessary during the life of the Project.

- A VDOT Representative will be available to make timely decisions concerning establishing review and approval of just compensation, approval of relocation benefits, and approval of administrative settlements on behalf of VDOT. The VDOT Representative is committed to issuing decisions on approval requests within twenty-one (21) days. The commitment is based on the Plan providing a reasonable and orderly workflow and the work being provided to the VDOT Representative as completed.
- The Design-Builder shall obtain access to and use VDOT's Right-of-way and Utilities Management System ("RUMS") to manage and track the acquisition process. RUMS will be used for Project status reporting; therefore, entries in RUMS shall be made at least weekly to accurately reflect current Project status. VDOT standard forms and documents, as found in RUMS, will be used to the extent possible. Training in the use of RUMS and technical assistance will be provided by VDOT.
- The Design-Builder shall provide a current title examination (no older than sixty (60) days) for each parcel at the time of the initial offer to the landowner. Each title examination report shall be prepared by a VDOT approved attorney or Title Company. If any title examination report has an effective date that is older than sixty (60) days, an update is required prior to making an initial offer to the landowner. A Title Insurance Policy in favor of the Commonwealth of Virginia in form and substance satisfactory to VDOT shall be provided by the Design-Builder, for every parcel acquired.
- The Design-Builder shall prepare appraisals in accordance with VDOT's Appraisal Guidelines. The Design-Builder shall submit a scope of work detailing the type of appraisal to be prepared for each parcel and the name of the proposed appraiser for VDOT's review and approval prior to commencing the individual parcel appraisal. The proposed appraiser shall be of an appropriate qualification level to match the complexities of the appraisal scope.
- The Design-Builder shall provide appraisal reviews complying with technical review guidelines found in VDOT's Right-of-Way Manual of Instructions and make a recommendation of just compensation. The Design-Builder's Right-of-Way consultant shall be a member of the VDOT pre-qualified contracting consultant list, and include a VDOT pre-qualified Fee Appraiser. The reviewer shall be approved by VDOT and shall also be on VDOT's approved fee appraiser list. VDOT shall have final approval of all appraisals.
- The Design-Builder shall make direct payments of benefits to property owners for negotiated settlements, relocation benefits, and payments to be deposited with the court. Payment documentation is to be prepared and submitted with the Acquisition Report (RW-24). VDOT will process vouchers and issue State Warrants for all payments and send to the Design-Builder, who will be responsible for disbursement and providing indefeasible title to VDOT.
- The Design-Builder shall prepare, obtain execution of, and record documents conveying title to such properties to the Commonwealth of Virginia and deliver all executed and recorded general warranty deeds to VDOT. For all property purchased in conjunction with the Project,

title will be acquired in fee simple (except that VDOT may, in its sole discretion, direct the acquisition of a right-of-way easement with respect to any portion of the right-of-way) and shall be conveyed to the "Commonwealth of Virginia, Grantee" by a VDOT-approved general warranty deed, free and clear of all liens and encumbrances, except encumbrances expressly permitted by VDOT in writing in advance. All easements, except for private utility company easements shall be acquired in the name of "Commonwealth of Virginia, Grantee". Private utility company easements will be acquired in the name of each utility company when the utility company has a prior recorded easement.

- Because these acquisitions are being made on behalf of the Commonwealth of Virginia, VDOT shall make the ultimate determination in each case as to whether settlement is appropriate or whether the filing of an eminent domain action is necessary, taking into consideration the recommendations of the Design-Builder. When VDOT authorizes the filing of a certificate, the Design-Builder shall prepare a Notice of Filing of Certificate. All required documents necessary to file a certificate shall be forwarded to the VDOT Project Manager. VDOT will review and execute the certificate, provide the money as appropriate and will return the assembly to Design-Builder. The Design-Builder will update the title and will file the certificate.
- When VDOT determines that it is appropriate, the Design-Builder will be responsible for continuing further negotiation for a minimum of 60 days, in order to reach settlement after the filing of certificate. After that time the case will be assigned to an outside attorney appointed by VDOT and the Office of the Attorney General. The Design-Builder will provide the necessary staff and resources to work with VDOT and its attorney throughout the entire condemnation process until the property is acquired by entry of a final non-appealable order, by deed, or by an Agreement After Certificate executed and approved by VDOT and the appropriate court. The Design-Builder will provide updated appraisals (*i.e.*, appraisal reports effective as of the date of taking) and expert testimony supporting condemnation proceedings upon request by VDOT. Services performed by the Design-Builder or its consultants after an eminent domain action is assigned to an outside attorney will be paid, if and when necessary, under a Work Order in accordance with Article 9 of Part 4 (General Conditions of Contract).
- The Design-Builder will be responsible for all contacts with landowners for rights of way or construction items.
- The Design-Builder shall maintain access at all times to properties during construction.
- The Design-Builder shall use reasonable care in determining whether there is reason to believe that property to be acquired for rights of way may contain concealed or hidden wastes or other materials or hazards requiring remedial action or treatment. When there is reason to believe that such materials may be present, the Design-Builder shall notify VDOT within three (3) calendar days. The Design-Builder shall not proceed with acquiring such property until they receive written notification from VDOT.

During the acquisition process and for a period of three years after final payment is made to the Design-Builder for any phase of the work, and until the Commonwealth of Virginia has indefeasible title to the property, all Project documents and records not previously delivered to VDOT, including but not limited to design and engineering costs, construction costs, costs of acquisition of rights of way, and all documents and records necessary to determine compliance with the laws relating to the acquisition of rights of way and the costs of relocation of utilities, shall be maintained and made available to VDOT for inspection or audit. This also would apply to the Federal Highway Administration on projects with federal funding. Throughout the design, acquisition and construction phases of the Project, copies of all documents/correspondence shall be submitted to both the Central Office and respective Regional Right of Way Office. The Design-Builder agrees to design and build the project completely within these right-of-way limits.

Prior to Project completion, the Design-Builder shall provide and set VDOT RW-2 right-ofway monuments within the project limits. Should additional right-of-way or easements be required (to accommodate Design-Builder's unique solution) above and beyond the limits depicted on the preliminary drawings included in the RFP Supplemental Information Package, costs of additional right-of-way and/or easements shall be paid by the Design-Builder, including but not limited to any public hearings that may be required, actual payments to property owners and all expenses related to the additional acquisitions and associated legal costs as well as any additional monies paid the landowners to reach a settlement or pay for Court Awards. In the event additional right-of-way is needed as the result of an approved scope change request by the Design-Builder, the Design-Builder shall follow the procedures indicated in the "Right-of-Way Acquisition Guidelines" included in the RFP Information Package. Additionally, the Design-Builder is solely responsible for any schedule delays due to additional right-of-way acquisition associated with the Design-Builder's design changes and no time extensions will be granted.

2.13.1 Proposed Right-of-Way and Limited Access Fencing

All proposed Right-of-Way and Limited Access fencing shall be standard fence woven wire fabric VDOT Standard FE-W1 with wood post. All existing fence will be replaced with new fence along the new project limits – this includes those locations where the existing ROW has not changed.

2.14 Railroads

For the southern interchange, the Design-Builder should consider alternatives that would avoid the replacement or modifications to the existing bridge carrying the CSX Railroad over existing Route 29/250. In the event that replacement or modifications are necessary all services and costs related to the railroad underpass shall be the responsibility of the Design-Builder.

The Design-Builder will be required to coordinate the design of the replacement structure or any structural modification with the CSX railroad and their consultant representative and to enter into a construction agreement with the Railroad prior to commencing any construction activities. Such

agreement and related force account estimates are subject to the review and approval of VDOT. Refer to Section 2.6.5 for more information on the CSX Bridge.

2.15 Landscaping

The Design-Builder shall develop a comprehensive conceptual plan for aesthetics that addresses linear elements of the project (screening, buffers, reforestation if appropriate), sound barrier walls, interchanges, bridge architecture, bio-retention measures where practicable and/or as deemed necessary by environmental requirements, and in keeping with the following:

- A final Planting Plan for the project shall be prepared by a Virginia licensed Landscape Architect and shall be submitted to the VDOT Project Manager for review and approval.
- The plans for all aesthetic treatments (landscape / bridge / etc.) shall be developed in concert with input from the local community / municipality.
- Concepts and construction estimates for various levels of aesthetic treatment (at the conceptual stage) shall be submitted to the Department for review and approval based upon affordability and constructability. Final design shall not commence until approval from the Department on a particular level of aesthetic treatment is received.
- All landscaping shall be in accordance with the Memo for Guidance for Planting in the Clear Zone and Landscaping for VDOT Projects, dated November 2, 2000, Guidelines for Context Sensitive Solutions/Design, dated February 25, 2004, and FHWA 23 CFR 752 Landscaping and Roadside Development.
- A majority of the plant materials should be native or indigenous to the area and can adapt and survive in roadside environments.
- Planting plans should be designed and constructed to require <u>minimal</u> maintenance except as agreed upon with the municipality accepting maintenance responsibilities.
- Landscaping treatments and features shall be compatible with the existing landscape adjacent to the Project site and may reflect historic and cultural features of the area. Further, where the roadway is close to existing residential developments, plant materials and landscape treatments shall be utilized as to reduce the impacts on those communities.
- Areas that can be re-forested after construction (if part of the approved design concept) shall be planted with one (1) inch caliper stock trees variably placed at minimum twenty (20) feet spacing and stabilized with native, non-competitive grasses.
- Stormwater management facilities shall be graded to a more natural (curvilinear) appearance including landscaped berms and tree plantings for screening, while providing adequate access for maintenance operations.

- Due to the graded roadway typical section of this project, opportunities for plantings that enhance the appearance of the corridor should be maximized where the roadway typical is bifurcated to allow for median plantings beyond thirty feet of the roadway edge, where additional right-of-way exists or is purchased outside of the roadway prism, and at interchanges where gateways to the various communities along the corridor occur.
- In addition, the Design-Builder shall engage a firm that has demonstrated expertise in the design and implementation of custom designs for sound barrier walls and bridge architecture. Proposed conceptual designs shall be developed and submitted with projected costs for construction at the concept stage for consideration by the Department. Such designs / aesthetic treatments as approved by the Department shall be finalized for implementation. Such designs to be developed shall reflect the unique historic and cultural identity of the surrounding community.

The landscape treatments shall be implemented both physically and visually, so that the roadway appears truly integrated and, in time, will fit within the existing landscape much as the existing U.S. 250 Bypass does today. The roadway corridor shall be treated as a natural, native landscape that is appropriate to the particular area through which it passes.

The roadside development sheet should include tall fescue for non-mowable slopes over 'native grasses' both for erosion and sediment control and permanent seeding.

2.16 Utilities

The Design-Builder shall be responsible for coordination of the Project construction with all utilities that may be affected. The Design-Builder shall be responsible for coordinating the work of the Design-Builder, its subcontractors and the various utilities. Such coordination shall be formally executed through a Utility Communications Plan. The Utility Communications Plan shall be developed by the Design-Builder and submitted to the VDOT Project Manager within 30-days of the Date of Commencement. The Design-Builder shall designate a Utility Relocation Coordinator, who shall have a minimum of two (2) years experience in coordinating utility relocation in accordance with Federal Regulations (23CFR30, Part 645) and policies and procedures outlines in VDOT's Utility manual. The designee shall be subject to VDOT's approval. The Design-Builder's Utility Relocation Coordinator shall be responsible for carrying out the Utility Communication Plan and all interactions with the utility companies.

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 utilities, utility owners or the operation of relocating utilities. Additionally, the Design-Builder is solely responsible for any schedule delays due to additional utility relocation associated with the Design-Builder's design changes and no time extensions will be granted. The Design-Builder shall be responsible for utility designations, utility locates (test holes), conflict evaluations, cost responsibility determinations, utility relocation designs, utility relocations and adjustments, utility reimbursement, replacement land rights acquisition required outside of the easements shown on Exhibit A and any north of the South Fork of the Rivanna River, and utility coordination required for the Project. The Design-Builder shall be responsible for all necessary utility relocations and adjustments to occur in accordance with the accepted Baseline Schedule. All efforts and cost necessary for utility designations, utility relocations and adjustments, ocst responsibility determination, utility relocation designs, utility relocations and adjustments, utility reimbursements, and utility coordination shall be included in the Offerors Price Proposal provided, however, if the VDOT Project Manager agrees that utilities cannot be relocated within existing or proposed right-of-way to construct the project as depicted in Exhibit A, the compensation paid to landowners for replacement land rights will be paid by VDOT as part of right-of-way acquisition costs and shall **NOT** be included in the Offerors Price Proposal.

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 initiate early coordination with all utilities located within the Project limits. The Design-Builder shall identify and acquire any replacement utility easements needed for all utilities necessary for relocation due to conflicts with the Project including all utility easements.

The Design-Builder shall provide all utilities 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 will use the Design-Builder's design plan for preparing relocation plans and estimates. If a party other than the utility prepares relocation plans, there shall be a concurrence box on the plans where the utility signs and accepts the relocation plans as shown.

The Design-Builder shall coordinate and conduct a preliminary review meeting with all affected utility owners to assess and explain the impact of the Project. VDOT's Project Manager and Regional Utilities Manager (or designee) shall be included in this meeting.

The Design-Builder shall verify the prior rights of each utility'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 120 days of the Date of Commencement 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 easements, plans, or other supporting documentation that substantiates any compensable rights of the utilities. The Design-Builder shall obtain the following from each utility that is located within the Project limits: relocation plans including letter of "no cost" where the utility does not have a compensable right; utility agreements including cost estimate and relocation plans where the utility has a compensable right; letters of "no conflict" where the utility's facilities will not be impacted by the Project.

Design-Builder shall review all relocation plans to ensure that relocations comply with the VDOT Utility Manual and VDOT's Land Use Permit Regulations. 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's relocation plans. The Design-Builder shall prepare and submit all relocation plans to VDOT for approval. The Design-Builder shall 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 (or designee) within 45 days of the Date of Commencement 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 utilities shall not begin their relocation work until authorized by the Design-Builder. Each relocation plan submitted shall 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's relocation plan.

At the time that 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 utilities with compensable rights or other claims related to relocation or coordination with the Project have been relocated and their claims and compensable rights satisfied or shall be satisfied by the Design-Builder.

The Design-Builder shall accurately show the final location of all utilities on the as-built drawings for the Project.

It is the Design-Builder's responsibility to verify whether other utility owners exist within the project limits. Known utility owners and their respective contact numbers are identified below for reference only and may not be limited to the following:

Dominion Virginia Power Mr. Daniel Bateman, Supervisor Customer Solutions 1719 Hydraulic Road Charlottesville, Virginia 22901 O: (434) 972-6734 C: (434) 996-5514 E: daniel.bateman@dom.com

Dominion Virginia Power Transmission Ms. Stephanie D. Bagby, Transmission Line Engineer Dominion Technical Solutions 701 East Cary Street Richmond, Virginia 23219 O: (804) 771-6282 E: stephanie.d.bagby@dom.com

<u>CenturyLink</u> Mr. Jerry Burge, Network Engineer II 127 East Church Street Martinsville, Virginia 24112 O: (276) 666-4247 C: (276) 340-9726 E: jerry.burge@centurylink.com

Comcast Mr. Wesley W. Parker, Construction Manager 324 West Main Street Charlottesville, Virginia 22903 O: (434) 951-3725 C: (434) 531-1830 E: wesley parker@cable.comcast.com

<u>City of Charlottesville Public Utilities</u> Mr. Phil Garber, Chief Gas Engineer 605 East Main Street Charlottesville, Virginia 22902 O: (434) 970-3811 E: garber@charlottesville.org

<u>Rivanna Water & Sewer Authority</u> Ms. Jennifer Whitaker, P.E. – Chief Engineer 695 Moores Creek Lane Charlottesville, Virginia 22902 O: (434) 977-2970, Ext. 104 E: jwhitaker@rivanna.org

<u>Albemarle County Service Authority</u> Mr. Peter Gorham, P.E. – Director of Engineering

168 Spotnap RoadCharlottesville, Virginia 22911O: (434) 977-4511, Ext. 115E: p.gorham@serviceauthority.org

Verizon Business (Old MCI) Mr. James "Dave" Fisher 12379A Sunrise Valley Drive Reston, Virginia 20191 O: (703) 391-5782 C: (703) 350-8463 E: james.fisher@mci.com Rappahannock Electric Cooperative Mr. Randy Ross – Distribution Supervisor P.O. Box 392 Culpeper, Virginia 22701 O: (540) 727-2149 E: rross@myrec.coop

<u>University of Virginia Facilities Management</u> Energy & Utilities Department Mr. Mark Roach – Utility Systems Manager O: (434) 243-1704 E: msr3w@virginia.edu

<u>Siemens</u> 1881 Campus Commons Drive Reston, Virginia 20191 (703) 262-2000 (800) 310-6308

<u>VDOT – Traffic Signals</u> Mr. JR Fitzgerald, Operations Maintenance Manager 801 Commerce Rd. Staunton, VA 24401 O: (540) 332-9854 C: (540) 280-8230 E: William.Fitzergerald@VDOT.Virginia.Gov

2.17 Quality Assurance / Quality Control (QA/QC)

The Design-Builder shall develop its QA/QC plan for both design and construction in accordance with the VDOT Minimum Quality Control and Quality Assurance Requirements for Design-Build and Public Private Transportation Act Projects Manual and submit it to the VDOT Project Manager for review and approval 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 at the meeting held after the Date of Commencement utilizing Project related scenarios.

2.17.1 Design Management

The Design-Builder shall be responsible for design quality. The Design Manager, assigned by the Design-Builder, shall be responsible for overall management of the QA/QC programs for design. This individual shall report directly to the Design-Builder's Project Manager, and is responsible for

all of the design QA/QC activities. The Design Manager shall maintain close communication with Design-Builder's Project Manager and shall ensure the Project is completed in accordance with the requirements of the Contract Documents. The Design Manager shall perform all of the design oversight reviews. VDOT will participate in these reviews. Under this procedure, the Design Manager shall provide VDOT with draft design plans for review and approval to confirm that the design work complies with the requirements of the Contract Documents, especially Section 2.4 of the General Conditions of Contract and the Standard and Reference Documents listed in Section 2.1.1 herein prior to initiation of construction activities on the Project.

Plans to be reviewed shall be submitted to VDOT and FHWA. VDOT shall receive four (4) full size sets and four (4) half size sets of each submission. FHWA shall receive zero (0) full size sets and two (2) half size sets of each submission. The plan submissions shall be delivered, in accordance with Section 2.18.7 below, to the following addresses:

The Attachments to Letter of Submittal #2 will be reviewed and evaluated to determine whether the submittal shall "pass or fail" based on the requirements outlined in Section 4.5.1. Failure to meet all of the requirements listed in Section 4.4 and 4.5 may deem an Offeror's Proposal non-responsive.

<u>VDOT</u> Address:	Virginia Department of Transportation 1601 Orange Road Culpeper, VA 22701
Attention:	Harold L. Jones, P.E. Project Manager
<u>FHWA</u> Address:	U.S. Department of Transportation Federal Highway Administration 400 North 8 th Street – Suite 750 Richmond, VA 23219-4825
Attention:	Jose Granado, P.E. Area Engineer

VDOT and FHWA shall have the right to review and comment on all Draft Plans and Specifications for compliance with the requirements of the Contract Documents and Reference Documents. The Design-Builder shall be responsible to satisfy all such requirements and acknowledge that VDOT and FHWA will have the right to disapprove any design approach that it is not in compliance with the requirements of the Contract Documents and Referenced Documents unless said approach was previously approved in writing by VDOT and FHWA.

The written approval of any modifications to the design plans that are not in compliance with the requirement of the Contract Documents and Reference Documents shall be attached with the draft plans submitted for review. The Design-Builder shall revise and modify all draft design plans so as to fully reflect all comments and shall deliver the revised submittal to VDOT, FHWA and Albemarle County as outlined in Section 's Project Manager, who will distribute plans to appropriate VDOT and FHWA staff for review and comments.

Construction Plans shall be submitted to VDOT and FHWA for review and approval by the Chief Engineer prior to construction of that element. The time frame for plan review and approval shall be in accordance with the requirements of the Contract Documents. The Design-Builder shall be responsible for the design details and ensuring that the design and construction work are properly coordinated.

2.17.2 Construction Management

The Construction Quality Management Plan requires the Design-Builder to have overall responsibility for both the Quality Control ("QC") and Quality Assurance ("QA") activities as dictated in the VDOT Minimum Quality Control and Quality Assurance Requirements for Design-Build and Public Private Transportation Act Projects Manual. The Design-Builder shall be responsible for 100% QA work and QA sampling and testing for all materials used and work performed on the Project. These QA functions shall be performed under the direction of a Quality Assurance Manager ("QAM") that represents an independent firm that has no involvement in the construction QC program/activities. The Design-Builder shall also be responsible for providing QA and QC testing for all materials manufactured off-site, including materials obtained from off-site borrow pits, but excluding the items listed below:

- Pipe (concrete, steel, aluminum and high density polyethylene) for culverts, storm drains and underdrains.
- Precast Concrete Structures.
- Metal Traffic Signal and Light Poles and Arms.
- Asphalt Concrete Mixtures.
- Aggregate (dense and open graded mixes).
- Prestressed Concrete Structural Elements.
- Structural Steel Elements

VDOT will provide plant quality assurance and plant testing of these items. In the event that VDOT determines that materials fail to meet the tolerances in the Road and Bridge specifications, a Non-Compliance Report ("NCR") will be issued by the VDOT Project Manager and addressed to the

Design-Builder's QAM for resolution. The Design-Builder is responsible to submit a Source of Materials, Form C-25, for all materials VDOT retains responsibility for testing.

The Design-Builder's QAM shall report directly to the Design-Builder's Project Manager and be independent of the Design-Builder's roadway, bridge and otherwise physical construction operations. The QAM shall be responsible for the QA inspection and testing of all materials used and work performed on the Project to include: monitoring of the Contractor's QC activities, maintaining the Materials Notebook; documentation of all materials, sources of materials and method of verification used to demonstrate compliance with VDOT standards and Federal compliance (i.e. Buy American Special Provision). 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 that is normally performed by VDOT, as prescribed in the Construction Manual, Inspection Manual, Materials Manual of Instructions, active Construction Directive Memorandum and all other applicable Reference Documents. This includes the documentation of construction activities and acceptance of manufactured materials.

VDOT's role during construction operations will be limited to verification sampling and testing, independent assurance, review and processing progress payments, and limited oversight of the Design-Builder's construction management scheduling, document control and other Project control and Project management/ administration efforts necessary to properly administer and manage the Project. All construction QA and QC personnel shall hold current VDOT materials certifications when testing hydraulic cement concrete, asphalt concrete, soils and aggregate, pavement markings and for the safety and use of nuclear testing equipment, as required by the VDOT 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 Manager. Substitution of either the Construction Manager or the QAM at any point during the Project shall require prior VDOT approval. In addition, VDOT shall have the right to order the removal of any construction QA and QC personnel, to include the QAM and the Construction Manager, for poor performance at the sole discretion of the VDOT Project Manager. The Construction Quality Management Plan shall include rapid reporting of non-compliance to the VDOT Project Manager, and the remedial actions to be taken as discussed in Section 105.12 of the Division 1 Amendments to the Standard Specifications.

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 (in electronic format)
- Test reports
- Invoices
- Materials Notebook

- Certified survey records
- DBE/EEO records
- Warranties
- Maintenance Manual
- As-Built and Record Documents
- Special Tools, etc.
- Buy American Compliance Certification

The Design-Builder shall be responsible to establish a Standard Filing System and Construction Document Management System (hard copy and electronic) for the duration of design/construction phase of the project. This filing system is subject to VDOT approval/acceptance. Hard copy documentation shall be accessible to VDOT and electronic access capability with shared access network as well. All documents, related to the following but not limited to, shall have electronic shared access as well as physical access:

- QC/QA Documentation
- Shop Drawings
- Permits/Environmental Documents
- Safety Reports
- Meeting Minutes
- Issue Tracking Logs
- Submittal/RFI etc. Tracking Logs
- Delivery Tickets/Invoices as Applicable

2.17.3 Substantial Completion

Project Substantial Completion is the date on which the Work, or an agreed upon portion of the Work, is complete in accordance with the Contract Documents so the Department can occupy and use the Project for its intended purposes. Project Substantial Completion shall be defined as Route 29 Bypass open to traffic including complete operability of the northern and southern termini and operable traffic signals necessary to safely convey traffic. Final completion of the work, and any part thereof, shall be achieved as expeditiously as reasonably practicable, but in no event later than sixty (90) days after Substantial Completion of the Work or designated part of the Work.

2.18 **Plan Preparation**

2.18.1 Geopak and MicroStation

When the Design-Builder is formally provided with the Date of Commencement, they will be furnished with the following files which run in WindowsNT or WindowsXP only: MicroStation (current version used by VDOT) and VDOT Standard Resources Files, and all the design files used to develop the drawings including aerial images and survey files.

2.18.2 Software License Requirements

VDOT shall furnish license(s) for all the software products VDOT makes available to the Design-Builder. The License(s) 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.

All License(s) are provided for use on the Project detailed on the request and only for the duration specified for that Project. Any approved revision to the Project schedule will be taken into consideration in adjusting the time the license(s) are available. Justification for the number of license(s) requested <u>MUST</u> 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 all license(s) provided to the Design-Builder will become the responsibility of the Design-Builder regardless of who on the team uses the license(s). The Design-Builder shall be responsible for keeping track of the license(s) provided to them or a team member and the prompt return of the license(s) and removal of the software from any system used solely for the project for which it was obtained.

2.18.3 Drafting Standards

All plans shall be prepared in accordance with the most recent version of the VDOT's Road Design Manual, Vol I, VDOT's CADD Manual and VDOT's I&IM and VDOT's Manual of Structure and Bridge Division, Vol. V, Part II, Design Aids and Typical Details and other Reference Documents that were available on the date the RFP for this project was advertised.

The approved plans shall be furnished by the Design-Builder with appropriate signature blocks and Professional Engineer seal on the title sheets indicating approval for construction.

2.18.4 Electronic Files

All plans shall also be submitted in electronic format using the provided versions of MicroStation CADD software. Files shall be submitted in both DGN & PDF formats, by way of

VDOT's Falcon Consultant environment. The Design-Builder will complete form LD-443, the Falcon System Access Security Agreement and the Falcon Access Request Form, for access to the Falcon Consultant environment. These forms are available in the RFP Information Package. VDOT will furnish electronic files of all applicable standard detail sheets upon request by the 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 the Design-Builder in electronic format shall be returned to VDOT and removed from the Design-Builder and its designer's computer equipment upon completion of this Project.

2.18.5 **Construction Plans**

Construction Plans are those that are issued for construction after prior approval by VDOT's 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. 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. These plans will be issued for construction following approval by VDOT's Chief Engineer. The roadway plans may be submitted for approval in logical subsections or work packages such as: 1) clearing and grubbing along with erosion and sediment control, 2) grading and drainage, 3) paving, and 4) traffic control. A submittal schedule and planned breakdown of work packages shall be submitted to VDOT for approval as part of the planned Project schedule. The submittal schedule shall be updated and sent to the VDOT Project Manager on the first business day of every month until all plans have been approved for construction.

The construction plans described above shall be submitted to VDOT and FHWA. VDOT shall receive two (2) full size sets and two (2) half size sets of each submission. FHWA shall receive zero (0) full size sets and one (1) half size sets of each submission. The plan submissions shall be delivered, in accordance with Section 2.18.7 below, to the following addresses:

Address:	Virginia Department of Transportation 1601 Orange Road Culpeper, VA 22701
Attention:	Harold L. Jones, P.E. Project Manager
<u>FHWA</u> Address:	U.S. Department of Transportation Federal Highway Administration 400 North 8 th Street – Suite 750 Richmond, VA 23219-4825

Attention: Jose Granado, P.E. Area Engineer

2.18.6 Record (As-Built) Plans

The final plan milestone is Record (As-Built) Plans. Record (As-Built) Plans shall be prepared, certified and submitted prior to 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. The Design-Builder shall submit the Record (As-Built) Plans in both hard copy and electronic (DGN & PDF) formats.

2.18.7 Plan Deliverables

- Hard Copy paper plans and Electronic plans (DGN & PDF) formats on VDOT's Falcon Consultant environment.
 - Construction Plans
 - o As-builts
 - Working Drawings
 - o Shop Drawings
 - Design Calculations
 - o Right-of-Way Plats as described in Section 2.13
 - o Guarantees/Warranties
- Project Correspondence
- QA/QC Records including Project Diaries, Test Reports, Invoices, Materials Books and certified survey records.

2.19 **Public Involvement Strategy**

A formal Design Public Hearing for this project was held on February 25th, 1997. Numerous Design Advisory Committee meetings were held during design development from 1995 – 1998.

Public involvement strategies will be focused on three primary components:

- Activities from RFP date to Notice of Award date of the Design-Build Contract
- Activities required to fulfill NEPA requirements
- Activities from Award of Design-Build Contract through Project completion

VDOT will be responsible for public involvement activities from RFP date through Notice of Award and activities required to fulfill NEPA requirements. However, the successful Design-Build

Contractor will be expected to provide VDOT with technical information needed to adequately convey the Project to the public during formal Public Hearings required as part of the NEPA process.

The Design-Builder will have primary responsibility for public involvement activities during project design and construction. Public information meetings must be held where two sets of exhibits suitable for display at a public information meeting of the drawings or illustrations prepared for the procurement of the design-builder as well as two sets of full-size copies of the Right-of-Way Plans should be prepared.

The Design-Builder shall be responsible for providing a point of contact and phone number for VDOT to use when gathering information to respond to a citizen or media inquiry regarding this project. The Design-Builder shall also be responsible for coordinating the preparation and release of any public information (includes flyers to residents) with VDOT's Culpeper District Office of Public Affairs:

During the Design, R/W Acquisition, and Construction Phases:

- The Design-Builder shall participate with VDOT in informal meetings with affected local citizen groups and businesses as necessary and as directed by the VDOT Project Manager. Any meetings held will be in accordance with the VDOT Policy Manual for Public Participation in Transportation Projects, updated July 2009.
- The Design-Builder shall provide VDOT's Culpeper District Office of Public Affairs with written information about the project at least twice a month that will be posted on VDOT's external website. This information will include a project overview, plan of work for the coming month, potential traffic impacts, overall project schedule, contact information and updated project photos.
- The Design-Builder shall develop and implement a Public Involvement Strategy to effectively communicate the Project development plans, implementation schedule (design, R/W acquisition, and construction), and construction phasing. Further, the Design-Builder's Public Involvement Strategy will be developed to resolve various technical issues, environmental concerns, and property access issues.

During the Construction Phase:

• The Design-Builder shall provide VDOT's Culpeper District Office of Public Affairs with written information about the project's scheduled impact on traffic (such as previously approved lane closures or detours) no less than 48 hours for lane closures and one week for ramp or road closures before the traffic impact is scheduled to occur. This information may be used by VDOT to issue news traffic alerts to the public.

2.20 Monthly Progress Meetings

The Design-Builder shall participate in monthly progress meetings. During such meetings, progress during the prior month and anticipated progress for the following month shall be reviewed. The Design-Builder shall collect information from any key subcontractors/sub-consultant responsible for work completed during the previous month and work scheduled during the upcoming month. These meetings shall be attended by the design-build project manager, construction manager, QAM and design manager, as well as other key personnel from the design and construction firms defined within the Design-Builder's proposal as well as VDOT's representative designated by the VDOT Project Manager. Meetings will occur monthly beginning the first month after the issuance of the Notice to Proceed. The Design-Builder shall be responsible for preparing, maintaining and distributing minutes of the meetings to all attendees for review within 2 business days after the meeting. The meeting minutes shall be provided to VDOT and Albemarle County within two calendar days of the day the monthly progress meeting was held.

2.21 Virginia Occupational Safety and Health Standards

The Project shall comply with Virginia Occupational Safety and Health Standards in accordance with Section 110.05 of the Division I Amendments to the Standard Specifications.

At a minimum, all personnel of the Design-Builder 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.
- Safety vest 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, and removing traffic controls.
- Flag persons shall be certified according to 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 feet or greater.
- All vehicles with an obstructed view when backing shall be equipped with a backup alarm or ground guide.
- All equipment and materials shall be stored outside of the clear zone when not in use.

END OF PART 2 TECHNICAL INFORMATION & REQUIREMENTS

Exhibit 1 To Part 3 September 27, 2011

Exhibit 1 to Part 3 Project-Specific Terms

This Exhibit 1 to Part 3 (2010 Lump Sum Design-Build Agreement Between Department and Design-Builder) contains project-specific terms that are hereby incorporated, as identified below, into Part 3, Part 4 (2010 General Conditions of Contract Between Department and Design-Builder), and Part 5 (2010 Division I Amendments to the Standard Specifications General Provisions for Design-Build Contracts Between Department and Design-Builder).

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:

PROJECT:

Project No.: Project: 0029-002-844 Route 29 Charlottesville Bypass Albemarle County, Virginia

PART 3 2010 LUMP SUM DESIGN-BUILD AGREEMENT BETWEEN DEPARTMENT AND DESIGN-BUILDER

- **2.1.4** The Department's Request for Proposals ("RFP") is dated September 27, 2011.
- **2.1.7** The list of all final modifications to the Proposal is as follows:

5.2.1 The **Substantial Completion Date** is April 15, 2016.

5.2.2 The Interim Milestone Dates are: (NOT USED)

5.3 The **Final Completion Date** is July 15, 2016.

Final Completion of the Work, and any part thereof, shall be achieved as expeditiously as reasonably practicable, but in no event later than ninety (90) days after Substantial Completion of the Work or designated part of the Work (the last day of such ninety day period being referred to as the "**Final Completion Date**"),

5.6.1 Liquidated damages for failing to attain Substantial Completion by the Substantial Completion Date are Two Thousand Dollars (\$3,100.00) per day.

5.6.2 Liquidated damages for failing to attain the Interim Milestone Date(s) are: ______ Dollars (\$______) per day. (NOT USED)

5.6.3 Liquidated damages for failing to attain Final Completion by the Final Completion Date are One Thousand Dollars (\$3,100.00) per day.

5.8 The Early Completion Bo	onus rate is	Dollars		
(\$) per day	The Early Completion	Bonus shall not exceed		
	Dollars(\$). The Early		
Completion Bonus notification deadline is (NOT USED)				

6.1 The <u>Contract Price</u> is ______Million ______Thousand and 00/100 Dollars (\$______).

6.3 The identification of eligible <u>Asphalt or Fuel or Steel</u> price adjustments for this contract is as follows:

Department and Design-Builder agree to adjust prices for asphalt, fuel and steel in accordance with the Department's pertinent special provisions.

9.1.1 The Department's Senior Representative is:

- 9.1.2 The Department's Representative is:
- 9.2.1 The Design-Builder's Senior Representative is:
- 9.2.2 The Design-Builder's Representative is:

11.1.2 The <u>Baseline Schedule</u> shall be submitted within ninety (90) days of the Date of Commencement.

PART 4 2010 GENERAL CONDITIONS OF CONTRACT BETWEEN DEPARTMENT AND DESIGN-BUILDER

2.2.1 The duration of the <u>Scope Validation Period</u> is one hundred and eighty (180) days. For the purpose of Scope Validation the Date of Commencement is considered to be Notice to Proceed 1.

PART 5

2010 DIVISION I AMENDMENTS TO THE STANDARD SPECIFICATIONS GENERAL PROVISIONS FOR DESIGN-BUILD CONTRACTS BETWEEN DEPARTMENT AND DESIGN-BUILDER

Addition as follows:

• Part 5 - Special Provision for 2010 Division I Amendments to the Standard Specifications, General Provisions for Design-Build Contracts Between Department and Design-Builder, May 2, 2011 (Included in the RFP Information Package)

DEPARTMENT:

DESIGN-BUILDER:

<u>Virginia Department of Transportation</u> (Name of Department)

(Signature)

(Name of Design-Builder)

Date:

(Signature)

(Printed Name)

(Printed Name)

Chief Engineer (Title)

(Title)

Date: _____

END OF

EXHIBIT 1 to PART 3 (2010 LUMP SUM DESIGN-BUILD AGREEMENT BETWEEN DEPARTMENT AND DESIGN-BUILDER PROJECT-SPECIFIC TERMS)