January 6, 2012

Request For Qualifications
A Design-Build Project

 Virginia Department of Transportation

I-64 Exit 91
Improvements

From: 0.429 Miles West of Route 285
To: 0.438 Miles East of Route 285

State Project No.: 0064-007-111, P101, R-201, C-501, B-627
Federal Project No.: NH-064-2(152)
Contract ID Number: C00075877DB47

Augusta County, Virginia

IN ASSOCIATION WITH:

Allegheny Construction Co.

WR&A
Whitman, Requardt & Associates, LLP
Engineers • Architects • Planners
Attachment 3.1.2 - SOQ Checklist
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Qualifications Checklist and Contents</td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>i – iii</td>
</tr>
<tr>
<td>Acknowledgement of RFQ, Revision and/or Addenda</td>
<td>Attachment 2.10 (Form C-78-RFQ)</td>
<td>Section 2.10</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Letter of Submittal (on Offeror’s letterhead)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offeror’s point of contact information</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Authorized Representative’s signature</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td>Principal officer information</td>
<td>NA</td>
<td>Section 3.2.2</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Offeror’s Corporate Structure</td>
<td>NA</td>
<td>Section 3.2.3</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Affiliated/subsidiary companies</td>
<td>NA</td>
<td>Section 3.2.4</td>
<td>yes</td>
<td>2</td>
</tr>
<tr>
<td>Debarment forms</td>
<td>Attachment 3.2.5(a) Attachment 3.2.5(b)</td>
<td>Section 3.2.5</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Offeror’s VDOT prequalification evidence</td>
<td>NA</td>
<td>Section 3.2.6</td>
<td>no</td>
<td>3 – Certificate in Appendices</td>
</tr>
<tr>
<td>Evidence of obtaining bonding</td>
<td>NA</td>
<td>Section 3.2.7</td>
<td>yes</td>
<td>5</td>
</tr>
<tr>
<td>Professional Services Evidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full size copies of SCC and DPOR registration documentation (appendix)</td>
<td>NA</td>
<td>Section 3.2.8</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Statement of Qualifications Component</td>
<td>Form (if any)</td>
<td>RFQ Cross reference</td>
<td>Included within 20-page limit?</td>
<td>SOQ Page Reference</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>SCC Registration</td>
<td>NA</td>
<td>Section 3.2.8.1</td>
<td>yes</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>DPOR Registration (Offices)</td>
<td>NA</td>
<td>Section 3.2.8.2</td>
<td>yes</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>DPOR Registration (Key Personnel)</td>
<td>NA</td>
<td>Section 3.2.8.3</td>
<td>yes</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>DPOR Registration (Non-APELSCIDLA)</td>
<td>NA</td>
<td>Section 3.2.8.4</td>
<td>yes</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal</td>
<td>NA</td>
<td>Section 3.2.9</td>
<td>yes</td>
<td>4</td>
</tr>
<tr>
<td>Offeror’s Team Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity of and qualifications of Key Personnel</td>
<td>NA</td>
<td>Section 3.3.1</td>
<td>yes</td>
<td>6-9</td>
</tr>
<tr>
<td>Key Personnel Resume – DB Project Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.1</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Key Personnel Resume – Quality Assurance Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.2</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Key Personnel Resume – Design Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.3</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Key Personnel Resume – Construction Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.4</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Key Personnel Resume – Lead Structural Engineer</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.5</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Statement of Qualifications Component</td>
<td>Form (if any)</td>
<td>RFQ Cross reference</td>
<td>Included within 20-page limit?</td>
<td>SOQ Page Reference</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Key Personnel Resume – Environmental Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.6</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Organizational chart</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>12-13</td>
</tr>
<tr>
<td>Organizational chart narrative</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>10-11</td>
</tr>
<tr>
<td><strong>Experience of Offeror’s Team</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Contractor Work History Form</td>
<td>Attachment 3.4.1(a)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Lead Designer Work History Form</td>
<td>Attachment 3.4.1(b)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Appendices and Attachments</td>
</tr>
<tr>
<td>Experience of Offeror’s Team Narrative</td>
<td>NA</td>
<td>Section 3.4</td>
<td>yes</td>
<td>14-16</td>
</tr>
<tr>
<td><strong>Project Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify and discuss three critical risks for the Project</td>
<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>17-20</td>
</tr>
</tbody>
</table>
3.2 Letter of Submittal

“Evidence of Obtaining Bonding”/Surety Letter
Located in this Section (Page 5)
January 6, 2012

Mr. John Daoulas, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1221 East Broad Street
Main Building, 4th Floor
Richmond, Virginia 23219

Re:  Statement of Qualifications for a Design-Build Project
1-64 Exit 91 Interchange Improvements
State Project No.: 0064-007-111, P101, R-201, C-501, B-627
Federal Project No.: NH-064-2(152)
Contract ID No.: C00075877DB47

Dear Mr. Daoulas:

Branch Highways, Inc. (Branch), is pleased to submit our response to your Request for Qualifications (RFQ) dated November 3, 2011 for the above referenced project, and in doing so, offers our Statement of Qualifications (SOQ) and intense interest in being selected to serve as the Design-Build for this very important project.

Since it’s founding in 1963, Branch, a Roanoke-based firm, has been engaged in highway and bridge construction and has successfully performed projects for the Virginia Department of Transportation (VDOT) for many years including projects similar to this particular project. Branch is a subsidiary of The Branch Group Inc., a 100% employee-owned company and has been consistently ranked in the ENR Top 400 list of contractors (currently #230). Branch is also a leader in design-build delivery, currently leading the re-construction of 37 miles of Route 58 between Stuart and Hillsville, Virginia under Virginia’s PPTA program. Additionally, Branch completed a design-build contract with Prince William County, Virginia for the construction of Route 15 under a Design-Build PPTA procurement process in December 2009. This project included the reconstruction of Route 15 from just north of I-66 to SR 234 and included three (3) secondary roads (Heathcote Boulevard, Old Carolina Road and Waterfall Road). Mr. Peter Kramer will serve as the Design-Build Project Manager and will be responsible for oversight of the entire Design-Build Team and will lead Branch’s Construction Team for this project.

The Branch Team is comprised of outstanding professional firms and specialty subcontractors, who are leading providers of service for Virginia transportation projects. Our lead designer, Whitman, Requardt and Associates, LLP (WR&A) is a Mid-Atlantic engineering firm with more than 60 years of providing transportation design services to VDOT. They have six offices in Virginia with over 120 staff members. The WR&A Richmond office will be the project office for this interchange design project. Their staff has completed several major interchange design projects for VDOT over the last 10 years. Allegheny
Construction, a Roanoke-based firm, will be a subcontractor to Branch responsible for the I-64 bridge construction. In the past, Branch and Allegheny have collaborated on similar projects of this type. Our successful collaborative experiences will be implemented on this project as well.

3.2.1 Offeror’s Official Representative Information
The Point of Contact for this RFQ and SOQ will be Michael C. Tomlinson, Vice President of Branch Highways, Inc. Contact information is as follows:

Michael C. Tomlinson, Vice President of Estimating and Business Development
Branch Highways, Inc. Phone: (540) 982-1678
P.O. Box 40004 Fax: (540) 982-4216
Roanoke, VA 24022 Email: MikeT@BranchHighways.com

3.2.2 Principal Officer Information with Whom Design-Build Contract with VDOT Would be Written

J. William Karbach, President
Branch Highways, Inc. Phone: (540) 982-1678
P.O. Box 40004 Fax: (540) 982-4216
Roanoke, VA 24022

3.2.3 Offeror’s Corporate Structure
Branch Highways, Inc. is a Corporation registered in the Commonwealth of Virginia. Branch will be the Offeror, the point of contact and the legal entity that will execute a final contract with VDOT. Branch will have no liability limitations on this project. Separate sub-agreements will be entered into between Branch, Whitman, Requardt & Associates, LLP (Lead Designer and Quality Assurance Manager), Allegheny Construction (Bridge Construction) and NXL Construction Co., Inc. (Construction Quality Control).

3.2.4 Affiliated/Subsidiary Companies
Branch Highways, Inc. is part of The Branch Group of companies. Our corporate structure is as follows:

<table>
<thead>
<tr>
<th>Parent Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Branch Group, Inc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subsidiary Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Highways, Inc.</td>
</tr>
<tr>
<td>E.V. Williams, Inc.</td>
</tr>
<tr>
<td>R.E. Daffan, Inc.</td>
</tr>
<tr>
<td>G.J. Hopkins, Inc.</td>
</tr>
<tr>
<td>Branch and Associates, Inc.</td>
</tr>
</tbody>
</table>

3.2.5 Certifications Regarding Debarment
See forms in Appendix for the following Team Members:
- Branch Highways, Inc. - Whitman, Requardt & Associates, LLP
- Allegheny Construction Co., Inc. - NXL Construction Co., Inc.
3.2.6 **Lead Contractor VDOT Prequalification**
Branch Highways, Inc. is prequalified with VDOT (Vendor Number – B319) and our prequalification is current (expires February 29, 2012). A copy of the prequalification certificate follows in the Appendices in this submittal.

3.2.7 **Evidence of Obtaining Bonding**
Surety for Branch Highways, Inc. is provided by The Hartford Insurance Group, proof of which follows on Page 5 of this letter.

3.2.8 **Professional Services Documentation**

3.2.8.1 **Evidence of Registration with the Virginia State Corporation Commission** –
Registration information for each firm is as follows (Copies are included in the Appendix):

<table>
<thead>
<tr>
<th>Firm</th>
<th>VA SCC Registration Number</th>
<th>Type of Corporation</th>
<th>Status of Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Highways, Inc.</td>
<td>0295618-3</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
<td>Active</td>
</tr>
<tr>
<td>Allegheny Construction Co.,</td>
<td>0095573-2</td>
<td>Corporation</td>
<td>Active</td>
</tr>
<tr>
<td>NXL Construction Co., Inc.</td>
<td>0349742-7</td>
<td>Corporation</td>
<td>Active</td>
</tr>
</tbody>
</table>

3.2.8.2 **Evidence of Registration with the Virginia Department of Professional and Occupational Regulation for Each Office Practicing or Offering to Practice Professional Services in Virginia** – (Copies are included in Appendix):

<table>
<thead>
<tr>
<th>Firm</th>
<th>Address</th>
<th>Registration Type</th>
<th>VA DPOR License No.</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Highways, Inc.</td>
<td>PO Box 40004 Roanoke, VA 24022</td>
<td>Class A Contractor</td>
<td>2701-029434</td>
<td>03-31-2013</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>9030 Stony Point Pkwy, Suite 220 Richmond, VA 23235</td>
<td>ENG</td>
<td>0411-000133</td>
<td>02-29-2012</td>
</tr>
<tr>
<td>Whitman, Requardt &amp; Associates, LLP</td>
<td>103 Paulette Circle Suite C Lynchburg, VA 24502</td>
<td>ENG</td>
<td>0411-000774</td>
<td>02-29-2012</td>
</tr>
<tr>
<td>Whitman, Requardt &amp; Associates, LLP</td>
<td>801 South Caroline Street Baltimore, Maryland 21231</td>
<td>ARC, ENG, LS, LA</td>
<td>0407-001676</td>
<td>12-31-2013</td>
</tr>
</tbody>
</table>
Allegheny Construction Co. 2830 Nicholas Ave. Roanoke, VA 24012 Class A Contractor 2701-006768 01-31-2013
NXL Construction Co, Inc. 2870-C South Main St. Harrisonburg, VA 22801 ENG 0411-000678 02-29-2012
NXL Construction Co, Inc. 114 E. Cary Street Suite 200 Richmond, VA 23219 ENG, LS 0407-003031 12-31-2013

3.2.8.3 Key Personnel Registration with Virginia Department of Professional and Occupational Regulation – Key Personnel with APELSCIDLA Licenses (Copies are included in Appendix):

<table>
<thead>
<tr>
<th>Firm Name and Office Location</th>
<th>Name of Key Personnel (Project Role)</th>
<th>Address</th>
<th>Type of Registration</th>
<th>VA DPOR License Number</th>
<th>Exp. Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR&amp;A – Richmond</td>
<td>John Maddox (Design Manager)</td>
<td>2825 Willbrook Dr. Richmond, VA 23233</td>
<td>Professional Engineer</td>
<td>0402026613</td>
<td>01-31-2012</td>
</tr>
<tr>
<td>WR&amp;A – Lynchburg</td>
<td>Brian Henschel (Quality Assurance Manager)</td>
<td>103 Carol Ct. Forest, VA 24551</td>
<td>Professional Engineer</td>
<td>0402035154</td>
<td>01-31-2013</td>
</tr>
<tr>
<td>WR&amp;A – Richmond</td>
<td>Jeremy Schlussel (Lead Structural Engineer)</td>
<td>9105 Carrington Hills Ct., Glen Allen, VA 23060</td>
<td>Professional Engineer</td>
<td>0402033974</td>
<td>01-31-2012</td>
</tr>
</tbody>
</table>

3.2.8.4 Regulated Services other than Professional Services with Virginia Department of Professional and Occupational Regulation – (Copies are included in Appendix):
Not applicable at this time.

3.2.9 Disadvantaged Business Enterprises Statement (12%)
Branch Highways, Inc. is fully committed to achieving a 12% DBE participation for the entire value of the Project.

The Branch Team appreciates the opportunity to provide our statement of qualifications for the I-64 Exit 91 Interchange Improvements Design-Build Project in Augusta County. Our Team of qualified firms brings the experience and expertise that is needed for this challenging project and we look forward to being short-listed for this project. Should you have any questions, please direct them to me at 540-982-1678.

Sincerely,
Branch Highways, Inc.

Michael C. Tomlinson
Vice President – Estimating and Business Development

3.2 Letter of Submittal
December 14, 2011

Mr. John Daoulas, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1221 East Broad Street
Main Building, 4th Floor
Richmond, VA 23219

Re: Branch Highways, Inc.
   Project: I-64 Exit 91 Interchange Improvements
   State Project No.: 0064-007-111, P101, R-201, C-501, B-627
   Federal Project No.: NH-0084-2(152)
   Contract ID No.: C00075877DB47

Dear Mr. Daoulas:

Branch Highways, Inc. has been a client of The Hartford Insurance Group for over 16 years. During that time, we have supported The Branch Group in their pursuit of projects in the $100,000,000 range and total programs in excess of $500,000,000.

As surety for Branch Highways, Inc., Hartford Fire Insurance Company with an A.M. Best Financial Strength Rating of A and Financial Size Category of XV will furnish a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

The Hartford expressly reserves the right to review the terms and conditions of the contract, contract amount, and bond form, evaluate pertinent underwriting data, and verify the adequacy of project financing prior to the issuance of bonds for the referenced project. Our consideration and issuance of bonds is a matter solely between The Branch Group, Inc., and The Hartford, and we assume no liability to third parties or to you by the issuance of this letter.

Hartford Fire Insurance Company is listed on the U.S. Treasury Department List and is licensed to transact fidelity and surety business in the Commonwealth of Virginia.

This letter will expire 180 days from this date.

We recommend this contractor highly and should you have questions, please let us know.

Sincerely,

Theresa S. Stump

cc: Branch Highways, Inc.
    Hartford Fire Insurance Company
3.3 Offeror’s Team Structure
3.3 Offeror’s Team Structure

3.3.1 Key Personnel Resumes
Detailed resumes of all Key Personnel listed below are located in the Appendices as Attachment 3.3.1.

The Branch Team consists of highly qualified professionals with the experience and technical expertise required to deliver this critical project to VDOT. The following will serve in the roles of the Key Personnel as described in the RFQ:

Peter R. Kramer  Design-Build Project Manager  Branch Highways, Inc.  22 years of Experience

Peter R. Kramer will serve as the Design-Build Project Manager and will be responsible for the overall project including design, construction, quality management and contract administration. Mr. Kramer has extensive experience as a Design-Build Project Manager, performing this role on the Route 15 PPTA project for the Prince William County (PWC) Department of Transportation. He is also LEED certified. Reporting directly to Mr. Kramer will be the Key Personnel identified in the organizational chart. Mr. Kramer’s proven experience on Route 15 attests to his capabilities of effective communication between Key Team Personnel in delivering an on-time, on-budget project meeting and exceeding the contract requirements. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Kramer has performed on similar projects:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities</th>
<th>on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Overall Responsibility</td>
<td>James Madison Hwy./Route 15 (PWC)</td>
</tr>
<tr>
<td>- Oversight of Overall Design</td>
<td></td>
</tr>
<tr>
<td>- Oversight of Overall QC</td>
<td>Port Republic Road (VDOT Staunton)</td>
</tr>
<tr>
<td>- Oversight of Overall QAM</td>
<td>James Madison Hwy./Route 15 (PWC)</td>
</tr>
<tr>
<td>- Environmental Permitting</td>
<td>Spriggs Road Phase II (PWC)</td>
</tr>
<tr>
<td>- All Contract Administration</td>
<td>Route 123 and Hooes Road (VDOT NOVA)</td>
</tr>
<tr>
<td>- Oversight of</td>
<td>I-81 Christiansburg Interchange (VDOT Salem)</td>
</tr>
<tr>
<td>Bridge Construction</td>
<td></td>
</tr>
<tr>
<td>Roadway Construction</td>
<td></td>
</tr>
<tr>
<td>Intensive MOT</td>
<td></td>
</tr>
</tbody>
</table>

Mr. Kramer has **effectively managed all three Risks** listed in Section 3.5 (MOT, Access and Environmental) to varying degrees on each of the above projects.

Brian Henschel, P.E., CCM, PMP  Quality Assurance Manager  WR&A  16 years of Experience

Brian Henschel will serve as the Quality Assurance Manager and will be responsible for the QA inspection and testing of all materials and work and will ensure that all work on the project conforms to the contract requirements. Mr. Henschel has extensive experience with both Design-Build and Quality Assurance processes, serving as a VDOT Design-Build Project Manager on five separate contracts in the Lynchburg District; administering design-build contracts; working with IPD/APD to develop/refine the QA/QC process on Design-Build projects; monitoring Quality Assurance testing and sampling performed by the QAM and assigning staffing and overseeing IA/IV testing and sampling. Mr. Henschel also served as a VDOT Area Construction Engineer on approximately 90 projects valued at over $200 million,
managing the QA staffing, testing, sampling and reporting processes, ensuring contract compliance. As QAM, Mr. Henschel will develop the QA plan, manage the QA testing and sampling program, monitor the contractor’s QC program, ensure quality in meeting contract requirements, maintain project documentation and test reporting, review and certify payments to VDOT and communicate closely with VDOT on compliance results. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Henschel has performed on similar projects:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC Inspection and Testing</td>
</tr>
<tr>
<td>Monitoring QC Program</td>
</tr>
<tr>
<td>Ensure Conformance with Contract Requirements</td>
</tr>
<tr>
<td>Route 29/Madison Heights Bypass</td>
</tr>
<tr>
<td>Route 29 NBL/Tye River Bridge</td>
</tr>
<tr>
<td>Regions I &amp; II Culvert Rehabilitation</td>
</tr>
</tbody>
</table>

Mr. Henschel has **effectively managed** or contributed to the management of **all three Risks** listed in Section 3.5 (MOT, Access and Environmental) to varying degrees on each of the above projects.

---

**John Maddox, P.E.**  
**Design Manager**  
**WR&A**  
**26 years of Experience**

John Maddox will serve as the Design Manager with over 26 years of experience in the design and management of major transportation contracts. He has significant experience designing projects on interstate facilities, interchanges and urban widening projects. His recent experience includes five VDOT projects in the Staunton District, which ensures he is familiar with the project requirements and VDOT staff. Mr. Maddox has a proven record of delivering high quality design services on major transportation projects throughout Virginia and in the Staunton District. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Maddox has performed on similar projects:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination of Design Disciplines</td>
</tr>
<tr>
<td>Overall Project Design</td>
</tr>
<tr>
<td>Oversight of Design QA/QC Program</td>
</tr>
<tr>
<td>Constructability Review</td>
</tr>
<tr>
<td>Environmental Permits</td>
</tr>
<tr>
<td>Fairfax County Parkway Interchange at Fair Lakes Parkway</td>
</tr>
<tr>
<td>Route 29/Madison Heights Bypass Interchange</td>
</tr>
<tr>
<td>I-81 Bridges over Buffalo Creek and Maury River</td>
</tr>
<tr>
<td>Route 123 Interchange at Route 1</td>
</tr>
</tbody>
</table>

Mr. Maddox has **effectively managed all three Risks** listed in Section 3.5 (MOT, Access and Environmental) to varying degrees on each of the above projects.
Warren (Jake) Hensley | Construction Manager | Branch Highways, Inc. | 30 years of Experience
---|---|---|---

As Construction Manager, Warren (Jake) Hensley will plan, schedule and execute the construction work and ensure the work and the material used in the work meets or exceed the contract requirements and the ‘approved for construction’ plans and specifications. Mr. Hensley has over 30 years of roadway construction experience.

Mr. Hensley is one of most experienced and capable managers of highway construction activities in Virginia. Clients frequently request him by name to serve on their projects. He recently completed the Route 253 Port Republic Road Improvements Project for VDOT’s Staunton District, where he again demonstrated his ability to successfully manage extremely challenging construction activities.

As Construction Manager, Mr. Hensley will implement an effective quality control plan that ensures the materials provided and work performed is in accordance with the contract requirements. Through effective weekly progress meetings, he will ensure that proper planning, execution and monitoring are implemented into the construction operations and quality control processes for the project. Mr. Hensley has a proven record of constructing major transportation projects to the owner’s complete satisfaction and in compliance with the contract documents. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Hensley has performed on similar projects:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities</th>
<th>on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Construction Processes</td>
<td>Port Republic Road (VDOT Staunton)</td>
</tr>
<tr>
<td>Manage QC Activities</td>
<td>Spriggs Road Phase II (PWC)</td>
</tr>
<tr>
<td>Ensure materials meet contract requirements and ‘approved for construction’ drawings and specifications.</td>
<td>Route 123 and Hooes Road (VDOT NOVA)</td>
</tr>
<tr>
<td>Ensure work meets contract requirements and ‘approved for construction’ drawings and specifications.</td>
<td>Route 460 Blacksburg Interchange (Salem District)</td>
</tr>
<tr>
<td>VDCR Responsible Land Disturber Certification</td>
<td></td>
</tr>
<tr>
<td>VDOT Erosions and Sediment Control Contractor Certification</td>
<td></td>
</tr>
</tbody>
</table>

Mr. Hensley has **effectively managed** or contributed to the management of all three Risks listed in Section 3.5 (MOT, Access and Environmental) to varying degrees on each of the above projects.

Jeremy Schlussel, P.E. | Lead Structural Engineer | WR&A | 15 years of Experience
---|---|---|---

Jeremy Schlussel will serve as the Lead Structural Engineer and will be responsible for the design of the replacement bridge structure on this project and will ensure that the final design follows all applicable design guidelines as set forth in Manuals of the Structure and Bridge Division, Volume V., Part 2-8 and 11. The final design will incorporate all of the latest guidelines to ensure that the new bridge structure will provide a low maintenance structure. He will draw on his 15 years of experience and having worked on over 200 bridge projects for VDOT over the past 8 years that range from 20 ft. to 10,000 ft. long.
structures. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Schlussel has performed on similar projects in the Staunton District:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities</th>
<th>on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Responsible for Bridge and Retaining Wall Design</td>
<td>• Route 250 over Calfpasture River</td>
</tr>
<tr>
<td>• Construction Support</td>
<td>• Route 211 over South Fork Shenandoah River</td>
</tr>
<tr>
<td>• Bridge Removal</td>
<td>• I-81 Bridges over Buffalo Creek and Maury River</td>
</tr>
<tr>
<td>• Foundation Design</td>
<td>• I-64 over Maury River Rehabilitation</td>
</tr>
</tbody>
</table>

In his design work on the projects listed above, Mr. Schlussel has **effectively incorporated consideration for all three Risks** listed in Section 3.5 (MOT, Access and Environmental) into his designs.

In addition to these projects located in the Staunton District, he has worked on multiple projects located within an interchange and understands the importance of designing a bridge structure that is fully coordinated with the sequence of construction of the project. Examples of projects include Route 623 over Route I-64 in Goochland, Route 54 over Route I-95 in Ashland and Route I-95 over Route 17 in Stafford. Mr. Schlussel has a proven record for the design of new bridge structures for VDOT and is a recent graduate of the **VDOT Transportation Project Management Institute (TPMI)**.

**Robert Siegfried** will serve as the Environmental Compliance Manager and will be responsible for obtaining environmental permits and approvals, ensuring that the project complies with all commitments made in the NEPA process and addressing field conditions and constructability issues as they impact environmental compliance. Mr. Siegfried has over 25 years of experience completing NEPA documents for transportation projects in Virginia and West Virginia. His permitting experience includes some of the largest 404 permits obtained by VDOT, including the Route 33 Bridges in West Point Virginia, Route 123 Bridge over the Occoquan River and the Route 1/I-95 interchange in Alexandria, Virginia. He has provided VDOT and other clients construction phase compliance monitoring for utility replacement, stream restoration and fish passage projects. Based on many years working on transportation projects, Mr. Siegfried will be able to work effectively with both design and construction staff to insure environmental compliance. Based on the evaluation criteria of this RFQ, the following is a list of similar tasks that Mr. Siegfried has performed on similar projects:

<table>
<thead>
<tr>
<th>Similar Tasks/Responsibilities</th>
<th>on Similar Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure Environmental Compliance</td>
<td>• Fairfax Co. Parkway Interchange at Fair Lakes</td>
</tr>
<tr>
<td>• Construction Support/Monitoring</td>
<td>• Route 237 Widening</td>
</tr>
<tr>
<td>• Design Support</td>
<td>• Route 501 Bridge Replacement EA</td>
</tr>
</tbody>
</table>

Mr. Siegfried has **effectively managed Risk No. 3** in Section 3.5 (Environmental) on each of the projects listed above.
OVERALL COMMUNICATION COORDINATION

The challenges and opportunity for the I-64 Exit 91 Interchange Improvements has allowed us to assemble a regionally-based Team. The result is a positive Team chemistry among the team members, improving communication and the total process, as each member understands their role and the respective role of other team members.

3.3.2 Team Organizational Chart
The Project Team Organizational Chart is located in this section on Page 12.

Description of Functional Relationships and Communication Among Participants
Branch, W R&A and Allegheny fit well together based on the following key factors:

- **Flat Organizations**: Their respective senior executives are very close to the day-to-day activities of their companies, enabling quick decision making.
- **Cultural Alignment**: They share the common values of hard work, high integrity, detailed oversight and striving to provide low cost/high quality services.
- **Similar Type and Size of Projects**: All companies routinely work on projects of this magnitude.

Our organizational chart demonstrates clear lines of accountability and responsibilities of each key team member. Our well-defined organization, relationships, responsibilities and expectations, along with continual interaction and communication among all team members, will provide the understanding needed to enable the Team to deliver a top-quality, on-time project within VDOT’s budget.

The Design-Build Project Manager will bear full responsibility and is accountable for the overall communication and coordination on the project. As part of his primary responsibilities, Mr. Kramer will create a work environment that promotes a collaborative, result oriented atmosphere and leads team members and other parties, including VDOT and other third parties, to function in an ‘open but formal’ environment. This environment will optimize understanding, mutually protect the parties from contractual non-conformities and empower our respective functionaries to operate in an environment, where they can make decisions appropriate to their level of responsibility.

An “Open but formal” environment provides outstanding functional balance: lines of authority and responsibility are limited and clear, yet communication and interaction are encouraged to occur throughout the organization among any of the stakeholders at any time. In terms of contractual issues, contract administration, reporting and regulatory issues, our communications and relationships will be formal and well documented, for the purpose of keeping all the parties within their contractual obligations and protecting one another from potentially harmful contractual issues.

Over the life of the project, stakeholders can anticipate meeting regularly to prepare, plan, evaluate and adjust the performance (including design) and coordination of project activities and responsibilities:

- **Weekly Progress Meetings** conducted by the DBPM.
- **Topical Meetings** to discuss specific project issues.
- **End of Shift Meetings** conducted by CM for project personnel including QA/QC.
- **Morning Huddles** conducted by foremen at the crew level.
- **Executive Committee Meetings** includes all key personnel and VDOT through project duration.
- **Risk Management Meetings** led by the DBPM to ensure resolution of identified project risks.
• **Other Miscellaneous Meetings Issues** - Emergency services, community leaders and others to facilitate communications with stakeholders and provide timely and proactive responses.

Throughout the design process, the Design Team will solicit and consider input from various team members, including the client, other agencies, adjacent property owners and other parties, whose input will provide value to the client, the project and the community. At a minimum, they will solicit input on actual site conditions; safety, traffic, environmental and community issues; project goals; constructability; and efficient and effective phasing.

**Communications of Participants with VDOT and Stakeholders**

**Design-Build Project Manager - Peter Kramer** will be the Single Point of Contact dealing with VDOT at an executive level on all project matters. Also, several of the Key Personnel and other team members will be in direct contact with outside agencies, VDOT staff and various stakeholders during project design and construction. The Design-Build Project Manager plays a critical role in the success of the project. He is essentially a communication hub to the rest of the Key Personnel. The functional relationship and open communication among the CM, DM, ECM and the QAM are critical to the success of the project.

**Design Manager - John Maddox, P.E.** will interact directly with the VDOT project representative and review staff to coordinate design oversight reviews and gain design approvals. The Design Manager will conduct comment resolution meetings and coordinate directly with VDOT staff as necessary to ensure the design intent is clear and that oversight review comments provided by VDOT are addressed properly.

**Quality Assurance Manager - Brian Henschel, P.E., CCM, PMP** will coordinate directly with VDOT on certifying monthly pay estimates and notification of Non-Compliance Reports and other communications in implementing a Recovery Plan. He will also coordinate Preparatory Inspection meetings and other Hold Point inspections with VDOT and other stakeholders.

**Construction Manager - Jake Hensley** will be the most visible member of the Team on the project coordinating and directing all field crews along with the construction quality control activities. He will manage and communicate the daily activities of the project through on-going operational meetings and provide the most up-to-date information regarding project status to all stakeholders.

**Lead Structural Engineer - Jeremy Schlussel, P.E.** will coordinate directly with the VDOT Structure and Bridge representative during the design review and approval process for the bridge. He will ensure all VDOT comments are addressed and meet the contract requirements.

**Environmental Compliance Manager - Robert Siegfried** will ensure the timely submittal of all permitting for the project and effective coordinating will all agencies. He will also provide documentation to VDOT staff that the project design and construction are in conformance with the NEPA Environmental document.

**Integrated Design-Build Team**
The Branch Team has highlighted the key personnel’s role on pertinent disciplines in the Table on Page 13.
A Design-Build Project – I-64 Exit 91 Interchange Improvements
Project No: 0064-007-111, P101, R-201, C-501, B-627

3.3 Offeror’s Team Structure

Quality Assurance Manager
Brian Henschel, P.E., CCM, PMP

Construction Manager
Jake Hensley

Environmental Compliance Manager
Robert Siegfried

Design Manager
John Maddox, P.E.

Safety Manager

Design-Build Project Manager
Peter Kramer

Branch Highways, Inc.
Whitman, Rca, and Associates, LLP
Allegheny Construction Co., Inc.
NXL Construction Services

= KEY PERSONNEL
Branch Highways, Inc.
Whitman, Requardt and Associates, LLP
Allegheny Construction Co., Inc.
NXL Construction Services

Quality Assurance & Testing

Roadway Superintendent
Bridge Superintendent
Grading Crews
Bridge Crews
Subcontractors
Subcontractors

QC Testing & Inspection

Roadway
Surveying
Interchange
Utility
Design/Relocation
Permitting
Right-of-Way
Geotechnical
Traffic Control Devices
Environmental
Transportation Management Plan

Bridge

Lead Structural Engineer
Jeremy Schlussel, P.E.

Structural Design
### 3.3.2 - Pertinent Disciplines Required For This Project

<table>
<thead>
<tr>
<th>Pertinent Disciplines</th>
<th>Peter Kramer (DBPM)</th>
<th>Brian Henschel (QAM)</th>
<th>John Maddox (DM)</th>
<th>Jake Hensley (CM)</th>
<th>Jeremy Schlussel (LSE)</th>
<th>Robert Siegfried (ECM)</th>
<th>Full Integration?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pertinent Disciplines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O - Oversight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E - Engineering (Design)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C - Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I - Inspection/Compliance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Project Management</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>CEI (QA)</td>
<td>O</td>
<td>I</td>
<td>OE</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEI (QC)</td>
<td>O</td>
<td>OE</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway Design</td>
<td>O</td>
<td>OE</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge Steel Design</td>
<td>O</td>
<td>OE</td>
<td>E</td>
<td>E</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge Foundation Design</td>
<td>O</td>
<td>OE</td>
<td>E</td>
<td>E</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>O</td>
<td>OE</td>
<td>E</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulics Design</td>
<td>O</td>
<td>OE</td>
<td>E</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROW Acquisition</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>O</td>
<td>OE</td>
<td>C</td>
<td>O</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permitting</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Historic Property 4(f)</td>
<td>O</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Involvement/Relations</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td></td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td>Private Utility Reloc., Adj. and Coord.</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Management Plan (MOT)</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey</td>
<td>OC</td>
<td>I</td>
<td>O</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demo Existing Bridge Structures</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>E</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Bridge Sub/Superstructure Construction</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>E</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Major and Minor Grading (Earthwork)</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>E</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Roadway, Interstate, Ramp Construction</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drainage</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>O</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signals</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signing and Pavement Marking</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erosion and Sediment Control</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>O</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Water Systems</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitary Sewer</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduling</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent Transportation Systems</td>
<td>OC</td>
<td>I</td>
<td>OE</td>
<td>C</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.4 Experience of Offeror’s Team
3.4 Experience of Offeror’s Team

Branch develops teams specifically for each project it pursues. We are committed to having the right team for the right project. Branch, WR&A and Allegheny Construction have all led different projects in the Staunton District that have either won or been nominated for Virginia Statewide Quality Awards.

The right designer for the project should have extensive experience in providing VDOT engineering services and particularly design of interchanges and bridges, especially in the Staunton District. Over the last three years, WR&A has been one of the most active firms providing engineering services to the Staunton District. This, and for all the reasons listed in the WR&A Section below, is why WR&A is the right designer.

The right bridge contractor for the project should have extensive experience building quality bridges for VDOT, over heavy traffic, in tight spots, safely and quickly, and all the better if in the Staunton District. The right bridge contractor should have an engineering mindset to guide its difficult operations over and around I-64. We believe this mindset is critical to the project. There is no doubt in our minds that Allegheny Construction Company, Inc. (a SWaM-certified firm) is the right bridge builder for this project.

Branch is the right Design-Builder to bring these two team members together because our experience on design-build projects allows us to both a) facilitate our fellow team members’ high performance and cooperation levels within the design-build system and b) modify our methodology to adapt to their strengths.

Based on the needs of this project, the Branch Team is the right Team. As demonstrated throughout this document, there is not a single scope, complexity, or regulatory issue that has not been effectively managed by at least one team member and in most cases, all team members. We have the right team members, with the right experience, with the right combinations of experience, on the right relevant projects and with the right scopes and complexities, all of which present VDOT with a Team whose complementary skills and experiences are custom tailored to meet VDOT’s needs on this project.

Branch Highways, Inc. (Branch) is the Team Leader and Offeror for this project. In the western portion of Virginia, no VDOT Design-Builder or contractor has more Design-Build experience than Branch, having performed or in the process of performing nearly $300 million worth of design-build work, all to VDOT’s satisfaction. Branch has been constructing transportation infrastructure since the mid-1960s (later incorporated as Branch Highways, Inc. in 1986). The firm provides services for both public and private owners, including small and simple projects, as well as large and complex projects such as: Route 58 PPTA, James Madison Hwy./Route 15 PPTA, I-81/Route 460 Christiansburg Interchange, Route 460/South Main Street Blacksburg Interchange and the Route 262 Staunton Bypass, which received the Construction Quality Award in 2003.

One VDOT District Administrator recently wrote that Branch’s senior management is “competent, highly qualified, of good character and honest and reliable in their dealings with the Department.” Furthermore, Branch has “become one of..., if not the, most professional and cooperative construction firms with which we do business.” And lastly, “[e]ven in the rare instances in which we are unable to reach an agreement it is clear to me that a high value is placed on maintaining good communication and a good working relationship.”
In the Staunton District, as recently as 2011, Branch completed a section of Port Republic Road in Harrisonburg, achieving project incentive milestones. We also recently finished a 5-mile section of I-64 improvements in Allegheny County. To the best of our knowledge, on both of these recent projects, over the course of their two season durations, on any of Contractor Performance Evaluations, we received only one single score less than 100% and that minor issue was corrected on the same day it was reported.

Whitman, Requardt and Associates, LLP (WR&A) has provided transportation design services to VDOT for over 60 years, and engineering, planning and construction management services in the Mid-Atlantic region for 97 years. They are currently ranked #127 by Engineering News Record. WR&A has one of the largest design groups in Virginia (with over 120 engineers and technicians). Over the last six years, WR&A has held the Structure and Bridge On-Call Design Contract for Bridge Maintenance and Repair for Regions II & III, which includes the Staunton, Culpeper, Lynchburg, Richmond, Fredericksburg and Hampton Roads Districts. They have completed over 150 bridge design task assignments during this period, many of which were in the Staunton District.

Over the last three years, WR&A has provided engineering services under VDOT’s Location and Design On-Call NOVA District and Statewide contracts, completing over 60 design tasks, many of which were located in the Staunton District. VDOT recently ranked the WR&A Team No. 1 among proposers based on qualifications and performance and has reselected them for an additional three years.

They currently hold On-Call contracts with the Location and Design, Structure and Bridge, Environmental and Construction Divisions of VDOT. They have contracts on major projects throughout Virginia including the Fairfax County Parkway Interchange at Fair Lakes Parkway, the Route 1 and 123 Interchange in Prince William County and the Replacement of the I-81 Bridges over the New River and Reconstruction of the Exit 105 Interchange ranging in construction cost from $45 to $70 million.

WR&A’s Design-Build experience with transportation projects includes being the Engineer of Record for two major projects in the Washington, D.C. metropolitan area, providing final design services including contract document preparation, permitting, environmental compliance and construction support services for both I-495 at Arena Drive ($30 million) and MD 237 from MD 235 to Pegg Road ($36 million).

Their experience on Design-Build projects in Virginia has been related primarily to the development of 30% plans on over nine different projects, including the I-64/Route 15 (Zion Crossroads) Diverging Diamond Interchange.

Allegheny Construction Company, Inc., founded in 1963, is a SWaM-certified Class A Heavy/Highway General Contractor licensed in Virginia, North Carolina and Tennessee.

In the Staunton District, Allegheny constructed the Norfolk Southern bridge over Route 340 in Waynesboro. In Goshen, Virginia Allegheny removed, rebuilt and reinstalled a historic truss bridge over the Maury River, which was nominated for Quality Award of the year. Allegheny was recently awarded the Route 603 temporary and permanent bridge project over Naked Creek in Page County and the Route 633 road and bridge project over the Cow Pasture River in Alleghany County.
In the Culpeper District, Allegheny built the 9th and 10th Street Connector project, which required the relocation of four main line Norfolk Southern tracks and a CSX track relocation for the construction of two new bridges. This project was awarded the VDOT Construction Quality Award of the year. Allegheny is currently constructing the Route 620 Road and Bridge over Mountain Run Creek.

Allegheny has considerable project experience with high traffic roadways. These projects include Route 634 (Hardy Road) Widening (VDOT), I-81 ramp upgrades, the Route 40 Widening in Rocky Mount, which also included a bridge over the Norfolk Southern for an access ramp onto U.S. Route 220 (VDOT) as well as the I-581 Valley View Interchange, Phase I (VDOT). Allegheny has decades of experience with VDOT and prides itself on undertaking modern and advanced engineering challenges.

Quality Control: NXL Construction Services, Inc.

In our efforts to include DBE/minority participation as part of our Team, the Branch Team has selected NXL to perform the construction quality control. NXL Construction Services, Inc. is a 100% minority-owned VDOT-certified DBE/MBE firm that was founded in 1989 and is based in Richmond, Virginia, with other locations including Atlanta, Georgia, Northern Virginia and Hampton Roads, Virginia. Mr. Nico De León, President and Founder of the firm, is a registered professional engineer in Virginia, Georgia, Delaware, North Carolina, Florida and California. NXL provides construction inspection services for transportation and engineering design projects. NXL has over 90 employees providing construction inspection services including quality control inspection and testing.
3.5 Project Risks
3.5 Project Risks

Project success depends on the careful evaluation and mitigation of critical risks inherent to the project. Identifying the most relevant and critical risks threatening the project requires first defining project success. In considering the scope, location, stakeholders and vision for the project, the Branch Team believes that Project Success may be defined by the following:

- Safety for workers and road users with no accidents
- On-Time and On-Budget
- Providing expected Quality
- Serving the needs of the traveling public
- Respecting the concerns of impacted businesses
- Minimizing the overall change in the footprint of the interchange
- Minimizing or eliminating environmental impacts
- Environmental Compliance

This comprehensive definition of Project Success ensures all parties with vested interest in the project and its impacts can attain their goals. Given this definition, the following risks pose the greatest threat to that success and are deemed critical risks requiring an effective mitigation strategy.

RISK 1: Maintenance of Traffic throughout the Phases of the Project

Definition of Risk: Route 285 is currently a busy two-lane roadway with congested traffic flow during peak traffic hours and difficult turning movements posing a safety concern to local and unfamiliar travelers. The proposed project involves replacing the existing bridge, expanding roadway capacity and altering existing turning movements in staged construction under traffic and over Interstate 64 and doing so in a manner that minimizes environmental impacts and the overall footprint of the interchange. The Design-Build must develop a Maintenance of Traffic Plan that allows construction to progress safely and timely for workers and the traveling public and provides adequate access to the work without negatively affecting interstate traffic on I-64 and the through and business traffic on Route 285. Traffic movements on Route 285 and the ramps accessing I-64 must be maintained during the various construction phases and associated traffic shifts. Significant risk to project success exists in the challenge of developing and implementing a comprehensive MOT plan to address the competing priorities of construction access/efficiency in staged construction versus maintaining the existing traffic flow and providing clear guidance for travelers through the project.

Critical Impact of Risk on Project: The following Project Success goals may be impacted by this risk:

- On-time and on-budget completion: There is a high-probability and high-impact threat that the requirement to build the project in each phase with sufficient space and safety considerations, while maintaining adequate traffic flow and turning movements will place pressure to sacrifice time and cost goals in order to focus on the project success metrics of safety for the worker and road user and serving the needs of the traveling public. Adequately maintaining the traffic may lead to additional costs and time in the form of acquiring additional easements, relocating additional utilities, performing additional traffic switches or performing smaller pieces of the total work in each phase (slowing work and increasing expense).

- Serving needs of traveling public: Conversely to the above, the needs of the traveling public could be sacrificed if too much priority is placed on meeting cost and schedule goals without properly respecting the impact this project will have on road users throughout the project, especially during...
peak traffic flows. The roadway is already congested; construction could push the interchange to an unacceptable level of operations.

- Safety for Workers and Public: Tight working conditions over I-64 and work areas next to open lanes of Route 285 coupled with changes in traffic movements creates safety risks. The Design-Builder’s solution must prepare for safe working and traveling conditions in all phases of the project.

- Respecting the concerns of impacted businesses: More fully detailed in Risk Item No. 2, construction of the project creates a significant potential impact to the businesses within and adjacent to the project that must be addressed by the MOT plan.

- Acquiring more right-of-way than is absolutely necessary for either the final project alignment or for project phasing is highly undesirable. Minimizing the right-of-way acquisition will be addressed during development of MOT design concepts.

**Mitigation Strategies:** To mitigate the risk of the impact from these events, and to minimize VDOT and other outside agency effort, the Design-Builder will employ the following strategies:

- The Contractor and Designer will jointly develop a Transportation Management Plan with traffic analysis of each phase of construction with all intersections and temporary signal modifications designed and timing plans for all peak periods with emergency pre-emption.

- Perform a comprehensive analysis of all proposed traffic shifts and stages to ensure that all travel movements and turns are clear and well signed/signaled, sequenced to provide maximum safety to workers and the public and allows the work to be performed without sacrifices to quality.

- Perform independent constructability reviews at each design phase by qualified Project Controls personnel to ensure optimal means and methods, access and traffic movements.

- Place high emphasis on developing a thorough QA/QC Plan in accordance with the updated Plan requirements likely to be released during the procurement phase of this contract, overseen by QA and QC Managers with proven histories of creating and reviewing similar QA/QC Plans.

**RISK 2: Maintaining Access to Businesses and Destinations Within and Adjacent to the Project**

**Definition of Risk:** The second critical risk identified is the threat of an unacceptable impact to access for the businesses and destinations located within and adjacent to the project location. Access to these businesses, which include the Medical Center, the Augusta Expo, Sheetz, McDonalds, Shell Station, Hampton Inn and Tinkling Springs Church among others, is a critical component of the local economy and the destination for much of the traffic passing through the project limits. As major stakeholders of this project, servicing their needs to remain open and fully accessible during the multi-phased construction project is a critical risk.

**Critical Impact of Risk on Project:** The following Project Success goals may be impacted by this risk:

- Respecting the Concerns of Impacted Businesses: Long-term construction and changing traffic movements can produce significant financial impacts to affected businesses and to the public trying to reach these goods and services, most notably to citizens and emergency personnel attempting to access the medical care facility. Unclear signage, delays in traffic flow or reduced access could all prove costly to someone with an urgent medical need. For the other businesses facing the difficult economic times, delayed, obstructed or shifting access can mean a significant loss of business – which could lead to loss of jobs in the community and loss of revenue for the local government. Whereas
much of the proposed design and construction is reasonably straightforward, preserving access to these key stakeholders stands as one of the greatest project challenges.

- Safety and Impact to the Public: Failure to sign and provide proper guidance to travelers, especially in the period shortly after traffic shifts, greatly increases the risk of accidents and other safety concerns.

**Mitigation Strategies:** To mitigate the risk of the impact from these events, the Design-Builder will employ the following strategies:

- Implement a broad reaching Public Involvement process to obtain stakeholder input on traffic flow and access needs, peak trip generation, special event dates and times, and other critical input to balance their needs with the construction requirements. The Design Team will use input from these sessions to develop design features and construction sequencing plans. This public involvement will continue during the construction phase, with frequent communications through news media, informal meetings with stakeholders and letters to ensure communication on project status and upcoming impacts.

- The traffic control plan and specifically the signage plans during construction will be carefully coordinated to maintain access and flow throughout the phases of construction. This focus on maintaining operations of the businesses will be at the forefront of each design phase quality review.

- The QA/QC Plan will be developed to incorporate these concerns during the construction phase, including increased inspection frequency of related features, such as work zone reviews. Access and business concerns will be a standing agenda item for Preparatory Inspection Meetings, and key stakeholders may be invited as appropriate to the Preparatory Inspection meeting prior to a traffic shift.

**RISK 3: Environmental Considerations and Permits**

**Definition of Risk:** A NEPA environmental document has been completed for the project, which included coordination with the VDHR and FHWA on the Tinkling Spring Presbyterian Church protected under Section 4(f). The church is on the Nation Register of Historic Places and the adjoining property has been determined to be an eligible historic property. The impacts to Waters of the U.S. have also been documented in the environmental document and the necessary permits will need to be acquired for the project. Additionally, there is a Federal Threatened species present in the project area, which will require strict implementation of erosion and sediment controls for the project.

**Critical Impact of Risk on Project:** The success of the project will require the Design-Build Team to first have a complete understanding of the commitments within the environmental document for the project and second to ensure these commitments are followed through in the design and construction of the project. The design of the project and commitments of impacts to the Tinkling Spring Presbyterian Church must be maintained during design and construction, to avoid delays in design approval and construction.

The design of stormwater management basins, drainage outfalls (MS-19 Requirements) and erosion and sediment control will need to be evaluated to determine the need for additional right-of-way or easement and modifications to the permits and mitigation for the project.

Traffic management could impact the overall footprint, which in turn could result in additional environmental impacts. This will be considered when developing the MOT plan.
Mitigation Strategies: The mitigation efforts will begin from day one with the identification of a qualified Environmental Compliance Manager, who has experience in environmental documentations, design and construction management. We have selected Robert Siegfried of WR&A to serve as the Environmental Compliance Manager for the project. With over 29 years of experience, Mr. Siegfried is currently managing both of the VDOT Contracts for Environmental Documents and the Statewide Wetland and Stream Maintenance Monitoring, which requires expertise through all phases of project development. Mr. Siegfried’s input will be integral to the design process and will continue in the construction phase through attendance at design and construction progress meetings to discuss the environmental concerns and frequent environmental/permit compliance reviews.

The commitments of the design and construction impacts on the Tinkling Spring Presbyterian Church have been clearly documented and will be complied with during all project phases.

The Team will need to confirm VDOT’s preliminary findings that no stormwater management facilities are required for the project and that the right-of-way and easements for drainage outfall requirements (MS-19) are met. Additionally, the Team will identify all temporary sediment control measures that could require an easement or temporarily impact the existing wetlands or stream.

WR&A’s extensive experience in providing design, mitigation and construction phase services on VDOT projects will ensure the preliminary design will identify and address these items early in the project development. WR&A Erosion and Sediment Control certified plan reviewers will complete a detailed review of the plans and will ensure proper implementation during construction.

Commitment to Minimizing VDOT Risk
The Branch Team will develop a project design that meets all design and construction criteria established by VDOT and the regulatory agencies. Our QA process will ensure VDOT and other agencies’ efforts are minimized during the development of the project.

Given our past positive work history designing and constructing projects of this size and complexity, we bring the expertise for managing both interstate and local traffic through work zones. Other than mandated QA verification, our QA/QC program will verify the quality of the finished work product, which minimizes VDOT’s oversight for the project.

Our verified experience working with the regulatory agencies will provide confidence to VDOT that additional efforts will not be necessary by either VDOT or these agencies. Similarly, our verified work experience for utility relocation and property acquisition will minimize VDOT’s involvement in these areas of work.

Our Team’s proven record of clearly identifying and minimizing project risk has been highlighted on our Work History Forms, which are located in the Appendices under Attachments 3.4.1 (a) and (b).

The Branch Team’s approach provides a solid strategy that mitigates additional efforts by VDOT, other agencies and all stakeholders.
Appendices and Attachments
Attachment 2.10 - Form C-78 RFQ
RFQ Signature Sheet
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00075877DB47
PROJECT NO.: 0064-007-111, P101, R-201, C-501, B-627

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

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

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ 11/03/2011 (Date)
2. Cover letter of (Date)
3. Cover letter of (Date)

Signature
12/19/11
Date
Debarment Forms
ATTACHMENT NO. 3.2.5(a)

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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]

Branch Highways, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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]

The Branch Group, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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] January 6, 2012 [Senior Vice President]
[Date] [Title]

[Whitman, Requardt and Associates, LLP]

Name of Firm
ATTACHMENT NO. 3.2.5(h)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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 12/6/2011  Vice President
Date Title

Allegheny Construction Co Inc

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-007-111, P101, R-201, C-501, B-627

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] President

[Title]

NXL Construction Services, Inc.

Name of Firm
VDOT Prequalification Certificate
CERTIFICATE OF QUALIFICATION

Branch Highways, Inc.
Vendor Number: B319

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications has been assigned to you by the Commissioner:

PREQUALIFIED

Work Classes: Grading, Major Structures, Underground Utilities.

Issue Date: March 22, 2011  This Rating and Classification will Expire: February 29, 2012

Suzanne FR Lucas Prequalification Officer

Don E. Silies, State Construction Contract Officer
SCC Certificates and DPOR Licenses
CISM0180

CORPORATE DATA INQUIRY

11/03/11
10:33:58

CORP ID: 0295618 - 3
STATUS: 00 ACTIVE
STATUS DATE: 11/25/86

CORP NAME: BRANCH HIGHWAYS, INC.

DATE OF CERTIFICATE: 11/25/1986
PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA
STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y
MONITOR INDICATOR:
CHARTER FEE:
MON NO:
MON STATUS:
MONITOR DTE:
R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE
AR RTN MAIL:

CITY: ROANOKE
STATE: VA
ZIP: 24016

R/A STATUS: 2 OFFICER
EFF. DATE: 01/11/08
LOC: 217

ACCEPTED AR#: 210 29 5718
DATE: 11/16/10
ROANOKE CITY

CURRENT AR#: 210 29 5718
DATE: 11/16/10
STATUS: A
ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

100.00
5,000

(Screen Id:/Corp_Data_Inquiry)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9060 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE
BRANCH HIGHWAYS INC
PO BOX 40004
ROANOKE VA 24022 0004

*CLASSIFICATIONS* SDS H/H

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

Gordon N. Dixon, Director
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

On August 10, 2000, a statement of registration as a foreign limited liability partnership was filed in this office by WHITMAN, REQUARDT & ASSOCIATES, LLP, a Maryland limited liability partnership.

This certificate of registration is in effect as of this date.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
June 14, 2011

Joel H. Peck, Clerk of the Commission
STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

a limited liability partnership registered under the laws of MARYLAND; was this day admitted to record in this office and that the partnership is registered to transact business in Virginia as a foreign Registered Limited Liability Partnership, subject to all laws applicable to the partnership and its business.

State Corporation Commission
Attest: [Signature]

Clerk of the Commission
COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

June 6, 2011

CT CORPORATION SYSTEM
4701 COX RD STE 301
GLEN ALLEN, VA 23060-6802

RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

ID: K000382 - 4
DCN: 11-06-06-0502

Dear Customer:

This is your receipt for $50.00 to cover the fee for filing the annual continuation report for the above-referenced registered limited liability partnership.

The annual continuation report was filed on June 6, 2011.

If you have any questions, please call (804) 371-9733 or toll-free in Virginia, 1-866-722-2551.

Sincerely,

Joel H. Peck
Clerk of the Commission

GPACCEPT
CIS0436
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES
9030 STONY POINT PKWY
SUITE 220
RICHMOND, VA 23235

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

NUMBER
0411000774

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

WHITMAN REQUARDT AND ASSOCIATES LLP
103 PAULETTE CIRCLE
SUITE C
LYNCHBURG, VA 24502

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

COMMONWEALTH OF VIRGINIA
BOARD FOR APESCLIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000774 EXPIRES: 02-29-2012
PROFESSIONS: ENG
WHITMAN REQUARDT AND ASSOCIATES LLP
103 PAULETTE CIRCLE
SUITE C
LYNCHBURG, VA 24502

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ARC, ENG, LS, LA

WHITMAN, REQUARDT AND ASSOCIATES LLP
801 SOUTH CAROLINE STREET
BALTIMORE, MD 21231
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
01-31-2012

NUMBER
0402026613

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE

JOHN PATRICK MADDOX
2825 WILLBROOK DRIVE
RICHMOND, VA 23233

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

COMMONWEALTH OF VIRGINIA

BOARD FOR APJELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402026613 EXPIRES: 01-31-2012

JOHN PATRICK MADDOX
2825 WILLBROOK DRIVE
RICHMOND, VA 23233

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
BRIAN ANDREW HENSCHEL
103 CAROL CT
FOREST, VA 24551
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: 1 (804) 367-8500

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE

JEREMY SCHLUSSEL
9105 CARRINGTON HILLS CT
GLEN ALLEN, VA 23060

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

ALTERNATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
CORPORATE DATA INQUIRY

CISM0180

CORP ID: 0095573 - 2

STATUS: 00 ACTIVE

STATUS DATE: 05/24/96

CORP NAME: ALLEGHENY CONSTRUCTION COMPANY, INC.

DATE OF CERTIFICATE: 01/16/1963 PERIOD OF DURATION:

INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND:

CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE:

MON NO:

MON STATUS:

MONITOR DTE:

R/A NAME: J. RUDY AUSTIN

STREET: 10 FRANKLIN RD., NE

P. O. BOX 40013

CITY: ROANOKE STATE: VA ZIP: 24038 13

AR RTN MAIL:

R/A STATUS: 4 ATTORNEY EFF. DATE: 05/29/96 LOC : 217

ACCEPTED AR#: 211 01 5217 DATE: 12/20/10 ROANOKE CITY

CURRENT AR#: 211 01 5217 DATE: 12/20/10 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

11 100.00

1,000

(Screen Id:/Corp_Data_Inquiry)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9900 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8560

NUMBER
2701 006768A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE
ALLEGHENY CONSTRUCTION CO INC
2830 NICHOLAS AVE
ROANOKE VA 24012

*CLASSIFICATIONS* H/H BLD BEC

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

COMMONWEALTH OF VIRGINIA
BOARD FOR CONTRACTORS - CLASS A
CONTRACTOR LICENSE - CLASSIFICATIONS: H/H
BLD BEC

NUMBER: 2701 006768A EXPIRES: 01-31-2013
ALLEGHENY CONSTRUCTION CO INC
2830 NICHOLAS AVE
ROANOKE VA 24012
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0349742 - 7 STATUS: 00 ACTIVE STATUS DATE: 11/17/89
CORP NAME: NXL CONSTRUCTION CO., INC.

DATE OF CERTIFICATE: 11/17/1989 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
R/A NAME: NICOMEDES L DE LEON
STREET: 9606 GEORGE'S BLUFF RD
CITY: RICHMOND STATE: VA ZIP: 23229
R/A STATUS: 2 OFFICER EFF. DATE: 10/08/98 LOC: 143
ACCEPTED AR#: 211 16 4444 DATE: 09/20/11 HENRICO COUNTY
CURRENT AR#: 211 16 4444 DATE: 09/20/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 100.00

(Screen Id: Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2012

NUMBER
0411000678

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG, LS

NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC.
2870-C SOUTH MAIN ST.
HARRISONBURG, VA 22801

ALTERATION OF THIS DOCUMENT USE AFTER EXPIRATION OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG, LS

NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
114 E CARY ST STE 200
RICHMOND, VA 23219

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER
THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
Attachment 3.3.1 - Key Personnel Resumes
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>Peter R. Kramer – Senior Project Manager</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Design-Build Project Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>Branch Highways, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
</tr>
<tr>
<td>With this Firm: 15 Years</td>
</tr>
<tr>
<td>With Other Firms: 8 Years</td>
</tr>
</tbody>
</table>

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

<table>
<thead>
<tr>
<th>Branch Highways, Inc.</th>
<th>Senior Project Manager/Area Manager</th>
<th>March 2009 – Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities included oversight of all northern Virginia projects including both public and private sectors. These projects included site work for Lowe’s and Eli Lilly (Prince William County), Route 123 in Lorton (Fairfax County) and Spriggs Road (Prince William County). Currently serving as Project Manager on VDOT Port Republic project. Duties include coordination with Field Operations Management regarding personnel performance, application of Production Management Methods and Value-Engineering Proposal development and administration. Also served as Design-Build Project Manager for the Route 15 James Madison Highway PPTA project for Prince William County. Responsible for traditional project management duties including contract administration, owner relations, internal reporting and overall project monitoring along with oversight authority for design, utility relocation, environmental permitting, ROW procurement and construction activities. These efforts require close coordination of all aspects of the process and a full understanding of the complexities of each aspect of the project to affect and drive key elements toward successful completion. Also required interfacing directly with landowners regarding specific proffer terms and conditions as well as acting as the point person for specific project-related property owner interactions for the Owner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch Highways, Inc.</td>
<td>Project Manager</td>
<td>1998 – February 2009</td>
</tr>
<tr>
<td>Responsibilities included oversight of all northern Virginia projects including both public and private sectors. These projects included site work for Lowe’s and Eli Lilly (Prince William County), Route 123 in Lorton (Fairfax County) and Spriggs Road (Prince William County). Currently serving as Project Manager on VDOT Port Republic project. Duties include coordination with Field Operations Management regarding personnel performance, application of Production Management Methods and Value-Engineering Proposal development and administration. Also served as Design-Build Project Manager for the Route 15 James Madison Highway PPTA project for Prince William County. Responsible for traditional project management duties including contract administration, owner relations, internal reporting and overall project monitoring along with oversight authority for design, utility relocation, environmental permitting, ROW procurement and construction activities. These efforts require close coordination of all aspects of the process and a full understanding of the complexities of each aspect of the project to affect and drive key elements toward successful completion. Also required interfacing directly with landowners regarding specific proffer terms and conditions as well as acting as the point person for specific project-related property owner interactions for the Owner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch Highways, Inc.</td>
<td>Superintendent / Project Engineer</td>
<td>1996 – 1998</td>
</tr>
<tr>
<td>Responsibilities included oversight of all northern Virginia projects including both public and private sectors. These projects included site work for Lowe’s and Eli Lilly (Prince William County), Route 123 in Lorton (Fairfax County) and Spriggs Road (Prince William County). Currently serving as Project Manager on VDOT Port Republic project. Duties include coordination with Field Operations Management regarding personnel performance, application of Production Management Methods and Value-Engineering Proposal development and administration. Also served as Design-Build Project Manager for the Route 15 James Madison Highway PPTA project for Prince William County. Responsible for traditional project management duties including contract administration, owner relations, internal reporting and overall project monitoring along with oversight authority for design, utility relocation, environmental permitting, ROW procurement and construction activities. These efforts require close coordination of all aspects of the process and a full understanding of the complexities of each aspect of the project to affect and drive key elements toward successful completion. Also required interfacing directly with landowners regarding specific proffer terms and conditions as well as acting as the point person for specific project-related property owner interactions for the Owner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch Highways, Inc.</td>
<td>Superintendent / Project Engineer</td>
<td>1996 – 1998</td>
</tr>
<tr>
<td>Responsibilities included oversight of all northern Virginia projects including both public and private sectors. These projects included site work for Lowe’s and Eli Lilly (Prince William County), Route 123 in Lorton (Fairfax County) and Spriggs Road (Prince William County). Currently serving as Project Manager on VDOT Port Republic project. Duties include coordination with Field Operations Management regarding personnel performance, application of Production Management Methods and Value-Engineering Proposal development and administration. Also served as Design-Build Project Manager for the Route 15 James Madison Highway PPTA project for Prince William County. Responsible for traditional project management duties including contract administration, owner relations, internal reporting and overall project monitoring along with oversight authority for design, utility relocation, environmental permitting, ROW procurement and construction activities. These efforts require close coordination of all aspects of the process and a full understanding of the complexities of each aspect of the project to affect and drive key elements toward successful completion. Also required interfacing directly with landowners regarding specific proffer terms and conditions as well as acting as the point person for specific project-related property owner interactions for the Owner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branch Highways, Inc.</td>
<td>Superintendent / Project Engineer</td>
<td>1996 – 1998</td>
</tr>
<tr>
<td>Responsibilities included oversight of all northern Virginia projects including both public and private sectors. These projects included site work for Lowe’s and Eli Lilly (Prince William County), Route 123 in Lorton (Fairfax County) and Spriggs Road (Prince William County). Currently serving as Project Manager on VDOT Port Republic project. Duties include coordination with Field Operations Management regarding personnel performance, application of Production Management Methods and Value-Engineering Proposal development and administration. Also served as Design-Build Project Manager for the Route 15 James Madison Highway PPTA project for Prince William County. Responsible for traditional project management duties including contract administration, owner relations, internal reporting and overall project monitoring along with oversight authority for design, utility relocation, environmental permitting, ROW procurement and construction activities. These efforts require close coordination of all aspects of the process and a full understanding of the complexities of each aspect of the project to affect and drive key elements toward successful completion. Also required interfacing directly with landowners regarding specific proffer terms and conditions as well as acting as the point person for specific project-related property owner interactions for the Owner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Military Institute / BS / 1988 / Civil Engineering</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:
   2006 / VDOT Erosion & Sediment Control Contractor Certification (ESCCC) / #3156C
   2009/Certified LEED AP, United States Green Building Council/10444816
   2009/U.S. Army Corps of Engineers - Construction Quality Management for Contractors/CENAO-09-1170

g. Document the extent and depth of your 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.)

Port Republic Road - Harrisonburg, VDOT Staunton District
Authorized representative for contractor and overall Project Manager. Duties included grand plan development, jobsite scheduling and construction oversight, subcontractor and vendor procurement, project tracking and reporting, VEP analysis and presentation and coordination with various third-party utility companies and developers. Also actively engaged VDOT, various property owners and local officials regarding ongoing construction and specific concerns.

James Madison Highway (Route 15) PPTA – Prince William County, VA
Authorized representative for contractor and PPTA Project Manager. Duties included the coordination and oversight for overall planning and scheduling, design, ROW acquisitions, utility relocation activities, permitting and environmental monitoring, construction quality management, QA/QC procedures and implementation and contract administration. Duties also included subcontractor and vendor procurement, project tracking and reporting and coordination of various proffer obligations and negotiations in concert with Owner.

Spriggs Road Improvements - Phase II – Prince William County, VA
Authorized representative for contractor and overall Project Manager. Duties included grand plan development, jobsite scheduling and construction oversight, subcontractor and vendor procurement, project tracking and reporting, VEP analysis and presentation and coordination with various third-party utility companies and developers. Also actively engaged the Owner, various property owners and PWC Board of Supervisor members regarding ongoing construction and specific needs.

Route 123 and Hooes Road – VDOT
Authorized representative for contractor and overall Project Manager. Duties included grand plan and scheduling responsibilities, construction oversight, subcontractor and vendor procurement, project tracking and reporting, VEP analysis and presentation, owner change negotiations and pricing, coordination with third party contractors and adjacent VDOT projects, as well as coordination with Fairfax County representatives and local citizens. Responsible for creating job specific Partnering Agreements and coordinating the partnering process.

I-81 Christiansburg/Blacksburg Route 460 Interchange - VDOT
Authorized representative for contractor and overall Project Manager. Duties included grand plan and scheduling responsibilities, construction oversight, subcontractor and vendor procurement, project tracking and reporting, owner change negotiations and pricing, coordination with third party contractors and adjacent VDOT projects. Simultaneously held Corporate Bridge Construction Manager position responsible for oversight and coordination of approximately 36 bridges under construction throughout Virginia and North Carolina.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>d. Years experience: With this Firm</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

<table>
<thead>
<tr>
<th>Branch Highways, Inc.</th>
<th>General Superintendent</th>
<th>1996 - Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible for managing the labor and equipment resources for multiple projects along with coordinating subcontractors’ forces. Projects ranged in size from +$1 million to +$25 million. Responsibilities included oversight of project superintendents and general foremen to ensure work in place met quality and contractual requirements.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Education: Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001 / Responsible Land Disturber / #17095</td>
</tr>
<tr>
<td>2003 / VDOT Erosion and Sediment Control Contract/#4885C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g. Document the extent and depth of your experience and qualifications relevant to the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
</tbody>
</table>

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

**Port Republic Road - Harrisonburg, VDOT Staunton District**

General superintendent with oversight of multiple project superintendents and all construction activities, including job-site coordination, employee training and development and on-going project scheduling. Reviewed processing schedules and production orders to make decisions concerning inventory requirements, staffing requirements, work procedures and duty assignments, considering budgetary limitations and time constraints.

Company: Branch Highways, Inc. | December 2009 - September 2011

**Spriggs Road Improvements - Phase II - Prince William County, VA**

Superintendent with responsibilities for specific project duties such as job-site coordination, employee training and development and on-going project scheduling. Reviewed processing schedules and production orders to make decisions concerning inventory requirements, staffing requirements, work procedures and duty assignments, considering budgetary limitations and time constraints.


Continued on Next Page
<table>
<thead>
<tr>
<th>Route 123 and Hooes Road - Fairfax County, VA - VDOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent with responsibilities for employee training and development and on-going project scheduling for the overall construction site. Also responsible for reviewing operations and conferring with technical or administrative staff to resolve production or processing problems. Ensured public satisfaction by addressing residents’ questions and complaints.</td>
</tr>
<tr>
<td><strong>Firm:</strong> Branch Highways, Inc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route 460 Interchange - Blacksburg, VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent for this project with responsibilities for overall construction site. Assisted with the interviewing, selecting and training of foreman, crew leaders and supervisory personnel. Additional duties included project schedule coordination with included multiple retaining walls and 12 bridges.</td>
</tr>
<tr>
<td><strong>Firm:</strong> Branch Highways, Inc.</td>
</tr>
<tr>
<td>Brief Resume of Key Personnel anticipated for the Project.</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td><strong>a. Name &amp; Title:</strong> John Maddox, P.E. - Project Manager</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Design Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> Whitman, Requardt and Associates, LLP</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm <em>16</em> Years With Other Firms <em>10</em> Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td><strong>Whitman, Requardt and Associates, LLP</strong></td>
</tr>
<tr>
<td>Mr. Maddox has 26 years of experience in highway design and management of major transportation projects. The last 16 years have been with WR&amp;A as a Project Manager on large transportation improvement projects in Virginia. His experience includes numerous interstate, interchange and major bridge projects. He manages a multi-discipline team of engineers through the project development process including environmental, traffic forecast/analysis, IMR, drainage, roadway design, interchange design, complex bridge design, traffic engineering and public involvement on accelerated schedules.</td>
</tr>
<tr>
<td>He has been the Project Manager on similar projects in the Staunton District beginning in 1996 and currently on the Route 340 Widening, Southeast Connector and Route 655 Reconstruction. He has recently managed the VDOT Location and Design On-Call contracts for the Statewide and the NOVA District. He has extensive experience in the design of interchange projects for VDOT, Maryland State Highway Administration and NCDOT.</td>
</tr>
<tr>
<td><strong>e. Education:</strong> Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>B.S./Civil Engineering/West Virginia Institute of Technology/ 1985</td>
</tr>
<tr>
<td><strong>f. Active Registration:</strong> Year First Registered/Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Professional Engineer/Virginia/1996/#026613</td>
</tr>
<tr>
<td><strong>Memberships:</strong> Virginia Transportation Construction Alliance (VTCA); American Council of Engineering Companies (ACEC)</td>
</tr>
<tr>
<td><strong>g. Document the extent and depth of experience and qualifications relevant to the Project.</strong></td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
<tr>
<td><strong>Fairfax County Parkway Interchange with Fair Lakes Parkway from North of Route 29 to North of Rugby Road - Fairfax County, VA - VDOT</strong></td>
</tr>
<tr>
<td>Project Manager for the development of the right-of-way and construction plans for a major interchange project including traffic forecast and analysis, interchange design, widening the Fairfax County Parkway for three miles from 4 to 6 lanes, two new six-lane bridges, one bridge widening, retaining walls, noise walls, drainage and stormwater management, lighting, signals/signs, landscaping, dam break analysis and public involvement. The split diamond urban interchange design provides full access to both Fair Lake Parkway and Monument Drive with four ramps. The project design allows the Fairfax County Parkway traffic to be shifted to the proposed ramps while Fairfax County Parkway is reconstructed by elevating the six lanes a maximum of 30 feet for a distance of approximately a half-mile bridging over both Fair Lakes Parkway and Monument Drive. The project included the hydraulic analysis and design of the extension of two major box culverts under Fairfax County Parkway. A Shared-Use Path was designed along the eastern side of the project with a connection to an existing stream valley park trail. A major element of the project design was the development of a complex sequence of construction to minimize impacts to this major heavily-traveled area. The Transportation Management Plan developed for the project included a detailed traffic analysis of each phase of construction. Estimated construction cost: $45 million.</td>
</tr>
<tr>
<td><strong>Firm:</strong> Whitman, Requardt and Associates, LLP</td>
</tr>
</tbody>
</table>
Route 29 Sweet Briar Interchange (UPC #15842) - Amherst County, VA - VDOT
Project Manager for traffic forecast and analysis, interchange design, railroad relocation, highway design, three new highway bridges and two railroad bridges, retaining walls, drainage, stormwater management and public involvement. The design included the relocation and extension of existing Route 29 to Business Route 29 by elevating the four lane divided roadway a maximum of 28’ over the proposed Route 29 Bypass. The innovative design separated the local traffic on Business Route 29 from the high speed traffic on the Bypass. Rutledge Creek and its associated FEMA Floodplain traversed the project through four box culverts requiring a detailed analysis to ensure the 100-year floodplain was not impacted by the project. A complex sequence of construction and the maintenance of traffic plan were required to extend the Bypass and Route 624 under the Norfolk Southern Railway. The railroad effort included a one-mile relocation of the track and the construction of two railroad bridges, requiring extensive coordination with Norfolk Southern. Construction cost: $35 million.

Route I-81 Bridges over Maury River and Buffalo Creek - Rockbridge County, VA - VDOT
Project Manager for the design of two miles of interstate widening from 4 to 6 lanes, including 4 six-lane bridges, extension of two box culverts, drainage, SWM and geotechnical engineering. The project was located in an area with karst geology and rock cut slopes requiring a complex geotechnical analysis for the project. The four bridges were designed with an innovative abutment that eliminated all deck joints on these major structures with bridge lengths ranging from 590’ to 820’]. The innovative bridge abutment design has since been incorporated into the VDOT design aids and will significantly reduce future maintenance cost on bridges in the state. The evaluation of the karst geology included dye testing, resistivity testing and a boring program to determine the location of potential karst features and recommend design modifications to minimize the cost and risk of the project. Construction cost: $38 million.

Route 123 Interchange at Route 1 (UPC #14693) - Prince William County, VA - Project Manager for the complete design of a tight urban interchange and widening of Route 1 and Route 123 from 4 to 6 lanes including surveys, traffic collection/analysis/forecast and modeling, hydraulic analysis, stormwater management, geotechnical, lighting, two-span bridge (Route 123), three-span bridge (Route 123 over CSXT mainline track), a bridge over Marumsco Creek, retaining walls, signing/marking, signals, utility relocation and public involvement. The design includes the extension of Gordon Boulevard to Belmont Bay Drive by providing a bridge over the CSXT tracks. This requires that a 1,000’ of Gordon Boulevard and 800’ of Belmont Bay Drive to be reconstructed by elevating the roadway using MSE retaining walls. Shared-Use Paths are provided along the western side of Route 1 and the north side of Route 123 allowing improved access to the VRE station located at the interchange. The project includes a complex sequence of construction and the development of a Transportation Management Plan, which includes a detailed traffic analysis, for each phase of construction including pedestrian access through project construction. The project has a significant right-of-way impact along the project requiring property acquisition from over 90 parcels. Estimated construction cost $70 million.
Firm: Whitman, Requardt and Associates, LLP 2008 - Present

Interstate 81 Bridges over The New River and Exit 105 Modifications (UPC #56899 and #56900) - Montgomery and Pulaski Counties - Project Manager responsible for managing the design of a major transportation improvement project, which includes the reconstruction of the partial cloverleaf interchange at Exit 105 and the replacement of the 1,660 LF long bridges over the New River and the design of the Route 232 bridge over I-81. The project design includes traffic forecast and analysis and modeling, an Interchange Modification Report, roadway and interchange design, a hydraulic analysis, stormwater management, a complete geotechnical analysis, signing and marking, stormwater utility relocation and public involvement. The project includes a detailed hydraulic analysis of a stream through a series of four box culverts within the interchange. Estimated construction cost: $60 million.
Firm: Whitman, Requardt and Associates, LLP 2009 - Present
### Brief Resume of Key Personnel anticipated for the Project.

**a. Name & Title:**
Brian Henschel, P.E., CCM, PMP – Associate for CM Services

**b. Project Assignment:**
Quality Assurance Manager

**c. Name of Firm with which you are now associated:**
Whitman, Requardt and Associates, LLP

**d. Years experience:**
- With this Firm: 1 Year
- With Other Firms: 15 Years

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

**Whitman, Requardt and Associates, LLP**
Associate for Construction Management Services - Project Manager/Responsible Charge Engineer/Engineering Support for transportation and utility contracts in Virginia. Manage staff assigned to VDOT and municipality CEI and construction management contracts providing QA inspection and monitoring Contractor’s QC program. Provide scheduling, constructability and specification interpretation support to VDOT and other clients. Manage and support construction projects to ensure compliance with contract requirements including materials testing and sampling, attend progress meetings, perform regular site visits to monitor progress and recommend field changes, resolve disputes, perform cost and schedule analysis for work orders and changes. Pay application/estimate review, staffing decisions and other project support.

**Virginia Department of Transportation**
Area Construction Engineer
Area Construction Engineer/Design-Build Project Manager/Project Controls Engineer – Responsible Charge Engineer and Design-Build Project Manager for projects in the Lynchburg District. As ACE, completed over 90 projects worth over $200 million, exceeding on-time, on-budget and CQIP goals. Ensured compliance with plans and specs, assigned staffing on project, ensured QA testing and inspection met quality and specification requirements, monitored contractor’s QC program, and coordinated with IA/IV testing and sampling. Analyzed and approved work orders. Reviewed and responded to NOI’s and claims. Coordinated with all project stakeholders. As Design-Build Project Manager, managed all phases of the contract, including the scoping phase, design phase, construction phase and project close-out. Served this role for five different Design-Build contracts. Administered contract and all specifications. Assigned and managed processes and testing frequencies of IA/IV program, overseeing reporting and sampling. Reviewed and signed off on completed plans. Performed Design-Build project close-out. As Project Controls Engineer, performed constructability, bidability, CEI budgets, CTDR’s and CPM schedules for over 100 projects.

**McDonough Bolyard Peck Construction Engineering**
Senior Engineer
Senior Engineer and Office Engineer/Claims Analyst/Project Inspector for VDOT and other public clients. Senior Engineer and Office Engineer on large VDOT projects, assigning inspection activities, performing project documentation, analyzing work orders, coordinating with FHWA on funding, leading partnering meetings, reviewing/approving schedules, analyzing NOI’s and claims. Performed materials testing and managed QA materials testing and reporting. Performed constructability reviews on large VDOT projects. Analyzed claims and provided detailed reports for use in negotiations and litigation.

**e. Education:**
Name & Location of Institution(s)/Degree(s)/Year/Specialization:
- M.S./Virginia Polytechnic Institute and State University/Civil Engineering/2007
- B.S./Virginia Polytechnic Institute and State University/Civil Engineering/1997

**f. Active Registration:**
Year First Registered/ Discipline/VA Registration #:
- Virginia Professional Engineer - 2001 #035154
- Certified Construction Manager - 2010
g. Document the extent and depth of your 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.)

**Route 29 NBL/Tye River Bridge Replacement - Amherst County, VA - VDOT**
VDOT Design-Build Project Manager, who managed all phases of the $9 million project. Assisted in writing of Technical Specifications, developed risk matrix and participated in preliminary and procurement phase activities. Facilitated and led kick-off meetings and administered the contract. Reviewed and approved QA/QC Plan and all subsequent updates, including reviewing all witness/hold points, QA and QC testing and sampling frequency and metrics, and other QA/QC Plan requirements. Oversaw scope validation period and responded to claims of additional scope. Reviewed, approved and signed plan submittals after contract compliance and constructability review. Managed IA/IV inspections, testing frequency and reporting to ensure contract compliance. Reviewed change order requests and approved payments. Facilitated project meetings.

**Firm:** VDOT  
**Dates:** 2009 - August 2010

**Region I Metal Culvert Rehabilitation and Replacement Contract - Lynchburg and Staunton - VDOT**
Design-Build Project Manager: Managed all phases of the Contract. Assisted in writing of Technical Specifications, developed risk matrix and participated in preliminary and procurement phase activities. Facilitated and led kick-off meetings and administered the contract. Reviewed and approved QA/QC Plan and all subsequent updates, including reviewing all witness/hold points, QA and QC testing and sampling frequency and metrics and other QA/QC Plan requirements. Oversaw scope validation period, and reviewed/responded to claims of additional scope. Reviewed, approved and signed plan submittals, after contract compliance, design and constructability review. Managed IA/IV inspections and testing frequency and reporting, as well as ensured contract compliance. Reviewed change order requests and approved payments. Facilitated project meetings. Coordinated closely with IPD/APD to implement all policies, procedures and guidelines related to the Design-Build contract. Seven Structures - $4 million

**Firm:** VDOT  
**Dates:** 2009 - August 2010

**Region II Metal Culvert Rehabilitation Contract - Lynchburg, VA - VDOT**
VDOT Design-Build Project Manager, who managed all phases of the Contract. Assisted in writing of Technical Specifications, developed risk matrix and participated in preliminary and procurement phase activities. Facilitated and led kick-off meetings and administered the contract. Reviewed and approved QA/QC Plan and all subsequent updates, including reviewing all witness/hold points, QA and QC testing and sampling frequency and metrics, and other QA/QC Plan requirements. Oversaw scope validation period, and reviewed/responded to claims of additional scope. Reviewed, approved and signed plan submittals, after contract compliance, design and constructability review. Managed IA/IV inspections and testing frequency and reporting, as well as ensured contract compliance. Reviewed change order requests and approved payments. Facilitated project meetings. Coordinated closely with IPD/APD to implement all policies, procedures and guidelines related to the design-build contract. 22 Structures - $4Milion

**Firm:** VDOT  
**Dates:** 2009 - August 2010

**Route 29/Madison Heights Bypass - Amherst, VA - VDOT**
Responsible Charge Engineer on 13-mile 4-lane divided highway (3 contracts for $120 million). Managed staff and QA inspection/testing frequency and reporting, approved change orders, coordinated with FHWA on funding, approved payments, performed regular field visits to monitor quality and contract compliance, monitored contractor’s QC program, led project Quality effort, developed and approved field changes, led partnering and progress meetings, resolved disputes and accepted project. Provided detailed analysis of NOI’s and claims. Represented VDOT in Commissioner’s hearings, supported Attorney General’s office in litigation proceedings and participated in mediation to resolve claims.

**Firm:** VDOT  
**Dates:** April 2004 - January 2010

**Main Street Bridge Project - Danville, VA**
Responsible Charge Engineer on 7-span arch bridges over the Dan River, including approach roadway, signalized intersections and utility relocation. Managed staff and QA inspection/testing, approved change orders, FHWA coordination, approved payments, performed regular field visits, monitored contractor’s QC program, approved field changes and resolved disputes. Provided detailed analysis of NOI’s and claims.

**Firm:** VDOT  
**Dates:** April 2004 - 2009
### ATTACHMENT 3.3.1
### KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Jeremy Schlussel, P.E. - Bridge Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Lead Structural Engineer</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Whitman, Requardt and Associates, LLP</td>
</tr>
</tbody>
</table>
| d. Years experience: | With this Firm: **10** Years
With Other Firms: **5** Years |

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

**Whitman, Requardt and Associates, LLP**

**Bridge Project Manager**  
2006 – Present  
Manages the Virginia Structure and Bridge Group of WR&A that consists of 12 employees that work on a wide variety bridge and retaining wall structures. Over the course of the past 10 years he has designed and managed a wide variety of new design and maintenance and repair bridge projects for VDOT and local municipalities that range from 20 ft. bridge structures to 10,000 ft. major river crossings, including emergency projects and rapid bridge replacements. Over the past 5 years Mr. Schlussel has been the Project Manager of 5 different VDOT Bridge Maintenance and Repair regional contracts that has covered Staunton, Culpeper and Lynchburg, and Richmond, Fredericksburg, and Hampton Roads District. In addition to these contracts, he has been the Bridge Design Manager on project specific contracts that involve new interchange bridge structures and major river crossings.

**Whitman, Requardt and Associates, LLP**  
**Bridge Project Engineer**  
2001 – 2006  
Employed as a project engineer that was responsible for designing a wide variety of projects from bridge replacement projects on primary and interstate roadways to feasibility reports for bridge structure options. Projects included structural steel, including hybrid designs, and pre-stressed concrete bridge structures and substructure design that ranged from conventional to innovative to eliminate bridge joints.

**Site-Blauvelt Engineers, Inc.**  
**Bridge Engineer**  
1996 – 2001  
Employed as a bridge engineer, whose responsibilities increased over the time from supporting senior level engineers to leading bridge design efforts on major bridge projects throughout Virginia. Projects that were designed ranged from interchange bridge structures to rehabilitation projects throughout Virginia.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
   - M.S./West Virginia University/Civil Engineering (Structures)/1996  
   - B.S./Virginia Military Institute/Civil Engineering/1994  
   - VDOT Transportation Project Management Institute (TPMI) - 2010  
     - Certification Safety Inspection of In-Service Bridges  
     - Advanced Work Zone Traffic Control Training

f. Active Registration: Year First Registered/ Discipline/VA Registration #:  
   - Virginia Professional Engineer/2000/ #033974  
   - North Carolina Professional Engineer/2010/#036510  
   - Pennsylvania Professional Engineer/2000/# PE057355E

g. Document the extent and depth of your 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.)


**Route 54 over Route I-95 - Town of Ashland, VA - VDOT**

Project Manager for the bridge replacement of the two existing four span bridge structures with a single new two-span bridge structure along the same alignment. The project will be built in staged construction utilizing elements of the original sub-structure to reduce the final cost of the project and under the LRFD Design Manual. The project involves modifications to the horizontal and vertical geometry, geotechnical analysis for the modified sub-structure units, pavement design and a TMP. The final geometric conditions will raise the existing vertical clearance by approximately 2'-6" to meet current design criteria. The final bridge structure will be approximately 220 ft. long and 95 feet wide and will be a continuous steel superstructure with a semi-integral abutment and a solid wall pier.

**Firm:** Whitman, Requardt and Associates, LLP  
**Period:** 2011 - Present

---

**Fairfax County Parkway Interchange at Fair Lakes Parkway - Fairfax County, VA - VDOT**

Bridge Design Project Manager responsible for the design of two single-span, prestressed concrete bulb-tee bridges carrying Fairfax County Parkway over Fair Lakes Parkway and Monument Drive. These two new bridge structures are part of the three miles of roadway improvements to create grade separations at these two locations and widen Fairfax County Parkway from 4 to 6 lanes. Responsibilities on the project included overall project management for the two new bridge structures and the design of the reinforced concrete decks and geometry of the new bridge structures. The Fair Lakes Parkway bridge structure consists of a 69-inch bulb-tee with semi-integral abutments and the Monument Drive bridge structure consist of a 61-inch bulb tee with semi-integral abutments. The entire project was designed to maintain traffic 100% of the time and incorporated the ashlar stone pattern along the MSE abutments and wingwalls for an aesthetic treatment desired by the community.

**Firm:** Whitman, Requardt and Associates, LLP  
**Period:** 2003 - Present

---

**I-81 Bridges over Buffalo Creek - VDOT - Rockbridge County, VA - VDOT**

Bridge Design Project Engineer for the design of two four-span continuous steel girder bridges with total lengths of 635 ft. (NBL) and 570 ft. (SBL), with pier heights up to 110 ft. Project responsibilities on this project included the design of the hybrid structural steel superstructure, special design abutments and completed a quality control review of the pier designs. The special design abutment embedded the ends of the steel girders in concrete to provide complete separation from the toothed expansion joints at the abutments. All of the NBL design efforts had to take into account the two staged construction.

**Firm:** Whitman, Requardt and Associates, LLP  
**Period:** 2001 - 2005

---

**I-81 Bridges over Maury River - VDOT - Rockbridge County, VA - VDOT**

Bridge Design Project Engineer for design of two continuous steel girder bridges - the NBL Bridge with 5 spans and a total length of 825 ft. and the SBL Bridge with 4 spans and a total length of 743 ft. Project responsibilities on this project included the design of the hybrid structural steel superstructure, special design abutments and completed a quality control review of the pier designs, which had piers up to 60 ft. in height. The special design abutment embedded the ends of the steel girders in concrete to provide complete separation from the toothed expansion joints at the abutments.

**Firm:** Whitman, Requardt and Associates, LLP  
**Period:** 2001 - 2005

---

**Pinners Point Interchange - City of Portsmouth, VA - VDOT**

Bridge Design Project Engineer for the new 3-directional multi-level interchange connecting Route 164 to Route 58 NB and SB that consists of 4 miles of roadway and 2.5 miles of bridge structures, including 7 curved steel girder ramp bridges with multiple units. During the design phase, was responsible for the preliminary and final design of 13 of 26 structural steel plate girder superstructure units with varying widths and curvature utilizing the “MDX” curved girder software. For the remaining 13 units, performed QA/QC design checks of the design. For the sub-structure design, Mr. Schlussel was responsible for the design and analysis of multiple-column and single-column piers utilizing the “RC-Pier” design software; including the geometry checks for the super elevated elements.

**Firm:** Site-Blauvelt Engineers, Inc.  
**Period:** 1996 - 2001
## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Robert Siegfried - Environmental Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Environmental Compliance Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Whitman, Requardt and Associates, LLP</td>
</tr>
<tr>
<td>d. Years experience: With This Firm</td>
<td>5 Years</td>
</tr>
<tr>
<td></td>
<td>With Other Firms</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
<td></td>
</tr>
</tbody>
</table>

- **Whitman, Requardt and Associates, LLP**  
  **Environmental Manager**  
  2007 - Present  
  Environmental Manager responsible for the project management and technical lead for NEPA documents, stream restoration, wetland mitigation, watershed studies and permits. Currently managing two environmental open end contracts for VDOT: Wetlands Monitoring and Maintenance statewide on-call contract, and NEPA statewide on-call contract. Provided permitting for VDOT projects such as Fairfax County Parkway Interchange at Fair Lakes Parkway in Fairfax County, as well as numerous permits for local government road projects.

- **KCI Technologies, Inc.**  
  **Environmental Manager**  
  1998 - 2007  
  Environmental Manager for Virginia, led numerous mitigation design and permitting projects for VDOT under open-end contracts, as well as stream restoration designs and watershed studies for local governments.

- **Michael Baker Jr. Inc.**  
  **Environmental Manager**  
  1989 - 1998  
  Environmental Manager responsible for oversight of staff completing NEPA studies for VDOT and WVDOT. Responsible for natural resources component on numerous NEPA transportation projects.

<table>
<thead>
<tr>
<th>e. Education: Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.A./Marine Biology/Virginia Institute of Marine Science/1989</td>
</tr>
<tr>
<td>B.S./Freshwater Ecology/Virginia Commonwealth University/1982</td>
</tr>
<tr>
<td>Sediment Transport Principles Applied to Channel Design - 2008</td>
</tr>
<tr>
<td>Geomorphic Principles of Stream Restoration - 2007</td>
</tr>
<tr>
<td>Alternative Approaches and Analytic Tools for Stream Restoration (Simon) - 2007</td>
</tr>
<tr>
<td>Interfluve/Process Based Channel Design - 2001</td>
</tr>
<tr>
<td>Rosgen/River Morphology &amp; Applications (Level II) - 1997</td>
</tr>
<tr>
<td>Rosgen/Applied Fluvial Geomorphology (Level I) - 1996</td>
</tr>
<tr>
<td>Planning Hydrology for Constructed Wetlands (Pierce) - 1993</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. Active Registration: Year First Registered/Discipline/VA Registration #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g. Document the extent and depth of experience and qualifications relevant to the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
</tbody>
</table>

**MD 237 Design Build Contract - St. Mary’s County, Maryland - Maryland State Highway Administration**  
As part of a Design-Build roadway project, provided onsite environmental compliance monitoring of the construction of a 100-foot fish passage rock ramp. As required by the permit, provided daily direction to construction crews, made field changes, and coordinated approvals with regulatory agencies on this environmentally sensitive project. Estimated Construction Costs: $38 million

**Firm: Whitman, Requardt and Associates, LLP**  
2011 - Present
**Fairfax County Parkway Interchange with Fair Lakes Parkway - Fairfax County, VA - VDOT**
Responsible for the design and restoration of a stream channel connecting a large box culvert to a perennial stream within a County park. Provided on-site environmental monitoring during construction to ensure that the commitments to the park authority and environmental documents were met and that the stream design was properly implemented.
Estimated Construction Costs: $45 million
Firm: Whitman, Requardt and Associates, LLP  
2010 - Present

**Route 501 Bridge Replacement Environmental Assessment - Bedford, VA**
Project Manager for an Environmental Assessment to replace a major bridge over the James River. Responsibilities include oversight of all technical work, coordination with National Forest Service, regulatory agencies and compliance with NEPA procedures. Identified environmental permits and commitments required for the environmental clearance of the project. Estimated Construction Costs: $18 million
Firm: Whitman, Requardt and Associates, LLP  
2011 - Present

**Route 33 Bridge Replacement Permits - Town of West Point, VA - VDOT**
Under a VDOT On-Call Wetlands and Water Quality Services Contract, Mr. Siegfried was the Project Manager for the permitting and mitigation for the replacement of the Route 33 bridges over the Pamunkey River and the Mattaponi River. Provided wetland delineations, agency coordination, permit application, compensation site selection, and design for the project that replaced the two bridges near West Point, Virginia. The project included the design and construction monitoring of a 4.5-acre tidal wetland compensation site. Estimated Construction Costs: $140 million
Firm: KCI Technologies, Inc.  
2003 - 2004

**Route 123 Bridge over the Occoquan River - Fairfax, VA**
Under a VDOT Statewide On-Call contract, Mr. Siegfried was the Project Manager for wetland delineations, permitting and agency coordination for the replacement of the Route 1 bridge over the Occoquan River. The project included obtaining bathometry surveys of the river, coordinating with U.S. Coast Guard and Baltimore District of the Corps of Engineers over impacts to the navigation channel and permitting dredging for construction access. Estimated Construction Costs: $25 million
Firm: KCI Technologies, Inc.  
2003 - 2004
Attachments 3.4.1 - Work History Forms

Attachment 3.4.1 (a) - Lead Contractor
Attachment 3.4.1 (b) - Lead Designer
PROJECT DELIVERY METHOD: Design-Build (PPTA)

LEAD DESIGNER: Rinker Design Associates

PROJECT DESCRIPTION:
Branch Highways was the Design-Build Contractor providing design, construction, right of way acquisition, and utility relocation for Route 15 (James Madison Highway) for Prince William County. Pete Kramer served as the Design-Build Project Manager. The Route 15 project required a series of environmental permits and mitigation actions for streams and wetlands, much of which was overseen by Mr. Kramer; extremely heavy rush hour traffic conditions and heavy traffic throughout the day; a vocal community whose concerns had to be heard; and maintaining and connecting several community walkways throughout the life of the project. The Project consisted of improvements to Route 15 beginning north of the I-66 interchange and extending to the existing four-lane section by the Dominion Valley Subdivision, and then starting at the intersection of Dominion Valley Drive/Graduation Drive and extending north beyond the intersection with Sudley Road/Route 234. The Project also consisted of improvements to portions of Waterfall Road, Sudley Road (Route 234), Shelter Land and Old Carolina Road along with a new section of Heathcote Boulevard between Old Carolina Road and Route 15. The project included nearly 22 lane-miles of construction along with five new bridge structures and a major box culvert.

ATTACHMENT NO. 3.4.1(a)
LEAD CONTRACTOR—WORK HISTORY FORM

<table>
<thead>
<tr>
<th>Work by Lead Contractor—three (3) projects which best illustrate current qualifications relevant to this Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Project Name &amp; Location</td>
</tr>
<tr>
<td>James Madison Highway (Route 15) PPTA Design-Build</td>
</tr>
</tbody>
</table>

b. Narrative describing nature of Firm’s Responsibilities

“Similar Scope” & “Complexity”

LEAD CONTRACTOR’S “LESSON LEARNED”

How this Work History and “Lessons Learned” from Relevant Project “DEMONSTRATE APPLICABILITY” to the I-64 Project

EVIDENCE OF GOOD PERFORMANCE on Relevant Project

| Permit modifications to accommodate new construction. (Project Risk #3) | Updates and changes to design specs and permitting requirements can compel a design-builder to modify existing permits or change his design approach. | Because of the nature of the locations of the box culverts (under I-64, under a deep fill of Rt. 285), care should be given to ensure that no significant increases in capacity for these existing box culverts would be required by either the design or the permit(s). |
| Daily, high-volume commuter traffic through the Work Zone. (Project Risk #1) | The travelling public must be both accommodated and protected. The work force must have well conceived and executed Work Zone protection. | This intersection is already a bottle neck. Reducing the flow of traffic to anything less than it is now would be very objectionable. Design and implement MOT accordingly. Ensure adequate Work Zone warning signage. Use Variable Message Board communications strategically to aid commuters when operations are anticipated to impact through traffic. Consider tow-truck standby for key periods. Ensure all work zones adequately protect workers. Emphasize daily at End of Shift Meetings and Morning Huddles. Address public frustration head on. Demonstrate willingness to accommodate local needs. |
| Free flow of traffic to and from the interstate. (Project Risk #1) | The free flow of traffic to and from the interstate must be preserved at all times. | Plan design and construction operations with Interstate access/egress in mind. Engage VDOT, EMS, and law enforcement preconstruction to establish contingency plans in the event a backup develops. Ensure adequate warning messages in the event planned operations are anticipated to contribute to a backup. Have contingency plans in place in the event a backup does occur. |

Successful permitting allowed completion of Route 15 Project by contract completion dates.

Well-conceived Traffic Management Plan and continual monitoring and adjustment of Traffic Control Plan for Route 15 resulted in a successful project.
Work by Lead Contractor—three (3) projects which best illustrate current qualifications relevant to this Project.

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 58 PPTA Corridor Improvements</td>
<td>Please see detailed narrative below.</td>
<td>VDOT P.O. Box 3071 Salem, VA 24153</td>
<td>Phase 1: December 2005</td>
<td>Phase 1: December 2005</td>
<td>Phase 1: $19,972</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phase 2: December 2011</td>
<td>Phase 2: November 2015</td>
<td>Phase 2: $83,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. Robert Williams Phone: 540.387.5345</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROJECT DESCRIPTION:** Branch Highways is the Developer and Design-Build Contractor providing design, construction, right of way acquisition, utility relocation, permitting and wetlands/environmental mitigation for the development, design and construction of the Route 58 Corridor from Hillsville to Stuart.

To date, it has been one of the most successful PPTA projects VDOT has ever undertaken, with no delays, no contractor initiated cost changes, and no major quality or safety failures. The project has relevant similarities to the I-64 project under consideration, as listed in the table. The sheer size of this project requires our organization to adapt and integrate ourselves into our many partners’ organizations, including VDOT’s. We have cooperated with local contractors, elected and public officials, property owners, and other agencies, to address many challenges, such as the Hillsville Flea Market events, concerns about the economic benefits of the project for the local community.

**LEAD DESIGNER:** HNTB

**PROJECT DELIVERY METHOD:** Design Build (PPTA)

**ATTACHMENT NO. 3.4.1(a)**

**LEAD CONTRACTOR—WORK HISTORY FORM**

<table>
<thead>
<tr>
<th>“SIMILAR SCOPE” &amp; “COMPLEXITY”</th>
<th>LEAD CONTRACTOR’S “LESSON LEARNED”</th>
<th>How this Work History and “Lessons Learned” from Relevant Project “DEMONSTRATE APPLICABILITY” to the I-64 Project</th>
<th>EVIDENCE OF GOOD PERFORMANCE on Relevant Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account for existing storm water facilities and conditions in proposed design. (Project Risk #5)</td>
<td>Both design and constructability decisions must consider capacity of existing SWM systems and their correlative permit allowances</td>
<td>When performing design and constructability review for the box culvert extensions, construction cost savings ideas must take into consideration the condition, capacity, and regulating permits of the existing box culverts under I-64 and the north side of Route 285.</td>
<td>Drainage systems for conveying 21 live streams were designed, permitted and constructed for the Route 58 Hillsville Project.</td>
</tr>
<tr>
<td>New SWM permit requests influenced by existing permits. (Project Risk #5)</td>
<td>New permit requests cannot be drafted in isolation from existing permits, and must be coordinated with existing permits.</td>
<td>Design-Builders to coordinate permit acquisition with regulatory agencies and ensure minimal impacts to existing environmental systems, without delaying construction, through proper scheduling, coordination and mitigation.</td>
<td>Providing permit obligations for monitoring for Route 58 project.</td>
</tr>
<tr>
<td>Modify existing bridge structure under live traffic. (Project Risk #1)</td>
<td>A high level of focus must be given to bridge construction operations adjacent to traffic.</td>
<td>Perform frequent (at least daily) work zone inspections. Never allow hoisting over traffic. Sequence superstructure installation, particularly deck concrete placement, in such a manner that vibrations and camber issues are mitigated.</td>
<td>Successful completion of Route 58 By-Pass Bridge over Business 58.</td>
</tr>
<tr>
<td>High volumes of information transfer.</td>
<td>High volumes of data and submittals can become unmanageable when managed through traditional processes.</td>
<td>Implement online, collaborative information management systems and processes for submittals, design review, correspondences, etc.</td>
<td>Ongoing management of SB Corridor very successful as evidenced by additional phases being awarded.</td>
</tr>
<tr>
<td>Highly complex project performed under high public visibility. (Project Risk #2)</td>
<td>Visible, complex projects attract public attention and frequent questions and criticism. Management teams must be prepared to respond professionally.</td>
<td>Apply Branch’s “Single Point of Contact” concept among Key Personnel to create a balanced and effective communication model. Delegated formally and subordinate other interactions to the interactions among Key Personnel, including VDOT’s personnel.</td>
<td>Ongoing management of SB Corridor very successful as evidenced by additional phases being awarded.</td>
</tr>
<tr>
<td>Construct superstructure over live, heavily travelled, 4-lane traffic. (Project Risk #1)</td>
<td>Extra care and attention is required when working over live traffic to prevent debris from falling into traffic below.</td>
<td>Significant portions of scope of work are over existing interstate traffic. Particularly bridge demolition, modification and construction. Daily planning with Bridge Contractor and inspectors. Emphasize daily at End of Shift Meetings. Engage local EMS, State Police, etc. early on.</td>
<td>Strong relationship with Hillsville Police and EMS. (Police Chief Steve Williams)</td>
</tr>
</tbody>
</table>
**PROJECT DELIVERY METHOD:**
Prime Contractor (Bid-Build)

**LEAD DESIGNER:** Virginia Department of Transportation

**PROJECT DESCRIPTION:** A highly complex project (68 lane miles, including 2 major interchanges at Exit 118 on I-81).

Although significantly larger than the I-64 Exit 91 project, Relevant Project featured some of the same risks as listed. Major items of work included excavation (approximately 1.7 million cubic yards), sound barrier wall (approximately 300,000 square feet), twelve (12) bridge structures, thirty-four (34) overhead signs, steel piping (approximately 84,460 linear feet) and bifurcated/non-bifurcated barrier wall (approximately 28,000 linear feet) including inset drainage structures.

The project consisted of many sequencing and coordination issues which were addressed with good planning and execution of our work that included 19 separate traffic lane changes, added truck climbing lanes, a specification change to FHWA 350 bifurcated/non-bifurcated barrier wall (approximately 28,000 linear feet) including inset drainage structures.

These challenges, along with continually changing scope issues, placed an enormous emphasis on Owner/Contractor cooperation and communication at all levels of both organizations. As a result of the ongoing partnerships formed, and despite the added challenges and associated $13 million in contract changes and quantity overruns, the Project completed on time and within budget.

**Route 460 Interchange - Christiansburg**

Please see detailed narrative below.

VDOT, Christiansburg
105 Cambria Street, NW
Christiansburg, VA

Mr. David Clark
Phone: 540.381.7190

December 2001

**Work by Lead Contractor—three (3) projects which best illustrate current qualifications relevant to this Project.**

<table>
<thead>
<tr>
<th>Project Name &amp; Location</th>
<th>Client/Owner/Project Manager</th>
<th>Contract Completion Date (Original)</th>
<th>Contract Completion Date (A causal or Estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Interstate MOT needs. (Project Risk #1)</td>
<td>Experienced &amp; qualified MOT workers are essential to safety for workers and public. Cooperation with VDOT critical.</td>
<td>December 2001</td>
<td>June 25, 2002</td>
</tr>
<tr>
<td>Modif Existing Structures over live traffic. (Project Risk #1)</td>
<td>Extra care and attention is required when working over live traffic to prevent debris from falling into traffic below.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodate high activity and alleviate congestion at existing, adjacent businesses and facilities. (Project Risk #2)</td>
<td>Proactive engagement with adjacent business owners prevents and reduces conflict for all parties.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy through-traffic. (Project Risk #1)</td>
<td>Drivers unfamiliar with the area may be unprepared for altered traffic patterns in the Work Zone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in interstate median requires careful materials’ management. (Project Risk #1)</td>
<td>Thorough planning minimizes unnecessary trips to and from the Work Zones in the median. This is safer for the travelling public and more cost-effective.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How this Work History and “Lessons Learned” from Relevant Project “DEMONSTRATE APPLICABILITY” to the I-64 Project**

Give considerable care to selection and training of MOT supervisors and crew. Have frequent inspection of Work Zone protection. Express urgency to subcontractors and vendors frequently. Daily planning with Bridge Contractor and inspectors.

**EVIDENCE OF GOOD PERFORMANCE on Relevant Project**

VDOT Work Zone inspection and other VDOT records.
Design of interchange, 3 miles of roadway widening and 2 bridges, 1 bridge widening, traffic studies, noise walls, retaining walls, traffic engineering and public involvement.

Virginia Department of Transportation
4975 Alliance Drive
Fairfax, VA 22030
M. N. astruy Obee
(703) 259-1723

Multiple Phases of construction with major shifts in traffic (Project Risks 1 and 2)

Detailed TMP developed early in project design.

Route 285 will require complex shifts of traffic through the interchange using temporary signals for each phase of construction, which is very similar to the complexity of FCP Project.

“SIMILAR SCOPE” & “COMPLEXITY”

LEAD DESIGNER’S “LESSONS LEARNED”

How this Work History and “Lessons Learned” from Relevant Project “DEMONSTRATE APPLICABILITY” to the I-64 Project

EVIDENCE OF GOOD PERFORMANCE on Relevant Project

First major shift in traffic successfully completed in November 2011.

Traffic Control Devices

The project included freeway overhead signing for the I-66, Fair Lakes Parkway and Route 50 interchanges including ITS/VMS facilities. Signals were designed for 7 intersections with coordinated signal timing plans to ensure the efficient flow of traffic through the project.

TMP Plans

The project consisted of multiple phases of construction with a complex sequencing of traffic. The first major phase was the construction of the Ramps, while maintaining traffic on existing Fairfax County Parkway. This required the construction of four major retaining walls including a Soil Nail wall, two Pile Panel walls and an MSE wall with an area of over 43,000 sf and a complex sequencing for the construction of the box culverts under the ramps. During construction, through and left turn movements at the intersection of Fairfax County Parkway and Fair Lakes Parkway were detoured onto Fair Lakes Circle. WR&A completed a detailed traffic analysis for each shift in traffic patterns and provided all signal timing plans to the Contractor, as well as assisted with field implementation of each traffic shift. Once traffic was shifted to the ramps Fairfax County Parkway was reconstructed to be elevated over Fair Lakes Parkway and Monument Drive.

Public Involvement

Since the 1980s, the Fair Lakes Community has maintained the VDOT right-of-way with landscaping, decorative signage, and mowing and reserved the right-of-way for the future interchange project. WR&A led a series of meetings with the Fair Lakes League that resulted in the acceptance of the project, donation of right-of-way easements and utilization of existing private regional stormwater management facilities for the project. This resulted in significant cost savings to the project, which allowed aesthetic features such as decorative pedestrian lighting and an asphalt stone finish on the retaining walls and sound barriers be added to the project. The finished project will enhance the community and provide significant improvements to traffic operations.

WR&A also developed materials for both a Citizens’ Information Meeting and a Design Public Hearing as well as presented the project to the public in formal presentations at each meeting.

Mr. Nassre Obeed
4975 Alliance Drive
Fairfax, VA 22030
M. N. astruy Obee
(703) 259-1723
LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

<table>
<thead>
<tr>
<th>Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Project Name &amp; Location</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>I-81 BRIDGES OVER BUFFALO CREEK AND MAURY RIVER</td>
</tr>
<tr>
<td>Rockbridge County, Virginia</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Whiton, Requardt and Associates, LLP (WR&A) was selected to design the I-81 bridge replacement projects of both the Buffalo Creek and Maury River bridges under a single contract. The bridges had reduced shoulder width and were classified as functional obsolete. The projects were to be the first part of the I-81 reconstruction efforts and were designed to widen I-81 from 4 to 6 lanes.

Roadway Design – Both projects required the reconstruction of approximately one mile of the interstate facility. The design required total replacement of the existing pavement section, which required the roadway typical section to be shifted to the east to ensure two travel lanes where maintained during construction at all times.

Hydraulic Analysis – The projects required a detailed hydraulic analysis of both Buffalo Creek and Maury River to ensure the project had no impact to the 100-year flood elevation. Additionally, the analysis included the evaluation of temporary causeways into the stream during construction. The projects also included the design of the extension of 3 box culverts.

Geotechnical Engineering – WR&A provided all geotechnical engineering services for the projects, which included an extensive testing and boring program to locate potential karst features. Our geologists performed extensive site visits and used dye testing to identify underground stream features that may impact the project design. At the Buffalo Creek northbound bridge it was determined the existing median contained a major underground stream network. The bridge and roadway improvements were shifted to the outside of the existing northbound I-81 lanes to avoid the karst features. WR&A provided a detailed geotechnical report including the design of a major embankments, rock cut slopes and bridge foundations.

Structural Design – The structural design of the two I-81 bridges over the Buffalo Creek gorge with a depth well over 100 feet on I-81 was a main focus of the design. The bridges were on independent alignments and gradings with approximately 1,000’ distance between the roadways. The NBL bridge was the more challenging design due to the requirement that it be constructed in two stages just downstream from the existing bridge, and due to the site topography. Alignment studies also revealed the need to raise the profiles of the bridges approximately 8 feet to meet current FHWA Interstate Design Standards. The design consists of continuous hybrid steel plate girder bridges with the following span configurations: NBL Bridge: 137'-166'-166'-137’ = 606’ and the SBL Bridge: 138'-154'-154'-138’ = 584’. The NBL Bridge is on a curved alignment, which was an existing condition, while the SBL Bridge is on a tangent alignment. Both bridges required tall piers of up to 110 feet in height due to the depth of the gorge. The Maury River bridges are three lanes wide with 14-foot wide shoulders on each side. The new bridges are on parallel alignments and are of different lengths and layouts due to the topography and constraints of the site. The NBL bridge is 825 feet in length with five spans (137’-151’-164’-177’-193) and the SBL bridge is 743 feet in length with four spans (193’-177’-177’-193”). They are on tangent alignments, but the NBL bridge has a 1°45’ curve in the southernmost end span. The bridges have fully-continuous hybrid steel superstructures with 73-inch deep plate girders. Both the Buffalo Creek and Maury River bridges were designed using innovative design element for the treatment of the deck joints at the abutments. The ends of the steel girders are encased in a concrete diaphragm that is integral with the deck and located just beyond the bearings. The deck joints are tooth expansion joints that are located on the abutment side of the concrete diaphragms. VDOT has since included the detail in the Design Guidelines as a special alternative joint detail.

The sequence of construction and maintenance of traffic required all existing travel lanes to remain open during construction. This required a phased construction of the bridges. The Buffalo Creek northbound bridge was constructed in two phases, while the southbound bridge was shifted into the median and constructed in a single phase. The Maury River bridges were replaced by first constructing the new northbound bridge to the east and then shifting the northbound traffic onto the new structure. The southbound traffic was then shifted onto the old existing northbound bridge while the new southbound structure was constructed.

Public Involvement – WR&A provided all presentation materials and participated in the Design Public Hearing for the project.

Project Awards:
BUFFALO CREEK: VDOT Statewide Construction Quality Award, NPHQ Award “Breaking The Mold” and ACEC Grand Award For Design Excellence
MAURY RIVER: ACEC Grand Award For Design Excellence
**Whitman, Requardt and Associates, LLP (WR&A) was retained to provide complete engineering design services to VDOT for the Route 29 Bypass Interchange at Sweet Briar College. The project was located at the northern terminus of the Madison Heights Bypass and connected to the existing Amherst Bypass. The location of the interchange was determined by conceptual studies completed by others, which located the interchange where the Norfolk-Southern mainline track, Rutledge Creek (FEMA Floodplain) and the existing Route 29 roadway are within 1,000 feet of each other in the center of the interchange and is adjoining the Sweet Briar College Campus. The project was noted to be one of the most complex projects in Central Virginia in recent history.**

**Interchange Design** - The interchange included a complex configuration of six ramps with a length of almost 2 miles. Three of the ramps were fully directional providing access to and from the proposed Route 29 Bypass to existing Route 29. The design of the interchange was driven by the desire to make the future Route 29 Bypass a continuous movement and the ability to clearly sign the traffic movements from the Bypass to Route 29 Business into Madison Heights and Amherst.

**Norfolk-Southern Railroad** - WR&A developed an innovative design that connected Route 29 Business in Amherst to the future Route 29 Business through Madison Heights by synchronizing to provide a continuous facility for local traffic separated from the high-speed Bypass traffic. The new section of Route 29 Business was a mile in length and required two bridges over the Route 29 Bypass. The Route 29 Bypass consisted of 1.25 miles of four-lane divided freeway.

**Hydraulic Analysis** - The roadway and interchange design required a full detailed analysis for ditches, curb and gutter, floodplain analysis and stormwater management. Rutledge Creek traversed the project by first passing under the relocated Sweet Briar College entrance roadway with a 100’ double 10’x8’ box culvert, then through an existing double 6’x8’ box culvert that required an extension of 300 feet and then through a 1,000-foot long double 8’x8’ box. A complex hydraulic model was developed to ensure the project had no impact to the existing 100-year floodplain elevation. WR&A developed a stormwater management strategy that relied on the treatment of off-site impervious area that required only one basin to be constructed for the project.

**Structural Design** - Four highway bridges and two railroad bridges were designed under this contract. The highway bridges were all two-span continuous steel girder bridges with spans ranging from 137 feet to 203 feet and skew ranging from 0 to 45 degrees. The highway bridges were designed for seismic performance category B using single mode seismic spectral analysis techniques (SEISA B Program). The Route 624 bridge (B627) over the Route 29 Bypass included a jointless deck bridge with semi-integral abutments. The Railroad Bridges were designed as part of a relocation of approximately one mile of Norfolk Southern mainline track to accommodate construction of the new interchange. Both bridges are designed to carry two mainline tracks. Bridge B632 carries the NS tracks over Route 29 Bypass and is a three-span skewed structure with simple deck plate girder spans of 133 feet - 150 feet - 169 feet. Bridge B631 carries the NS tracks over Relocated Route 661, and is a single-span skewed structure with a deck plate girder span of 121 feet. Both Railroad Bridges are constructed in two stages to accommodate railroad traffic during construction.

**Public Involvement** - WR&A provided extensive support for the stakeholder meetings with local officials and the Sweet Briar College and developed a design that addressed the expressed goal of separating high-speed Bypass traffic from the low-speed Route 29 Business traffic. WR&A assisted VDOT in presenting the design to the public at a Design Public Hearing, where the innovative design was overwhelmingly supported by the public.

**Project Award:**

ACEC Honor Award For Design Excellence

---

<table>
<thead>
<tr>
<th>Work on This Project - lead designer (3 projects) which best illustrates current qualifications relevant to this Project.</th>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Original Contract Value</th>
<th>g. Final or Estimated Contract Value</th>
<th>h. Dollar Value of Work for Which Firm Was/is responsible</th>
</tr>
</thead>
</table>
| **ROUTE 29 (MADISON HEIGHTS BYPASS) SWEETBRIAR INTERCHANGE** Amherst County, Virginia | Design of interchange, roadway and 4 highway bridges, retaining walls, drainage, SWM, H/H studies and traffic forecast and analysis. Design of 2 railroad bridges and track relocation. | Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219 Gary Wilmuth | Design 2001 Construction Fall 2004 | Design 2001 Construction Fall 2004 | $32,704 | $33,250 | $33,250 | **WR&A**

---

**AT R TACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

---

**Interchange Design with complex phasing during construction. (Project Risk: #1)**

**Coordination of Bridge design, especially foundation with the roadway and M&O is critical to success.**

**Detailed Hydraulic model of existing and proposed condition is critical to the project design.**

**Early coordination with local officials was the key to success.**

**WR&A** developed a sequence of construction plan for the project, which required the NS track relocation be constructed first, then the completion of Route 29 Business was built over the existing Route 29. The design ensured the impact to the existing Route 29 traffic would be minimized during construction, while providing the continuous access to Sweet Briar College and the businesses along Route 29 Business into Amherst.

**Public Involvement** - WR&A provided extensive support for the stakeholder meetings with local officials and the Sweet Briar College and developed a design that addressed the expressed goal of separating high-speed Bypass traffic from the low-speed Route 29 Business traffic. WR&A assisted VDOT in presenting the design to the public at a Design Public Hearing, where the innovative design was overwhelmingly supported by the public.

**ACEC Honor Award For Design Excellence**
Request For Qualifications
A Design-Build Project

I-64 Exit 91
Improvements

From: 0.429 Miles West of Route 285
To: 0.438 Miles East of Route 285

State Project No.: 0064-007-111, P101, R-201, C-501, B-627
Federal Project No.: NH-064-2(152)
Contract ID Number: C00075877DB47

Augusta County, Virginia