I-64 Exit 91 Interchange Improvements Design-Build
from 0.429 miles West of Route 285 to 0.438 miles east of Route 285
Augusta County, Virginia

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

January 6, 2012
Submitted by:
Vecellio & Grogan, Inc.
in association with
Baker
Michael Baker Jr., Inc.
January 6, 2012

Ms. Brenda Williams
Virginia Department of Transportation
1401 E Broad Street
Richmond, VA 23219

Re: Statement of Qualifications: I-64 Exit 91 Interchange Improvements Design-Build Project
0.429 miles West of Route 285 to 0.438 miles East of Route 285; Augusta County; State Project No.: 0064-007-111, P101, R-201, C-501, B-627; Federal Project No.: NH-064-2(152); Contract ID: C00075877DB47

Dear Ms. Williams:

The Design-Build Team of Vecellio & Grogan, Inc. in association with Michael Baker Jr., Inc. (“V&G Team”) have joined together to submit this Statement of Qualifications for the I-64 Exit 91 Interchange Improvements Design-Build project in Augusta County. It is with great pleasure that we present this Phase I qualification package for our team, and we look forward to the opportunity of submitting a detailed technical and competitive price proposal during Phase II of this very important project selection process.

Vecellio & Grogan, Inc. (V&G) is an ENR Top 200 Heavy Highway Contractor. Since its incorporation in 1938, the company has expanded and diversified its operation to include all areas of infrastructure. The company is best known for highway and bridge construction, particularly for its ability to accomplish complex projects safely while providing the best value and highest quality product to the owner. In addition to its highway and bridge construction experience, V&G is experienced in airport work, site development, asphalt paving, and coal related ventures. V&G has many years of experience on varied projects throughout Virginia and the southeastern United States. The company has the extensive capacity, personnel, relevant experience and a reputation for quality work completed with integrity. All of these will be needed to complete a project of this complexity.

Michael Baker Jr., Inc. (Baker) is a full-service engineering firm which has, for more than 70 years, been creating value by delivering innovative and sustainable solutions for infrastructure and the environment. Baker provides engineering for major infrastructure projects worldwide. Baker has more than 3,200 employees in more than 107 offices across the United States and internationally and is ranked by Engineering News Record as #11 in transportation and #4 in bridges. We have provided these services out of our Virginia offices for more than 25 years. Baker’s Alternative Delivery Management (ADM) Group operates nationally over the five geographic regions that comprise Baker’s U.S. operation. The ADM Group regularly partners with contractors and concessionaires to deliver Design-Build (DB) and Public Private Partnership (P3) projects for the surface transportation industry. Baker’s ADM Group includes experienced professionals responsible for strategically implementing Baker’s business and engineering activities for transportation projects that utilize alternative delivery methods.

The V&G Team views this project as an opportunity to apply its expertise, innovative thinking, and commitment to exceed client expectations. Our experience will aid VDOT in developing the most effective ideas to maintain schedules, provide stringent QA/QC, control cost, and minimize impacts to the public during construction.

The V&G Team brings many attributes to this contract:

- Considerable experience with similar road and bridge construction;
- Ample resources for design, right-of-way, construction, and quality assurance;
- Extensive experience with utility coordination on design-build projects;
- A history of successful utility coordination efforts during construction;
- A team with a lengthy and positive VDOT work history; and
- Relevant design-build experience and expertise.
V&G and Baker have diligently assisted VDOT in meeting transportation goals in the past and have focused on quality and cost control. The V&G Team believes this submittal underscores the firms’ collective capabilities and continuing desire to serve VDOT.

In accordance with Section 3.2 of the RFQ, the V&G Team offers the following information:

**3.2.1 Offeror’s Official Representative:** As Prime Contractor and Design-Builder, Vecellio & Grogan, Inc. will be officially represented as follows:

- **Offeror’s Primary Contact:** Matthew A. Farley, Vice President - Structures
  - **Address:** 2251 Robert C. Byrd Drive, Beckley, WV 25801
  - **Phone and Fax:** (304) 252-6575 (phone); (304) 252-4131 (fax)
  - **Email:** Matt.Farley@VecellioGrogan.com

**3.2.2 Offeror’s Principal Officer:** Harold William Medcalf, Jr., is the principal officer of the legal entity (Vecellio & Grogan, Inc.) with whom the design-build contract with VDOT will be written for this project.

- **Offeror’s Principal Officer:** Harold William Medcalf, Jr., President, Construction Division
  - **Address:** 2251 Robert C. Byrd Drive, Beckley, WV 25801
  - **Phone:** (304) 252-6575

**3.2.3 Offeror’s Organizational Structure:** Vecellio & Grogan, Inc. (V&G) is a corporation licensed in 13 Mid-Atlantic States and formed in West Virginia in 1938. V&G will be the “Offeror” and as the contracting entity with VDOT, will undertake the financial responsibility, and holds no liability limitations for same. Our proposed design-build team will be structured to provide VDOT with a single point of responsibility for completion of the project and performance of the team. V&G will subcontract the design and construction quality control (QC) tasks to our lead designer, Michael Baker Jr., Inc., and Triplet-King & Associates, Inc., respectively. V&G will also subcontract the right-of-way services to O.R. Colan Associates and the construction quality assurance (QA) to NXL Construction Services, Inc. Financial responsibility for completion of the project will rest solely with V&G. V&G will be liable for the performance of the work required for the project.

**3.2.4 Affiliates and Subsidiaries**

*Parent Company (Affiliate):* Vecellio Group, Inc. - 101 Sansbury Way, West Palm Beach, FL 33416

*Divisions of Vecellio & Grogan:*
  - Sharpe Brothers - 204 Base Leg Road, Greensboro, NC 27409
  - White Rock Quarries - 18300 N.W. 122nd Avenue, Miami, FL 33346

*Affiliated Companies:*
  - Ranger Construction - 101 Sansbury Way, West Palm Beach, FL 33416
  - Ranger Golf - 101 Sansbury Way, West Palm Beach, FL 33416

*Subsidiary Companies:*
  - South Florida Materials Corp. - 300 Middle Road, Port of Palm Beach, Riviera Beach, FL 33404
  - South Florida Petroleum Services, LLC - 2550 Eisenhower Boulevard #11, Ft. Lauderdale, FL 33346
  - Vecenergy Resources, LLC - 2550 Eisenhower Boulevard #11, Ft. Lauderdale, FL 33346

**3.2.5 Certification Regarding Debarment:** Please refer to the V&G Team Certification Regarding Debarment Forms provided in the Appendix.

**3.2.6 VDOT Prequalification:** V&G (Vendor No. V004) is prequalified to do business with VDOT. Please refer to the firm’s prequalification certificate provided in the Appendix.
3.2.7 Bonding Capacity: Evidence of V&G’s ability to provide the required performance and payment bonds is included via letter from our bonding agent below.

Friedlander Company

Bonds & Insurance
1566 Kanawha Blvd. East 25311
PO Box 2466 Charleston, WV 25329
Telephone: 304/357-4520 * Fax: 304/345-8724

December 19, 2011

Mr. John C. Daoulas, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation (VDOT)
1401 East Broad Street
Richmond, Virginia 23219

Subject: Vecellio & Grogan, Inc., Beckley, West Virginia

Gentlemen:

The Design-Build Team of Vecellio & Grogan, Inc., Beckley, WV and Michael Baker Jr., Inc. Richmond, VA and Pittsburgh, PA, “V&G Team”, is submitting their Statement of Qualifications for VDOT’s I-64 Exit 91 Interchange Improvements” in Augusta County, Virginia. In response to Paragraph 3.2.7 of the RFP it pleases me to advise that it has been the privilege of this surety agency since 1938 and the Travelers Companies since 1959 to provide surety bonds for Vecellio & Grogan, Inc. (V&G). As a surety agent with the Friedlander Company I have worked with V&G since 1970 and personally know they have not been denied bond in that 41 year period.

It is our opinion that V&G is qualified to provide and perform the necessary construction services for the satisfactory completion of the above referenced design-build project. We understand your estimated value of the project, per Section 2.1, is $37,000,000. We have provided bonds for the Vecellio companies in excess of $100,000,000.

Travelers Casualty and Surety Company of America, with an A. M. Best Co. Financial Strength Rating of “A+” and Financial Size Category of “XIV”, on behalf of Vecellio &Grogan, will furnish 100% performance bond and 100% labor & materials payment bond in the amount of the anticipated cost of construction, said bonds covering the noted Project and any warranty periods, in the event that V&G enters into a contract for this project.

Should you have any questions or concerns please contact me at my Moneta, Virginia branch office. Phone: 540-721-5441. Thank you for the opportunity to recommend this fine construction company.

Very truly yours,

A. L. Stanchina
Surety's Attorney-in-Fact
Agency’s President

3.2.8 Evidence of Professional Registration

<table>
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<tr>
<th>Business Name</th>
<th>Reg #</th>
<th>Type of Corporation</th>
<th>Status</th>
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<td>Corporation</td>
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<td>Michael Baker Jr., Inc.</td>
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<td>Accumark, Inc.</td>
<td>0440745-8</td>
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### 3.2.8.2 DPOR Registration information for each office practicing any professional services in Virginia

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<thead>
<tr>
<th>Business Name &amp; Address</th>
<th>Reg. Type, # and Exp. Date</th>
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<tr>
<td>Michael Baker Jr., Inc. 1801 Bayberry Court, Ste 101, Richmond, VA 23226</td>
<td>Eng, LS; 0411000058; Exp. 2/29/2012</td>
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<tr>
<td>Michael Baker Jr., Inc. 3141 Fairview Park Dr, Ste 575, Falls Church, VA 22042</td>
<td>Eng; 0411000829; Exp. 2/29/2012</td>
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<tr>
<td>Michael Baker Jr., Inc. 272 Bendix Rd, Ste 400, Va. Beach, VA 23542</td>
<td>Eng; 0411000143; Exp. 2/29/2012</td>
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<tr>
<td>Michael Baker Jr., Inc. 3601 Eisenhower Ave, Alexandria, VA 22304</td>
<td>Eng; 0411000059; Exp. 2/29/2012</td>
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<tr>
<td>NXL Construction Services, Inc. 114 E Cary St, Ste 200, Richmond, VA 23219</td>
<td>Eng, LS; 0407003031; Exp. 12/31/13</td>
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<tr>
<td>NXL Construction Services, Inc. 2870-C South Main Street, Harrisonburg, VA 22801</td>
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<tr>
<td>Schnabel Engineering Consultants, Inc. 480 Four Seasons Drive, Charlottesville, VA 22901</td>
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<tr>
<td>Schnabel Engineering Consultants, Inc. One Cary Street, Richmond, VA 23220</td>
<td>Eng; 0411000700; Exp. 2/29/2012</td>
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<tr>
<td>Triplett-King &amp; Associates, Inc. PO Box 70, Rock Hill, SC 29731</td>
<td>Eng; 0407005496; Exp. 12/31/2013</td>
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<tr>
<td>Froehling &amp; Robertson, Inc. 3015 Dumbarton Road, Richmond, VA 23228</td>
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<tr>
<td>Accumark, Inc. 9500 King Air Ct, Ashland, VA 23005</td>
<td>Eng; 0407005172; Exp. 12/31/2013</td>
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### 3.2.8.3 DPOR Registration information for each Key Personnel practicing a professional service in VA

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<th>Key Personnel</th>
<th>Reg Type, # Exp</th>
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<tr>
<td>Joe Hamed, PE Christiansburg, VA</td>
<td>P.E., 0402039327 Exp. 2/29/2012</td>
<td>NXL Construction Services, Inc. 2870-C S Main St, Harrisonburg, VA 22801</td>
</tr>
<tr>
<td>Amir Fouladgar, PE Potomac, MD</td>
<td>P.E., 04020017431 Exp. 12/31/12</td>
<td>Michael Baker Jr., Inc. 3141 Fairview Park Dr, Ste 575, Falls Church, VA 22042</td>
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<tr>
<td>Khosrow Babaei, PE Herndon, VA</td>
<td>P.E., 0402025896 Exp. 2/28/2013</td>
<td>Michael Baker Jr., Inc. 3141 Fairview Park Dr, Ste 575, Falls Church, VA 22042</td>
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### 3.2.8.4 DPOR License information for those regulated services not regulated by the APELCDLA Board

<table>
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<th>Registration Type, # and Exp. Date</th>
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<tbody>
<tr>
<td>Vecellio &amp; Grogan, Inc. 2251 Robert C. Byrd Drive, Beckley, WV 25801</td>
<td>Contractor Class A; 2705046593; Exp. 10/31/12</td>
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<tr>
<td>O. R. Colan Associates of Florida, LLC 11111 Carmel Commons Blvd, Charlotte, NC 28226</td>
<td>RE Appraiser; 4008001545; 7/31/2013</td>
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3.2.9 Disadvantaged Business Enterprises Commitment

V&G has a long history of DBE utilization on our projects even when participation is not a requirement. We maintain relationships with reputable small and disadvantaged businesses across Virginia and we depend on their contributions for our success on all of our projects. We are committed to achieving a twelve percent (12%) DBE participation goal for the entire value of the contract.

The following team members are either certified under Virginia’s “SWaM” Procurement Initiative or the U.S. Department of Transportation’s DBE program. All of the firms listed are very familiar with providing professional services to VDOT. We have already identified five SWaMs who will provide either all or a substantial majority of the 40 percent SWaM utilization goal, per Executive Order Number 33.

<table>
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<tr>
<th>Team Member</th>
<th>SWaM Certification</th>
<th>DBE/MBE Certification</th>
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<td>NXL Construction Co., Inc.</td>
<td>Minority-Owned Small (626437)</td>
<td>DBE/MBE (N140; 626437)</td>
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<td>O.R. Colan Associates</td>
<td>Woman-Owned (674542)</td>
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<tr>
<td>H&amp;B Surveying and Mapping, LLC</td>
<td>Woman-Owned Small (679423)</td>
<td>DBE/WBE (H960; 679423)</td>
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<td>Accumark, Inc.</td>
<td>Small (648547)</td>
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For the construction portion of the project, V&G will inform DBE subcontractors of opportunities to submit quotes and bids and encourage participation by non-minority subcontractors to help meet the DBE goals.

To facilitate the design and construction of this project, our team is committed to establishing an informal partnering program with VDOT. Partnering is about shared responsibility, and as defined in the VDOT Field Guide for Partnering, is “a process based on trust and an open, honest attitude in which all participants in a project recognize both common and individual objectives and work to achieve those objectives through improved communication and cooperation.” We feel this is essential in a design-build project such as this one. Therefore, our partnering program will incorporate the values set forth in the manual referenced earlier: trust, teamwork, communication, motivation, empowerment, and issue resolution. In cooperation with the Department, we will select an individual from our staff to lead us in accordance with the Field Guide for Partnering requirements to include regular or scheduled partnering meetings attended by key members of our team, VDOT representatives, subcontractors, suppliers, FHWA representatives; where appropriate, other federal agencies, local government officials, utilities representatives, law enforcement and public safety officials, consultants, and other stakeholders.

We are excited about the opportunity to take part in this design-build selection process and we hope that VDOT will select our team to continue as a short-listed firm into Phase II. We are confident, that if chosen to design and build this project, our team will provide VDOT, Augusta County and the community of Fishersville, a project that will be designed to the highest standards, constructed safely and competitively, and built to serve the community for years to come. Additionally, our team understands the importance of maintaining traffic across the existing and new bridges over I-64 and is committed to exploring innovative methods to minimize construction impacts on the traveling public and the community of Fishersville’s emergency services personnel.

We look forward to serving you once again on this very important and significant project and appreciate your consideration of our team’s qualification submittal. If you have questions or need further information, please contact me.

Respectfully submitted,

Harold William Medcalf, Jr.
President, Construction Division
3.3 OFFEROR’S TEAM STRUCTURE

Vecellio & Grogan, Inc. (V&G), will lead the design-build team and ultimately be responsible to VDOT for the completion of the I-64 Exit 91 Interchange Improvements Design-Build Project. V&G’s role will include managing all aspects of the project and serving as the lead contractor. Michael Baker Jr., Inc. (Baker) will be lead designer and will provide all engineering design services except for geotechnical design.

Together, V&G and Baker have assembled additional team members based on previous working relationships and the quality performance they have demonstrated on similar projects. These team members are dedicated to the quality of work and service to provide the best value to VDOT. Below are the firms that make up the V&G Team and their defined role on the project.

The V&G Team

Vecellio & Grogan, Inc.
Offeror / Lead Contractor
Project Management
Coordinating with VDOT
Performing Majority of Construction
Supervising Remaining Subcontractor Activities

Michael Baker Jr., Inc.
Lead Designer
Roadway Design
Bridge Design
Traffic Design
Utility Design
Public Involvement
Environmental Compliance & Permitting

NXL Construction Services, Inc.
Quality Assurance

Triplett-King & Associates, Inc.
Quality Control

Schnabel Engineering Consultants, Inc.
Geotechnical Analysis and Design Quality Assurance Testing Lab

Froehling & Robertson, Inc.
Quality Control Testing Lab

O. R. Colan Associates
Right-of-Way Acquisition Construction Easements

H&B Surveying and Mapping, LLC
Supplemental Survey and Plats

Accumark, Inc.
Subsurface Utility Engineering

Baker, NXL, O.R. Colan, and Triplett-King will be subconsultants to Vecellio & Grogan. The remaining project design firms will be subconsultants to Baker.

3.3.1 IDENTITY OF AND QUALIFICATIONS OF KEY PERSONNEL

The six individuals described below are the key personnel who will successfully deliver this project. Each individual was hand picked for this project based on their past experience and having the necessary skills required by this project. More detailed information on each is provided on the required Key Personnel Resume Forms (Attachment 3.3.1) that appear in the Appendix.

1 Design-Build Project Manager (D-B PM): Matt Farley (V&G) will be responsible for administering the I-64 Exit 91 Interchange Improvements Design-Build Project. Mr. Farley has more than 20 years of construction experience in all levels of project engineering and management, contract administration, safety and quality control. He began his career with V&G in 1989 and his commitment has lead to his advancement to Vice-President of V&G’s Construction Division, with responsibility for all of the company’s structures-related work. He has worked on projects of varying size, complexity, and scope. Recently, he was responsible for the oversight of the on-time completion of V&G’s East Beckley Bypass Project which included a 1,200-foot-long, 220-foot-tall bridge over Cranberry Creek. During the
same period, Mr. Farley oversaw the construction of a 1,400-foot-long RC box culvert relocating Patterson Creek and a 600-foot-long bridge over Knobley Road in Maysville, WV on V&G’s Corridor H project. Mr. Farley has also overseen the construction of 10 bridges on the I-540 project in Wake County, NC, four bridges in Greensboro, NC, a $30 million 2,200-linear foot bridge in Hardy County, WV, and two design-build bridges at the Dominion Power plant in Russell County, VA.

.2 Quality Assurance Manager (QAM): Joe Hamed, P.E. (NXL) will ensure the construction quality (quality assurance) of the project meets or exceeds VDOT’s requirements. Mr. Hamed has more than 20 years of experience, including serving as a Quality Assurance Manager for D-B projects. His current responsibilities include; ensuring all contract requirements are appropriately administered and applied, all required quality control testing and independent quality assurance is carried out in accordance with requirements and ensuring construction quality standards are met and payments appropriately processed. Mr. Hamed is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

.3 Design Manager (DM): Amir Fouladgar, P.E. (Baker) will be responsible for coordinating the individual design disciplines and ensuring the overall project design conforms with the project requirements. Mr. Fouladgar has more than 40 years experience providing transportation design projects in the role as lead designer and project manager, including several design-build projects. He has significant experience on large bridge projects for VDOT. Mr. Fouladgar is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

.4 Construction Manager (CM): Argel Cook (V&G) will be responsible for the daily construction operations. Mr. Cook has more than 35 years of construction experience, nearly 30 of which have been with V &G. Serving in his current role as Structures Superintendent for more than 18 years, Mr. Cook has supervised and directed the construction of numerous structures of various sizes and complexities throughout the Mid-Atlantic. Mr. Cook’s recent resume of projects includes direct supervision of both a 1,400-foot-long reinforced concrete box culvert relocating the Middle Fork of Patterson Creek and a 600-foot-long bridge over Knobley Road in Maysville, WV at V&G’s Corridor H project. Prior to working on the Corridor H project, Mr. Cook served as Structures Superintendent on V&G’s Bryan Boulevard Relocation project which included construction of four multi-span bridges with a value of approximately $19 million. Mr. Cook has successfully constructed numerous multi-span bridges including bridges constructed over traffic. Mr. Cook will have all the required certifications for this position including a Virginia Department of Conservation and Recreation Responsible Land Disturber Certification and a VDOT Erosion and Sediment Control Contractor Certification.

.5 Lead Structural Engineer: Khosrow Babaei, P.E., S.E. (Baker) will provide structural engineering design of the bridges and any retaining walls. His experience in design, rehabilitation and inspection of highway and railway bridges includes virtually all facets of bridge engineering. He has served in responsible charge of numerous bridge design projects throughout Virginia. Mr. Babaei has significant experience with the design of shoring and constructability issues related to bridge construction in congested areas. Mr. Babaei is experienced in design of foundations for bridges. Mr. Babaei is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

.6 Environmental Compliance Manager: Marc Neuhoff (Baker) will be responsible for ensuring compliance with all environmental commitments during the project. Mr. Neuhoff has more than 26 years of extensive experience in environmental compliance and permit review for E&S laws as a Virginia DCR E&S Control certified Combined Administrator, surveying, interpretation of plans and specifications, project documentation, traffic control, review of shop drawings and submittals and work order reviews, etc. to ensure contractor compliance with applicable laws as well as the project plans and specifications. Throughout his career he has coordinated and communicated with contractors, external agencies, clients, peers, staff and general public to ensure successful and timely project completion.
3.3.2 ORGANIZATION CHART

The organizational structure of the V&G team is a straightforward chain of command benefiting VDOT by providing a single-source entity, responsible for the complete design and construction of the project. The V&G Team combines the strengths of several companies, resulting in an integrated organization, to address all needs associated with this project. Our organizational chart shows all of our identified team members and graphically depicts the reporting structure within the team and to VDOT. The individuals depicted on the organizational chart on the following page are the key members of the V&G Team. This team will remain intact for the duration of the project.

All correspondence and coordination between VDOT and the project team will occur through Mr. Farley the D-B PM, who will be directly involved with all facets of the project, including design, construction, administration, quality, and schedule. He will be in frequent contact with the other key personnel: the DM, CM and QAM. Each of these individuals will be responsible for managing the tasks and staff associated with their portion of the I-64 Exit 91 Interchange Improvements Design-Build Project and responsible for informing the D-B PM of any project issues or potential schedule delays that may arise. There will be direct communication between the DM and CM concerning critical design and constructibility issues. Communication between the CM and the QAM will occur via the D-B PM. These key personnel will maintain a collaborative relationship founded on a common goal: to successfully design and build the project.

Our organizational chart shows the separation between quality assurance and quality control including separation of testing laboratories. We propose a reporting structure for the quality process to ensure independent processes which requires, in accordance with VDOT policy, both the quality control manager and the quality assurance manager report to the Design-Build Project Manager. This requirement is maintained, but secondarily and independently, the QAM reports to the VDOT Independent Review Team. Additionally, our organizational chart indicates a clear separation of our QAM processes and our QC processes with no direct lines of communication or reporting.

Following the organization chart is a list of discipline leaders for the design, construction, and quality assurance and control portions of the project. A brief description of the individuals’ reporting and functional relationships is provided.
Matt Farley, as Design-Build Project Manager (D-B PM), will fully integrate design, construction and quality personnel during the design phase to ensure the complete coordination from design through construction. This position requires direct involvement with all facets of the project: design, right-of-way management, construction, administration, and quality control and quality assurance. Mr. Farley will be the main contact with VDOT keeping the VDOT Project Manager up to date on the progress of the project and of any issues that may arise. It will be his responsibility to work with the Design Manager (Amir Fouladgar, P.E.) throughout the design phase and the Construction Manager (Argel Cook) to ensure design changes or other construction issues are resolved in a timely manner. His interaction, from design through construction, will include weekly design and construction meetings for short-term planning and prompt issue resolution. It will be his responsibility to assign small groups of appropriate representatives to smaller teams charged with quickly resolving any issues. He will interact continuously with the Quality Assurance Manager (Joe Hamed, P.E.) to ensure the project complies with all specifications. By providing contractor involvement during design and designer involvement through construction, Mr. Farley can ensure streamlined effort by all team members and reduce the possibility of rework by addressing potential engineering, constructability and quality issues up front. He will have direct involvement with all facets of the project including design, construction, administration, quality and schedule. Reporting directly to Mr. Farley will be the Design Manager, the Construction Manager, the Safety Manager and the Public Information Manager. The interrelationship between each of these personnel will be collaborative with a common goal to successfully design and build this project.

Joe Hamed, as Quality Assurance Manager (QAM), will ensure the construction quality (quality assurance) of the project meets or exceeds VDOT’s Minimum Quality Control and Quality Assurance Requirements for Design-Build and PPTA Projects. He will operate independently from the construction operations to assure VDOT that a quality project is being delivered. He will report directly to the D-B PM and coordinate with the CM and VDOT’s Independent Verification Team on all quality issues. As issues arise, Mr. Hamed and QA staff will note trends and suggest remediation measures directly to the D-B PM and coordinate with VDOT and construction personnel to complete remediation measures. He will assure any item of work that fails to meet minimum standards will be immediately corrected. Construction personnel will have no authority over QA inspection staff, and Mr. Hamed and the D-B PM will resolve any issues raised by construction personnel. Mr. Hamed will inform VDOT’s Independent Verification Team of all issues and solutions during all project phases through weekly reports and progress meetings in accordance with VDOT QC and QA requirements.

Amir Fouladgar, P.E., as Design Manager (DM), will be responsible for coordinating the individual design disciplines and ensuring the overall project design conforms with the project requirements. Mr. Fouladgar will also be responsible for all design quality control and quality assurance (QC/QA) requirements, as outlined in VDOT’s Minimum Quality Control and Quality Assurance Requirements for Design-Build and PPTA Projects. He will report directly to the D-B PM and will be responsible for reviewing the design details and ensuring the design and construction work are properly coordinated. In the design process, Mr. Fouladgar will be responsible for monitoring the project design, overseeing the compilation of plans, and determining when the plans are sufficient and ready for quality reviews. He will be responsible for all design subconsultants.

Argel Cook, as Construction Manager (CM), will report directly to the D-B PM and will be responsible for the day-to-day project operations. He will provide daily oversight and immediate direction to the construction crews for all construction activities. Additionally, he will oversee the daily activities and progress of all subcontractors, construction survey crews, and ensure the project is completed in a timely manner, to the highest quality, and under the safest working conditions possible. Mr. Cook will work with the D-B Coordinator, Rob Williams to develop and maintain the construction progress schedule. Mr. Cook will ensure that maintenance of traffic devices are properly installed and operational daily.
Khossrow Babaei, P.E., S.E., as Lead Structural Engineer, will provide structural engineering design of the bridges and retaining walls and will report directly to the DM. Mr. Babaei’s oversight responsibilities will include managing Schnabel as they provide structures geotechnical services. He will work with Schnabel early in the design phase to determine the necessary geotechnical field investigations to meet the project requirements.

Marc Neuhoff, as Environmental Compliance Manager, will be responsible for ensuring compliance with all environmental commitments during the construction of the project. Mr. Neuhoff will also be integrated into the design quality review team in order to ensure that environmental compliance and commitments are achieved not only during construction, but during all phases of the design process. Mr. Neuhoff will report directly to the D-B PM during both design and construction phases of the project, with emphasis during design to coordinate with design disciplines and the DM.

Design-Build Coordinator: Rob Williams, P.E., Ph.D. (V&G) will report directly to the D-B PM. In this role, Mr. Williams will be fully responsible for the vital link between construction operations and the multi-discipline design team responsible for completion the approved and Ready for Construction (RFC) documents on schedule for active field operations. Prior to and during construction, he will work with the CM to develop and maintain the construction progress schedule. Mr. Williams will also assist in coordination and management of subcontractors and vendors, and develop project documentation.

Safety Manager: Robert (Bob) Kennedy (V&G) has 16 years in the industry providing loss prevention and safety program implementation services. It will be Mr. Kennedy’s responsibility to ensure that the V&G team is following the safety protocols and procedures established by the Vecellio Group, Inc. that can be credited with their excellent safety record.

Construction Quality Control: Robert Atkinson (Triplett-King & Associates, Inc.) has a thorough understanding of quality control (QC) equipment, processes, and testing procedures on DOT projects. His QC experience and responsibilities include the management of project QC staff and supervising all QC tasks for transportation construction projects. Mr. Atkinson will report to the CM and will review quality control submissions, perform erosion control inspections, and request corrective action in case of QC problems and will follow up on corrective actions. He will also oversee all site and file preparation for QMT inspections.

Roadway and Hydraulics Engineering: Chuck Eastman, P.E. (Baker) will manage the roadway and hydraulic design and will report to the DM. Mr. Eastman’s oversight responsibilities will include managing H&B, Inc. as they provide design-phase surveying. His significant and comprehensive transportation experience will allow him to also oversee and coordinate other design elements to be performed by Baker staff, including retaining walls, maintenance of traffic, signals/lighting, stormwater, markings/signing and utility relocations. He will also coordinate the efforts of our subconsultant for right-of-way services (O.R. Colan) and survey (H&B) because of the dependency of each discipline.

Geotechnical: Ed Drahos, P.E. (Schnabel) will report directly to the DM and will coordinate with other disciplines, including direct supervision from our Lead Structural and Lead Roadway Engineer.

Right-of-Way: Hugo Solano, R/W-RAC (O.R. Colan) will work closely with the DM to accurately and expeditiously identify and acquire any right-of-way necessary for the project. He will report the status of all right-of-way negotiations and acquisitions to the D-B PM. He has managed full service right-of-way projects that include acquisition, relocation, appraisal/appraisal review, property management, and title services. He is well versed in the application of the “Uniform Act” regulations and applies his knowledge and abilities in solving complex acquisition and relocation issues.
3.4 EXPERIENCE OF OFFERER’S TEAM

V&G/Baker team members have been involved in numerous VDOT, PPTA, and design-build projects together, as well as on other teams. The team knows what needs to be done, with whom to coordinate, and how to make things happen. This experience is brought together to provide VDOT the best team for this project.

3.4.1 WORK HISTORY FORMS

Work History Forms (Attachments 3.4.1(a) and 3.4.1(b)) for both V&G (lead contractor) and Baker (lead designer) are included in the Appendix. The representative projects for both firms reflect the experience of the lead contractor and the lead designer on projects similar in scope and complexity as the I-64 Exit 91 Interchange Improvements project. We have included below more information about the experience of the V&G Team.

LEAD CONTRACTOR

VECELLIO & GROGAN, INC. (V&G), offers VDOT three essential assets: Safety, Experience, and Quality. V&G is committed to safety and strives to provide only the highest quality work environment to its employees and a safe traveling experience to the public. Despite working under heavy and complex traffic patterns in multiple states, V&G has successfully maintained the safe flow of traffic on numerous projects and has a near flawless safety record in doing so. Internally, V&G takes great pride in its Experience Modification Ratio (EMR) of 0.71 – further evidence of its commitment to safety. “Safety is Job 1!” is more than just a slogan for V&G; it’s the way every V&G project is built.

V&G’s experience in highway and bridge construction dates back to its incorporation in 1938. V&G is headquartered in Beckley, West Virginia and operates throughout the Mid-Atlantic and Southeastern United States. V&G has many years of VDOT experience on various projects throughout Virginia. Since the Federal Aid Highway Act of 1956, the Vecellio Group has performed interstate contracts on the order of $1 Billion dollars. The group’s three heavy/highway construction units: Vecellio & Grogan, Inc. (V&G), Ranger Construction Industries, Inc. and Ranger South, have built, widened, or resurfaced approximately 1,000 lane miles of highway in West Virginia, Virginia, North Carolina, Tennessee, Maryland, and Florida. Today, the Vecellio Group ranks #177 in the Engineering News Record (ENR) list of Top 400 Contractors, with $315 million in revenues in 2010.

V&G is committed to more than simply ‘getting a job done.’ V&G is committed to getting the job done right, on-time, and providing the highest quality product to the owner. During its 73-year history, V&G has earned a solid reputation for quality and integrity in their operations. Today, that same commitment to quality is evidenced in the following excerpt from a letter of commendation provided by Mr. Douglas Wozniak, PE, KBD Construction Services, Inc. Project Executive for the recently completed FedEx Mid-Atlantic Hub project, “KBD commends your willingness to accept these challenges and the ability of your field personnel to meet and exceed KBD’s expectations.”

LEAD DESIGNER

Michael Baker Jr., Inc. (Baker) will be the lead designer for this project and will provide all of the necessary roadway and structure design services with the exception of geotechnical design. Consistently ranked in the Top 500 Design Firms by Engineering News-Record, Baker provides comprehensive engineering, architectural, planning, environmental and construction services for the development of aviation and surface transportation projects. Over the past eight years, the Virginia design team has developed roadway designs and construction plans for 15 projects totaling $300 million in construction. Throughout the development of these projects, Baker’s engineers have proved their ability to provide common-sense solutions to complex problems.
Unique among transportation engineering firms, Baker has established a design-build group comprised of highly experienced and talented engineers who specialize in project management and design services for design-build and alternative delivery projects. In the past 12 years, Baker has pursued more than $8 billion in design-build construction and has been successful on more than $3 billion of those pursuits. Baker has led the design effort for design-build projects ranging from $5 million to $1.1 billion and are truly dedicated to the design-build delivery system and will spare no expense to maintain their reputation as a leader in this industry.

The collaboration of one of the largest and best highway contractors on the east coast with one of the leading design-build designers in the country provides VDOT with a highly qualified and creative team. The V&G/Baker team has proven experience in the application of VDOT policies and procedures, AASHTO standards, and FHWA guidelines and will ensure the successful delivery of the project.

**DESIGN-BUILD TEAM**

In addition to the years of individual experience offered by V&G and Baker, the V&G Team offers VDOT the benefit of having worked together previously to successfully complete a number of projects. Some of this teamwork involves staff members from LPA (which was acquired by Baker in May of 2010) and now work for Baker. Working together in these projects has lead to the development of many professional relationships between the firms, which are certain to facilitate a seamless design-build process. Such experience includes:

- Greenville/Spartanburg, SC Airport – V&G constructed a new runway and LPA (now Baker) was the designer and owners representative for inspection
- Bryan Blvd Relocation NCDOT/PTIA – V&G constructed the new four lane alignment and Baker was owner’s representative for inspection
- FedEx Mid-Atlantic Hub for PTIA – V&G constructed the site for the new Distribution Center and Baker was designer and owner’s representative for inspection
- New Runway for PTIA – V&G constructed the new runway; LPA (now Baker) was the designer; Baker was owner’s representative for inspection
- South Branch Potomac River Bridge for WVDOH – V&G constructed the new bridge and Baker was the designer

**SUBCONSULTANTS AND/OR MAJOR SUBCONTRACTORS**

Our team was assembled based on past successful working relationships. We first identified project tasks that require specific expertise either unavailable within our organization or more efficiently provided by an outside firm due to local knowledge or other factors. Our team’s firm selection criteria include technical capabilities, prior experience with VDOT, and working relationships with team members. Our team subconsultants and subcontractors have all worked together on successful traditional and nontraditional pursuits in the past. Each firm stands at the top of its respective discipline as an industry leader and has earned its reputation for quality work and outstanding expertise.

Subcontractors will be an integral part of the construction of this project and will include the following categories of work: asphalt paving, pavement markings, demolition, reinforcing steel, lights/signs/s signals, painting, erosion control/seeding, MSE walls, hauling, guardrail, fencing, etc.

Our design team members include:

**QUALITY ASSURANCE: NXL Construction Co., Inc. (NXL)**

As a certified DBE/MBE/SBE firm founded in 1989, NXL has been performing quality assurance and construction engineering inspection for VDOT on multiple contracts for more than 10 years. NXL is currently providing CEI services under Lynchburg’s District-wide contract, NOVA’s District-wide Maintenance contract, as well as the Regional Bridge Repair and Coatings contracts in the Hampton Roads, Richmond, Lynchburg, Staunton and Salem Districts. NXL
has worked on four VDOT PPTA/design-build projects and is currently performing QC inspection on
VDOT’s I-81 Operational Safety Improvement Design-Build project in Rockbridge County, as well as
the Rolls Royce Design-Build project for Prince George County. NXL is also representing Spotsylvania
County in a “Responsible Charge” Quality Assurance capacity for their Rt. 3 Design-Build project.
Baker and NXL are currently working together on the VDOT Richmond District-wide CEI contract.

**RIGHT-OF-WAY:** O.R. Colan Associates (ORC)

ORC is certified as a VDOT SWAM firm and specializes exclusively in land
acquisition, relocation, and program management for public works projects. ORC’s extensive Virginia
experience includes projects such as the Pocahontas Parkway – 895 Connector in Richmond (P3 Project),
the Route 1 North and South in Prince William County, the 10th Street project in Roanoke County, and the
VDOT Western Region On-Call contract in Floyd and Montgomery counties. ORC presently maintains a
fully-functioning project office in Roanoke. Their staff is very familiar with all VDOT policies and
procedures, as well as the application of the RUMS system to right-of-way acquisition projects. Baker and
O.R. Colan have worked together on the improvements to the West Shoreway highway project and the
Wadsworth Municipal Airport in Ohio.

**GEOTECHNICAL & QA LAB TESTING:** Schnabel Engineering

As a nationally-recognized firm with a tradition dating back more than 55 years, Schnabel Engineering
has become a preeminent provider of GeoDesign engineering services. Schnabel has seven branch
offices strategically located throughout Virginia including an office in Charlottesville in close proximity to
the project site. As a result, they have extensive experience with the local soil and bedrock conditions from
numerous current and completed projects in the Shenandoah Valley. Schnabel’s laboratories currently
hold USACE validation and/or AASHTO Materials Reference Laboratory (AMRL) accreditation on a
large range of general soil test methods. Provided below is a partial list where Schnabel has provided
geotechnical engineering services to prime consultants working for VDOT. Many of these are design-
build projects or within the Shenandoah Valley.

- Fairfax County Parkway Bridges and Roadway Design-Build, Fairfax County, VA
- I-81 Widening MP 195 to MP 202 Roadway and Bridge Design Build, Rockbridge County, VA
- Route 460 and Route 29 Interchange, Bridge Pile Dynamic Testing, Lynchburg, VA
- Route 460 Bridge over Buffalo Creek Design Build, Prince Edward County, VA
- Middle Ground Boulevard Geotechnical Data Report for Design Build, Newport News, VA

Baker and Schnabel have worked together on the Indian River Road widening project and Stumpy Lake
Improvement project.

**QUALITY CONTROL:** Triplett-King & Associates, Inc. (TKA)

TKA a privately owned engineering consulting firm founded in 1997. TKA
specializes in highway bridge design and CE&I services primarily on DOT fast
track design-build and CE&I projects. TKA has performed successful CE&I services for DOT’s for over
10 years. TKA has completed CE&I services on several large scale design-build projects including,
Palmetto-Parkway, Phases I&II, US 17 Ace Basin, I-85 Greenville/Spartanburg Airport Access
Improvements, and John Hardee Expressway. TKA has worked with VDOT on several Design-Build
projects including the most recent Multiple Bridge Replacements Project in Region 2, Virginia and the
Design-Build Route 288 Interchange Project. TKA has a sound understanding of the requirements and
procedures of independent QA and QC, gained through providing QC services to VDOT. TKA has
provided construction engineering design services to V&G on several recent projects, including the
Bryan Boulevard Relocation in Guilford County, NC and the I-540 Outer Beltway project in Wake
County, NC.
QUALITY CONTROL TESTING LAB: Froehling & Robertson, Inc. (F&R)

Established in 1881, Froehling & Robertson, Inc. is a multi-disciplinary woman owned engineering firm that provides clients with the full range of services, including construction materials testing and geotechnical and environmental engineering. In support of this mission, F&R maintains a fleet of drilling equipment as well as accredited geotechnical and construction materials testing laboratories that are utilized by each of our twelve offices. F&R’s laboratories are accredited by the AASHTO (AMRL/CCRL), U.S. Army Corps of Engineers, and WACEL. Technical personnel are certified by agencies including ACI, ASTM, AWS, ICC, NICET, and WACEL. Finally, F&R is accredited by the Virginia Department Professional & Occupational Regulation as a licensed training provider for various asbestos disciplines. Projects demonstrating F&R experience include:

- VDOT In-Situ Geotechnical Testing Annual Contract
- Route 288– Route 60 to Route 64 Section, Chesterfield and Powhatan Counties, Virginia
- I-81 Corridor Safety Improvements, Montgomery County, Virginia
- Dulles Toll Road Expansion of I-495 Interchange, Fairfax County, Virginia

SURVEY & PLATS: H&B Surveying and Mapping, LLC (H&B)

H&B is certified as a VDOT DBE firm and is a full service land surveying firm led by a team of professionals with more than 75 years of combined experience. H&B has surveyed many transportation projects throughout the Commonwealth including 13 complete bridge situation surveys for bridge rehab and replacement. H & B currently is a subconsultant for surveying services for the following On-Call Term Contracts for VDOT:

- VDOT - Limited Services Design Term Contract for the Northern Virginia District
- VDOT - Limited Services Statewide Design Term Contract (member of Baker led team)
- VDOT - Statewide New Bridge Design Limited Services Term Contract
- VDOT - Statewide Limited Services Term Contract for Utility Relocation Design

SUBSURFACE UTILITY ENGINEERING: Accumark, Inc. (Accumark)

Accumark provides professional Subsurface Utility Services on a daily basis across Virginia and the mid-Atlantic region. These services include utility designating, locating, survey and computer drafting. The company also provides ancillary services as needed including ground penetrating radar (GPR) scans, CCTV sewer inspection, topographic surveys and underground storage tank (UST) locating. Accumark is a certified small business with the Commonwealth of Virginia. Accumark’s Design-Build or VDOT experience includes:

- VDOT - Statewide Survey, Photogrammetry and Subsurface Utility Designation and Location Term Contract – 10+ task orders
- Fort Lee New Logistics University Design Build Project, Fort Lee, VA
- Dulles Metro Rail Utility Relocation Design Build Project, Fairfax County, VA

Baker, F&R, H&B, and Accumark have recently worked together on the VDOT task order contract for widening Route 709 in Accomack County.
3.5 PROJECT RISK

After a field visit and review of VDOT RFQ and technical documents the V&G Team brought together the project Key Personnel for a pre-planning “Risk Meeting.” The results of our meeting are simplified below in our “Project Risk Register” which indicates the top three critical risks for this project. These risks have the greatest potential for significant negative impact, including; time, cost, safety and quality. These risks will also require the most intensive mitigation strategies to reduce and eliminate the negative impacts.

<table>
<thead>
<tr>
<th>Critical Risk Item</th>
<th>Impacts</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Third party control of decision-making: Includes design milestone submittals, right-of-way acquisition, utility relocation and environmental permitting.</td>
<td>Schedule Delay Cost Increase</td>
<td>Pre-submittal meetings with VDOT. Early and effective agency coordination. ROW research during bidding phase and kick-off meeting immediately upon NTP. Utility research during bidding phase. Proper assumptions and scope for post-award phase.</td>
</tr>
<tr>
<td>2 - Work around traffic: Particular risk at higher volume areas requiring access to adjacent developments and at I-64 overpass and I-64 ramps.</td>
<td>Safety Hazard Delay to Traveling Public</td>
<td>Appropriate planning Comprehensive TMP development Regular inspections Lessons-learned process</td>
</tr>
<tr>
<td>3 - Environmental compliance: Meeting state and federal environmental and related requirements, as stipulated in the approved Categorical Exclusion (CE).</td>
<td>Damage to environment Schedule Delay Cost Increase</td>
<td>During bidding phase – perform adequate field work and agency coordination for mitigation pricing and stormwater design. Perform jurisdictional determination for wetlands. Early coordination and proper submittal of permit applications for CWA and NPDES permits.</td>
</tr>
</tbody>
</table>

The V&G Team has completed hundreds of transportation projects, small to large and in various project delivery methods, each with requirements to identify and mitigate risk and deliver a quality project on time and at budget. Our Team has used our successful project experiences to identify the three most critical risks for this project and will draw on this same experience to mitigate these risks and to minimize additional efforts required by VDOT and other stakeholders to address risks.

Critical Project Risk No. 1 – THIRD PARTY CONTROL OF DECISION-MAKING

The V&G Team can mitigate risk in schedule and cost fluctuations on items that are directly within our control. Plan reviews, agency permit approvals, ROW acquisition, and utility relocation/coodination are all third party risks that are not directly within our control. These risk items could potentially impact the project’s success, specifically causing schedule delay and cost increase.

Milestone Submittals

Criticality and Impact of Risk: The V&G Team anticipates risk to project schedule (and subsequent cost) in the case the project schedule is established at project award and is subsequently extended due to poor milestone submittal processes.

Mitigation of Risk: Our team, therefore, proposes “pre-submittal” meetings be held for any milestone submittals. These meetings could include the V&G Team discipline leads, VDOT and third party reviewers and would be an opportunity to discuss upcoming milestone submittal packages, including any known deviations. These meetings will help mitigate potential plan revisions and provide an update of critical items.
Agency Permit Approvals

**Criticality and Impact of Risk:** The V&G Team has provided risk information and mitigation strategies in Risk Item No. 3 for Environmental Compliance. Specifically regarding third party control of decision making, we anticipate schedule risk associated with the process of permit approvals because no project permits have been obtained yet and our team will be responsible for preparing and obtaining permits, predominantly from the U.S. Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (VDEQ) for wetlands, streams and stormwater facilities.

**Mitigation of Risk:** To mitigate schedule risk, our Team will provide research and agency coordination during the bidding phase. Post-award, our Team will continue with agency meetings on a regular interval and will include VDOT as required in order to facilitate timely permit approvals.

Right-of-Way Acquisition

**Criticality and Impact of Risk:** The V&G Team has identified ROW acquisition as potential risk item for this project in terms of both cost and schedule. Bidding phase assumptions for acreage and cost corresponding to our preliminary design concept must be made by our team in order to provide VDOT a responsive bid. These assumptions may prove to be incorrect post-award based on the development of final design, including final stormwater BMP’s and agency permit approvals.

**Mitigation of Risk:** To minimize risk, we will perform key elements during the bidding phase:

- Coordinate with VDOT ROW staff to develop review procedures and durations relevant to the development and approval of plans and acquisitions.
- Perform increased coordination with permitting agencies to set right-of-way accordingly to meet all anticipated permit compliance requirements.
- Compare legal descriptions and parcel owners against latest GIS database for the areas of take to identify any discrepancies.
- Adequately set proposed ROW limits to correspond to our preliminary design to avoid revisions during post-award final design development.
- Fully correlate right-of-way acquisition into the development of our overall project schedule.

To minimize risk associated with ROW during final design and construction phase, we will coordinate a kick-off meeting, within 10 days of NTP, with ROW personnel and VDOT to determine:

- Contact person at VDOT who will be reviewing approved appraisals.
- Duration of VDOT appraisal review process
- Duration and procedure for approval of administrative settlements above fair market value.

This initial ROW kick-off meeting will establish final procedures specific to our team and VDOT for acquisition activities for this project, including any of our team’s accepted innovative techniques. This early coordination will minimize the risk of schedule delay associated with ROW activities. The V&G Team realizes how important communication is between the design staff, the construction staff and acquisition staff in order to maintain cost and schedule. The most critical aspect is the determination by the designers of when ROW can be “released” for acquisition on each parcel. From the list of impacted properties and preliminary ROW plans, we will develop a prioritized list of parcels and the required (final) acquisition date to not negatively impact the schedule.

Utility Relocations

**Criticality and Impact of Risk:** The V&G Team expects utility relocations within the project limits performed by others will be the highest utility risk item. This risk will predominantly come in the form of schedule delay. Specifically, utility company decision-making during their relocation design and construction phases could be delayed and cause overall project delay. Secondarily, risk will come in the form of relocations performed by the V&G Team. Specifically, our Team could be put behind schedule when decision-making by utility owners is delayed. Our Team understands the need to have water and sewer (public) utility relocation plans, prepared and sealed by our team, to be reviewed and approved by
the corresponding utility owners. Our Team understands the need for public utility owners to inspect and approve key elements of relocation construction performed by our team.

**Mitigation of Risk:** During the bidding phase, our Team will perform in-person coordination meetings with utility companies anticipated to have relocations, in order to mitigate risk of schedule delay and cost overruns. We will determine the extent of relocations needed to accommodate our preliminary design concept and will quantify these costs (by our team and by others) in our bid. Our Team’s schedule development during the bidding phase will include adequate duration to coordinate, design and construct the required utilities anticipated at the time of bidding and required by VDOT’s RFP. During post-award phase and in order to mitigate utility risk, our Team will invite all utility owners to a group kickoff meeting to: discuss the expected conflicts, the planned relocations and the corresponding schedule durations incorporated during the bidding phase. Our Team will then conduct individual meetings with each owner to coordinate their efforts and our team’s efforts with regards to cost responsibilities, design and construction. We will also conduct bi-weekly utility coordination meetings, inviting VDOT and all utility owners, to ensure the relocation paperwork, designs and construction operations are maintaining the proposed schedule and that utility owners have all necessary information to complete their work. Our Team will use an internet-based SharePoint site to promote coordination with utility owners and VDOT and document control.

**Outside Involvement (Milestone Submittals, Permits, ROW and Utilities):** Our Team anticipates VDOT, permit agencies and utility owners will be responsible for respective scope and cost in accordance with current VDOT guidelines and final RFP requirements. Our Team does not expect to request that VDOT, permit agencies or utility owners be responsible for additional activities or risk above and beyond this.

**Critical Project Risk No. 2 – WORKING AROUND TRAFFIC**

**Active Traffic Flow Inside the Limits of Construction**

**Criticality and Impact of Risk:** Maintenance of Traffic (MOT) is a concern for workers and the traveling public. “Safety is Job 1!” It is by this mantra we will approach the mitigation of risk involved with having active traffic flow inside the limits of construction while the I-64 Exit 91 Interchange Improvement project is ongoing. The V&G Team recognizes the importance of 1) keeping all persons, construction crews and the traveling public, in the limits of construction safe, and 2) maintaining the flow of traffic to prevent delays and road user impacts.

**Mitigation of Risk:** Due to the risk involved in having active traffic flow inside the limits of construction, the V&G Team will implement the strategy below. With the priorities outlined above in mind, the V&G Team will perform the following risk mitigation measures:

1. During design develop a well thought out Transportation Management Plan (TMP) that includes detailed MOT plans, a public communications plan, and transportation operations plan.
2. Investigate the unique project characteristics and parameters which dictate MOT devices, markings, and procedures.
3. Develop a detailed MOT design that achieves the safety goals, working with VDOT to ensure the design meets their standards for safety and incorporates any ‘lessons learned’ by personnel experienced in and around the I-64 Exit 91 area. Special attention should be given here to the following project parameters:
   a. **Overhead work on bridge over I-64.** We will work to maintain the safe flow of traffic on the interstate. Such safety procedures will include the installation of an overhead traffic protection system, adjusting work hours to accommodate peak traffic flows on I-64, and the possibility of detouring traffic around the bridge work area by making use of the exit ramps during off-peak traffic flow.
   b. **Maintain access to/from Augusta Health Center at all times.** We recognize the importance of access to this emergency care facility and will ensure that ongoing construction operations do not impede ingress or egress of emergency vehicles and traffic.
c. Maintain access to/from Augusta Expoland at all times. Prior to commencing construction, the V&G Team will apprise itself of events taking place at Expoland and ensure preconstruction planning accounts for both daily traffic flow in the area and peak event traffic flow patterns.

4. Implement the designed MOT, by installing and inspecting devices and markings.

5. Conduct bi-daily inspections of maintenance of traffic devices, markings, and procedures. This step will include documentation, correction (if necessary), and re-inspection. V&G will work with onsite VDOT personnel, and invite such persons to participate in the bi-daily inspections to ensure project needs are met.

6. Implement an operations plan that includes periodic lessons-learned review of MOT features with the goal of learning from experience and going beyond the requirements of the MOT plan.

7. Develop a comprehensive communications plan.

Outside Involvement: The V&G Team knows it is important to inform the public in advance of changes such as changes in traffic patterns, road closures and detours, and general construction activities and durations. To convey this information, the V&G Team could employ VMS sign panels in advance of the project as well as using social media (Twitter, Facebook, etc.), and a project website to give construction updates and other useful information to the traveling public.

Early in the design and construction phases, the V&G Team will seek feedback and involvement from VDOT, as well as representatives from the surrounding organizations (Augusta Health, Tinkling Springs Presbyterian Church, and Expoland) and businesses (Hampton Inn, Sheetz, Shell, etc.) regarding its plan to maintain the safe flow of traffic throughout the life of the project. During construction, the V&G Team will offer an open invitation for VDOT and FHWA to participate in regular project inspections and documentation of traffic control devices, markings, and procedures.

Critical Project Risk No. 3 – ENVIRONMENTAL COMPLIANCE

Environmental compliance, including permitting and Section 4f, will be a critical item to complete the project on schedule and at budget. There are several commitments stipulated in the approved Categorical Exclusion (CE) for this project that must be fulfilled. If these commitments are not fulfilled, the project is at risk to schedule delay and cost overrun from a possible mandate for a reevaluation of the CE.

Wetlands and Water Quality

Criticality and Impact of Risk: Federal and state permits will be required prior to filling any wetlands or jurisdictional waterways. This project will impact waters of the U.S., including nontidal wetlands. Therefore, our team must obtain Section 404, Section 402, and Section 401 Clean Water Act (CWA) permits. Conveyances of stormwater from the proposed project will require compliance with the NPDES and the VPDES standards and stormwater management regulations. Formal jurisdictional boundary confirmations with the USACE and the VDEQ will be required before the project can be permitted. This project will increase the amount of impervious surface in the watershed and must be designed and constructed to meet all current federal, state, and local requirements for water quality and stormwater management. These requirements include permits, plans, and temporary Best Management Practices (BMPs) to manage stormwater runoff during construction, as well as design criteria for permanent highway runoff control and treatment measures. Implementation of both temporary and permanent BMPs satisfying these requirements and protecting the water quality of the South Fork Shenandoah watershed, Goose Creek, and its tributaries are part of the proposed project.

Mitigation of Risk: Upon Notice to Proceed, the V&G Team will conduct field work to formally establish wetland and stream boundaries. This effort will be followed by a joint field visit with the USACE and the VDEQ to confirm these boundaries. Establishing these boundaries is critical to the successful design of the project. Should additional wetlands or streams be identified that are not currently on the plans, design modifications may be necessary to avoid or minimize impacts to these resources. This risk translates to potential project schedule and cost delays. If design modifications are required, our team will be able to provide these within the normal course of final design submittal procedures because our coordination with Corps and DEQ would be completed early. Once a
Jurisdictional Determination is provided by the Corps, the V&G Team will proceed with the Joint Permit Application for impacts to jurisdictional wetlands and waters, as well as proceed with the evaluation of compensatory mitigation. The V&G Team assumes purchasing wetland and stream credits from an approved mitigation bank will be the most cost-effective option based on the findings in the CE and based on current Corps/DEQ Compensatory mitigation ratios. A search of approved mitigation banks indicates there are suitable wetland and stream mitigation banks in the area to meet the compensatory mitigation requirements for the project. Should the earlier field survey indicate wetland and stream impacts greater than reported in the CE, the cost of compensatory mitigation will increase. It is critical, therefore, to avoid and minimize impacts where practicable. The V&G Team will mitigate this risk by confirming field conditions during the pre-bidding phase and will correspondingly identify the required compensatory mitigation prior to project bidding in order to eliminate the risk of increased project cost post-award. Our Team will administer monthly agency coordination meetings to ensure all permit requirements are met and all agency concerns are addressed. Our approach will be to monitor permit milestones and “pre-coordinate” permitting activities in advance of their required timeframe.

**Outside Involvement:** Our Team anticipates VDOT will attend meetings and assist with timely decision-making by the agencies. Our Team anticipates VDOT will be responsible for only activities and costs in accordance with current VDOT guidelines and final RFP requirements. Our Team does not expect to request that VDOT be responsible for additional permitting activities or risk above and beyond this.

**Stormwater Management**

**Criticality and Impact of Risk:** Current design plans do not identify the requisite stormwater management facilities such as stormwater ponds or other BMP’s to meet stormwater requirements. If such facilities are required, their location must be such that they do not create additional impacts that would elevate the overall impacts of the project to a level considered “significant.” If this happens, VDOT/FHWA may determine it necessary to revisit the environmental CE document. The reevaluation of the CE would result in project delays and add to construction costs.

**Mitigation of Risk:** In order to mitigate this risk that would otherwise occur post-award, the V&G Team will provide an adequate level of agency coordination and preliminary design during the bidding phase of this project to identify the necessary stormwater facilities corresponding to our Team’s design concept and meet VDOT’s project and agency requirements for water quantity and quality.

**Outside Involvement:** Our Team anticipates VDOT’s role will be to review the V&G Team’s Virginia Stormwater Management Program Permit (VSMPP) prior to its submittal. Our Team anticipates VDOT will be responsible for only certain activities and costs in accordance with current VDOT guidelines and final RFP requirements. Our Team does not expect to request that VDOT be responsible for additional ROW activities or risk above and beyond this.

**Section 4(f) Property**

**Criticality and Impact of Risk:** Current design specifications must be followed to maintain the project’s No Adverse Effect (Section 106) and De Minimis (Section 4(f)) determinations relative to Tinkling Spring Presbyterian Church. Should project design on the NRHP eligible church lands change from what is currently proposed, it will be necessary to coordinate any changes with the church officials, the Department of Historic Resources (DHR), VDOT, and FHWA. If the impacts change substantially, they may require the consideration of avoidance alternatives; an option that should be avoided due to the potential for lengthy delays and agency consultation.

**Mitigation of Risk:** Our Team is aware of the serious ramifications of design change that physically affect this Section 4(f) resource. As such, every effort will be made to maintain current design plans.

**Outside Involvement:** Our Team anticipates VDOT’s involvement to mitigate this risk item will not be increased from that which is regularly provided by VDOT on design-build projects impacting 4(f) property.
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>
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<td>Section 3.1.2</td>
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<td>Section 2.10</td>
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<td>Section 3.2.1</td>
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<td>Principal officer information</td>
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## Statement of Qualifications Checklist and Contents

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<td><strong>Professional Services Evidence</strong></td>
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<td><strong>Offeror’s Team Structure</strong></td>
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<td>Key Personnel Resume – DB Project Manager</td>
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### STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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<td>Lead Contractor Work History Form</td>
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2.10 Acknowledgement of RFQ, Revision and/or Addenda

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 RFQ Questions & Answers 12/16/2011 (Date)
3. Cover letter of ____________________________ (Date)

__________________________  January 6, 2012
SIGNATURE             DATE
3.2.5 Certifications Regarding Debarment

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 ____________
President – Construction Div. Title

Vecellio & Grogan, Inc. Name of Firm

APPENDIX-5
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

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

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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]
Paul Pindeaux

[Date]
12/20/11

Title
Vice President

Michael Baker, Jr. Inc.

Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, R201 & C501

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

Vecellio Group, Inc.

Name of Firm

Assistant Secretary & Treasurer

Title

12/19/11
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

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[Signature] 12-19-11
Secretary & Treasurer
Title

Sharpe Brothers
Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, R201 & C501

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[Signature] 12-17-11
Signature

[Title]
Secretary & Treasurer

White Rock Quarries
Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
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[Signature] 12.19.11  Assistant Secretary & Treasurer
Date Title

Ranger Construction
Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

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Signature: [Signature]
Date: 12/19/xx

Assistant Secretary & Treasurer
Title

Ranger Golf
Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

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LOWER TIER COVERED TRANSACTIONS

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[Signature] [12/19/11] Secretary & Treasurer
[Date] Title

South Florida Materials Corp.
Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

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Signature 12/19/1

Date Secretary & Treasurer

Title

South Florida Petroleum Services, LLC

Name of Firm
3.2.5 Certifications Regarding Debarment

ATTACHMENT NO. 3.2.5(b)

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LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703, P101, R201 & C501

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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] 12/17/11  Secretary & Treasurer
Date  Title

Vecenergy Resources, LLC
Name of Firm

APPENDIX-14
3.2.5 Certifications Regarding Debarment

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

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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 12/5/2011  President

Date Title

NXL CONSTRUCTION SERVICES, INC

Name of Firm
3.2.5 Certifications Regarding Debarment

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

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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] December 5, 2011

Chief Operating Officer

Title

O. R. Colan Associates of Florida, LLC

Name of Firm
3.2.5 Certifications Regarding Debarment

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

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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] December 7, 2011 [Principal]
[Date] [Title]

Schnabel Engineering
Name of Firm
3.2.5 Certifications Regarding Debarment

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

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[Signature] 12/12/2011 [President]
[Date] [Title]

Triplet King & Associates, Inc.
Name of Firm

APPENDIX-18
3.2.5 Certifications Regarding Debarment

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]

Name of Firm
3.2.5 Certifications Regarding Debarment

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

Name of Firm
3.2.5 Certifications Regarding Debarment

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
S. Craig Martin 12/9/11 President

Name of Firm

Accumark, Inc.
3.2.6 Evidence of Lead Contractor VDOT Prequalification

**CERTIFICATE OF QUALIFICATION**

Vecellio & Grogan, Inc.

Vendor Number: V004

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 (Currently Inactive)**

Work Classes: Grading, Major Structures, Asphalt Pavement

Issue Date: October 5, 2011

This Rating and Classification will Expire: October 31, 2012

Suzanne FR Lucas Prequalification Officer

Don E. Silies, State Contract Officer
I-64 Exit 91 Interchange Improvements Design-Build Project

3.2.6 Evidence of Lead Contractor VDOT Prequalification

From: Silies, Don E. [mailto:Don.Silies@VDOT.Virginia.gov]
Sent: Monday, December 05, 2011 10:42 AM
To: Rick Hertzer
Cc: Lucas, Suzanne F.
Subject: RE: I-64 Exit 91 Interchange Improvements Design-Build Project

I waive the bidding restriction on this project as well.

Don Silies
Assistant Division Administrator
Scheduling and Contract Division
Virginia Department of Transportation
(804) 786-1630
Don.Silies@vdot.virginia.gov

From: Rick Hertzer [mailto:Rick.Hertzer@vecellio.grogan.com]
Sent: Saturday, December 03, 2011 9:11 AM
To: Silies, Don E.
Subject: RE: I-64 Exit 91 Interchange Improvements Design-Build Project

Mr. Silies:
Vecellio & Grogan, Inc. is prequalified with VDOT, but with the classification “Currently Inactive.” Vecellio & Grogan, Inc. wishes to submit a statement of qualifications and subsequently a bid on the following project:

I-64 Exit 91 Interchange Improvements, A Design-Build Project. State Project No.: 0064-007-111, P101, R-201, C-501, B-627. Contract ID Number: C00075877DB47.

According to our Prequalification Inactive status, bidding on this project requires a waiver from you. You have granted similar waiver requests in the past and should have supportive material for us on file. Please consider this request for a waiver applicable to the above project.

Our current uncompleted work load is approximately $84 million.

Thanks for your consideration of this request. Please call should you have questions or need additional information.

We have included below an email exchange evidencing your recent approval for our involvement in the Route 29 Bypass around Charlottesville. You will probably recall that we submitted additional supporting documentation at the time of that previous request.

Rick Hertzer
Direct: 304-929-6105
Cell: 304-890-2515
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Vecellio & Grogan, Inc.

[Image of Virginia State Corporation Commission registration]

CISN0186

CORP ID: 7008386 - 7 STATUS: 00 ACTIVE STATUS DATE: 12/31/75

CORP NAME: Vecellio & Grogan, Inc.

DATE OF CERTIFICATE: 06/06/1949 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: WV WEST VIRGINIA STOCK INDICATOR: 5 STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CORPORATE CreATIONS NETWORK INC.

STREET: 4445 CORPORATION LANE, 2ND FLOOR AR RTN MAIL:

CITY: VIRGINIA BEACH STATE : VA ZIP: 23462
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 09/14/11 LOC : 226
ACCEPTED AR#: 211 00 0075 DATE: 04/20/11 Virginia beach
CURRENT AR#: 211 00 0075 DATE: 04/28/11 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 1,700.00 300,000
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Michael Baker Jr., Inc.

---

**Commonwealth of Virginia**

**State Corporation Commission**

| CORP ID: | 0026074 - 7 |
| STATUS: | 00 ACTIVE |
| STATUS DATE: | 01/22/01 |
| CORP NAME: | BAKER, JR., INC., MICHAEL |

**DATE OF CERTIFICATE:** 10/28/1992
**PERIOD OF DURATION:**
**INDUSTRY CODE:** 00
**STATE OF INCORPORATION:** PA
**STOCK INDICATOR:** S
**MERGER IND:** S SURVIVOR
**CONVERSION/DOMESTICATION IND:**
**GOOD STANDING IND:** Y
**MONITOR INDICATOR:**
**CHARTER FEE:**
**MON NO:**
**MON STATUS:**
**MONITOR DTE:**
**R/A NAME:** CT CORPORATION SYSTEM

**STREET:** 4701 COX RD STE 901
**AR RTN MAIL:**

**CITY:** GLEN ALLEN
**STATE:** VA
**ZIP:** 23060

**R/A STATUS:** S B.E. AUTH IN VI
**EFF. DATE:** 01/05/04
**LOC:** 143
**ACCEPTED AR#:** 211 16 4541
**DATE:** 09/21/11
**MENRICO COUNTY**

**CURRENT AR#:** 211 16 4541
**DATE:** 09/21/11
**STATUS:** A
**ASSESSMENT INDICATOR:** 0
**YEAR FEES:**
**PENALTY:** 100.00
**INTEREST:**
**TAXES:**
**BALANCE:**
**TOTAL SHARES:** 100
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

NXL Construction Co., Inc.
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

O.R. Colan Associates of Florida, LLC

![Image of Virginia State Corporation Commission]

LLC ID: T0209927 - O
STATUS: 00 ACTIVE
STATUS DATE: 06/02/06

LLC NAME: Colan Associates of Florida, LLC, O.R.

DATE OF FILING: 06/02/2006 PERIOD OF DURATION: 99/99/9999 INDUSTRY CODE: 00

STATE OF FILING: FL FLORIDA

CONVERSION/DOMESTICATION INDICATOR: 

PRINCIPAL OFFICE ADDRESS

STREET: 439 NE 7TH AVE

CITY: FT LAUDERDALE
STATE: FL ZIP: 33301-0000

REGISTERED AGENT INFORMATION

R/A NAME: NATIONAL REGISTERED AGENTS INC

STREET: 4001 North Ninth Street, Suite 227

CITY: ARLINGTON
STATE: VA ZIP: 22203-0000

R/A STATUS: 5 ENTITY AUTHORIZED EFF DATE: 12/30/10 LOC: 106 ARLINGTON COUNTY

YEAR FEES PENALTY INTEREST BALANCE

11
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Schnabel Engineering Consultants, Inc.

---

**Commonwealth of Virginia**

**State Corporation Commission**

---

**CORE ID:** 3712674

**CORE NAME:** Schnabel Engineering Consultants, Inc.

**DATE OF CERTIFICATE:** 08/12/2009

**PERIOD OF DURATION:**

**STATE OF INCORPORATION:** VA

**INDUSTRY CODE:** 00

**STOCK INDICATOR:** 5

**CHARTER FEE:** $50.00

**MONITOR INDICATOR:**

**R/A NAME:** CT CORPORATION SYSTEM

**STREET:** 4701 COX RD STE 301

**CITY:** GLEN ALLEN

**STATE:** VA

**ZIP:** 23060

**ACCREDITED AGENT NAME:**

**ADDRESS:**

**DATE:** 06/29/11

**HENRICO COUNTY**

**CURRENT AR#:** 211 12 3663

**ACCEPTED AR#:** 211 12 3663

**YEARS OF FEES:** 11

**PENALTY:** 150.00

**INTEREST:**

**TAXES:**

**BALANCE:**

**TOTAL SHARES:** 10,000

---

**APPENDIX-28**
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Triplett-King & Associates, Inc.

![Image of Virginia State Corporation Commission registration certificate]

Help

CORP ID: 179473 - 6  STATUS: 00 ACTIVE  STATUS DATE: 08/16/11

CORP NAME: Triplett-King & Associates, Inc.

Print

DATE OF CERTIFICATE: 06/25/2009 PERIOD OF DURATION: 00

STATE OF INCORPORATION: SC SOUTH CAROLINA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y  MONITOR INDICATOR:

CHARTER FEE: 200.00  MON NO: 0  MON STATUS: 0  MONITOR DTE:

R/A NAME: JOHN HAREFOOT

STREET: 12220 FRAMAR DR  AR RN: 0

CITY: MIDLOTHIAN  STATE: VA  ZIP: 23113

R/A STATUS: 2  OFFICER  EFF. DATE: 06/25/09  LOC: 120

ACCEPTED AR#: 211 51 7727  DATE: 08/08/11  CHESTERFIELD CO

CURRENT AR#: 211 51 7727  DATE: 08/08/11  STATUS: A  ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 670.00 67.00 100,000
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Froehling & Robertson, Inc.
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

H & B Surveying and Mapping, LLC
3.2.8 Evidence of Professional Registration

3.2.8.1 Virginia State Corporation Commission Registration

Accumark, Inc.
3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

Michael Baker Jr., Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRESS ON
02-29-2012

NUMBER
0411000058

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

PROFESSIONS: ENG, LS

MICHAEL BAKER JR INC
HILLCREST BLDG STE 101
1801 BAYBERRY COURT
RICHMOND, VA 23226

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRESS ON
02-29-2012

NUMBER
0411000829

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

PROFESSIONS: ENG

MICHAEL BAKER JR INC
3141 FAIRVIEW PARK DRIVE
SUITE 575
FALLS CHURCH, VA 22042
### 3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

Michael Baker Jr., Inc.
3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

NXL Construction Services, Inc.
3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

Schnabel Engineering Consultants, Inc.

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 BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC
2020 AVON CT.
SUITE 15
CHARLOTTESVILLE, VA 22902

DATED: 02-29-2012

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.

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 BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

SCHNABEL ENGINEERING CONSULTANTS, INC
ONE CARY STREET
RICHMOND, VA 23220

DATED: 02-29-2012

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.
3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

Triplett-King & Associates, Inc.

Froehling & Robertson, Inc.
3.2.8 Evidence of Professional Registration

3.2.8.2 DPOR Registration information for each office practicing or offering to practice any professional services in Virginia

H&B Surveying and Mapping, LLC

Accumark, Inc.
3.2.8 Evidence of Professional Registration

3.2.8.3 DPOR license detailing for each Key Personnel practicing or offering to practice professional services in Virginia

Joe Hamed, PE – Quality Assurance Manager

Amir Fouladgar, PE – Design Manager
3.2.8 Evidence of Professional Registration

3.2.8.3 DPOR license detailing for each Key Personnel practicing or offering to practice professional services in Virginia

Khossrow Babaei, PE – Lead Structural Engineer

![DPOR License Image]
3.2.8 Evidence of Professional Registration

3.2.8.4 DPOR License information for those regulated services not regulated by the APELCIDLA Board

Vecellio & Grogan, Inc.

O.R. Colan Associates of Florida, LLC

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APPENDIX-41
**ATTACHMENT 3.3.1**  
**KEY PERSONNEL RESUME FORM**

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

| a. Name & Title: | Matt Farley, Vice President - Structures |
| b. Project Assignment: | Design-Build Project Manager |
| c. Name of Firm with which you are now associated: | Vecellio & Grogan, Inc. |

**d. Years experience:**
- With this Firm: 21 Years
- With Other Firms: 0 Years

*Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 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>Vecellio &amp; Grogan, Inc.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President - Structures (2009-present)</td>
</tr>
<tr>
<td>Structure Operations Manager (2002-2009)</td>
</tr>
<tr>
<td>Senior Bridge Estimator (1998-2002)</td>
</tr>
<tr>
<td>Project Engineer / Estimator (1993-1998)</td>
</tr>
</tbody>
</table>

**e. Education:**
- The University of Wisconsin/Coursework/2007/Highway Bridge Design |
- ARTBA/The Management Crucible/2006 |
- Virginia Tech/Transportation Construction Management Institute/2005 |
- University of Florida/Project Management/2004 |

**f. Active Registration:**
- Certified Quality Control Technician by WVDOH for concrete, aggregates and compaction |
- Will hold Responsible Land Disturber certification from the Virginia Department of Conservation and Recreation and certification under the VDOT Erosion and Sediment Control Certification Program prior to contract award. |

**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.)*

**Mr. Farley has worked on the following projects while at Vecellio & Grogan, Inc.:**

**East Beckley Bypass, $31 Million, Beckley, WV.** Responsible for oversight and management of all construction operations. Initial duties included oversight of the estimating process, baseline schedule preparation using Primavera P6, establishing budgets, and negotiating contracts with vendors. Ongoing duties include a weekly review of project progress and budget, ensuring prompt and accurate schedule updates, discussion and resolution of project issues with on-site project supervisors, and ensuring fair and timely compensation for all completed work. (2009-present)

**Corridor H, $30 Million, Hardy County, WV.** Responsible for oversight and management of all construction operations. Duties included oversight of the estimating process that led to obtaining the project, review of project progress and budget on a weekly basis, oversight of preparation and updating of the Primavera P6 schedule for the project, discussion and resolution of any project issues with the on-site project manager, resolving constructability issues with WVDOH personnel, negotiating fair compensation for necessary revisions, and ensuring timely and fair compensation for all completed work. (2006-2009)

**I-540 Outer Beltway, $70 Million, Wake County, NC.** Responsible for managing construction of 10 new bridges including the design and construction of two temporary bridges (1,390 lf combined) crossing Beaverdam Creek and the Neuse River, two environmentally sensitive waters. Duties included preparation of the structures portion of the bid, review of project progress and budget on a weekly basis, discussion and resolution of any project issues with the on-site project manager on a weekly basis, resolving constructability issues with the NCDOT, negotiating fair compensation for necessary revisions, and ensuring timely and fair compensation for all completed work. (2004-2006)
Bryan Boulevard Relocation, $45 Million, Guilford County, NC. Responsible for managing construction of four new bridges. Duties included preparation of the structures portion of the bid, review of project progress and budget on a weekly basis, discussion and resolution of any project issues with the on-site project manager on a weekly basis, resolving constructability issues with the project owners (Piedmont Triad Airport & NCDOT), and negotiating fair compensation for necessary revisions. (2004-2008)

Knightdale Bypass, $43 Million, Wake County, NC. Responsible for managing construction of five new bridges, including a two-span steel girder overpass bridge, a five-span steel girder ramp bridge, and two eight-span curved steel girder flyover bridges. Duties included preparation of the structures portion of the bid, review of project progress and budget on a weekly basis, discussion and resolution of any project issues with the on-site project manager on a weekly basis, resolving constructability issues with the NCDOT, negotiating fair compensation for necessary revisions, and ensuring timely and fair compensation for all completed work. (2002-2004)
### Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Joseph Hamed, PE, LS, PMP, Project Manager/Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Quality Assurance Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>NXL Construction Services, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm <strong>1</strong> Years With Other Firms <strong>21</strong> Years</td>
</tr>
<tr>
<td></td>
<td><em>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 15 years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.</em>:</td>
</tr>
<tr>
<td>NXL Construction Services, Inc.:</td>
<td>Project Manager/Quality Assurance Manager (2011-present)</td>
</tr>
<tr>
<td>VDOT:</td>
<td>Area Construction Engineer, Salem District (January 2011-May 2011)</td>
</tr>
<tr>
<td>VDOT:</td>
<td>Program Delivery Manager, Southwest Regional Operations (2006-2011)</td>
</tr>
<tr>
<td>VDOT:</td>
<td>Area Construction Engineer, Salem District (2005-2006)</td>
</tr>
<tr>
<td>HNTB Corporation:</td>
<td>Resident Engineer Route 58 PPTA Project, Patrick County, Virginia (2004)</td>
</tr>
<tr>
<td>Louis Berger Group, Inc.:</td>
<td>Project Manager/Project Engineer (1999-2004)</td>
</tr>
<tr>
<td>VDOT:</td>
<td>Project Engineer, VDOT Route 460 (1994-1999)</td>
</tr>
<tr>
<td>e. Education:</td>
<td>University of Idaho/B.S./1990/ Civil Engineering</td>
</tr>
<tr>
<td>f. Active Registration:</td>
<td>2004/VA Professional Engineer #039327, WV Professional Engineer #012756, WV Professional Land Surveyor #1574, Certifications: Certified PMP (2005), OSHA 40-Hour, DCR Erosion &amp; Sediment Control Inspector</td>
</tr>
</tbody>
</table>
| 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.)* |

Mr. Hamed has worked on the following projects at NXL Construction Services, Inc.:

**Project Manager/Quality Assurance Manager, Various Projects, Virginia.** Mr. Hamed’s responsibilities with NXL include Independent Quality Control Manager for joint Design-Build projects ensuring all contract requirements and specifications are appropriately administered and applied, all required quality control testing and independent quality assurance is carried out in accordance with applicable requirements ensuring construction quality standards are met and payments appropriately processed.

Mr. Hamed has worked on the following projects while with another firm:

**Area Construction Engineer, VDOT, Salem District, Virginia.** Mr. Hamed managed the delivery of the Salem District Southern Construction Area’s Construction Program. Mr. Hamed managed projects that include drainage, grading, placing, bridges, bridge superstructure/substructure restorations, signal, guardrail, pavement markings, utilities, etc. He also managed the Preliminary Engineering of a Roadway Lighting System, now under construction. Key aspects of Mr. Hamed’s responsibilities included: identifying and communicating with stakeholders and encouraging team member to communicate, identifying the need for extra work, reviewing and negotiating work order prices, and providing Responsible Charge oversight to ensure that each project was construction in conformance with the plans, specifications and standards.

**Program Delivery Manager, VDOT Southwest Regional Operations, Southwest Virginia.** Mr. Hamed provided oversight of all SW Regional Operations project delivery in all project phases, including planning, programming, project development and construction. He provided support for traffic signal projects, traditional traffic engineering projects, 2 mountain tunnel facilities, including fire, life and safety systems, and also provided support for technology projects including cameras, message boards, and FHWA Rule 940 Compliance. Mr. Hamed coordinate with SW Regional staff to identify and prioritize potential projects. In conjunction with Central Office and staff from three Districts (Bristol, Lynchburg and Salem), Mr. Hamed identified funding sources for chosen projects, requested funding transfers, and initiated projects for the system. He also provided oversight of the PE process to ensure that projects were developed in accordance with VDOT processes. He coordinated with other sections including Environmental, Right of Way, Location and Design, Scheduling and Contracts, Federal Highway Administration and Construction. Mr. Hamed provided responsible charge oversight for the Regional Signal Contract including approval of estimates, negotiating work orders, coordinating inspection and approval. Key projects included:
$3 million Federal Sign Program. Mr. Hamed planned, programmed, developed, and delivered approximately 13 signals to the SW Regional using Federal Maintenance Funds provided by Operations Planning Division. Signals were constructed under the Regional Signal Contract.

Fiber Optic Cable. Mr. Hamed provided field oversight to the construction of approximately 22 miles of fiber optic cable along I-81 from Christiansburg to Salem using an OSD contract.

East River Mountain Tunnel Generators. Mr. Hamed provided construction oversight for the replacement of two 1.5 Mega-watt generators using an OSD contract. He also managed a consultant task order to design 2 more supplementary generators required for fire code compliance.

Big Walker Mountain Tunnel Water System. Mr. Hamed designed an overhaul of the existing water system including pump/waterline replacement and providing system safeguards.

I-77 Rumble Strips. Mr. Hamed planned, programmed and coordinated the development of two rumble strip projects that included shoulder restoration, guardrail replacement and rumble strips.

**Area Construction Engineer, VDOT Salem District Construction Division, Virginia.** Mr. Hamed managed the delivery of the Salem District Northern Construction Area’s construction program. His team managed construction and maintenance projects, where their goal was to deliver each project on time and on budget, with quality in the constructed project. In this regard, the team exceeded the expectation and percentages established by the Department’s executive leadership. During his tenure in this position, Mr. Hamed managed projects that include drainage, grading, placing, bridges, bridge superstructure/substructure restorations, signal, guardrail, pavement markings, utilities, etc. He also managed the Preliminary Engineering of a Roadway Lighting System, now under construction. Key aspects of Mr. Hamed’s responsibilities included: identifying and communicating with stakeholders and encouraging team member to communicate, identifying the need for extra work, reviewing and negotiating work order prices, and providing Responsible Charge oversight to ensure that each project was construction in conformance with the plans, specifications and standards. Mr. Hamed also provided input to the Preliminary Engineering process by attending various meetings to address unique project specific problems. He was responsible for the project budget during the Construction Phase, monitored expenditures in SiteManager and FMS II, and compared them to the budgeted amounts on a monthly basis.
**APPENDIX 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong></td>
<td>Amir Fouladgar, P.E., Principal-in-Charge</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong></td>
<td>Design Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong></td>
<td>Michael Baker Jr., Inc.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong></td>
<td>With this Firm 4 Years  With Other Firms 36 Years</td>
</tr>
<tr>
<td><strong>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 15 years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Michael Baker Jr., Inc.:</strong></td>
<td>Principal-in-Charge (2007-present)</td>
</tr>
<tr>
<td><strong>TRC:</strong></td>
<td>Senior Vice President National Transportation Director, 2004-2007</td>
</tr>
<tr>
<td><strong>Wilbur Smith Associates:</strong></td>
<td>Sr. Vice President National Structural Discipline Leader, 1984-2004</td>
</tr>
<tr>
<td><strong>e. Education:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</strong></td>
<td></td>
</tr>
<tr>
<td>B.S./Civil Engineering/1971</td>
<td></td>
</tr>
<tr>
<td><strong>f. Active Registration:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year First Registered/ Discipline/VA Registration #:</strong></td>
<td></td>
</tr>
<tr>
<td>1987/Professional Engineer/VA #017431</td>
<td></td>
</tr>
<tr>
<td><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project.</strong></td>
<td></td>
</tr>
<tr>
<td>1. <strong>Note your specific responsibilities and authorities for each assignment, not those of the firm.</strong></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Note whether experience is with current firm or with other firm.</strong></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Provide beginning and end dates for each assignment.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</strong></td>
<td></td>
</tr>
<tr>
<td>Mr. Fouladgar has 40 years of experience in transportation / structural engineering and project management, and is responsible for quality control, marketing, and oversight of structural projects. His accomplishments have included the complete design of parking garages and numerous highway structures, including bridges for grade separations and river crossings using structural steel, reinforced concrete, prestressed and post-tensioned I-beam, segmental box concrete, and steel through truss and arch designs.</td>
<td></td>
</tr>
<tr>
<td><strong>Mr. Fouladgar has worked on the following projects at Michael Baker Jr., Inc.:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Design-Build Rehabilitation of New York Avenue N.E. Bridge over Railroads, Washington, D.C. District Department of Transportation.</strong></td>
<td>Mr. Fouladgar serves as Principal-in-Charge for the review design and manages construction of the retrofit of the New York Avenue N.E. bridge. The contractor for this Design-Build project is Fort Myer Construction Company. The bridge crosses a number of rail lines, including those operated by Amtrak, CSX, and WMATA. The bridge consists of two parallel structures, the north structure having six spans and the south structure having five spans. The existing superstructure includes a non-redundant, fracture critical, two-girder system with floor beams and stringers. This project will introduce redundancy to the superstructure by adding a third girder to each parallel structure. The construction includes removing the existing deck, floor beam, and stinger system, and replacing with precast concrete panels post-tensioned both transversely and longitudinally. The deck panels will be directly supported by the three-girder system. (2010-Present)</td>
</tr>
<tr>
<td><strong>Urgent Bridge Repair Retainer Contract, Louisiana. LADOTD.</strong></td>
<td>Principal-In-Charge / QA/QC for task orders, including I-20 East Ramp “H” TL-6 Barrier Study on bridge over U.S. 165, an innovative design to incorporate the AASHTO rated high rail bridge barrier to prevent accidents and spillovers. Finite Element (FEM) analysis was performed. Approach slab study along I-12 in Baton Rouge project involved an innovative study of rehabilitation of 11 bridges’ approach slabs including related bent stabilization. the study included geotechnical, GPR survey and investigative efforts that resulted in a comprehensive report with repair solutions, alternatives and costs for approval by DOTD and further development for construction. (2008-2010)</td>
</tr>
</tbody>
</table>
Mr. Fouladgar worked on the following project at TRC:

San Francisco-Oakland Bay Bridge By-Pass Rehabilitation (Design-Build), San Francisco, California. California Department of Transportation (CALTRANS). Supervising Engineer. Mr. Fouladgar was involved with finite element modeling and analysis of the East Tie-In portion of a two-span double deck truss bridge (total length of 316'). The analysis consisted of building the new structure adjacent to the existing truss, jacking the existing truss, cutting the vertical and diagonal members of the south side of the existing truss, tying the existing truss to a new structure, re-routing the traffic to new lanes, hinging the extra part of the existing truss and removing the extra elements of the existing truss. Supervised the engineers involved in design and detailing of the main viaduct truss and the East Tie-In units, including review and modification of the West Tie-In portion which consisted of cantilevered, post-tensioned beam and ties between the existing and new structures. The design included all service loads and extreme events, including dynamic analysis and response spectrum design. (2005-2006)

Mr. Fouladgar worked on the following projects at Wilbur Smith Associates:

I-85 Design-Build, Mecklenburg County, Virginia. Virginia Department of Transportation. Project Director. Mr. Fouladgar served during the completion of design-build services associated with the demolition, design, and construction of a rest and state welcome center, including coordination between the contractor and sub-consultants that included the architect, landscape architect, and six other environmental and engineering sub-consultants. From selection to completion, the project was scheduled to take less than one year, with a substantial completion date for the building in only nine months. The new facility included a lengthened highway ingress ramp, variable message sign / security system, and expanded parking lots. The site also included pedestrian walkways and landscaping amenities that pass a CPTED review (crime prevention through environmental design). The new building is over 17,000 square feet and includes space for both VDOT and the Department of Tourism, with separate offices for the Virginia State Police and site maintenance staff. (2001-2002)

Southern Avenue Bridge over Suitland Parkway Design-Build, Washington, D.C. Eastern Federal Lands Highway Division. Project Manager. Mr. Fouladgar was assigned as the Project Manager for the design-build of a cast-in-place, post-tensioned, concrete box girder built on falsework. The bridge is a three-span, continuous structure with a 164'-0" main span and two 124'-6" end spans. The superstructure consists of two double-cell trapezoidal box girders with a closure pour in between. The out-to-out width of the superstructure is 59'-11", including a roadway of 44'-0" and two sidewalks that are each 6'-0" wide. The foundation consists of steel H piles with concrete pile caps. However, a drilled shaft foundation is used to support one of the piers due to the proximity of the pier to a power line. Construction staging consisted of two lanes of traffic to be maintained on Southern Avenue, one lane in each direction. Pedestrian traffic remained open at all times. Construction was completed in two stages. In each stage, one of the double-cell boxes was constructed and post-tensioned. Finally, the closure pour, which is 1'-6" wide and 10" deep, was placed between the two cells to complete the top slab. A silica fume, protective overlay that is 1 ¼” thick was then applied on the roadway. (2003-2004)
## 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><strong>a. Name &amp; Title:</strong> Argel Cook, Structures Superintendent</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Construction Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> Vecellio &amp; Grogan, Inc.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm <strong>29 Years</strong> With Other Firms <strong>7 Years</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 15 years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked):</strong></td>
</tr>
<tr>
<td>Vecellio &amp; Grogan, Inc.: Structures Superintendent (1992-present)</td>
</tr>
<tr>
<td><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization: High School Graduate</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Will hold Responsible Land Disturber certification from the Virginia Department of Conservation and Recreation and certification under the VDOT Erosion and Sediment Control Certification Program prior to contract award.</td>
</tr>
<tr>
<td><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project:</strong></td>
</tr>
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<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>

Mr. Cook has worked on the following projects while at Vecellio & Grogan, Inc.:

**Corridor H, $33 Million, Grant County, WV.** Responsible for management of all bridge and structure construction operations. Duties include coordination of labor, equipment, subcontractors, and materials for construction of multi-span (600’ steel girder) bridge over active Knobley Road and reinforced concrete box culvert (1422’ long, 10’ x 10’ section) relocating Middle Fork of Patterson Creek (native trout stream). Also responsible for daily interaction and coordination with the WVDOH to ensure compliance with all specifications and contract requirements. (2009-Present)

**Bryan Boulevard Relocation, $45 Million, Guilford County, NC.** Responsible for management of all bridge and structure construction operations. Duties included coordination of labor, equipment, subcontractors, and materials for construction of four multi span steel girder bridges along with one MSE retaining wall. Also responsible for daily interaction and coordination with the NCDOT to ensure compliance with all specifications and contract requirements. (2004-2008)

**Fed-Ex Site Development, $21 Million, Guilford County, NC.** Responsible for assisting in design and management of a temporary bridge and structure construction operations. Duties included coordination of labor, equipment, subcontractors, and materials for construction of a two-span (130’ long) bridge that carried 100 ton trucks across a four lane road to haul borrow material for the construction of the Fed-Ex site. Also responsible for daily interaction and coordination with the Piedmont Triad International Airport (PTIA) to ensure compliance with all specifications and contract requirements. (2002-2004)

**Routet 288 / US-60 Interchange, $60 Million, Chesterfield County, VA.** Responsible for management of all bridge and structure construction operations. Duties included coordination of labor, equipment, subcontractors, and materials for construction of seven bridges, including two (2) two-span steel girder bridges with MSE walls at Rte 60, two (2) three-span steel girder bridges with MSE walls crossing N/S Railway, one (1) two-span steel girder bridge with MSE walls on Charter Colony, one (1) two-span steel girder bridge on Otterdale Road, and one (1) two-span concrete girder bridge with MSE walls on Woolridge Road. Also responsible for daily interaction and coordination with the VDOT to ensure compliance with all specifications and contract requirements. (2000-2002)

**Smart Road, $36 Million, Blacksburg, VA.** Responsible for management of all bridge and structure construction operations. Duties included coordination of labor, equipment, subcontractors, and materials for construction of two multi-span bridges; one over a county route and one over North Folk Southern Railway. Also responsible for daily interaction and coordination with the VDOT to ensure compliance with all specifications and contract requirements. (1997-2000)
<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> Khosrow Babaei, P.E., S.E., Director of Structures</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Lead Structural Engineer</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> Michael Baker Jr., Inc.</td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm 1 Years With Other Firms 36 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 15 years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):*

- **Michael Baker Jr., Inc.:** Office Manager and Director of Structural Department (2010-present)
- **VDOT NOVA District, Bridge & Structures Division:** Consultant Manager for Bridge Design Projects (2006-2010)
- **Wilbur Smith Associates:** Senior Associate and Chief of Structures Remedial & Specialty Services (1992-2006)

<table>
<thead>
<tr>
<th><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Washington/M.S.C.E./1978/Civil/Structural Engineering</td>
</tr>
<tr>
<td>University of Tehran/M.S.C.E./1974/Civil/Structural Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995/Professional Engineer/VA #025896</td>
</tr>
<tr>
<td>2004/Professional Engineer/Maryland; 2004/Professional Engineer - Structural/Washington D.C.; 2000/Professional Engineer - Structural/Illinois; 2005/Professional Engineer/Louisiana; 1983/Professional Engineer - Civil/Structural/Washington</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project.</strong></th>
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<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.*

**Mr. Babaei has worked on the following projects at Michael Baker Jr., Inc.:**

- **Bridge Replacement/Retrofit at New York Avenue NE over AMTRAK/CSX/WMATA Railroads, Washington, D.C. DDOT.** Design Review Manager. Assisted DDOT with developing conceptual plans, and reviewing the interim and final plans and specifications developed by the design-build contractor for deck replacement and superstructure/substructure retrofit of this five span non-redundant steel girder/floor beam structure. Responsible for the compliance of the design products with sound engineering principles and compliance with the LRFD design code. Also responsible for managing the design review team, budget, and schedule of multiple tasks assigned under this contract (2010-present)

**Mr. Babaei has worked on the following projects while with another firm:**

- **Design-Build Bridge Replacement at Southern Avenue over Suitland Parkway, Washington, D.C. Eastern Federal Lands & DDOT.** Project Manager. Responsible for design and preparation of plans and specifications, managing and coordinating all disciplines involved including structural design and approach roadway modification, and managing the design budget and schedule. Responsibilities extended to working closely with the contractor and providing engineering support during the construction phase. The project involved replacement of the existing steel frame bridge with a 413-foot long, three-span, cast-in-place, post-tensioned concrete box girder bridge. Bridge replacement was completed in two stages allowing two lanes of traffic on Southern Avenue during construction. Each stage of construction included completion and post-tensioning of a twin-cell, variable depth, parabolic box with a minimum depth of 4.5-foot and maximum depth of 8-foot at piers. A narrow closure pour between the two, twin cell boxes completed the construction. Designed per LRFD code. The design phase was initiated in 2004 and completed in 2005 within budget and on time. The construction was successfully completed in 2006. (2004-2006)
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Responsible Party</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Bridge, 1-95 Detour/HOV Bridge Over Quantico Creek and Route 629, Prince William County, Virginia. VDOT.</td>
<td>Task Manager.</td>
<td>Responsible for design and preparation of plans and specifications for this 287-foot, four-span, continuous steel plate girder bridge on a curved alignment. Substructure consisted of multi column piers and semi-integral abutments. The project was placed on an accelerated time schedule after the plans for the replacement and widening of the North- and Southbound I-95 bridges (a task of the VDOT open-end Bridge Maintenance contract for the NOVA District) were completed and the contractor opted to build the detour bridge at his own expense, thereby eliminating staged construction and reducing the overall project cost. The bridge was designed so it can be used as a future I-95 HOV bridge at this location. Responsibilities included managing the design budget and schedule, as well as providing engineering support services during the construction stage. The design began in late 1998 and was completed in three months. Construction was completed in 1999. (1998-1999)</td>
</tr>
<tr>
<td>Bridge Replacement and Widening, Forest Park Avenue over Gwynns Falls, Baltimore, MD. City of Baltimore.</td>
<td>Project Manager.</td>
<td>Replacing this existing 2-span concrete arch bridge with a 110’ long, single span bridge supported by prestressed concrete beams and semi-integral abutments. Responsibilities included managing the design team, QA/QC review of plans and specifications, and providing engineering support during construction. Responsibilities extended to coordinating all disciplines involved including the approach roadway design, H&amp;H, and geotechnical. Foundations at abutments were steel H piles placed in 18” diameter holes filled with concrete designed as laterally unsupported piles for 100 year scour event. Lightweight backfill was specified behind the tall abutment walls and wingwalls to reduce earth pressure. An elaborate design was performed for attaching the existing multiple utility lines under the superstructure. An important feature of the project was aesthetics. Design included parabolic, precast fascia panels installed on exterior beams for aesthetics. The panels are made with light weight concrete, and had stone finish form liner on the exterior face. The design also included aesthetically pleasing concrete railing and lighting. The design was completed on time in 2004; construction was completed in 2005. (2004-2005)</td>
</tr>
<tr>
<td>Bridge Replacement &amp; Widening, Route 251 over Buffalo Creek, Rockbridge County, Virginia. VDOT. Task Manager.</td>
<td>Responsible for overseeing, checking, and QA/QC of design, plans, and specifications to replace the existing truss bridge with a jointless, two-span continuous steel plate girder bridge. The substructure consisted of a wall pier on spread foundation. The abutments were modification of the existing abutments with elimination of the joints by extending the deck slab over the back wall. The plans included construction staging to maintain the traffic during construction. Responsibilities included managing the budget and schedule, as well as providing engineering support services during the construction stage. Design was initiated in 2000 and construction competed in 2001. (2000-2001)</td>
<td></td>
</tr>
</tbody>
</table>
## Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Mark Neuhoff, Construction Inspector</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>Michael Baker Jr., Inc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d. Years experience:</th>
<th>With this Firm 1 Years</th>
<th>With Other Firms 26 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Baker Jr., Inc.:</td>
<td>Construction Inspector (2010-present)</td>
<td></td>
</tr>
<tr>
<td>Rise, Inc.:</td>
<td>Senior Construction Inspector (2009-present)</td>
<td></td>
</tr>
<tr>
<td>Total Engineering:</td>
<td>Project Engineer (2009)</td>
<td></td>
</tr>
<tr>
<td>City of Virginia Beach:</td>
<td>Construction Inspector 3 (1997-2008)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Education:</th>
<th>Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCC/Associate Degree/2004/Civil Engineering Technology</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. Active Registration:</th>
<th>Year First Registered/ Discipline/VA Registration #:</th>
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</thead>
<tbody>
<tr>
<td>DCR – Erosion &amp; Sediment Control Inspection (Exp. 2014); VDOT Soils &amp; Aggregate Field Compaction (Exp. 2014); VDOT Asphalt Field (Exp. 2015); VDOT Hydraulic Cement Concrete Field (Exp. 2013); VDOT Pavement Marking (Exp. 2015); VDOT Flagger Certification (Exp. 2013); Nuclear Gauge Safety Training (Exp. 2013); VDOT Intermediate Work Zone Traffic Control (Exp. 2015); 10-Hour OSHA Safety Training; VDOT GRIT (Exp. 2014); ACI Concrete Field Testing Technician – Grade 1 (Exp. 2016); VDOT Site Manager - Current</td>
<td></td>
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</tbody>
</table>

<table>
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<tr>
<th>g. Document the extent and depth of your experience and qualifications relevant to the Project.</th>
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<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.)

Mr. Neuhoff has more than 26 years of extensive experience in environmental compliance and permit review for E&S laws as a Virginia DCR E&S Control certified Combined Administrator, surveying, interpretation of plans and specifications, project documentation, traffic control, review of shop drawings and submittals and work order reviews, etc. to ensure contractor compliance with applicable laws as well as the project plans and specifications. Throughout his career he has coordinated and communicated with contractors, external agencies, clients, peers, staff and general public to ensure successful and timely project completion.

Mr. Neuhoff has worked on the following projects while at Michael Baker Jr., Inc.:  
**York County, James City County, and Various AARA Plant Mixes, Hampton Roads District. VDOT. Inspector.**  
Responsibilities included daily inspection of traffic control, milling operations, proper paving and compaction procedures, pavement markings, traffic loop installation, erosion control, drainage items, validate pay quantities, assist with project records, monthly vouchers, and supervise inspection staff on site.

Mr. Neuhoff has worked on the following projects while with another firm:  
**Water/Sewer Rehabilitation, Portsmouth, Virginia. City of Portsmouth. Consultant Senior Inspector on this $3 million dollar, five phase water/sewer rehabilitation project overseeing four different utility contracting firms. Responsibilities included quality control and inspection of all work, E&S compliance, proper logistics/traffic control for numerous deliveries of oversized material in an urban environment, materials book, and as-built plans. Verified monthly pay estimates for work complete.**

**Drainage Project, Chesapeake, Virginia. City of Chesapeake. Consultant Senior Inspector. Responsibilities included detailed project records, quality control and inspection of all work, E&S compliance, materials book, and as-built plans. Verified monthly pay estimates for work complete.**

**HRSD Sewer Force Main Installation for Light Rail (Total Engineering), Norfolk, Virginia. HRSD. Project Engineer. Installed new HRSD sewer force main for the construction of Norfolk’s light rail project. Provided inspection and QA of job. Developed plans and cost estimates for installation of systems, facilities, and structures.**

**Road and Bridge Inspections, Virginia Beach, Virginia. City of Virginia Beach. Construction Inspector III. Responsible for inspection/acceptance of more than 1,800 miles of roads and bridges. Reviewed site plans for large civil construction projects. Specialist in environmental compliance and disaster recovery. Training and certification officer.**
ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR - WORK HISTORY FORM

Work by Lead Contractor - three (3) projects which best illustrates 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>(1) Route 288 Construction at the US 60 Interchange Chesterfield County, VA</td>
<td>See narrative below.</td>
<td>Virginia Department of Transportation 2430 Pine Forest Drive Colonial Heights, VA 23834 John Stognar 804-524-6436</td>
<td>2003</td>
<td>2005</td>
<td>$47,637</td>
</tr>
</tbody>
</table>

**Project Delivery Method:** Design-Bid-Build

**Specifications:** Construction of new roadway on new alignment including four travel lanes and collector lanes. Project included concrete and asphalt pavements.

**Project Description:** This major project began as a $47 million contract with the Virginia Department of Transportation, but quickly expanded to include two additional subcontracts for portions of the adjoining projects. Ultimately, due to numerous plan revisions required to accommodate the adjoining Route 288 PPTA Project, this grew to become a $60 million project. The project included 3.3 million cubic yards of excavation, construction of seven bridges, and construction of an interchange with Route 60 (Midlothian Turnpike). The project featured a complex maintenance of traffic to provide for the maintenance of traffic on Route 60 and several other roadways that crossed the new alignment of Route 288.

This project suffered from unplanned changes to the work from the very start. Notice to proceed with construction of several major bridges was delayed to allow time for VDOT to re-design them. This re-design was necessary to provide wider bridges that would accommodate the traffic from the adjoining PPTA project. Additionally, numerous slides throughout the length of the project affected progress. Most of these slides were nuisances and were removed or repaired without significantly affecting the completion date of the project. However, one major slide was located at the base of a major electric transmission tower. Designing and constructing the fix for this slide significantly delayed the project. The re-design raised the profile grade for a long section of the new mainline to protect the transmission tower. Additionally, repair of the slide was accomplished in small increments to avoid affecting stability of the tower, but this method dramatically affected productivity. Ultimately, the project was complete and opened to traffic at about the same time as the adjoining PPTA project.

**Lessons Learned:** Though this project was a traditional design-bid-build, V&G gained considerable design-build-like experience on this project. The adjoining PPTA project necessitated a significant re-design of many of the bridge structures on the project immediately after the project was awarded to V&G. Then, when grading operation were nearing completion, a major slide below and electrical transmission tower necessitated a complete re-design of the roadway finished grade through a large portion of the project.

During the course of this project, The V&G Team developed its skill of maintaining progress and productivity while dealing with a constant barrage of changes. Additionally, an outside consultant performed the construction engineering and inspection work on this major project for VDOT. These two facts helped V&G hone some of the skills necessary to effectively manage a design-build project.
## Lead Contractor - Work History Form

### Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.

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<tr>
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<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><strong>Knightdale Bypass</strong></td>
<td>See narrative below.</td>
<td>North Carolina Department of Transportation PO Box 25201 Raleigh, NC 27611 Steve Leonard 919-250-4202</td>
<td>2004</td>
<td>2005</td>
<td>$40,364 $42,615 $42,615</td>
</tr>
</tbody>
</table>

### Project Delivery Method: Design-Bid-Build

### Project Description: This 1.1 miles of new four-lane divided highway included completion of concrete paving, major utility relocations, excavation and borrow, drainage, and construction of five steel-girder bridges. Bridges constructed included: two 1,600', nine-span flyover bridges; one 800', five-span interstate ramp; and two 300', two-span overpass bridges. These bridges were constructed working over traffic on existing I-440 and provided the critical link between the US-64 Bypass and I-440 Beltline. During construction, NCDOT produced major design changes to the widening portion of I-440 and the New Hope Road interchange. V&G worked proactively with NCDOT to accommodate their requests. This additional work delayed the completion of the project by nearly six months but through open communication and a partnering environment between V&G and NCDOT, the time impact was able to be minimized. Despite these delays, the project was opened for traffic in conjunction with the adjoining sections of the US-64 Bypass. This completed the vital access between the city of Raleigh, NC and the Knightdale suburb – significantly reducing commuter traffic and reducing travel times.

### Lessons Learned: V&G was able to accomplish this project while managing the needs of the traveling public and maintaining the flow of traffic on the vital I-440 Raleigh, NC beltway. V&G worked proactively with the NCDOT to plan, install, and maintain necessary traffic control devices to safely manage traffic through the construction limits.
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

<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>
<th>g. Dollar Value of Work for Which Firm Was/Is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Beckley Bypass/ Grey Flats Road Raleigh County, WV</td>
<td>See narrative below.</td>
<td>West Virginia Department of Transportation Division of Highways District 10 270 Hardwood Lane Princeton, WV 24740-2737</td>
<td>8/30/2011</td>
<td>11/19/2011 *WVDOT generated change order to increase scope of work.</td>
<td>$19,818</td>
<td>$31,040</td>
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</tbody>
</table>

**PROJECT DELIVERY METHOD:** Design-Bid-Build

**SPECIFICATIONS:** Construction of 1.5 miles of new 4-lane highway including new connector roads, bridge, off right-of-way waste site development, and reinforced soil slope walls.

**PROJECT DESCRIPTION:** This project included 220,000 cubic yards of drilling and blasting adjacent to a residential/school area, approximately 370,000 cys of total excavation, 1248’ long x 220’ high bridge over Cranberry Creek, over 9,000 linear feet of storm drainage, nearly 33,000 square yards of reinforced soil slope wall, and rain garden.

Mid-way through construction, WVDOT amended V&G’s contract to include additional excavation, retaining walls, drainage, intersection construction, and asphalt pavement while maintaining the established completion date. V&G was able to meet this challenge through accelerating bridge completion and has completed a much needed section of the East Beckley Bypass.

**LESSONS LEARNED:** Though this project was a traditional design-bid-build, the contract modification and increase to V&G’s scope of work (which took place during construction) created a partnering environment in which V&G was able to work closely with the WVDOT to satisfy its needs for this critical section of the East Beckley Bypass. To accomplish this scope change, and maintain the project schedule, V&G worked closely with the WVDOT to assist in acquiring necessary right-of-way in a condensed time-frame. The end result was a quality project, produced on time, and of the highest quality for the traveling public and the State of West Virginia.
ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

<table>
<thead>
<tr>
<th>Project Name &amp; Location</th>
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</tr>
</thead>
<tbody>
<tr>
<td>(1) Western Wake Freeway Design-Build (R-2635) Wake County, NC</td>
<td>See narrative below.</td>
<td>North Carolina Turnpike Authority 5400 Glenwood Avenue Raleigh, NC 27612 Shannon Sweitzer, P.E. 919-571-3000</td>
<td>On-going Design Completed 2010</td>
<td>2012 (Est.)</td>
<td>$446,000</td>
</tr>
</tbody>
</table>

**Design Builder:** Raleigh-Durham Roadbuilders (a joint venture of Archer Western, Granite, Eutaw)

**Project Description:** Baker is providing design services as part of the Western Wake Freeway design-build team. The $446 million design-build project is a new location roadway, approximately 12.6 miles in length from NC 55 at SR 1172 to NC 55 near SR 1630. The project is a six-lane controlled access toll road and includes the construction of 33 bridge structures, six interchanges, and numerous box culverts. The project has required extensive traffic control planning and sequencing, railroad and utility coordination, and right-of-way acquisition. As part of this project, major arterials such as US 1 and US 64 have been widened, resurfaced, and portions reconstructed.

The freeway is expected to save customers up to 20 minutes per full-length trip and is scheduled to open to traffic in 2012. The project will be the first project in North Carolina designed and built to utilize an all electronic toll collection system, meaning there will be no toll booths and no stopping to pay tolls.

**Lessons Learned:**

**Right-of-Way Acquisition:** Through the teams’ recent experience with the Western Wake Freeway project, the Team has discovered that a designated right-of-way liaison is necessary in providing accurate and timely information to NCTA and their Land Agents. It is essential to the project that the property owners are seen as individuals and that the NCTA, through their land agent, provides the most accurate information available during negotiations.

The right-of-way coordination team should begin by releasing selected parcels to NCTA, as the project footprint is finalized, so that the appraisal process and negotiations may begin. The initial focus should target properties located inside the mainline construction area and areas necessary for utility relocations. It is typical for design-build projects to have occasional revisions for additional easements due to the fast track nature of the design process; the Team should notify NCTA of potential revisions as they surface and once finalized, updated plans will be distributed. It should be the Team’s desire to eliminate or reduce claims where possible, as well as minimizing revisions to the claims that have already been appraised, discussed and/or settled with the property owner. To provide clear and concise plans for the NCTA right-of-way agents, the Team has established a modified version of the NCDOT “Utility by Others” plans that are referred to as Project Coordination Plans. The Project Coordination Plans should include the typical data shown in the right-of-way plans along with proposed utilities, erosion control features, roadway detours and other pertinent features to assist the Land Agent with illustrating the claims to property owners.

**Utility Coordination:** During the early phases of design it was evident that a highly effective team of coordinators were needed to handle the amount of utility relocation and coordination that would be required. Our Team planned accordingly for utility coordination and achieved success. A key exercise implemented on this design-build project was the use of Joint Utility and Construction Coordination Meetings (JUCCM). The JUCCM was a weekly or bi-weekly meeting including utility owners, construction personnel and NCTA representatives, to review upcoming activities and provide feedback to improve cooperation. Our utility coordinator used his experience and existing relationships along with diligent communication to effectively coordinate relocations and bring all the utilities together on this project, to optimize all relocations to help keep the project on schedule and on budget.
### LEAD DESIGNER - WORK HISTORY FORM

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</thead>
<tbody>
<tr>
<td>1. Interchange at</td>
<td>See narrative below.</td>
<td><strong>Virginia Department of Transportation</strong> 1700 Main Street Suffolk, VA 23434</td>
<td>On-going</td>
<td>2012</td>
<td>$1,857 (Fee) $1,857 (Fee) $1,416 (Fee)</td>
</tr>
<tr>
<td><strong>Lynnhaven Parkway and Great Neck Road</strong></td>
<td></td>
<td>Ellen Lundevall Project Manager 757-925-2627</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Final Design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Virginia Beach, VA</strong></td>
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</tbody>
</table>

### Project Description:

This project includes the preliminary design of improvements to the I-264 interchange at Lynnhaven Parkway in Virginia Beach and new ramps to London Bridge Road (Great Neck Road) and the final design of the new Ramps to London Bridge Road.

The preliminary stage of the project included developing, analyzing, and reporting on potential alternative concepts for modifying the interchange on I-264, located at Lynnhaven Parkway and providing access to London Bridge Road. Baker also conducted a comprehensive traffic operations analysis and developed numerous conceptual engineering solutions to the highly congested interchange.

The Interchange Justification Report for this project received approval from FHWA in April 2008, the Phase I preliminary engineering is complete, the Design Public Hearing was held and Baker proposed final construction plans for the first phase of the overall improvement (ramps to Great Neck Road).

The work conformed to the current standards, policies and procedures of VDOT. Where appropriate, supplemental design criteria were developed and submitted to the Department for review and comment. The work was accomplished utilizing computerized design and drafting systems, which are compatible with the Department's automated design and drafting systems. The Department's design system is GEOPAK and the drafting system is MicroStation. High traffic volumes and constrained rights-of-way presented engineering challenges on this project. Baker worked closely with the City of Virginia Beach and the Federal Highway Administration to address all perspectives of the proposed urban interchange design.

Due to limited highway funding, only the final design of the new ramps to this heavily traveled interstate roadway are proceeding at this time. Included in this part of the overall project is the complete design of the exit and entrance ramps and auxiliary lanes along I-264 to the existing interchange with Lynnhaven Parkway. Also included are improvements to London Bridge Road to accommodate northbound dual left turn lanes and southbound right turn lanes, interstate bridge widening and geometry as well as tie - back retaining wall plans, hydraulic scour study of London Bridge Creek, drainage and storm water management design, ITS modifications to I-264, lighting design (using AGI-32 software), pavement markings and signing (overhead and cantilever sign structures along with break away ground mounted regulatory and warning signs) and a complex sequence of construction plan to maintain at a minimum the number of existing lanes open to traffic at all times during construction. Coordination with VDOT design staff, City of Virginia Beach and Norfolk Southern Railroad are important components of this project.

### Lessons Learned:

This project resulted in extensive coordination with the City due to the project tying into London Bridge Road maintained by the City and the desire that City standards/preference and not VDOT would occur on London Bridge Road including the new signal. Baker learned that, as the designer, you must make sure that submissions are being reviewed by all disciplines including local government representatives that will ultimately be providing comments on the project. This will insure that changes in design are not requested during development of the final construction documents.
### LEAD DESIGNER - WORK HISTORY FORM

**Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.**

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<th>f. Final or Estimated Contract Value</th>
<th>f. Dollar Value of Work for Which Firm Was/is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) US 64 Knightdale Bypass</td>
<td>See narrative below.</td>
<td>North Carolina Department of Transportation 1020 Birch Ridge Drive Raleigh, NC 27610 Rodger Rochelle 919-250-4128</td>
<td>2005</td>
<td>2005</td>
<td>$131,000</td>
<td>$131,000</td>
<td>Responsible for the design of $131,000 million in construction</td>
</tr>
</tbody>
</table>

**DESIGN BUILDER:** North Carolina Constructors, Knightdale (a joint venture of Lane and Flatiron)

**PROJECT DESCRIPTION:** Baker was the responsible engineer leading a multi-discipline design team on this NCDOT funded design-build project. The project included the design of approximately 14 kilometers of a six-lane divided arterial highway on new alignment. The new facility provides a bypass of the Town of Knightdale on US 64 approaching the City of Raleigh from the east. The project included 23 bridge structures and three major box culverts. Innovations included re-design of rock cut slopes, standardizing bridge designs, optimizing roadway grades and designing a progressive traffic maintenance plan to accelerate construction.

The project involved roadway design, bridge design, permitting revisions, hydraulic design, erosion and sediment control, traffic control/marking plans, signal design, signing plans, ITS work, public involvement, and utility relocations.

**LESSONS LEARNED:**

**Erosion and Sedimentation Control/Stormwater Pollution Prevention Plan:** As illustrated by the Knightdale Bypass project, Erosion and Sedimentation plan development and control becomes hyper-critical on large-scale projects. Our team had members in place that successfully navigated the mine fields that come with designing and implementing an exemplary program. After working hand-in-hand with NCDOT designers to produce RFC Erosion Control plans, our Team was able to standardize the NCDOT representatives to make the necessary adjustments in the field and produce outstanding results. The additional organizational adjustments that were made to segment the project into workable units ultimately became the model for future projects. Our Team’s erosion control design took into account all major construction factors such as construction sequencing, existing topography, proposed land grades, soil type, classifications of surrounding waters, critical habitat areas, and any environmental concerns within the corridor. Erosion control measures were designed to avoid placement of devices in wetlands and other environmentally sensitive areas.

**Public Involvement/Perception:** The project corridor had significant right-of-way impacts including residence and business relocations. There was some public opposition to the project as evidenced by yard signs and public meeting comments. It was critical that the public feel that they were brought into the decision making process, kept well informed on project progress, and were provided ample opportunities to communicate with the project team. The Design-Build team indentified and implemented the items below to develop and maintain the public trust:

- Pay close attention to commitments made during the NEPA process.
- Have a dedicated Public Information Manager.
- Conduct Public Meetings and Informational Sessions to provide project status and take questions from the community.
- Conduct an aesthetic design workshops to receive public input on the project aesthetics including bridge columns, retaining walls, sign structures, toll gantries, and noise walls.
- Create and maintain a project website to provide project information, progress updates, right-of-way acquisition information, and traffic impact information. The website will also allow visitors to sign up on a mailing list to obtain email notifications of traffic updates and will have a Q&A section where the public can submit questions directly to the project team.