

November 15, 2012

CD COPY

I-81 Bridge over Maury River



I-81 Bridge over Buffalo Creek



Battlefield Blvd. and I-64 Interchange



I-95/I-495 at Arena Drive - Design-Build



**Request For Qualifications
A Design-Build Project**



I-64 Widening and Route 623 Interchange Improvements

From: 0.99 Miles West of Route 623
(WB – Route 622, EB – Route 623)
To: 0.38 Miles West Route 271 (Pouncey
Tract Road) in Short Pump

State Project No.: 0064-964-110, P101, C501, B610-B614, B617,
B616, D601, D606

Federal Project No.: NH-064-2(150)

Contract ID Number: C00070542DB55

Goochland County and
Henrico County, Virginia



IN ASSOCIATION WITH:
Bryant Contracting, Inc. (SWaM)
George Nice & Sons, Inc. (SWaM)
EBA Engineering, Inc. (DBE)
Engineering & Testing Services, Inc. (DBE)
AMEC Environment & Infrastructure, Inc.
H&B Surveying and Mapping, LLC (DBE)

WR&A WHITMAN, REQUARDT
& ASSOCIATES, LLP
ENGINEERS · ARCHITECTS · PLANNERS EST. 1915



P.O. BOX 65128
VIRGINIA BEACH, VA 23467
757-420-1140 FAX: 757-420-7250
www.evwilliams.com

QUALITY CONSTRUCTION
"ON TIME, WITHIN BUDGET"

November 15, 2012

Mr. Stephen D. Kindy, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, Virginia 23219

Statement of Qualifications/I-64 Widening and Route 623 Interchange Improvements

From 0.99 Miles West of Route 623 to 0.38 Miles West of Route 271
State Project No.: 0064-964-110, P101, C501, B610-B614, B617, B616, D601-D606
Federal Project No.: NH-064-2(150)
Contract ID No.: C00070542DB55

Dear Mr. Kindy:

E.V. Williams, Inc. (EVW) is pleased to submit our response to your Request for Qualifications (RFQ) for the above referenced project. In doing so, we offer our Statement of Qualifications (SOQ) to serve the Virginia Department of Transportation (VDOT) as the Design-Builder for this project.

E.V. Williams, Inc., founded in 1941, has become one of Virginia's premier Heavy/Highway and Civil contractors. We have accomplished this with an uncompromising safety program complimented by exemplary business relationships and exceptional performance. Upon becoming a subsidiary of The Branch Group in 1997, we added additional financial resources, management expertise and the ability to service the entire Commonwealth.

The EVW Design-Build Team was assembled based on our past corporate relationships on Design-Build projects in Virginia. For this undertaking, we have partnered with a local design firm, *Whitman, Requardt & Associates, LLP* (WR&A). WR&A has provided engineering, planning and construction management services to VDOT for over 60 years and is currently working on two Design-Build projects with Branch Highways, Inc. Based on this successful relationship, The Branch Group decided to team with WR&A on this Design-Build project through its subsidiary company *E.V. Williams, Inc.* The Branch Group/WR&A Design-Build project experience includes:

- **George Mason University – Campus Drive** – A 1.2 miles long two-lane roadway with a grade separation at Route 123. WR&A is designing the Route 123 improvements including the bridge over Campus Drive, geotechnical engineering, utility coordination and construction quality assurance management. Total cost of the project is \$14 million.
- **Route 636 PPTA – Augusta County** – A 1.04 miles long roadway on new location with a bridge over CSXT Railroad. WR&A is providing the bridge and geotechnical engineering services and construction quality assurance management. Total cost of the project is \$13 million.

The Design-Build Team is further enhanced by the addition of *Bryant Contracting, Inc.* for construction of the I-64 bridges over Little Tuckahoe Creek. WR&A and Bryant previously worked together on the Colonial Heritage Boulevard Bridge over Yarmouth Creek, a Design-Build project for a private developer.

The structure had a complex horizontal and vertical curve alignment. The cost of the Design-Build project was \$1.3 million. Bryant, as the prime contractor, has also constructed several of WR&A’s VDOT bridge rehabilitation projects in the Richmond and Fredericksburg Districts.

With EVW’s extensive Heavy/Highway and Civil Construction Management expertise combined with WR&A’s unrivaled experience, reputation for innovation and quality engineering, this Design-Build Team will undoubtedly provide the expertise required to successfully construct and manage all facets of this project for VDOT. We understand it is VDOT’s intent to widen approximately 4.52 miles of I-64 in the Short Pump area from a four-lane divided freeway to a six-lane divided freeway with improvements to the I-64/Route 623 Interchange. Furthermore, our Team understands the scope of this project is to include all work required to support the design and construction of: roadway, environmental, bridges, survey, geotechnical, hydraulics, traffic control devices, ITS, transportation management plans, utilities, public involvement/relations, quality assurance and quality control, construction engineering and inspection, and overall project management.

In addition, our Team acknowledges the requirements to all commitments included in the Traffic Analysis Report, the NEPA Environmental Document, and all aspects of the utility work. Furthermore, we understand the importance of providing Quality Assurance and Quality Control for both design and construction. In order to minimize risk and provide the Owner with the highest quality product, we have assigned to our Team both a Quality Assurance Manager and a Quality Control Manager for construction, whose roles are described in greater detail in section 3.3.2.

Safety is a critical component contributing to the schedule and success of a project. EVW believes that safety of everyone on the job site is paramount. To affirm the previous statement, we have included the following chart that summarizes our Experience Modification Rate (EMR) and serious OSHA violations for the previous five years:

YEAR	EMR	OSHA
2012	0.82	0
2011	0.77	0
2010	0.76	0
2009	0.79	0
2008	0.75	0

Given that the industry average EMR is 1.0, EVW has clearly demonstrated our focus and commitment to provide a safe working environment for our employees, subcontractors, and the general public. Project Superintendents and Foremen are all certified in Safety, First Aid, and adult CPR. In addition, they have completed OSHA 10-hour safety training, which qualifies them to serve as a “Competent Person” for excavations as defined by OSHA. Both our Construction Manager and our MOT Coordinator have assumed the added responsibility of becoming certified in Intermediate Work Zone Traffic Control Training and Flagger operations. This is an example of the importance that EVW places on all MOT work, but more specifically when it involves working on interstates. Our Safety Manager for this project, *Sam Williams*, a seasoned veteran of eight years, will report directly to the DBPM to ensure compliance with all applicable laws and regulations and to promote a safe and healthy work environment. He will have complete authority to suspend any operation deemed unsafe or outside the parameters of pertinent laws and regulations governing the project until a viable solution can be reached.

3.2.2 The Official Representative and Point of Contact for this Project is:

James A. Openshaw, III

Vice President and General Manager

E.V. Williams, Inc.

P.O. Box 65128

Virginia Beach, VA 23467

757-420-1140 Fax: 757-420-7250 E-mail: jayo@evwilliams.com

3.2.3 The Principal Officer with whom a Design-Build contract with VDOT would be written is:

William Karbach

Chief Executive Officer

The Branch Group, Inc.

P.O. Box 65128

Virginia Beach, VA 23467

757-420-1140 Fax: 757-420-7250 E-mail: willk@branchhighways.com

3.2.4 Offeror's Corporate Structure

E.V. Williams, Inc. is a corporation. *E.V. Williams, Inc.* a registered Corporation in the Commonwealth of Virginia and will take full financial responsibility for the Project without limitation and has a total bonding capacity of \$750 million.

3.2.5 Lead Contractor and Lead Designer

The Lead Contractor for Project will be *E.V. Williams, Inc.*

The Lead Designer for this Project will be *Whitman, Requardt and Associates, LLP.*

3.2.6 Affiliated/Subsidiary Companies

Affiliated/Subsidiary Companies are listed in the Appendices under Attachment 3.2.6.

3.2.7 Certifications Regarding Debarment

See forms in Appendix for the following Team Members:

- | | |
|--|---|
| - E.V. Williams, Inc. | - Whitman, Requardt & Associates, LLP |
| - Bryant Contracting, Inc. | - EBA Engineering, Inc. |
| - George Nice & Sons, Inc. | - AMEC Environment & Infrastructure, Inc. |
| - Engineering and Testing Services, Inc. | - H&B Surveying and Mapping, LLC |

3.2.8 Lead Contractor VDOT Prequalification

E.V. Williams, Inc. is prequalified with VDOT (Vendor Number – W488) and our pre-qualification is current until October 31, 2013. A copy of prequalification evidence follows in the Appendices section of this submittal.

3.2.9 Evidence of Obtaining Bonding

Surety for *E.V. Williams, Inc.* is provided by The Hartford Insurance Group. Proof of bonding and insurance follows this letter, located in the Appendices section of this submittal.

3.2.10 Professional Services Documentation

Full-size copies of SCC Certificates and DPOR Registrations of all team members are included in the Appendices section of this submittal.

3.2.10.1 Evidence of Registration with the Virginia State Corporation Commission

Registration information in tabular format as well as full-size copies for team members are located in the Appendices and Attachments section of this submittal, under Attachment 3.2.10.

3.2.10.2 Evidence of Registration with the Virginia Department of Professional and Occupational Regulation

Registration information in tabular format as well as full-size copies for each firm is located in the Appendices and Attachments section of this submittal, under Attachment 3.2.10.

3.2.10.3 Key Personnel Registration with Virginia DPOR

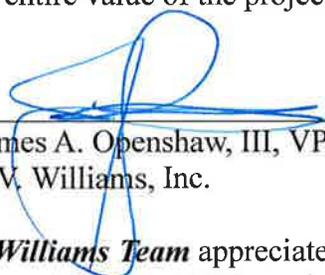
Key personnel registered with Virginia DPOR are shown on Attachment 3.2.10.

3.2.10.4 Regulated Services other than Professional Services with Virginia Department of Professional and Occupational Regulation

Registration information other than Professional Services with Virginia Department of Professional and Occupational Regulation include Matthew Puckett, who currently possesses the required DCR Responsible Land Disturber (RLD) Certification VDOT Erosion and Sediment Control Certification (ESCCC), full-size copies are located in the Appendices and Attachments section of this submittal under Attachment 3.2.10.4.

3.2.11 Disadvantaged Business Enterprises Statement (10%)

Our Team supports VDOT's mission of Equal Opportunity, Civil Rights, and Small Business Development by using programs that include the participation of disadvantaged, minority-owned, and women-owned businesses. We are committed to achieving a 10% DBE participation for the entire value of the project.

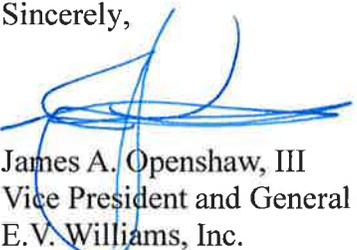


James A. Openshaw, III, VP/GM
E.V. Williams, Inc.

November 15, 2012
Date

The *E.V. Williams Team* appreciates the opportunity to provide our Statement of Qualifications for the I-64 Widening and Route 623 Interchange Improvements Design-Build project in Goochland and Henrico Counties. Our Team of qualified firms brings the experience and expertise that is needed for this challenging project. We look forward to your review of our submittal.

Sincerely,



James A. Openshaw, III
Vice President and General Manager
E.V. Williams, Inc.

3.3 Offeror’s Team Structure

The E.V. Williams Design-Build Team has been assembled based on past proven results on similar types of projects, excellent reputation within the industry and existing corporate partnerships. The Team has developed a clearly defined functional relationship for all elements of the project implementation.

3.3.1 Key Personnel

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

James A. Openshaw, III Design-Build Project Manager E.V. Williams, Inc. 34 years of Experience

James A. Openshaw, III will serve as the Design-Build Project Manager (DBPM) for this project. Mr. Openshaw offers over 34 years of experience in state and federal highway construction in Virginia and Maryland and has experience as a DBPM in North Carolina. Since joining EVW, Mr. Openshaw has had complete authority over all operational aspects on major projects. In this capacity, he has fulfilled the responsibilities of a DBPM coordinating with all project disciplines. Mr. Openshaw will lead all aspects of this endeavor including being responsible for the overall project design, construction quality management, and contract administration.

Robert Shackelford, P.E. Quality Assurance Manager WR&A 21 years of Experience

Robert Shackelford, P.E. will be the Quality Assurance Manager (QAM) for the project and operate separately and independently from construction operations. He has 21 years of experience in the construction industry and was a former DCE and ACE in the VDOT Fredericksburg District performing similar Quality Assurance and responsible charge roles. He is also a registered and licensed Professional Engineer in Virginia. Mr. Shackelford will be responsible for the Quality Assurance (QA) inspection and testing of all materials used and work performed, to include monitoring of the contractor’s Quality Control (QC) program. He will ensure that all work and materials, testing, and sampling are performed in accordance with the contract requirements and the “Approved for Construction” plans and specifications.

John Maddox, P.E. Design Manager WR&A 27 years of Experience

John Maddox, P.E. will serve as the Design Manager (DM) for this project and is a registered and licensed Professional Engineer in Virginia. He has over 27 years of experience designing major highway and interstate facilities. He has been performing as a Design Manager for over 20 years including several similar interstate widening projects in the Commonwealth. Mr. Maddox will be responsible for coordinating the individual design disciplines and ensuring the overall project design is in conformance with the Contract Documents. In addition, he will establish and oversee the design QA/QC program for all appropriate disciplines involved in the design of the project including review of design, working plans, shop drawings, specifications and constructability for the project.

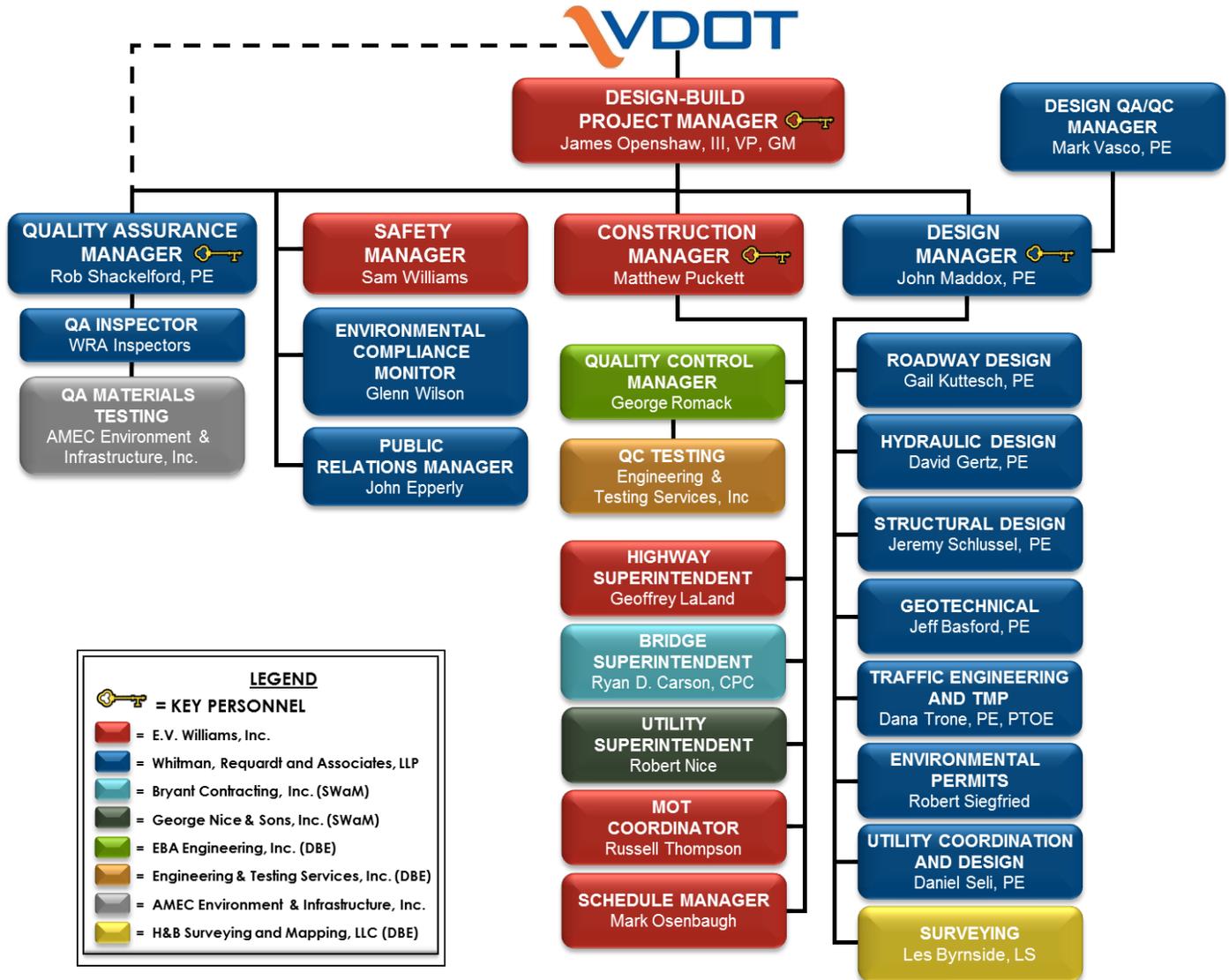
Matthew Puckett Construction Manager E.V. Williams, Inc. 14 years of Experience

Matthew Puckett will be the Construction Manager (CM) for this project. He has over 14 years of experience working in the heavy highway construction field in Virginia and has a reputation for delivering quality projects on aggressive schedules. As a Construction Manager, with a degree in Environmental Science, Mr. Puckett will manage the construction process, including all QC sampling and

testing activities to ensure the materials used and work performed meet contract requirements and the “Approved for Construction” plans and specifications. Mr. Puckett possesses the required DCR Responsible Land Disturber (RLD) Certification – #38549 and expires 10/25/2015 and VDOT Erosion and Sediment Control Certification (ESCCC) – #4106C and expires 11/12/2015.

3.3.2 Team Organizational Chart

This Organizational Chart provides a visual overview of the functional relationships and lines of communication for our Team. A distinct separation of Quality Assurance and Quality Control for construction activities is shown. Key Personnel are denoted with a “key” symbol.



VDOT/Design-Build Project Manager

The Design-Build Project Manager, *James A. Openshaw, III* will be the single point of contact for VDOT. Mr. Openshaw will serve as a communication link between the Design-Build Team and VDOT. Any issues or clarifications of the contract documents relating to pre-construction activities will be handled by him. The DBPM will coordinate

progress and final drawings for review by VDOT. He will lead in generating alternative technical concepts during the bid and design phases of the project. Additionally, the DBPM will submit to VDOT a design/preliminary construction schedule for review. During construction, a detailed CPM schedule will be maintained and submitted to VDOT. The DBPM will also ensure that any and all required permits are acquired with copies submitted to VDOT.

The DBPM will facilitate final inspections and audit of the project with VDOT and the QAM to ensure the project was designed and constructed in conformance of the requirements of the contract. VDOT will review with the DBPM the appropriate documents relating to the final close-out of the project. Upon completion, VDOT will take final acceptance of the project.

The DBPM will bear full responsibility for the successful completion of this project and is accountable for the overall communication and coordination of all team members. He will create a work environment that promotes a collaborative, results-oriented atmosphere and lead team members, including VDOT and other parties, to function in an ‘open but formal’ environment. This environment will optimize understanding, mutually protect the parties from contractual non-conformities, and empower our representatives to operate in an environment where they can make decisions appropriate to their level of responsibility.

Design-Build Project Management Team

In cooperation with the Design-Build Project Management Team, the DBPM will create a plan for managing the entire project to successful completion. In addition to the actual design and construction of the project, major elements of the plan will include QA, QC, Safety, Environmental Compliance and Public Relations.



The Quality Assurance Manager for this project, **Rob Shackelford, P.E.**, will develop the Quality Assurance and Quality Control Plan (QA/QC Plan) for review and approval by VDOT as well as implementation by the DBPM. The plan will ensure all aspects of design and construction meet the VDOT requirements of the Design-Build Manual. The QAM will establish testing and reporting standards to be implemented on the project. The Quality Assurance Manager will monitor the contractor’s Quality Control practices and will review reports to ensure compliance with the standards set forth. Mr. Shackelford will report directly to the DBPM.

The Design Manager, **John Maddox, P.E.**, will coordinate the individual design disciplines and ensure the overall project design is in conformance with VDOT design standards as specified in the Contract

Documents. Mr. Maddox will utilize input received from the DBPM and the CM to develop the design in conformance with the QA, QC, Safety and Environmental plans. Mr. Maddox will report directly to the DBPM, and will communicate with the CM to resolve any constructability issues that may arise. He will attend progress meetings and provide guidance in resolving changes to the design with the CM.

The CM, **Matthew Puckett**, will report directly to the DBPM. As the CM, he will support the Design Team in their efforts by communicating constructability issues to the DM. He will also lead the Construction Team and work with the QA, QC, Safety, Environmental and Public Relations aspects of the Construction Plan.

Sam Williams, our Safety Manager for this project, will work with the DBPM to mitigate identified safety issues and risks. He will analyze the scope of the project and communicate possible safety issues and concerns related to design to the DM through the DBPM. Mr. Williams will make regular visits to check for compliance, identify new issues and will report directly to the DBPM. He will also communicate openly with the CM to coordinate appropriate training of construction crews.

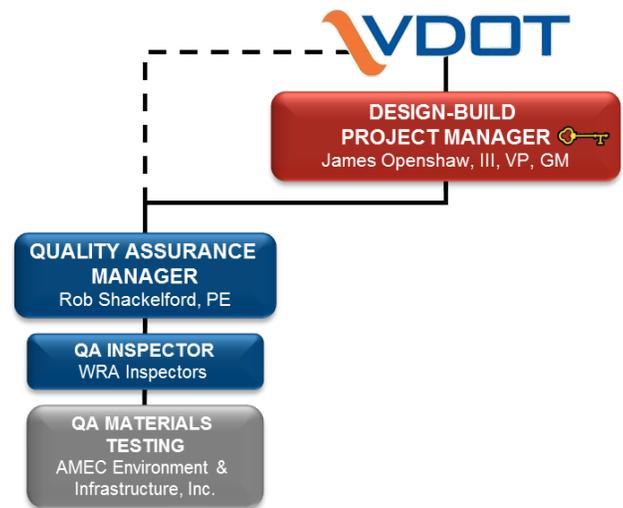
The Environmental Compliance Monitor, **Glenn Wilson**, will conduct an environmental assessment and will report his findings directly to the DBPM. Mr. Wilson will then review the project design and QA/QC Plan for consistency with his recommendations. During construction, he will make regular visits to the site checking for compliance and identifying any new issues and risks.

The Public Relations Manager, **John Epperly**, will develop a Public Relations Plan and will use his expertise to work with the DBPM, VDOT and media outlets to inform the general public on all relevant aspects of this project. He will update VDOT on the most current status and pertinent issues associated with this project.

Quality Assurance Team

The Quality Assurance Manager, **Rob Shackelford, P.E.**, will establish the QA/QC Plan that complies with the Minimum Requirements for Quality Assurance and Quality Control on Design-Build and P3 Projects Manual dated January 2012. He will distribute and enforce the plan with support from the DBPM. Mr. Shackelford will communicate with VDOT to clarify any issues with regard to the Department’s standards and specifications. The DBPM will review the QA/QC Plan for conformance to the Contract Documents and submit the plan to VDOT for approval.

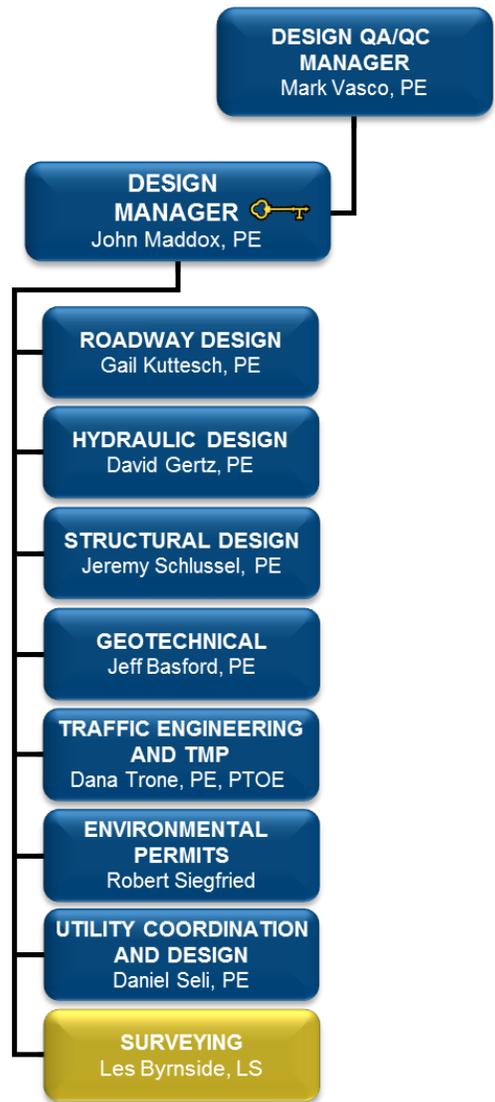
The QAM will be responsible for the Quality Assurance inspections performed by his Inspection Team and the QA sampling and testing of all materials. This testing will be performed by the QA Materials Testing firm, **AMEC Environment & Infrastructure, Inc.** The QA Inspection and Testing Team will carry out their duties and report their findings directly to the QAM. The QAM will also ensure that the contractor follows the “Approved for Construction” plans and specifications. At project completion, the DBPM and the QAM will work together to ensure all final documents and releases required by VDOT are in place to facilitate the close-out of the Project.



Design Team

The Design Team, led by **John Maddox, P.E.** will manage all elements of the design for the project. He has over 27 years of experience and will be leading a proven Team of WR&A engineers, who have worked together for many years and on similar VDOT interstate widening projects. He will report directly to the DBPM and lead all design disciplines. He will be supported by the following WR&A staff:

- **Structural Design – Jeremy Schlusel, P.E.** with 15 years of experience will lead the bridge design efforts for the I-64 project. He will ensure all structural designs are completed in accordance with VDOT’s Road and Bridge Standards and design manuals. The proposed design of the I-64 bridges over Little Tuckahoe Creek proposes to utilize the existing substructure, Mr. Schlusel has a unique understanding of the design of bridge rehabilitation projects in the Richmond District and on I-64 from the on-call bridge maintenance and rehabilitation contracts he has managed over the last 8 years. He will coordinate with the roadway and hydraulic design staff for the phased construction of the I-64 bridges. Mr. Schlusel is providing similar bridge design services on two Design-Build projects in Virginia for The Branch Group of which *E.V. Williams, Inc.* is a subsidiary company.
- **Roadway Design – Gail Kuttesch, P.E.** will lead the roadway design based on her history of designing interstate widening projects. She has over 9 years of experience and will work closely with the bridge and traffic engineering staff coordinating the design to ensure safe and cost effective phasing of construction, which will be supported by the Transportation Management Plan (TMP) for the project.
- **Hydraulic Design – David Gertz, P.E.** has over 31 years of experience and has led WR&A’s drainage group on similar VDOT interstate widening projects. His expertise in river mechanics analysis will be required for the Little Tuckahoe Creek FEMA floodplain study. He will coordinate closely with the roadway and bridge staff on the phasing of construction to ensure the design and construction phasing will not impact the FEMA 100-year floodplain.
- **Geotechnical Engineer – Jeff Basford, P.E.** will provide the final geotechnical reports for the roadway improvements and the bridge foundations. For 12 years he has provided geotechnical engineering services for VDOT, including interstate widening projects. He is currently working on two Design-Build projects in Virginia for The Branch Group of which *E.V. Williams, Inc.* is a subsidiary company.
- **Traffic Engineering and TMP – Dana Trone, P.E., PTOE** with over 16 years of experience will lead the traffic engineering efforts for the project. A critical element will be the development of the TMP including the analysis of each phase of construction with close coordination with the roadway and bridge staff. She has worked on several complex TMPs in the Richmond District and recently led the traffic engineering efforts for the bridge rehabilitation project for I-64 over Shockoe Creek.
- **Design QA/QC Manager – Mark Vasco, P.E.** will follow the QA/QC Plan for the design of the project, which will be coordinated with all design disciplines and coordinated with the project design



and construction QA/QC Plan. He has 29 years of experience in designing projects for VDOT and has a complete understanding of VDOT’s design requirements and Road and Bridge Specifications. He is also working in a similar capacity on the George Mason Design-Build project for The Branch Group of which *E.V. Williams, Inc.* is a subsidiary company.

The Design Team coordination efforts are greatly enhanced due to WR&A’s ability to complete all design disciplines with our in-house staff. To assist in meeting the DBE requirements for the project, the surveying efforts will be completed by *H&B Surveying and Mapping, LLC*, which has worked with WR&A on numerous projects in the Richmond area. The design center for the project will be in the Richmond office, which is conveniently located near the I-64 project.

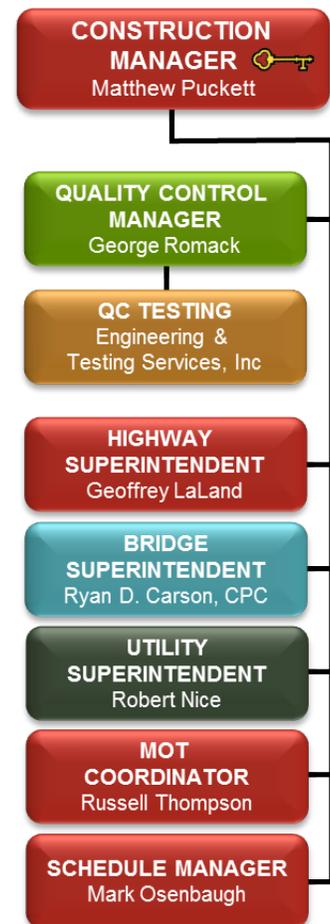
Construction Team

Our Construction Manager, *Matthew Puckett*, will play an integral role in establishing the groundwork for a successful construction effort. Mr. Puckett will work with the Quality Control Manager (QCM), *George Romack*, to communicate and execute the Construction Quality Control program of the QA/QC Plan. Together they will be responsible for ensuring all work performed meets the requirements of the “Approved for Construction” plans and specifications. The CM will communicate project specific baseline quality, environmental, and safety standards to the Team. The Schedule Manager, *Mark Osenbaugh*, in conjunction with the CM, will solicit input from the Construction Team to develop an appropriate baseline schedule and process to be followed for progressing and updating the schedule during construction. The Construction Team includes the Highway Superintendent, *Geoffrey LaLand*; the Bridge Superintendent, *Ryan D. Carson, CPC*; and the Utility Superintendent, *Robert Nice*. Finally, the CM will work closely with our Maintenance of Traffic Coordinator, *Russell Thompson* to establish a plan of execution of the MOT design to ensure the safety of the traveling public as well as the workers.

Mr. Puckett will coordinate with the QCM, Mr. Romack to arrange for all QC testing on the project. The testing will be conducted by the QC Testing firm, *Engineering and Testing Services, Inc. (ETS)*, who will report directly to the QCM. ETS will provide the necessary testing and sampling of materials and will make on-site recommendations to senior field personnel to efficiently ensure compliance according to the QC materials sampling and testing frequencies set forth in the QC program of the QA/QC Plan.

To summarize, our Team provides the following:

- A well-organized Senior Management staff with Design-Build experience
- Extensive experience designing and constructing VDOT projects
- Local Design-Build Team members
- Complete in-house Design Team to minimize inter-discipline conflicts
- Expertise in all Design-Build disciplines necessary for successful project completion
- A proven history of delivering projects on time and within budget
- Unparalleled QA and QC programs
- A Safety Program with a proven track record of excellence
- Trained and certified professionals in the areas of E&S, MOT and Scheduling



3.4 Experience of Offeror's Team



E.V. Williams, Inc. (EVW), the Lead Contractor for this project, has been proudly building Virginia infrastructure since 1941. Our acquisition by The Branch Group provides us additional financial strength and resources needed to expand our reach in the Commonwealth and further contribute to solving VDOT's infrastructure needs. Our focus on exemplary business relationships, exceptional performance, and employee ownership has earned us a ranking of #232 in *Engineering News Record's Top 400 Contractors*. A further example of our focus on exemplary business relationships is evidenced by the fact that on our last five VDOT projects, we have partnered with the Owner to provide seven Value Engineering Proposals with a savings to taxpayers in excess of approximately \$750,000. EVW has abundant available resources to handle the challenges associated with this project. Additionally, The Branch Group has developed a successful relationship with Whitman, Requardt and Associates, LLP on two on-going Design-Build projects.



Whitman, Requardt and Associates, LLP (WR&A) will be the Lead Designer for this project. WR&A has provided transportation design services to VDOT for over 60 years and engineering, planning and construction management services in the Mid-Atlantic region for 97 years. They are currently ranked #127 by *Engineering News Record*. WR&A has one of the largest design groups in Virginia (with over 120 engineers and technicians) and currently has a total staff of over 620 in the region. WR&A is a multi-disciplined engineering firm that has experienced staff for roadway, bridge, retaining wall, drainage, river mechanics analysis, traffic engineering, ITS, utility and geotechnical engineering that is currently providing design services to VDOT on numerous projects. Additionally, our environmental staff has developed permits and environmental documents for VDOT and other local government agencies.



Bryant Contracting, Inc. (SWaM) will be constructing the bridges over Little Tuckahoe Creek. EVW and Bryant are currently working together on the Dominion Boulevard project. Bryant has also worked with WR&A on the Design-Build Colonial Heritage Boulevard over Yarmouth Creek project. Bryant, as the prime contractor, has also constructed several of WR&A's VDOT bridge rehabilitation projects in the Richmond and Fredericksburg Districts. Bryant's VDOT Design-Build experience as a prime contractor includes the Region 4 Design-Build projects, where similar bridge rehabilitation and widening projects were completed in 2011.

3.4.1 Relevant Projects

E.V. Williams, Inc. and Whitman, Requardt and Associates, LLP each have recent and extensive experience on projects similar in scope and complexity from both a construction and design standpoint, respectively. To illustrate our success and capabilities in constructing similar projects, we offer the following projects, which are further detailed in the Appendices under Attachments 3.4.1(a) and 3.4.1(b):

E.V. Williams, Inc. – Prime Contractor

1. VDOT – I-64/Battlefield Boulevard
2. NCDOT – Route 13/Route 158
3. VDOT – Birdneck Road Improvements

Whitman, Requardt & Associates, LLP – Lead Designer

1. VDOT – I-81 Bridges over Buffalo Creek and Maury River
2. VDOT – Fairfax County Parkway Interchange at Fair Lakes Parkway
3. MSHA – I-495 Arena Drive Design-Build

3.5 Project Risks

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

- Safety for workers and road users with no accidents
- Environmental Compliance
- On-Time and On-Budget
- Providing expected Quality
- Serving the needs of the traveling public
- Minimizing or eliminating environmental impacts

The E.V. Williams Team has reviewed the I-64 widening project in the field and examined the information provided by VDOT in the RFQ. Our Team has identified three critical risks for the design and construction based on our past experiences with similar projects.

RISK 1: Utilization of Existing Bridge Elements (foundations, columns and pier caps) in Reconstruction of the Existing I-64 Bridges over Little Tuckahoe Creek

Definition of Risk: There are two primary risks associated with this project proposing to use existing elements of the sub-structure for the superstructure replacement and widening of the two existing bridge structures. The first risk is **design** based – the two existing bridge structures were designed under the 1961 AASHTO Standard Design Specifications, which did not take into account various design elements that are currently designed in today’s codes, including, but not limited to, shear design, earthquake load(s), and foundation design. The second risk



is **condition** based – the existing sub-structure units were built in the 1960s and have been in-service for over 40 years, which means that these reinforced concrete elements have been exposed to the environment, including yearly freeze/thaw cycles and roadway salts.

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

- **Design Risk** – As with all projects where existing elements are proposed to be re-used, it is critical that the Engineer review how the existing bridge structure was designed and how current service loads may impact the existing bridge elements. The Stage 1 Report provided as part of the RFQ package analyzed continuous structural steel versus simple span bulb tees made continuous for live load. The report recommended that 37-inch VDOT bulb-tees be used for a long-term low maintenance solution. The risk of using this type of superstructure type includes increasing the dead loads of the girders approximately 425% over the existing rolled beams. The resulting increase in dead load may require a complete re-build of the existing pier caps to support the additional dead load, potential strengthening of the columns and or in-fill between the columns and modifications to the spread foundations to keep the bearing pressures under the original design capacities on the piers and an evaluation on the existing HP piles used to support the abutments. In addition, the heavier loads will require more substantial sub-structure elements for the widening portion of the project. All of this will impact the schedule to ensure that the existing elements can properly support the proposed dead loads.

- **Material Risk** – As with many projects built in the 1960s, the existing bridge concrete is more permeable than what is specified today. This means that the entire structure is susceptible to being contaminated with chlorides from roadway salts. The chlorides degrade the condition of the concrete by causing the existing reinforcing steel to corrode, which in-turn causes delamination and spalls in the concrete. This degradation impacts the ability of the concrete to perform well in the long-term; thus, requiring sub-structure rehabilitation to bring the existing conditions back to a serviceable state.

Mitigation Strategies: To mitigate the risk of the impact from these events, and to minimize VDOT's efforts, the Design-Builder will employ the following strategies:

- **Design Mitigation Strategy** – WR&A and Bryant Contracting, Inc. are leaders in the bridge design and construction fields, respectively, having worked on numerous VDOT bridge projects. WR&A and Bryant have a unique knowledge working on existing bridge structures to extend their service life. WR&A has evaluated existing conditions for over 150 projects and the Team will draw on this knowledge to review what is most appropriate for these bridges from a design perspective. Bryant will use their knowledge of construction techniques and conduct constructability reviews for the most appropriate means and methods to rehabilitate/widen the two bridge structures over Little Tuckahoe Creek. Together our Team will conduct an independent review of the existing elements to determine how the existing sub-structure might be deficient versus current standard design elements and investigate how these existing elements can be strengthened with minimal impact to the overall project. Such strategies will include the review of external reinforcing, such as carbon fiber wrap, the use of lightweight concrete, and review of superstructure types (i.e., structural steel vs. concrete) and simple span with continuous for live load versus fully continuous superstructure.
- **Material Mitigation Strategy** – To mitigate the material condition, a full hands-on field investigation will take place to record the deficient concrete elements present in the sub-structure. In addition to recording the deficient concrete, the sub-structure elements would be tested to record their chemical compositions. The chemical composition analysis would include half-cell potential, chloride measurements, petrographic analysis, and/or compressive strength tests to provide a comprehensive understanding of existing material conditions. Once the results of the material testing have been received, the long-term material performance risks can be minimized by including a passive cathodic protection system or a combination of chloride extraction and long-term cathodic protection.

VDOT's Role and Minimizing Risk

The proposed Team will minimize the risk to VDOT by providing a single source to evaluate, design and construct solutions for the rehabilitation and widening of the two bridge structures over Little Tuckahoe Creek. Having designed and built hundreds of projects similar to this one for VDOT, our Team will undertake an extensive material testing program. This program will identify the existing material conditions in conjunction with a Life Cycle Cost Analysis (LCCA) and evaluate the most appropriate superstructure replacement option to provide a long-term low maintenance solution. With this Team in place, VDOT's role will involve oversight of these activities during the scope validation period and will only be responsible for approval of major changes in the scope of the project, such as a bridge replacement.

RISK 2: Ability of Existing Outside Paved Shoulders to be Utilized for Shifting Traffic to the Outside

Definition of Risk: The initial phase of construction will require shifting traffic to the outside shoulders on EB and WB I-64 to accommodate the widening within the median areas. After reviewing the existing site conditions, as-built plans, and the Geotechnical Data Report (GDR) it is unknown whether the current shoulder sections will be able to adequately support traffic for an extended period of time. Portions of the project have the original ten-foot paved shoulders from the 1960s, which will need to be strengthened per the VDOT GDR. Areas of the project within the I-295 Interchange vicinity should have full depth paved shoulders and should not require strengthening. The outside paved shoulders constructed under the Route 288 Interchange project are the major areas of risk. Based on our site review of the project, these paved shoulders are showing extensive deterioration, which does not correspond with the as-built plans showing 7.5 inches of asphalt with a 6-inch aggregate base. Above is a photo of the existing outside paved shoulder deterioration that were constructed west of the Route 288 Interchange project.



Critical Impact of Risk on Project: There is significant risk associated with diverting traffic to the outside paved shoulders as conditions may deteriorate under traffic loading. This could result in repair work being performed while traffic is already shifted onto the shoulder, which would require additional lane closure time to fully repair. This would be problematic especially during winter months when deterioration can be accelerated. Repairs to weak shoulder sections during construction could also result in significant impacts to the project schedule, increase cost, create negative public reaction and potentially compromise the safety of the traveling public. Operational risks to the traveling public, such as the development of large potholes and rough roadways, could create an unsafe work zone and hazardous driving conditions.

Mitigation Strategies: To mitigate the risk of paved shoulder break-up and the resultant affects to the project and VDOT, the Design-Builder will employ the following strategies: Prior to the design, outside paved shoulder sections conditions will be thoroughly investigated during the scope validation period. Asphalt cores will be taken to determine the structural integrity of the outside paved shoulders within the project limits. These investigations will help the Design-Build Team to determine whether the paved shoulders will be adequate to carry traffic or if improvements will be necessary prior to shifting traffic onto the paved shoulders. EVW and WR&A have experience on similar types of widening projects designing and implementing pavement testing programs to verify as-built plan information on paved shoulders prior to construction.

VDOT's Role and Minimizing Risk

Following this proactive strategy will minimize risk to both the project and VDOT by addressing any inadequate paved shoulder conditions early in the scope validation and design process. Conducting advanced investigations and potentially strengthening paved shoulders would reduce the risk to motorists, minimize potential traffic delays and help the Design-Build Team and VDOT avoid “negative press”, which is often associated with poor road conditions. With this Team in place, VDOT's role will involve oversight of the pavement testing program during the scope validation period and VDOT will only be responsible for approval of major changes in the scope of the project, such as full paved shoulder reconstruction.

RISK 3: SWM/Water Quality Requirements

Definition of Risk: VDOT's current Stormwater Program Advisories (SWPAs) require Design-Build projects with a Request for Proposals (RFP) dated after October 1, 2012 to be designed in accordance with the new SWM regulations. The new SWM regulations require water quality BMPs to be installed to provide 100% treatment of both the existing and proposed pavement (impervious) areas. This will require water quality BMPs to be constructed in both the median and on the outside of the existing travel lanes of I-64. The BMP facilities on the outside may have a significant impact on the design and construction of the I-64 widening. This is due to the potential need for permanent easements or right-of-way acquisition for the project or the design of innovative BMPs. This would likely increase the construction cost and VDOT's future maintenance and monitoring cost. Additionally, introducing a clearing and grading operation to the outside of the existing travel lanes could also increase the project duration and maintenance of traffic costs.

Critical Impact of Risk on Project: The critical risks on the I-64 project are the initial construction cost, schedule delays, potential right-of-way impacts and future maintenance costs.

- **Initial Construction Cost** – To develop a design that will not require any additional easements or R/W the Design-Build Team may be required to utilize innovative linear facilities such as “Dry Swales” or Bioretention Facilities, which are more expensive than the traditional VDOT BMPs.
- **Schedule Delays** – If the design and construction of the BMPs does require easements or R/W the project schedule could be delayed for the re-evaluation of the NEPA environmental document and additional public involvement. The acquisition process for easements or R/W has numerous requirements that will impact the schedule.
- **Future Maintenance Cost** – If the plans require numerous linear BMPs, these facilities will require future monitoring and upkeep by VDOT maintenance crews.

Mitigation Strategies: The most important factor to minimize risks is to clearly define VDOT's SWM requirements for the project in the RFP documents and plans. VDOT is allowing some projects to be “grandfathered in” to allow the current SWM requirements to be utilized, but only if the proposed facilities can fit within the existing right-of-way. Providing clear direction on the regulations to be used will allow the Design-Build Team the opportunity to develop the water quality BMPs that minimize risks and reduce costs of the project. Designers with a thorough understanding of the SWM requirements will be able to utilize innovative design techniques to take full advantage of their expertise in developing the preliminary plans. The preliminary plans will be reviewed by **Glenn Wilson** of WR&A, who is a certified DCR Combined Administrator.

VDOT's Role and Minimizing Risk

The Design-Build Team will minimize the risk to VDOT by clearly defining the requirements utilized the design of SWM facilities on the project and how the preliminary designs fully meet these requirements. During the scope validation period, both VDOT and the Design-Build Team will have a role in confirming that the proposed design meets regulatory criteria. This will ensure that the Design-Build Team and VDOT are in complete compliance with the SWM regulations. Additionally, EVW has an excellent record of constructing large highway projects that meet all requirements for water quality and erosion and sediment control. **Glenn Wilson** will provide continuous monitoring for the BMP facilities and erosion and sediment control measures throughout the project construction. This will ensure the BMP facilities are constructed as designed and properly maintained during construction.

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendices & Attachments
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendices & Attachments
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	4
Offeror's point of contact information	NA	Section 3.2.2	yes	3
Principal officer information	NA	Section 3.2.3	yes	3
Offeror's Corporate Structure	NA	Section 3.2.4	yes	3
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	3
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	3 – Certificate in Appendices
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendices & Attachments
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendices & Attachments
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendices & Attachments

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.10	no	Appendices & Attachments
SCC Registration	3.2.10	Section 3.2.10.1	no	Appendices & Attachments
DPOR Registration (Offices)	3.2.10	Section 3.2.10.2	no	Appendices & Attachments
DPOR Registration (Key Personnel)	3.2.10	Section 3.2.10.3	no	Appendices & Attachments
DPOR Registration (Non-APELSCIDLA)	3.2.10	Section 3.2.10.4	no	Appendices & Attachments
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	4
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	5-6
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendices & Attachments
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendices & Attachments
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendices & Attachments
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendices & Attachments
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	6-10

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendices & Attachments
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendices & Attachments
Experience of Offeror's Team Narrative	NA	Section 3.4	yes	11
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	12-15

ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

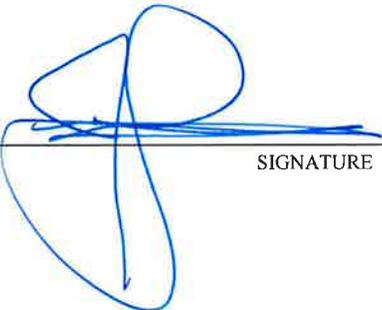
RFQ NO. C00070542DB55
PROJECT NO.: 0064-964-110, P101, C501, RW201

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 09/25/2012
(Date)
2. Cover letter of Addendum #1 - 11/01/2012
(Date)
3. Cover letter of _____
(Date)


SIGNATURE

11/6/2012
DATE

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

- 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 form.

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.

 11/15/12
Signature Date

Senior Vice President
Title

Whitman, Requardt and Associates, LLP
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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- 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 form.

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.

 10/30/2012 PRESIDENT
Signature Date Title

BRYANT CONTRACTING INC.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

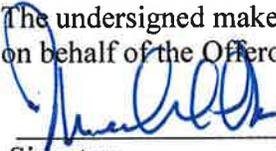
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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 form.

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

George Nice & Sons, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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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.

Chauhan 11/1/2012 Vice President
Signature Date Title

Engineering and Testing Services, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

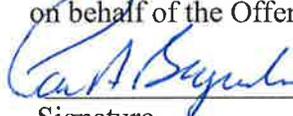
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

- 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 form.

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.

	October 29, 2012	Area Manager
Signature	Date	Title
Paul Baginski		
<u>AMEC Environment & Infrastructure</u>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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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 form.

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.

Leslie R. Bynarde 11/2/12 Vice President
Signature Date Title

H & B SURVEYING and Mapping, LLC
Name of Firm

TRNSPORT - E22
LSPPREQ

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PREQUALIFIED VENDORS SORTED BY VENDOR NAME
THIS LIST INCLUDES ALL PREQUALIFIED LEVELS
AS OF 10/19/2012
- W -

10/19/2012
2:05 PM
PAGE 444

=====

W488
E. V. WILLIAMS, INC.
PREQ. EXP : 10/31/2013

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)

P. O. BOX 65128	002 - GRADING
VIRGINIA BEACH, VA 23467-5128	005 - DRAINAGE STRUCTURES
PHONE : 540-982-1678	006 - PORTLAND CEMENT CONCRETE PAVING
FAX : 540-982-4217	045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: MILLER, DENNIS JAMES
EMAIL: DENNISM@EVWILLIAMS.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A

=====

W029
S. L. WILLIAMSON COMPANY, INCORPORATED
PREQ. EXP : 10/31/2013

--PREQ ADDRESS ----- WORK CLASSES (LISTED BUT NOT LIMITED TO)

P. O. BOX 648	002 - GRADING
CHARLOTTESVILLE, VA 22902-0648	004 - ASPHALT CONCRETE PAVING
PHONE : 434-295-6137	005 - DRAINAGE STRUCTURES
FAX : 434-977-7852	

BUSINESS CONTACT: WILLIAMSON, BLAIR KILLEY
EMAIL: BLAIR@SLWILLIAMSON.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A

=====

10 Franklin Road, SE
Suite 550
Roanoke, VA 24011
Tel (540) 343-8071
Fax (540) 345-2958

October 22, 2012

Employee Owned



Est. 1864

Charlotte
Greensboro
Knoxville
Lynchburg
Nashville
Raleigh
Richmond

Mr. Stephen D. Kindy, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, VA 23219

Re: E. V. Williams, Inc.
Statement of Qualifications for a Design-Build Project
I-64 Widening and Route 623 Interchange Improvements
State Project No. 0064-964-110,P101,C501,B610-B614,B617,B616,D601-D606
Contract ID No.: C00070542DB55

Dear Mr. Kindy:

E. V. Williams, Inc., a subsidiary of The Branch Group, has been a client of The Hartford Insurance Group for over 16 years. During that time, we have supported The Branch Group in their pursuit of projects in the \$100,000,000 range and total programs in excess of \$750,000,000.

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

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

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

This letter will expire one hundred and eighty (180) days from the above date.

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

Sincerely,

HARTFORD FIRE INSURANCE COMPANY

A handwritten signature in blue ink that reads "Theresa S. Stump".

Theresa S. Stump
Attorney-In-Fact

cc: E. V. Williams, Inc.
The Hartford Insurance Group

scottins.com

Insurance, Bonds, Benefit Services and Financial Management
With Captive Insurance Operations in Grand Cayman
Founded 1864

ATTACHMENT 3.2.10

State Project No. 0064-964-110, P101, C501, RW201

SCC and DPOR Information

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
E.V. Williams, Inc.	0478466-6	Corporation	Active	925 South Military Hwy. P.O. Box 65128 Virginia Beach, Virginia 23467	Class A Contractor	2705 037384A	02/28/2013
Whitman, Requardt and Associates, LLP	K000382-4	Limited Liability Partnership	Active	801 South Caroline Street Baltimore, Maryland 21231	ARC, ENG, LS, LA	0407001676	12/31/2013
Whitman, Requardt and Associates, LLP	See Above	See Above		9030 Stony Point Parkway Ste. 220 Richmond, Virginia 23235	ENG	0411000133	02/28/2014
Whitman, Requardt and Associates, LLP	See Above	See Above		Central Park Town Center 1320 Central Park Blvd., Ste. 224 Fredericksburg, Virginia 22401	ENG	0411000861	02/28/2014
Bryant Contracting, Inc.	0260572-3	Corporation	Active	P.O. Box 1000 Toano, Virginia 23168	Class A Contractor	2701 025574A	12/31/2012
George Nice & Sons, Inc.	0265519-9	Corporation	Active	129 Industrial Blvd. Toano, Virginia 23168	Class A Contractor	2701 027703	03/31/2014
EBA Engineering, Inc.	F123900-5	Corporation	Active	714 Westwood Office Park Fredericksburg, Virginia 22401	ENG	0411000871	02/28/2014
Engineering and Testing Services, Inc.	0557195-5	Corporation	Active	5226 Indian River Road, Ste. 103 Virginia Beach, Virginia 23464-6129	ENG	0407005064	12/31/2013
AMEC Environment & Infrastructure, Inc.	F144198-1	Corporation	Active	2020 Winston Park Drive, Ste. 700 ON L6H 6X7 Canada	ENG	0407004079	12/31/2013
AMEC Environment & Infrastructure, Inc.	See Above	See Above		1070 West Main Street, Ste. 5 Abingdon, Virginia 24210	ENG	0411000912	02/28/2014
H&B Surveying and Mapping, LLC	S290560-4	Limited Liability Corporation	Active	612 Hull Street, Ste. 101B Richmond, Virginia 23224	LS	0407005432	12/31/2013

ATTACHMENT 3.2.10

State Project No. 0064-964-110, P101, C501, RW201

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Whitman, Requardt and Associates, LLP	Robert Shackelford	Fredericksburg, Virginia	11705 New Bond Street Fredericksburg, Virginia 22408	Professional Engineer	0402040575	01/31/2013
Whitman, Requardt and Associates, LLP	John Maddox	Richmond, Virginia	2825 Willbrook Drive Richmond, Virginia 23233	Professional Engineer	0402026613	01/13/2014
Whitman, Requardt and Associates, LLP	Mark Vasco	Richmond, Virginia	2601 Whiteclift Drive Richmond, Virginia 23233	Professional Engineer	0402021622	10/31/2014
Whitman, Requardt and Associates, LLP	Gail Kuttesch	Richmond, Virginia	14131 Charter Landing Court Midlothian, Virginia 23114	Professional Engineer	0402048119	12/31/2012
Whitman, Requardt and Associates, LLP	David Gertz	Richmond, Virginia	10841 Snowmass Court Glen Allen, Virginia 23060	Professional Engineer	0402018547	06/30/2014
Whitman, Requardt and Associates, LLP	Jeremy Schlusel	Richmond, Virginia	9105 Carrington Hills Court Glen Allen, Virginia 23060	Professional Engineer	0402033974	01/31/2014
Whitman, Requardt and Associates, LLP	Jeffrey Basford	Baltimore, Maryland	1946 Gablehammer Road Westminster, Maryland 21157	Professional Engineer	0402043143	03/31/2013
Whitman, Requardt and Associates, LLP	Dana Trone Ozlin	Richmond, Virginia	5005 Fremont Place Glen Allen, Virginia 23059	Professional Engineer	0402045607	02/28/2013
Whitman, Requardt and Associates, LLP	Daniel Seli	Richmond, Virginia	2205 Albion Road Midlothian, Virginia 23113	Professional Engineer	0402023410	06/30/2014
H&B Surveying and Mapping, LLC	Leslie Byrnside	Richmond, Virginia	4100 Ketcham Drive Chesterfield, Virginia 23832	Land Surveyor	0403002362	06/30/2013

***NOTE:** We have also included copies of Matthew Puckett's (Construction Manager) required Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber (RLD) Certification and his VDOT Erosion and Sediment Control Contractor Certification (ESCCC). The copies are located behind E.V. Williams' DPOR Office License.

E.V. Williams, Inc.
SCC and DPOR Information



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:05:04

CORP ID: 0478466 - 6 STATUS: 00 ACTIVE STATUS DATE: 01/27/97
 CORP NAME: WILLIAMS, INC., E. V.

DATE OF CERTIFICATE: 01/27/1997 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE AR RTN MAIL:

CITY: ROANOKE STATE : VA ZIP: 24016
 R/A STATUS: 2 OFFICER EFF. DATE: 01/11/08 LOC : 217
 ACCEPTED AR#: 212 02 8808 DATE: 01/26/12 ROANOKE CITY
 CURRENT AR#: 212 02 8808 DATE: 01/26/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	100.00				100.00	5,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
02-28-2013

NUMBER
2705 037384A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

EV WILLIAMS INC
EV WILLIAMS INC
925 SOUTH MILITARY HWY
PO BOX 65128
VIRGINIA BEACH VA 23467 5128

CLASSIFICATIONS H/H



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR CONTRACTORS - CLASS A
CONTRACTOR LICENSE - CLASSIFICATIONS: H/H

NUMBER: 2705 037384A EXPIRES: 02-28-2013
EV WILLIAMS INC
EV WILLIAMS INC



(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

	COMMONWEALTH OF VIRGINIA	
	Soil and Water Conservation Board 203 Governor Street, Suite 206, Richmond, Virginia 23219 Telephone (804) 786-2064	
	EROSION AND SEDIMENT CONTROL RESPONSIBLE LAND DISTURBER	
Expires 10/25/2015	Matthew Puckett	Certificate Number 38549
 DCR Department of Conservation & Forestry Division of Soil & Water Conservation		<i>Jack E. Frye</i> Director Division of Soil & Water Conservation



Commonwealth of Virginia
Virginia Department of Transportation



VERIFICATION OF COMPLETION OF
INTERMEDIATE WORK ZONE TRAFFIC CONTROL TRAINING
AND FLAGGER CERTIFICATION

This is to verify that **Matt Puckett** has successfully completed training and an examination by the Department on the proper practices and methods for the installation, maintenance, removal of temporary traffic control devices and flagging operations.

R. J. Henry

Date 5/31/2012

State Traffic Engineer

Verification No 053112037

Expiration Date 5/31/2016



COMMONWEALTH OF VIRGINIA
Soil and Water Conservation Board
203 Governor Street, Suite 206
Richmond, Virginia 23219
Telephone (804) 786-2064



**EROSION AND SEDIMENT CONTROL
RESPONSIBLE LAND DISTURBER**

Expires
10/25/2015

Matthew Puckett

Certificate
38549

COMMONWEALTH OF VIRGINIA
Virginia Department of Transportation
1401 E. Broad Street
Richmond, VA 23219

Expires
11/16/2012

**Erosion & Sediment Control
Contractor Certification Program
Certificate of Completion
for**

Matt P. Puckett

Cert. #
4106C

Please contact VTCA at 804-330-3312 with changes of employment or change of address.

**Whitman, Requardt and Associates, LLP
SCC and DPOR Information**

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

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



State Corporation Commission

Attest:

Joel H. Beck

Clerk of the Commission

Commonwealth of Virginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On August 10, 2000, a statement of registration as a registered limited liability partnership was filed in this office by Whitman, Requardt & Associates, LLP, a Maryland registered limited liability partnership.

As of the date below, this statement of registration is in effect.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:
June 19, 2012*



Joel H. Peck

Joel H. Peck, Clerk of the Commission



COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

May 30, 2012

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

RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

ID: K000382 - 4

DCN: 12-05-30-0539

Dear Customer:

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

The annual continuation report was filed on May 30, 2012.

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

Sincerely,

Joel H. Peck
Clerk of the Commission

GPACCEPT
CIS0436

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0407001676

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

PROFESSIONS: ARC, ENG, LS, LA

WHITMAN, REQUARDT AND ASSOCIATES LLP
801 SOUTH CAROLINE STREET
BALTIMORE, MD 21231



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407001676 EXPIRES: 12-31-2013
PROFESSIONS: ARC, ENG, LS, LA
WHITMAN, REQUARDT AND ASSOCIATES LLP
801 SOUTH CAROLINE STREET
BALTIMORE, MD 21231



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

FOUR

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-8500

NUMBER

0411000133

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

PROFESSIONS: ENG

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



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000133 EXPIRES: 02-28-2014
PROFESSIONS: ENG
WHITMAN REQUARDT AND ASSOCIATES
9030 STONY POINT PKWY
SUITE 220
RICHMOND, VA 23235



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

FEB 08 2012

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000861

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

PROFESSIONS: ENG

WHITMAN, REQUARDT AND ASSOCIATES LLP
CENTRAL PARK TOWN CENTER
1320 CENTRAL PARK BLVD
SUITE 224
FREDERICKSBURG, VA 22401



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

(DETACH HERE)

BOARD FOR AP/ELSC/DLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000861 EXPIRES: 02-28-2014
PROFESSIONS: ENG
WHITMAN, REQUARDT AND ASSOCIATES LLP
CENTRAL PARK TOWN CENTER
1320 CENTRAL PARK BLVD
SUITE 224
FREDERICKSBURG, VA 22401



GROUP

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

01-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0402040575

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

ROBERT FRANK SHACKELFORD
11705 NEW BOND STREET
FREDERICKSBURG, VA 22408



Gordon N. Dixon
Gordon N. Dixon, Director

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON
01-31-2014**

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

**NUMBER
0402026613**

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

**JOHN PATRICK MADDOX
2825 WILLBROOK DRIVE
RICHMOND, VA 23233**



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

**BOARD FOR APPELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402026613 EXPIRES: 01-31-2014**

**JOHN PATRICK MADDOX
2825 WILLBROOK DRIVE
RICHMOND, VA 23233**



(FOLD)

(DETACH HERE)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233**

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Bryant Contracting, Inc. SCC and DPOR Information



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:15:28

CORP ID: 0260572 - 3 STATUS: 00 ACTIVE STATUS DATE: 08/30/84
 CORP NAME: BRYANT CONTRACTING, INC.

DATE OF CERTIFICATE: 08/31/1984 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: M. ANDERSON BRADSHAW

STREET: 7884 RICHMOND ROAD AR RTN MAIL:
 P.O. BOX 456
 CITY: TOANO STATE : VA ZIP: 23168
 R/A STATUS: 4 ATTORNEY EFF. DATE: 08/30/91 LOC : 147
 ACCEPTED AR#: 212 10 5275 DATE: 06/15/12 JAMES CITY COUN
 CURRENT AR#: 212 10 5275 DATE: 06/15/12 STATUS: A ASSESSMENT INDICATOR: 0
 YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
 12 100.00 5,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2012

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
2701 025574A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

BRYANT CONTRACTING INC

PO BOX 1000
TOANO VA 23168



Gordon N. Dixon
Gordon N. Dixon, Director

***CLASSIFICATIONS* LAC H/H**

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

POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR CONTRACTORS - CLASS A
CONTRACTOR LICENSE - CLASSIFICATIONS: LAC
H/H

NUMBER: 2701 025574A EXPIRES: 12-31-2012
BRYANT CONTRACTING INC



PO BOX 1000
TOANO VA 23168

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

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**George Nice & Sons, Inc.
SCC and DPOR Information**



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:16:25

CORP ID: 0265519 - 9 STATUS: 00 ACTIVE STATUS DATE: 08/17/07
 CORP NAME: NICE & SONS, INC., GEORGE

DATE OF CERTIFICATE: 01/14/1985 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 375.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CECIL G MOORE

STREET: 710 DENBIGH BLVD STE 6-C AR RTN MAIL:

CITY: NEWPORT NEWS STATE : VA ZIP: 23608
 R/A STATUS: 4 ATTORNEY EFF. DATE: 05/19/04 LOC : 211
 ACCEPTED AR#: 212 01 4696 DATE: 12/16/11 NEWPORT NEWS CI
 CURRENT AR#: 212 01 4696 DATE: 12/16/11 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	1,270.00				1,270.00	200,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
03-31-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-8500

NUMBER
2701027703

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS* H/H

GEORGE NICE & SONS INC
129 INDUSTRIAL BLVD
TOANO, VA 23168



Robert N. Dixon
Robert N. Dixon, Director

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

**EBA Engineering, Inc.
SCC and DPOR Information**

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, January 2, 1996

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

EBA Engineering, Inc.

a corporation organized under the laws of MARYLAND
and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.



State Corporation Commission

Attest:

William J. Bridge

Clerk of the Commission



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:19:32

CORP ID: F123900 - 5 STATUS: 00 ACTIVE STATUS DATE: 12/03/07
 CORP NAME: EBA ENGINEERING, INC.

DATE OF CERTIFICATE: 10/22/1997 PERIOD OF DURATION: INDUSTRY CODE: 70
 STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 2000.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143
 ACCEPTED AR#: 212 53 6976 DATE: 09/26/12 HENRICO COUNTY
 CURRENT AR#: 212 53 6976 DATE: 09/26/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	1,700.00					1,000,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON

02-28-2014

NUMBER

0411000871

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

PROFESSIONS: ENG

EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000871 EXPIRES: 02-28-2014
PROFESSIONS: ENG
EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401



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(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(FOLD)

**Engineering and Testing Services, Inc.
SCC and DPOR Information**

Commonwealth OF Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

Engineering and Testing Services, Inc. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is April 12, 2001.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
July 12, 2010*

Joel H. Peck

Joel H. Peck, Clerk of the Commission



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:30:20

CORP ID: 0557195 - 5 STATUS: 00 ACTIVE STATUS DATE: 05/05/09
 CORP NAME: Engineering and Testing Services, Inc.

DATE OF CERTIFICATE: 04/12/2001 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CHARBEL T NABHAN

STREET: 5226 INDIAN RIVER ROAD AR RTN MAIL:
 SUITE 103
 CITY: VIRGINIA BEACH STATE : VA ZIP: 23464
 R/A STATUS: 2 OFFICER EFF. DATE: 04/08/10 LOC : 228
 ACCEPTED AR#: 212 07 3071 DATE: 04/09/12 VIRGINIA BEACH
 CURRENT AR#: 212 07 3071 DATE: 04/09/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	100.00					1,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0407005064

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

PROFESSIONS: ENG

ENGINEERING AND TESTING SERVICES INC
5226 INDIAN RIVER RD STE 103
VIRGINIA BEACH, VA 23464-6129



Gordon N. Dixon
Gordon N. Dixon, Director

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

DETACH HERE

(DETACH HERE)

COMMONWEALTH OF VIRGINIA

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005064 EXPIRES: 12-31-2013
PROFESSIONS: ENG
ENGINEERING AND TESTING SERVICES INC
5226 INDIAN RIVER RD STE 103
VIRGINIA BEACH, VA 23464-6129



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**AMEC Environment & Infrastructure, Inc.
SCC and DPOR Information**

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That AMEC Environment & Infrastructure, Inc., a corporation incorporated under the law of Nevada, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on September 20, 2000; and

That the corporation is in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date:

November 15, 2011

Joel H. Peck

Joel H. Peck, Clerk of the Commission



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/13/12

15:30:56

CORP ID: F144198 - 1 STATUS: 00 ACTIVE STATUS DATE: 09/20/00
 CORP NAME: AMEC Environment & Infrastructure, Inc.

DATE OF CERTIFICATE: 09/20/2000 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: NV NEVADA STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 2000.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143
 ACCEPTED AR#: 212 13 4423 DATE: 08/16/12 HENRICO COUNTY
 CURRENT AR#: 212 13 4423 DATE: 08/16/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	1,700.00					990,000

(Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0407004079

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

PROFESSIONS: ENG

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
2020 WINSTON PARK DRIVE
STE. 700
ON L6H 6X7 CANADA



Gordon N. Dixon
Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
1070 W. MAIN STREET
SUITE 5
ABINGDON, VA 24210



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COMMONWEALTH OF VIRGINIA

BOARD FOR AP/ELSC/DLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000912 EXPIRES: 02-28-2014
PROFESSIONS: ENG
AMEC ENVIRONMENT & INFRASTRUCTURE, INC.
1070 W. MAIN STREET
SUITE 5
ABINGDON, VA 24210



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

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H&B Surveying and Mapping, LLC SCC and DPOR Information

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, April 27, 2009

This is to certify that the certificate of organization of

H & B Surveying and Mapping, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: April 27, 2009



State Corporation Commission

Attest:

Joel H. Beck
Clerk of the Commission



Commonwealth of Virginia
State Corporation Commission

Virg

11/13/12

LLCM3220

LLC DATA INQUIRY

15:33:54

LLC ID: S290560 - 4 STATUS: 00 ACTIVE STATUS DATE: 04/27/09
 LLC NAME: H & B Surveying and Mapping, LLC

DATE OF FILING: 04/27/2009 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 612 HULL STREET STE 101B

CITY: RICHMOND STATE: VA ZIP: 23224-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: TIMOTHY H GUARE

STREET: TIMOTHY H GUARE PLC
 6802 PARAGON PL STE 100

RTN MAIL:

CITY: HENRICO STATE: VA ZIP: 23230-0000

R/A STATUS: 4 MEMBER OF VSB EFF DATE: 07/02/09 LOC: 143 HENRICO COUNTY

YEAR FEES PENALTY INTEREST BALANCE

12 50.00

(Screen Id:/LLC_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407005432

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
612 HULL ST
SUITE 101B
RICHMOND, VA 23224



Gordon N. Dixon
Gordon N. Dixon, Director

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: James A. Openshaw, III – Vice President and General Manager	
b. Project Assignment: Design-Build Project Manager	
c. Name of Firm with which you are now associated: E.V. Williams, Inc.	
d. Years experience: With this Firm <u>15</u> Years With Other Firms <u>19</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): E.V. Williams, Inc. 1997-Present Vice President and General Manager – 2011-Present <ul style="list-style-type: none">• Specializes in Design-Build Project Management for the firm.• Mr. Openshaw has been responsible for all facets of the organization including operations, project procurement/estimating, safety, training, corporate and employee issues related to Civil Rights, public relations, and strategic planning.• Mr. Openshaw instituted goals and strategies for the company and established a team atmosphere between employees and with clients such as VDOT, Virginia Port Authority, Local Municipalities, and private sector clients.• Mr. Openshaw plans, directs, and coordinates operations, project procurement and equipment management to achieve maximum resource utilization and ensures smooth and efficient operations are maintained.• Takes a leading role in strategic planning including such aspects as potential acquisitions, determining new geographic markets to pursue and development of necessary resources required to meet future needs. Vice President – 2006-2011 <ul style="list-style-type: none">• Worked directly with the Vice President of Operations and other senior management personnel on future endeavors and strategic planning as well as how to improve current systems and procedures.• Continued development of estimating/procurement staff to allow continued growth as well as diversification into alternative procurement such as Design-Build and P3. Projects include working with Kiewit/Skanska/Weeks on the Midtown Tunnel and a potential expansion of the Hampton Roads Bridge Tunnel in Tidewater, the 460 project in Southeast Virginia as well as Jacoby Development on redeveloping the old Ford Plant in Norfolk, VA• Assumed responsibility for corporate safety and corporate training.• Diversified the company horizontally by acquiring a concrete crushing and recycling company.• Managed major projects in excess of \$50 million. Vice President of Operations – 1997-2006 <ul style="list-style-type: none">• Mr. Openshaw oversaw the entire company operations and estimating departments. Developed a chief estimator and an operations manager to assist in management of the firm as it doubled in size.• Responsible for all facets of the organization including, operations, estimating, safety, training, public relations, as well as oversight of administration. Particular emphasis was placed on overseeing and developing Project Managers.• Mr. Openshaw simultaneously managed two or three large complex projects.	
e. Education: Degree(s)/Year/Specialization: Virginia Military Institute/1976-79/Civil Engineering Executive Business Management Certificate/2010/Executive Business Management/Old Dominion University	
f. Active Registration: Year First Registered/Discipline/VA Registration #: N/A	
g. Document the extent and depth of experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)	

Route 13/Route 158 – Gates and Hertford Counties, NC – NCDOT

1. Mr. Openshaw is currently serving as the Design-Build Project Manager on this \$54 million project. The project consists of widening approximately seven miles of US 13/US 158 in northeastern North Carolina. Included in the improvements/construction are two new lanes throughout the project, repaving of existing dual lanes, new bridges in highly environmentally sensitive areas that include moratoriums for construction throughout various times of the year, as well as reconstructing the existing Chowan River bridge.

Mr. Openshaw assembled and leads the team which consists of E.V. Williams, Inc. as the lead of the Design-Build Team, RK&K as the lead designer, McLean Contracting Co. as the bridge contractor, and Rose Brothers Paving Co. completing the team and performing the asphalt paving. Of key significance to this project, was our team's Alternate Technical Concept which minimized impacts to sensitive environmental areas as well as reduced project risk associated with unsuitable soils. The project adjusted the original alignment of the roadway which resulted in enhanced safety to the motoring public due to increased sight distance for at-grade intersections.

To date, the design has been completed and approved. All permits have been acquired, land acquisition has been completed, and construction is well under way with a December 2014 completion. Under the leadership of Mr. Openshaw, this Design-Build Team has created success to date and anticipates a successful completion of this project for all stakeholders. The project is currently on schedule and on budget.

2. ***Firm: E.V. Williams, Inc.***
3. ***SOQ submitted January 2011 / Construction commenced September 2012***

Battlefield Boulevard & I-64 Interchange – Chesapeake, VA – VDOT J-27

1. During this \$100 million VDOT project, on which E.V. Williams, Inc. was the prime contractor, Mr. Openshaw was responsible for estimating as well as construction. In this dual role, he oversaw preparation of the bid and assembled the construction team which completed this project ahead of schedule and on budget. Being ahead of schedule and under budget allowed scope to be added to the project, thereby improve traffic handling in the region. The concrete pavement on the project received a bonus based on rideability. One of the unique concepts on this project was to recycle the existing concrete pavement as well as process it into CTA all while keeping the material in the existing median of the interstate. This eliminates approximately 3,000 truckloads of demolished concrete pavement from having to exit the site and impact interstate traffic as well as eliminate approximately 2,800 truckloads of CTA from having to access the site from the same interstate traffic. In addition to the savings to the motoring public, environment impacts were substantially reduced.

Of particular significance on this project were the relationships that Mr. Openshaw and his staff maintained throughout the course of the project with the Hampton Roads District of VDOT, the designer, and the CEI on the project. The collaborative effort of E.V. Williams, Inc., the Owner, Designer, and CEI was a significant reason for the resounding success of this project. While Mr. Openshaw did not have design responsibility for this project, he did have responsibility for all other aspects of the role of Design Build Project Manager.

2. ***Firm: E.V. Williams, Inc.***
3. ***February 2006 – March 2009***

HOV Lane Construction, I-64 – Newport News, VA – VDOT D-08

1. In 1998, Mr. Openshaw successfully led the estimating and construction teams at E.V. Williams, Inc. in the construction of two HOV lanes within the existing median of approximately four miles of I-64 in Newport News, VA. Major elements of the project included complete replacement of a bridge over I-64 as well as the widening of I-64 bridges in each direction over the Billy Wood Canal. Due to an inconsistent topographical survey used for the design, Mr. Openshaw and his construction team had to partner with the VDOT Location & Design Section in re-designing the cross-slopes of the new pavement to account for revised spread calculations and to correct the severe edge slump on the existing concrete pavement. This redesign ultimately required removal of three additional feet of pavement beyond that contemplated in the design and addressed issues with the existing bridge deck at the location of the tie-in for the extension.

Mr. Openshaw and his staff worked closely with the VDOT designers, suggesting revisions to the median barrier configuration and storm drainage facilities that ultimately minimized the time and cost impacts in what eventually became a design-build aspect of the project. With the exception of the design Mr. Openshaw had all of the responsibilities of a Design Build Project Manager on this project.

2. ***Firm: E.V. Williams, Inc.***
3. ***December 1998 – June 2001***

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Robert Shackelford, P.E. – Associate – Construction Management Services	
b. Project Assignment: Quality Assurance Manager	
c. Name of Firm with which you are now associated: Whitman, Requardt and Associates, LLP	
<p>d. Years experience: With this Firm <u>1</u> Years With Other Firms <u>20</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</p> <p>Whitman, Requardt and Associates, LLP Various Positions/Project Manager July 2011 – Present Mr. Shackelford is an Associate for Construction Management Services within the firm and has performed Project Management duties on various contracts for VDOT, George Mason University and local agencies. Projects include:</p> <ul style="list-style-type: none"> • George Mason University Campus Drive Design-Build Project – Quality Assurance Manager – Aug. 2012-Present • VDOT DW Contracts in the Richmond, Fredericksburg a NoVA Districts – Consultant Coordinator – 2011-Present • City of Richmond – RMA Bridge Rehabilitation Project – Construction Project Manager – 2011-Present <p>Virginia Department of Transportation Dist. Construction Eng./Area Construction Eng. July 2004 – July 2011 Mr. Shackelford was the Fredericksburg District Construction Engineer and Area Construction Engineer (ACE) and was responsible for management of over \$200 million in transportation construction projects. He was also the Department’s Project Manager and Senior Department Representative on three Design-Build projects. Projects include:</p> <ul style="list-style-type: none"> • Region 4 Design-Build Bridge Projects – Multiple Districts – District DB Project Manager – 2009-2011 • Region 2 Design-Build Culvert Projects – Multiple Districts – District DB Project Manager – 2009-2011 • Route 3 Improvement Project– LAP/DB – Spotsylvania County – ACE - 2009-2011 • Route 208 Bypass Project Phases 1 and 2 – Spotsylvania County – ACE - 2008-2011 • Cowan Boulevard Project over I-95 – City of Fredericksburg – ACE - 2004-2006 • Interstate 95/627 Interchange Project – Stafford County – ACE - 2004 – 2007 <p>Harris & Associates, Inc. Resident Engineer October 1998 – July 2004 Mr. Shackelford was a Resident Engineer responsible for the construction of civil works projects for numerous clients on transportation construction (highways & bridge), drainage facilities, utility installations and planned development community infrastructure construction projects within the San Francisco Bay Area. Projects included the following:</p> <ul style="list-style-type: none"> • Mountain House (Phase 1 & 2) Roads, Structures, Infrastructure, San Joaquin County, CA – RE – 2002-2004 • Highway 4 Bypass (Phase 2) – Antioch and Brentwood, CA – RE - 2000-2002 <p>California Department of Transportation Resident Engineer/Assist. RE July 1991 – October 1998 Mr. Shackelford was a Resident Engineer and Structure Representative for several Caltrans divisions and worked on numerous bridge and highway construction projects in the San Francisco Bay Area. Projects included the following:</p> <ul style="list-style-type: none"> • US Route 101/I-80 Central Freeway Seismic Retrofit Project – Field Engineer - San Francisco, CA – 1997-1998 • US Route 101 Marina and Presidio Viaduct Seismic Retrofit Projects – Field Engineer -S.F., CA – 1995-1997 • Interstate 80/Hilltop Road Interchange reconstruction and widening – Field Engineer - Richmond, CA – 1990-1992 	
e. Education: Degree(s)/Year/Specialization: B.S./Civil Engineering/The Ohio State University/ 1991	
f. Active Registration: Year First Registered/Discipline/VA Registration #: Professional Engineer/Virginia/2005/#040575	
<p>g. Document the extent and depth of experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> 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. <p>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</p> <p>George Mason University Campus Drive Project – Fairfax, VA</p> <p>I. Mr. Shackelford is the Quality Assurance Manager responsible for ensuring project quality on the \$14 million Design-Build contract, which includes the construction of a Campus Drive through the GMU campus with a new bridge carrying Route 123 over Campus Drive. Along with the Route 123 improvements, the project installs a new</p>	

signalized intersection at Route 620 Braddock Road. The project is being delivered according to VDOT Design-Build requirements and Mr. Shackelford is responsible for providing all QA functions for construction. Items include documentation/reporting, material sampling/testing, certification of payment applications and ensuring the project is built in accordance with the plans and specifications and all VDOT requirements.

2. **Firm: Whitman, Requardt & Associates, LLP**

3. **August 2012 – Present**

Region 4 Design-Build Bridge Contract – Richmond and Fredericksburg Districts – VDOT

1. Mr. Shackelford served as the Project Manager/Senior Dept. Representative on the \$6.6 million multi-District ARRA contract, which replaced ten (10) bridges in the VDOT Richmond & Fredericksburg Districts. Mr. Shackelford was responsible for coordination and approval of all work packages for construction, problem-solving/negotiations with the Design-Builder, coordination of IA/IV inspections/testing and payment application approvals. He was also responsible for the processing of change requests, seeing that public information notifications were sent out and ensuring that bridge work was performed in compliance with contract requirements.

2. **Firm: Virginia Department of Transportation**

3. **2009 – 2011**

Region 2 Design-Build Culvert Contract – Richmond, Fredericksburg and Northern Virginia Districts – VDOT

1. Mr. Shackelford served as the Project Manager/Senior Dept. Representative on the \$9.2 million multi-district contract, which reconstructed or rehabilitated nine (9) deficient drainage systems in the VDOT Richmond, Fredericksburg and Northern Virginia Districts. Mr. Shackelford was responsible for all coordination and approval of all work packages for construction, problem-solving/negotiations with the Design-Build team, coordination of IA/IV inspections/testing and pay application approvals. He was also responsible for the processing of change requests, ensuring public information notifications went out, environmental permitting requirements and commitments were met and he ensured that culvert work was performed according to the contract requirements.

2. **Firm: Virginia Department of Transportation**

3. **2009 – 2011**

Cowan Boulevard Project over I-95 – City of Fredericksburg, VA – VDOT

1. Mr. Shackelford was the Area Construction Engineer assigned to this \$10.7 million project, which constructed a new east-west route between Route 1 and Central Park within the City of Fredericksburg to relieve congestion on Route 3 and other nearby local roads. The project built 3 miles of divided roadway, a new three span structure over I-95, a precast arch culvert, storm water management facilities, 2 new signalized intersections and other roadway features. Mr. Shackelford was responsible for managing the FHWA funded project and supervised all Construction Management and Inspection staff. Duties included verification that all Department and FHWA requirements and processes were satisfied on the project. He reviewed and approved project documentation/recordkeeping and ensured that material and testing was in conformance with all standards. He approved monthly pay packages, communicated with project designers and other VDOT support sections. He was responsible for negotiations and authorized changes on the project, resolved conflicts and notices of intent to file claims with the contractor and resolved all financial closeout items with the FHWA on the contract. He also conducted project meetings and dealt with the public, government bodies and project stakeholders.

2. **Firm: Virginia Department of Transportation**

3. **2004 – 2006**

I-95/627 Interchange Project – Stafford County, VA – VDOT

1. Mr. Shackelford was the Area Construction Engineer assigned to this \$41.5 million project, which constructed a new interchange on Interstate 95 north of Fredericksburg, a connector road to Route 1 and associated roadway features. Project built approximately 5 miles of both undivided and divided roadway, 5 new structures, 4 signalized intersections, soundwall, storm drain systems, lighting and soundwall on this multi-year contract. Mr. Shackelford was responsible for managing the FHWA funded project and supervising all Construction Management and Inspection staff. Duties included verification that all Department and FHWA requirements and processes were employed and satisfied on the project. He reviewed and approved project documentation and ensured that materials used met standards. He approved monthly payments to the contractor, frequently communicated with project designers and coordinated with VDOT support sections to resolve unforeseen conditions encountered on the project. He negotiated and authorized changes on the project with the contractor and was responsible to resolve conflicts and notices of intent to file claims with the contractor. He also was responsible to closeout all financial settlements with the contractor and eventually FHWA on the contract. He conducted partnering sessions and project meetings with the contractor and communicated extensively with utilities, the public, local governments, media outlets and project stakeholders in formal and informal settings.

2. **Firm: Virginia Department of Transportation**

3. **2004 – 2007**

I-81 Widening and Bridge Replacements over Buffalo Creek and Maury River – Rockbridge County, VA – VDOT

1. Mr. Maddox was the Project Manager responsible for the design of both projects under a single design contract. The project construction totaled \$45 million and included widening 2 miles of I-81 from four to six lanes. The project included the replacement of the I-81 Bridge over Buffalo Creek with an approximate length of 600 feet and the bridge over Maury River with an approximate length of 800 feet. The design included a complex maintenance of traffic plan to maintain two lanes of traffic in each direction during all phases of construction. Mr. Maddox provided oversight and coordination for all elements of the design, including roadway, hydraulic, SWM, structural, geotechnical, environmental permits and public involvement. Duties included coordination of the design with FHWA and VDOT staff. The projects received the 2008 ACEC Grand Award and the Buffalo Creek was awarded the “VDOT Virginia Statewide Construction Quality Award” and NPHQ Award “Breaking the Mold”.
2. ***Firm: Whitman, Requardt and Associates, LLP***
3. ***August 1999 – December 2007***

Fairfax County Parkway (FCP) Widening and Interchange at Fair Lakes Parkway – Fairfax County, VA – VDOT

1. Mr. Maddox is the Project Manager responsible for the design of a \$44 million project, which widens FCP from four to six lanes for 2.3 miles and provides an interchange at Fair Lakes Parkway and Monument Drive. The interchange includes two new bridges and over 43,000 sf of retaining walls. The project also required the design of over 70,000 sf of noise walls. The FCP Bridge over Route 50 was widened from four to six lanes. The project also includes an extensive MOT plan with multiple phases of construction for maintaining over 45,000 vpd during the construction of the project. Mr. Maddox provides oversight and coordination for all elements of the project including roadway, hydraulic, SWM, structural, utility relocation, traffic engineering, environmental permits, traffic forecast and analysis, and public involvement. Mr. Maddox provided a leadership role in stakeholder outreach to the existing Homeowners’ Associations, Fair Lakes League and the Fairfax County Park Authority to minimize right-of-way impacts, aesthetic and pedestrian access to the Rocky Run Stream Valley Park.
2. ***Firm: Whitman, Requardt and Associates, LLP***
3. ***October 2001 – Present (Under Construction)***

Route 123 Interchange at Route 1– Prince William County, VA – VDOT

1. Mr. Maddox is the Project Manager responsible for the design of a \$70 million project, which includes a tight urban interchange at Route 123 and Route 1 and the widening from four to six lanes 1.7 miles of Route 1 and Route 123. The project requires two new bridges; Route 123 over Route 1 and Route 123/Belmont Bay Drive over CSXT Railroad. Route 123 and the connecting ramps are elevated on MSE retaining walls to reduce the right-of-way impacts of the project. The replacement of the existing bridge over Marumsco Creek required a detailed analysis of the FEMA floodplain. A complex MOT plan is also required to maintain traffic operations during multiple phases of construction including a complete traffic analysis of each phase of construction. Mr. Maddox provides oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, traffic engineering, ITS, TMP, traffic forecasting and analysis, permitting and public involvement.
2. ***Firm: Whitman, Requardt and Associates, LLP***
3. ***December 2007 – Present***

Route 29 Bypass Sweet Briar Interchange – Amherst County, VA – VDOT

1. Mr. Maddox served as the Project Manager for the design of a \$35 million project, which included the relocation and extension of existing Route 29 to Business Route 29 by elevating the four-lane divided roadway a maximum of 28’ over the proposed Route 29 Bypass. The innovative design separated the local traffic on Business Route 29 from the high speed traffic on the Bypass. Rutledge Creek and its associated FEMA Floodplain traversed the project through four box culverts requiring a detailed analysis to ensure the 100-year floodplain was not impacted by the project. A complex sequence of construction and the maintenance of traffic plan were required to extend the Bypass and Route 624 under the Norfolk Southern Railway. The railroad effort included a one-mile relocation of the track and the construction of two railroad bridges, requiring extensive coordination with Norfolk Southern. Mr. Maddox provided oversight and coordination for all elements of the design including traffic forecast and analysis, interchange design, railroad relocation, highway design, three new highway bridges and two railroad bridges, retaining walls, drainage, stormwater management and public involvement.
2. ***Firm: Whitman, Requardt and Associates, LLP***
3. ***1996 – 2005***

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Matthew Puckett – Construction Manager	
b. Project Assignment: Construction Manager	
c. Name of Firm with which you are now associated: E.V. Williams, Inc.	
d. Years experience: With this Firm <u>4.5</u> Years With Other Firms <u>10</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): E.V. Williams, Inc. April 2008 – Present Mr. Puckett has served in the capacities of Project Superintendent and Construction Manager in his tenure at E.V. Williams, Inc. on several VDOT and private sector projects. Mr. Puckett is uniquely qualified as a Construction Manager due to his background in the field and office environments. Mr. Puckett interacts effectively with owners, corporate officers, and design professionals, as well as subcontractors, suppliers, and his own staff to professionally and efficiently create the best result for all stakeholders. Mr. Puckett served as Construction Manager on the following projects: <ul style="list-style-type: none"> • Princess Anne/Kempsville Road Intersection Improvements –Virginia Beach, VA – 2011-Present (\$20 million) • HRT Newton Road – Norfolk, VA – 2011 (\$2 million) • Suffolk Airport – Suffolk, VA – 2011(\$2.6 million) • Ebony Heights – Portsmouth, VA – 2011 (\$1.6 million) • Warwick Boulevard – Newport News, VA – 2010 (\$20 million) • JFCOM – Suffolk, VA – 2010 (\$2 million) • Atlantic Gardens/Red Mill Landings –Virginia Beach, VA – 2010 (\$1.6 million) • Settler’s Market – Williamsburg, VA – 2008-2010 (\$15.5 million) Thomas Brothers, Roanoke, VA, 2006-2008 While at Thomas Brothers, a grading division of English Construction, Mr. Puckett worked as a Construction Manager for their various projects including all VDOT projects. He was responsible for documenting changes, ensuring projects were built in accordance with contractual requirements including appropriate permits. Lynchburg City, Lynchburg, VA, 2004-2006 In addition to erosion and sediment control inspections for all construction projects, Mr. Puckett was responsible for review of construction plans for conformance with applicable permits as well as Federal, State, and Local requirements. L.H. Sawyer Paving, Roanoke, VA 1998-2004 Starting as a laborer on an asphalt paving crew, Mr. Puckett soon acquired the skills to handle project management for government and private paving jobs of all sizes.	
e. Education: Degree(s)/Year/Specialization: B.S./2006/Environmental Science/Lynchburg College	
f. Active Registration: Year First Registered/Discipline/VA Registration #: 2006 / Erosion & Sediment Control Responsible Land Disturber/Certification # 38549 2006 / Erosion and Sediment Control Contractor Certification/Certification # 4106C 2009 / OSHA 10-Hour Safety Card 2012/Intermediate Work Zone Traffic Control Training and Flagger Certification /Certification # 053112037	
g. Document the extent and depth of experience and qualifications relevant to the Project. <ol style="list-style-type: none"> 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.) Princess Anne/Kempsville Road Intersection Improvements – Virginia Beach, VA – VDOT 1. Mr. Puckett is the Project Superintendent responsible for all field operations associated with this \$20 million	

design-bid-build project. The intersection improvements consist of widening Princess Anne Road, Kempsville Road and Witchduck Road from four lanes to six lanes. Other major items of work include the relocation of the Princess Anne Road/Kempsville Road intersection and portions of Princess Anne Road. Mr. Puckett is also responsible for construction/installation of storm drain system, medians, signalization, grading, relocation of entrances, bridgework, and utility relocations. Key to this project is the complete replacement of one bridge while maintaining a minimum of four lanes of traffic with the extension of both ends of a cast-in-place triple box culvert.

In addition, Mr. Puckett handles the daily planning and coordination of all construction activities. He works with his Foremen to ensure safety and efficiency on the job site. Mr. Puckett coordinates with his Project Manager on schedule updates and subcontractor communication. He prepares look-ahead schedules and project updates which he presents at weekly progress meetings. Mr. Puckett is also responsible for implementing the QC Program and monitoring QA testing to ensure compliance with the QC Program. Mr. Puckett is responsible for meeting budgets as well as projecting remaining costs to complete the project. With these responsibilities on this project he is performing the roles the Construction Manager will perform on the I-64 project.

2. ***Firm: E.V. Williams, Inc.***
3. ***February 2011 – Present***

Warwick Boulevard – Newport News, VA – VDOT

1. This project build-bid-build project involved widening from four to six lanes of approximately three miles of Warwick Boulevard in Newport News, VA. New storm drainage, curb, gutter and sidewalk, paving, street lighting, traffic signalization, and landscaping were major elements of this project. All work had to be completed while maintaining a minimum of two lanes of traffic in each direction. High traffic resulted from the commercial businesses in the area as well as Christopher Newport University.

Mr. Puckett served as a Construction Manager and was tasked with seeing this challenging urban road widening project to completion. In that role, he was responsible for progressing and updating the schedule, coordinating major traffic shifts with the onsite traffic manager as well as Quality Assurance. Mr. Puckett was responsible for coordinating access and egress of materials, equipment, and personnel to limited access work locations. During Mr. Puckett's tenure on this job, the project underwent two VOSH inspections with zero citations. The project had an excess of 150 utility conflicts and Mr. Puckett was responsible for coordinating with the various public utility companies, surrounding businesses, surrounding residences, VDOT, subcontractors, and other stakeholders on the job.

2. ***Firm: E.V. Williams, Inc.***
3. ***January 2009 – June 2010***

Settler's Market – Williamsburg, VA – AIG Baker Williamsburg LLC

1. This \$15.5 million site work project was built on a 55-acre commercial site in Williamsburg, VA called Settler's Market. The project included all aspects of site work including clearing, site preparation, roadway work, site lighting, drainage, and landscaping. Key elements on this project also included signalization and construction of turn lanes on Monticello Avenue, new interior streets, working adjacent to environmentally sensitive areas, the development of settlement ponds to function as part of a storm water management plan as well as a box culvert and large diameter drainage pipe.

Mr. Puckett had primary responsibility for generating, progressing, and updating the schedule, coordination of self-performed work and managing subcontracted work. He concurrently coordinated work with onsite building contractors. Mr. Puckett managed QA testing on the project for E.V. Williams, Inc. Material testing, documentation and certification required for VDOT acceptance of the roadway sections was also his responsibility. All changes on the project directed by the Owner were tracked and later incorporated into an as-built set of project drawings.

2. ***Firm: E.V. Williams, Inc.***
3. ***April 2008 – December 2008***

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. . Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Battlefield Blvd. & I-64 Interchange Location: Chesapeake, Virginia	Name: Kimley-Horn & Associates, Inc.	Name of Client: Virginia Department of Transportation Project Manager: Mr. Michael Johnson Phone: (757) 494-5470 Email: MichaelJ.Johnson@vdot.virginia.gov	July 2009	March 2009	\$98,000	\$102,000	\$37,000

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of the work can be considered accordingly.

- Scope of Work Similar to I-64**
- Urban interstate with high traffic volumes
 - Interchange improvements while maintaining traffic flow
 - Reconstruction of bridges
 - Adding additional travel lanes
 - Incorporation of Intelligent Transportation Systems
 - Complex and substantial traffic shifts

Project Description – E.V. Williams Inc., was the prime contractor on this large scale urban highway project, which involved the complete re-construction and widening of I-64 from Greenbrier Parkway to the I-464 Interchange. Also included in the scope of work was an additional widening of I-64 from the I-464 Interchange to the High Rise Bridge. The project involved reconstructing and widening four miles of I-64, re-configuring a standard cloverleaf intersection to include the addition of Collector Distributor (C-D) Roadways for the entire length of the project. The project also included installation of several mechanically-stabilized earth retaining walls, design and construction of concrete sound walls, installation of traffic management systems and the incorporation of large stormwater management facilities within the footprint of the I-64 corridor. E.V. Williams, Inc. teamed with McLean Contracting Company to construct the new Battlefield Blvd. bridge, which consisted of two new pre-stressed concrete girder bridges, two bridge widenings over the CSX Railroad, and the construction of two “braided” bridges on the C-D Roadways between Greenbrier Parkway and Battlefield Blvd on I-64.

Roadway Reconstruction and Widening – Four miles of I-64 was widened from four to eight mainline lanes and the addition of four C-D feeder lanes at the braided bridges and cloverleaf interchanges. Mainline pavement sections included 13” of continuous reinforced concrete over cement treated aggregate. Feeder lanes were comprised of full depth asphalt paving over cement treated aggregate. An additional asphalt pavement travel lane was added to the existing I-64 between I-464 and the High Rise Bridge.

Traffic Management – Sequence of construction and maintenance of traffic required all travel lanes to remain open during construction of this urban interstate. This also included maintaining traffic for the demolition of the existing Battlefield Blvd. bridge over I-64 and keeping two lanes of traffic open on the bridge during the demolition and reconstruction phases. A pre-approved contingency traffic management plan was immediately implemented when a jack and bore operation encountered an unanticipated obstruction under the travel lanes.

Schedule – The project completion date was fixed at July 30, 2009. The project was substantially completed four months ahead of schedule in March 2009, E.V. Williams, Inc. subsequently earned the maximum early completion bonus. This allowed the Department to reconfigure a major tie-in and add an enhancement of an additional C-D lane at the 168 interchange.

- Innovation** –
- The existing four travel lanes of reinforced concrete pavement was scheduled for demolition and disposal. Working with the Department, E.V. Williams was able to incorporate the demolished concrete, into the Cement Treated Aggregate as required for the roadway section. This work was performed entirely within the right-of-way, without requiring the material site to be taken off site, or potentially impacting traffic.
 - Utilizing the existing ramps at Battlefield Boulevard, the Team was able to begin the reconstruction of the Battlefield Boulevard bridge 6 months ahead of schedule.
 - Working with the Regional Traffic and the District offices, a revised sequence of construction allowed the C-D lanes to be constructed and existing traffic to be shifted off the mainline, saving the department \$750,000, thus reducing the construction schedule by three months.

- LESSONS LEARNED**
- Having the design engineer on-board and attending each progress meeting eliminates bottlenecks and resolves issues in a timely manner.
 - Importance of traffic management and contingency plans prior to major traffic shifts and various types of work.
 - Public outreach to keep local businesses, homeowners, and the monitoring public informed of progress improved public appreciation and understanding during the construction process.

E. V. Williams Team Advantage
E. V. Williams has a proven track record on primary interstate projects involving high traffic volumes and complex traffic control plans. Utilizing our experiences and team approach, we can apply the lessons learned directly to the I-64 Project.



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

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					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <i>Birdneck Road Improvements</i> Location: Virginia Beach, Virginia	Name: <i>Virginia Department of Transportation</i>	Name of Client: <i>Virginia Department of Transportation</i> Project Manager: Mr. Antonio Bassett Phone: (757) 494-5480 Email: Antonio.Bassett@VDOT.Virginia.gov	April 2011	December 2010	\$28,000	\$34,000	\$18,000

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of the work can be considered accordingly.

- Scope of Work Similar to I-64**
- Adding additional lanes to an urban highway
 - Highly sensitive environmental issues
 - Intelligent Transportation Systems installation
 - Subgrade stabilization/ground improvements

Project Description – The Birdneck Road project consisted of widening 2.9 miles of two-lane roadway to a four-lane divided roadway. This included installation of over 38,000 linear feet of new utilities, new roadway pavement sections, ground improvements, traffic control, sound abatement walls, landscaping, brick paver walkways, signalization, lighting, and smart traffic systems. All improvements were constructed within a swampy marsh area and under current traffic configuration of an existing two-lane road.

Roadway Reconstruction and Widening – The reconstruction of existing and new widening work involved installing 25,000 linear feet of storm drain piping, including over 230 storm drain structures, four SWM basins, 13,000 linear feet of water main installation, and approximately 7,000 linear feet of sanitary sewer lines. Installation of these utilities proved challenging as the elevation of this swampy area is at a minimal elevation above sea level, requiring additional emphasis on environmental concerns and performing all work while maintaining two lanes of unobstructed traffic at all times.

Schedule – The original contract project completion date was April 1, 2011. A revised Maintenance of Traffic phasing and adding additional utility crews allowed the project to be completed early in October 2010.

Traffic Control – As part of the gateway to the oceanfront, Birdneck Road serves as a highly traveled thoroughfare. The original project phasing called for five phases; however, E.V. Williams worked closely with the Department to revise the MOT plan to three phases and significantly reduce the project schedule by five months.

Ground Improvements – With the new and existing roadway alignment running through the marshlands, the existing and proposed roadway subgrades required extensive improvements to prepare for the pavement section. With a combination of undercut and 12” manipulation with cement and lime, the subgrade was successfully stabilized to construct the roadway.

Innovation – All pipe trench spoil was identified as unsuitable and required the backfill of all utility pipe to be flowable backfill. Working with the Department, E.V. Williams was able to provide a value engineering solution using select backfill rather than using costly flowable backfill. This substitution resulted in a substantial savings to the Department.

The existing design called for an at-grade intersections, which required new subgrade construction and pavement sections. However, the existing pavements were found to be in good condition and reasonably close to the new proposed grades. Rather than performing a full reconstruction, milling and overlay of these areas was performed. This saved the Department over \$250,000 and valuable time on the project. This also reduced impacts to the traveling public.

- LESSONS LEARNED**
- Being prepared with innovative approaches to stormwater management to minimize environmental impacts.
 - Necessity to be prepared to utilize varying subgrade stabilization methods depending on soil characteristics.
 - CPM scheduling is essential in maintaining conflict resolution and assessing negative impacts.

E. V. Williams Team Advantage
E. V. Williams is proposing to utilize the same integrated team approach to the project, which will allow the Lessons Learned above and innovations to be applied directly to the I-64 project.



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. . Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 13/158 Location: Gates & Hertford Counties, NC	Name: Rummel, Klepper & Kahl, LLP 900 Ridgefield Drive, Suite 350 Raleigh, NC 27609	Name of Client: North Carolina Department of Transportation Project Manager: Scott Emory Phone: (252) 332-4514 Email: semory@ncdot.gov	December 2014	December 2014	\$54,000	\$54,000	\$27,000

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of the work can be considered accordingly.

Scope of Work Similar to I-64

- Design Build project
- Bridges over water
- Interchange improvements
- Design QA/QC
- Construction QA/QC
- Adding additional travel lanes

Project Description – This Design-Build Project in Hertford and Gates Counties, is planned to widen US 13/US 158 from US 158/NC 45 near Winton to the US 158 Bypass in Tarheel. The proposed improvements will improve approximately 7.1 miles as a four-lane divided facility with a 46-foot median (30-foot at the Chowan River). The entire facility was designed to meet a 60-mph design speed for a rural principal arterial. The Design-Build Team has designed the US 13/US 158 Interchange at NC 45, with all other crossings on the mainline designed and constructed as at-grade intersections with directional crossovers and median U-Turn bulb-outs.

Roadway Design, Reconstruction and Widening – The original alignment proposed by the Department was modified to enhance the safety of the travelling public. The E.V. Williams Team was able to increase the site distance for the at-grade intersections by increasing design speed and curve standards. The overall result required no additional right-of-way acquisition or cost to the Department.

Interchange Design and Reconstruction – The NC 45/158 interchange was redesigned as a project safety enhancement. By simply reversing the grade separation at this interchange and having Route 13 cross over Route 158, we were able to reduce the quantity of excavation of unsuitable soils. Further, we were able to remove the need for a temporary roadway to maintain traffic as well as avoid the relocation and protection of an existing 12” sewer force main.

Structures Design and Construction – Project structures include new single-span dual bridges at Buckhorn Creek, dual bridges at the Route 13 over NC 45 interchange, a new 1,200-foot long bridge over the Chowan River and the rehabilitation of the existing bridge over the Chowan River.

Traffic Management – Utilizing innovative traffic control measures, our Team was able to phase the project’s sequence of construction to eliminate the need for any complete closure of the roadway, which improved traffic operations and safety of the project. An existing signalized intersection was also relocated on the newly proposed ramps reducing the construction activity and minimizing impacts to the traveling public.



Innovation – During the technical proposal and pricing phase, the E.V. Williams Design-Build Team identified that a previous undercut had been performed on the east side of the existing roadway. In addition, it was determined that the Department owned right-of-way on the east side of the roadway. The RFP indicated the structure and roadway to be located west of the existing roadway.

Exploration of widening to the west side showed unsuitable material extending well under the existing roadway with the remainder of existing slope containing highly organic soils, all of which would need to be removed and replaced. Adding further complication to the west side expansion was the presence of a 12” gas main, which runs parallel and within the NCDOT right-of-way in this area. Utilizing this information we developed an ATC (Alternate Technical Concept) and submitted it to the Department for approval. This innovation saved the Department an estimated five million dollars, not including the cost to relocate the existing 12” gas main that could remain in its current location crossing the Chowan River.

LESSONS LEARNED

- Importance of beginning permit acquisition as soon as possible.
- Value of Alternate Technical Concepts and how they can improve the resulting end product.
- The importance of having accurate baseline survey and topographical data prior to design phase.

E. V. Williams Team Advantage

E. V. Williams is proposing the same Design-Build Project Manager, which will allow the Lessons Learned above to applied directly to the I-64 project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-81 BRIDGES OVER BUFFALO CREEK AND MAURY RIVER Location: Rockbridge County, VA	Name: Buffalo Fairfields Echols, LLC (Fairfield Skanska, Inc.) Maury Orders Construction Company	Name of Client: Virginia Department of Transportation Phone: See below Project Manager: Mr. Mike Branscome Phone: (540) 332-7746 Email: Michael.Branscome@VDOT.Virginia.gov	Buffalo 2004 Design	Buffalo 2004 Design	\$27,151	\$27,073	\$1,313
			2007 Construction	2007 Construction	\$17,736	\$18,184	\$908

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

Whitman, Requardt and Associates, LLP (WR&A) was selected as the prime designer for the I-81 bridge replacement projects of both the Buffalo Creek and Maury River bridges under a single contract. WR&A completed approximately 90% of the design from our Richmond, Virginia office. The bridges had reduced shoulder width and were classified as functional obsolete. The projects were to be the first part of the I-81 reconstruction efforts and were designed to widen I-81 from 4 to 6 lanes.

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

- Scope of Work Similar to I-64**
- Roadway
 - Retaining Walls
 - Box Culvert
 - Environmental Permits
 - Geotechnical
 - Hydraulics and SWM
 - Complex MOT Plan
 - Public Involvement
 - Design QA/QC
 - Construction Engineering
 - Project Management

Hydraulic Analysis – The projects required a detailed hydraulic analysis of both Buffalo Creek and Maury River to ensure the project had no impact to the 100-year flood elevation. Additionally, the analysis included the evaluation of temporary causeways into the stream during construction. The project design needed to carefully consider the karst geologic features along the corridor. Five stormwater management facilities were designed for the projects and all existing CMP drainage pipes were replaced. The projects also included the design of the extension of 3 box culverts.

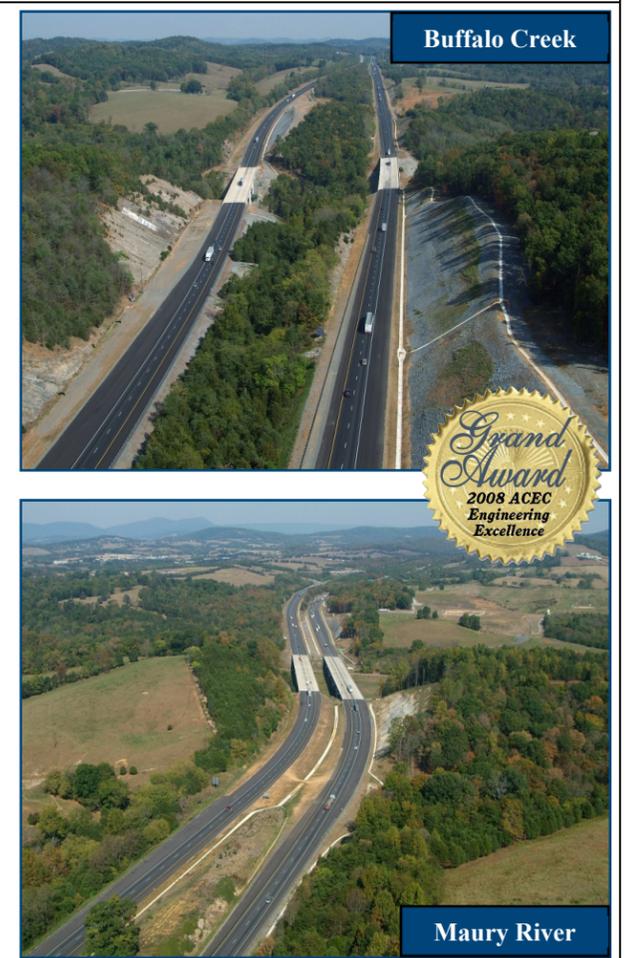
Geotechnical Engineering – WR&A provided all geotechnical engineering services for the projects, which included an extensive testing and boring program to locate potential karst features. Our geologists performed extensive site visits and used dye testing to identify underground stream features that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

Structural Design – The structural design of the two I-81 bridges over the Buffalo Creek gorge with a depth well over 100 feet on I-81 was a main focus of the design. The bridges were on independent alignments and grading with approximately 1,000' distance between the roadways. The NBL bridge was the more challenging design due to the requirement that it be constructed in two stages just downstream from the existing bridge, and due to the site topography. Alignment studies also revealed the need to raise the profiles of the bridges approximately 8 feet to meet current FHWA Interstate Design Standards. The design consists of continuous hybrid steel plate girder bridges with the following span configurations: NBL Bridge: 137'-166'-166'-137' = 606' and the SBL Bridge: 138'-154'-154'-138' = 584'. The NBL Bridge is on a curved alignment, which was an existing condition, while the SBL Bridge is on a tangent alignment. Both bridges required tall piers of up to 110 feet in height due to the depth of the gorge.

The Maury River bridges are three lanes wide with 14-foot wide shoulders on each side. The new bridges are on parallel alignments and are of different lengths and layouts due to the topography and constraints of the site. The NBL bridge is 825 feet in length with five spans (137'-151'-164'-177'-193') and the SBL bridge is 743 feet in length with four spans (193'-177'-177'-193'). They are on tangent alignments, but the NBL bridge has a 1°-45' curve in the southernmost end span. The bridges have fully-continuous hybrid steel superstructures with 73-inch deep plate girders. Both the Buffalo Creek and Maury River bridges featured an innovative design element for the treatment of the deck joints at the abutments. The ends of the steel girders are encased in a concrete diaphragm that is integral with the deck and located just beyond the bearings. The deck joints are tooth expansion joints that are located on the abutment side of the concrete diaphragm. VDOT has since included the detail in the Design Guidelines as a special alternative joint detail.

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

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



- LESSONS LEARNED**
- Early Involvement of geotechnical staff can have a significant enhancement to constructability and cost of project.
 - Maintenance of traffic plans should carefully consider the strengthening of existing paved shoulders for each phase of construction.
 - Innovative bridge design approach can eliminate bridge deck joints resulting in reduce maintenance cost throughout the life of the bridge.

WR&A Team Advantage
WR&A is proposing the same Project Manager and design staff for the I-64 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: FAIRFAX COUNTY PARKWAY INTERCHANGE AT FAIR LAKES PARKWAY Location: Fairfax County, VA	Name: Shirley Contracting Company, LLC	Name of Client: <i>Virginia Department of Transportation</i> Phone: See below Project Manager: Mr. Nassre Obeed Phone: (703) 259-1723 Email: Nassre.Obeed@VDOT.Virginia.gov	2013 Construction	2013 Construction	\$43,961	\$43,961 (Est.) Under Construction	\$3,736

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

Scope of Work Similar to I-64

- Roadway
- Retaining Walls
- Bridge
- Box Culverts
- Environmental Permits
- Hydraulics and SWM
- Traffic Control Devices
- Complex TMP
- Utilities Design
- Public Involvement
- Design QA/QC
- Construction Engineering
- Project Management

Whitman, Requardt and Associates, LLP was selected as the prime designer to provide engineering services to VDOT for the study and final design of an interchange at the intersection of the Fairfax County Parkway and Fair Lakes Parkway/Monument Drive intersection. WR&A completed approximately 90% of the design services from our Richmond, Virginia office. The project was partially funded with ARRA funding for construction, which required extensive coordination with FHWA. The project features include:

Roadway Reconstruction and Widening – 2.3 miles of Fairfax County Parkway was widened into the median increasing the number of lanes from 4 to 6 and 0.7 miles was totally reconstructed to facilitate raising FCP up and over Fair Lakes Parkway and Monument Drive. Over 3,000 feet of Fair Lakes Parkway was widened/reconstructed to provide additional turn lanes.

Interchange Design – The project included the design of a Split-Diamond Interchange to provide access to both Fair Lakes Parkway and Monument Drive. The four ramps with over 7,000 feet total in length. The ramps intersected Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches.

Hydraulic Analysis – The project contained a major drainage outfall to the Rocky Run Stream through an 800-foot long triple 8’x10’ box culvert under Ramps B and C and Fairfax County Parkway. The project also included a single 400-foot long 7’x 8’ box culvert under Ramp B and C and Fairfax County Parkway. Additionally, Fairfax County Parkway and Fair Lakes Parkway are located on dams for regional stormwater management lakes, which are regulated by DEQ. The dam is being modified by the project and a new stormwater outfall was extended into the existing lake to provide water quality requirements for the project. This required WR&A to complete a dam break analysis and coordination for review of the dam modification with DEQ and the County of Fairfax.

Structural Design – The bridge design efforts included the complete design of two single-span structures consisting of precast bulb tee beams spanning 116’ and 142’, each with a width of 124’. Abutments consisted of semi-integral concrete seats on steel piles with MSE retaining walls imprinted with an architectural finish of ashlar stone. The design

included under bridge lighting for the sidewalks and pedestrian movements. The project also included widening the Fairfax County Parkway bridge over Route 50 by adding two additional travel lanes in the median. The bridge widening consisted of two span structural steel plate girders totaling 220’ in length set on a new concrete pier aesthetically similar to the existing piers. The design included over 43,000 sf of retaining walls including MSE, Pile Panel, Soil Nail and over 70,000 sf of sound barriers. The ashlar stone finish from the bridge abutments was carried through to all wall elements to create an appealing appearance to this gateway to the Fair Lakes Community. The geotechnical design efforts included an evaluation of all of the walls and the final design of bridge foundations. The retaining wall featured a two tier soil nail wall, which was one of the first soil nail walls utilized by VDOT. WR&A assisted with the development of the retaining wall specifications and provided support during construction to ensure the walls were constructed in accordance with the plans and specifications and the architectural finish on all walls and bridge abutments.

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

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

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



Rendering



Under Construction

LESSONS LEARNED

- Detailed traffic analysis of each phase of construction is essential to quality Transportation Management Plans.
- Innovative approach to stormwater management is required to minimize right-of-way impacts.
- Early public outreach results in true enhancements to the final project.

WR&A Team Advantage

WR&A is proposing the same Project Manager and design staff for the I-64 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER – WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: DESIGN-BUILD I-95/I-495 AT ARENA DRIVE FROM MD 202 TO MD 214 Location: Prince George’s County, MD	Name: Lane Construction Corporation	Name of Client: <i>Maryland State Highway Administration (MSHA)</i> Phone: See below Project Manager: Mr. Eric Marabello Phone: (410) 545-8770 Email: emarabello@sha.state.md.us	August 2009	December 2009	\$26,600	\$29,500 (Est. Final)	\$1,700

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

<p>Scope of Work Similar to I-64</p> <ul style="list-style-type: none"> • Design-Build • Field Survey • Roadway • Environmental Permits • Geotechnical • Pavement • Hydraulics and SWM • E&S Plans • Bridge and Misc. Structures • Traffic Control Devices • Complex TCP • Utility Coordination • Public Involvement • Design QA/QC • Construction Engineering • Project Management 	<p>Whitman, Requardt and Associates, LLP was the prime design firm for this design-build project responsible for preparing final engineering design documents and approvals for improvements to I-95/I-495 at Arena Drive. The project was designed in our Baltimore, Maryland office. The project enabled the Arena Drive interchange with I-95/I-495 (Capital Beltway) to operate as a full-time interchange instead of only during special events. I-95/I-495 was widened for an additional lane and incorporated two collector-distributor lanes. The project features include:</p> <p>Roadway Rehabilitation and Widening – 1.9 miles of median widening on the I-95/I-495 for additional lanes in each direction. Additionally, the I-95/I-495 typical section was reconfigured from four lanes through-lanes only to three through-lanes with two collector-distributor lanes. The collector-distributor lanes provide access to/from three interchanges: MD 214, Arena Drive, and MD 202.</p> <p>Interchange Reconstruction – Ramps at two interchanges were reconfigured to eliminate inadequate weaving lengths on I-95/I-495. The northeast and northwest loop ramp at MD 214 and northwest ramp at MD 202 were eliminated. Existing quadrant ramps were widened to accommodate additional traffic with new connections to MD 214 and MD 202. As a result of traffic analyses performed during final design, a ramp from MD 202 to I-95/I-495 was identified as needing to be widened to address congestion along MD 202. As a modification to the contract, an Interstate Access Permit Approval was completed and ramp widening was designed and constructed, including additional NEPA approval and environmental permitting.</p> <p>Hydraulic Analysis and Stormwater Management (SWM) – WR&A re-evaluated the conceptual SWM plan provided by MSHA and determined that only one of two proposed SWM facilities was required to meet the project’s SWM needs. By eliminating the second facility, to be constructed in a loop ramp, over five (5) acres of existing forest was saved. For the remaining proposed SWM facility, a 48” RCP was jacked and bored under SB I-95/I-495 while traffic was maintained.</p> <p>Geotechnical and Pavement Analysis/Design – Geotechnical services included jacking and boring a 48” RCP under I-95/I-495, a reinforced slope, and subgrade and pavement design for full-depth pavement and the rehabilitation of existing concrete pavement. Also, the existing shoulders along I-95/I-495 were analyzed for traffic bearing capacity during construction and it was determined that the shoulders were adequate for temporary use and did not required full-depth replacement.</p> <p>Structural Design – Structural design effort consisted designing special drainage structures and miscellaneous repairs to an overpass bridge. The under clearances at existing overpass structures were surveyed to determine vertical clearance limitations for the rehabilitation of the existing pavement. At one location, the mainline profile was re-worked to maintain the required minimum vertical clearance.</p> <p>Maintenance of Traffic – Extensive multi-phase maintenance of traffic plans were required on I-95/I-495, MD 214 and MD 202 to maintain traffic throughout the interchanges since over 190,000 vehicles per day traveled on I-95/I-495 at that time. To maintain adequate levels of service for traffic during construction, all lanes were required to remain open during peak hours of 6 to 9 AM and 3 to 7 PM. Limited lane closures were permitted from 9 AM to 3 PM, while multiple lane closures were permitted from 10 PM to 5 AM. As a result, a majority of the pavement resurfacing for the project was performed during nighttime hours.</p> <p>Traffic Control Devices – This project re-used six (6) existing sign structures, including two cantilever, two overhead, and two overhead dynamic message systems. These sign structures were relatively new and were relocated onto new foundations and fitted with new or modified sign panels. Additionally, four new cantilever structures were installed and all ground-mounted signing throughout the three interchanges was upgraded. Partial interchange roadway lighting was completed consisting of 80 new light fixtures. Also, four new traffic signals were installed with modifications to another existing traffic signal.</p> <p>Public Involvement – Public information materials and advanced notification of traffic impacts were provided to MSHA as needed to keep the public informed.</p> <p>Partnering During Design and Construction – WR&A participated in partnering agreement, which set goals and objectives during the early stages of work. Subsequent monthly meetings were held to ensure goals and objectives were being met by discussing the project progress, quality, resolve issues, and current/future schedule.</p>	   
<p>LESSONS LEARNED</p> <ul style="list-style-type: none"> • Accurate existing pavement elevations are necessary to determine pavement cross-slopes to ensure AASHTO criteria is being met. • Maintenance of traffic involving shifting of traffic need to account for concrete pavement joints while construction of sign structures need to be properly sequenced. • Early and continued coordination between all members of the Design-Build Team and owner are a necessity to develop constructible plans and resolved construction issues expediently. • Major reconfiguration of interchanges require thoughtful planning to ensure changes to signing and pavement markings are properly sequenced with lane shifts. • Substantial lead time needs to be provided to obtain power feed hook-ups for traffic signals; therefore, design of the signals need to be advanced early. 		

**Request For Qualifications
A Design-Build Project**



**I-64 Widening
and Route 623
Interchange
Improvements**

From: 0.99 Miles West of Route 623
(WB – Route 622, EB – Route 623)
To: 0.38 Miles West Route 271 (Pouncey
Tract Road) in Short Pump

State Project No.: 0064-964-110, P101, C501, B610-B614, B617,
B616, D601, D606

Federal Project No.: NH-064-2(150)

Contract ID Number: C00070542DB55

**Goochland County and
Henrico County, Virginia**

