Request For Qualifications
A Design-Build Project

Route 3 Widening

From: 4.1 Miles East Rte. 29
To: 4.0 Miles West of Culpeper/Orange County Line

State Project No.: 0003-023-107, P101, R201, C501
Federal Project No.: STP-023-7(024)
Contract ID Number: C00014657DB56

Culpeper County, Virginia

IN ASSOCIATION WITH:
KDR Real Estate Services, Inc.
EBA Engineering, Inc. (DBE)
Engineering & Materials Technologies, Inc. (DBE)
AMEC Environment & Infrastructure, Inc.
H&B Surveying and Mapping, LLC (DBE)
Pape and Company, Inc.
Appraisal Review Specialists, LLC
Title Solutions, Inc.
January 25, 2013

Commonwealth of Virginia
Virginia Department of Transportation
Central Office Mail Center
Loading Dock Entrance
1401 East Broad Street
Richmond, VA 23219
Attention: Brenda L. Williams

Re: Statement of Qualifications for: Route 3 Widening; Culpeper County, Virginia
State Project No.: 0003-023-107, P101, R201, C501
Federal Project No.: STP-023-7(024) Contract ID Number: C00014657DB56

Dear Ms. Williams:

W. C. English, Inc. (English) is pleased to submit the enclosed Statement of Qualifications to design and build 4.1 miles of Route 3 Widening in Culpeper County. The following details the English Team’s structure and experience, QA/QC approach, safety, maintenance of traffic, environmental stewardship, and scheduling.

The Design-Build Team will be led by English and supported by a solid Team of experienced and qualified partners that we feel are the best fit for the Route 3 Widening project. Our Team consists of:

- W. C. English, Incorporated (English) – Lead Contractor
- Whitman, Requardt and Associates, LLP (WR&A) – Lead Designer
- KDR Real Estate Services (KDR) – Right-of-Way (SWaM)
- Pape & Company, Inc. (Pape) – Fee Appraisals
- Appraisal Review Specialists, LLC (ARS) – Independent Appraisal Review
- Title Solutions, Inc. – Title Reports and Settlements
- EBA Engineering, Inc. (EBA) – Quality Control Manager and Inspections (DBE)
- AMEC Environment & Infrastructure, Inc. (AMEC) – Quality Assurance Testing Lab
- H & B Surveying and Mapping, LLC (H&B) – Design Surveying & Appraisal Plats (DBE)

English’s experience in highway and bridge construction is unparalleled: we successfully complete an average volume of roadway work of more than $100 million per year. Over the last 30 years, English has completed over 120 transportation projects. English maintains a staff of more than 400 employees, forming construction and support teams under the leadership of 120 tenured personnel, who have served on as many as 40 concurrent projects. In support of our qualifications, we emphasize the following:

**Local Experience** – English has significant local experience including rebuilding a section of Route 3 with a new bridge over the Rapidan River, replacing the bridge and approaches on Route 29S and 29N over the Rivanna River, replacing the bridge and approaches on Route 250 over the Rivanna River and replacing two bridges and approaches on Route 231 in Madison County over the Robinson River and White Oak Creek. English also built Cowan Boulevard, Route 218 and Route 17/I-95 projects in the Fredericksburg Area.
**Design-Build Experience** – English is recognized as a leader on Design-Build projects in Virginia. Our experience includes Route 288 in Richmond, as part of the Design-Build group with APAC, we performed excavation, grading, and storm drainage work; and Route 895-Pocahontas Parkway in Richmond, as a subcontractor to FD/MK, we built the eight-mile roadway section of this project, which included 14 bridges and the toll plaza. North Gayton Road was a Design-Build project for Henrico County, on this project English constructed over two miles of roadway including the bridge over I-64, two new arch culverts and right of way acquisition services for more than 70 parcels. English also constructed the Design-Build rest areas in New Kent County on I-64 EBL and on the I-85 NBL in Mecklenburg County. English is presently completing the Design-Build I-81 Truck Climbing Lanes in Rockbridge County.

**Experienced Management Team** – All of the English/WR&A Managers have numerous years of experience in construction and design of transportation projects in Virginia. Mr. Judson Dalton, our Design-Build Project Manager (DBPM), has a wealth of management experience, serving as DBPM for the North Gayton Road project over I-64 in Henrico County and also assisting the DBPM on the Design-Build I-81 Truck Climbing Lanes in Rockbridge County. Mr. Wilson Dickerson, Principal-in-Charge, has over 40 years’ of construction and management experience, including the last 35 years with English. Our Design Manager (DM), John Maddox has over 27 years of design experience working on Design-Build and Bid Build projects. Rob Shackelford, our QA Manager brings tremendous experience, working with VDOT and now with WR&A, and understands what is required to produce a quality project. Our Team is further strengthened by Kenneth Shirley, with EBA, who will lead our QC program. Mr. Shirley also worked with VDOT before joining EBA and understands the QC program and testing that is required.

**English and WR&A Experience Working Together** – Through the years, English and WR&A staff have worked together on the design and construction of a wide variety of highway/bridge projects throughout Virginia. Working together on these projects has given us the experience and knowledge needed to provide a compatible and proven Team that will deliver a successful project with the quality expected by VDOT and the citizens of Virginia. Our other team members have worked with us before and have the same mindset of providing exceptional services and delivering exceptional results, which adds to the value of our Team.

As requested in section 3.2 of the RFQ, the English Team offers the following information:

**3.2.1 Legal Entity with whom a Design-Build Contract with VDOT Would Be Written**
W.C. English, Incorporated located at 615 Church Street, Lynchburg, Virginia 24504 will be the legal entity with whom a Design-Build contract with VDOT will be written. Wilson L. Dickerson, Jr., P.E., will be the Principal-in-Charge, who will be signing the contract.

**3.2.2 Point of Contact**
The official representative and point of contact for the English Team relative to this SOQ:
Judson H. Dalton – Design-Build Project Manager \ W. C. English, Incorporated, 615 Church Street, Lynchburg, VA 24504 \ Phone: 434-845-0301 \ Fax: 434-845-0306 \ Email: jdalton@englishconst.com

**3.2.3 Principal Officer**
Wilson L. Dickerson, Jr., P.E. - Senior Vice President \ W. C. English, Incorporated, 615 Church Street, Lynchburg, VA 24504 \ Phone: 434-845-0301 \ Fax: 434-845-0306 \ Email: wdickerson@englishconst.com
3.2.4 **Offeror’s Organizational Structure**
W. C. English, Incorporated is structured as a corporation and is not a limited liability company, joint venture, or any form of partnership. English will undertake the financial responsibility for this Design-Build project, provide the required bonding, and accept the risks and liabilities for the performance of the work. English has no liability limitations.

3.2.5 **Lead Contractor:** W. C. English, Incorporated

**Lead Designer:** Whitman, Requardt & Associates, LLP

3.2.6 **Affiliated and/or Subsidiary Companies of the Offeror**
See Attachment 3.2.6 in the Appendix 3.

3.2.7 **Certification Regarding Debarment Form(s)**
See Attachment 3.2.7(a) and Attachment 3.2.7(b) in the Appendix 4.

3.2.8 **Contractor VDOT Prequalification**
W. C. English, Incorporated certification number is E009 and is an active prequalified contractor to do business with VDOT. A copy of certificate is in the Appendix 5.

3.2.9 **Bonding Capacity**
English carries the ability to bond single projects up to $125,000,000 and aggregate bonding limits are $500,000,000. Please find a letter from Travelers Casualty & Surety Company of America regarding English’s bonding capability in the Appendix 6.

3.2.10 **Evidence of Virginia State Corporation Commission (SCC) and Virginia Department of Professional and Occupational Regulations (DPOR)**
See Attachment 3.2.10 in the Appendix 7.

3.2.11 **Disadvantaged Business Enterprises (DBE)**
English is fully committed to meeting and/or exceeding the **twenty percent (20%)** DBE participation goal during the design and construction of the project.

![Signature]

*Wilson L. Dickerson, Jr., PE, Senior Vice President*

Our Team is 100 percent committed to delivering a successful, quality project to VDOT on-time and on-budget. *Our knowledge and experience in this region offers understanding of subsurface conditions and the traffic volumes that will be maintained allowing us to properly staff and meet the requirements of the project. We have a history of being competitive on bid build and design build projects and our resources are strategically staged throughout the area allowing us to offer a very competitive proposal.* If you have any questions or need further information, please contact me.

Respectfully submitted,

W. C. English, Incorporated

![Signature]

*Wilson L. Dickerson, Jr., PE*

*Senior Vice President*
3.3 **Offeror’s Team Structure**

The Firms and Key Personnel represented on the English Team have been chosen to lead this endeavor based on their proven track record of working cooperatively and constructively in a team environment. English and WR&A have an impressive history of constructing and designing VDOT projects throughout Virginia. We have assembled a Team to ensure that this project and the associated risks will be effectively managed through our personnel’s experience, competence and accountability. This belief is founded in the successful project delivery by our Key Personnel as shown on the resumes in the Appendices section of this submittal. English and WR&A strongly believe that with our experience and resources we are the right team for this project. Listed below are some key aspects of our team structure.

### 3.3.1 **Key Personnel**

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

<table>
<thead>
<tr>
<th><strong>Judson Dalton</strong></th>
<th><strong>Design-Build Project Manager</strong></th>
<th><strong>English</strong></th>
<th><strong>12 Years of Experience</strong></th>
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**Judson Dalton** has over 12 years of experience and will serve as the Design-Build Project Manager (DBPM) for the project. He will be responsible for the success of the overall project, including design, construction, quality management, and contract administration. He has been a Project Manager with English since 2008 and has managed numerous transportation projects involving earthwork, structures, concrete and asphalt paving, utilities, and storm drainage. Mr. Dalton served as DBPM on the recent $38 million North Gayton Road Design-Build project in Henrico County, Virginia. This project is very similar to the Route 3 Widening Design-Build project and included roadway, bridge construction, right-of-way acquisition, and extensive private utility relocation and coordination. Throughout Mr. Dalton’s career he has experienced all facets of roadway construction from dealing with traffic control and environmental issues during the design phase of projects as a DBPM to actually installing traffic control and performing actual construction in and around environmentally sensitive areas. **He will oversee and be responsible for the timely delivery of this project and will ensure each team member is performing at acceptable levels.**

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<tr>
<th><strong>Robert Shackelford, P.E.</strong></th>
<th><strong>Quality Assurance Manager</strong></th>
<th><strong>WR&amp;A</strong></th>
<th><strong>21 Years of Experience</strong></th>
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**Robert Shackelford, P.E.** will serve as 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, 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.

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<th><strong>John Maddox, P.E.</strong></th>
<th><strong>Design Manager</strong></th>
<th><strong>WR&amp;A</strong></th>
<th><strong>27 Years of Experience</strong></th>
</tr>
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**John Maddox, P.E.** is a *registered, licensed, Professional Engineer in Virginia* with 27 years of experience designing major highway facilities and will serve as the Design Manager (DM) for this project. He has been performing as a DM for over 20 years including several similar 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. He is currently working on two Design-Build projects in Virginia.
Darrell Sullivan will serve as the Construction Manager (CM) for this project. He has been in the construction industry for over 35 years working as a Senior Construction Manager on projects mainly in the Culpeper and Fredericksburg Districts. Mr. Sullivan lives in the area and will be on site throughout the construction phase and will be responsible for all aspects of the construction including all Quality Control, ensuring that all work performed and materials used meet the contract requirements. He will also be responsible for managing all of the traffic control requirements on the project, he currently holds WZTC – Intermediate with Traffic Control Supervisor Certification – ATSSA #21953 which expires on February 28, 2016. Safety and effective traffic management has been an important facet to every project that Mr. Sullivan has managed. His ability to manage complex projects seamlessly has been proven through a long career of successful projects. Mr. Sullivan currently holds his DCR Responsible Land Disturber Certification #29115, which will expire on February 21, 2014 and a VDOT Erosion and Sediment Control Contractor Certification #3067C, which will expire September 23, 2016. *He will implement and oversee the maintenance of traffic during construction to ensure the safety of the traveling public and pedestrians.*

Dan Seli, P.E. will serve as the Lead Utility Coordination Manager (LUCM) for this project. He has over 22 years of experience designing and coordinating utility relocations for roadway projects. He has been performing as the Project Manager or LUCM on utility relocation and coordination annual contracts with VDOT since 1994 as well as the LUCM on Design-Build projects and individual roadway design contracts. Mr. Seli will be responsible for coordinating the utility relocations with the various utility owners, defining conflicts and cost responsibilities, designing and/or reviewing utility relocation plans, cost estimates, identification of easements and conducting all utility relocation services.

Jefferson Dykes will serve as the Right-of-Way Manager (ROWM) for this project. He has been in the management role for KDR on a wide range of acquisition projects, including previous Design-Build projects in Virginia, with a focus on negotiations with property owners and scheduling with the right of way acquisition team. Mr. Dykes is currently serving as the ROWM on the Middle Ground Boulevard Design-Build project in Newport News, Virginia and on the Route 36/Fort Lee Entrance Design-Build project in Prince George County, VA. *He will implement and oversee all Right of Way Services on the contract.*

### 3.3.2 Team Organizational Chart

The Organizational Chart located on the next page 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.

The chart clearly shows the reporting relationships among the English Team and demonstrates the DBPM, Judson Dalton, is responsible for the project's successful completion. He will report directly to the VDOT Project Manager and will serve as the single point of contact for VDOT from submission of this SOQ until final acceptance. Mr. Dalton will have the authority to act for English on all project-related matters.
Organizational Narrative/Functional Relationships and Communication

Wilson Dickerson is the Principal-in-Charge for this Design-Build project and will execute the contract.

The Design-Build Project Manager (DBPM), Judson Dalton will be the single point of contact for VDOT. Mr. Dalton will serve as a communication link between the Design-Build Team and VDOT. Any issues or clarifications of the contract documents 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 baseline project schedule for review. 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 an audit of the project with VDOT and the QAM to ensure the project was designed and constructed in conformance with the requirements of the contract. VDOT will review with the DBPM the appropriate documents relating to the final close-out of the project.

The DBPM bears 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. This environment will optimize understanding of project objectives, mutually protect parties from contractual non-conformities, and empower our representatives to operate in a manner where they can make decisions appropriate to their level of responsibility.

Design-Build Management Team

In cooperation with the Design-Build Project Management Team, the DBPM will develop a detailed plan for managing the entire project to a 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 (QAM) 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 QAM will monitor the contractor’s Quality Control practices and will review reports to ensure compliance with the requirements set forth in the QA/QC Plan. Mr. Shackelford will report directly to the DBPM.

- The Design Manager for this Project, 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 Construction Manager (CM) to develop the design in conformance with the QA, QC, Safety and Environmental requirements. 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 **Construction Manager (CM)**, Darrell Sullivan, will report directly to the DBPM. As the CM, he will be on the project site for the duration of construction activities and will oversee the work of the Construction Team. Mr. Sullivan will also oversee the Quality Control activities to ensure that all work reflects the project plans and specifications, and that all construction products are properly tested. Mr. Sullivan will meet with the QC Manager to ensure that there are sufficient inspectors daily and that the materials used meet the “Approved for Construction” plans and specifications. He will be involved during the design process to review and make recommendations on the TMP/MOT plan to ensure the anticipated construction phasing is followed. In addition to management of field operations, the CM will support the Design Team in their efforts by working with the DM to review constructability issues during development the design plans.

- The **Lead Utility Coordination Manager**, Dan Seli, P.E., will coordinate the relocation of all private utility companies required by the project design and supervise the design of all public utilities. During the construction of the utility relocation, he will report directly to the DBPM to ensure all utilities are cleared for construction of the project and that relocation plans are coordinated with all aspects of the project. He will work closely with the DM to ensure impacts to the existing utilities are minimized.

- The **Right-of-Way Manager**, Jefferson Dykes will coordinate all Right-of-Way scheduling and services on the project. Mr. Dykes will work closely with the DBPM, DM, CM and the Public Relations Manager to ensure all communication lines are open with the property owners and the Appraisal Team. He will serve as the liaison between property owners and VDOT representatives.

- The **Project Safety Director**, Michael Scott, will work with the DBPM to mitigate identified safety issues and risks. He will make frequent visits to the project site to verify compliance, identify new issues and will report directly to the DBPM. He will communicate openly with the CM to coordinate training of construction crews, through “tool box safety talks” and more formal training as necessary.

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

- The **Public Relations Manager**, Brad Stipes, P.E., will develop a Public Relations Plan for the project that engages and integrates identified project stakeholders, building on the recent successes of the project’s Steering Committee. A central aspect of this plan will be an effective Public Communication Plan to inform the public of potential lane closures, timing of cross-over closures, and permanent impacts to existing traffic patterns. Mr. Stipes will work directly for, and coordinate closely with, the DBPM, VDOT, and media outlets as necessary to keep the public informed on all relevant aspects of this project.

**Quality Assurance Team**

The Quality Assurance Team, led by **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 VDOT 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 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 record documents and releases required by VDOT are in place to facilitate the close-out of the project.

- **Testing and Inspections** – WR&A shall provide the personnel to perform material sampling, testing and reporting in accordance with the frequencies required by the QA/QC Plan. The QA Inspectors will carry out
their duties and report their findings directly to the QAM.

- **Independent QA Testing Lab** – AMEC Environmental & Infrastructure, Inc. will provide the independent lab testing for the QA function of the project and will report directly to the QAM.

**Design Team**

Design Manager *John Maddox, P.E.* will be responsible for all design elements for the project. He will lead a proven Team of WR&A engineers who have worked together for many years on similar VDOT projects. He will report directly to the DBPM and lead all design disciplines. He will be supported by the following WR&A staff:

- **Roadway Design** – *Mark Vasco, P.E.* has 29 years of experience in designing VDOT projects and thoroughly understands VDOT’s design requirements and Road and Bridge Specifications. He currently works in a similar capacity on the George Mason Design-Build project for the Route 123 Improvements.

- **Hydraulic Design** – *David Gertz, P.E.* has 36 years of experience and will lead the storm drainage and stormwater management design efforts for the project. He is currently providing similar services to VDOT under WR&A’s On-Call Design Contract including projects in the Culpeper District.

- **Structural Design** – *Jeremy Schlussel, P.E.* with 15 years of experience will lead the structural design efforts for the Route 3 project. He will ensure all structural designs are completed in accordance with VDOT’s Road and Bridge Standards and design manuals. Mr. Schlussel is currently providing similar design services on two Design-Build projects in Virginia.

- **Geotechnical Engineer** – *Jeff Basford, P.E.* will provide the final geotechnical reports for the roadway improvements and the box culverts. For 12 years he has provided geotechnical engineering services for VDOT, including major widening projects. He is currently working on two Design-Build projects in Virginia.

- **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 staff. She has worked on several complex TMPs for VDOT and recently led the traffic engineering efforts for the Fairfax County Parkway Interchange at Fair Lakes Parkway.

- **Environmental Permits** – *Robert Siegfried*, with over 32 years of experience, will lead the environmental team. Mr. Siegfried will work directly with the DM to coordinate and obtain all necessary environmental permits for the project.

- **Design QA/QC Manager** – *Randall Phillips* will work directly with the DM to develop and assure conformance with the Project Design QA/QC Plan. This plan will be coordinated with all design disciplines, and with the project QA/QC Plan. Mr. Phillips has 40 years of experience with VDOT in roadway plan design and review; he thoroughly understands VDOT’s design requirements and is widely recognized for his technical skills.

The Design Team coordination efforts are greatly enhanced by WR&A’s ability to complete all design elements with our in-house staff. Surveying and right-of-way plats will be completed by H&B Surveying and Mapping, LLC, a certified DBE firm that has worked with WR&A on numerous VDOT projects.

**Construction Team**

*Darrell Sullivan* will lead all construction efforts on the project. The Construction Team will be involved in the design process, as needed, to identify any constructability issues or improvements to the design that may be identified. The CM will communicate project specific baseline quality, environmental, and safety standards to the Team.
• **Quality Control Manager (QCM)** – *Kenneth Shirley, P.E., CCM of EBA* will work closely with the CM 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 and to arrange for all QC testing on the project. EBA QC Inspectors 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 portion of the QA/QC Plan. The QC Lab Testing will be provided by *Engineering & Materials Technologies, Inc. (E.M. Tech).*

• **Scheduling/Project Controls**, performed by *Josh Clifton, the Schedule Manager*, in conjunction with the CM, will solicit input from the ROWM, LUCM, Design Team and Construction Team to develop an appropriate baseline schedule and process to be followed for progressing and updating the schedule during construction.

• **Highway Superintendent & MOT Coordinator** – Will report directly to the CM and will be responsible for the various construction foremen on the project. He will work closely with the CM to ensure the construction personnel have the necessary equipment and materials to perform their work as scheduled. He will also work with the designers to ensure constructability of the project.

**Right-of-Way Acquisition Team**
The Right-of-Way Acquisition Team will be led by *Jefferson Dykes of KDR Real Estate Services*, a VDOT prequalified right-of-way contracting consultant. Mr. Dykes will work closely with the DBPM to ensure the required right-of-way and/or easements are acquired in a timely manner and in accordance with the project schedule. The ROWM will communicate frequently with the DM, CM and the Public Relations Manager to ensure the proper communication is relayed to the property owners. The Right-of-Way Team includes the following firms that have worked with KDR on past successful projects.

• **Appraisals** will be performed by *Pape & Company, Inc.*

• **Appraisal Reviews** will be performed by *Appraisal Review Specialists, LLC (ARS).*

• **Title Reports and Recordation of Deeds** will be performed by *Title Solutions, Inc.*

• **Acquisition Plats** will be prepared by *H&B Surveying and Mapping, LLC.*

**Relationships and Coordination with VDOT**
The English Team offers a proven background of open effective communication with our clients on Design-Build Projects. We will hold monthly progress meetings throughout the design phase of the project to review work completed, action items to be addressed and the schedule of deliverables. During the construction phase, the English Team will hold monthly progress meetings to review all pertinent contract documentation with VDOT and provide for OIA and OVST sampling and testing as required by the VDOT Design-Build minimum standards. These meetings will be designed to keep VDOT and identified stakeholders fully and regularly informed throughout the project’s duration.

**Why Select the English Team?**
Finally, we feel the English Design-Build Team warrants selection based on the following key attributes:

• **A well-organized Senior Management Staff with proven Design-Build experience.**

• **Extensive experience designing and constructing VDOT projects, including Design-Build.**

• **Seasoned and current expertise in all critical disciplines necessary for successful project completion.**

• **Unparalleled QA and QC programs that result in exceptional client satisfaction.**

• **Unwavering commitment to Corporate and Project-Specific Health, Safety and Welfare Programs.**
3.4 Experience of Offeror’s Team

3.4.1 Over the years, W. C. English, Inc. (English) and Whitman, Requardt and Associates, LLP staff has worked together closely and successfully on a wide range of transportation and utility projects. Also of note is previous project/staff work history involving QAM Rob Shackelford and English, where Mr. Shackelford previously served as VDOT Fredericksburg District Area Construction Engineer on three different projects that English successfully constructed (Cowan Boulevard in Fredericksburg; Route 30 in Caroline County; and Route 208 in Spotsylvania County). Our firms and staffs have many years of experience working together, and this history has resulted in solid working relationships built on mutual knowledge, trust, and a shared commitment to deliver quality products and solutions throughout the project delivery process. A proven Team has evolved that delivers successful projects with the quality expected by VDOT and the citizens of Virginia. The combined experience and knowledge of the two staffs will be of significant benefit to the Route 3 Widening project and to VDOT.

**W.C. English, Inc. (English)** has a long history of delivering Design Build projects and fully understands the process and the requirements. With our construction experience we are very familiar with widening projects of this nature, proven by such projects as the recent Route 30 project built in Caroline County. English will not perform the work under this contract alone; our Lead Designer and all of our subconsultants only strengthen this team and our ability to deliver the Route 3 Widening project with all members of the team having a proven cooperative work history, teaming experience and complementary skills and knowledge. Exceptional performance is not only shown throughout the enclosed work history forms, but with everything we do. The experience of our personnel, the ample resources that we are able to assign to the project, and the companies themselves result in a sound, qualified Team to design and build this project and will allow our team to provide a very competitive proposal.

**Whitman, Requardt and Associates, LLP (WR&A)** is a regional engineering and architectural firm that has been providing professional engineering services for over 98 years, including over 60 years of providing continuous design services to VDOT. WR&A has been providing engineering services on a wide variety of similar projects throughout Virginia, including the Culpeper District. WR&A is also currently providing engineering and construction quality assurance services on two Design-Build projects in Virginia. The George Mason University Campus Drive project, WR&A is providing roadway design for the Route 123 detour and improvements, the bridge, retaining walls, geotechnical engineering and construction quality assurance. For the PPTA Route 636 project in Augusta County, WR&A is providing bridge and retaining walls and geotechnical engineering design services and construction quality assurance.

**KDR Real Estate Services** is a full service right-of-way and easement acquisition company. Available services that can be provided internally or by qualified subconsultants include ownership verification title search, appraisal of property rights to be acquired, appraisal reviews, conveyance document preparation and compilation of related paperwork for the presentation of an offer to the affected landowners, negotiations with the landowners, clearance of title, closing and settlement procedures, and overall project administration to complete the transfer of title from the property owner to VDOT. KDR will work closely with the English Team and representative legal counsel to ensure that proper acquisition procedures are followed in accordance with the requirements of the Virginia Code and the VDOT Right-of-Way and Utilities Manual, as applicable, relating to rights acquired through the eminent domain process.

*Relevant projects for the Lead Contractor and Lead Designer are provided on Attachments 3.4.1(a) and 3.4.1(b) in Appendix 9 and Appendix 10.*
3.5 Project Risks

The English Team has carefully reviewed the documents included in the RFQ Informational Package and completed a field investigation to identify critical risks on the project. Our review paid particular attention to the following: 1) comments raised during public meetings, 2) VDOT’s Scoping Report and 3) the conceptual plans. The English Team identified several potential risks, such as Utility Crossings/Relocations, Maintenance of Traffic, ROW Acquisition and Sensitive Environmental Areas. The English Team has identified the following as the three critical risks that could impact the success of the project: High Pressure Gas Transmission Lines and Facilities, Private Utilities and Maintenance of Traffic.

Risk 1: High Pressure Gas Transmission Lines

A. Define the Risk and Why it is Critical

Existing gas facilities on this project presents risks associated with safety, additional project cost and potentially to the project schedule. The gas lines include three large diameter high pressure gas mains (42”, 36”, 30”) that cross existing Route 3 west of Route 669. An additional risk is the existing gas regulating/metering station located off of Route 669, which takes gas off from the transmission main, reduces the pressure and meters the flow into the gas distribution system. The existing three gas transmission mains (42”, 36”, 30”) are cathodically protected steel gas transmission pipelines owned by Williams Gas (Transcontinental Gas Pipe Line Company, LLC). Normal operating pressure in the lines is over 300 psi.

The proposed roadway widening over top of the existing gas pipelines and the impacts of realigning Route 669 to the existing regulator/metering station are critical because they impact the safety of the traveling public and construction workers on the project and significantly impact project costs and schedule. Williams Gas has prior rights for their facilities and any relocations, adjustments and work required will be part of the project costs. Work on the existing facilities would be designed and constructed by Williams Gas contractors, and completed on their schedule which has the potential to delay the overall project.

B. Impacts the Risk Will Have on the Project

Gas transmission main impacts could significantly affect the total project cost and schedule as follows:

- Proper protection of the gas mains is required to provide safety to the workers and traveling public. The high pressure and its combustibility can create a deadly combination. Williams Gas requires a minimum 66” of cover over the pipelines under roadways and 48” of cover at ditch inverts.
- If proper cover cannot be maintained, the lines would have to be lowered or protective measures installed such as split-casings or protective slabs.
- The existing cathodic protection system may need to be relocated or adjusted.
- Roadway construction methods may be impacted since vibratory equipment cannot be used within the gas easement.
- During construction, Williams Gas will require one of their inspectors to be on site while work is performed in their easement.
- Impacts to the existing gas regulator/metering station should be avoided. This facility cannot be taken out of service.
- The transmission gas lines cannot be taken out of service.

C. Mitigation Strategies

To ensure safety to the workers and traveling public the lines will be located horizontally and vertically at
numerous locations during the design phase to confirm horizontal and vertical location of facilities. During construction, safety measures will be required while working in the gas line easements. Such measures would include and not limited to the following: eliminate heavy construction equipment driving over top of the lines, limit excavator activity within 10 feet of the lines and no vibratory equipment will be allowed within the gas easement.

To mitigate the cost risks associated with the existing gas transmission lines and regulator station is to design roadway and drainage improvements to provide the minimum cover and clearances required by Williams Gas. The test hole information required during RFP phase will be utilized to ensure adequate cover exists to protect the lines by adjusting the Route 3 design.

Since any design or modification of the facilities will be completed by a Williams Gas contractor, it is critical to determine conflicts and resolutions to the conflict early in the design process so the project schedule is not impacted. Through our utility coordination contract with VDOT, we have extensive experience coordinating these types of efforts.

D. VDOT’s Role in Mitigating Risk & How the Strategies Will Minimize Additional VDOT Efforts

Following the proactive strategies listed above will minimize risk to both VDOT and the project by addressing any design or construction requirements that would affect the roadway design and construction. VDOT’s role will be to complete review of project design submittals for both in-plan and out of plan utilities. All utility relocation agreements entered into with the private utilities will be reviewed and approved by VDOT. RUMS system will be maintained by the contractor for VDOT’s use in tracking the project.

Risk 2: Private Utilities (Fiber Optic, Dominion Power, Buried Telephone Facilities)

A. Define the Risk and Why it is Critical

Existing private utilities on this project presents risks associated with additional project costs and potential impacts to the project schedule. We have grouped the utility risks for the private utilities into a single risk that is associated with determining the cost responsibility and scheduling for relocation of the following utilities.

- Fiber Optic Facilities
- Dominion Virginia Power (DVP) Distribution and Transmission Line Poles
- Buried Telephone Lines and Aerial Poles

Buried Fiber Optic lines, DVP poles and telephone poles exist along the entire length of the project and will be impacted by the proposed widening and drainage facilities. There are multiple owners of the fiber optic facilities including; Fiber Light of Virginia, LLC, Level 3 Communications, Verizon Virginia and AT&T Communications. The majority of the fiber optic facilities serve a secure site off of Route 669. Security requirements related to these fiber optic lines could present coordination issues during design and construction. The DVP poles carry overhead distribution power and services. In addition, there is a Dominion Virginia Power Transmission tower located along the north side of Route 3 west of the Route 600 that is located within the limits of the proposed cut. The buried telephone facilities and poles are owned by Verizon Virginia.

The risks associated with the private utilities along Route 3 are critical because they impact project costs, coordination efforts and schedule. The existing facilities appear to be located both in and outside VDOT
right-of-way. It is not known at this time if the facility owners have prior rights and if relocation/adjustment costs would be borne by the project or by the facility owner.

B. Impact the Risk Will Have on the Project
Project costs and schedule associated with the relocation of the private utilities could be impacted by the following:

- Early determination if the existing private utilities are in right of way or private easements and if they have prior rights documentation.
- Third-party inspection requirement during construction may be required.
- Cost of the relocation of the existing DVP transmission tower.
- Cost and time of obtaining new easements.
- Ability to shutdown existing facilities.
- The private utility owners will complete their own design and construction of any relocated facilities.

C. Mitigation Strategies
During the RFP phase the exact location, type and size of the private utilities will have to be confirmed along with any special relocation requirements. It is also imperative that determination of prior rights is complete to determine if relocation costs will be the responsibility of the private utility owner or the project. On previous projects, secure facilities have required additional coordination efforts and special requirements during construction.

To mitigate the cost risks associated with the existing private utilities, we will determine any special requirements on the facilities and design roadway and drainage improvements to provide minimum cover, clearances and meet any special requirements. Information gathered on the existing facilities will assist us in revising the design to eliminate conflicts while still maintaining VDOT standards. As an example, we will look at adjusting the cut limit that impacts the existing DVP transmission tower to see if they can be adjusted to not impact the tower.

We will utilize our design, relocation coordination and construction expertise with these types of facilities to design and build a project that will minimize impacts to the fiber optic, power and telephone facilities and allow for construction of the roadway improvements to proceed on an aggressive, safe and attainable schedule. At each stage of design utility owners will be involved to ensure that their design and construction requirements are being maintained while meeting VDOT’s project goals and standards. Construction methods will also be analyzed so that all construction activities meet facility owner requirements associated with activity over and around the existing facilities including construction traffic, compaction, shut downs, storage and excavation limits.

D. VDOT’s Role in Mitigating Risk & How the Strategies Will Minimize Additional VDOT Efforts
Following the proactive strategies listed above will minimize risk to both VDOT and the project by addressing any design or construction requirements that would affect the project development. VDOT’s role will be to complete review of project design submittals for both in-plan and out of plan utilities. All utility relocation agreements entered into with the private utilities will be reviewed and approved by VDOT. RUMS system will be maintained by the contractor for VDOT’s use in tracking the project.

Risk 3: Maintenance of Traffic (Safety Improvements During Construction)
A. Define the Risk and Why it is Critical
The preliminary design of this project includes widening the existing alignment, adding left-turn lanes and median crossovers and improving intersections with secondary roads and local driveways. The project will bring important safety improvements between Culpeper and Fredericksburg; however, the safety of the
traveling public is of paramount importance during construction. The Route 3 Widening project will prove challenging to construct while ensuring the safe and efficient flow of traffic through the project area with two major shifts in traffic and the phasing through Stevensburg. Risks include possible delays to traveling motorists, potential access impacts to area businesses and residences, and construction schedule delays. The most critical aspect of maintaining traffic during construction is ensuring the safety of motorists and construction workers.

B. Impact the Risk Will Have on the Project
The Route 3 corridor in the project area has experienced a relatively high number of crashes; the potential for further crashes is magnified during construction. Construction of the project will require frequent changes to traffic patterns which could result in confusion for motorists. Moreover, numerous secondary roads and driveways intersect Route 3 in the project area; the turning movements at these intersections could result in delays and could cause high-severity type crashes.

C. Mitigation Strategies
The English Team will develop an appropriate Transportation Management Plan (TMP) including a Maintenance of Traffic (MOT) Plan. The TMP will be developed in accordance with VDOT’s Instruction and Informational Memorandum IIM-LD-241.5/TED-351.2. The MOT Plan will be developed in accordance with the Virginia Work Area Protection Manual, 2011 Edition, and will balance the need to maintain access to local businesses and residences while providing for the safety of the traveling public and construction workers. Appropriate lane shifts will be designed as necessary to carry mainline traffic through the 4.9 mile work zone. Careful attention will be paid to the planned realignments of intersections such as the Route 600 (York Road) and Route 669 (Carrico Mills Road). The English Team will use design and construction expertise to appropriately phase the project and maintain traffic through the work zone. This collaborative approach will ensure that adequate work zones are established and that the work can be carried out in a safe manner. Efficient phasing will limit the duration that the traveling public is exposed to the work zone. Appropriate signage will be included as part of the MOT Plan to provide clear and logical direction to motorists.

Detailed construction sequencing will be developed to provide construction personnel with clear direction on how the work should be performed. The TMP will also accommodate existing traffic and consider operation limitations during peak hours, holidays and special events, if necessary. A public communications plan will be included in the TMP to establish clear communication to the public. Communication efforts could include Message Signs, use of the VDOT website and appropriate news outlets.

D. VDOT’s Role in Mitigating Risk & How the Strategies Will Minimize Additional VDOT Efforts
VDOT’s role in mitigating this risk will be to review the TMP and MOT Plans, and to allow the English Team access to utilize existing VDOT tools such as the VDOT website and the Virginia 511 system.
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
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<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
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## Statement of Qualifications Checklist and Contents

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ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO.: C00014657DB56
PROJECT NO.: 0003-023-107, P101, R201, C501

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 12/04/2012
   (Date)

2. Cover letter of RFQ Addendum No. 1 01/11/2013
   (Date)

3. Cover letter of
   (Date)

W. C. English, Incorporated

[Signature]

Wilson L. Dickerson, Jr., PE, Senior Vice President

January 25, 2013
DATE
Offerors shall complete the table and include the addresses of affiliates or subsidiary companies as applicable. By completing this table, Offerors certify that all affiliated and subsidiary companies of the Offeror are listed.

The Offeror does not have any affiliated or subsidiary companies.

Affiliated and/ or subsidiary companies of the Offeror are listed below.

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<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
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<td>Shared Management &amp; Related Ownership</td>
<td>English Construction Company, Inc.</td>
<td>PO Box P-7000, Lynchburg, Virginia 24505</td>
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<tr>
<td>Shared Management &amp; Related Ownership</td>
<td>Counts &amp; Dobyns</td>
<td>37 Leland Road, Rustburg, Virginia 24588</td>
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<tr>
<td>90% Ownership</td>
<td>Thomas Brothers, LLC</td>
<td>494 Glenmore Drive, Salem, Virginia 24153</td>
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<tr>
<td>100% Ownership</td>
<td>Lee Construction of the Carolinas, Inc.</td>
<td>PO Box 7667, Charlotte, North Carolina 28241</td>
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<td>100% Ownership</td>
<td>MCC Acquisition, LC</td>
<td>PO Box 568, South Boston, Virginia 24592</td>
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<td>Beverley E. Dalton (Sole Stockholder of W. C. English, Incorporated) and A. Douglas Dalton, Jr. (Stockholder of English Construction Company, Inc.) own 99.15%</td>
<td>Adams Construction Company</td>
<td>PO Box 12627, Roanoke, Virginia 24027</td>
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ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

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

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

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

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

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

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

\[\text{Signature} \quad \text{January 25, 2013} \quad \text{Wilson L. Dickerson, Jr.} \quad \text{Senior Vice President}\]

\[\text{Date} \quad \text{Title}\]

W. C. English, Incorporated

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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] 1/25/2013 Senior Vice President

[Date] [Title]

Whitman, Requardt and Associates, LLP

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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]
Signature

January 8, 2013
Date

[President]
Title

KDR Real Estate Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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: 01/14/13
First Exec. VP
Title

EBA Engineering, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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] January 7, 2013 [Principal Engineer]
Date Title

Engineering and Materials Technologies, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that
neither it nor its principals is presently debarred, suspended, proposed for debarment, declared
ineligible, or voluntarily excluded from participation in this transaction by any Federal
department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements
in this certification, such prospective participant shall attach an explanation to this 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] January 8, 2013
Signature Date

Paul D. Baginski

AMEC Environment & Infrastructure, Inc.

Area Manager Title

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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: [Signature] Date: 1/8/13

Vice President

Title

H&B Surveying and Mapping, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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] 01/09/2013 Managing Partner

Signature Date Title

Appraisal Review Specialists, LLC

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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]

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this 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] 1-22-13

[Title] Vice President

[Name of Firm] Title Solutions, Inc.
CERTIFICATE OF QUALIFICATION

W. C. ENGLISH, INCORPORATED

Vendor Number: E009

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications have been assigned to your firm:

Prequalified

Work Classes: GRADING; MAJOR STRUCTURES; MINOR STRUCTURES

Issue Date: 04/30/2012

This Rating and Classification will Expire: 04/30/2013

Suzanne FR Lucas Prequalification Officer

Don E. Silles, State Contract Officer
January 25, 2013

Commonwealth of Virginia
Department of Transportation (VDOT)
1401 East Broad Street
Richmond, Virginia 23219
Attention: Brenda L. Williams

REF: REQUEST FOR QUALIFICATIONS A DESIGN-BUILD PROJECT
Route 3 Widening From: 4.1 Miles East Rte. 29
To: 4.0 Miles West Of Culpeper/Orange County Line
Culpeper County, Virginia
State Project No.: 0003-023-107, P101, R201, C501
Federal Project No.: STP-023-7(024)
Contract ID Number: C00014657DB56

To Whom It May Concern:

W. C. English, Incorporated has been a valued client of Travelers Casualty and Surety Company of America for over sixty years. During that time, we have maintained a working line of surety credit and have supported single bond requests up to the $125,000,000 range and aggregate programs up to the $500,000,000 range. These levels reflect our history with this client; however, they are not to be construed as limits. Given W. C. English, Incorporated extensive experience and financial strength, we are certainly prepared to consider requests well in excess of these levels.

W. C. English, Incorporated is capable of obtaining a 100% Performance Bond and 100% Labor and Material Payment Bond in the amount of the anticipated cost of construction, as referenced in Section 2.1 of the RFQ 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.

Travelers Casualty and Surety Company of America is licensed to transact surety business in all 50 states and is listed on the United States Department of Treasury list of acceptable surety companies. Travelers Casualty and Surety Company of America carries an A.M. Best rating of A+ and has a Financial Size Category of XV. The information contained in this letter is valid for a period of three (3) months from date of this letter.

Please feel free to contact us if you have any questions.

Sincerely,

TRAVELERS CASUALTY & SURETY COMPANY OF AMERICA

Whitney D. Melton
Attorney-in-Fact

WDM/sll
Power of Attorney Attached
POWER OF ATTORNEY

Attorney-In Fact No. 213509

Certificate No. 005184718

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Whitney D. Melton, and Frances M. Saunders

of the City of Altavista, State of Virginia, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 11th day of September, 2012.

[Seals and Signatures]

State of Connecticut
City of Hartford ss.

By: Robert L. Raney, Senior Vice President

On this the 11th day of September, 2012, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2016.

Marie C. Tetreault, Notary Public

58440-8-12 Printed in U.S.A.
This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company’s name and seal with the Company’s seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company’s seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President or any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 25th day of January 2013.

[Signature]
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.
ATTACHMENT 3.2.10

State Project No. 0003-023-107, P101, R201, C501

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.

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Information (3.2.10.1)</th>
<th>DPOR Information (3.2.10.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCC Number</td>
<td>SCC Type of Corporation</td>
</tr>
<tr>
<td>W.C. English, Inc.</td>
<td>0068944</td>
<td>Corporation</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
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</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>K000382-4</td>
<td>Limited Liability Partnership</td>
</tr>
<tr>
<td>KDR Real Estate Services, Inc.</td>
<td>0571210-4</td>
<td>Corporation</td>
</tr>
<tr>
<td>EBA Engineering, Inc.</td>
<td>F123900-5</td>
<td>S-Corporation</td>
</tr>
<tr>
<td>Engineering &amp; Materials Technologies, Inc.</td>
<td>0478633-1</td>
<td>Corporation</td>
</tr>
<tr>
<td>AMEC Environment &amp; Infrastructure, Inc.</td>
<td>F144198-1</td>
<td>Corporation</td>
</tr>
<tr>
<td>AMEC Environment &amp; Infrastructure, Inc.</td>
<td>F144198-1</td>
<td>Corporation</td>
</tr>
<tr>
<td>H&amp;B Surveying and Mapping, LLC</td>
<td>S290560-4</td>
<td>Limited Liability Corporation</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10

**State Project No. 0003-023-107, P101, R201, C501**

### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Appraisal Review Specialists, LLC</th>
<th>T049068-2</th>
<th>Limited Liability Corporation</th>
<th>Active</th>
<th>3058 Mount Vernon Road, Suite 12 Hurricane, West Virginia 25523</th>
<th>Appraisal Business - L</th>
<th>4008001735</th>
<th>04/30/2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pape and Company, Inc.</td>
<td>0371158-7</td>
<td>Corporation</td>
<td>Active</td>
<td>1421 Sachem Place Suite 1 Charlottesville, Virginia 22901</td>
<td>Real Estate Appraiser</td>
<td>4008000940</td>
<td>01/31/2014</td>
</tr>
<tr>
<td>Title Solutions, Inc.</td>
<td>0534967-5</td>
<td>Corporation</td>
<td>Active</td>
<td>*Not Applicable – Title Solutions, Inc. is providing Non-Professional services and does not require Office DPOR Certification</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10

**State Project No. 0003-023-107, P101, R201, C501**

**SCC and DPOR Information**

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual’s Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual’s DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>Robert Shackelford</td>
<td>Fredericksburg, Virginia</td>
<td>11705 New Bond Street Fredericksburg, Virginia 22408</td>
<td>Professional Engineer</td>
<td>0402040575</td>
<td>01/31/2013</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>John Maddox</td>
<td>Richmond, Virginia</td>
<td>2825 Willbrook Drive Richmond, Virginia 23233</td>
<td>Professional Engineer</td>
<td>0402026613</td>
<td>01/13/2014</td>
</tr>
<tr>
<td>Whitman, Requardt and Associates, LLP</td>
<td>Daniel Seli</td>
<td>Richmond, Virginia</td>
<td>2205 Albion Road Midlothian, Virginia 23113</td>
<td>Professional Engineer</td>
<td>0402023410</td>
<td>06/30/2014</td>
</tr>
<tr>
<td>H&amp;B Surveying and Mapping, LLC</td>
<td>Leslie Byrnside</td>
<td>Richmond, Virginia</td>
<td>4100 Ketcham Drive Chesterfield, Virginia 23832</td>
<td>Land Surveyor</td>
<td>0403002362</td>
<td>06/30/2013</td>
</tr>
</tbody>
</table>

*Note 1:* Darrell Sullivan possesses the required DCR Responsible Land Disturber Certification #29115, which will expire on February 21, 2014 and a VDOT Erosion and Sediment Control Contractor Certification #3067C, which will expire September 23, 2016.

**Note 2:** KDR Real Estate, Inc. is a VDOT prequalified Right-of-Way Contracting Consultant. Pape and Company, Inc. is a VDOT prequalified Fee Appraiser. Appraisal Review Specialists, LLC is a VDOT prequalified Review Appraiser.
W.C. English, Incorporated
SCC and DPOR Information
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0068944 - 8  STATUS: 00 ACTIVE  STATUS DATE: 05/23/02
CORP NAME: ENGLISH, INCORPORATED, W. C.

DATE OF CERTIFICATE: 04/06/1954  PERIOD OF DURATION:  INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA  STOCK INDICATOR: S STOCK
MERGER IND: S SURVIVOR  CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y  MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: JAMES P KENT JR

STREET: 525 7TH STREET  AR RTN MAIL:

CITY: ALTAVISTA  STATE: VA  ZIP: 24517
R/A STATUS: 4  ATTORNEY  EFF. DATE: 03/15/05  LOC: 115
ACCEPTED AR#: 212 06 7229  DATE: 03/16/12  CAMPBELL COUNTY
CURRENT AR#: 212 06 7229  DATE: 03/16/12  STATUS: A  ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 130.00

(Screen Id:/Corp_Data_Inquiry)
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF THE
STATE CORPORATION COMMISSION
CITY OF RICHMOND

April 6, 1954

NOTICE OF ISSUING AND CERTIFICATION OF

charter of W. C. English, Incorporated

to be recorded in the office of the State Corporation Commission
and where necessary certified to the clerk of the proper court
for recording in his office.

Papers covering the above specified application having
been duly considered by the Commission, and it being found that
all the requirements of law have been complied with, the
Commission has this day ordered the same to be admitted to record
in this office.

Enclosed herewith you will find receipt of the
State Corporation Commission for charter fee (if any required on
this application), $5.00 for costs in this office, and recording
fee. Where necessary to be recorded by a court clerk, such
clerk will receive to you direct for his fee.

Your attention is called to blanks and circulars pre-
pared by the Commission and enclosed herewith for the use of
the corporation, as specified below in paragraphs against which
is marked upon the margin the typewritten letter "X":

| X | A blank prepared under the provisions of Section
   | 167 of the Constitution of Virginia and Section
   | 13-97, Code of Virginia, 1950, upon which a state-
   | ment of the financial plan of stock to be issued
   | should be made and lodged with the Commission, and
   | acknowledgment thereof received by the corporation
   | from the Commission, before any stock is actually
   | issued.

| X | A blank for report pursuant to Sections 13-9, and
   | 13-22 Code of Virginia, 1950, with the law printed
   | upon the back of the blank, requiring same to be
   | made to the Commission upon the organization of the
   | corporation, and within thirty days after the time
   | appointed for the election of officers and direc-
   | tors, annually thereafter. This report must be filed
   | as soon as the corporation is organized, whether the
   | officers or directors, as shown in the charter, are
   | changed or not.

There is also enclosed Circular No. 5, giving in
full Section 13-12, Code of Virginia, 1950, and where
all officers and directors of the corporation, as
shown in the charter, are non-residents of the city
or county in which the principal office of the cor-
poration is to be located, blanks in duplicate are
also enclosed for the written power of attorney re-
quired to be executed and filed in accordance with
the above mentioned section before the corporation
commences business.

Mr. W. Barney Arthur
Attorney at Law
Altavista, Virginia

N. W. Colston
Clerk of the Commission.
CERTIFICATE OF INCORPORATION
OF
W. C. ENGLISH, INCORPORATED

To The State Corporation Commission
Commonwealth of Virginia

This is to certify that we, the undersigned, desire to, and hereby do associate to establish a corporation, under the provisions and subject to the requirements of the law for such cases made and provided, and we, by this our certificate of incorporation set forth as follows:

(a) The name of the corporation is to be W. C. English, Incorporated.

(b) The principal office in this State is to be in Altavista, Campbell County.

(c) The purposes for which it is formed are as follows:

(1) To make, enter into, perform and carry out contracts for building, erecting, improving, constructing, altering, repairing, decorating, finishing and furnishing houses, buildings, warehouses, store-rooms, edifices, works, roads, tenements and structures of every kind and description; to carry on in all their respective branches the businesses of builders, contractors, decorators and such other trades and businesses as pertain or are connected with the general business of building and construction.

(2) To take over, acquire, purchase, own, sell, lease, hire, hold, control, manage, maintain and operate quarries, brick-yards, lime-kilns, refineries, asphalt, cement and plaster mills, lumber yards, timber lands, saw mills, glass, metal and woodworking plants, pulp and paper mills, furnaces, factories and establishments for the manufacture, preparation and production of building supplies, material, furnishings, decorations and furniture; and to buy, sell and generally deal in and with all such articles and materials.

(3) To buy, sell, exchange, mortgage, lease, improve, farm, manage, operate, build, construct, maintain, or otherwise dispose of any property, real or personal, of all kinds and descriptions; to make and obtain loans upon real estate, improved and unimproved, and to take mortgages and assignments of mortgages upon the same, and to supervise, manage, and protect such property and loans, and all interests and claims affecting the same.

(4) To carry on and conduct a general contracting business, including the constructing, enlarging, repairing, remodeling or otherwise engaging in any work upon buildings, roads, side walks, water lines, power lines, highways, bridges, or manufacturing plants; and to engage in iron, steel, wood, brick, concrete, stone, cement, masonry and earth construction, and to execute contracts or to receive assignments of contracts therefor, or relating thereto; also to manufacture and furnish the building materials and supplies connected herewith.
(5) To do all and everything necessary, suitable and proper for the accomplishment of any of the purposes or attainment of any of the objects or the furtherance of any of the powers hereinbefore mentioned, either alone or in association with any other corporations, firms or individuals, and to do every other act or acts, thing or things, incidental or appurtenant to or growing out of or connected with the aforesaid business or powers or any part or parts thereof, provided the same be not inconsistent with the laws under which this corporation is organized.

(d) The capital stock of the corporation is to consist of no par value shares, the maximum number of shares to be issued is to be one hundred and fifty (150), and the minimum number of shares to be issued is to be fifty (50).

(a) The period for the duration of the corporation is unlimited.

(f) The names and residences of the officers and directors who unless sooner changed by the stockholders, are for the first year to manage the affairs of the corporation, are as follows:

<table>
<thead>
<tr>
<th>OFFICERS</th>
<th>OFFICES</th>
<th>RESIDENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Curtis English</td>
<td>President</td>
<td>Altavista, Va.</td>
</tr>
<tr>
<td>Louise T. English</td>
<td>Vice-President</td>
<td>Altavista, Va.</td>
</tr>
<tr>
<td>Helen F. Myers</td>
<td>Secretary-Treasurer</td>
<td>Altavista, Va.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIRECTORS</th>
<th>RESIDENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Curtis English</td>
<td>Altavista, Va.</td>
</tr>
<tr>
<td>Louise T. English</td>
<td>Altavista, Va.</td>
</tr>
<tr>
<td>Helen F. Myers</td>
<td>Altavista, Va.</td>
</tr>
</tbody>
</table>

(g) The amount of real estate to which its holdings at any time are to be limited is 1000 acres.

Given under our hands this ___ day of ________, 1954.

__________________________

STATE OF VIRGINIA,

COUNTY OF CAMPBELL, to-wit:

I, ________________________, a Notary Public of and for the County and State aforesaid, do certify that W. CURTIS ENGLISH, LOUISE T. ENGLISH and HELEN F. MYERS, whose names are signed to the writing above, bearing date on the ___ day of ________, 1954, have acknowledged the same before me in Campbell County.

Given under my hand this ___ day of ________, 1954.

My commission expires ________________________.

__________________________

Notary Public
BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
*CLASSIFICATIONS* BLD H/H

W C ENGLISH INC
PO BOX P-7000
LYNCHBURG, VA 24505
Whitman, Requardt and Associates, LLP
SCC and DPOR Information
STATE CORPORATION COMMISSION

Richmond, August 10, 2000

This is to Certify that the statement of registration of

Whitman, Requardt & Associates, LLP

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

State Corporation Commission
Attest:  

[Signature]

Clerk of the Commission
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, Clerk of the Commission
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
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ARC, ENG, LS, LA

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

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

(POCKET CARD)
COMMONWEALTH OF VIRGINIA
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
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

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

PROFESSIONS: ENG

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

Gordon N. Dixon, Director
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

NUMBER
0411000861

EXPIRES ON
02-28-2014

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

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

COMMONWEALTH OF VIRGINIA
BOARD FOR AIRPLANE DESIGN AND CONSTRUCTION
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

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRM OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
WHITMAN REQUARDT & ASSOCIATES LLP
1700 KRAFT DRIVE
SUITE 1200
BLACKSBURG, VA 24060
ROBERT FRANK SHACKELFORD
11705 NEW BOND STREET
FREDERICKSBURG, VA 22408
JOHN PATRICK MADDOX
2825 WILDBRUSH DRIVE
RICHMOND, VA 23233

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

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

0402026613
01-31-2014

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

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

DANIEL JOSEPH SELI
2205 ALBION ROAD
MIDLOTHIAN, VA 23113

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER
THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
KDR Real Estate Services, Inc.
SCC and DPOR Information
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, January 30, 2002

This is to Certify that the certificate of incorporation of

KDR Real Estate Services, Inc.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: January 30, 2002

State Corporation Commission
Attest:

Joel H. Peck
Clerk of the Commission
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0571210 - 4 STATUS: 00 ACTIVE STATUS DATE: 07/07/03
CORP NAME: KDR REAL ESTATE SERVICES, INC.

DATE OF CERTIFICATE: 01/30/2002 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: MONITOR DTE:
R/A NAME: ALLEN G DORIN JR

STREET: 2500 GRENOBLE RD AR RTN MAIL:
CITY: RICHMOND STATE: VA ZIP: 23294
R/A STATUS: OFFICER EFF. DATE: 07/09/03 LOC: 143
ACCEPTED AR#: 213 01 0173 DATE: 11/20/12 HENRICO COUNTY
CURRENT AR#: 213 01 0173 DATE: 11/20/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00

(Screen Id:/Corp_Data_Inquiry)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

REAL ESTATE BOARD
REAL ESTATE CORPORATION, PARTNERSHIP, ASSOCIATION LICENSE
POST IN A CONSPICUOUS PLACE
THIS LICENSE TO BE KEPT IN CUSTODY AND CONTROL OF PRINCIPAL BROKER

KDR REAL ESTATE SERVICES INC
2500 GRENOBLE RD
RICHMOND, VA 23294

Gordon N. Dixon, Director

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
EBA Engineering, Inc.
SCC and DPOR Information
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
CISM0180      CORPORATE DATA INQUIRY

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
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

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
Engineering & Materials Technologies, Inc.
SCC and DPOR Information
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That ENGINEERING & MATERIALS TECHNOLOGIES, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is January 29, 1997;

That the period of its duration is perpetual; and

That the corporation is in existence and 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:
April 16, 2012

Joel H. Peck, Clerk of the Commission
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, January 29, 1997

This is to Certify that the certificate of incorporation of
ENGINERING & MATERIALS TECHNOLOGIES, INC.
was this day issued and admitted to record in this office
and that the said corporation is authorized to transact its business
subject to all Virginia laws applicable to the corporation and its
business. Effective date:

January 29, 1997

State Corporation Commission

William J. Bridge
Clerk of the Commission
CISM0180   CORPORATE DATA INQUIRY

CORP ID: 0478633 - 1 STATUS: 00 ACTIVE STATUS DATE: 01/29/97

CORP NAME: ENGINEERING & MATERIALS TECHNOLOGIES, INC.

DATE OF CERTIFICATE: 01/29/1997 PERIOD OF DURATION: INDUSTRY CODE: 70

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: MONITOR DTE:

R/A NAME: SHAHZAD S MOOSA

STREET: 7857 COPPERMINE DR AR RTN MAIL:

CITY: MANASSAS STATE: VA ZIP: 20109

R/A STATUS: 2 OFFICER EFF. DATE: 07/20/06 LOC : 176

ACCEPTED AR#: 213 01 1156 DATE: 11/28/12 PRINCE WILLIAM

CURRENT AR#: 213 01 1156 DATE: 11/28/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

13 100.00

5,000
AMEC Environmental & Infrastructure, Inc.
SCC and DPOR Information
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, Clerk of the Commission
CISM0180 CORPORATE DATA INQUIRY

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

(Screen Id:/Corp_Data_Inquiry)
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
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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
H&B Surveying and Mapping, LLC
SCC and DPOR Information
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:

Clerk of the Commission
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<td>TIMOTHY H GUARE</td>
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(Screen Id:/LLC_Data_Inquiry)
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

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THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Appraisal Review Specialists, LLC
SCC and DPOR Information
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 10, 2012

This certificate of registration to transact business in Virginia is issued for

Appraisal Review Specialists, LLC
(Date of Registration: February 3, 2012)

a limited liability company organized under the laws of West Virginia and the said company is authorized to transact business in Virginia, subject to all Virginia laws applicable to the company and its business.

State Corporation Commission
Attest:

Joel H. Peck
Clerk of the Commission

CIS0502
**LLCM3220**

**LLC DATA INQUIRY**

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**STATUS DATE:** 02/03/12

**DATE OF FILING:** 02/03/2012  
**PERIOD OF DURATION:** 99/99/9999  
**INDUSTRY CODE:** 00

**STATE OF FILING:** WV WEST VIRGINIA  
**MERGER INDICATOR:**

**CONVERSION/DOMESTICATION INDICATOR:**

**PRINCIPAL OFFICE ADDRESS**

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**REGISTERED AGENT INFORMATION**

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(Screen Id:/LLC_Data_Inquiry)
REAL ESTATE APPRAISER BOARD
BUSINESS REGISTRATION

APPRAISAL REVIEW SPECIALISTS LLC
3058 MOUNT VERNON ROAD SUITE 12
HURRICANE WV 25523

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

COMMONWEALTH OF VIRGINIA

REAL ESTATE APPRAISER BOARD
BUSINESS REGISTRATION
NUMBER: 4008 001735 EXPIRES: 04-30-2014
APPRAISAL REVIEW SPECIALISTS LLC
3058 MOUNT VERNON ROAD SUITE 12
HURRICANE WV 25523

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Pape and Company, Inc.
SCC and DPOR Information
**CISM0180**  
**CORPORATE DATA INQUIRY**  

**CORP ID:** 0371158 - 7  
**STATUS:** 00 ACTIVE  
**STATUS DATE:** 03/31/99  

**CORP NAME:** PAPE AND COMPANY, INC.  

**DATE OF CERTIFICATE:** 02/13/1991  
**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:** JAMES P COX III  

**STREET:** 500 COURT SQ STE 300  
**AR RTN MAIL:**  

**CITY:** CHARLOTTESVILLE  
**STATE:** VA  
**ZIP:** 22902  

**R/A STATUS:** 4 ATTORNEY  
**EFF. DATE:** 02/14/11  
**LOC:** 203  

**ACCEPTED AR#:** 212 02 2887  
**DATE:** 01/17/12  
**LOC:** CHARLOTTESVILLE  

**CURRENT AR#:** 212 02 2887  
**DATE:** 01/17/12  
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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) 357-9500

REAL ESTATE APPRAISER BOARD
BUSINESS REGISTRATION

PAPE & COMPANY INC
1421 SACHEM PLACE SUITE 1
CHARLOTTESVILLE VA 22901

NUMBER
4008 000940

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

Gordon N. Dixon, Director
Title Solutions, Inc.
SCC and DPOR Information
CISM0180 CORPORATE DATA INQUIRY

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**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

a. **Name & Title:**
   
   **Judson H. Dalton, Design Build Project Manager**

b. **Project Assignment:**
   
   **Design-Build Project Manager**

c. **Name of Firm with which you are now associated:**
   
   **W. C. English, Incorporated**

d. **Years experience:** With this Firm: 12 Years With Other Firms: 0 Years
   
   Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 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.):

   - 2007-Present… Design Build Project Manager……………..   W. C. English, Incorporated (North Gayton Road)
   - 2001-2002….. Grade Checker/Foreman ………………….   W. C. English, Incorporated (Route 895 Connector)

e. **Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   
   **Randolph Macon College, Ashland, VA / Bachelor of Arts / 2001 / Business & Economics**

f. **Active Registration:** Year First Registered/Discipline/VA Registration #:
   
   **LEED Certification #10382156**

g. **Document the extent and depth of your experience and qualifications relevant to the Project.**
   
   1. **Note your specific responsibilities and authorities for each assignment, not those of the firm.**
   2. **Note whether experience is with current firm or with other firm.**
   3. **Provide beginning and end dates for each assignment.**

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

**North Gayton Road, Richmond, VA**

Project consists of the design and construction of 8,000’ of divided highway from Route 250 to Pouncey Tract Road including 2 conspan bridges and 1 bridge across I-64. It also includes rebuilding 1000’ of Shady Grove Road from Pouncey Tract to Twin Hickory. **$38 million project**

**Project Role:** Design Build Project Manager

**Responsibilities:** Overall Project Design to include extensive MOT plans, construction quality management and contract administration to include: Built and managed the project CPM Schedule, Supervise personnel/equipment usage for self -performed work, manage subcontractors, coordinate and pay for private utility relocations, coordinate and prioritize right of way acquisition, oversee and manage permitting process and permit requirements, coordinate and manage all QA/QC requirements and personnel, plan and lead all project progress meetings, as the single point of contact plan events with and communicate with the owner and their inspectors and engineers.

**Name of Firm:** W. C. English, Incorporated

**Start Date:** 2007 (Design phase) 2009 (Construction phase)      **Finish Date:** 2012
**APM Terminals, Portsmouth, VA**

260 Acre site development for a container handling facility which includes excavation, storm piping, water, sewer, electrical, stone, asphalt and concrete paving and a rail system for cranes. **$90 million project**

**Project Role:** Assistant Project Manager and Construction Manager

**Responsibilities:** Worked directly with the Project Manager. Supervise personnel/equipment usage for self-performed work, scheduled and managed subcontractors, plan/coordinate project progress meetings with the owner, coordinate and schedule Owners’ inspectors and engineers. Built and maintained the project CPM schedule. W. C. English was the prime contractor for APM Terminals completing this in 24 months.

**Name of Firm:** W. C. English, Incorporated

**Start Date:** 2005 **Finish Date:** 2007

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**Cowan Boulevard, Fredericksburg, VA**

The project extends the roadway in both directions as a four-lane divided highway connecting to Jefferson Davis Highway (US-1 Bypass) to the east and Carl D. Silver Parkway to the west. The work was done in three separate sections:
- From the intersection of Central Park Boulevard and Carl D. Silver Parkway
- In the median of I-95 building the bridge in both directions
- On Cowan Boulevard from I-95 to Route 1

The project had 194,000 CY of excavation, a major bridge across I-95, a large arch culvert with a pedestrian trail and bridge, and two signalized intersections. It also included replacing a 12-inch water line which paralleled the roadway. English also had to work with an elementary school adjacent to the project to provide proper and safe access for the students. **$11 million project**

**Project Role:** Assistant Construction Manager

**Responsibilities:** Supervise personnel/equipment usage for self-performed work to include both, grading and structure operations including all traffic control on both Cowan Boulevard and I-95, scheduled and managed subcontractors, plan/coordinate project progress meetings, plan and coordinated VDOT inspectors and engineers. W. C. English was the prime contractor for VDOT.

**Name of Firm:** W. C. English, Incorporated

**Start Date:** 2002 **Finish Date:** 2005

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**Route 895 Connector Project, Henrico Co., VA**

This was the first PPTA project initiated in the State of Virginia and had a very aggressive schedule. English’s work consisted of building eight miles of roadway, which had ten major drainage structures, 3,200,000 CY of grading, 450,000 tons of stone and asphalt, and 14 bridges with 1,260,000 SF of MSE Walls. English was responsible for rebuilding the interchange of Chippenham Parkway (Route 150) and I-95 to include the connection with the 895 connector, and then continuing the 895 connector to the tie-in with Route 295. **$85 million project**

**Project Role:** Assistant Construction Manager / Forman

**Responsibilities:** Supervise personnel/equipment usage for self-performed work on heavy grading operation to include all necessary traffic control, coordinate and manage subcontractors. Schedule and assist with inspectors and engineers. W. C. English was a subcontractor for FD/MK who was the prime contractor for VDOT.

**Name of Firm:** W. C. English, Incorporated

**Start Date:** 1998 **Finish Date:** 2002
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong>  Robert Shackelford, P.E. – Associate – Construction Management Services</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong>  Quality Assurance Manager</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong>  Whitman, Requardt and Associates, LLP</td>
</tr>
</tbody>
</table>
| **d. Years experience:**  With this Firm 1 Years With Other Firms 20 Years  
  Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):  
  **Whitman, Requardt and Associates, LLP 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:  
    - George Mason University Campus Drive Design-Build Project – Quality Assurance Manager – Aug. 2012-Present  
    - VDOT DW Contracts incl. Culpeper, Fred, Rich and NoVA Districts – Consultant Coordinator – 2011-Present  
    - City of Richmond – RMA Bridge Rehabilitation Project – Construction Project Manager – 2011-Present  
  - 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:  
    - 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  
    - Route 30 State Fair Project – Caroline and Hanover Counties – ACE – 2006 - 2007  
    - Interstate 95/627 Interchange Project – Stafford County – ACE – 2004 – 2007  
  - Mr. Shackelford was a Resident Engineer responsible for over $40 million in construction/civil works projects for numerous clients on transportation construction (highways & bridge), drainage facilities, utility & planned development community infrastructure construction projects within the San Francisco Bay Area. Projects included the following:  
    - 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  
  **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:  
    - Interstate 80/Hilltop Road Interchange reconstruction and widening – Field Engineer – Richmond, CA – 1990-1992  
| **e. Education:**  Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
  - The Ohio State University – Columbus, Ohio/B.S./1991/Civil Engineering |
| **f. Active Registration:**  Year First Registered/Discipline/VA Registration #:  
  - Professional Engineer/Virginia/2005/#040575 |
| **g. Document the extent and depth of your experience and qualifications relevant to the Project.**  
  1. **Note your specific responsibilities and authorities for each assignment, not those of the firm.**  
  2. **Note whether experience is with current firm or with other firm.**  
  3. **Provide beginning and end dates for each assignment.**  
  (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)  
  **George Mason University Campus Drive Project – Fairfax, VA**  
  1. 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 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 within the VDOT ROW. 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 – Estimated December 2013

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, a history trail 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

Route 30 State Fair Project – Caroline/Hanover Counties, VA – VDOT
1. Mr. Shackelford was the Area Construction Engineer assigned to this $11 million project, which widened a rural route into a divided high-volume primary facility to accommodate a significant increase of traffic volume to the new State Fair of Virginia event site. Project added two (2) new pedestrian tunnels while still maintaining traffic, new multi-span bridge, drainage, storm water facilities, utilities and dealt with environmentally sensitive areas along the project corridor. Mr. Shackelford was responsible for managing the budget and accelerated schedule on the project, supervised all Construction Management and Inspection staff and verified all contract requirements 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. 2006 – 2007
ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>John Maddox, P.E. – Senior Vice President</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Design Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Whitman, Requardt and Associates, LLP</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 17 Years With Other Firms 10 Years</td>
</tr>
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</table>

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

| Whitman, Requardt and Associates, LLP Various Positions | July 1995 – Present |

Mr. Maddox has served as Project Manager on VDOT projects continuously from August 1997 to the present including:

- Route I-81 Bridge over the New River and Improvements to Exit 105 – Project Manager – 2011-Present ($90 million)
- Route 123 and Route 1 Interchange – Project Manager – 2007-Present ($70 million)
- VDOT NOVA District Location and Design On-Call Contract – Contract Manager – 2008-Present
- Fairfax County Parkway Widening and Interchange at Fair Lakes Parkway – Project Manager – 2001-Present ($44 million)
- VDOT Statewide Location and Design On-Call Contract – Contract Manager – 2008-2011
- Route I-81 Widening and Bridge Replacement over Buffalo Creek and Truck Climbing Lane – Project Manager – 1999-2007 ($27 million)
- Route I-81 Widening and Bridge Replacement over Maury River – Project Manager – 1999-2006 ($18 million)
- Route 29 Bypass Sweet Briar Interchange – Project Manager – 1996-2005 ($35 million)

<table>
<thead>
<tr>
<th>e. Education:</th>
<th>Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Virginia Institute of Technology (is now a division of West Virginia University) – Montgomery, West Virginia/B.S./1985/Civil Engineering</td>
<td></td>
</tr>
<tr>
<td>f. Active Registration:</td>
<td>Year First Registered/Discipline/VA Registration #:</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Professional Engineer/Virginia/1996/#026613</td>
<td></td>
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<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
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<td></td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
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</tr>
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</table>

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

**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. The project included the extension or replacement of two major box culverts, a triple 8’x8’ and 7’x8’, which required an extensive H&HA. 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, aesthetics and pedestrian access to the Rocky Run Stream Valley Park.

2. Firm: Whitman, Requardt and Associates, LLP


**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 and the construction of a truck climbing lane on northbound I-81. 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. The project design included the design of the extension of three box culverts. 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

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

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. The project includes building 2,200 feet of the Potomac Heritage Trail along Route 123. The project also includes the tunneling of three storm drainage pipes under the railroad. 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

I-81 Bridge Replacement over the New River and Exit 105 Modifications – Montgomery and Pulaski Counties, VA – VDOT

Mr. Maddox is the Project Manager responsible for the design of the $90 million project, which includes 1.72 miles of improvements to the existing four-lane divided interstate. The improvements consist of the replacement of the existing two-lane bridges over the New River with three-lane bridges in each direction. The bridges are approximately 1,600 feet long and are 80 feet above the river. I-81 will be widened to provide deceleration and acceleration lanes along I-81. The project included a complex analysis of five existing box culverts, which required modification to the existing structures. The design includes a complex Type B Category IV TMP for multiple phases of construction. The Exit 105 interchange is reconstructed requiring an IMR and the replacement of the Route 232 bridge over I-81. The project is being developed under a “Turnkey Delivery” and Mr. Maddox is providing oversight and coordination for all elements of the design including surveys, roadway, hydraulics, SWM, structural, geotechnical, and traffic engineering, ITS, TMP, environmental permits and utility design. Additionally, the project includes public outreach including stakeholder meetings, a citizen information meeting and a public hearing. Mr. Maddox also leads monthly meetings with VDOT, subconsultants and key staff to ensure all elements of the project are proceeding on schedule. The scheduling is enhanced by utilizing CMP scheduling to clearly define the critical path of the design, environmental and right-of-way tasks.

2. Firm: Whitman, Requardt and Associates, LLP
3. February 2011 – December 2017 Advertisement

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

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 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. The new or extended box culverts included a double 10’x8’, double 6’x8’ and a double 8’x8’. 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
<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: <strong>Darrell Sullivan, Project Superintendent</strong></td>
</tr>
<tr>
<td>b. Project Assignment: <strong>Construction Manager</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: <strong>W. C. English, Incorporated</strong></td>
</tr>
</tbody>
</table>
| d. Years experience: With this Firm: 12 Years  
  With Other Firms: 0 Years  
  Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last 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.): |
| 2010 – Present... Construction Manager ..... W. C. English, Incorporated (Route 208 Spotsylvania County) |
| 2007 – 2010 ..... Construction Manager ..... W. C. English, Incorporated (Spotsylvania Bond Projects) |
| 2005 – 2007 ..... Construction Manager ..... W. C. English, Incorporated (Layhill Road Phases A, B, C) |
| 2004 – 2005 ..... Construction Manager ..... W. C. English, Incorporated (Investigated possible projects) |
| 2000 – 2004 ..... Construction Manager ..... W. C. English, Incorporated (Route 218 Stafford County) |
| 1996 – 1999 ..... Construction Manager ..... W. C. English, Incorporated (Route 29 Albemarle County) |
| 1993 – 1995 ..... Construction Manager ..... W. C. English, Incorporated (I-81 Weigh-in Motion Scales Frederick County) |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
|   **New River Community College, Dublin, VA / No Degree / 1973-1975** |
|   **Virginia Tech, Blacksburg, VA / No Degree / 1975-1977 / Architectural & Construction Engineering** |
| f. Active Registration: Year First Registered/Discipline/VA Registration #: |
|   **Responsible Land Disturber Certification #29115 expires 2/21/14; E&S Control Certification #3067C expires 9/23/16; ACI Certification #1179286 expires 11/20/14; First Aid/CPR expires 7/22/13; WZTC – Intermediate w/ Traffic Control Supervisor Certification (TCS) ATSSA Certification #219253 expires 2/28/16;** |
| g. Document the extent and depth of your experience and qualifications relevant to the Project. |
|   1. Note your specific responsibilities and authorities for each assignment, not those of the firm. |
|   2. Note whether experience is with current firm or with other firm. |
|   3. Provide beginning and end dates for each assignment. |
|   (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) |

**Route 208, Spotsylvania County, VA**  
This VDOT project consists of relocating existing State Route 208 which includes the addition of additional travel lanes as well as two new bridges over the Ta River and the Po River.  
**$14 million project**  
**Project Role:** Construction Manager  
**Responsibilities:** Managed all phases of construction including schedule and directing crews, directed MOT and worked with VDOT to insure compliance with the traffic plans and phasing. Scheduled subcontractors and monitored quantities of work from subs and English’s self-performed work. Reviewed cost and productions and evaluated resources on a daily basis. Coordinated and worked with property Owners to maintain access to their property.  
**Name of Firm:** W. C. English, Incorporated  
**Start Date:** 2010  
**Finish Date:** Anticipated July 2013  

**Layhill Road Phases A, B, C**  
The project consisted of building new access road into the new Leeland Station subdivision. The design connected two existing roads and included a 3,500’ bridge over CSX Railroad which included through lanes in both directions as well as dedicated left lane turn lanes for the subdivision access roads. This road also
provides access to the newly completed Leeland Elementary School as well as a future Library and Community Center. $4+ million project for the Maryland Development Co.

Project Role: Construction Manager
Responsibilities: Managed all construction activities to include scheduling crews and subcontractors. Worked with the Owner to review designs and assist in building project so cost would be consistent with cash flow but still meet the schedule for access to the school. He reviewed and requested resources when needed.
Name of Firm: W. C. English, Incorporated
Start Date: 2005 Finish Date: 2007

Route 218, Stafford County, VA
This VDOT project consisted of building and relocating Route 218, 212 & 607 with 2 Bridges (one 712' and one 190'). $16 million project.
Project Role: Construction Manager
Responsibilities: Managed construction and coordinated subs and bridge crews. Worked with VDOT on MOT issues and directed the installation of traffic control devices to insure a safe project. Supervised the installation and maintenance of E & S controls and monitored them after rain events. Coordinated the installation of utilities, contacted the public concerning interruptions, and adjusted English’s schedule to reduce those interruptions. Worked with property owners to maintain access to their property.
Name of Firm: W. C. English, Incorporated
Start Date: 2000 Finish Date: 2004

Route 29, Albemarle County, VA
This VDOT project consisted of 0.93 miles of roadway, grading, drainage, asphalt paving, incidentals, gas/water lines, signals, 2 bridges. $10 million project.
Project Role: Construction Manager
Responsibilities: Supervised all construction, coordinating crews and subcontractors while monitoring the schedule. Worked with VDOT to install and maintain traffic control devices to insure a safe project. Monitored the installation and maintenance of E&S controls on the project.
Name of Firm: W. C. English, Incorporated
Start Date: 1996 Finish Date: 1999

Frederick County Weigh Station
I-81 Weigh-in Motion Scale System, which included grade, drainage, 2 box culverts, concrete paving, incidentals, scale house w/computerized controls, facilities, signal/lighting. $10 million project. For this project English received the Marvin M. Black Excellence in Partnering Award.
Project Role: Construction Manager
Responsibilities: Supervised all construction, coordinated subcontractors, and installation of traffic control devices, monitored schedule, quality and erosion control on the project.
Name of Firm: W. C. English, Incorporated
Start Date: 1993 Finish Date: 1995
Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:
   Dan Seli, P.E. – Senior Vice President

b. Project Assignment:
   Lead Utility Coordination Manager

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

d. Years experience: With this Firm _22_ Years With Other Firms _0_ Years
   Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

   Whitman, Requardt and Associates, LLP
   Various Positions
   February 1988 – Present

   Mr. Seli has served as Project Manager and Contract Manager on VDOT utility projects continuously from 1994 to the present including:
   - VDOT Utility Coordination and U.F.I. Services On-Call Contract Statewide – Contract Manager – 2012-Present
   - VDOT Utility Relocation On-Call Contract Statewide – Contract Manager – 2011-Present
   - VDOT Utility Relocation On-Call Contract NOVA & Culpeper Districts – Contract Manager – 2008-2011
   - VDOT Utility Relocation On-Call Contract NOVA District – Contract Manager – 2001-2004

   As Contract Manager Mr. Seli served as Lead Utility Coordination Manager on task assignments made under the contracts.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   University of Delaware – Newark, Delaware /B.S./1988/Civil Engineering

f. Active Registration: Year First Registered/Discipline/VA Registration #:
   Professional Engineer/Virginia/#023410

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

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

   George Mason University West Campus Connector Project – Design-Build
   1. Mr. Seli served as the Lead Utility Coordination Manager for the coordination of utility relocations for the George Mason University West Campus Connector design-build project. His responsibilities included the coordination of the utility relocations, determining utility conflicts and cost responsibilities, UT-9 development, reviewing utility plan and estimates and all required project documentation. Utilities on this project included Washington Gas, Verizon, Dominion Virginia Power, Zayo Communications and Cox Cable.

   2. Firm: Whitman, Requardt and Associates, LLP

   3. August 2012 – Present

   Route 1/600 Roadway Improvements – Dinwiddie County – VDOT
   1. Mr. Seli is the Project Manager for the Utility Coordination and Utility Field Inspection services. His responsibilities included the coordination of in-plan and out of plan utility relocations, conducting U.F.I. meetings, reviewing utility plan and estimates, UT-9 development, determining conflicts and relocation cost responsibilities, review of required easements and all required documentation. Project will also include oversight of utility relocations during construction. Utilities included on this project were Dinwiddie County Water and Sanitary Sewer, Columbia Gas, Verizon, Level 3 Communications, Comcast, Mid-Atlantic Broad Band and Dominion Virginia
Power.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **March 2012 – Estimated Construction December 2014**

**Route 460 Bridge Replacement and Roadway Improvements – Nottaway County – VDOT**

1. Mr. Seli is the Project Manager for the Utility Coordination and Utility Field Inspection Services. His responsibilities included the coordination of the in-plan and out of plan utility relocations, determining utility conflicts and relocation cost responsibilities, UT-9 development, conducting U.F.I. meetings, reviewing utility plan and estimates, review of required easements and all required documentation. Project will also include oversight of utility relocations during construction. Utilities included on this project were Century Link Communications, Southside Electric Cooperative and Mid-Atlantic Broad Band Cooperative.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **June 2012 – Estimated Construction August 2014**

**Route 15 Utilities – Town of Culpeper – VDOT**

1. Mr. Seli has served as Project Manager and oversaw the development of in-plan Utility Adjustment Plans. The work involved the relocation design of 1,200 LF of 6”/8”/12” water main, 665 LF of 8” sanitary sewer and 1,700 LF of 2”/4” electrical conduit for the Town of Culpeper. In addition to plan design, the work also included: pipeline profiles, plan notes/specifications, construction sequencing, quantity summaries, cost estimates and coordination with out of plan utility relocating.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **June 2004 – Construction Complete September 2009**

**Route 229 Utilities – Town of Culpeper – VDOT**

1. Mr. Seli served as Project Manager and oversaw the development of in-plan Utility Adjustment Plans. The work involved the relocation design of 3,200 LF of 2”/3”/4”/6”/8” water main, 2,300 LF of 8”/10” sanitary sewer and 225 LF of 1 ½” sanitary sewer force main for the Town of Culpeper. In addition to plan design, the work also included pipeline profiles, plan notes/specifications, construction sequencing, quantity summaries, cost estimates and coordination with out of plan utility relocating.

2. **Firm: Whitman, Requardt and Associates, LLP**
3. **July 2012 – Estimated Construction June 2014**
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

| a. Name & Title: | Jefferson L. Dykes, SR/WA, R/W-RAC, R/W-EC |
| b. Project Assignment: | Right-of-Way Manager |
| c. Name of Firm with which you are now associated: | KDR Real Estate Services, Inc. |
| d. Years experience: | With this Firm: 5 Years | With Other Firms: 6 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.):**

**KDR Real Estate Services, Inc.**

- **Project Manager**
- **April 2008 - Present**
- Project Manager. His role with KDR has been focused upon conducting negotiations with property owners for all types of property rights and coordinating large projects that require management oversight. He has management experience in a wide range of acquisitions including road right-of-way, sewer and water lines, and power transmission lines. Noted transportation projects in this capacity include:
  - Route 301/Atlee Road Intersection – Hanover County, VA – 2012-Present – ($109,000)
  - Middle Ground Boulevard Connector Design-Build - Newport News, VA - 2011-Present ($475,000)
  - Boulevard Improvement - Colonial Heights, VA – 2010-Present ($333,000)
  - Route 36/Fort Lee Entrance Design-Build - Prince George County, VA – 2012-Present ($127,000)
  - Route 33/54 Intersection Improvement – Hanover County, VA – 2011-2012 ($95,000)
  - Route 205 Bridge – Colonial Beach, VA – 2011-2012 ($100,000)
  - Poplar Road Widening Project – Stafford County, VA – 2010-2011 ($77,000)

**Hanover County, Virginia**

- **Utility Agent II**
- **July 2002 – April 2008**
- During his employment with Hanover County Mr. Dykes was active in monitoring the location of underground utilities, coordinating consultant contracts with real estate appraisers and utility locators, complete title searches, reviewing construction plans and plats, negotiating and acquiring utility easements, preparing deeds of easement conveyance, coordinating the acceptance of constructed utility lines with the Construction Inspection Division, and insuring contractor compliance with contractual terms and bonding requirements.

**e. Education:**

- **Name & Location of Institution(s)/Degree(s)/Year/Specialization:**
  - International Right-of-Way Association – Senior Right-of-Way Agent (SR/WA) 2008
  - Real estate related courses at local community colleges.

**f. Active Registration:**

- **Year First Registered/ Discipline/VA Registration #:**
  - **None**

**g. Document the extent and depth of your experience and qualifications relevant to the Project.**

1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

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

**Middle Ground Bouelvard Design-Build – Newport News, VA – Subconsultant to American Infrastructure for VDOT – 55 parcels**

1. Mr. Dykes as the Right-of-Way Manager coordinated overall right-of-way management of the Design-Build project including assigning and supervising field agents and participating in the negotiation process with landowners.
Primary liaison among the consultant client and VDOT. Assisted in the relocation of residential tenants and commercial landowner.

2. **Firm:** KDR Real Estate Services, Inc.
3. **July 2011 – Estimated completion in April 2013**

**Route 30/Fort Lee Entrance Design-Build Project – Prince George County and the City of Hopewell, VA – Subconsultant to Rinker Design for VDOT – 7 parcels**

1. Mr. Dykes as the Right-of-Way Manager coordinated overall right-of-way management of the Design-Build project including assigning and supervising field agents and participating in the negotiation process with landowners. Primary liaison with the consultant client and VDOT.

2. **Firm:** KDR Real Estate Services, Inc.
3. **September 2010 – Estimated completion in Spring 2013**

**Interstate 81 Truck Climbing Lane Design-Build – Montgomery County, VA – Subconsultant to CH2M Hill for VDOT – 13 parcels**

1. Mr. Dykes as the Right-of-Way Manager coordinated overall right-of-way management of project including conducting all negotiations with the affected landowners and acting as a liaison with the consultant client and VDOT.

2. **Firm:** KDR Real Estate Services, Inc.
3. **November 2010 – Estimated completion in Spring 2013**

**Boulevard Safety and Improvement Project – Colonial Heights, VA – Subconsultant to Lochner for the City of Colonial Heights – 39 parcels**

1. Mr. Dykes as the Right-of-Way Manager coordinated overall right-of-way management of project including assigning and supervising field agents and participating in the negotiation process with landowners. Primary liaison among consultant client and the project owner. Assisted in the relocation of residential tenants and commercial landowner. Assisted engineers in the re-design of limits of right-of-way on several properties to accommodate landowners subsequently resulting in voluntary conveyances.

2. **Firm:** KDR Real Estate Services, Inc.
3. **June 2009 – Estimated completion in February 2013**

**Poplar Road Improvement Project - Stafford County, VA – Subconsultant to Rinker Design Associates for the County of Stafford – 25 parcels**

1. Mr. Dykes as the Right-of-Way Manager coordinated overall right-of-way management of project including assigning and supervising field agents and participating in the negotiation process with landowners. Primary liaison with the consultant client and the project owner.

2. **Firm:** KDR Real Estate Services, Inc.
3. **August 2010 – October 2011**
ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NORTH GAYTON ROAD DESIGN-BUILD</strong></td>
<td><strong>AECOM</strong></td>
<td>Name of Client/Owner: <strong>Henrico County</strong> (PO Box 90755, Henrico, VA 23273) Phone: 804.501.5985 Project Manager: Rob Tieman Email: <a href="mailto:tie@co.henrico.va.us">tie@co.henrico.va.us</a></td>
<td>12/2011</td>
<td>11/2012 Change in completion due to 11 owner request change orders and ROW delays by owner.</td>
<td>$38,600</td>
<td>$38,065</td>
</tr>
</tbody>
</table>

A Design-Build project with Henrico County, W.C. English, Incorporated was responsible for the design, permitting, ROW acquisition, private utility relocation and coordination and construction including QA/QC.

The extension of North Gayton Road begins at the intersection of West Broad Street and existing Gayton Road, crosses Interstate 64 and proceeds on new alignment to the intersection of Pouncey Tract Road and Shady Grove Road. The project continues across Pouncey Tract Road where it terminates at the intersection of Shady Grove Road and Twin Hickory Drive. The total project length is estimated to be 2.10 miles.

Some of the project highlights include the construction of two arch culverts allowing the relocation of Bacova Road to accommodate the phasing of the bridge construction that occupies the footprint of the old Bacova Road alignment. Extensive traffic control and phasing were required to construct the widening of Shady Grove Road as well as the bridge construction over I-64. Poor soils were present throughout the project and under cutting these materials became a major component of the grading operation on the project. The project also included the widening of existing two lane facilities at either end of the project to a four lane section. The widening section included building two new parallel lanes next to the existing lanes open to traffic with numerous crossovers riddled throughout for entrances and cross streets; and then the reconstruction of the existing lanes in subsequent phases after the new lanes were open just like the probable phasing of the Route 3 Widening Project.

Some key highlights and challenges to this project included a detailed MOT plan to accommodate construction and the appropriate strategy and plan to facilitate the on going use of existing business and residential entrances. Private utility relocations presented constant challenges relocating almost a mile of overhead Dominion Power lines, Comcast and Verizon lines, and City of Richmond Gas all having to be phased with construction and scheduled with the utility owners. Erosion control presented its own challenge with limited Right of Way to place appropriate traps and basins which was creatively engineered to accommodate in some cases using storm drain to handle and retain overflow as well as the use of ajacks structures to reduce the velocity of flow in areas of limited room.

With over 70 parcels of Right of Way needing to be acquired by the Design-Build team public involvement was paramount. We participated in all of the public hearings for this project and met with each individual property owner to inform them of our needs and negotiate the acquisitions. The Right of Way Team along with the Design-Build Project Manager worked closely with the Owner to identify the parcels that needed condemnation and then worked directly with the Owner through that process. Prioritizing the acquisition of the properties to coincide with the construction phasing was one of the greatest challenges on this project.

**Lessons Learned:** Partnering was an important part of this project from design through construction. Monthly meetings were held with the designers, contractor, and county to insure that the project was being designed to both VDOT and the County standards. Design issues were resolved in these meetings to avoid conflicts during construction. Monthly progress meetings were held with upper management of all parties and weekly meetings were held with field personnel to discuss schedule and resolve issues. This entire process proved to be very beneficial and allowed the project to move forward successfully and we will uswe on future projects.
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong>: <strong>ROUTE 208 IMPROVEMENTS</strong></td>
<td>Name: VDOT Name of Client/Owner: <strong>Virginia Department of Transportation</strong> Phone: 540.899-4288 Project Manager: Sylvester Okpala Email: <a href="mailto:Sylvester.Okpala@VDOT.Virginia.gov">Sylvester.Okpala@VDOT.Virginia.gov</a></td>
<td></td>
<td>11/2012</td>
<td>07/2013 Completion date was changed due to the change order adding an additional ¾ mile to the project.</td>
<td>$14,462</td>
<td>$14,592</td>
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<tr>
<td>Location: Spotsylvania County, VA</td>
<td></td>
<td></td>
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<td></td>
<td>$7,230</td>
<td></td>
</tr>
</tbody>
</table>

b. 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 that work can be considered accordingly.

W. C. English, Incorporated is the prime contractor building this project for VDOT. The original contract increased from 6.90 km to 8.05 km (3/4 mile) by work order. The project consists of new two lane alignment of Route 208 for the length of the project to include two (2) bridge structures, one single span structural steel 39.2 meters (128.6 LF) and one two span concrete Bulb-T 50 meters (164 LF). This project is being constructed in four phases broken down into five (5) areas. English’s self-performed work consists of regular excavation 242,566 CuM (317,264 CY), storm drainage, erosion control, cement treated base stone, traffic control, bridges and contract administration.

This project was unique because of the phasing and detours required shifting traffic from one side of Route 208 to the other and allowing construction to continue also creating the need for temporary and permanent crossovers allowing the continued use of existing entrances and cross streets. This was done in a similar fashion as will be required for the Route 3 Widening project with phased construction and traffic switches from existing lanes to newly constructed parallel lanes.

**Scope of Work Similar to Route 3:**
- Roadway Widening
- Traffic Control and Maintenance of Entrances
- Bridge Construction
- Storm Drainage installation in environmentally sensitive areas
- Long sections opened up at one time to maintain schedule while controlling erosion and sediment control measures
- Extensive Traffic Control required for the phasing of construction
- Public Relations to keep property owners and the school informed on work schedule and interruptions

**Lessons Learned:** VDOT and English followed an “Informal Partnering” process on this project with monthly meeting to review schedule and issues. Both parties, as well as subcontractors, bought into the process which created a cooperative atmosphere that helped the project process. We feel this is an extremely valuable process and will continue to use it on future projects.
ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location
   - W.C. English, Incorporated was awarded the contract by VDOT to complete widening and improvements for Route 30 in Hanover and Caroline Counties in anticipation of the State Fair of Virginia moving to its new location adjacent to the road. The project included a divided 4-lane highway on the south side of Route 30 that includes a 40-foot median. Due to the State Fair of Virginia’s opening schedule, this project was set up as an incentive/disincentive type contract. The project plans were provided by VDOT.

b. Name of the prime design consulting firm responsible for the overall project design.
   - English’s responsibilities included adding 1.3 miles of two new lanes on Route 30, construction of a new bridge over the North Anna River, extending quad. 72-inch concrete pipe, 118,808 CY of excavation, 39,000 tons of asphalt paving, and storm drainage. The new lanes created a divided highway connecting to lanes at Kings Dominion on the West end of the project. The new section then transitioned back to the existing two lane alignment on the East terminus.

RÉSUMÉ 

W.C. English, Incorporated was awarded the contract by VDOT to complete widening and improvements for Route 30 in Hanover and Caroline Counties in anticipation of the State Fair of Virginia moving to its new location adjacent to the road. The project included a divided 4-lane highway on the south side of Route 30 that includes a 40-foot median. Due to the State Fair of Virginia’s opening schedule, this project was set up as an incentive/disincentive type contract. The project plans were provided by VDOT.

English’s responsibilities included adding 1.3 miles of two new lanes on Route 30, construction of a new bridge over the North Anna River, extending quad. 72-inch concrete pipe, 118,808 CY of excavation, 39,000 tons of asphalt paving, and storm drainage. The new lanes created a divided highway connecting to lanes at Kings Dominion on the West end of the project. The new section then transitioned back to the existing two lane alignment on the East terminus.

This project scope was very similar to the work required on the Route 3 Widening project with English responsible for coordinating the construction with property owners providing access to their property and to avoid conflicts. The wate line work required close coordination and fast track submissions with Hanover County to deliver water to the new fair site in time for the opening.

Partnering was a very important part of the Route 30 project. English, VDOT, the State Fair of Virginia and local stakeholders “brought into” the program and understood the importance of completing the project on time due to the commitments made to the State Fair. Everyone worked together to resolve issues promptly thus allowing the project to complete ahead of schedule. English continues with this practice of partnering to resolve issues on all jobs.

Record of Performance: The VDOT District Administrator and the VDOT Construction Manager were very pleased with the performance of English on this project, as evidenced by the letter shown. It was noted that the staff worked “in an exceptional manner reflecting the true spirit of partnering.” The District Administrator went on to say that the English team members “are to be commended for their performance and professionalism.”

Lessons Learned: VDOT and English worked side by side on this project in the true spirit of partnering. All team members were reminded during this project that we are all on the same team and want the same outcome: a quality project on time that everyone can be proud of. This project serves as a model of VDOT partnering and shows how a challenging project such as this can be a success. English now uses formal partnering on many of their projects.

English received a performance bonus on this project by completing the work ahead of schedule. This project was delivered successfully.
### ATTACHMENT 3.4.1(b)

#### LEAD DESIGNER – WORK HISTORY FORM

#### LIMIT 1 PAGE PER PROJECT

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Construction Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands).</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEGG ROAD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location: St. Mary’s County, MD</td>
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</tbody>
</table>

#### Scope of Work Similar to Route 3

- **Design-Build**
- Field Survey
- **Roadway**
- Environmental Compliance
- Geotechnical
- **Pavement**
- **Hydraulics and SWM**
- E&S Plans
- **Box Culvert**
- Traffic Control Devices
- **Complex TPC**
- Utility Design
- Utility Coordination
- **Landscaping**
- Public Involvement
- **Design QA/QC**
- Construction Engineering
- Project Management

**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 the dualization of 2.88 miles of MD 237 from MD 235 to Pegg Road in St. Mary’s County, Maryland. The project was designed in our Baltimore, Maryland office. The project widened MD 237 from a two-lane open section roadway to a four lane divided highway incorporating pedestrian and bicycle facilities. The project features include:

- **Roadway Reconstruction** – Existing two-lane open roadway was completely reconstructed to a four-lane closed-section divided roadway with left turn lanes at select intersections. The reconstructed roadway incorporated 5’ bike lanes, a raised landscape median, and 5’ pedestrian walkways throughout the entire limits of the project. Improved horizontal and vertical geometrics were enacted to meet current design criteria including raising the roadway profile 12’ for a 2,200 LF vertical realignment at a major stream crossing for replacement of undersized pipes with a two-cell culvert with a main cell of 17’x14’ and a second cell of 13’x14’ for overflow and animal passage.

- **Intersection Reconstruction** – Sixteen intersecting side streets required reconstruction including two with complete realignments. With adjacent properties having direct access, over 65 driveways and entrances were reconstructed.

- **Hydraulic Analysis and Stormwater Management (SWM)** – The new closed storm drain system consisted of over 13,500 LF of drainage pipes. Eight new SWM ponds were constructed, initially constructed as sediment traps then converted over to landscaped SWM facilities as construction progressed.

- **Noise Analysis and Noise Barrier Design** – Three noise walls, totaling over 1,700 LF were installed along residential communities. Noise walls were supported on reinforced concrete drilled shafts. The noise wall consisted of reinforced concrete noise posts and panels with a simulated brick finish.

- **Geotechnical and Pavement Analysis/Design** – Foundation design was provided for the noise wall and twin-cell box culvert. A temporary fabric wall was designed to maintain traffic at the culvert replacement to accommodate the raised roadway grade while maintaining traffic on the existing pavement. Roadway geotechnical and pavement design services included designing new roadway cuts/fills and new pavement using Falling Weight Deflectometer testing of existing pavement to remain and new pavement subgrade. The first use by MSHA of bank run gravel as the pavement base course was recommended by WR&A and approved by MSHA on this project. Local sources of bank run material were tested and accepted for use on the project.

- **Drainage Culvert Replacement** – Undersized culverts at a significant stream crossing were replaced with a twin-cell box culvert to eliminate flooding and closing of the existing roadway. A temporary culvert was installed for construction of the culvert and a stone box culvert structure was designed and constructed to promote fish passage while maintaining upstream hydrology needed for the preservation of existing wetlands. The new box culvert was supported on ‘H’ piles with one cell passing the normal flow and a second cell used as an animal passage and floodplain overflow. A circular overflow culvert was also installed to provide additional capacity for major storm events.

- **Utility Relocation Design and Coordination** – Utility relocation consisted of designing and installing over 10,000 LF of 12” ductile iron water pipe, 6,000 LF of 6” and 8” gas line, 350 feet of low pressure sanitary sewer with grinder pumps and coordination with utility companies for the relocation of aerial electric, telephone and cable television.

- **Maintenance of Traffic** – Extensive multi-stage maintenance of traffic plans were required to maintain traffic along all roadways and access to driveways/entrances. The project was divided into four distinct construction zones based on maintaining drainage within each zone. Temporary crossovers from newly constructed pavement to the existing pavement were necessary as each portions of the project were completed.

- **Traffic Control Devices** – Traffic Engineering services included the design and installation of five new traffic signals, signal interconnect, relocation of school flasher, new signing and pavement markings, and new intersection lighting.

- **Environmental Compliance** – Construction occurred in an environmental sensitive area requiring MSHA to retain an Independent Environmental Monitor (IEM) throughout the project duration as a permit condition. Close coordination with the IEM was required to maintain the project within the strict permit conditions.

- **Public Involvement** – A public meeting was held to continue MSHA’s public involvement campaign and to inform the community of the final design elements and upcoming construction activities. Public information materials and advanced notification of traffic impacts were provided to MSHA on a continual basis to keep the public informed throughout construction.

- **Partnering During Design and Construction** – WR&A participated in a 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.

**LESSONS LEARNED**

- Early and continued coordination with utility companies is necessary to ensure utility relocations are compatible with construction sequence and operations.
- Early and continued coordination with environmental agencies is necessary to ensure wetland and waterway construction activities are being performed in strict compliance with all permit conditions.
- Maintaining traffic in adjacent lanes is more desirable than splitting traffic, which requires the Contractor to work in an isolated construction area.
- Early and continued coordination between all members of the Design-Build Team and owner are a necessity to develop constructable plans and resolved construction issues expeditiously.
- 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.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER – WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

**Name:** DESIGN-BUILD MD 237 FROM MD 235 TO PEGG ROAD

**Location:** St. Mary’s County, MD

**Name:** Lane Construction Corporation

**Name of Client:** Maryland State Highway Administration (MSHA)

**Phone:** (410) 545-8814

**Project Manager:** Mr. Jeff Folden

**Email:** jfolden@sha.state.md.us

**Construction Contract Completion Date (Original):**

11/2010

**Construction Contract Completion Date (Actual or Estimated):**

10/2011

**Substantially Complete (Schedule extension by MSHA for 1 year delay in providing NFP to Lane):**

$35,872

**Est. Final: $38,435**

**Construction Contract Value (Original):**

$3,022

$38,435

$3,022
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 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. Four ramps with a length over 7,000 feet. The ramps intersected Fair Lakes Parkway and Monument Drive at coordinated signalized intersections with multi-lane approaches. WR&A assisted VDOT in coordinating the design of the project with the Fairfax County Park Authority for constructing a drainage outfall into the park and connecting the pedestrian facilities to the Rocky Run Stream Valley Trail in the park. The design of the trail through the interchange was of significant concern to the Park Authority.

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 reconstructing 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 all walls 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 were similar.

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.

WR&A Team Advantage

WR&A is proposing the same Project Manager for the Route 2 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

LESSES 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.
**LESIONS LEARNED**

- During preliminary design a major focus should be placed on constructability.
- Early coordination of Box Culvert design with the roadway and MOT is critical to success.
- A detailed Hydraulic model of the existing and proposed condition is critical to ensure private property is not impacted.
- Early coordination with local officials and stakeholders is a key to success.

**WR&A Team Advantage**

WR&A is proposing the same Project Manager for the Route 3 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

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**Roadway**
- Retaining Walls
- Box Culverts
- Environmental Permits
- Hydraulics and SWM
- Complex TMP
- Public Involvement
- Design QA/QC
- Engineering Support for Construction
- Project Management

**LESSONS LEARNED**

- During preliminary design a major focus should be placed on constructability.
- Early coordination of Box Culvert design with the roadway and MOT is critical to success.
- A detailed Hydraulic model of the existing and proposed condition is critical to ensure private property is not impacted.
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**WR&A Team Advantage**

WR&A is proposing the same Project Manager for the Route 3 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.

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**Project Award:**

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

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**Project:**

- **Structural Design** – Four highway bridges and two railroad bridges were designed under this contract. The highway bridges were all two-span continuous steel girder bridges with spans ranging from 137 feet to 203 feet and skew angles from 0 to 45 degrees. All the bridge designs were for use in a seismic performance category B using simple mode seismic spectral analysis techniques (SEISAB Program). The Route 624 bridge (B627) over the Route 29 Bypass included a jointless deck bridge with semi-integral abutments. The Railroad Bridges were designed as part of a relocation of approximately one mile of Norfolk Southern mainline track to accommodate construction of the new interchange. Two rounded bridges are designed to carry two mainline tracks. Bridge B626 carries the NS tracks over Route 29 Bypass and is a three-span skewed structure with simple deck plate girder spans of 133 feet – 150 feet – 169 feet. Bridge B631 carries the NS tracks over Relocated Route 661, and is a single-span skewed structure with a deck plate girder span of 121 feet. Both Railroad Bridges are constructed in two stages to accommodate railroad traffic during construction.

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**Scope of Work Similar to Route 3**

- Project Management
- Design QA/QC
- Public Involvement
- Hydraulics and SWM
- Box Culverts
- Temporary Facilities
- Roadway Design
- Stormwater Management
- Soils and Geotechnical Engineering
- Special Inspection
- Design and Construction Processes

**LESSONS LEARNED**

- During preliminary design a major focus should be placed on constructability.
- Early coordination of Box Culvert design with the roadway and MOT is critical to success.
- A detailed Hydraulic model of the existing and proposed condition is critical to ensure private property is not impacted.
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**WR&A Team Advantage**

WR&A is proposing the same Project Manager for the Route 3 project ensuring a proven integrated team approach to the project, which will allow the Lessons Learned above to be applied directly to the project.
Request For Qualifications
A Design-Build Project

Route 3 Widening

From: 4.1 Miles East Rte. 29
To: 4.0 Miles West of Culpeper/Orange County Line

State Project No.: 0003-023-107, P101, R201, C501
Federal Project No.: STP-023-7(024)
Contract ID Number: C00014657DB56

Culpeper County, Virginia