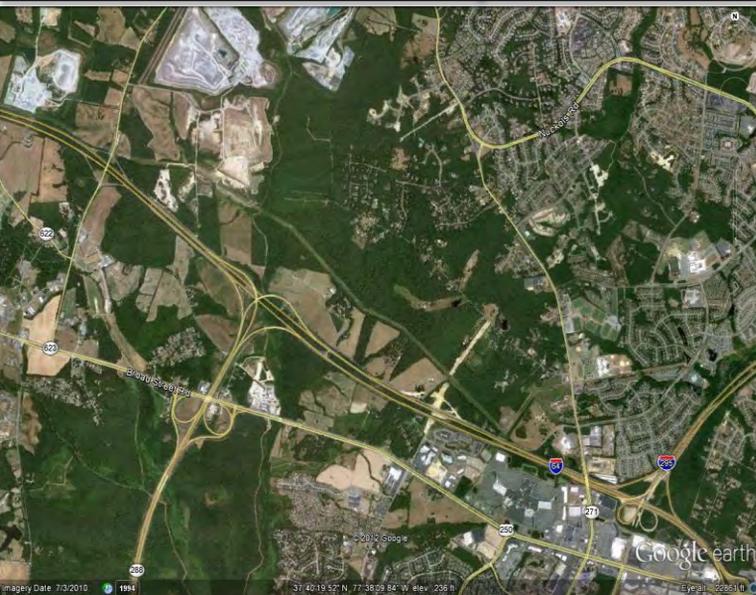


# STATEMENT OF QUALIFICATIONS

## I-64 WIDENING AND ROUTE 623 INTERCHANGE IMPROVEMENTS

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

State Project No.: 0064-964-110, P101, C501, B610-B614, B617, B616, D601-D606  
Federal Project No.: NH-064-2(150)  
Contract ID Number: C00070542DB55



This Statement of Qualifications has been prepared by:

*Key Construction Company, Inc.*



**JOHNSON, MIRMIRAN & THOMPSON**  
*Engineering A Brighter Future®*



November 15, 2012



## **SECTION 3.2**

# **LETTER OF SUBMITTAL**

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*Key Construction Company, Inc.*



# Key Construction Company, Inc.

P.O. Box 698 • Clarksville, Virginia 23927 • Tel. (434) 374-2125 • Fax (434) 374-4360

November 15, 2012

Mr. Stephen D. Kindy, PE  
Alternate Project Delivery Office  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

RE: **Statement of Qualifications**

I-64 Widening and Route 623 Interchange Improvements  
Goochland County and Henrico County, Virginia  
State Project No.: 0064-964-110, P101, C501, B610-B614,  
B617, B616, D601-D606  
Federal Project No.: NH-064-2(150)  
Contract ID Number: C00070542DB55

Dear Mr. Kindy:

**Key Construction Company, Inc. (Key)** is pleased to submit one (1) original paper version of our Statement of Qualifications, with full supporting documentation, which bear original signatures; one (1) CD-ROM containing the entire Statement of Qualifications in a single cohesive Adobe PDF file; and ten (10) abbreviated paper copies of the original Statement of Qualifications (SOQ) to the Virginia Department of Transportation (VDOT) to provide Design-Build (D-B) services for the I-64 Widening and Route 623 Interchange Improvements D-B Project in Goochland County and Henrico County, Virginia. We have carefully reviewed the Request for Qualifications (RFQ), RFQ Addendum No. 1, RFQ Information Package, and RFQ Questions and Answers; attended the Project Information Meeting; and visited the project site multiple times.

### **PROJECT TEAM**

Key is a wholly-owned subsidiary of Utility Services Associates, Inc. (USA). USA is a 100% employee-owned and operated Virginia corporation that serves as the holding company of the USA family of companies, including Key Construction Company, Inc. and their subsidiaries Key Constructors, Inc. and D.W. Lyle Corporation, each of whom provides construction related services. Key, based in Clarksville, Virginia, employs qualified personnel delivering projects throughout the Mid-Atlantic Region. Key has selected **Johnson, Mirmiran & Thompson (JMT)** as our lead design firm to provide all engineering services for this project. Key and JMT have excellent reputations in the design and construction of similar projects, with proven prior experience in delivering quality D-B projects. Other members of our team include EEE Consulting, Inc.; Froehling & Robertson, Inc.; NXL Construction Services, Inc.; Schnabel Engineering Consultants, Inc.; Volkert, Inc.; and Zannino Engineering, Inc.

### **KEY PERSONNEL**

Key has committed one of their most seasoned managers, **Mr. David Lyle**, to serve as the D-B Project Manager. Mr. Lyle has more than 21 years experience planning, managing and assisting in the design and construction of heavy civil projects. He has specific expertise in Virginia transportation construction projects and is thoroughly familiar with VDOT processes, policies, and procedures. JMT's Design Manager, **Mr. Robert Gallagher, PE**, will provide day-to-day management of the design team's efforts. Key's Construction Manager, **Mr. Paul Phillips**, will be on site for the duration of the project to manage the construction process including all Construction Quality Control activities. These key individuals will work closely with the independent Construction Quality Assurance Manager, **Mr. Bill McDowall, PE** of **Volkert, Inc.** to provide the highest level of project Construction Quality Assurance services in all phases from design to construction completion.

### **Section 3.2.2 Point Of Contact**

Key's official representative and designated **Point Of Contact** for all project-related communications is Key's **President, Mr. David W. Lyle**. Mr. Lyle can be reached as follows:

Address	Phone	Mobile	Fax	Email
P. O. Box 698 11453 Highway 15 South Clarksville, VA 23927	434-374-2125	804-731-3707	434-374-4360	<a href="mailto:david.lyle@key-construction.com">david.lyle@key-construction.com</a>

### Section 3.2.3 Principal Officer

The **Principal Officer** of Key with whom a D-B contract would be written is Key's principal officer and **President, Mr. David W. Lyle**. Mr. Lyle can be reached as follows:

Address	Phone	Mobile	Fax	Email
P.O. Box 698 11453 Highway 15 South Clarksville, VA 23927	434-374-2125	804-731-3707	434-374-4360	<a href="mailto:david.lyle@key-construction.com">david.lyle@key-construction.com</a>

### Section 3.2.4 Structure of Offeror

Key, a 100% employee-owned and operated Virginia corporation, will take financial responsibility for the project through bonding, insurance, etc. as required by VDOT. Key will manage the project subconsultants and subcontractors as a single, integrated design-build team. Key will provide VDOT with performance and payment bonds for the entire value of the contract. At this time, there are no limits, qualifications, or caps for Key's liability and indemnification for VDOT.

### Section 3.2.5 Full Legal Name of Both Lead Contractor and Lead Designer

*Lead Contractor's full legal name is:* Key Construction Company, Inc.

*Lead Designer's full legal name is:* Johnson Mirmiran & Thompson, Inc.

### Section 3.2.6 Affiliated or Subsidiary Companies

All information regarding Affiliated or Subsidiary Companies can be found on Attachment 3.2.6 located in the Appendix.

### Section 3.2.7 Certification of Debarment

Signed "Certification Regarding Debarment" forms for the D-B Team are included in the Appendix.

### Section 3.2.8 VDOT Prequalification Number and Status

Key Construction Company, Inc. is licensed by the Commonwealth of Virginia State Corporation Commission (license number 2701 021531A) and is an **active**, prequalified corporation with VDOT (**vendor number K006**). A copy of Key's VDOT prequalification certificate is included in the Appendix.

### Section 3.2.9 Surety or Insurance Company Performance and Payment Bond

The letter of reference from Thomas Rutherford, Inc., our surety agent, stating that Key is capable of obtaining a performance and payment bond based on the current estimated contract value of \$31,000,000 is located in the Appendix.

### Section 3.2.10 Business Entities Information

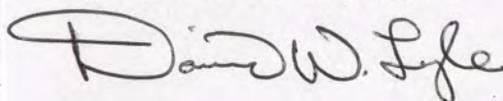
Full size copies of DPOR licenses and SCC registrations for the D-B Team members can be found in the Appendix, as well as Attachment 3.2.10.

### Section 3.2.11 Commitment to DBE Participation Goal

Key formally commits to achieving VDOT's ten percent (10%) Disadvantaged Business Enterprise (DBE) participation goal for the entire value of the contract on the I-64 Widening and Route 623 Interchange Improvements D-B Project.

Key and JMT have long and successful histories of serving VDOT on numerous projects. As a single, integrated D-B Team, we will design and construct the I-64 Widening and Route 623 Interchange Improvements D-B Project in a manner to ensure the greatest opportunity for success. We will create a transparent working relationship with VDOT and 3<sup>rd</sup> party stakeholders to promote trust, confidence, and collaboration.

Respectfully Submitted,  
**Key Construction Company, Inc.**



David W. Lyle  
President



## **SECTION 3.3**

# **OFFEROR'S TEAM STRUCTURE**

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*Key Construction Company, Inc.*

### 3.3 OFFEROR'S TEAM STRUCTURE

Key Construction Company, Inc. (Key), operating as a single Design-Build (D-B) entity, will be ultimately responsible for the delivery of this project to VDOT. Key's responsibilities will include coordinating all interested parties – contractors, designers, VDOT, and the public – as well as providing overall construction management. In addition, Key will serve as the lead contractor, self-performing much of the construction while managing qualified subcontractors as necessary. Other team members and their assigned roles include:

- ✓ **Johnson, Mirmiran & Thompson, Inc.** – Lead Designer
- ✓ **EEE Consulting, Inc.** – Environmental
- ✓ **Schnabel Engineering Consultants, Inc.** – Geotechnical
- ✓ **NXL Construction Services, Inc.** – Construction Quality Control Services
- ✓ **Froehling & Robertson, Inc.** – Construction Quality Control Materials Sampling and Testing Services
- ✓ **Volkert, Inc.** – Construction Quality Assurance Services
- ✓ **Zannino Engineering, Inc.** – Construction Quality Assurance Materials Sampling and Testing Services

#### 3.3.1 Identity of and Information About the Key Personnel

The Key and Johnson, Mirmiran, and Thompson, Inc. (JMT) personnel assigned to the I-64 Widening and Route 623 Interchange Improvements D-B Project are highly qualified design and construction professionals with extensive experience on similar projects. The Key/JMT Team structure employs **best management practices, emphasizes intra-team communications**, and empowers team members to **solve issues at the most appropriate organizational level**. This Statement of Qualifications (SOQ) includes resumes providing descriptions of the qualifications and experience of the Key/JMT Team Key Personnel. Our Key Personnel and support staff have a long history working with VDOT on transportation projects and have experience working on recent D-B projects in Virginia. **The Key/JMT Team will keep these Key Personnel, as well as all identified support team members, on this project for the duration of this contract.** For the I-64 Widening and Route 623 Interchange Improvements D-B Project, the Key/JMT Team commits the following four (4) Key Personnel:

##### 3.3.1.1 Design-Build Project Manager (D-B PM)

Key has committed one of their most seasoned managers, **Mr. David W. Lyle**, to serve as the D-B PM. Mr. Lyle has more than 21 years of experience in planning, managing and assisting in the design and construction of heavy civil projects. His specific expertise is in Virginia transportation construction projects and, as a result, he is thoroughly familiar with VDOT processes, policies and procedures. Mr. Lyle has worked on numerous D-B and traditional bid build transportation projects in the State involving bridges, roadways and interchanges. His recent D-B experience includes the following projects:

- ✓ Route 61 over New River, Route 460, and Old Virginia Avenue Project (D-B), Town of Narrows
- ✓ Route 288 PPTA Project (D-B), VDOT Richmond District
- ✓ James Madison Highway (Route 15) Improvements Project (D-B), Prince William County
- ✓ I-495 HOT Lanes Project (D-B), VDOT NOVA District
- ✓ I-895, Pocahontas Parkway Project (D-B), Chesterfield and Henrico Counties
- ✓ Watkins Center Parkway (Route 60) Project (D-B), Chesterfield County

His recent and on-going Virginia D-B experience, combined with his knowledge and uncompromising commitment to quality and professionalism, ensure that Mr. Lyle has the ability to capably fulfill the D-B PM responsibilities for this project. Mr. Lyle has served on the VTCA/VDOT Joint Structure and Bridge Subcommittee for over 13 years. He also served terms on the VTCA Contractor Leadership committee and served multiple terms on VTCA's Board of Directors.

##### 3.3.1.2 Quality Assurance Manager (QAM)

Volkert, Inc. has committed one of their most experienced managers, **Mr. William "Bill" D. McDowall, II, P.E.**, to serve as the QAM. Mr. McDowall worked 11 years for VDOT, his last position being the Assistant State Construction Engineer, where he was responsible for numerous construction projects across the state. He also served as the Assistant State Contract Engineer and as the Senior Transportation Engineer in charge of VDOT's Anti-Trust Office. His experience includes the management of roadway widening, new bridge, bridge repair and widening, and bridge replacement projects. As a former employee of McDowall & Woods Construction Company, Mr. McDowall also built numerous roadways and bridges in Virginia. Mr. McDowall has experience with the following projects:

- ✓ I-95 Widening at the Rappahannock River, City of Fredericksburg and Stafford County
- ✓ I-81 Widening at Radford, Montgomery and Pulaski Counties
- ✓ I-95 Springfield Interchange and Woodrow Wilson Bridge, Fairfax County
- ✓ I-66 VDOT NOVA District Patching and Overlay Project, VDOT NOVA District

### 3.3.1.3 Design Manager (DM)

JMT has committed **Mr. Robert T. Gallagher, P.E.**, one of their most experienced managers, to serve as the DM. Mr. Gallagher has 25 years of extensive experience in Virginia transportation projects. He serves as JMT's Virginia Transportation Manager and is responsible for the major transportation disciplines of roadway and bridge design, construction inspection, and right-of-way acquisition within the Commonwealth. He is thoroughly familiar with the VDOT project development and delivery process for transportation projects including public involvement policy; environmental document preparation; roadway, hydraulics, structures (bridge and retaining wall) and traffic engineering; and utility design and relocation coordination. His vast experience in the management of all pertinent design disciplines ensures his ability to responsibly manage project design and to establish and oversee an independent design QA/QC program for this project. Mr. Gallagher has been instrumental in the successful design and administration of many VDOT and municipal, VDOT funded, highway projects including numerous D-B projects. He has served as the Project Manager or Principal-In-Charge on numerous VDOT "on-call" contracts and D-B projects throughout the Commonwealth including:

- ✓ Route 61 over New River, Route 460, and Old Virginia Avenue Project (D-B), Town of Narrows
- ✓ Route 288 PPTA Project (D-B), VDOT Richmond District
- ✓ James Madison Highway (Route 15) Improvements Project (D-B), Prince William County
- ✓ Fairfax County Parkway (Phase I, II and IV) Project (D-B), Fairfax County
- ✓ Route 1 (Monroe Avenue) over Potomac Yards Project (D-B), City of Alexandria
- ✓ Pentagon Secure Access Road Improvements at Route 27/244 Project (D-B), Arlington County
- ✓ VDOT Design Limited Services Statewide and Two Regional Contracts
- ✓ VDOT Traffic Engineering Statewide Limited Services
- ✓ VDOT NOVA Regional Quality Plan Review

Mr. Gallagher is a current member of VTCA's Engineering Consultant Leadership Committee and previously served on VTCA's Joint Highway Cooperative Committee.

### 3.3.1.4 Construction Manager (CM)

**Mr. Paul Phillips** will serve as the CM responsible for managing the Key and subcontractor forces. He will oversee a multi-disciplined staff of construction professionals and subcontractors. Mr. Phillips brings over 15 years of progressive, large DOT project, construction management experience. A depth of DOT, Design/Build experience and current working relationship with grading superintendents, structures superintendents, subcontractors and suppliers allow Mr. Phillips to positively direct and control specific tasks for each construction crew and subcontractor. Mr. Phillips will also oversee all construction QC activities to ensure the materials used and the work performed meet contract requirements, plans, and specifications. Work on two recent, extremely successful VDOT Design Build Projects and other large DOT projects give Mr. Phillips a significant amount of D-B and local experience.

- ✓ Route 288 PPTA Project (D-B), VDOT Richmond District
- ✓ APM Terminal Roadway Project (D-B), City of Portsmouth
- ✓ Hill Carter Parkway Project, Town of Ashland
- ✓ Fox Club Parkway and Village Square Parkway PPEA Project (D-B), Chesterfield County

Mr. Phillips will hold all applicable certifications required in the performance of his duties prior to commencement of construction, including but not be limited to a Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber(RLD) Certification and a VDOT Erosion and Sediment Contractor Certification (ESCCC).

### 3.3.2 Team Organizational Chart

The organizational chart provided at the end of this section shows the "chain of command" while identifying major functions to be performed by the Key/JMT Team. The organizational chart also shows the reporting relationships of Key Personnel responsible for the management of design, construction, and quality control/quality assurance activities. The Key/JMT Team has clearly defined roles and relationships. The team organization is optimized to present clear, logical, reporting relationships to manage the design and construction of the I-64 Widening and Route 623 Interchange Improvement D-B Project, while maintaining distinct responsibilities and project controls. The project staff is organized to facilitate timely and effective communication among all personnel, regardless of position. Practical lines of communication run between design, construction, and the independent QA/QC support staff, with the D-B PM ensuring all levels function as a team. This organization is a successful model used by Key and JMT on past and present projects.

### Design-Build Project Manager

The Key/JMT Team organizational chart starts with VDOT at the pinnacle of the hierarchy. The Key/JMT Team recognizes that all final decisions rest with VDOT. The team's primary interface with VDOT will be through the D-B

PM, Mr. David Lyle.

In accordance with sound management practice and VDOT guidance, the D-B PM serves in the most crucial role, one that defines success for all aspects of the project. The D-B PM is the principal conduit for communication with VDOT, and also directly controls the design, construction, and quality assurance functions. One feature of the Key/JMT Team proposal is the independence of the key support staff of specialty professionals whose role is to assure that the highest levels of quality and safety are maintained in both the design and construction phases of the project.

The organizational chart further depicts that the main production staff interfaces with the D-B PM will be the DM, the CM, and the QAM allowing effective communication among the Key Personnel. The DM, the CM, and the QAM will support the D-B PM as points of contact with VDOT in their respective areas of expertise. The D-B PM will rely on the DM, the CM, and the QAM to effectively coordinate their individual Team elements and will use these Key Personnel to communicate to all Team members during design and construction.

Mr. Lyle will also coordinate directly with those shown in the roles of Safety Director, Environmental Compliance Monitor, and Public Involvement/Relations. These personnel serve important support roles for the project team and provide specific areas of expertise to benefit the entire project.

**Safety Director:**

Key will assign a dedicated individual to serve as Safety Director for this project. The Safety Director will be responsible for planning, executing, evaluating, and monitoring all aspects of the Safety Program in close coordination with the D-B PM, the CM, and field staff.

**Environmental Compliance Monitor:**

**EEE Consulting, Inc.** will provide independent environmental compliance monitoring and oversight during construction and will ensure all requirements of the environmental document and environmental permits are met.

**Public Involvement/Relations:**

The I-64 Widening and Route 623 Interchange Improvement D-B Project will increase the capacity along the I-64 corridor as well as improve performance of the off-ramps at the Route 623 interchange. As a result, 3<sup>rd</sup> party stakeholders such as Goochland and Henrico Counties, the local business owners, schools, emergency responders, public and private utility companies, and especially the traveling public will be very interested in the project. The D-B PM will work with VDOT and the project Team to develop and implement a public participation program including conducting both public information meetings and individual one-on-one meetings, developing and updating a project web site, preparing monthly project mailers, and securing media coverage through newspapers, radio, and television. The CM, superintendents, and QA Team will provide the daily, front line interaction with 3<sup>rd</sup> party stakeholders.

### *Design Manager*

The Key/JMT Team organizational chart clearly defines that all design disciplines for the project will report to the DM, Mr. Robert Gallagher, PE. The approach to staffing these disciplines hinges on the concept of matching the requirements of this project to the experience and depth of knowledge of staff best suited to fulfill these specific requirements. While the majority of the disciplines will be covered by JMT professionals, the team does include specialty sub consultants who will augment the Team and report directly to the DM. The DM will report directly to the D-B PM.

During the design phase of the project, Mr. Gallagher will interface directly with each of the discipline leaders, whether that individual is a JMT staff member or a JMT sub consultant. In addition, JMT, a VDOT prequalified right-of-way contracting consultant, has the ability to assist with potential right-of-way services for the project. While note currently a design service requested by the Department, the need for additional right-of-way may be required as a result of the final design solution. If additional right-of-way is required, JMT will engage the services of a VDOT prequalified fee appraiser and VDOT prequalified review appraiser during the appraisal and appraisal review process.

Mr. Gallagher will also establish and oversee the QA/QC program for design. The responsibilities of the QA/QC team will be separated between the Design QA Manager and the Design QC Managers.

The Design QA Manager will operate independent of the design team and will evaluate and compare the design to the established design criteria and ensure that the design QC process is complete. In general, the Design QA Manager will evaluate whether the designer appropriately assessed design issues and problems, applied the correct analysis techniques, and assigned qualified personnel to the task. The Design QA Manager will address whether the solution is practical and cost effective and whether the design is appropriate. *JMT has identified Mr. Dick Asbury, PE to*

*serve as the Design QA Manager.* He will interface and report directly to the DM. Mr. Asbury has provided design quality assurance services on numerous projects during his 40 year engineering career.

The Design QC Team will be staffed with individual Design QC Managers that are not involved in the design process and will report directly to the DM. Reviewers that are independent from day-to-day design activities ensure that the QC Team is truly providing a fresh set of eyes to plan development. The independent QC reviews will determine whether the design and plans conform to the established design criteria and design processes. In general, the QC Team will review math and engineering computations; check technical accuracy; verify conformance with contract requirements; review form, content, and spelling; and verify coordination with other design disciplines and the project sequence of construction.

The following sub consultants will provide specialty services and will report directly to the DM.

**EEE Consulting, Inc. (EEE)**

EEE will be responsible for obtaining all necessary state and federal water quality permits for the project.

**Schnabel Engineering Consultants, Inc. (Schnabel)**

Schnabel will provide geotechnical services for the project including geotechnical investigations, borings and analysis, materials analysis, and geotechnical recommendations for design and construction. In addition, Schnabel will validate the suitability of the minimum pavement sections anticipated for the project.

**Construction Manager**

The Key/JMT Team organizational chart identifies Mr. Paul Phillips as the CM for the project who will oversee all major construction activities. The roadway superintendent and structure and bridge superintendent will report directly to the CM. CM responsibilities will include CPM schedule development and updating, resource planning and allocation (materials, labor, and equipment), budgetary and cost control, subcontractor scheduling, maintenance of traffic, E&SC, and shop drawing review. The CM will report directly to the D-B PM.

In addition, the CM will be responsible for Construction Quality Control activities including construction quality control testing and off-site materials sampling and testing. The Key/JMT Team has selected NXL Construction Services, Inc. (NXL) to provide the Construction Quality Control services for the project. Key and NXL will assign an experienced individual to serve as the Construction QC Manager for the project's construction quality control program. The Construction QC Manager will oversee all QC staff including inspectors and testing technicians and will oversee the activities of the off-site materials sampling and testing laboratory. The **Construction QC Manager** will report directly to the CM.

The following sub consultants will provide specialty services and will report directly to the CM.

**NXL Construction Services, Inc. (NXL)**

NXL will provide QC inspectors and testing technicians for the project.

**Froehling & Robertson, Inc. (F&R)**

F&R will provide QC services for the off-site materials sampling and testing.

**Quality Assurance Manager**

The Key/JMT Team organizational chart identifies Volkert, Inc. as the independent firm to provide the Construction Quality Assurance services for this project. Volkert commits Mr. William McDowall, II, PE to serve as the QAM in a leadership capacity for the project's construction quality assurance program. He will oversee a QA staff including a lead senior inspector, project inspectors, and a records administrator, as well as oversee the activities of the independent off-site materials sampling and testing laboratory. The QAM will report directly to the D-B PM.

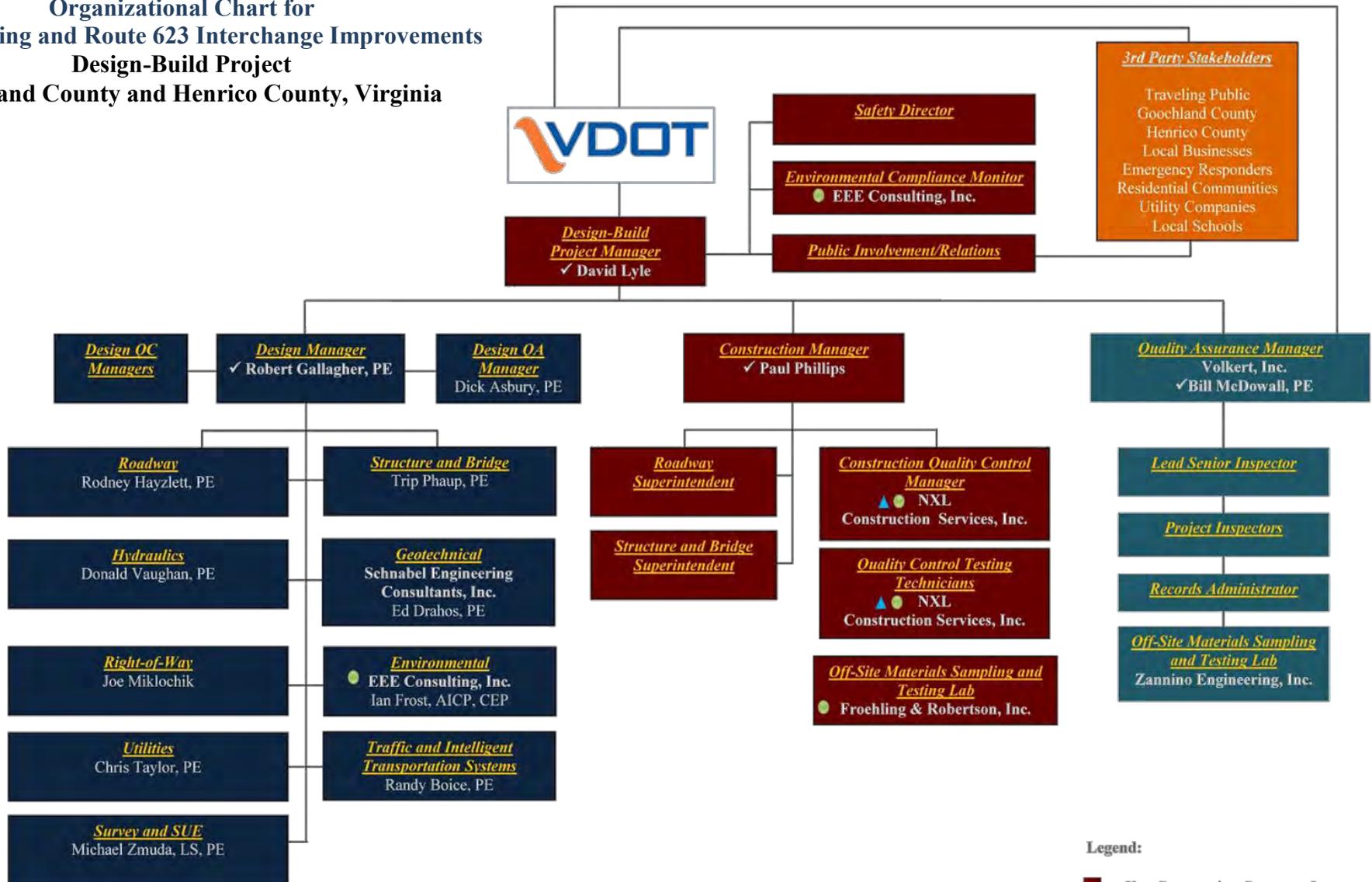
**Volkert, Inc. (Volkert)**

Volkert will provide all Construction Quality Assurance services for this project including inspection and administration activities.

**Zannino Engineering, Inc. (Zannino)**

Zannino will provide QA services for the off-site materials sampling and testing.

**Organizational Chart for  
I-64 Widening and Route 623 Interchange Improvements  
Design-Build Project  
Goochland County and Henrico County, Virginia**



- Legend:**
- = Key Construction Company, Inc.
  - = Johnson, Mirmiran & Thompson, Inc.
  - = Volkert, Inc.
  - = Small, Women, and Minority Business
  - = Disadvantaged Business Enterprise
  - ✓ = Key Personnel



## **SECTION 3.4**

# **EXPERIENCE OF OFFEROR'S TEAM**

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*Key Construction Company, Inc.*

**3.4 EXPERIENCE OF OFFEROR'S TEAM**

**Key Construction Company, Inc. (Key)** is a heavy-highway construction contractor specializing in public and private infrastructure projects including bridges, overpasses, channels, roadways, and highways. During the past five decades, Key has served as a prime contractor for multiple clients including departments of transportation, counties, federal, state and local governmental authorities, municipalities, investor-owned utilities, and other private market owners in the states of Virginia, Maryland, North Carolina, and South Carolina. These projects have been successfully completed by a variety of project delivery methods including design-build, prime contracting, subcontracting, and construction management. In 2006, Key acquired D.W. Lyle Corporation in a strategic move to add strength and market share to its organization. D.W. Lyle Corporation operated for over 50 years as a heavy-highway contractor focused primarily on new bridge, bridge replacement, and bridge widening projects throughout Virginia, North Carolina, and South Carolina.

Key's philosophy is to safely deliver the highest level of quality within the industry both on time and within budget and to assure that the standards of construction meet Virginia Department of Transportation (VDOT) requirements. Key is further committed to meeting the needs of VDOT on every front, from the initial project development through construction completion. **Key has maintained an average C-36 rating over 90 points and a 95 CQIP performance score.**

The projects listed below showcase Key and D. W. Lyle Corporation experience with projects that are similar in size and scope to the I-64 Widening and Route 623 Interchange Improvements Design-Build (D-B) Project. Project similarities include interstate interchange; bridge and road construction; utility construction, relocation and coordination; phased construction; maintenance of traffic; environmental compliance; and stakeholder coordination.

- ✓ VDOT, 2011, Route 265 Franklin Turnpike Extension, Pittsylvania County
- ✓ **VDOT, 2009 to Current, I-495 / Dulles Toll Road Interchange, Fairfax County**
- ✓ VDOT, 2008, Watkins Center Parkway over Route 288 (D-B), Chesterfield County
- ✓ VDOT, 2007, Route 360 and Route 58 Bridge and Roadway, Halifax County
- ✓ VDOT, 2007, Route 29 Business over Route 29 Bypass, Town of Chatham
- ✓ VDOT, 2005, Stony Run Parkway over I-64, Henrico County



**Johnson, Mirmiran & Thompson, Inc. (JMT)** is a full service ENR top 500 design firm (#105 in 2012) and is #29 among ENR's Top 50 Transportation Design Firms with more than 40 years of experience in the design of highway projects. JMT has total staff in excess of 786 professionals with offices in Richmond, Herndon and Virginia Beach, Virginia as well as in Maryland, West Virginia, Pennsylvania, Washington DC, Delaware, New Jersey, New York and Florida. JMT has continuously provided road and bridge design and surveying services to VDOT from our Virginia offices for over 25 years and currently has a staff of over 80 in Virginia.

JMT has designed major projects for VDOT, Maryland State Highway Administration, Maryland Transportation Authority, Pennsylvania Department of Transportation, and the Metropolitan Washington Airports Authority. JMT's transportation design capabilities have been recognized by a number of awards that our projects have received including:

- Fairfax County Parkway Design-Build Project, Phases I, II, and IV, Fairfax County, VA**
- 2012 Transportation Engineering Award, VDOT Projects Greater than \$10 Million, VTCA
- 2011 Merit Award, American Council of Engineering Companies – Virginia
- 2011 Honor Award, American Council of Engineering Companies – Maryland

- North Area Roadway Improvements, Washington Dulles International Airport, VA**
- 2010 Merit Award, American Council of Engineering Companies – Virginia

- Woodrow Wilson Bridge, Prince George's County, MD; Washington, DC; and Fairfax County, VA**
- 2008 OPAL Award, American Society of Civil Engineers - Maryland

Details of these and other award winning projects can be found on JMT's website at <http://www.jmt.com/about-jmt/awards-honors/>. The projects listed below showcase JMT's relevant D-B experience that are similar in size and scope to the I-64 Widening and Route 623 Interchange Improvements Design-Build (D-B) Project. Project similarities include interstate; interchange; survey and SUE; bridge, road, hydraulic, and traffic engineering; geotechnical engineering; utility design, relocation and coordination; phased construction and maintenance of traffic; environmental studies and permit acquisition; and public involvement.

- ✓ Fairfax County Parkway (D-B), Fairfax County
- ✓ 9th Street Bridge Replacement (D-B), Washington, DC
- ✓ Taylor Street Bridge Replacement (D-B), Washington, DC
- ✓ Route 61 over New River, Route 460, and Old Virginia Avenue (D-B), Town of Narrows
- ✓ 3<sup>rd</sup> Street (Route 15/460) over Buffalo Creek (D-B), Town of Farmville
- ✓ **11<sup>th</sup> Street Corridor (D-B), Washington, DC**
- ✓ James Madison Highway (Route 15) Improvements (D-B), Prince William County



**Relationship of Key and JMT**

Key and JMT and the individual staff members of Key and JMT have a solid, long term, work history of teaming and partnering on transportation projects. The successful completion of these projects demonstrates that the Team possesses the skills and knowledge to provide VDOT with an exceptional team for the design and construction of the I-64 Widening and Route 623 Interchange Improvements Design-Build (D-B) Project. In addition, Key and JMT’s focus on process, planning, and scheduling make them an excellent team for this project. Both organizations are very experienced with the design-build process and have a proven cooperative work history.

The Key/JMT Team has success with VDOT as the D-B Team selected to provide the design and construction of the Route 61 Bridge Replacement over the New River, Route 460, and Old Virginia Avenue D-B Project in the Town of Narrows located in VDOT’s Salem District. The I-64 Widening and Route 623 Interchange Improvements D-B Team will use many of the same design, construction, and quality assurance staff including Design-Build Project Manager, Design Manager, Lead Roadway Engineer, Lead Structure and Bridge Engineer, and Quality Assurance firm as on the Route 61 D-B Team. The uninterrupted continuation of this experienced D-B Team will prove to be a valuable asset to the success of this project.

Key’s Design-Build Project Manager, David Lyle, and JMT’s Lead Structure and Bridge Engineer, Trip Phaup, PE have a **24 year relationship** working together on roadway, bridge, and structure related projects including design-build projects, design-bid-build projects, value engineering (VE) redesigns, and construction engineering assignments for cofferdams, sheeting and shoring, crane lifting beams, and other miscellaneous structures. David and Trip first met at **Virginia Tech** while taking classes in Civil Engineering and Building Construction. They first worked together as Contractor’s project superintendent and Engineer’s construction inspector on the Pungo Ferry Road Bridge Replacement Project in the City of Virginia Beach completed in 1991. Since then, they have worked hand-in-hand on numerous projects in Virginia including:

- ✓ Route 15 Bridge over Rivanna River, VE Foundation Redesign, Fluvanna County
- ✓ Southpoint Parkway Bridge over Massaponax Creek, Total Bridge Design, Spotsylvania County
- ✓ Route 1 (Boydton Plank Road) Bridge over Stony Creek, Superstructure Jacking Plans, Dinwiddie County
- ✓ Route 606 (Blenheim Road ) Bridge over Deep Creek, VE Total Bridge Redesign, Powhatan County
- ✓ Route 54 Bridge over South Anna River, Temporary Bridge Foundation Design, Hanover County
- ✓ Pungo Ferry Road Bridge Replacement, Construction and Construction Inspection, City of Virginia Beach

**Route 15 over Rivanna River Value Engineering Redesign**



**Pungo Ferry Road Bridge Replacement**

Key’s Design-Build Project Manager, David Lyle; JMT’s Design Manager, Robert Gallagher, PE; and JMT’s Lead Structure and Bridge Engineer, Trip Phaup, PE have a **12 year relationship** working together on bridge and roadway projects in Virginia including:

- ✓ Route 288 PPTA D-B, Goochland County including bridges on -
  - Route 650 (River Road) over Route 288
  - Route 288 (NBL and SBL) over West Creek Parkway
  - Route 6 (Patterson Avenue) over Route 288
- ✓ Route 642 (Salem Church Road) over Reedy Creek, Chesterfield County

**Route 288 (NBL and SBL) over West Creek Parkway PPTA D-B**



**Route 642 (Salem Church Road) over Reedy Creek**

As companies, Key and JMT have worked successfully on a number of recent D-B projects in Virginia including:

- ✓ Route 61 over New River, Route 460, and Old Virginia Avenue (D-B), Town of Narrows (under construction)
- ✓ James Madison Highway (Route 15) Improvements (D-B), Prince William County
- ✓ Watkins Center Parkway (D-B), Chesterfield County



**Route 61 over New River, Route 460, and Old Virginia Avenue (D-B)**



**James Madison Highway (Route 15) Improvements (D-B)**



**Watkins Center Parkway (D-B)**

The project examples described above demonstrate that Key and JMT and the individual staff members of Key and JMT have a solid, long term, work history involving transportation projects in Virginia and will be able to successfully deliver the I-64 Widening and Route 623 Interchange Improvements Design-Build (D-B) Project.

***Subconsultants and Major Subcontractors***

Key and JMT have developed and organized a team in order to provide VDOT with sufficient, knowledgeable, and qualified staff to successfully complete this project. Based on the project size, we selected a number of qualified subconsultant firms to provide the expertise, experience, qualifications, and staff resources to accomplish the anticipated work. Brief descriptions of the qualifications of each subconsultant are provided below.

 **EEE Consulting, Inc. (EEE)**, a Virginia DMBE certified small, women-owned, and minority (SWaM) business, specializes in environmental and environmental engineering, local government planning and environmental education. EEE has helped local government, and state and federal transportation agencies with natural resource, wetlands, hazardous materials, air quality, noise studies, environmental compliance, and NEPA documents, including Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, and State Environmental Review Process Requirements. EEE’s transportation experience includes contracts with VDOA, VDOT, VDRPT, WMATA, NCDOT, STB, FTA, and local governments. EEE is extremely familiar with the environmental work necessary for acquisition of the water quality permits and has provided similar services to JMT on numerous, recent projects including the Fairfax County Parkway Design-Build Project in Fairfax County, VA.

 **Froehling & Robertson, Inc. (F&R)**, established in 1881, is a multi-disciplinary engineering firm that provides a full range of services including construction management, construction materials testing, and environmental and geotechnical engineering. Not only does F&R have some of the most advanced testing facilities and equipment in the industry, but their engineers and technicians are among the most highly trained. F&R’s specialists are examined and certified by technical groups including WACEL, NICET, ACI, AWS, and ASNT, and constantly take new training to ensure that they are up-to-date on the latest procedures and techniques.

 **Schnabel Engineering Consultants, Inc. (Schnabel)**, founded in 1956, is an employee-owned company offering highly specialized services in geotechnical engineering, geostructural design, dam engineering, tunnel and underground engineering, environmental, geophysical and geosciences, construction monitoring, and resident engineering from locations throughout the United States. Schnabel’s wide variety of projects includes buildings, dams, airports, **highways and bridges**, subways, tunnels, port facilities, and government facilities. With a multi-disciplinary staff of more than 300, Schnabel provides a full range of geotechnical and dam engineering services including subsurface exploration, soil laboratory testing, engineering analysis, design recommendations, and construction phase services. **Schnabel has provided geotechnical engineering services on over 75 bridge and roadway projects throughout Virginia located in a wide variety of geologic settings.** Also, Schnabel has a long history of providing geotechnical services to JMT including the Fairfax County Parkway Design-Build Project in Fairfax County, VA.

**VOLKERT** **Volkert, Inc. (Volkert)**, founded in 1925, is a multi-disciplinary, full-service engineering and environmental firm that provides services to state departments of transportation, federal agencies, local and municipal governments, as well as private industry. Volkert’s Virginia based staff of construction managers and inspectors are very knowledgeable of VDOT road and bridge construction methods, materials, standards, and specifications. Volkert’s quality assurance experience includes significant design-build projects, as well as construction engineering services for traditional

design-bid-build projects. Volkert is currently providing the quality assurance and QAM services for Key on the **Route 61 (MacArthur Avenue) over New River, Route 460, and Old Virginia Avenue D-B Project** in the Town of Narrows.



**Zannino Engineering, Inc.** (Zannino) is a progressive, innovative geotechnical and environmental engineering and materials testing company founded in 1991. Zannino has worked with numerous public and private sector clients on all types of projects ranging in size from simple residential soil surveys to commercial, industrial, and institutional projects with budgets in excess of \$100 million. Zannino's AMRL accredited laboratory is capable of providing a wide range of tests to suit a client's particular needs.

**Construction Subcontractors and Material Suppliers** As an established member of the Heavy Highway and Construction Industry for 50 years, Key has developed long standing relationships with reputable subcontractors and material suppliers and will utilize these relationships to identify and secure the most qualified firms to support our project goals. Key is currently working with a number of subcontractors and materials suppliers, prequalified with VDOT, performing similar scope of services and quantities of work that this project demands. When selecting subcontractors and material suppliers, Key evaluates them during the procurement process as follows:

- ✓ Review VDOT experience track record and qualifications.
- ✓ Define the scope of work with associated quantities and project expectations.
- ✓ Prepare bid quote packages including expected performance time schedule and estimated quantities.
- ✓ Solicit quotes from subcontractors and vendors including all DBE and SWaM firms.
- ✓ Check performance data, EMR Ratings, OSHA, and Safety Records.
- ✓ Analyze and select subcontractors based on price, performance, products, methods, and firm capacity.

### 3.4.1 Work History

Key and JMT have each provided three work history forms describing relevant projects of similar scope and complexity as the I-64 Widening and Route 623 Interchange Improvements D-B Project. The project descriptions can be found in **Attachment No. 3.4.1 (a) Lead Contractor Work History Form** and **Attachment 3.4.1(b) Lead Designer Work History Form** of this SOQ.



The projects **Key** has chosen for their work history experiences were selected because they are similar in nature to the I-64 Widening and Route 623 Interchange Improvements D-B project and best demonstrate our qualifications. **The projects were constructed for VDOT, involved roadway and bridge construction in environmentally sensitive sites, carried high volumes of traffic in a mix of urban and rural settings, and contained a heavy concentration of public and private utilities.** These projects had various stakeholders, such a private property owners, city and town officials, business owners and government administrators which required extensive communication to present project goals and schedules. The projects were completed ahead of schedule and within budget.

The projects **JMT** has chosen for their work history experiences were selected because each involved similar aspects of work that will be required for the I-64 Widening and Route 623 Interchange Improvements Improvement D-B project. **All projects are Design-Build projects designed and constructed to FHWA or VDOT Standards and Specifications involving roadway improvements and new, replacement, or widened bridges.** The Fairfax County Parkway project was a major Design-Build project with FHWA-EFLHD with extensive review and oversight from VDOT, NOVA Mega Projects GEC, U.S. Army Garrison Fort Belvoir, and the I-95 HOT Lanes P3 team. The project includes design of 7 bridge structures, including 3 structures over the environmentally sensitive Accotink Creek and the widening of an existing bridge.



The 3<sup>rd</sup> Street (Route 15/460) Bridge over Buffalo Creek project was one of the first VDOT Design-Build projects involving a bridge replacement over waterway in the Town of Farmville that required critical MOT plans to accommodate traffic through the work zone during construction including maintaining access for emergency response and fire department vehicles.

The 9<sup>th</sup> Street Bridge Replacement D-B project in Washington D.C. required construction of a four span bridge over CSXT and AMTRAK rail facilities for New York Avenue and included 1,700 feet of realignment and construction of New York Avenue including three new signalized intersections. The project and project Owner concerns mandated a community outreach program to address and minimize impacts and construction time, and address concerns with aesthetic design of the project. Along with the community and users of the project, major stakeholders included the DDOT, CSXT, AMTRAK, U.S. Post Office and Utility Companies.





## **SECTION 3.5**

# **Project Risk**

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*Key Construction Company, Inc.*

### 3.5 Project Risk

#### 3.5.1 Identify and Discuss Three Critical Risks for this Project

The Key/JMT Team (Team) has evaluated the existing project information contained in the RFQ documents including RFQ plans, and reports and has visited the project site on numerous occasions. Based on this research, the Team has identified a number of potential project risks including:

- ✓ Ensuring safety through the work zone during construction while minimizing impacts to the traveling public.
- ✓ Developing a good public communication plan.
- ✓ Assessing and defining the potential variable geotechnical characteristics present at the project site.
- ✓ Finalizing the design and location of stormwater management facilities within the existing right-of-way.
- ✓ Evaluating the condition of existing structures (bridges, culverts, large drainage pipes) and quantifying the amount of required upgrades or repairs.
- ✓ Finalizing environmental evaluations related to wetlands, streams, and threatened and endangered species.
- ✓ Developing wetland and stream mitigation strategies and obtaining water quality permits in a timely manner.
- ✓ Performing utility relocation and coordination in a timely manner.

The Team has weighed each potential risk described above and has identified three critical risks that the Team considers most relevant and critical to the success of the project. A narrative for each risk is provided below that describes why the risk is critical, indicates the impact the risk may have on the project, discusses the mitigation strategies that the Team may implement to address the risk, and describes the role that the Team expects VDOT or other agencies may have in addressing the risk.

**Critical Risk 1** – **Finalizing the design and location of stormwater management facilities within the existing right-of-way will be a critical risk for the project.** VDOT requirements for addressing post development stormwater management have undergone dramatic changes over the past few years and are described in detail in Location and Design Division IIM-LD-195.7 dated November 12, 2010. According to IIM-LD-195.7, for Design Build Projects, full implementation of the water quality volume guidelines and criteria will be required since the Public Hearing and RFP were both advertised after the effective date of the IIM. Full implementation of the guidelines and criteria require that the water quality volume for any required BMP be based on the TOTAL POST DEVELOPMENT IMPERVIOUS AREA within the site draining to the BMP. So even though the project is only adding a single 12 foot lane along the eastbound and westbound lanes, the water quality volume for the BMP's will be based on three 12 foot lanes and 2 shoulders along the eastbound and westbound lanes.

**Why the risk is critical and the impact the risk will have on the Project.** The risk is critical because there are limited areas within the existing right-of-way where conventional BMP's can be placed and additional right-of-way or permanent easements may be required. Based on the information contained in the RFQ documents, VDOT has assumed that additional right-of-way and easements will not be required for the project. For example –

- Section 9.5 Storm Water Management Basins of the Geotechnical Data Report states that “*Specific storm water management basin locations were unavailable at the time of drilling. The primary conceptual locations proposed at the time of this report are generally in the median area of the project limits.*”
- The Project Information section of the Categorical Exclusion (CE) states that “*All work is proposed within the existing right of way.*” The Right of Way and Relocations section of the CE states that no right of way is required and that the project will be built within the existing right of way.
- Plan Sheet No. 1 includes a note that reads “*All work to be done within existing right of way. No additional temporary or permanent easements will be required to construct the project.*”

In addition, Recommendation 6 of the Value Engineering Study Report for the project, dated August 2008, refers to using IIM-LD-195.6 when evaluating the storm water management requirements. This earlier IIM did not include the stringent requirement that water quality volume for any required BMP be based on the TOTAL POST DEVELOPMENT IMPERVIOUS AREA within the site draining to the BMP.

If additional right-of-way or permanent easements are required, the project schedule and cost could be impacted for the following reasons:

- Additional survey and geotechnical work will be required.
- Additional environmental work including revising and re-evaluating the CE.
- An additional public hearing may need to be held depending on BMP locations.
- Time for right-of-way acquisition activities will need to be included in the project schedule.
- Initial right-of-way acquisition costs will need to be added to the estimated project cost.
- Additional construction cost for the increased number of BMP's will need to be added to the estimated project cost.

- Long term-maintenance requirements, including costs, will need to be considered and budgeted for in future years.

**Mitigation strategies the Team may implement to address the risk.** The mitigation strategies that the Team may implement include:

- Confirming that full implementation of IIM is required and that project is not exempt by some prior agreement.
- Evaluating conventional BMP options placed along project limits within existing right-of-way.
- Evaluating low impact development BMP options placed along project limits within existing right-of-way.
- Explore other BMP options that will reduce the number and size of extended detention facilities.
- Determining feasible, low impact, locations for BMP's required outside of existing right-of-way.
- Initiating early coordination activities to minimize schedule impacts related to additional survey, geotechnical, and environmental services.
- Initiating early coordination activities with property owners of proposed BMP locations.

**Role that the Team expects VDOT or other agencies may have in addressing these project risks.** The Team expects that VDOT will provide timely reviews of submittals for post development stormwater management reports, studies, design calculations, and recommendations as outlined in the Contract Documents. The Team also expects that VDOT will provide assistance when possible in dealing with outside agencies and 3<sup>rd</sup> party stakeholders.

**Critical Risk 2 – Finalizing environmental evaluations related to wetlands, streams, and threatened and endangered species; developing wetland and stream mitigation strategies; and obtaining water quality permits in a timely manner will be a critical risk for the project.** The Team has identified a potential risk associated with the acquisition of environmental or water quality permits for the project due to the potential impact on the project schedule in obtaining the permits.

**Why the risk is critical and the impact the risk will have on the Project.** This risk is critical because the project schedule as described in the RFQ is approximately 26 months in length from an assumed Notice to Proceed in September 2013 to Substantial and Final Completion in November 2015. Notice to Proceed is assumed to be issued approximately 2 months after the Anticipated Notice of Intent to Award Date of July 2013. According to the preliminary estimates provided in the Categorical Exclusion (CE) dated July 2012 included in the RFQ Documents, the project may impact 2,944 linear feet of jurisdictional streams and 1.46 acres of wetlands. If the anticipated impacts prove to be correct, then the project will not qualify for a Nationwide Permit and may not qualify for a State Programmatic General Permit (SPGP) from the United States Army Corps of Engineers (USACE) and a Water Protection Permit 3 (WPP 3) from the Virginia Department of Environmental Quality (DEQ). If the actual project impacts exceed the impact thresholds for those permits, then an Individual Permit would be needed, which can take from eight (8) to twelve (12) months to secure from the agencies. Please note that at this time, it is not clear whether the anticipated impacts include impacts from proposed SWM BMP's or not since locations for these facilities have not been identified on the RFQ plans. Given this potential situation, the acquisition of the permits may affect the project schedule and may be a on the critical path for the project, making it a potential risk for the Team.

**Mitigation strategies the Team may implement to address the risk.** Mitigation strategies that the Team will implement are described below. The Team will first delineate the jurisdictional areas and then secure a jurisdictional determination from the USACE of the waters of the United States. The Team will then work to avoid and minimize impacts to wetlands and streams to the extent practicable. We propose to have several meetings between the contractor (Key), lead engineer (JMT), and the environmental subconsultant (EEE) to discuss and reach consensus on avoidance and minimization strategies. The Team will try to reduce impacts below the requisite thresholds so that the project qualifies for a Nationwide Permit 23 (less than 0.5 acres of impact allowed) or a SPGP and WPP 3 (less than 1,500 linear feet of stream impact allowed). Reducing impact amounts below thresholds will greatly accelerate the timeframe for the acquisition of permits and greatly reduce the risk associated with the water quality permits. The Team will also meet with the USACE and the DEQ early in the design process to discuss the avoidance and minimization strategies and the mitigation or compensation for wetland and stream impacts. By coordinating early in the process with the regulatory agencies and avoiding and minimizing impacts to jurisdictional waters to the extent practicable, the Team will mitigate the risk of project delays due to the environmental permits. The permits will also require that the Team identify compensation options for the impacts to wetland and streams. The team will investigate mitigation options on-site and through approved commercial banks, of which there are several in the watershed. A distinct advantage of the Key/JMT Team is that we have EEE on board as the environmental subconsultant. EEE has vast experience in successfully coordinating the water quality permits for transportation projects in Virginia including over 20 VDOT projects such as the Fairfax County Parkway Design-Build project, the I-81 improvements in Christiansburg, and the Route 58 improvements and the I-83 project in western Virginia.

The permits will also require that the project be compliant with the Endangered Species Act. According to the information contained in the CE included in the RFQ Documents, there is some potential for the project to impact three special status species: the James Spiny mussel, the Smooth Coneflower, and the Small Whorled Pogonia. Our environmental subconsultant, EEE, has performed significant work within the project watershed and has completed similar mussel surveys for the other projects including the Tri-County Parkway in Prince William County and the Tuckahoe Creek Service District and James River Correctional Center Water intake structure in Goochland County. Based on this experience, the Team does not expect to find individuals of any of these species within the project corridor, but is prepared to conduct surveys for all three species if required by the regulatory agencies. The Team's environmental subconsultant, EEE, has completed mussel surveys for the James Spiny mussel species and has staff that is certified by the United States Fish and Wildlife Service for Small Whorled Pogonia surveys. If any of these species are identified in the project corridor, then the Team will coordinate with the regulatory agencies including the United States Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, Virginia Department of Conservation and Recreation, and Virginia Department of Agriculture and Consumer Services to avoid adverse effects. Typical mitigation strategies include relocation of mussel species outside the project impact footprint should the James Spiny mussel be present and development of a buffer plan should the Small Whorled Pogonia be present.

**Role that the Team expects VDOT or other agencies may have in addressing these project risks.** The Team expects that VDOT will provide timely reviews of the environmental evaluations and permit applications developed by the Team as outlined in the Contract Documents. The Team also expects that VDOT will provide assistance, when possible, in dealing with outside agencies and 3<sup>rd</sup> party stakeholders. An example where the Department and the Key/JMT Team worked extremely well together was during the water quality permit acquisition process on the Route 61 Bridge Replacement Design-Build Project in the Town of Narrows. The Key/JMT Team engaged the USACE early during project design to resolve the unexpected discovery of regulated ephemeral channels. VDOT Salem District Environmental staff provided valuable assistance in working through this challenge and continued to provide assistance during the permitting process with extremely quick reviews of the permit application and guidance and recommendations during outside agency review periods.

**Critical Risk 3 – Assessing and defining the potential variable geotechnical characteristics present at the project site will be a critical risk for the project.** As with any project where the Design-Build Team is required to provide a lump sum price for all project elements prior to finalizing design, unexpected geotechnical challenges are always evaluated and quantified with respect to potential risk. The Team has reviewed the Geotechnical Data Report (GDR) produced by Richmond District Materials for the project. The GDR indicates that shallow rock was not encountered in the subsurface exploration; however, a hard transitional zone (very similar to highly weathered rock) was encountered in several borings at relatively shallow grades below the residual soils. Rock in this area is characterized as metavolcanic rocks at the west end of the site, Triassic basin shale and sandstone in the middle and Petersburg granite at the east end of the site. The upper zone of the natural residual soils consisted of loose to dense sands and stiff to hard clays and silts. Existing fill was only encountered in one of the borings although the GDR text suggests that existing fill and probable fill is more extensive than shown on the boring logs. Selected soil specimens obtained in bulk or from SPT testing were tested in the laboratory. Testing included particle size analysis and Atterberg limits testing as well as moisture density relations, CBR and resilient modulus tests for the bulk samples.

**Why the risk is critical and the impact the risk will have on the Project.** The risk is critical because the Design-Builder is expected to quantify various geotechnical related activities and submit a lump sum price to perform all work on the project using only the information provided in the RFP Documents and prior to finalizing all design elements. While VDOT's Scope Validation process does provide the ability to address Scope Issues that could not be verified or confirmed during the Technical or Price Proposal phase, past experience with VDOT Design-Build projects has taught the Team that VDOT does not automatically approve all Scope Issue items considered by the Team to be valid. As on any Design-Build project bid lump sum, a certain amount of geotechnical risk will still be the Team's responsibility even with the Scope Validation process in place. The Team has identified the following geotechnical-related risks for the project:

- **Tuckahoe Creek Bridges - Approach Embankment Settlement.** The approach embankment fills are in areas where GDR borings were not performed. However, eight borings were drilled for the existing bridge and the preliminary plans indicate the presence of wetlands in this area. Soft or loose near-surface soils were encountered in the original bridge borings, and are also typically associated with wetland areas. Accordingly, new embankment fill will likely settle due to compression of any soft or loose materials left in place. However, underlying natural foundation soils are relatively stiff or dense in this area and settlement of the foundation soils may not be too great. Undercutting of soft and wet near-surface soils should be anticipated prior to approach fill placement to reduce settlement.
- **Embankment Fill Materials.** Criteria for unsuitable soils are provided in the GDR. Based on the boring and soil laboratory test results in the GDR, most of the on-site soils appear to be suitable for use as embankment fill based on their classification. A minimum CBR value was not included in the GDR definition of unsuitable soils.

However, a later paragraph in Section 9.3 of the GDR indicates that soils with a CBR value less than 5 could be considered unsuitable, and the CBR values included with the report varied between 1.5 and 3.5. In addition, the minimum resilient modulus,  $M_R$ , value was 5,330 psi which correlates to a CBR value of about 3.6. Accordingly, the on-site soils may be suitable use in embankments but not for pavement support. These soils would also have to be undercut and replaced with suitable materials if encountered in the existing shoulder pavement subgrade. Moisture conditioning of fill materials will also likely be needed since several in-situ moisture contents are about 5% to 10% above and below the optimum moisture content for compaction.

- **Rock Excavation.** According to the GDR, locations for construction of storm water management basins in the median are unknown. The borings that were drilled in the median, many of which were only 5 to 6 feet deep, encountered dense to very dense residual soils at shallow depths of about 2.5 to 4.5 feet in some areas. These materials were underlain by weathered rock in some of the borings. Therefore, some rock excavation could be encountered, especially in areas of deeper cuts.
- **Design Slope Angles.** Proposed fill slopes are 2H:1V and depending on the available fill materials, it is possible that slightly flatter slopes or benched slopes will be needed to produce stable slopes. As mentioned above, there may also be a need to undercut soft, near-surface soils prior to fill placement.
- **Topsoil Thickness.** Topsoil was 12 inches thick in each of the GDR borings drilled in 2009 but only 6 inches thick in each of the GDR borings drilled in 2012. The 2009 borings were not sampled at the ground surface so topsoil thicknesses were not based on the results of sampling in these borings. Accordingly, the actual topsoil thickness is considered to be suspect at this time.

**Mitigation strategies the Team may implement to address the risk.** The mitigation strategies that the Team may implement include the following:

- Assign experienced staff with the responsibility of managing the risk. The Team's geotechnical subconsultant, Schnabel Engineering Consultants (Schnabel), will be responsible for all geotechnical investigations, evaluations, and recommendations for the project. With a local office in Richmond, Schnabel has extensive experience with the geotechnical characteristics of the Piedmont region of Virginia. **Schnabel has provided geotechnical engineering services on over 75 bridge and roadway projects throughout Virginia located in a wide variety of geologic settings.** Also, Schnabel has a history of providing geotechnical services to the Team's lead engineer, JMT, spanning the last 15 years.
- Evaluate and assess the quality of information contained in the GDR prepared for the project.
- Perform a geotechnical engineering investigation that meets or exceeds Chapter 3 of the VDOT Manual of Instructions for Materials Division. Specific items that will be considered for this project include:
  - A **thorough evaluation of the subsurface conditions** is important to properly characterize the subsurface conditions and should include performing necessary calculations to better quantify the potential risks.
  - The GDR indicates areas of soils with high and low moisture content requiring drying or wetting to meet compaction criteria. Therefore, **additional laboratory testing** is recommended to better define the proctor values, estimate the extent of unsuitable soils that require undercut and replacement, and evaluate the extent of soils that can be modified or stabilized versus undercut and replacement with select materials.
  - Where cut or fill slope heights are greater than 10 feet, **triaxial shear strength testing** on proposed embankment materials will be considered for slope stability analyses and factor of safety determination.
  - **Identification of significant compressible zones** will allow for design considerations for embankment construction, which can reduce settlement potential at deep embankments.
- Initiate early discussion with Department's geotechnical and materials engineers to address all concerns and develop consensus on geotechnical recommendations.
- Rely on the fairness of the scope validation and identification of scope issues process defined in the Contract Documents to resolve issues that could not be reasonably discovered during development of the price proposal.

**Role that the Team expects VDOT or other agencies may have in addressing these project risks.** The Team expects that VDOT will provide timely reviews of submittals for geotechnical reports, studies, and recommendations as outlined in the Contract Documents. The Team also expects that VDOT will provide assistance when possible in dealing with outside agencies and 3<sup>rd</sup> party stakeholders.



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*Key Construction Company, Inc.*



**ATTACHMENT 3.1.2**  
**SOQ CHECKLIST AND CONTENTS**



*Key Construction Company, Inc.*

**ATTACHMENT 3.1.2**

**Addendum No. 1**

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

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>Statement of Qualifications Checklist and Contents</b>	Attachment 3.1.2	Section 3.1.2	no	Appendix Tab
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix Tab
<b>Letter of Submittal (on Offeror's letterhead)</b>				1-2
Authorized Representative's signature	NA	Section 3.2.1	yes	2
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	2
Offeror's Corporate Structure	NA	Section 3.2.4	yes	2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	2/Appendix Tab
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	2/Appendix Tab
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	2/Appendix Tab
Evidence of obtaining bonding	NA	Section 3.2.9	no	2/Appendix

**ATTACHMENT 3.1.2**

**Addendum No. 1**

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

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
				Tab
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.10	no	2/Appendix Tab
SCC Registration	3.2.10	Section 3.2.10.1	no	2/Appendix Tab
DPOR Registration (Offices)	3.2.10	Section 3.2.10.2	no	2/Appendix Tab
DPOR Registration (Key Personnel)	3.2.10	Section 3.2.10.3	no	2/Appendix Tab
DPOR Registration (Non-APELSCIDLA)	3.2.10	Section 3.2.10.4	no	n/a
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	2
<b>Offeror's Team Structure</b>				3-7
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3-4
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	3/Appendix Tab
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	3/Appendix Tab
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	4/Appendix Tab
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	4/Appendix

**ATTACHMENT 3.1.2**

**Addendum No. 1**

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

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
				Tab
Organizational chart	NA	Section 3.3.2	yes	7
Organizational chart narrative	NA	Section 3.3.2	yes	4-6
<b>Experience of Offeror's Team</b>				8-11
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	11/Appendix Tab
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	11/Appendix Tab
<b>Project Risk</b>				12-15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	12-15



**ATTACHMENT 2.10**  
**FORM C-78-RFQ**



*Key Construction Company, Inc.*

**ATTACHMENT 2.10****COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

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

**ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA**

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

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

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

  
 \_\_\_\_\_  
 SIGNATURE

Nov 13, 2012  
 \_\_\_\_\_  
 DATE



## **ATTACHMENT 3.2.6**

# **LIST OF AFFILIATED AND SUBSIDIARY COMPANIES**



*Key Construction Company, Inc.*

**ATTACHMENT 3.2.6**

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

**Affiliated and Subsidiary Companies of the Offeror**

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.

<input type="checkbox"/> <b>The Offeror does not have any affiliated or subsidiary companies.</b>
<input checked="" type="checkbox"/> <b>Affiliated and/ or subsidiary companies of the Offeror are listed below.</b>

<b>Relationship with Offeror (Affiliate or Subsidiary)</b>	<b>Full Legal Name</b>	<b>Address</b>
Subsidiary	D.W. Lyle Corporation	11453 Highway 15 South, Clarksville, VA 23927
Subsidiary	Key Constructors, Inc.	11453 Highway 15 South, Clarksville, VA 23927
Affiliate	Utility Services Associates, Inc.	11500 Ironbridge Road, Chester, VA 23831
Affiliate	C.W. Wright Construction Company, Inc.	11500 Ironbridge Road, Chester, VA 23831
Affiliate	Booth & Associates, Inc.	5811 Glenwood Ave, Raleigh, NC 27612
Affiliate	Seaboard Boring, LTD	8301 Shell Road, Richmond, VA 23237
Affiliate	USA Solutions, Inc.	11500 Ironbridge Road, Chester, VA 23831
Affiliate	Coastal Power & Electric, Inc.	4235 US Highway 421, Currie, NC 28435
Affiliate	USA Priority Capital, LLC	11500 Ironbridge Road, Chester, VA 23831
Affiliate	USA Realty Investments, LLC	11500 Ironbridge Road, Chester, VA 23831



**ATTACHMENT 3.2.7 A**  
**PRIMARY DEBARMENT FORM**



*Key Construction Company, Inc.*

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

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

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.

David W. Lyle      Nov 13, 2012      PRESIDENT  
Signature                      Date                      Title

KEY CONSTRUCTION CO., INC  
Name of Firm



**ATTACHMENT 3.2.7 B**  
**LOWER TIER DEBARMENT FORM**



*Key Construction Company, Inc.*

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 11/15/12  
Signature Date

Senior Vice President  
Title

Johnson Mirmiran and Thompson  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

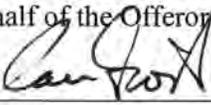
**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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

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

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

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

 October 30, 2012 President  
Signature Date Title

EEE Consulting, Inc.  
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
  
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

<u>Edward G. Drakos</u>	<u>11-01-12</u>	<u>Principal</u>
Signature	Date	Title

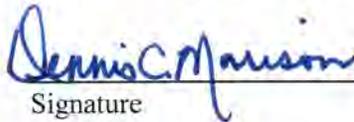
Schnabel Engineering Consultants, Inc.  
Name of Firm

**CERTIFICATION REGARDING DEBARMENT**  
**LOWER TIER COVERED TRANSACTIONS**  
(To be completed by a sub-consultant)

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

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
  
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.



Signature

Nov. 1, 2012

Date

Senior Vice President

Title

Volkert, Inc.

Name of Firm

---

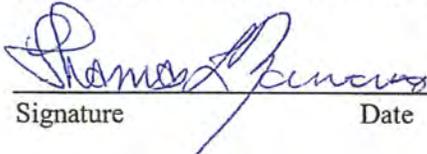
ATTACHMENT NO. 3.2.7(B)

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS

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

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

	11-12-12	President
Signature	Date	Title
<u>Zannino Engineering Inc.</u>		
Name of Firm		

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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

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

November 7, 2012

Date

President

Title

NXL Construction Services, Inc.

Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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

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

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

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	11/13/12	President
Signature	Date	Title

Froehling & Robertson, Inc.  
Name of Firm



## OFFEROR'S VDOT PREQUALIFICATION CERTIFICATE



*Key Construction Company, Inc.*



COMMONWEALTH OF VIRGINIA



## CERTIFICATE OF QUALIFICATION

### KEY CONSTRUCTION COMPANY, INCORPORATED

Vendor Number: **K006**

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; DRAINAGE STRUCTURES; UNDERGROUND UTILITIES

Issue Date: 06/30/2012

This Rating and Classification will Expire: 06/30/2013

A handwritten signature in blue ink that reads "Suzanne FR Lucas".

Suzanne FR Lucas Prequalification Officer

A handwritten signature in blue ink that reads "Don E. Silies".

Don E. Silies, State Contract Officer



## SURETY LETTER



*Key Construction Company, Inc.*

# RUTHERFORD

A Marsh & McLennan Agency LLC Company

November 12, 2012

Virginia Department of Transportation  
Mr. Stephen D. Kindy, P.E.  
1401 East Broad Street  
Annex Building, 8<sup>th</sup> Floor  
Richmond, VA 23219

**RE: Key Construction Company, Inc.**  
**RFQ: Design/Build Project:**  
**I-64 Widening and Route 623 Interchange Improvements**  
**Contract ID Number: C00070542DB55**  
**Estimate: \$31,000,000**

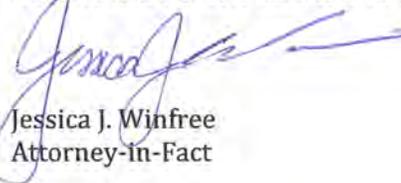
Dear Mr. Kindy:

The above referenced firm is a valued client of Zurich North American Surety {Fidelity and Deposit Company of Maryland, which is listed on the United States Department of Treasury, Federal Register, Circular 570 and is licensed to transact business in the Commonwealth of Virginia}. Zurich is one of the leading bonding companies in the country and has an "A" Best Rating and Financial Size Category: XV. We have committed to provide Key Construction Co., Inc. with \$125,000,000 in aggregate capacity in payment and performance bonds with a single project limit of \$60,000,000.

We are prepared to provide bid and 100% performance and 100% payment bonds in the amount of the anticipated cost of construction, and said bonds will cover the project and any warranty periods (Virginia standard 12 month warranty period) on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project, subject to the normal underwriting conditions at the time of award. This includes, but is not limited to work on hand, contract terms, bond forms, profitability and bid spread.

We have found their management to be seasoned, mature and proactive. Their abilities to manage the preconstruction and construction process and finance their operation are as good as any in the business. We recommend this contractor highly. If I can be of further assistance please feel free to contact me directly.

Sincerely,  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND



Jessica J. Winfree  
Attorney-in-Fact

## RICHMOND OFFICE

1001 Hawaii Point | Suite 800 | Richmond, VA 23219 | 804-780-0611 | Fax 804-788-8944 | [www.rutherford.com](http://www.rutherford.com)

Local Touch. World Class.



**ATTACHMENT 3.2.10**  
**SCC AND DPOR INFORMATION TABLES**



*Key Construction Company, Inc.*

**ATTACHMENT 3.2.10**

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

**SCC and DPOR Information**

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

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
<b>Business Name</b>	<b>SCC Information (3.2.10.1)</b>			<b>DPOR Information (3.2.10.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
<b>Key Construction Company, Incorporated</b>	0082414-4	Corporation	Active	N/A	N/A	N/A	N/A
<b>Johnson Mirmiran and Thompson</b>	F149901-3	Corporation	Active	9201 Arboretum Pkwy Suite 310 Richmond, VA 23236	ENG/LS	0411 000029	02/28/14
				13921 Park Center Rd Herndon, VA 20171	ENG	0411 000441	02/28/14
				272 Bendix Rd Suite 260 Virginia Beach, VA 23452	LS/ENG	0411 000440	02/28/14
				72 Loveton Circle Sparks, MD 21152	LA/ARC/ ENG/ LS	0407 001314	12/31/13
<b>EEE Consulting, Inc.</b>	0504941-6	S-Corp	Active	8525 Bell Creek Road Mechanicsville VA 23116	ENG	0407 003798	12/31/13
<b>Schnabel Engineering Consultants, Inc.</b>	07126741	Corporation	Active	One Cary Street, Richmond, VA 23220	ENG	0411 000700	2/28/14
<b>Volkert, Inc.</b>	F136659-2	SCorporation	Active	5400 Shawnee Road Alexandria, VA 22312	ENG	0407 002610	12/31/13

**ATTACHMENT 3.2.10**

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

**SCC and DPOR Information**

<b>Zannino Engineering Inc.</b>	0438706-4	Corporation	Active	9915 Greenwood Rd Glen Allen, VA 23060	ENG	0407 003572	12/31/13
<b>NXL Construction Services, Inc.</b>	0349742-7	Corporation	Active	114 E. Cary Street, Suite 200 Richmond, VA 23219	ENG/LS	0407 003031	12/31/13
<b>Froehling and Robertson, Inc.</b>	0027211-2	Corporation	Active	3015 Dumbarton Rd. Richmond, VA 23228	ENG	0407 000098	12/31/13

**ATTACHMENT 3.2.10**

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

**SCC and DPOR Information**

<b>DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)</b>						
<b>Business Name</b>	<b>Individual's Name</b>	<b>Office Location Where Professional Services will be Provided (City/State)</b>	<b>Individual's DPOR Address</b>	<b>DPOR Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
<b>Johnson Mirmiran and Thompson</b>	Robert T. Gallagher	Richmond, VA	10004 Studley Farms Drive Mechanicsville, VA 23116	PE	0402 023016	01/31/14
<b>Volkert, Inc.</b>	William D. McDowall, P.E.	Alexandria, VA	2701 Frankie Lane Hopewell, VA 23860	PE	0402 018236	10/31/14



## SCC DOCUMENTATION



*Key Construction Company, Inc.*

Key Construction Company, Inc.



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State Corporation Commission

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CORP ID: 0082414 - 4 STATUS: 00 ACTIVE STATUS DATE: 06/26/85

[Print](#)

CORP NAME: KEY CONSTRUCTION COMPANY, INCORPORATED

[Signoff](#)

DATE OF CERTIFICATE: 02/05/1959 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

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

R/A NAME: MARK W NUNN



Visit  
SCCeFile!

STREET: 11453 HWY 15 S AR RTN MAIL:

PO BOX 698

CITY: CLARKSVILLE STATE : VA ZIP: 23927

R/A STATUS: 2 OFFICER EFF. DATE: 01/20/02 LOC : 158

ACCEPTED AR#: 212 04 6866 DATE: 02/27/12 MECKLENBURG COU

CURRENT AR#: 212 04 6866 DATE: 02/27/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

12 250.00 30,000

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.

(Screen Id: /Corp\_Data\_Inquiry)

Johnson Mirmiran and Thompson, Inc.



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13:53:23

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CORP ID:  - 3 STATUS: 00 ACTIVE STATUS DATE: 10/17/06

[Print](#)

CORP NAME:

[Signoff](#)

DATE OF CERTIFICATE: 10/17/2006 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: 50.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: ROBERT GALLAGHER



Visit  
SCCeFile!

STREET: 9201 ARBORETUM PKY STE 140 AR RIN MAIL:

CITY: RICHMOND STATE : VA ZIP: 23236  
R/A STATUS: 2 OFFICER EFF. DATE: 09/06/07 LOC : 120  
ACCEPTED AR#: 212 53 1768 DATE: 08/21/12 CHESTERFIELD CO  
CURRENT AR#: 212 53 1768 DATE: 08/21/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 100.00 1,000

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as labeled. Function key usage varies depending on the Application Screen.  
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(Screen Id: Corp\_Data\_Inquiry)



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CORP ID: 0504941 - 6 STATUS: 00 ACTIVE STATUS DATE: 08/04/04  
CORP NAME: EEE CONSULTING, INC.  
DATE OF CERTIFICATE: 06/23/1998 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: CT CORPORATION SYSTEM



Visit  
SCCeFile!

STREET: 4701 COX RD STE 301 AR PTN MAIL:  
CITY: GLEN ALLEN STATE : VA ZIP: 23060  
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 05/15/12 LOC : 143  
ACCEPTED AR#: 212 52 4099 DATE: 06/27/12 HENRICO COUNTY  
CURRENT AR#: 212 52 4099 DATE: 06/27/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 100.00 5,000

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.  
(Screen Id: Corp\_Data\_Inquiry)

# Schnabel Engineering Consultants, Inc.



## Commonwealth of Virginia State Corporation Commission

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CORP ID: 0712674 - 1 STATUS: 00 ACTIVE STATUS DATE: 08/12/09  
CORP NAME: Schnabel Engineering Consultants, Inc.

DATE OF CERTIFICATE: 08/12/2009 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: CT CORPORATION SYSTEM

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STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802  
R/A STATUS: S B.E. AUTH IN VI EFF. DATE: 06/16/11 LOC : 143  
ACCEPTED AR#: 212 52 7550 DATE: 07/29/12 HENRICO COUNTY  
CURRENT AR#: 212 52 7550 DATE: 07/29/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 130.00 10,000

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.  
(Screen Id: Corp\_Data\_Inquiry)

Volkert, Inc.



Commonwealth of Virginia  
State Corporation Commission

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CORP ID: F136659 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/21/99  
CORP NAME: Volkert, Inc.  
DATE OF CERTIFICATE: 01/21/1999 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: AL ALABAMA STOCK INDICATOR: S STOCK  
MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: CORPORATION SERVICE COMPANY  
STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:  
1111 EAST MAIN ST.  
CITY: RICHMOND STATE : VA ZIP: 23219  
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 07/19/11 LOC : 216  
ACCEPTED AR#: 212 02 6546 DATE: 01/23/12 RICHMOND CITY  
CURRENT AR#: 212 02 6546 DATE: 01/23/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
13 100.00 100.00 2,250



Visit  
SCCeFile!

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.

(Screen ID: Corp\_Data\_Inquiry)

# Zannino Engineering, Inc.



## Commonwealth of Virginia State Corporation Commission



Virginia.gov

SCC  
Clerk's  
Information  
System

CISM0180

CORPORATE DATA INQUIRY

11/13/12  
13:54:15

[Help](#)

[Print](#)

[Signoff](#)

CORP ID: **0438706** - 4 STATUS: 00 ACTIVE STATUS DATE: 12/22/94  
CORP NAME: **ZANNINO ENGINEERING, INC.**  
DATE OF CERTIFICATE: 12/22/1994 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: \$0.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: RICHARD F GONET



Visit  
SCCeFile!

STREET: 5211 W BROAD ST STE 100 AR RTN MAIL:  
CITY: RICHMOND STATE : VA ZIP: 23230  
R/A STATUS: 4 ATTORNEY EFF. DATE: 01/29/08 LOC : 143  
ACCEPTED AR#: 211 20 3320 DATE: 12/15/11 HENRICO COUNTY  
CURRENT AR#: 211 20 3320 DATE: 12/15/11 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 100.00 100.00 5,000

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.  
(Screen ID: Corp\_Data\_Inquiry)

NXL Construction Co., Inc.



Commonwealth of Virginia  
State Corporation Commission

[SCC Home](#) | [Contact SCC](#) | [Site Map](#) | [Search](#)



Virginia.gov

SCC  
Clerk's  
Information  
System

CISM0180 CORPORATE DATA INQUIRY 11/13/12 13:54:29

[Help](#)

CORP ID: 0349742 - 7 STATUS: 00 ACTIVE STATUS DATE: 11/17/89

[Print](#)

CORP NAME: NXL CONSTRUCTION CO., INC.

[Signoff](#)

DATE OF CERTIFICATE: 11/17/1989 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:

R/A NAME: NICOMEDES L DE LEON



Visit  
SCCeFile!

STREET: 9606 GEORGE'S BLUFF RD AR RTN MAIL:

CITY: RICHMOND STATE : VA ZIP: 23229  
R/A STATUS: 2 OFFICER EFF. DATE: 10/08/98 LOC : 143  
ACCEPTED AR#: 212 15 2072 DATE: 09/24/12 HENRICO COUNTY  
CURRENT AR#: 212 15 2072 DATE: 09/24/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 100.00 5,000

CIS has changed to enhance its navigation.  
Click on menu items or buttons to select and perform functions. You may also use function keys  
as labeled. Function key usage varies depending on the Application Screen.  
Please refer to [Function Key Documentation](#) for details.

(Screen Id: Corp\_Data\_Inquiry)

# Froehling & Robertson, Incorporated



Commonwealth of Virginia  
State Corporation Commission

SCC Home | Contact SCC | Site Map | Search



Virginia.gov

SCC Clerk's Information System

CISM0180 CORPORATE DATA INQUIRY 11/13/12 13:54:48

[Help](#)  
[Print](#)  
[Signoff](#)

CORP ID: 0027211 - 2 STATUS: 00 ACTIVE STATUS DATE: 11/13/09  
CORP NAME: FROEHLING & ROBERTSON, INCORPORATED

DATE OF CERTIFICATE: 10/11/1924 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: 2480.00 MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: WILLIAM H HOOFNAGLE III

STREET: 1900 ONE JAMES CENTER AR RTN MAIL:  
901 E CARY ST  
CITY: RICHMOND STATE : VA ZIP: 23219  
R/A STATUS: 4 ATTORNEY EFF. DATE: 09/21/11 LOC : 216  
ACCEPTED AR#: 212 14 0123 DATE: 09/29/12 RICHMOND CITY  
CURRENT AR#: 212 14 0123 DATE: 09/29/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	1,700.00					1,100,000

SCCeFile  
Visit SCCeFile!

CIS has changed to enhance its navigation. Click on menu items or buttons to select and perform functions. You may also use function keys as labeled. Function key usage varies depending on the Application Screen. Please refer to [Function Key Documentation](#) for details.  
(Screen Id: Corp\_Data\_Inquiry)



## **DPOR DOCUMENTATION**



*Key Construction Company, Inc.*

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000029

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

PROFESSIONS: ENG, LS

JOHNSON, MIRMIRAN & THOMPSON, INC.  
9201 ARBORETUM PKWY  
SUITE 310  
RICHMOND, VA 23236



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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

The screenshot shows the DPOR (Department of Professional and Occupational Regulation) website. The header includes the DPOR logo and navigation links for APPLICANTS, LICENSEES, and CONSUMERS. A breadcrumb trail reads: Home > License Lookup > License Lookup & Disciplinary Actions. A search bar is located in the top right. A left sidebar contains a menu with options like License Lookup, DPOR Online Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact. The main content area displays details for license number 0411000029, including the licensee's name, license number, description, address, and certification/expiration dates. It also shows a 'Complaints' section with 'No Open Complaints' and 'No Closed Complaints'.

**DPOR**  
Department of Professional and Occupational Regulation

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Home > License Lookup > License Lookup & Disciplinary Actions

Enter Keyword Search

**License Lookup**

- DPOR Online Services
- Boards
- Professions & Occupations
- Forms & Applications
- Fair Housing Office
- Community Associations
- Report a Licensee
- Records & Documents
- News & Information
- About DPOR
- Contact

**Details of license number 0411000029**

Name: JOHNSON MIRIRAN & THOMPSON INC.  
License Number: 0411000029  
License Description: Business Entity Branch Office Registration  
9201 ARBORETUM PKWY SUITE 310  
RICHMOND, VA 23236  
Address:  
Initial Certification Date: March 24, 1992  
Expiration Date: February 28, 2014

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**

**Professional Engineer License**

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

EXPIRES ON

02-28-2014

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

NUMBER

0411000441

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

PROFESSIONS: ENG

JOHNSON MIRMIRAN & THOMPSON INC  
13921 PARK CENTER RD  
HERNDON, VA 20171



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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The screenshot shows the DPOR (Department of Professional and Occupational Regulation) website. The header includes the DPOR logo and navigation links for APPLICANTS, LICENSEES, and CONSUMERS. A breadcrumb trail reads: Home > License Lookup > License Lookup & Disciplinary Actions. A search bar is located in the top right. A left sidebar contains a menu with options like License Lookup, DPOR Online Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact. The main content area displays the details for license number 0411000441, including the licensee's name, license number, description, address, and certification/expiration dates. It also shows sections for Open and Closed Complaints, both indicating no complaints are present. At the bottom, it identifies the license as a Professional Engineer License.

**DPOR**  
Department of Professional and Occupational Regulation

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Home > License Lookup > License Lookup & Disciplinary Actions

Enter Keyword Search

**License Lookup**

- DPOR Online Services
- Boards
- Professions & Occupations
- Forms & Applications
- Fair Housing Office
- Community Associations
- Report a Licensee
- Records & Documents
- News & Information
- About DPOR
- Contact

**Details of license number 0411000441**

Name: JOHNSON MIRIRAN & THOMPSON INC  
License Number: 0411000441  
License Description: Business Entity Branch Office Registration  
Address: 13921 PARK CENTER RD  
HERNDON, VA 20171  
Initial Certification Date: March 6, 2006  
Expiration Date: February 28, 2014

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**

Professional Engineer License

Johnson Mirmiran & Thompson

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

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000440

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

PROFESSIONS: LS, ENG

JOHNSON MIRMIRAN & THOMPSON INC  
272 BENDIX ROAD  
SUITE 260  
VIRGINIA BEACH, VA 23452



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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The screenshot shows the DPOR (Department of Professional and Occupational Regulation) website. The header includes the DPOR logo and navigation links for APPLICANTS, LICENSEES, and CONSUMERS. A breadcrumb trail reads: Home > License Lookup > License Lookup & Disciplinary Actions. A search bar is present with the text 'Enter Keyword' and a 'Search' button. A left sidebar contains a 'License Lookup' menu with options: DPOR Online Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact. The main content area displays 'Details of license number 0411000440' for 'JOHNSON MIRMIRAN & THOMPSON INC'. The license details include: License Number: 0411000440; License Description: Business Entity Branch Office Registration; Address: 272 BENDIX ROAD SUITE 260, VIRGINIA BEACH, VA 23452; Initial Certification Date: March 6, 2006; Expiration Date: February 28, 2014. Under the 'Complaints' section, it states 'No Open Complaints' and 'No Closed Complaints'. A disclaimer explains that open complaints require a departmental investigation and that state law prohibits disclosure of any information about open complaints. It also notes that closed complaints since 1990 are purged after three years. Contact information for public records access is provided. The 'Associated Professional Licensing Information' section lists 'Land Surveyor License'.

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Home > License Lookup > License Lookup & Disciplinary Actions

Enter Keyword Search

License Lookup

DPOR Online Services  
Boards  
Professions & Occupations  
Forms & Applications  
Fair Housing Office  
Community Associations  
Report a Licensee  
Records & Documents  
News & Information  
About DPOR  
Contact

**Details of license number 0411000440**

Name: JOHNSON MIRMIRAN & THOMPSON INC  
License Number: 0411000440  
License Description: Business Entity Branch Office Registration  
Address: 272 BENDIX ROAD SUITE 260  
VIRGINIA BEACH, VA 23452  
Initial Certification Date: March 6, 2006  
Expiration Date: February 28, 2014

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**

Land Surveyor License

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

EXPIRES ON

12-31-2013

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

NUMBER

0407001314

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

PROFESSIONS: ENG, LA, ARC, LS

JOHNSON MIRMIRAN & THOMPSON INC  
72 LOVETON CIRCLE  
SPARKS, MD 21152



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

*Gordon N. Dixon*  
Gordon N. Dixon, Director

The screenshot shows the DPOR (Department of Professional and Occupational Regulation) website. The header includes the DPOR logo and navigation links for APPLICANTS, LICENSEES, and CONSUMERS. A breadcrumb trail indicates the current page is 'Home > License Lookup > License Lookup & Disciplinary Actions'. A search bar is present in the top right. A left sidebar contains a 'License Lookup' menu with various options like 'DPOR Online Services', 'Boards', and 'Forms & Applications'. The main content area displays the 'Details of license number 0407001314' for Johnson Mirmiran & Thompson Inc. The details include the license number, description, address, and dates. Below this, the 'Complaints' section shows 'No Open Complaints' and 'No Closed Complaints', with explanatory text for each. At the bottom, it identifies the license as a 'Professional Engineer License'.

**DPOR**  
Department of Professional and Occupational Regulation

Home > License Lookup > License Lookup & Disciplinary Actions

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Enter Keyword Search

**License Lookup**

- DPOR Online Services
- Boards
- Professions & Occupations
- Forms & Applications
- Fair Housing Office
- Community Associations
- Report a Licensee
- Records & Documents
- News & Information
- About DPOR
- Contact

**Details of license number 0407001314**

Name: JOHNSON MIRMIRAN & THOMPSON INC  
License Number: 0407001314  
License Description: Business Entity Registration  
Address: 72 LOVETON CIRCLE  
SPARKS, MD 21152  
Initial Certification Date: August 30, 1982  
Expiration Date: December 31, 2013

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**

Professional Engineer License

EEE Consulting, Inc.

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

**EXPIRES ON**  
12-31-2013

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

**NUMBER**  
0407003798

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

**PROFESSIONS: ENG**

EEE CONSULTING INC  
8525 BELL CREEK RD  
MECHANICSVILLE, VA 23116



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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EEE Consulting, Inc.

The screenshot shows the Virginia DPOR website interface. At the top, there is a navigation bar with "Virginia.gov", "Online Services | Agencies | Governor | Help", and a search box labeled "Search Virginia.Gov". The DPOR logo is prominently displayed, with the text "Department of Professional and Occupational Regulation" below it. On the right side, there are three blue buttons: "APPLICANTS >>", "LICENSEES >>", and "CONSUMERS >>". A red breadcrumb trail reads "Home > License Lookup > License Lookup & Disciplinary Actions". Below this is a search bar with "Enter Keyword" and a "Search" button. A left-hand navigation menu lists various services: License Lookup, Online Renewal & Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact. The main content area is titled "Details of license number 0407003798" and contains the following information:

Name:	EEE CONSULTING INC
License Number:	0407003798
License Description:	Business Entity Registration
Business Type:	CORP
Address:	8525 BELL CREEK RD MECHANICSVILLE, VA 23116
Initial Certification Date:	August 24, 1998
Expiration Date:	December 31, 2013

A "print" link is located to the right of the license details. Below this, the "Complaints" section is titled "No Open Complaints" and includes a disclaimer: "Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. State law prohibits the disclosure of any information about open complaints [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed. Below this, the "No Closed Complaints" section states: "Closed Complaints" reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy. To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov. The page concludes with the heading "Associated Professional Licensing Information".

Schnabel Engineering Consultants, Inc.

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

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000700

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

PROFESSIONS: ENG

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



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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Schnabel Engineering Consultants, Inc.

The screenshot shows the Virginia Department of Professional and Occupational Regulation (DPOR) website. The header includes the Virginia.gov logo, navigation links for Online Services, Agencies, Governor, and Help, and a search bar. The DPOR logo is prominently displayed. A navigation menu on the left lists various services like License Lookup, Renewal, and Complaints. The main content area displays the details for license number 0411000700, including the licensee's name, address, and certification dates. It also shows a section for complaints, indicating there are no open or closed complaints.

Virginia.gov Online Services | Agencies | Governor | Help Search Virginia.Gov

DPOR Department of Professional and Occupational Regulation

Home > License Lookup > License Lookup & Disciplinary Actions Enter Keyword Search

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

License Lookup  
Online Renewal & Services  
Boards  
Professions & Occupations  
Forms & Applications  
Fair Housing Office  
Community Associations  
Report a Licensee  
Records & Documents  
News & Information  
About DPOR  
Contact

**Details of license number 0411000700**

Name:	SCHNABEL ENGINEERING CONSULTANTS INC
License Number:	0411000700
License Description:	Business Entity Branch Office Registration
Address:	ONE CARY STREET RICHMOND, VA 23220
Initial Certification Date:	January 5, 2010
Expiration Date:	February 28, 2014

print

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**

Volkert, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
12-31-2013

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

NUMBER  
0407002610

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

PROFESSIONS: ENG, LA

VOLKERT INC  
5400 SHAWNEE RD  
STE 301  
ALEXANDRIA, VA 22312



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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Volkert, Inc.

The screenshot shows the Virginia.gov website's Department of Professional and Occupational Regulation (DPOR) interface. The top navigation bar includes 'Virginia.gov', 'Online Services | Agencies | Governor | Help', and a search box. The DPOR logo is prominently displayed. A sidebar on the left lists various services like 'License Lookup', 'Online Renewal & Services', and 'Boards'. The main content area is titled 'Details of license number 0407002610' and contains the following information:

Name:	VOLKERT INC
License Number:	0407002610
License Description:	Business Entity Registration
Business Type:	CORP
Address:	5400 SHAWNEE RD STE 301 ALEXANDRIA, VA 22312
Initial Certification Date:	July 29, 1983
Expiration Date:	December 31, 2013

Below the license details, there are sections for 'Complaints'. The 'No Open Complaints' section states: "Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

The 'No Closed Complaints' section states: "Closed Complaints" reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

At the bottom, there is a section for 'Associated Professional Licensing Information'.

Zannino Engineering, Inc.

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

**EXPIRES ON**  
12-31-2013

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

**NUMBER**  
0407003572

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

**PROFESSIONS: ENG**

**ZANNINO ENGINEERING INC  
9915 GREENWOOD RD  
GLEN ALLEN, VA 23060**



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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.

Zannino Engineering, Inc.

The screenshot shows the Virginia.gov website interface for the Department of Professional and Occupational Regulation (DPOR). The page is titled "Details of license number 0407003572". The header includes the Virginia.gov logo, navigation links for Online Services, Agencies, Governor, and Help, and a search bar. The DPOR logo is prominently displayed. A sidebar on the left contains a menu with options like License Lookup, Online Renewal & Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact. The main content area displays the following information:

**Details of license number 0407003572**

Name:	ZANNINO ENGINEERING INC
License Number:	0407003572
License Description:	Business Entity Registration
Business Type:	CORP
Address:	9915 GREENWOOD RD GLEN ALLEN, VA 23060
Initial Certification Date:	November 12, 1996
Expiration Date:	December 31, 2013

Complaints

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

Closed Complaints			
File Number	Disposition	Date Case Closed	Old License Number
2007-03466	Violation	March 19, 2008	

"Closed Complaints" reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

Associated Professional Licensing Information

NXL Construction Services, Inc.

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

**EXPIRES ON**  
12-31-2013

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

**NUMBER**  
0407003031

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

**PROFESSIONS: ENG, LS**

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



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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.

# NXL Construction Services, Inc.

The screenshot shows the Virginia.gov DPOR website. The header includes the Virginia.gov logo, navigation links for Online Services, Agencies, Governor, and Help, and a search bar for Virginia.gov. The DPOR logo is prominently displayed, with the text 'Department of Professional and Occupational Regulation' below it. A navigation menu on the left lists various services like License Lookup, Online Renewal & Services, Boards, etc. The main content area displays the 'Details of license number 0407003031'. The license information is as follows:

Name:	NXL CONSTRUCTION CO INC
License Number:	0407003031
License Description:	Business Entity Registration
Trading Name:	NXL CONSTRUCTION SERVICES INC
Business Type:	CORP
Address:	114 E CARY ST STE 200 RICHMOND, VA 23219
Initial Certification Date:	November 8, 1991
Expiration Date:	December 31, 2013

Below the license details, there is a 'Complaints' section. It states 'No Open Complaints' and provides a detailed explanation: 'Open Complaints' reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. State law prohibits the disclosure of any information about open complaints [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

It also states 'No Closed Complaints' and explains: 'Closed Complaints' reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

At the bottom, there is a note: 'To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.'

The page concludes with the heading 'Associated Professional Licensing Information'.

Froehling & Robertson, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
12-31-2013

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

NUMBER  
0407000098

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC  
3015 DUMBARTON ROAD  
RICHMOND, VA 23228



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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Froehling & Robertson, Inc.

The screenshot shows the Virginia Department of Professional and Occupational Regulation (DPOR) website. The header includes the Virginia.gov logo and navigation links for Online Services, Agencies, Governor, and Help. A search bar is located in the top right corner. The main content area displays the details for license number 0407000098, which is held by Froehling & Robertson, Inc. The license description is Business Entity Registration. The address is 3015 DUMBARTON ROAD, RICHMOND, VA 23228. The initial certification date is August 5, 1982, and the expiration date is December 31, 2013. The complaints section indicates there are no open or closed complaints. A sidebar on the left contains various navigation options such as License Lookup, Online Renewal & Services, Boards, Professions & Occupations, Forms & Applications, Fair Housing Office, Community Associations, Report a Licensee, Records & Documents, News & Information, About DPOR, and Contact.

Virginia.gov Online Services | Agencies | Governor | Help Search Virginia.Gov

DPOR Department of Professional and Occupational Regulation

Home > License Lookup > License Lookup & Disciplinary Actions

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Enter Keyword Search

License Lookup  
Online Renewal & Services  
Boards  
Professions & Occupations  
Forms & Applications  
Fair Housing Office  
Community Associations  
Report a Licensee  
Records & Documents  
News & Information  
About DPOR  
Contact

**Details of license number 0407000098**

Name:	FROEHLING & ROBERTSON INC
License Number:	0407000098
License Description:	Business Entity Registration
Address:	3015 DUMBARTON ROAD RICHMOND, VA 23228
Initial Certification Date:	August 5, 1982
Expiration Date:	December 31, 2013

print

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

"Closed Complaints" reflect complaints against regulants closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

**Associated Professional Licensing Information**



## **Key Personnel DPOR DOCUMENTATION**



*Key Construction Company, Inc.*

Johnson Mirmiran & Thompson  
Robert Taylor Gallagher

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON

01-31-2014

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

NUMBER

0402023016

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

ROBERT TAYLOR GALLAGHER  
10004 STUDLEY FARMS DRIVE  
MECHANICSVILLE, VA 23116



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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

Robert Taylor Gallagher

The screenshot shows the Virginia Department of Professional and Occupational Regulation (DPOR) website. The header includes the Virginia.gov logo and navigation links for Online Services, Agencies, Governor, and Help. A search bar is located in the top right corner. The main content area displays the details for license number 0402023016, which is held by Robert Taylor Gallagher. The license is a Professional Engineer License issued in Mechanicsville, VA, with an initial certification date of January 27, 1992, and an expiration date of January 31, 2014. The complaints section indicates there are no open or closed complaints against the licensee. A sidebar on the left provides navigation options such as License Lookup, Online Renewal & Services, and Boards. A print button is visible on the right side of the license details.

Virginia.gov Online Services | Agencies | Governor | Help Search Virginia.Gov

DPOR Department of Professional and Occupational Regulation

APPLICANTS >> LICENSEES >> CONSUMERS >>

Home > License Lookup > License Lookup & Disciplinary Actions Enter Keyword Search

License Lookup  
Online Renewal & Services  
Boards  
Professions & Occupations  
Forms & Applications  
Fair Housing Office  
Community Associations  
Report a Licensee  
Records & Documents  
News & Information  
About DPOR  
Contact

**Details of license number 0402023016**

Name:	GALLAGHER, ROBERT TAYLOR
License Number:	0402023016
License Description:	Professional Engineer License
Address:	MECHANICSVILLE VA, 23116
Initial Certification Date:	January 27, 1992
Expiration Date:	January 31, 2014

print

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

**No Closed Complaints**

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To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).

Volkert, Inc.  
William D. McDowall

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

EXPIRES ON  
10-31-2014

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

NUMBER  
0402018236

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

WILLIAM DOUGLAS MCDOWALL II  
2701 FRANKIE LN  
HOPEWELL, VA 23860-7777



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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.

William D. McDowall

The screenshot shows the DPOR (Department of Professional and Occupational Regulation) website. The header includes the DPOR logo and navigation links for APPLICANTS, LICENSEES, and CONSUMERS. A breadcrumb trail indicates the current page is 'License Lookup & Disciplinary Actions'. A search bar is present in the top right. A left sidebar contains various service links. The main content area displays the details for license number 0402018236, including the licensee's name, license number, description, address, and certification dates. Below this, it states there are no open or closed complaints and provides a disclaimer about the information shown.

**DPOR**  
Department of Professional and Occupational Regulation

APPLICANTS >>  
LICENSEES >>  
CONSUMERS >>

Home > License Lookup > License Lookup & Disciplinary Actions

Enter Keyword Search

License Lookup  
Online Renewal & Services  
Boards  
Professions & Occupations  
Forms & Applications  
Fair Housing Office  
Community Associations  
Report a Licensee  
Records & Documents  
News & Information  
About DPOR  
Contact

**Details of license number 0402018236**

Name:	MCDOWALL, WILLIAM DOUGLAS, II
License Number:	0402018236
License Description:	Professional Engineer License
Address:	HOPEWELL VA, 23860
Initial Certification Date:	February 23, 1988
Expiration Date:	October 31, 2014

print

**Complaints**

**No Open Complaints**

"Open Complaints" reflect only those complaints against regulants for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. **State law prohibits the disclosure of any information about open complaints** [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

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To inquire about closed complaints, see the department's [Public Records Access](#) or contact the department's Information Management Section at (804) 367-8583 or [publicrecords@dpor.virginia.gov](mailto:publicrecords@dpor.virginia.gov).



## ATTACHMENT 3.3.1

# KEY PERSONNEL RESUME FORMS



*Key Construction Company, Inc.*

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>
a. Name & Title: <i>David W. Lyle</i> <i>President</i>
b. Project Assignment: <i>Design Build Project Manager</i>
c. Name of Firm with which you are now associated: <i>Key Construction Company, Inc.</i>
d. Years experience: With this Firm <u>19</u> With Other Firms <u>2</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): <b>Name of Firm:</b> Key Construction Company, Inc. <b>Start Date:</b> Aug, 2011 <b>End Date:</b> Present <b>Position:</b> President <b>Name of Firm:</b> Key Construction Company, Inc. <b>Start Date:</b> Jan, 2006 <b>End Date:</b> July, 2011 <b>Position:</b> Vice-President <b>Name of Firm:</b> D.W. Lyle Corporation (Subsidiary of Key) <b>Start Date:</b> Jan, 2006 <b>End Date:</b> Present <b>Position:</b> President <b>Name of Firm:</b> D. W. Lyle Corporation (Subsidiary of Key) <b>Start Date:</b> 1999 <b>End Date:</b> Jan 2006 <b>Position:</b> Executive Vice President <b>Name of Firm:</b> D. W. Lyle Corporation (Subsidiary of Key) <b>Start Date:</b> 1991 <b>End Date:</b> 1999 <b>Position:</b> Vice President, Construction & General Superintendent <b>Responsibilities:</b> David Lyle has been continuously employed by D. W. Lyle Corporation for over 19 years in positions of progressive responsibility, from Superintendent, General Superintendent, VP-Construction, and Executive Vice President. In 2006, D. W. Lyle Corporation became a subsidiary of Key Construction Co., Inc. and David was promoted to President of D. W. Lyle Corp. and Vice President of Key Construction Co., Inc. In August, 2011, David was promoted to President of Key Construction Co., Inc.  David is a 3 <sup>rd</sup> generation bridge contractor, literally grew up in the bridge and highway construction business, has served the company in roles of progressive responsibility, David has developed a wide range of skills, which include estimating, planning, engineering collaboration, resource allocation, project management, budgeting, and cost controls that allow him to efficiently and effectively manage construction projects from start to completion.  In addition to those duties, David has served on the VTCA Board of Directors and as Chairman of the VTCA Contractors Leadership Committee. Over 13 years of service on the VTCA/VDOT Joint Structures & Bridge Subcommittee (currently Committee Vice Chairman) has acquired an intimate knowledge of VDOT's specifications and standards, environmental regulations, policies and procedures. Hundreds of low bid VDOT projects have been successfully delivered to the citizens of Virginia during the past 21 years. David has participated in the estimating, design, management and construction of design/build projects since 1999. Successful participation in 10 DOT design/build construction projects in multiple states and the pursuit of at least 10 other Design/Build projects creates a depth of experience and "lessons learned".
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <i>Virginia Polytechnic Institute and State University/ Bachelor of Science, Building Construction/1988/ Construction Management</i>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:

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.)**

**Project:** *US 360 & US 58 Bypass in Halifax County, Virginia*

**Name of Firm:** Key Construction Company, Inc.

**Start:** 08/2003 **David's role began in January, 2007**

**Finish Date:** 12/2006

**Project Role:** Bridge Project Manager

**Responsibilities:** Managed the construction, allocation of resources, budget and cost controls and supervised the project bridge construction staff in the demolition of an existing bridge and the construction of two two-lane bridges 2,134 feet long containing 5,005 cubic yards of concrete, 1.7 million pounds of reinforcing steel and 7.2 million pounds of plate girders in a highly environmentally sensitive area across the Dan River and its flood plains. This project also featured construction of a MSE wall and a tie back reinforced retaining wall. Additionally, grading, paving, curb and gutter, water and sewer installation, and drainage structures were completed on the heavily traveled highway. Of note, implemented value engineering on the MSE wall construction on this \$24.6 million project that was completed seven months ahead of schedule and under budget. Supervised 1 bridge superintendent. **Client/Owner Contact:** VDOT, Mr. J.D. Barkley, II, Resident Engineer (434)791-5218 **Project:** *288 PPTA Subcontractor to United Contractors, Inc. and APAC, Special Projects Division*

**Name of Firm:** D.W. Lyle Corporation

**Start Date:** 2000

**Finish Date:** 2003

**Project Role:** Contract Coordinator for D. W. Lyle Corp. and Co-Coordinator for the project bridge team.

**Responsibilities:** On behalf of project bridge construction team, participated in all initial bridge scoping, bridge design reviews, value engineering, estimating, project negotiation, project Q/C team, project scheduling, and participated in wide variety of "unknown conditions" resolutions during construction. Managed the estimating, contract negotiation, budget and cost controls for D. W. Lyle Corporation. Supervised a work force that included 1 project manager, 2 project engineers, 1 survey party chief, 5 bridge superintendents and 1 grade superintendent. Project was completed ahead of time and under budget.

**Client/Owner Contact:** VDOT, Bob Reilly, Project Coordinator; (804)897-6309.

**Project:** *Pocahontas Parkway, Route 895 Subcontractor to English Construction Co., Inc.*

**Name of Firm:** D.W. Lyle Corporation

**Start Date:** 1999

**Finish Date:** 2002

**Project Role:** Contract Coordinator, responsible for estimating and operations for D.W. Lyle Corporation.

**Responsibilities:** Managed the estimating, construction, budget and cost controls of 2 bridges, retaining walls, toll tunnel, box culverts, grading and storm drainage work in the 895/I-95/Chippenham Parkway Interchange. Supervised a work force that included 1 project manager, 2 bridge superintendents and 1 grade superintendent. Represented the company in contract negotiations with the prime contractor. Coordinated design changes and plan issues with the designer, QC/QA staff and prime contractor. Project was completed on time and under budget.

**Client/Owner Contact:** VDOT, Dave Wesson, Project Coordinator (currently retired); (804)740-9048.



retaining wall, roadway approaches, storm drainage system, bike lanes, sidewalks, and utilities. Reviewed the QA/QC plan, meets weekly with the QA manager and inspector, monitors budget and schedule, evaluates and confirms compliance of QA services with the *VDOT Minimum Requirements for QA/QC on Design-Build and PPTA Projects* and Volkert's quality standards, reviews documentation to confirm accuracy and completeness, verifies VDOT's and contractor's satisfaction with Volkert's services, and provides technical guidance regarding matters such as installation of drilled shafts and form work for bridge piers.

**Project:** *Route 221 Realignment, Roanoke County, Virginia*

**Owner** – VDOT

**Firm** – Volkert, Inc.

**Dates** – Sept. 2010-August 2013

**Role and Description** – *QA/QC Manager*. QA/QC for the realignment a 0.75-mile segment of Route 221. This ARRA-funded \$20-million construction project involved roadway realignment and widening from 2 to 4 lanes, 2 new prestressed-concrete bulb-t beam bridges, a single-span steel replacement bridge, a new culvert, intersection improvements, a new drainage system and 2 SWM ponds. Observed the inspectors' work and checked project documentation for completeness and accuracy and to verify proper organization and maintenance. Reviewed testing reports for completeness and accuracy. Reviewed the blasting and surplus removal plans to confirm the judicious use of explosives, proper blasting techniques, and safety. Evaluated and reviewed construction schedules for completeness and conducted schedule impact analysis. Planned upcoming work activities with the construction manager and inspection staff. Assisted with the identification of potential issues and careful planning for avoiding / mitigating them. Met with the VDOT project manager to evaluate satisfaction with inspector performance and to discuss quality improvement processes. The existing 2-lane road is a major commuter route with an average daily traffic volume of 14,000 and runs through rocky hills as high as 190 feet. Extensive blasting next to the roadway was required for the excavation of 373,858 CY of earth material with 60% rock. It included clays, silts, and rock of numerous types of geological formations ranging from the very hard charokite to the soft sandstone. Challenges included blasting operations that are appropriate for the various types of rocks and geological conditions, prevention of slope failure, safety of motorists and construction workers, avoiding environmental impacts, omission from the steel schedule, and finding a disposal site that complied with local ordinances and VDOT and the USACE requirements.

**Project:** *Route 11/460 Widening, Salem, Virginia*

**Owner** – VDOT

**Firm** – Volkert, Inc.

**Dates** – Nov. 10, 2010 - Oct. 25, 2013

**Role and Description** – *QA/QC Manager*. Conducts QA review, constructability review, schedule impact analysis, NOI analysis, CPM schedule review including schedule impact analysis, and engineering support to address construction issues for a \$22-million construction project, which includes widening of a 2.1-mile section of 3-lane road to 4 lanes, including a 44-foot long bridge over Little Bear Rock Branch on drilled shafts, a triple-box culvert, a double-box culvert, a raised median, center and right-turn lanes at intersections and crossovers, and an extensive storm drainage system with stormwater management ponds and large jack and bore segments under the Norfolk Southern Railroad tracks into the Roanoke River. The project included blasting and associated safety measures for 25,000CY of grading. Conducts site visits to observe the inspectors' work and checks project documentation and testing reports for completeness, accuracy, and proper organization. Discusses upcoming work activities with inspection staff to verify proper equipment on hand and understanding of testing frequency. Meets with VDOT and contractor representatives to discuss and evaluate construction issues and advise on potential cost effective solutions to potential and existing issues.

**Project:** *Route 60 over Route 288 Design-Build Project, VDOT, Chesterfield County*

**Owner** – VDOT      **Client** – Key Construction/ D.W. Lyle Corporation

**Firm** – Volkert, Inc.

**Dates** – Oct. 2007-Nov. 2008

**Role and Description** – *Quality Assurance Manager*. Managed quality assurance to verify that construction of this bridge widening (from 3 to 4 lanes with a full shoulder) project complied with contract documents. The new bridge included a reinforced concrete deck, steel plate girders, elastomeric bearings, piers, end bents, MSE walls and seismic design and included the 1,500-2,000 feet of roadway approaches. The project included grading for the roadway approaches. Prepared QA and test plans with testing types and frequencies. Managed inspection and testing personnel and conducted preparatory, intermediate, and completion inspection meetings. Oversight of materials testing including density, moisture, slump, and air content of concrete, compressive strength test on concrete, and used one-point proctors on soils. Addressed non-conformance issues regarding concrete quality and failed subgrades, monitored corrective actions, and maintained a non-conformance log. Monitored schedule, budget, and compliance with work zone safety, environmental, and EEO/DBE regulations. Oversight of document control procedures and quality including the materials notebook, reviewed daily work reports, and submitted materials test reports, non-conformance reports, and progress reports to VDOT. Conducted punch list inspection at the close of the project. Conducted constructability reviews during design.

### ATTACHMENT 3.3.1

#### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <i>Robert T. Gallagher, P.E.</i> Senior Vice President	
b. Project Assignment: <i>Design Manager</i>	
c. Name of Firm with which you are now associated: <i>Johnson, Mirmiran &amp; Thompson, Inc.</i>	
d. Years experience: With this Firm <u>5</u> Years With Other Firms <u>20</u> Years Name of Firm: Johnson Mirmiran & Thompson Start Date: 02/07 End Date: Present Position: Senior Vice President, Richmond Office Manager Responsibilities: Responsible for operations of JMT's Richmond Office and serves as JMT's Transportation discipline leader for Virginia. Oversees all roadway and bridge design, construction inspection, and right-of-way acquisition within the Commonwealth. Mr. Gallagher also serves as JMT's Project Manager on the VDOT Statewide Limited Services Design contract.	
Name of Firm: Earth Tech Start Date: 07/98 End Date: 02/07 Position: Vice President, Senior Section Manager Responsibilities: Manager of Transportation engineering services for the Richmond office. Responsible for the major transportation disciplines of roadway and bridge design, construction inspection and right-of-way acquisition. Served as the Project Manager and Principal-in-Charge for design and administration of many VDOT and municipal VDOT-funded highway projects. Served as Project Manager for multiple VDOT Limited Services Design contracts and on select project specific contracts. Served as the Capital District Transportation Business Line Leader responsible for coordinating transportation efforts between individual offices including Baltimore, Alexandria, Richmond, and Norfolk.	
Name of Firm: Earth Tech (formerly Rust Environment and Infrastructure) Start Date: 04/90 End Date: 07/98 Position: Transportation Project Manager and Engineer Responsibilities: Served in various engineering and project manager roles for VDOT and municipal funded Virginia Transportation projects. Experience centered on highway design, structure design and analysis, roadway hydraulics and storm water management.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <i>Trine -University, Angola, Indiana/BS/1987/Civil Engineering</i> <i>State University of New York Agricultural &amp; Technical College, Alfred, NY/AAS/1984/Construction Technology</i> (2006 – 2009) (2011- 2014) VTCA Engineering Consultant Leadership Committee. Currently serves as the VA engineering representative of the Joint Highway Coop Committee of the Virginia Transportation Construction Alliance	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <i>1992 / Professional Engineer / 23016</i>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. Project: <i>Route 61 Bridge Replacement Design-Build, Town of Narrows, Giles County, VA</i> Name of Firm: Johnson, Mirmiran & Thompson Start Date: 12/10 Finish Date: Design 02/12, Construction 10/13 Project Role: Design Manager Responsibilities: The \$15.6M project replaces the existing, structurally deficient bridge that crosses the New River, Route 460, and Old Virginia Avenue with a new, 1140', two-lane bridge with sidewalks and includes reconstruction of the roadway approaches. Described by VDOT as a "utility relocation project with a bridge on it", the project also includes relocation of water, sewer, gas, telecommunications, and electrical lines serving the Town. Responsible for management of the design scope of services includes survey, subsurface utility engineering, road and bridge design, drainage and stormwater management design, hydrologic and hydraulic analysis, geotechnical engineering, environmental permit acquisition, utility coordination and relocations, right-of-way acquisition, signing and marking, and public involvement. Relevant Attributes: <b>VDOT Design-Build Project, Bridge and Road Design and Construction Services, Geotechnical</b>	

**Challenges, Environmental Permits, Right-of-Way Acquisition, Utilities Relocations and Coordination, Entire Project Constructed by D.W. Lyle Corporation**

**Project:** *Fairfax County Parkway (Route 7100) Design-Build, Fairfax County, VA*

**Name of Firm:** Johnson, Mirmiran & Thompson

**Start Date:** 10/08 **Finish Date:** 09/09 (Phase I/II), 11/09 (Phase IV)

**Project Role:** Design Manager

**Responsibilities:** Responsible for engineering of the Design-Build construction on one of the segment of the Fairfax County Parkway between Rolling Road (Rte. 638) and Fullerton Road. This project included construction of approximately 1.5 miles of a four-lane divided, limited access highway designed to facilitate future widening to 6 lanes. The project includes relocation of portions of Rolling Road; a multipurpose trail; interchanges at Rolling Road/EPG Access Road, Boudinot Drive Interchange; I-95 SB DAR access ramp; and 6 new multi-lane bridges; 1 interstate ramp widening and UXO and Hazmat accommodations. Responsibilities include oversight for roadway and structure design and coordination with all other support disciplines including survey, SUE, water resources, environmental analysis and permitting, geotechnical engineering, traffic engineering, signing and lighting and project website. Western half conditional approval for clearing, grading and E&S was received 2 months ahead of original schedule.

**Relevant Attributes:** **Design-Build Project, Bridge and Road Design, Sensitive Utilities, Heavy Public Involvement, Geotechnical Challenges, Environmental Permits**

**Project:** *Gayton Road PPTA Design-Build, Henrico County VA*

**Name of Firm:** Johnson, Mirmiran & Thompson

**Start Date:** 2008 **Finish Date:** 11/12

**Project Role:** Senior Advisor for Design Consultant and Principal-In-Charge for Construction QA/QC

**Responsibilities:** P.I.C. for Construction QA/QC Services for this 2.2 mile new alignment roadway and bridge crossing over I-64. Project construction cost of 39M. Provided Senior Advisor support to the team and oversight for limited engineering design for traffic signal designs and structural design load rating. Prior to 2008 while with previous employer generated PPTA concept and offer with the ultimately successful contractor.

**Relevant Attributes:** **Recent Adjacent Design-Build Experience on the I-64 Corridor and New Bridge over I-64**

**Project:** *Design Build - James Madison Highway (Rte. 15) Improvements PPTA, Prince William County, VA*

**Name of Firm:** Johnson, Mirmiran & Thompson

**Start Date:** 01/07 **Finish Date:** 2009

**Project Role:** Principal-In-Charge

**Responsibilities:** Responsible for overseeing the design of two river crossing structures, review of structural shop drawings submittals, acquisition of right of way acquisition, and designation of utilities for a PPTA Design-Build project to improve and widen Route 15.

**Relevant Attributes:** **Design-Build Project, Bridge and Road Design and Construction Services, Right-of-Way Acquisition, Utilities, Bridges Constructed by D.W. Lyle Corporation**

**Project:** *VDOT Design Build - Project Approaches & Bridge over Buffalo Creek, Town of Farmville, VA*

**Name of Firm:** Johnson, Mirmiran & Thompson

**Start Date:** 2007 **Finish Date:** 09/08

**Project Role:** Principal-In-Charge

**Responsibilities:** Principal-In-Charge for the engineering portion of this Design-Build bridge and approach roadways. JMT also provided the project construction QA/QC. This bridge replacement project on existing location included a 3-span, 270' long and 58'-8" wide structure. The maintenance of traffic was critical in maintaining two way traffic during construction and access for the fire station at the northern end of the existing bridge.

**Relevant Attributes:** **VDOT Design-Build Project, also provided Construction QA/QC.**

**Project:** *VDOT PPTA Design Build - Route 288 PPTA, Goochland County, VA*

**Name of Firm:** Earth Tech

**Start Date:** 2000 **Finish Date:** 2002

**Project Role:** Design Manager/Principal-In-Charge

**Responsibilities:** Responsible for roadway, bridge design and water resources work performed as a sub consultant to the PPTA design-builder. Services included completion of the roadway and select bridge plans for this segment of the Route 288 western bypass around Richmond from the James River to Interstate 64. Segment included four interchanges and extensive environmental permitting. Project design efforts included value engineering meetings with contractors. Provided field support for contractor Request for Information and structural shop drawings submittals.

**Relevant Attributes:** **VDOT Design-Build PPTA, Interstate tie in with I-64, Bridge Design and Construction Services, Bridges Constructed by D.W. Lyle Corporation**

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	<i>Paul E. Phillips</i> Senior Project Manager
b. Project Assignment:	<i>Construction Manager</i>
c. Name of Firm with which you are now associated:	<i>Key Construction Company, Inc.</i>
d. Years experience: With this Firm <u>1</u> Years With Other Firms <u>16</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):	<p><b>Name of Firm:</b> Key Construction Company, Inc.      <b>Start Date:</b> May 2012      <b>End Date:</b> Present <b>Position:</b> Senior Project Manager</p> <p><b>Responsibilities:</b> Mr. Phillips came to Key Construction Company in March of 2012 as a Senior Project Manager. His past experience in the construction field and his desire to grow and expand his career is what brought him to Key. His experience with VDOT, design build, PPTA, PPEA, NCDOT, and private site projects is being applied to current projects and also in the pursuit of future projects.</p> <p><b>Name of Firm:</b> English Construction Company, Inc.      <b>Start Date:</b> May 1995      <b>End Date:</b> May 2012 <b>Position:</b> Project Manager (March 2001 to May 2012) <b>Responsibilities:</b> Partner directly with municipalities, private owners, and academic institutions to create opportunities by applying experience, knowledge, and presenting a confidence level that result in mutually beneficial partnerships and business relationships. Extensive involvement with Capital Improvement Committees for municipalities allowing them to achieve goals by presenting solutions to their immediate needs and aiding them in cost effective decision making. Utilized a strong background in identifying all aspects of a project in great detail which allowed for the development of an accurate and complete quantitative analysis that was then used to create a schedule of values for bidding and scheduling purposes. Coordinated and facilitated meetings with owners, engineers, and subcontractors to update progress, discuss schedule, and address outstanding issues. Responsible for bidding and managing design build, hard bid, and negotiated contracts from beginning stages and following through to completion including oversight of project superintendents, scheduling of equipment and personnel, execution and coordination of subcontracts/purchase orders, and processing of monthly invoices and schedule updates.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<i>Virginia Polytechnic Institute &amp; State University, Blacksburg, VA/Bachelor of Science/1993/Construction Management</i>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> <b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b>	
	<p><b>Project:</b> <i>Route 288 PPTA Project from State Route 250 to the I-64 Interchange, Goochland VA</i> <b>Name of Firm:</b> English Construction Co., Inc. <b>Start:</b> December 2002 <b>Finish:</b> June 2004</p>

**Project Role:** Project Manager

**Responsibilities:** Responsible for overall project management including oversight of field superintendent, foremen, and all other employees. Generated monthly pay applications and schedule updates, conducted and attended meetings with all associated contractors, subcontractors, and VDOT representatives. Approved and processed payments for subcontractors and all materials. Ordered materials and scheduled subcontractors ahead of time in order to maintain project schedule and prevent delays. Coordinated with bridge subcontractor to maintain a schedule that was mutually beneficial for all parties and allowed continuous construction without interruption. Scheduled construction operations for on-ramps, off-ramps, and acceleration/deceleration lanes on Interstate 64 while working closely with VDOT to maintain current traffic patterns and prevent delays. The success of this project led to additional work along the Route 288 corridor (Route 60 to the James River Bridge) that was uncompleted by the original contractor.

**Project:** *APM Terminal Roadway Design Build Project, Portsmouth VA*

**Name of Firm:** English Construction Co., Inc.

**Start:** August 2005

**Finish:** November 2006

**Project Role:** Project Manager

**Responsibilities:** Worked closely with design engineers, provided constructability analysis for potential concepts, and helped create the design that was ultimately used for the construction of this project. Although English was not the Prime Contractor for this project, Tidewater-Skanska chose to use English's design once they realized the advantages that it provided over their original concept. Due to the circumstances, Tidewater-Skanska chose English to perform the grading on this project while they self-performed the bridge construction. My involvement throughout the design, review, and bidding process led to being chosen as the project manager for construction of the roadway. Duties included locating and acquiring a suitable borrow source, oversight of all field personnel, processing purchase orders and scheduling material orders, and scheduling subcontractors. Schedule was a critical part of this project and required a tremendous amount of in depth analysis and monitoring to maintain production. Much time was spent attending scheduling meetings, analyzing upcoming activities, and identifying ways to be more efficient. Teamwork was vital to the success of the project and working closely with all parties helped identify opportunities that normally would have been overlooked.

**Project:** *Interstate 95/Keen Road Interchange, Four Oaks NC*

**Name of Firm:** English Construction Co., Inc.

**Start:** June 2002

**Finish:** October 2004

**Project Role:** Project Manager

**Responsibilities:** Investigated the project prior to bidding and located a borrow source that was close to the project right-of-way which played a key part in the successful bid and overall construction of the project. Processed, approved, and executed purchase orders and subcontracts for all aspects of work. Oversight of all project personnel including hiring of local employees. Aided one local business in becoming an approved NCDOT subcontractor and utilized their skill and local knowledge to our advantage. Generated all monthly invoices as well as schedule updates. Coordinated operations with NCDOT and worked closely with their traffic and safety division when performing work along Interstate 95. Coordinated road closures and detours with local government to reduce the impact to local traffic. Worked closely with the bridge subcontractor to coordinate lane closures, night work, and all aspects associated with building a new bridge over an active interstate.

**Project:** *Route 210 Interchange for the Madison Heights Bypass, Amherst VA*

**Name of Firm:** English Construction Co., Inc.

**Start:** August 1998

**Finish:** October 2001

**Project Role:** Project Superintendent

**Responsibilities:** Responsible for the construction of the entire interchange project including a new bridge over Route 29 and the rehabilitation of an existing bridge over the James River. Located and set up offices for prime contractor and VDOT on project right-of-way. Hired local employees and established accounts with local businesses and suppliers. Acquired permits for borrow source and constructed access roads for transport of material. Coordinated re-construction of Route 29 Northbound lanes including complete demolition and re-building while under traffic. Performed survey/layout work for roadway, storm drainage, and bridge construction. Coordinated utility work with local municipality including new sewer and water mains as well as services for existing properties. Constructed a box culvert adjacent to an existing stream in a very environmentally sensitive area with limited work space. Maintained relations with VDOT, local business owners, and local property owners as this project effected a large number of properties and greatly impacted local traffic.



**ATTACHMENT 3.4.1(A)**

**WORK HISTORY FORM/LEAD CONTRACTOR**



*Key Construction Company, Inc.*

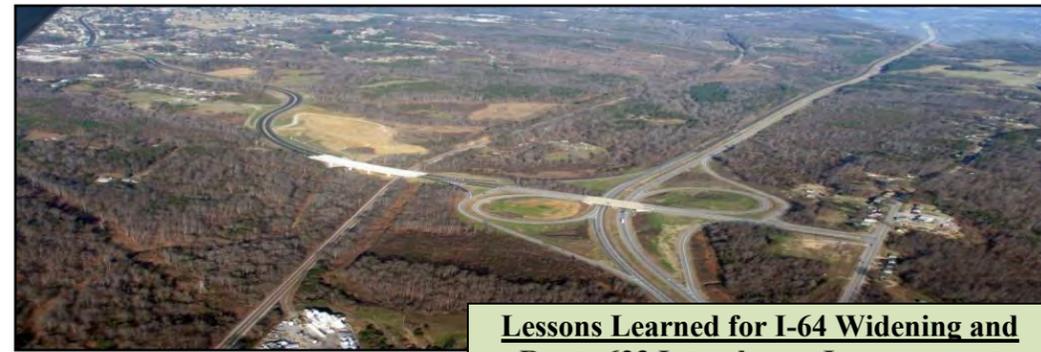
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

Work by Lead Contractor– three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm’s Responsibilities	c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<b>(1)</b> <b>Route 265 Franklin Turnpike Extension</b> <b>Pittsylvania County, VA</b> <b>Project #(NFO) 6265-071-V05-B643,C501</b>  	<ul style="list-style-type: none"> <li>• CPM</li> <li>• Construction Management</li> <li>• Bridges (2)</li> <li>• Roadway</li> <li>• Storm Drainage</li> <li>• MSE Wall</li> <li>• Wetlands Impact Avoidance</li> <li>• Subcontractor Management</li> <li>• Water &amp; Sewer relocation &amp; adjustments</li> <li>• Incidental Concrete</li> </ul>	<b>Virginia Department of Transportation</b> Halifax Residency 5211 Halifax Road Halifax, VA 24558  <b>Project Manager:</b> <i>Zachary P. Weddle, P.E.</i> Area Construction Engineer <i>Tel: 434-476-6471 (office)</i>	Dec. 2, 2011	Nov. 18, 2011	\$ 18,295	\$ 18,900  (Increased contract value due to approved change orders)	\$ 18,900

<b>Similar Scope Elements to I-64 Widening and Route 623 Interchange Improvements</b>	
Utility Relocation	X
Clearing, Grubbing & Erosion Control	X
Roadway Construction	X
Phased MOT	X
Communicating/Coordination w/ Third Party Stakeholders	X
High Visibility Project	X
Bridge Construction	X
Project Management	X
Signing & Signalization	X

Key Construction Co., Inc. constructed the Franklin Turnpike Extension through a formal partnering process with VDOT that led to a project with minimal communication issues. Construction activities, including clearing and grubbing, 300,000+ cubic yards of excavation, water and sewer, storm drainage, aggregate base material, asphalt, concrete curb and gutter, guardrail, fencing, overhead signs, and two bridges each 600+ lf in length, were performed during construction of this final phase of the Franklin Turnpike Extension connecting Route 41 in the City of Danville to the Route 29 Danville Bypass. Coordination and cooperation with the many stakeholders involved, including VDOT, the City of Danville, N&S Railroad, local business owners, and the travelling public, contributed significantly to the successful early completion of this \$18.9 million project.



**Lessons Learned for I-64 Widening and Route 623 Interchange Improvements**

- Required continuous and effective communications and coordination with all stakeholders – VDOT, City and County officials, utility owners, Retailers association and the general public
- Coordinated construction scheduling with 3<sup>rd</sup> party stakeholders
- Reconstructing heavily travelled signalized intersections
- Utilized MSE Retaining Walls to maximize available right of way
- Coordinated utility construction & relocation with 3<sup>rd</sup> party utility owners



**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

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

a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<p>(2)  <b>US 360 &amp; US 58</b>  <b>Halifax County, VA</b>  <b>Project # 6360-041-E15, C501, B608, B609, B610</b></p> 	<ul style="list-style-type: none"> <li>• CPM</li> <li>• Construction Management</li> <li>• Bridges (3)</li> <li>• Roadway</li> <li>• Storm Drainage</li> <li>• MSE Wall</li> <li>• Permanent Soil Nail Wall</li> <li>• Subcontractor Management</li> <li>• Wet &amp; Dry Drilled Shafts</li> <li>• Water &amp; Sewer relocation &amp; adjustments</li> <li>• Incidental Concrete</li> </ul>	<p><b>Virginia Department of Transportation</b>                      Halifax County                      P.O. Box 759                      Halifax, VA 24558</p> <p><b>Project Manager:</b>  <i>J.D. Barkley, II</i>                      Resident Engineer  <i>Tel: 434-791-5218 (office)</i></p>	August 7, 2007	January 2007	\$ 24,300	\$ 24,600  (Increased contract value due to approved change orders)	\$ 24,600

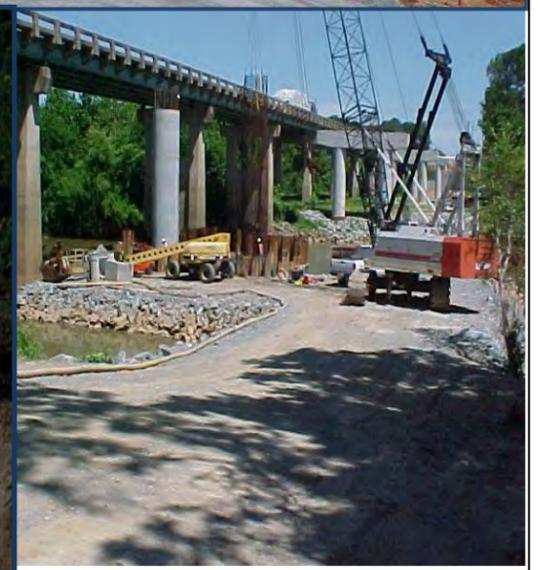
<u>Similar Scope Elements to I-64 Widening and Route 623 Interchange Improvements</u>	
Utility Relocation	X
Signing & Signalization	X
Roadway Construction	X
Phased MOT	X
High Visibility Project	X
Bridge Construction	X
Project Management	X
Sensitive Environment	X

Key was the prime contractor on this long anticipated VDOT bridge and roadway project that completed Route 360 as a four-lane highway system from Richmond to Danville. The original 2000 ft + bridge spanned across the Dan River, its flood plains and the Norfolk Southern Corp. The original bridge was demolished and replaced with two 2100 ft + structures. Also, the original Vaughan Street bridge across Route 360 was demolished and replaced with a wider, longer structure. All totaled, there were 5000 ft cy of concrete, 1.7 million pounds of reinforcing steel and 7.2 million pounds of steel plate girders utilized. The project also included staged roadway construction converting 1.5 miles of roadway from two lane rural design to four lane urban design. Of significance, there were three major intersections contained within this project, the westernmost being the major intersection of Routes 58, 360 and 501. The roadway & approach work included clearing and grubbing, grading, drainage, curb and gutter, sanitary water and sewer utilities, storm sewer, paving, and guardrail as well as construction of an MSE wall and a tie back retaining structure. There was an exceptional lesson learned on this project that now impacts our subcontractor selection process. Key experienced performance and scheduling issues from a subcontractor during the project. As a result of this experience, Key developed a more comprehensive and structured subcontractor selection process. **This highly visible project, located in very sensitive environmental surroundings, required the best cooperative efforts between Key, VDOT, private utility companies, local governmental agencies, and the general public's cooperation to deliver a successful job.** Value Engineering the traffic phasing and sequence of construction shortened the project



duration by 7 months.

<u>Lessons Learned for I-64 Widening and Route 623 Interchange Improvements</u>
<ul style="list-style-type: none"> <li>• Developed more structured subcontractor selection process</li> <li>• Required continuous and effective communications and coordination with all stakeholders – VDOT, City and County officials, utility owners, retailers association and the general public</li> <li>• Reconstructing 2 heavily travelled signalized intersections</li> <li>• Managed construction in and around sensitive environmental and public recreation features</li> <li>• Utilized various types of Retaining Walls to maximize available right of way</li> </ul>



**LEAD CONTRACTOR - WORK HISTORY FORM**

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

a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<p><b>(3)</b>  <b>SR 288 PPTA Design/ Build</b>  <b>Richmond, VA</b></p> 	<ul style="list-style-type: none"> <li>• <i>Pre Bid Design Build Value Engineering, estimating, and scheduling of bridge construction.</i></li> <li>• <i>Post Award Design Build Coordination of all 25 bridges</i></li> <li>• <i>Complete construction of 16 bridges,</i></li> <li>• <i>Pile Driving and beam erection on 3 additional bridges</i></li> <li>• <i>Existing Structure demolition and widening</i></li> <li>• <i>Rough Grading, access, and excavation for 8 bridge sites.</i></li> <li>• <i>Storm drainage, erosion control and grading of 9.5 lane miles of 288</i></li> </ul>	<p><b>Virginia Department of Transportation</b>                      1401 East Broad Street                      Richmond, VA 23219                      Mal Kerley, Chief Engineer                      Tel: 804-786-4798</p> <p><b>VDOT PPTA Project Coordinator:</b>                      Bob Riley                      Now w/: The Louis Berger Group                      801 East Main Street, Ste 500                      Richmond, VA 23219                      Tel.: 804-335-0348</p>	Dec. 1, 2003	July 15, 2003	\$200,000 + (by Prime Contractor with VDOT)	200,000+	\$16,787 Bridge \$ 2,824 Grading & Drainage  \$19,611 Total

<b>Similar Scope Elements to I-64 Widening and Route 623 Interchange Improvements</b>		<p>D. W. Lyle Corporation is a wholly owned subsidiary of Key Construction Co., Inc. D. W. Lyle Corporation's work experience on this project is extremely relevant to the I-64 Widening and Route 623 Interchange Improvements Design Build project because Key has access to and would utilize intellectual knowledge gained as well as utilizing personnel and physical resources that worked on this project for D. W. Lyle Corporation. David Lyle, as Executive Vice President of D. W. Lyle Corporation, played a key role in procurement, estimating, and construction of the 288 project for D. W. Lyle Corporation and as the Design Build Project Manager for Key Construction Co., Inc. would utilize the knowledge, lessons learned and management tools gained from the 288 PPTA project. D. W. Lyle Corporation (DWL) was involved in the Richmond, VA Rte 288 design build/PPTA project as part of the VDOT's original request for competing proposals. DWL was on the project team that value engineered and managed the design of all 25 bridges providing pre-bid constructability advice and post award provided detailed constructability reviews for structures and roadways. DWL built 16 bridges, constructing bridge approach fills on several of these bridges, and constructed 9.5 miles of lane widening in a wide variety of traffic and environmental conditions including two major urban primary interchanges and two high capacity interstate interchanges. Bridge foundations, substructures and superstructures varied where necessary to provide the most efficient constructability and the most efficient schedule. Approx. 150,000 square feet of bridge deck was placed on a variety of steel girder and concrete bulb tee girders. Prime Contractor, APAC – Special Project Division and United Contractors, Inc. tasked DWL with expediting the project so that it could be completed in a timely manner. Roadway approach cuts and fills to support bridge abutments were accomplished with phased construction plans before the final roadwork drawings were completed. Working at multiple sites with phased plan approvals allowed bridge, bridge approach, and roadway widening construction to be complete approx. 6 months earlier than required by the Master project schedule.</p>
Design – Build Delivery	X	
Large Public Impact	X	
Sensitive Environmental Areas	X	
Roadway Widening	X	
Selective Demolition for Bridge Widening	X	
Multiple 3 <sup>rd</sup> Party Stakeholders	X	
High Visibility Project	X	

- Lessons Learned for I-64 Widening and Route 623 Interchange Improvements**
- Construction Team must provide consistent, continuous constructability review during design to minimize construction project delays.
  - Design Team must provide continuous presence to minimize or eliminate delays to project during construction.
  - Coordination and communication with all stakeholders minimizes or eliminates project misconceptions and delays.
  - Phased Plan approvals can expedite project completion.
  - Effective communication with 3<sup>rd</sup> party stakeholders can enhance the public's perception of the project and improve the construction process





**ATTACHMENT 3.4.1(B)**

**WORK HISTORY FORM/LEAD DESIGNER**



*Key Construction Company, Inc.*

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

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

a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<b>(1) Fairfax County Parkway (Route 7100) Design Build Fairfax County, VA</b> 	Lead Designer responsible for complete design of project including work in the following disciplines: highway, structural, water resources, traffic, multipurpose trail, lighting designs, surveys, utility designations, subsurface utility engineering, geotechnical engineering, environmental analysis and permitting.	<b>Eastern Federal Lands Highway Division</b> 21400 Ridgetop Circle Loudoun Technical Center Sterling, VA 22170  <b>Project Manager:</b> Mr. Robert A. Morris, PE Phone: (703) 404-6302	<b>Phases I/II</b> December 2010  <b>Phase IV</b> July 2010	<b>Phases I/II</b> September 2010 (Actual)  <b>Phase IV</b> July 2010 (Actual)	Total: \$85,472	Total: \$112,500	Total: \$11,397



The Design-Build (D-B) Team of Johnson, Mirmiran & Thompson, Inc. (JMT) and Cherry Hill Construction, Inc. (CHC) was selected as the best value team for the Fairfax County Parkway (FCP) project by the Federal Highway Administration's Eastern Federal Lands Highway Division (EFLHD), Virginia Department of Transportation (VDOT) and U.S. Army Garrison Fort Belvoir.

The 4-lane divided limited access highway on new location completes the missing connection of FCP to I-95. The project corridor begins at Rolling Road/Franconia-Springfield Parkway and proceeds southeastward on a new alignment and ends just east of Fullerton Road and includes new interchanges at Boudinot Drive and at the new Fort Belvoir Engineering Proving Ground (EPG) Access Road (Barta Road). The work involved in the parkway extension includes design of: highway and interchange ramps, bike paths, six new bridges and one bridge widening, retaining walls, noise walls, box culverts, sign structures, grading, drainage, storm water management, erosion and sediment control, landscaping, traffic analysis, traffic simulation, traffic signals, signing and striping, dynamic message signing, lighting and pavement marking as well as maintenance of traffic and a Type C Transportation Management Plan for a



complicated construction detouring scheme. The project also included special coordination requirements with Fort Belvoir environmental staff due to the presence of contaminated soil/groundwater and the possibility of unexploded ordinance on the site as well as environmental permitting with the USACOE for the Accotink Creek bridge construction. In addition, the project included widening of southbound I-95 to accommodate a new exit lane. The project had an extremely aggressive 750 calendar day schedule.

During the bidding process, JMT prepared alternate technical concepts that improved the overall project design and reduced the cost. The JMT/Cherry Hill Construction team was selected based on the alternate technical concepts prepared by JMT and the overall best value that our team's proposal offered to EFLHD. The most significant change identified was the "Fullerton Flip". The original design depicted Fullerton Road crossing over Fairfax County Parkway. JMT was able to revise the profiles for both the Fairfax County Parkway and Fullerton Road to take the Parkway over Fullerton Road. The benefits that raising the grade of FCP brought to the project were:

- Reduced the amount of soil and rock excavation by also raising Boudinot Drive.
- Minimized the disturbance of contaminated material by placing embankment over the Central Motors site.
- Reduced the surplus material on the project.
- Resulted in a balanced earthwork project significantly reducing project cost.

JMT also identified areas on the project where the remaining surplus material could be disposed which eliminated the need to dispose material off site and eliminated the numerous truck trips on the local roads.

**Lessons Learned for I-64 Widening and Route 623 Interchange Improvements**

- Coordinated the mitigation and processing of design waivers and exceptions from previously approved CTB plans, allowing the project to remain within boundaries established by the MOA between project stakeholders (VDOT, EFLHD, US Army, and Fairfax County) and keeping the commitments of the ROD.
- Designed significant profile revisions to minimize surplus material, thereby avoiding impacts to HAZMAT and UXO's, and reducing construction traffic on the local road network.
- Performed extensive JMT/CHC Team coordination for foundation design approvals to expedite construction schedule and minimize cost.
- Conducted extensive coordination process to satisfy the varying and diverse needs of the major stakeholders.
- Rapidly accommodated multiple owner options into the plans while maintaining the design and construction schedules.



<b>Similar Scope Elements to I-64 Widening and Route 623 Interchange Improvements</b>	
<b>Design-Build Project</b>	<b>X</b>
<b>Road Design and Construction</b>	<b>X</b>
<b>Bridge Design and Construction</b>	<b>X</b>
<b>Utility Relocation and Coordination</b>	<b>X</b>
<b>Geotechnical Challenges</b>	<b>X</b>
<b>Environmental Permits</b>	<b>X</b>
<b>Phased MOT</b>	<b>X</b>
<b>QA/QC</b>	<b>X</b>
<b>Public Involvement/Relations</b>	<b>X</b>
<b>Project Management</b>	<b>X</b>

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

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

a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<b>(2)</b> <b>9<sup>th</sup> Street Bridge Replacement Design-Build Washington, DC</b>  	Lead Designer responsible for complete design of project including work in the following disciplines: highway, structural, water resources, traffic, multipurpose trail, lighting designs, surveys, utility designations, subsurface utility engineering, geotechnical engineering, environmental analysis and permitting.	<b>Eastern Federal Lands Highway Division</b> 21400 Ridgetop Circle Loudoun Technical Center Sterling, VA 22170  <b>Project Manager</b> Mr. Kenneth Atkins, PE Phone: (703) 404-6307	June 2011	July 2011	\$50,961 (Design and Construction)	\$50,961 (Design and Construction)	\$4,802 (Design)



The Federal Highway Administration's Eastern Federal Lands Highway Division (EFLHD) representing the District Department of Transportation (DDOT) selected the team of Cherry Hill Construction, Inc. (CHC) and Johnson Mirmiran & Thompson, Inc. (JMT) for this challenging \$51M design-build project. The project required the construction of a completely new four span structure over CSXT and AMTRAK rail facilities and New York Avenue on a parallel alignment with the existing 7-span structure. The project also required the full depth reconstruction and widening of 1,700 feet of New York Avenue along with the realignment and construction of three new signalized intersections. Removal of the existing structure commenced after traffic was set in its final configuration. Project phasing allowed vehicular and pedestrian traffic free movement throughout the project, during both construction and demolition, an important goal of the Owner.

The Team was issued Notice to Proceed on September 6, 2006 and completed its 100% design milestone approximately one-month ahead of schedule. Construction was able to begin in advance of the August 2009 scheduled date. The Project mandated a community outreach program which the Design-Build team embraced through the establishment of a project website, community

meetings, and an extensive aesthetic content program. Like previous EFLHD projects, the Team formed a partnering agreement with DDOT, EFLHD and CSXT, but added to this list the United States Postal Service, Amtrak and the DC Water and Sewer Authority (WASA) as significant stakeholders. These stakeholders were essential to the acquisition of easements and property transfers for the construction of the project. In support of the Owners property needs, the Team performed all Title Searches, Assessments, Plat preparations, and assisted with the assembly of agreements and closing services.

The project Owner was also concerned with the aesthetic design of the structure and minimizing impacts to the community by reducing construction time. To address these critical concerns, the Team focused on achieving an elegant, streamlined bridge with numerous architectural enhancements along with an aesthetic development program lead by a local area artist specializing in urban streetscape design. The program allowed the Owner to work with the artist to develop a design, adding or deducting elements as desired while maintaining their budget. CHC's knowledge of AMTRAK operations minimized time impacts. The Team's experience with Amtrak procurement regulations gave early recognition to the relocation of electrical traction facilities attached to the existing bridge girders. To advance construction, CHC accelerated the project schedule by acquiring the necessary AMTRAK materials without profit. In addition, a creative demolition sequence allowed the girder span holding the electrical traction elements to remain in place during the construction of all piers and abutments, thereby allowing construction to commence in advance of the one-year duration Amtrak quoted to perform the relocations.

A project of this magnitude involved ongoing and interactive coordination with all utilities and public traffic. Along with utilities within the right of way such as DC WASA, Washington Gas, PEPCO, MCI, AMTRAK, and CSXT Railroad, the project sees an average of 60,000 vehicles on New York Avenue and 24,000 vehicles on 9<sup>th</sup> Street. Maintaining this volume of traffic mandated seven (7) major traffic phases to accommodate peak rush-hour volumes without impact.



**Lessons Learned for I-64 Widening and Route 623 Interchange Improvements**

- Extensive Maintenance of Traffic plans dealing with high traffic volume in an urbanized area.
- Extensive Railroad Coordination and proactive approach to mitigating impacts.
- Interactive coordination with all utilities and specifically with DC Water and Sewer Authority.
- Stormwater Management (SWM) challenges to meet SWM regulations within the limited Right of Way available.

**Similar Scope Elements to I-64 Widening and Route 623 Interchange Improvements**

Design-Build Project	X
Road Design and Construction	X
Bridge Design and Construction	X
Utility Relocation and Coordination	X
Geotechnical Challenges	X
Environmental Permits	X
Phased MOT	X
QA/QC	X
Public Involvement/Relations	X
Project Management	X

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<b>Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.</b>							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
<b>(3)</b> <b>3<sup>rd</sup> Street (Route 15/460) over Buffalo Creek Design-Build Town of Farmville, VA</b> 	Lead Designer responsible for complete design of project including bridge, roadway, drainage, hydraulics, scour analysis, maintenance of traffic, signing and pavement marking, public involvement, construction Quality Assurance, and construction surveying and stakeout.	<b>Virginia Department of Transportation</b> Lynchburg District 4219 Campbell Avenue Lynchburg, VA 24501  <b>Project Manager:</b> Terry Meadows, PE Phone: (434) 856-8317	June 2008	September 2008	\$2,900 (Design and Construction)	\$2,900 (Design and Construction)	\$423 (Design)

VDOT selected the Corman Construction / Johnson, Mirmiran & Thompson Design-Build Team for the 3<sup>rd</sup> Street (Route 15/460) over Buffalo Creek bridge replacement Design-Build project in the Town of Farmville. Maintenance of traffic (MOT) was a key requirement for the project and the challenge was to design and construct a bridge replacement, in the same location, while maintaining the daily traffic along 3rd Street (Route 15/460). Preliminary plans, provided as part of the procurement process, depicted only one lane of traffic remaining open during construction with temporary signals at each end of the work zone. JMT was able to provide a plan where one lane of traffic in each direction was provided without signals. Flagging was used only as needed for short periods of time while moving construction equipment. The MOT plan and final design provided accessibility from the fire station at the northeast corner of the bridge to 3rd Street (Route 15/460) without creating impacts of delays to fire and emergency vehicles. The JMT design reduced the number of constructions phases originally envisioned by VDOT and reduced project cost, reduced construction time and reduced the impacts to the public. The existing bridge was removed in stages and the proposed, 3-span, 270 foot long replacement bridge was constructed in stages while maintaining traffic on 3<sup>rd</sup> Street (Route 15/460). In addition to replacing the existing bridge, new approach roadways were designed to tie into the existing approach roadway, drainage system, and sidewalks and accommodate the proposed bridge typical section. Design services for the project included bridge, roadway, drainage, erosion and sediment control, hydrologic and hydraulic analysis, scour analysis, bridge load rating, shop drawing review, and consultation during construction. JMT also provided the construction inspection and Quality Assurance Management of the construction.



<b>Similar Scope Elements to I-64 Widening And Route 623 Interchange Improvements</b>	
Design-Build Project	X
Road Design and Construction	X
Bridge Design and Construction	X
Utility Relocation and Coordination	X
Geotechnical Challenges	X
Phased MOT	X
QA/QC	X
Public Involvement/Relations	X
Project Management	X

<b>Lessons Learned for I-64 Widening and Route 623 Interchange Improvements</b>
<ul style="list-style-type: none"> <li>Independent QA/QC extremely valuable to both VDOT and D-B team by promoting objectivity throughout the entire process.</li> <li>Developed alternate phased MOT plan to maintain 2 way traffic through the work zone and to accommodate emergency responders within the project limits without disrupting traveling public.</li> <li>Gained valuable VDOT Design-Build experience working on one of the first D-B projects advertised by the Innovative Project Delivery Division.</li> </ul>



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