

# Design-Build

## I-64 Capacity Improvements - Segment II

State Project Number: 0064-965-264, P101, R201, C501, B627, B628, B629, B630, B631, B632, B633, B634, B635, D603, D604, D605, D606, D607, D608

Contract ID Number: C00106665DB82



Submitted to:

Submitted by:



A Joint Venture

In association with:





## *3.2 Letter of Submittal*

May 27, 2015  
Mr. Joseph A. Clarke, PE, DBIA  
Alternate Project Delivery Office  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219

**RE: Letter of Submittal: Design-Build Interstate 64 Capacity Improvements – Segment II**  
**State Project No.: 0064-965-264**  
**Contract ID Number: C00106665DB82**

Dear Mr. Clarke:

**3.2.1** Corman-EV Williams-McLean JV (CWM JV), 925 S. Military Highway, Virginia Beach, VA 23464 is the legal entity who will execute the contract with VDOT and submits the following:

- One original Statement of Qualifications (SOQ) with full supporting documentation
- One CD-ROM containing the entire SOQ in a single cohesive Adobe PDF file
- Ten abbreviated copies of the original SOQ

The CWM JV appoints the following:

3.2.2 Point of Contact	Alternate Point of Contact	3.2.3 Principal Officer of Legal Entity
<b>Mark Osenbaugh, Project Development Manager</b> E.V. Williams, Inc. 925 S. Military Highway Virginia Beach, VA 23464 757.420.1140 Telephone 757.420.7250 Fax marko@evwilliams.com	<b>Louis Robbins, PE, DBIA, Vice President</b> Corman Construction, Inc. 12001 Guilford Rd Annapolis Junction, MD 20701 410.792.9400 Telephone 301.953.0384 Fax lrobbins@CormanConstruction.com	<b>James A. Openshaw, III, President</b> E.V. Williams, Inc. 925 S. Military Highway Virginia Beach, VA 23464 757.420.1140 x22036 Telephone 757.420.7250 Fax jayo@evwilliams.com

**3.2.4** CWM JV is a construction joint venture of Corman Construction, Inc., E.V. Williams, Inc., and McLean Contracting Co. The CWM JV will share financial responsibility for the project. Corman, E.V. Williams, Inc., and McLean will be jointly and severally liable with no limitations. CWM JV will provide a single 100% performance bond and single 100% payment bond.

**3.2.5 Lead Contractor:** CWM JV | **Lead Designer:** RK&K

**3.2.6 Affiliated and/or Subsidiary Companies Table (Attachment 3.2.6)** is in the Appendix.

**3.2.7 Certification Regarding Debarment Forms (Attachments 3.2.7(a) and 3.2.7(b))** are in the Appendix.

**3.2.8** Corman Construction (C097-Active) Prequalification Certificate, E.V. Williams, Inc. (W488-Active) VDOT Prequalification evidence, and McLean Contracting Co. (M047-Active) are in the Appendix.

**3.2.9 Surety Letters** are in the Appendix.

**3.2.10** SCC and DPOR information are in **Attachment 3.2.10**; supporting documentation is in the Appendix.

**3.2.11** CWM JV is committed to achieving a 12% DBE participation goal for the entire value of the contract.

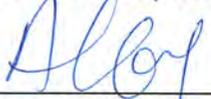
We present to you a design-build team equipped with the experience, knowledge, and resources to partner with the Virginia Department of Transportation in successfully delivering the Interstate 64 Capacity Improvements – Segment II Design-Build project.

Sincerely,

**Corman Construction, Inc.**

**E.V. Williams, Inc.**

**McLean Contracting Co.**

  
\_\_\_\_\_  
Arthur C. Cox, III, Vice President

  
\_\_\_\_\_  
James A. Openshaw, III, President

  
\_\_\_\_\_  
George Bosmajian, III, President/CEO



## *3.3 Team Structure*

### 3.3 OFFEROR’S TEAM STRUCTURE

The Corman-E.V. Williams-McLean Joint Venture (CWM JV) Team provides VDOT with an experienced and integrated Design-Build (DB) Team for the I-64 Capacity Improvements – Segment II Project. We have chosen to perform the work as a three-way JV because success on this project for VDOT, our JV, and all third party stakeholders demands this project is completed on or ahead of schedule. The CWM JV has strategically assembled a team to create redundancy of resources. We have two team members capable of constructing any or all of the bridges. We have two team members capable of all other aspects of the project. Creating this team mitigates the risk of having a finite set of resources available to meet the inevitable challenges a project of this size and complexity will have. Each firm has successfully worked together in a three-way JV including the Dominion Boulevard project located in Chesapeake, Virginia and the I-695/95 Interchange project in Baltimore, Maryland.

We recognize that strong working relationships are vital to the success of any Design-Build project, and the individuals on our team have already developed a rapport and knowledge of each other’s abilities, skills, and working style. For this reason, the framework for the project implementation is strengthened and the project’s design and construction phases will not be a “training ground” for our team, but instead will be one additional example of our team’s success.

#### 3.3.1 KEY PERSONNEL

The CWM JV Team has assembled a team of highly-qualified and seasoned individuals, and structured them accordingly for optimal performance on this project. The Key Personnel described below offer extensive road construction, along with exceptional design expertise. Our Team, including Key Personnel, will remain intact for the duration of the Project providing constant leadership throughout each phase. A  icon has been placed next to the names of the individuals with Design-Build experience.

 **Design-Build Project Manager (DBPM):** We have committed *Mark Osenbaugh, DBIA (EVW)* for the DBPM role. He will serve as the primary point of contact and main communication link between the CWM JV Team and VDOT. Coordinating with the entire team throughout the duration of this project, his responsibilities will include the execution of work, coordination of design activities, and oversight of construction including clarification of the contract documents, and managing project risks and schedule to ensure timely completion. He will work closely with the Responsible Charge Engineer ensuring the Design is performed properly, the required constructability reviews are performed, and that the design is properly implemented during Construction. He will also be involved with and work closely with the Safety Manager to develop project specific Safety and Emergency Response Plans. Additionally, he will work with the Team’s QC Manager establishing communication to ensure materials and work meet the contract documents. He will also work closely with our Public Relations Manager coordinating public outreach efforts. Mr. Osenbaugh will have complete authority over all aspects of this endeavor including responsibility for the overall project design, construction, quality management, and contract administration. He will be responsible for ensuring that the CWM JV Team is performing at high levels of productivity and for their roles on the Team. The QAM, DM, CM, RCE and MOT Manager will report to the DBPM.

 **Responsible Charge Engineer (RCE) / Design Construction Integrator:** Our Team structure provides distinct positive influences on design and constructability. For this reason, *Ryan Gorman, PE, DBIA (CCI)* will fulfill dual roles of the RCE and Design-Build Integrator. **As RCE, he accepts full professional responsibility for engineering services relating to the final work product.** Reporting directly to the DBPM, Mr. Gorman will be fully integrated among the entire project team, including subconsultants, and will communicate regularly in order to maintain open lines of communication with the Department, DM, CM, and QAM. He will oversee the coordination of the project from both a design and construction perspective. With his involvement in the current Route 29 Solutions DB project, Mr. Gorman is the first to ever fulfill the role of RCE for the Design-Builder on a VDOT DB project. His role as RCE on the Route 29 Solutions DB will become part-time in the coming months, affording him full access and availability for the RCE role on this project. The JV has vested him with the authority to act on behalf of CWM JV to make any necessary decisions to keep the project progressing efficiently. He also has the authority to cease project work if warranted.

**DB 3.3.1.3 Quality Assurance Manager (QAM):** *Michael R. Davis, PE, CCM (AMT)* has progressive construction oversight and management experience and will serve as the QAM for this project. He will make sure that work is performed and carried out in conformance with the contract requirements and the “approved for construction” documents. He will be responsible for development and adherence to the QA Plan, QA inspection and testing of all materials used and work performed. Mr. Davis will report directly to the DBPM, but will remain independent and impartial for all Quality Assurance concerns. As an independent entity, Mr. Davis will audit and monitor the Construction Quality Control Program. He will have the ability to stop construction, enforce compliance with all specifications, and issue/require resolution of all Non-Conformance Reports (NCRs). The QA Team will conduct independent and concurrent tests and analysis of the work with the construction quality control team. He will maintain project quality records and approve and submit pay estimates. In addition, he will submit monthly written reports to the VDOT project manager and the Executive Committee. Mr. Davis’ recent VDOT DB experience includes three contracts, valued at \$100M and located in the Hampton Roads District. See resume for duration of each assignment.

**DB 3.3.1.4 Design Manager (DM):** *Gary S. Johnson, PE, DBIA (RK&K)* will serve as DM for the Project reporting to the DBPM. He will be responsible for providing a quality product, meeting all design milestones and interfaces, and overseeing the design QA/QC program and ensuring the Design QA/QC Manager’s involvement. Mr. Johnson was chosen specifically for this project based on his strong DB experience on interstate projects. He is adept at managing the overall design process, including monitoring project schedules, assigning staff, reviewing work plans, and ensuring project goals and budgets are met. He recently completed the design of the VDOT I-64 Widening and Route 623 Interchange Design-Build project with Corman and will be completing the design of the Rio Road Bridge in the summer of 2015, also with Corman and Ryan Gorman as the RCE. The Rio Road Bridge is part of the Route 29 Solutions Design-Build project near Charlottesville. These assignments will be complete before the start of the I-64 Capacity Improvements Segment II project, allowing him to be dedicated to this project.

**DB 3.3.1.5 Construction Manager (CM):** *Chris Martin (EVW)* will fulfill the CM position and he will remain on-site full-time for the duration of construction. He will coordinate with the DB Team from the initial design phase and remain as CM for the duration of the construction phase, providing constant leadership, project oversight, and ensuring that the construction is performed safely and in accordance with the approved construction documents. His daily duties will include project scheduling, safety, coordination of subcontractors, and the oversight of construction QC activities. In a management role, Mr. Martin has successfully solved complex problems and overseen the success of multiple projects serving as the CM including RK&K’s \$54M DB project of US 13 in Gates County with NCDOT which is similar to the I-64 Capacity Improvements – Segment II project as it is a Design-Build and includes multiple structures. He will report directly to the DBPM and manage the efforts of the on-site construction team.

**DB 3.3.1.6 Maintenance of Traffic (MOT) Manager:** We have strategically selected *John McDowell, PE (RK&K)* for the role of MOT Manager due to his extensive DB experience and ability to serve as the lead to develop and implement the TMP for this project. He will be a key point of contact and work diligently to resolve issues that arise relative to temporary Roadway Geometrics and MOT while ensuring that construction activities are coordinated with utility and roadway work in the I-64 corridor, as well as make sure that work is communicated to the traveling public. Mr. McDowell recently was involved with the I-64 Widening and Route 623 Interchange DB and Route 29 Solutions DB projects (both with Corman) where he managed the complex design of a roadway to meet Interstate standards and complexity. Mr. McDowell will serve as Deputy Design Manager and report directly to the DM.

### Additional Design and Construction Support

**DB Geotechnical Engineer:** *Randy Wirt, PE (ECS)* will be in charge of all aspects of geotechnical engineering and evaluation for the project, including evaluation of abutment and pier foundation support, potentially unsuitable soils, slope and embankment stability and settlement, pavements, and geotechnical construction considerations. He will also assist the DM and the CM during construction, as needed, for earthwork and geotechnical project questions. Mr. Wirt has more than 14 years of experience in geotechnical engineering related directly to similar transportation projects for various state agencies including VDOT. He has served as the lead geotechnical engineer for multiple design-build VDOT projects including VDOT Route 28 Corridor Improvements PPTA, several

VDOT Design-Build projects along the Route 7 Corridor in Loudoun and Fairfax Counties. Mr. Wirt has provided similar services on VDOT I-64 Widening and Route 623 Interchange Improvements DB project in Henrico County, Virginia for Corman. Mr. Wirt will report to the DM.

**DB Environmental Permitting Coordinator: *Ricky Woody (RK&K)*** will be responsible for ensuring the work performed by the DB Team is in compliance with federal and state environmental regulations, and that specific project commitments are implemented. He has 27 years of planning and scientific experience with transportation projects including DB projects. Before joining RK&K, **Mr. Woody was the Natural Resource Program Manager for VDOT** where he secured and managed natural resource clearances for DB projects, wetland and stream compensatory mitigation projects and banks as well as all types of transportation improvement projects. He possesses an expert technical and regulatory knowledge on environmental policies, agency standard operating procedures, streamlining agreements, and environmental laws and regulations. Mr. Woody was the Environmental Permitting Coordinator on the I-64 Widening and Route 623 Interchange Improvements DB project in Henrico and Goochland Counties, Virginia with Corman. Mr. Woody will report to the DM.

**DB Public Relations Manager: *Lauren Hansen (PRR, Inc.)*** joins our DB Team as the PR Manager and will report directly to the DBPM. She will have an open line of communication to stakeholders, third party representatives, and VDOT where she will initiate and facilitate public hearings and communication necessary to announce lane closures and timing of other construction milestones. Ms. Hansen is experienced in all areas of creative services, public affairs, community outreach, marketing, advertising, strategic planning and communications plans. She is currently working with RK&K providing similar services in the Hampton Roads District on The Elizabeth River Tunnels project and previously on the I-64 Widening at Battlefield in Chesapeake, Virginia with EVW. She will report to the DBPM.

**DB Roadway Engineer: *Mike Merritt, PE (RK&K)*** is a Sr. Roadway Project Manager with 25 years of experience in the preparation of roadway design plans for state, federal and municipal transportation projects. He excels in the design and coordination of rural and urban roadway and highway facilities. He served as an Assistant Project Design Engineer in the NCDOT Roadway Design Unit for more than four years. His responsibilities include the management, coordination and preparation of roadway plans from planning stages through final plans and specifications. He recently completed the \$137M Triangle Parkway DB project where he managed the design of a roadway to Interstate standards and complexity. He also worked with EVW and McLean on the Route 13/158 Design-Build. Mr. Merritt will report to the DM.

**DB ROW Manager: *Al Dorin, Jr., MAI, SRA, RW-NAC (KDR)*** will be actively involved in the project including the overall coordination of appraisals, negotiations, project management, invoicing, and contract related matters. Mr. Dorin is currently finishing the ROW efforts on VDOT’s Fall Hill Avenue and Mary Washington Boulevard DB project in Fredericksburg with Corman and will be available for this new project. Mr. Dorin will report to the DM.

**DB Bridge Design / Structural Engineer: *Ashley Johnson, PE (RK&K)*** will be involved in all aspects of structural design for this project. She has eight years of experience in the design of new and replacement bridges, as well as rehabilitation of existing structures. Ms. Johnson provided preliminary design of three bridges as part of the extension of Jones Branch Connector in Fairfax County which involved designing the widening and extension of existing bridges over I-495. She is also currently involved in the construction aspects of replacement of twin interstate bridges as part of VDOT’s I-64 Widening and Route 623 Interchange Improvements DB project in Henrico and Goochland Counties, Virginia with Corman. Ms. Johnson will report to the DM.

**DB H&HA / Drainage Engineer: *Michael Hogan, PE, (RK&K)*** is providing similar services on the I-64 Widening and Route 623 Interchange Improvements DB project with Corman and offers more than 16 years of advanced technical roadway and drainage experience, as well as rural and urban design project experience. Mr. Hogan has extensive experience in design, and consultant management oversight of general drainage, hydrologic studies, hydraulic bridge studies, and bridge scour analysis for many of VDOT’s largest projects including various types of municipal and roadway design projects on new location, reconstruction and widening, and major drainage improvement projects. Mr. Hogan will report to the DM.

**DB Traffic, ITS, Lighting Engineer: *Jyothirmai Paladugu, PE, (Sabra Wang Associates)*** Ms. Paladugu has 13 years of experience in lighting design, Intelligent Transportation Systems (ITS), signal timing optimization, signal

design, signing and pavement marking design, developing work zone traffic control plans and traffic analysis. She will report the DM.

**DB Wet Utilities Coordinator: Dave Plum, PE (RK&K)** will lead the coordination of utilities. He offers more than 33 years of management, planning, and design of a wide range of infrastructure engineering and multi-disciplinary projects, including water and wastewater for municipal, state, federal, and international agencies. He has been actively involved in the planning, design, and construction of Virginia’s infrastructure projects for over 25 years, providing industry leadership through addressing the region's infrastructure needs. Mr. Plum was the Lead Utility Design Engineer on the I-64 Widening and Route 623 Interchange Improvements DB project in Henrico and Goochland Counties, Virginia with RK&K and Corman. Mr. Plum will report to the DM.

**DB Dry Utilities Coordinator: Dale Kniffen (Utility Pros)** has more than 25 years of experience in coordinating utility installations and relocations. He will be the single point of contact to coordinate all dry utility service relocations and will work with the service providers to ensure timely service delivery. Mr. Kniffen will track milestone project dates and provides complete utility notifications while consolidating documentation tracking of all service correspondence to further ensure timely service deliveries are attained. He has worked with Corman on the Route 1 Improvements at Fort Belvoir, the Fall Hill Avenue and Mary Washington Boulevard Extension DB and with the Corman/RK&K Team on the I-64 Widening and Route 623 Interchange Improvements DB. Mr. Kniffen will report to the DM.

**DB Noise Analysis Designer: Joseph Rauseo (RK&K)** brings more than 20 years of experience to this project. He is responsible for fulfilling all functions and tasks associated with traffic and construction noise analyses, noise abatement design, development of noise abatement design specifications and the noise-related aspects of the public involvement process. Mr. Rauseo will report to DM.

**DB Landscape Architect: John Schmidt, ASLA (LPDA)** has 20 years of experience as a site designer specializing in site grading, planting plans, conceptual site planning and preparation of construction documents. His experience includes all aspects of site design and environmental design, as well as all facets of landscape architectural services for infrastructure projects. Mr. Schmidt will report to the DM.

**DB Design QC Manager: Tommy Peacock, PE, PLS (RK&K)** will arrange for all design quality assurance and design quality control procedures in accordance with the quality control plan. He will verify that checks and reviews have been made prior to submissions, including review comment checking, contract conformance reviews, interdisciplinary reviews, and constructability reviews by the CWM JV staff. Mr. Peacock, with over 48 years of experience, will serve as a valuable resource to the team ensuring resources are assigned, accelerated schedules are maintained, and the team is responsive to clients. Mr. Peacock will report to the DM.

**DB Safety Manager: Sam Williams (EVW)** will work with the DBPM to mitigate identified safety issues and risks. He will analyze the scope of the project and communicate possible safety issues and concerns related to design to the DM. Mr. Williams will make regular visits to check for compliance, identify any issues. He will also communicate openly with the CM to coordinate appropriate training of construction crews. Under his leadership, EVW’s EMR rating has averaged 0.78 for the past five years, proving EVW’s dedication to safety. Mr. Williams will report to the CM.

### 3.3.2 ORGANIZATIONAL STRUCTURE

The following Organizational Chart depicts VDOT-identified Key Personnel, the major functions each will perform, and the designated reporting structure of the team. Solid lines identify the reporting relationships of our team members in managing, designing and constructing the project, and illustrate clear reporting lines from the DBPM to the design and construction team. Dashed lines represent indirect reporting and obligations to the owner and/or corporate management. The chart also shows that a clear separation exists between QA and Construction QC inspection and field/laboratory testing.

#### Functional Relationships – Integrate to Facilitate

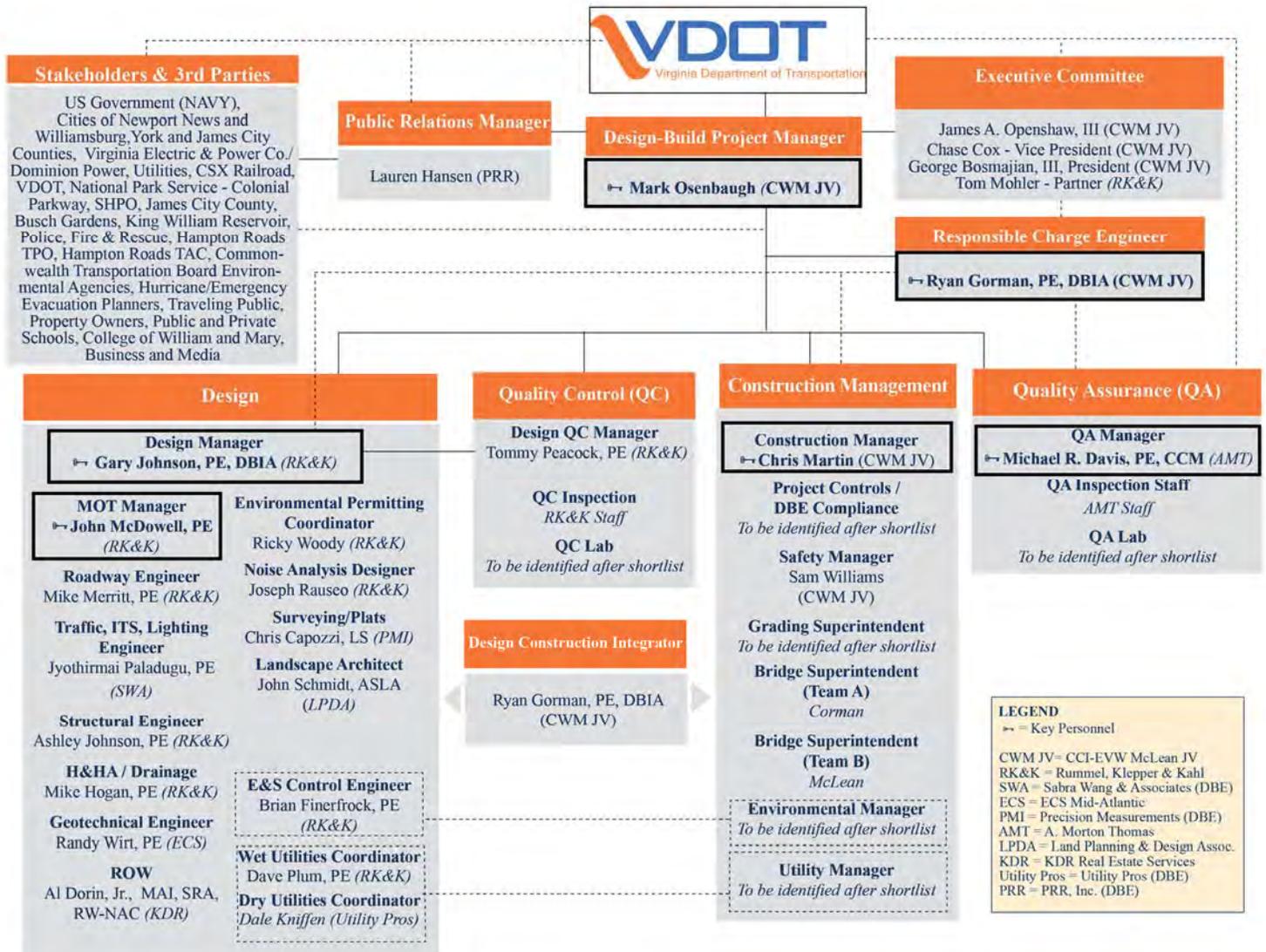
The foundation of our organizational structure is our Key Personnel and their positions. Information regarding their qualifications and experience can be found in the Appendix. Design-build unites the contractor and designer more than just contractually. It integrates innovative design and construction techniques that benefit schedule and cost which ultimately lead to client satisfaction. Through our DBPM, DM, RCE, QAM and CM, we will create a

firm relationship that sets the foundation to interact and partner with VDOT and third-party stakeholders. Additional ways in which our team will be fully integrated include:

- Inter-disciplinary design reviews prior to milestones to ensure design disciplines are coordinated
- Constructability reviews of design, especially for MOT, highway and bridge plans
- Weekly schedule meetings to review the previous weeks work and develop the two week look ahead, and monthly scheduling meetings to review CPM progress during design development and construction
- Weekly foreman meetings to discuss the schedule and coordination
- Morning huddles with the crews to set the safety and production goals for the day
- Weekly progress meetings with the owner to review and discuss quality, submittals, and progress payments
- Monthly partnering meetings with all stakeholders for issue resolution

**Commitment to Keep the Team Intact**

The CWM JV Team understands the importance of keeping the proposed team intact throughout the life of the project. With this understanding, we have selected specific personnel with current assignments that will allow them to serve on this project in the capacity needed. The individuals identified in this Statement of Qualifications, both Key Individuals and non-Key Individuals, will serve on this project through completion of construction.





## *3.4 Team Experience*

**3.4 EXPERIENCE OF OFFEROR’S TEAM**

The CWM JV is comprised of leading Design-Build contractors, designers and specialty subconsultants with a proven capability of delivering design-build road infrastructure projects throughout the Commonwealth. Each team member was specifically selected due to their previous experience delivering projects of similar complexity as the I-64 Segment II project, as well as their attention to detail and commitment to safety and quality. We have chosen to perform the work as a three-way JV as success on this project for VDOT, our JV, and all third party stakeholders demands this project is completed on or ahead of schedule. The CWM JV has strategically assembled a team to create redundancy of resources. We have two JV members fully capable of constructing any or all of the bridges. Similarly, we have two JV members fully capable of constructing all other aspects of the project. By creating a fully integrated team, with such a strong resource base, we have mitigated the risk of having a finite set of resources available to meet the inevitable challenges a project of this size and complexity will encounter. Each firm has successfully worked together in a three-way JV including the Dominion Boulevard project located in Chesapeake, Virginia and the I-695/95 Interchange project in Baltimore, Maryland.

 **Corman Construction, Inc. (CCI)** is a licensed heavy civil contractor specializing in highway, bridge, restoration, and heavy utility construction. With a corporate headquarters in Annapolis Junction, MD and offices in Richmond and Chesapeake, Virginia, near the project location. Corman prides itself as a “Best in Class” contractor. The firm’s “A” ratings confirm the quality of their work. With a track record of successfully delivering over \$1.5 billion in design-build (DB) roadway and bridge projects, Corman comes to VDOT with the hands-on experience and top notch personnel it takes to effectively execute the design and construction, as well as manage the risks of the I-64 Capacity Improvements – Segment II Design-Build Project. Corman’s history on design-build roadway and bridge projects includes many of similar scope and complexity to this project for clients such as VDOT, DDOT, NCDOT, and MSHA. Corman’s DB experience includes:

- VDOT Route 29 Solutions, Albemarle County, VA (with RK&K)
- VDOT I-64 Widening & Route 623 Improvements, Henrico and Goochland Counties, VA (with RK&K)
- VDOT Fall Hill Ave and Martha Washington Rd Extension, Fredericksburg, VA
- Tidewater Drive, City of Norfolk, VA (with EVW)
- Route 17, Hampton, VA (with EVW)
- VDOT I-64 / Route 15 Interchange Improvements (DDI), Zions Cross Roads, VA
- CSX Arkendale to Powells Creek, Stafford and Prince William Counties, VA (with RK&K)
- MDTA ICC A&B, Montgomery County, MD (with RK&K)
- MD Route 216 US 29 to I-95, Howard County, MD (with RK&K)
- E. Deer Park Rd. Bridge Emergency Rehab., Gaithersburg, MD (with RK&K)
- Frederick Douglass Bridge/South Capitol Street over Anacostia River, Washington, DC (with RK&K)

 **E. V. Williams, Inc. (EVW)** has the capabilities of leading design-build projects regardless of the project size. EVW is a full-service prime contractor specializing in heavy highway construction with extensive experience with VDOT and public sector road and bridge construction work in eastern Virginia. Furthermore, EVW is currently active in DB highway work and has successfully completed projects similar to the Interstate 64 Capacity Improvements – Segment II project. EVW is currently working with RK&K and McLean on a \$55 million design-build project for NCDOT on Route 13/158 Design-Build as well as a \$3 million design-build project at the Dam Neck military base in Virginia Beach. EVW is proud to have been presented with the American Council of Engineering Companies – 2010 Engineering Excellence Honor Award for I-64 Battlefield Blvd Intersection in Chesapeake, Virginia; the VTCA – 2008 - 2011 Contractor Safety Award; and an Honorable Mention for the Governors Transportation Safety Award – 2003 Motor Carrier Safety.

 **McLean Contracting Company** has more than 100 years of bridge building experience and joins the team providing expertise and manpower in that critical discipline. McLean has extensive DB structure experience including EVW’s and RK&K’s Route 13/158 DB contract. McLean also worked on VDOT’s first PPTA project for the Route 895 Pocahontas Parkway Bridge and the first DB project for the bridge over Garden Creek Canal project. They have constructed bridges along the I-64 corridor, including the bridges for EVW’s I-64 Battlefield Blvd. Interchange project and EVW’s I-64 Mercury Blvd project. On this project, McLean will assist in the required bridge reconstruction / widening. To expedite the construction schedule and minimize impacts to the travelling public, McLean and Corman crews (Team A & B) will share the structural efforts each performing individual bridge widening as best suits their abilities and manpower availability. **McLean has teamed**

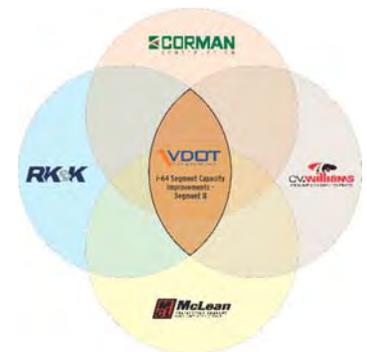
with E. V. Williams on a three way JV for the Dominion Blvd Bridge in Chesapeake, Virginia and another three way JV with Corman on the I-95/I-695 Interchange project in Baltimore, Maryland.

**RK&K** Partnering with Corman-EV Williams-McLean JV, **Rummel, Klepper & Kahl, LLP (RK&K)** is serving as the Lead Designer. RK&K is a multi-disciplinary consulting firm providing a wide range of planning and design services for infrastructure design and rehabilitation, including the design of roadways, bridges, transit, water/sewer and site design. The firm employs 900+ engineers, planners, environmental specialists, surveyors, designers, draftsmen/CADD technicians, construction managers, inspectors, and support personnel including over 80 professional engineers registered in Virginia. RK&K is ranked 73rd on the *2015 Engineering News Record's listing of the "Top 500 Design Firms,"* and serves an array of federal, state, and local clients from four Virginia offices and multiple offices throughout the Mid-Atlantic and Southeast US. RK&K has completed 12 design-build projects in the region. RK&K has worked with Corman on six design-build projects with a construction value over \$1 Billion. They are currently working with Corman on the VDOT I-64 Widening & Route 623 Improvements and the Route 29 Solutions Design-Build projects. RK&K's relevant DB experience, **exclusively with Corman-EVWilliams-McLean JV**, includes:

- Route 13, Gates County, NC (with EV Williams & McLean)
- VDOT Route 29 Solutions, Albemarle County, VA (with Corman)
- VDOT I-64 Widening & Route 623 Improvements, Henrico and Goochland Counties, VA (with Corman)
- CSX Arkendale to Powells Creek, Stafford and Prince William Counties, VA (with Corman)
- MDTA ICC A&B, Montgomery County, MD (with Corman)
- MD Route 216 US 29 to I-95, Howard County, MD (with Corman)
- E. Deer Park Rd. Bridge Emergency Rehab., Gaithersburg, MD (with Corman)
- Frederick Douglass Bridge over Anacostia River, Washington, DC (with Corman)

**DB Experience Working Together**

Simply having individuals and individual firms with design-build experience is not enough to ensure successful delivery of a project. You need people and firms with experience delivering design-build and other projects. There are multiple overlaps of projects between the major players on our team. ***In fact, the individual team members have worked together on over 25 successful joint projects with a construction value of over \$3 billion.*** Many of our other design partners have also worked on these projects. This existing team partnership will prove to be an asset to VDOT on the delivery of this project.



Established, strong working relationships are vital to the success of any design-build project. Since the individuals on our team have already developed a rapport and knowledge of each other's abilities, skills, and working style, the framework for the project implementation is strengthened. The I-64 Capacity Improvements – Segment II project will not be a “training ground” for the CWM JV Team, but instead will be one additional example of our Team's success. Not only does each partner have DB experience, we have this experience working together. Team members from Corman, EVW, McLean and RK&K slated for this project have worked together successfully on past design-build projects for VDOT, DDOT, NCDOT, MSHA and various other transportation agencies.

**Executive Committee**

The Executive Committee will serve as a guiding group and resource to the CWM JV Team. They will ensure that all team partners, including VDOT, are on the same page and will meet monthly to discuss the overall progress and performance of the Team.

**Subconsultants**

We have judiciously selected the firms described below to meet the needs of VDOT on this project and to further enhance our DB Team capabilities.



**A. Morton Thomas and Associates (AMT)** will provide construction Quality Assurance. They have managed and provided inspection services for some of the most significant and challenging transportation projects in the Commonwealth including roadways, structures and bridges. These

projects have included extensive environmental issues; complex maintenance of traffic; coordination with property owners, local government and law enforcement agencies, suppliers, utility companies and other stakeholders; review of the contractor’s schedule and plan of operations; field engineering; quantity verifications and cost estimates; and maintenance of comprehensive project records, among others. AMT is currently providing Design and/or QA/QC services on Corman’s Route 1 Widening at Ft Belvoir, Fall Hill / Mary Washington, I-64 Widening and Route 623 Interchange DB, and the Route 29 Solutions DB projects.



**Precision Measurements, Inc. (PMI)** joins our team providing survey services. PMI is a full service land surveying firm offering a wide range of surveying services including topographic surveys, hydrographic survey services utilizing fully digital equipment, volumetric surveys, horizontal and vertical control surveys, acquisition platting, easement acquisition, 3-D scanning, geodetic surveys, aerial photo control, construction field engineering, route surveys, infrastructure surveys, deformation monitoring surveys, antenna alignment surveys, utility location services and construction inspection. PMI is a certified DBE/SWaM firm.



**ECS Mid-Atlantic, LLC (ECS)** will provide all geotechnical engineering services. ECS is a multi-discipline engineering consulting firm specializing in the related fields of geotechnical, environmental, and construction materials engineering. Their staff includes registered professional engineers and geologists, certified lab technicians and construction inspectors, and field engineers. ECS is currently working with Corman and RK&K in a similar capacity on the VDOT I-64 Widening & Route 623 Improvements project in Henrico and Goochland Counties, Virginia.



**KDR Real Estate Services (KDR)** will lead right of way efforts. KDR is a certified small business, VDOT-pre-qualified right-of-way and easement acquisition firm. They have significant experience in the research and preparation of appraisals for right-of-way and easement acquisition. KDR also performs negotiations, closings and relocation assistance and condemnation (eminent domain) documentation. Our DB Team has extensive experience working together with KDR to secure ROW (or easements) for transportation projects for VDOT. KDR is currently working with Corman in a similar capacity on the Fall Hill / Mary Washington VDOT DB project.



**Sabra, Wang & Associates, Inc. (SWA)** will lead traffic, ITS, and lighting design efforts. SWA is a multi-disciplinary DBE/MBE engineering firm. SWA consistently delivers cost-effective, efficient, and cutting-edge solutions to clients in the Mid-Atlantic region on the federal, state, and local level as well as in the private sector, on such projects as the Intercounty Connector Design-Build Contracts (A, B and C) and VDOT’s On-Call Traffic Engineering for the Northern Operations Region.



**Utility Professional Services, Inc. (Utility Pros)**, a certified DBE/WBE/SWaM company joins our team providing dry utility services. **Utility Pros** provides turn-key design-build and project management services for dry utilities and all dry utility infrastructure associated with roadway projects for service feasibility, relocations, and new service installations. Utility Pros has provided similar services on Route 1 Widening at Ft Belvoir and Fall Hill / Mary Washington DB projects with Corman.



**PRR, Inc.** will lead our public relations efforts as needed, including research, marketing strategy, digital/social media design and development, broadcast/outdoor/print design and development, media planning and buying, public affairs outreach and community coalition building. PRR is a certified DBE, small business, public relations, advertising, and marketing agency specializing in projects encompassing a wide variety of transportation infrastructure projects. PRR has successfully worked on VDOT projects such as Elizabeth River Tunnels Project and will be providing public involvement and communications support for the Hampton Roads Crossing Study (HRCS).



**Land Planning Design & Associates (LPDA)** is a landscape architecture and planning firm that will provide design and consultation. Their staff’s in-depth knowledge of native plants and broad construction and inspection experience, results in planting plans that are both beautiful and hardy, and designs that are beautifully executed and long-lasting. **LPDA** has been involved in DB projects throughout the Commonwealth including VDOT rest areas, roadway widening and intersection modifications. They are currently working with Corman and RK&K on the Route 29 Solutions DB project in Albemarle County.

### 3.4.1 WORK HISTORY FORMS

Work History Forms (Attachments 3.4.1 (a) and (b)) as required by the Lead Contractor and Lead Designer are included in the Appendix.



## *3.5 Project Risks*

### 3.5 PROJECT RISKS

The CWM JV Team will employ the Construction Management Association of America (CMAA) endorsed approach to risk management through the use of a “Risk Register” which includes a formal list of identified risks, potential impacts to the project, and mitigation strategies for each issue. A successful risk management process is robust because it must consider project risks throughout all facets of the project’s life and delivery processes. Our Team’s risk management process has already commenced, will continue throughout design and construction, and enable our Team to respond to changes in an organized and proactive way as specific project issues unfold. The Team will employ a five step risk management approach to the project including the following stages:

1. **Identify** – name risks facing the project, determine cause and effect, and categorize risks
2. **Assess** – assign probability of occurrence, severity of impact, and determine response
3. **Analyze** – quantify risk severity, determine risk exposure, establish risk tolerance level, and determine risk contingency (applicable during preliminary design and pricing)
4. **Manage** – define response plans and actions, establish ownership of risk, and manage response (after NTP)
5. **Monitor / Review** – monitor/review/update risks, monitor response plans, update risk exposure, analyze trends, and produce reports (after Notice to Proceed, during design, during construction).



We have reviewed the available information for the project, visited the site during various traffic and weather conditions, and jointly discussed the major risks. With the mindset of project risk being defined as an issue that has the potential to impact the project schedule, budget, or both, our Team has identified the three most critical risks facing the DB Team during the course of the project.

#### RISK NO. 1 – ENSURING ENVIRONMENTAL COMPLIANCE

**Risk Identification:** The Environmental Risk on this project is broken down into the following subsets:

##### Cultural Resources

- The project has two battlefields within its limits of construction. The Yorktown Battle field on the eastern end of the project and the Williamsburg Battlefield on the west end of the project.
- The project stormwater management basins shown in the RFP plans have not had a Phase I Archeological Survey conducted.
- A Confederate Peninsular defenses campaign, identified as Redoubt 9, is located in the median and has been determined individually eligible for the National Register by the Virginia Department of Historic Resources (VDHR) and it appears it could be effected by the project tie-in on the west end in the median.

##### Threatened and Endangered Species (T&E)

- Northern Long Ear Bat (*Myotis septentrionalis*) was listed on May 4, 2015 as a Federal Threatened Species and was not addressed in the project NEPA Document.
- The Small whorled pogonia (*Isotria medeoloides*) survey prepared to support the project Environmental Impact Statement (EIS) has expired.
- The Mabee's salamander (*Ambystoma mabee*) is on the State Threatened list and the project EIS shows that its habitat may be present within the project area.
- The Canebrake rattlesnake (*Crotalus horridus*) is on the State Endangered list and the project EIS shows that its habitat may be present within the project area.
- Anadromous fish are known to exist within the York River and the James River, and the King Creek crossing within the project limits may be identified as having anadromous, potentially requiring a Time of Year (TOY) restriction for in-stream work.

##### Wetlands and Streams

- Wetlands systems shown as jurisdictional in the EIS and RFP plans were never confirmed by the Corps of Engineers.
- Stream jurisdiction was not determined by the currently recognized method of the unified stream methods and may need to be redone.
- Stream impacts associated with culvert extension in median were not shown as impacts considered in the EIS or VDOT plans.
- The project crosses two watersheds: York on the western end and the James on the eastern end, which effects the potential project compensatory mitigation opportunities and the stormwater management requirements.

- East end of project tie-in in the environmental documents does not show a crossing of Curtis Creek.

**Why this Risk is Critical and an Impact on the Project:** Not securing environmental compliance will derail a project. Not securing environmental compliance in a timely manner will delay a project, increase project costs, and effect the overall success of the project. For these reasons, this risk is very critical for both VDOT and the Design-Builder. Following is a description of the impacts on the subsets of environmental compliance:

*Cultural Resources*

- The identification of previously unidentified archaeological and cultural resources that may be identified during the required additional Phase I archaeological surveys for the stormwater management basin could delay the project. In addition, it is anticipated that a Phase III Treatment/Data Recovery plan will be required for Redoubt #9. Both of these will require revisiting the current cultural resource clearances resulting in the FHWA, the lead federal agency, to coordinate with the State Historic Preservation Officer (SHPO) to complete Section 106 of the National Historic Preservation Act coordination because of the NEPA Document and federal water quality permits. In addition, FHWA may be subject to making a Section 4(f) determination for any potentially eligible archaeological site which requires the assessment of avoidance and minimization alternatives which requires additional project designs affecting the project design schedule.

*Threatened and Endangered Species*

- With respect to the **Northern Long Ear Bat and Small whorled pogonia (*Isotria medeoloides*)**, the risk impact with Federal T&E is that Section 7 consultation is required between the Federal Highway Administration and U.S. Fish and Wildlife Service (FWS). This consultation will affect the project delivery schedule because species survey will need to be conducted and the design modification evaluated. The project overall schedule will be affected because of the preparation of the Biological Assessment for each species. The FWS regulatory prescribed timeframe of 135 days to issue their Biological Assessment will need to be completed prior to the NEPA reevaluation and water quality permit issuance. It is further complicated by time of year (TOY) restrictions on the actual surveys for species identification. The project design will be affected because avoidance and minimization efforts will be required to be incorporated into the project design. It will also affect the project construction with the implementation of TOY restrictions in accordance with the current FWS guidance, specifically April 15 to September 15 for the Northern Long Ear Bat for no tree cutting.
- The **Mabee's salamander** poses a huge schedule risk because the species identification requires two consecutive year surveys to determine a present or absent and may result in replacement habitat as compensation.
- **The Canebrake rattlesnake** will require species survey and coordination with the state resource agencies with a potential up to a 1:3 ratio compensation requirement anticipated for replacement habitat.
- **Anadromous fish** will affect in-stream work because of the TOY restriction of February 15 to June 15 of any given year.

*Wetlands and Streams*

This risk element is critical because the wetland delineation methods for the EIS did not use the current USACE guidance including the Regional Supplement to the USACE Wetlands Delineation Manual applicable to the Atlantic and Gulf Coastal Plain Region for the wetlands identified in the EIS. Using the current delineation methods may result in more wetlands within the project corridor than identified in the EIS. In addition, a number of the channels have not been identified as streams in the RFP plans and wetlands shown in EIS have not been field reviewed or confirmed by the Corps of Engineers. Road side ditches and water seeps are prevalent along the corridor and the regulatory agencies have their own nuances of assessing regulatory jurisdiction. In addition, crossing two stream basins (York and James) increases the risk to providing the stormwater management and the wetlands and stream compensatory mitigation. These can result in project delays with longer permitting timeframes and increases in costs for both design and construction. Unavoidable impacts to wetlands and stream require compensatory mitigation and if improperly identified will increase project wetlands and streams impacts beyond those identified in the EIS.

**Risk Mitigation Strategy:** Our overall mitigation strategy is to demonstrate that all alternatives with fewer impacts are impracticable and do not meet the purpose and need of the project. In addition, during the project design, our team will avoid and minimize impacts to wetlands, streams, fish, plant, and wildlife and their habitats and cultural resources by evaluating the cross-section to avoid wetlands areas, spanning/bridging streams, countersinking of culverts, limiting clearing of existing vegetation to the greatest extent possible, strict adherence to erosion and sediment control guidelines and the implementation of stormwater best management practices. Our Team understands the regulatory agencies expectations for each regulated environmental resources within our project limits, thus eliminating surprises and minimizing the risk of delays to the project schedule. Our Environmental Permitting Coordinator, Ricky Woody, will lead this effort and he will lean on his 26 years at VDOT in the role of Natural Resource Program Manager and his experience in negotiating agreements with the

regulatory and resource agencies to ensure that the project submittals are regulatory compliant, complete, and address each of the agency expectations. Specific mitigation strategies for each subset are:

*Cultural Resources*

To mitigate this risk, we will prepare a draft approach for conducting Phase I archaeological survey in the early stages of project development during the technical proposal development process. This will provide the team with necessary information to know any previously unidentified potentially eligible archaeological sites and design accordingly to avoid them. We will coordinate with the State Historic Preservation Officer “SHPO” to set the stage to complete Section 106 of the National Historic Preservation Act early on in the project. After NTP, we will work with the FHWA and assist in preparing the Section 4(f) de-minus determination for any potentially eligible archaeological sites which will require the assessment of avoidance and minimization alternatives. By finding these avoidance areas early on in the process, we mitigate the risk by removing the unknown project impacts from archaeological resources and provide a clearly defined approach to preparing the necessary NEPA re-evaluation, Section 106 and 4(F) documentation based on a design that includes well thought out avoidance and minimization alternatives. This has benefits to schedule and price.

*Threatened and Endangered (T&E) Species*

For T&E, if their habitat is determined to be present, compensatory mitigation will be required in the form of conservation bank credit purchases. We will mitigate this risk in the following ways:

- Investigate on site preservation of habitat at a ratio of 1:1
  - Investigate offsite purchase of land at a 1:1 ratio that is located within the natural range of these species and provides suitable habitat
  - Purchase at a 1:1 ratio of wetlands and associated uplands at a mitigation bank known to support these species.
- All of these possible mitigation approaches will minimize the impact to cost and schedule.

*Wetlands and Streams*

To mitigate the wetland and stream risks, we will rely on our Team’s vast experience with negotiating with the regulatory agencies to ensure their jurisdiction is appropriately applied. Our relationships with individuals at the regulatory and resources agencies streamline the process and keep the project on schedule. Our Team will present in-field factors to eliminate or minimize the project stream impacts by clarifying the stream impacts as either road side ditches or have them classified as jurisdictional ditches, neither of which will require stream compensatory mitigation. In addition, our team will present parameters that the stream features are actually linear wetlands thus reducing the stream compensation requirements on the project. To further remediate the permit risk, we will secure a Corps jurisdictional determination using current recognized delineation guidance and advance the project’s hydrologic design to file for water quality permits early in the project development process. Our Team will assess the effect on the project construction schedule as a result of the required TOY restrictions and apply it during the project’s preliminary engineering and construction activities. Our Team will evaluate the alternatives during the project design for innovative stormwater management within each watershed. In addition, our Team is aware of the relief for providing compensatory mitigation for linear projects that cross multiple watersheds provided in the Code of Virginia and we are experienced at providing the appropriate documentation to comply with the Code to secure this relief in the project’s compensatory mitigation decision.

**Role of VDOT and Other Agencies:** It is anticipated the Department will enter into a programmatic agreement with the SHPO for this project that will prescribe specific actions required prior to design approval and construction. VDOT, with our assistance, will lead agency negotiations with the FHWA, SHPO and FWS. State and federal resource agencies will provide resource information under their jurisdiction, comment on our project proposal and review / approve our project’s avoidance, minimization and mitigation strategies for these resources identified in the state environmental review process and NEPA clearances. Should a NEPA reevaluation be required, we will perform required studies and provide VDOT with the required information to lead the discussions. Our Team will take on this responsibility without hesitation and remain in the lead position to meet the environmental commitments on the Project.

**RISK NO. 2 – GEOTECHNICAL CONDITIONS**

**Risk Identification:** The project is located in the Atlantic Coastal Plain Physiographic Province of Virginia. This is characterized by a series of south-easterly dipping layers of relatively consolidated sandy clay deposits, with lesser amounts of gravel. Specifically, the roadway alignment passes through a formation that primarily includes alluvial and terrace deposits consisting of pebble to boulder sands overlain by fine to coarse sand interbedded with peat and clayey silt rich in organics.

Based on our review of the *Geotechnical Data Report*, the near surface soils (below topsoil layer) are generally anticipated to include existing Fill (typically CL and SC) ranging in thickness from 0 to about 12 feet and

transitioning to the alluvial and terrace deposit soils (SM, SC, and CL) to depths of about 50 feet. The near surface alluvial and terrace deposit soils may contain significantly thick deposits of soft, compressible, and high plasticity soils (CH, MH and OH). Ground water will likely be encountered at shallow depths given the proximity to the York River and James River. We see these existing subsurface conditions as comprising risks related to potential unsuitable subgrade soils, settlement due to new fill placement, and soft/loose soils for deep foundations bridge structure locations.

**Why this Risk is Critical and an Impact on the Project:** The recognition and mitigation of these geotechnical conditions will impact traffic, public safety, quality, schedule (including the critical path), and construction costs.

**Traffic and Public Safety** – Removal and replacement of unsuitable materials would increase trucks entering and exiting the project site and present traffic and safety impacts for the traveling public. Maintaining traffic on the existing bridges during placement of fill may present a safety risk for the traveling public if the bridge foundations experience down drag.

**Quality** – Unanticipated settlement could require additional fill material to maintain the roadway grade and create future maintenance issues for the roadway. The impact of down drag on foundation elements could have an effect on the performance of the bridge joints and bearings, which would impact the quality of work and could end up providing an uneven riding surface.

**Construction Duration and Costs** – Unsuitable subgrade materials, settlement of embankment fills, and bridge foundation serviceability issues all have the potential to extend the duration of construction and increase costs.

The description of risks and impacts are presented in more detail below.

*Potential Unsuitable Soils*

Based on the geographic location of the project alignment, there is the likelihood that subgrade soils could be unsuitable for roadway embankment and pavement subgrades. Unsuitable soils per VDOT standards are typically identified by (a) exhibiting natural moisture contents greater than 20 to 30 percent above the respective soils optimum moisture content, (b) classifying as highly-plastic clays and silts (CH and MH), (c) low California Bearing Ratio (CBR) value as compared to minimum pavement design value, and (d) soft or loose relative density. Subgrade soils that are unsuitable must be modified in-place or removed entirely. These soils pose a risk to the project due to the additional time required to delineate the extent of these soils, the time required to modify or remove and replace these soils with suitable fill, and the uncertainty it creates with earthwork quantity estimation.

*Settlement of Embankment Fill*

New embankment fills will be constructed within the existing median along the corridor for new travel lanes and shoulder construction. Substantial fills, greater than 5 feet, will be required at isolated locations of deeper ravines and for bridge structure approaches. Soft soil layers were identified in the GDR soil test borings; therefore, new fill induced settlement must be evaluated by the Team prior to construction. The risk of fill induced settlement, if not addressed during construction, could potentially lead to post-construction settlement of new pavements, affecting the levelness and “rideability” of the new lanes and approaches. Settlement monitoring of the deeper fill areas, if necessary, could impact the project schedule if unaccounted for early in the construction process.

*Soft/Loose Soils for Deep Foundations at Bridges*

The bridge foundation design will be dependent on soil types and relative densities/consistencies. The borings presented in the Geotechnical Data Report (GDR) show very soft/loose to soft/loose soil profiles to the termination depth of the bridge borings. Significant risk to the project can occur without sufficient geotechnical boring data up to and beyond the anticipated foundation bearing elevation(s). Soft and loose soil deposits can have a significant impact on overall serviceability of bridge structures. As such the performance of the structure foundation has to be analyzed for (a) foundation type and size, (b) anticipated settlement of discrete soils layers that can lead to “down drag” forces on individual pile/shaft elements, (c) lateral squeeze factor of safety, and (d) overall slope stability of approach embankments. Further, these soil conditions are critical factors because they affect not only the new foundations but the existing adjacent substructure units as well.

**Risk Mitigation Strategy:** We will mitigate the geotechnical risks associated with the Project by confirming the extent of the potential impacts, selecting appropriate design and remediation strategies in coordination with VDOT’s recommendations, and safely and efficiently managing construction operations to minimize cost and schedule impacts. The mitigation strategies are presented in more detail below.

*Potential Unsuitable Soils*

To mitigate the potential for unsuitable soils to negatively affect the project schedule, the Project Team will focus early phase geotechnical explorations around low-lying areas and portions of the alignment where unsuitable soils have been noted in the existing Standard Penetration Test (SPT) soil test boring logs. The early phase exploration

will also focus on laboratory tests of the samples to include natural moisture contents, gradation, Atterberg Limits (VTM-7), Standard Proctor (VTM-1) and CBR (VTM-8) tests. The results of these tests will help delineate the lateral extent and depth of unsuitable soils to allow for proactive measures to be taken in early earthwork construction phases. Locations where unsuitable soils are anticipated to be encountered will be delineated on the project drawings (both depth and lateral extent). A Soils Remediation Plan will be developed and approved by VDOT’s geotechnical and materials engineers prior to the commencement of construction. The Soils Remediation Plan may include undercut/replacement, in-place drying/scarification, lime modification (moisture reduction), or lime/cement stabilization (altering the plasticity of the soil). Potential borrow sources will be identified and approved by VDOT prior to the start of construction to provide suitable fill material for the roadway fills and potential undercuts.

*Settlement of Embankment Fill*

In-situ testing consisting of Cone Penetrometer Testing (CPT), including pore pressure dissipation testing, Dilatometer Testing (DMT), and/or Pressure Meter Testing (PMT) can be performed at deep fill locations to compliment traditional SPT and laboratory consolidation testing. The test results will be used to determine settlement rates, magnitudes and provide anticipated settlement monitoring durations for inclusion in the project schedule. To mitigate against large anticipated settlement values or long-term settlement behavior alternative construction techniques may include (a) utilizing light weight fill material, (b) installing stabilization geosynthetic grids or fabrics, or (c) surcharging embankment fills that may or may not include vertical drains. These approaches will be evaluated by the Team and our approach finalized in alignment with VDOT.

*Soft/Loose Soils for Deep Foundations at Bridges*

Deep foundation systems developing most of their capacity from skin friction should be considered in lieu of non-displacement deep foundation systems such as H-piles. This reduces the overall number of foundation elements for each structure and accommodates the “soil setup” capacity increase common in this geology. Deeper borings and in-situ tests can be completed at the bridge locations to evaluate the depth and consistency of deeper soil strata that can also contribute to increased skin friction and end bearing capacity. If bridge foundation “downdrag” or negative skin friction is deemed to be a viable risk after further investigation, mitigation strategies may include (a) oversizing the foundation elements to accommodate the anticipated downdrag load, (b) use of light weight fill material to minimize settlement of subsurface soils, (c) bituminous coating of piles to reduce friction of subsurface soils pulling down on the pile, or (d) working with the team to modify the construction sequencing to allow for settlement of subsurface soils to occur prior to driving of foundation elements. To mitigate against long-term movement of new and/or existing structures, the proposed and existing structures can be monitored for adjacent ground movement. Existing piers and bridge beams will be protected during construction will be sequenced to ensure global stability of the foundations during construction.

**Role of VDOT and other Agencies:** None, other than the traditional review of the Team’s geotechnical investigation plan and designs. We take on the geotechnical risk fully per the RFP requirements.

**RISK NO. 3 –FULL DEPTH RECONSTRUCTION**

**Risk Identification:** The scope of the project originally called for the mill and overlay of the existing travel lanes, as indicated in the Alternatives Development Technical Memorandum dated December 2013. Since that time and the release of the RFQ, the scope of work has changed to a full depth reconstruction of the existing travel lanes. This change has a significant impact on many parts of the project and thus constitutes a major risk for the project.

**Why this Risk is Critical and an Impact on the Project:** The following components are critical and have an impact on the Project.

*Stormwater Management*

With the change to full-depth reconstruction, **the stormwater management plan must now account for the treatment of the existing lanes and the proposed lanes, not just the new proposed pavement.** The Public Hearing Plans and ROW areas denoted on the RFQ plans appear to have Best Management Practices (BMPs) sized for just treating the widened section, as if it is a mill and overlay project. Drainage in the median during the pavement removal process is also a significant risk. Overall, this is critical as more ROW may be required for the newly required BMPs and this fact yields other issues noted below.

*Increased ROW Needs*

The need for more BMPs calls for more ROW than was shown in the Public Hearing Plans and RFQ plans. This fact is further complicated by the three mile stretch of the project adjacent to the Yorktown Naval Weapons Station where no ROW for BMPs have been identified. In this section, it will be difficult to obtain sites for BMPs, as right-of-way acquisition from the Yorktown Naval Weapons Station will be difficult and I-64 is flanked by Route 143 (Merrimac Trail) and a railroad line to the south. This is critical for the project’s approval.

*Increased Cultural Resource Survey Needs*

The increase in BMP needs also increases a need for an expanded Cultural Resource Survey as these new BMP sites were not previously surveyed. This Survey may find additional cultural resource sites. This risk has an impact on the project as a newly found cultural resource site may require relocation avoidance or mitigation. The impact, in turn, may increase time and cost to the project.

*Increased Wetland and Stream Impacts*

With an increase in possible ROW needs, there may also be increased impacts on natural resources such as wetlands and streams. The risk is delay due to the permit acquisition timeframes as the project may go from a general permit authorization to an individual permit for the project.

*Complexity of Maintenance of Traffic (MOT)*

The change from mill and overlay, as currently being utilized in I-64 Segment I, to full depth reconstruction greatly complicates the MOT. With full depth reconstruction, traffic will need to be completely removed from the existing pavements to remove and rebuild the pavements. This will likely mean a more complex MOT plan consisting of more phases, longer times to construct phases and possible detours. The impact of this item will be more inconvenience and delay to the traveling public, higher risk of work-zone related incidents and much tighter schedule constraints.

**Risk Mitigation Strategy:**

*Stormwater Management (SWM)*

To mitigate this risk, we can utilize larger BMPs in areas identified, such as the Cellco property. This mitigation will likely require more piping, but will reduce the overall risk to the project. We will avoid extensive SWM facilities in the median in order to preserve the existing trees that are so important to the community in this area, especially where the alignment passes through the Yorktown Naval Weapons Station. If other options do not suitably accommodate the stormwater treatment requirements, underground treatment and/or pre-manufactured BMP solutions may be considered. Also, stormwater attenuation requirements may be accomplished by capturing upstream runoff and controlling its flow rate through the project limits. For drainage needs during the pavement removal process, we will design a temporary drainage system specifically for this operation to mitigate this risk.

*Increased ROW needs*

Successful application of the strategies considered in the above section will help minimize or eliminate the need for additional ROW.

*Increased Cultural Resource Survey Needs*

Again, our first attempt is to eliminate or minimize the need for additional property for stormwater treatment. If more ROW is still needed, we will identify possible additional BMP locations during the proposal phase. Armed with this information, our team will conduct a preliminary cultural resource survey of these areas to determine if additional cultural resource sites exist. If there is a possibility of the cultural resource site at or near a newly proposed BMP, we will first seek to relocate the BMP in order to mitigate the risk.

*Increased Wetland and Stream Impacts*

If we cannot fully mitigate the need for additional ROW, we may propose natural channel design to promote self-compensation within the project limits. This approach also reduces the amount of wetland credits needed for the project.

*Complexity of Maintenance of Traffic*

Our Team will build upon the simpler MOT developed as part of RK&K’s Technical Proposal for I-64 Segment I project and modify it to work for the full-depth Segment II project. Specifically, we may request the allowance of lane closures for the full project length instead of the VDOT standard two mile maximum. With this allowance and our three way JV providing almost unlimited labor, multiple crews can work concurrently and provide a more efficient and condensed schedule. Work affecting traffic will be performed during the fall, winter and spring months, whenever possible, to avoid the higher traffic volumes during the summer tourist season. If work is required during the summer, 24 hour work periods during week days will be explored to avoid impacts during the heavier traveled weekends. Existing paved shoulders will be strengthened to support traffic loads so that traffic can be shifted to the outside to allow for constructing of the two inside lanes. Lane shifts will be more complicated at interchanges, where work zones may interfere with exit and entrance ramps. When a work zone interferes with a ramp, temporary ramp alignments will be provided and the work zone will be adjusted to allow for the temporary ramps.

**Role of VDOT and other Agencies:** None other than VDOT will enter into a programmatic agreement with the SHPO for this project and will, with our assistance, lead the agency negotiations with the FHWA and Corps of Engineers.



# *Appendices*

**ATTACHMENT 3.1.2**

**Project: 0064-965-264, Contract ID#: C00106665DB82**

**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	A1 – A3
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	A4 – A6
<b>Letter of Submittal (on Offeror's letterhead)</b>				1
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's Point of Contact information	NA	Section 3.2.2	yes	1
Principal Officer information	NA	Section 3.2.3	yes	1
Offeror's corporate structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	A7
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	A8 – A19
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	A20 – A22
Evidence of obtaining bonding	NA	Section 3.2.9	no	A23 – A28

**ATTACHMENT 3.1.2**

**Project: 0064-965-264, Contract ID#: C00106665DB82**

**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>
<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	A29 – A31
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	A32 – A40
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	A41 – A46
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	A47 – A48
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	A49
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
<b>Offeror’s Team Structure</b>				2 – 6
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	A50 – A51
Key Personnel Resume – Responsible Charge Engineer	Attachment 3.3.1	Section 3.3.1.2	no	A52 – A53
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.3	no	A54 – A55
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.4	no	A56 – A57
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.5	no	A58 – A59
Key Personnel Resume – Maintenance of Traffic Manager	Attachment 3.3.1	Section 3.3.1.6	no	A60 – A61
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	5 – 6

**ATTACHMENT 3.1.2**

**Project: 0064-965-264, Contract ID#: C00106665DB82**

**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>
<b>Experience of Offeror's Team</b>				7 – 9
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	A62 – A64
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	A65 – A67
<b>Project Risk</b>				10 – 15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	10 – 15

# NEED EVW SIGNED ATTACHMENT 2.10

Form C-78-RFQ

## ATTACHMENT 2.10

### COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

RFQ NO. C00106665DB82  
PROJECT NO.: 0064-965-264

### 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 04/21/2015  
(Date)
2. Cover letter of RFQ Addendum No. 1 05/18/2015  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PRINTED NAME

\_\_\_\_\_  
TITLE

**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00106665DB82  
PROJECT NO.: 0064-965-264

**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.

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- 1. Cover letter of RFQ 04/21/2015  
(Date)
- 2. Cover letter of RFQ Addendum No. 1 05/18/2015  
(Date)
- 3. Cover letter of \_\_\_\_\_  
(Date)

	<u>May 28, 2015</u>
SIGNATURE	DATE
<u>Arthur C. Cox, III</u>	<u>Vice President</u>
PRINTED NAME	TITLE

**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

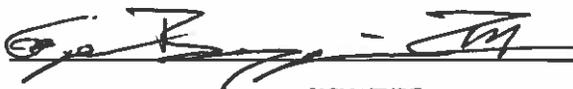
RFQ NO. C00106665DB82  
PROJECT NO.: 0064-965-264

**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 04/21/2015  
(Date)
2. Cover letter of RFQ Addendum No. 1 05/18/2015  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

 SIGNATURE	<u>5/21/2015</u> DATE
<u>GEORGE BOSMAJIAN III</u> PRINTED NAME	<u>PRESIDENT</u> TITLE

**ATTACHMENT 3.2.6**

**State Project No. 0064-965-264, Contract ID#: C00106665DB82**

**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>
<b>E. V. Williams, Inc.</b>		
PARENT COMPANY	The Branch Group	P. O. Box 4004, Roanoke, VA 24022
SUBSIDIARY	E. V. Williams, Inc.	925 South Military Highway, Virginia Beach, VA 23464
SUBSIDIARY	Branch Highways, Inc.	P. O. Box 4004, Roanoke, VA 24022
SUBSIDIARY	Branch & Associates, Inc.	P. O. Box 40051, Roanoke, VA 24022
SUBSIDIARY	G. J. Hopkins, Inc.	P. O. Box 12467, Roanoke, VA 24025
<b>Corman Construction, Inc.</b>		
PARENT COMPANY	CG Enterprises, Inc.	12001 Guilford Road, Annapolis Junction, MD 20701
AFFILIATE (SISTER)	Corman Marine Construction, Inc.	711 East Ordnance Road, Suite 715, Baltimore, MD 21226
AFFILIATE (JOINT VENTURE)	CK Constructors, A Joint Venture	c/o Corman Construction, Inc., 12001 Guilford Road, Annapolis Junction, MD 20701
AFFILIATE (JOINT VENTURE)	Intercounty Constructors Joint Venture	c/o Granite Construction Northeast, Inc., 120 White Plains Road, Suite 310, Tarrytown, NY 10591
AFFILIATE (JOINT VENTURE)	MD 200 Constructors, A Joint Venture	c/o Kiewit Infrastructure South Co., 450 Dividend Drive, Peachtree City, GA 30269
AFFILIATE (JOINT VENTURE)	Wagman, Corman, McLean Joint Venture	c/o GA & FC Wagman, Inc., 3290 North Susquehanna Trail, York, PA 17406
AFFILIATE (JOINT VENTURE)	Corman-Wagman, A Joint Venture	c/o Corman Construction, Inc., 12001 Guilford Road, Annapolis Junction, MD 20701
AFFILIATE (JOINT VENTURE)	KC Constructors, A Joint Venture	1800 South Bell Street, Suite 300, Arlington, VA 22202
AFFILIATE (JOINT VENTURE)	LANE/Corman Joint Venture	c/o The Lane Construction Corp., 90 Fieldstone Court, Cheshire, CT 06410
<b>McLean Contracting Company</b>		
SUBSIDIARY	Norcur, Inc.	6700 McLean Way, Glen Burnie, Md 21060



# *Debarment Sheets*

**ATTACHMENT NO. 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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.

	05/28/2015	Vice President
Signature	Date	Title
Arthur C. Cox, III		
Corman Construction, Inc.		
Name of Firm		

**ATTACHMENT NO. 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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.

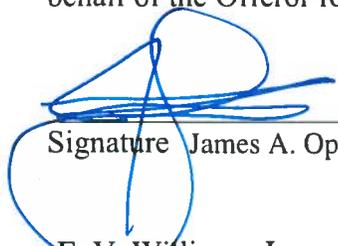
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under 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

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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.

	May 28, 2015	President
Signature James A. Openshaw, III	Date	Title
E. V. Williams, Inc.		
Name of Firm		

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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.

 5/7/15 Ass't. Vice Pres  
Signature Date Title

McLean Contracting Co.  
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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.



May 28, 2015  
Date

Director, Structures  
Title

Rummel, Klepper & Kahl, LLP (RK&K)

Name of Firm

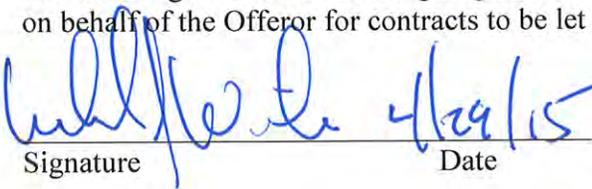
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

- 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

4/29/15  
\_\_\_\_\_  
Date

Principal  
\_\_\_\_\_  
Title

A. Morton Thomas & Associates, Inc.

\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

- 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.

	5/6/2015	Chief Engineer
Signature	Date	Title

ECS Mid-Atlantic, LLC  
Name of Firm

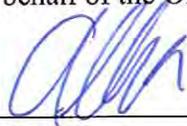
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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

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

	April 28, 2015	President
_____ Signature	_____ Date	_____ Title

KDR Real Estate Services, Inc.  
\_\_\_\_\_  
Name of Firm

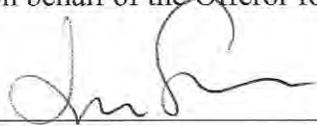
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

- 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.

	May 11, 2015	Vice President
_____ Signature	_____ Date	_____ Title
Land Planning and Design Associates, Inc.		
_____ Name of Firm		

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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

*Shirane J. Day* 4/29/2015  
Signature Date

President  
Title

Precision Measurements, Inc.  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-965-264  
Contract ID#: C00106665DB82

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

 _____ Signature	5/6/2015 _____ Date	Principal _____ Title
Sabra, Wang & Associates, Inc. _____ Name of Firm		







# *Offeror's VDOT Prequalification Certificate*



COMMONWEALTH OF VIRGINIA



# CERTIFICATE OF QUALIFICATION

**E. V. WILLIAMS, INC.**

**Vendor Number: W488**

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

**PREQUALIFIED**

Your firm specializes in the noted Classification(s):

**GRADING; DRAINAGE STRUCTURES;  
PORTLAND CEMENT CONCRETE PAVING; UNDERGROUND UTILITIES**

**Issue Date:** October 31, 2014

Suzanne FR Lucas, State Prequalification Officer

**This Rating and Classification will Expire:** October 31, 2015

Don E. Silles, Director of Contracts

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.



COMMONWEALTH OF VIRGINIA



# CERTIFICATE OF QUALIFICATION

## CORMAN CONSTRUCTION, INC.

Vendor Number: C097

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

**PREQUALIFIED**

Your firm specializes in the noted Classification(s):

**GRADING; MAJOR STRUCTURES; MINOR STRUCTURES; UNDERGROUND UTILITIES**

Issue Date: March 31, 2015

Suzanne FR Lucas, State Prequalification Officer

This Rating and Classification will Expire: March 31, 2016

Don E. Sillies, Director of Contracts

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.



COMMONWEALTH OF VIRGINIA



# CERTIFICATE OF QUALIFICATION

## MCLEAN CONTRACTING COMPANY

Vendor Number: **M047**

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

**PREQUALIFIED**

Your firm specializes in the noted Classification(s):

**MAJOR STRUCTURES**

Issue Date: July 31, 2014

*Suzanne FR Lucas*  
Suzanne FR Lucas, State Prequalification Officer

This Rating and Classification will Expire: July 31, 2015

*Don E Silles*  
Don E Silles, State Contract Officer

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.



# *Surety Letter*



Construction Risk Solutions, LLC  
11311 McCormick Road, Suite 450  
Hunt Valley, MD 21030  
Main: 443-798-7499  
Fax: 443-798-7290

May 28, 2015

Virginia Department of Transportation  
Alternate Project Delivery Office  
1401 East Broad Street  
Richmond, VA 23219  
Attn: Mr. Joseph A. Clarke, P.E., DBIA

Re: Corman Construction, Inc. – Surety Qualification  
In Association with a JV Proposal with E.V. Williams Inc. and McLean Contracting Co.  
Interstate 64 Capacity Improvements – Segment II: A Design-Build Project  
Contract ID No.: C00106665DB82

Dear Mr. Clarke:

As Surety for Corman Construction, Inc., Fidelity and Deposit Company of Maryland and Zurich American Insurance Company with A.M. Best Financial Strength Ratings “A+” and Financial Size Category “XV” are capable of providing 100% Performance Bond & 100% Labor and Materials Payment Bond in the anticipated amount of \$185,000,000.00 and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

If Corman Construction, Inc., as a member of the Joint Venture, is short-listed and/or awarded a contract for the referenced project and requests that we provide the necessary Bid and Performance and Payment Bonds, we will be prepared to execute the bonds subject to our acceptable review of the contract terms and conditions, bond forms and any other underwriting considerations at the time of the request.

Fidelity and Deposit Company of Maryland and Zurich American Insurance Company are proud to have represented Corman Construction, Inc.’s as its surety for over twenty (20) years. Based on Corman Construction, Inc.’s financial strength and track record, we are prepared to consider jobs of \$250,000,000 single/\$600,000,000 aggregate total program.

Our consideration and issuance of bonds is a matter solely between Corman Construction, Inc. and ourselves, and we assume no liability to third parties or to you by the issuance of this letter.

We trust that this information meets with your satisfaction. If there are further questions, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert A. Chlada", is written over a faint, circular stamp.

Robert A. Chlada,  
Attorney-in-Fact



# Commonwealth of Virginia

## STATE CORPORATION COMMISSION

July 1, 2014

FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
600 RED BROOK BLVD  
OWINGS MILLS MD 21117-5153

is hereby licensed to transact the business of

Aircraft Liability	Glass
Auto Liability	Homeowners Multi-Peril
Auto Physical Damage	Inland Marine
Boiler & Machinery	Liability Other than Auto
Burglary & Theft	Misc Property & Casualty
Commercial Multi-Peril	Ocean Marine
Credit	Surety
Credit Property Insurance	Water Damage
Fidelity	Workers Compensation & Employers'
Fire	Liability

in the Commonwealth of Virginia through the thirtieth day of June next succeeding the date hereof unless this license shall be sooner revoked or otherwise cancelled.

ID: 39306



State Corporation Commission  
Bureau of Insurance

By: Jaqueline K. Cuffey  
Commissioner

# Commonwealth of Virginia

## STATE CORPORATION COMMISSION

July 1, 2014

ZURICH AMERICAN INSURANCE COMPANY  
ONE LIBERTY PLAZA  
165 BROADWAY  
NEW YORK NY 10006-1404

is hereby licensed to transact the business of

Accident & Sickness	Fire
Aircraft Liability	Glass
Aircraft Physical Damage	Homeowners Multi-Peril
Auto Liability	Inland Marine
Auto Physical Damage	Legal Services
Boiler & Machinery	Liability Other than Auto
Burglary & Theft	Misc Property & Casualty
Commercial Multi-Peril	Ocean Marine
Credit	Surety
Credit Accident & Sickness	Water Damage
Farmowners Multi-Peril	Workers Compensation & Employers'
Fidelity	Liability

in the Commonwealth of Virginia through the thirtieth day of June next succeeding the date hereof unless this license shall be sooner revoked or otherwise cancelled.

ID: 16535



State Corporation Commission  
Bureau of Insurance

By: Jacqueline K. Curran  
Commissioner

# FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

## Statement of Financial Condition As Of December 31, 2014

### ASSETS

Bonds.....	\$ 142,720,308
Stocks .....	21,816,223
Cash and Short Term Investments .....	2,077,768
Reinsurance Recoverable .....	10,375,303
Other Accounts Receivable .....	46,778,921
<b>TOTAL ADMITTED ASSETS .....</b>	<b>\$ 223,768,523</b>

### LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses .....	\$ 1,321,332
Ceded Reinsurance Premiums Payable.....	49,965,411
Securities Lending Collateral Liability.....	4,009,064
<b>TOTAL LIABILITIES .....</b>	<b>\$ 55,295,807</b>
Capital Stock, Paid Up.....	\$ 5,000,000
Surplus.....	163,472,717
Surplus as regards Policyholders.....	168,472,716
<b>TOTAL.....</b>	<b>\$ 223,768,523</b>

Securities carried at \$58,191,540 in the above statement are deposited with various states as required by law.

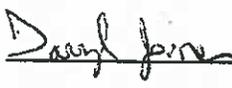
Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2014 would be \$227,936,393 and surplus as regards policyholders \$172,640,586.

I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2014.

  
Corporate Secretary

State of Illinois }  
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2015.

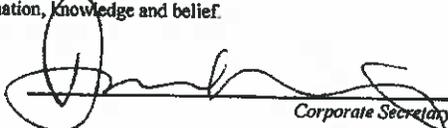
  
Notary Public



**ZURICH AMERICAN INSURANCE COMPANY**  
**COMPARATIVE BALANCE SHEET**  
**ONE LIBERTY PLAZA, 165 BROADWAY, 32nd FLOOR, NEW YORK, NY 10006**  
**As of December 31, 2014 and December 31, 2013**

	12/31/2014	12/31/2013
<b>Assets</b>		
Bonds	\$ 17,933,136,241	\$ 18,990,565,123
Preferred Stock	-	-
Common Stock	3,213,594,517	2,411,755,638
Other Invested Assets	2,602,435,930	2,505,133,631
Short-term Investments	707,396,303	327,019,081
Receivable for securities	20,334,654	123,767,865
Cash and cash equivalents	9,155,828	(65,045,469)
Securities lending reinvested collateral assets	167,993,212	208,060,537
Employee Trust for Deferred Compensation Plan	140,606,132	142,420,097
Total Cash and Invested Assets	\$ 24,794,652,816	\$ 24,643,676,503
Premiums Receivable	\$ 3,317,513,374	\$ 3,358,946,105
Funds Held with Reinsurers	2,357,701	2,383,155
Reinsurance Recoverable	492,689,841	391,812,478
Accrued Investment Income	116,594,177	113,886,701
Federal Income Tax Recoverable	941,023,188	940,033,456
Due from Affiliates	83,375,591	183,852,738
Other Assets	561,819,984	549,410,052
Total Assets	\$ 30,310,026,672	\$ 30,184,001,188
 <b>Liabilities and Policyholders' Surplus</b>		
<b>Liabilities:</b>		
Loss and LAE Reserves	\$ 13,922,765,027	\$ 13,894,112,327
Unearned Premium Reserve	4,502,895,029	4,321,146,577
Funds Held with Reinsurers	191,291,330	185,460,548
Loss In Course of Payment	306,093,345	357,922,606
Commission Reserve	79,627,248	68,132,284
Federal Income Tax Payable	115,512,376	290,773,995
Remittances and Items Unallocated	123,759,621	111,710,550
Payable to parent, subs and affiliates	154,224,298	154,428,297
Provision for Reinsurance	59,189,897	43,942,761
Ceded Reinsurance Premiums Payable	721,709,366	807,651,125
Securities Lending Collateral Liability	167,993,212	208,060,537
Other Liabilities	1,949,229,451	1,942,241,242
Total Liabilities	\$ 22,294,290,200	\$ 22,385,582,849
 <b>Policyholders' Surplus:</b>		
Common Capital Stock	\$ 5,000,000	\$ 5,000,000
Paid-In and Contributed Surplus	4,394,131,321	4,394,131,321
Surplus Notes	-	-
Special Surplus Funds	57,824,000	34,865,000
Cumulative Unrealized Gain	572,072,362	505,136,565
Unassigned Surplus	2,986,708,790	2,859,285,454
Total Policyholders' Surplus	\$ 8,015,736,472	\$ 7,798,418,339
Total Liabilities and Policyholders' Surplus	\$ 30,310,026,672	\$ 30,184,001,188

I, Dennis F. Kerrigan, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2014, according to the best of my information, knowledge and belief.

  
 \_\_\_\_\_  
 Corporate Secretary

State of Illinois  
 County of Cook

} SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2015.

  
 \_\_\_\_\_  
 Notary Public  
**DARRYL JOINER**  
**OFFICIAL SEAL**  
 Notary Public - State of Illinois  
 My Commission Expires  
 February 24, 2018

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **THOMAS O. MCCLELLAN, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Joseph A. PIERSON, Robert A. CHLADA, Cynthia M. CHARVAT, Dennis C. OURAND, Steven A. DZURIK, JR., John J. MARKOTIC and Diane S. LOUGHRY, all of Hunt Valley, Maryland, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V. Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 21st day of August, A.D. 2014.

**ATTEST:**

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: Eric D. Barnes  
*Eric D. Barnes*  
Secretary  
Eric D. Barnes

Thomas O. McClellan  
*Thomas O. McClellan*  
Vice President  
Thomas O. McClellan

State of Maryland  
County of Baltimore

On this 21st day of August, A.D. 2014, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **THOMAS O. MCCLELLAN, Vice President, and ERIC D. BARNES, Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance A. Dunn  
*Constance A. Dunn*



Constance A. Dunn, Notary Public  
My Commission Expires: July 14, 2015

**EXTRACT FROM BY-LAWS OF THE COMPANIES**

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

**CERTIFICATE**

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 28<sup>th</sup> day of May, 2015.



*Michael Bond*

Michael Bond, Vice President



## ***DPOR and SCC Registrations***

**ATTACHMENT 3.2.10**

**State Project No. 0064-965-264, Contract ID#: C00106665DB82**

**SCC and DPOR Information**

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing. **SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)**

Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
E. V. Williams, Inc.	04784666	Corporation	Active	925 South Military Hwy Virginia Beach, VA 23467	Class A Contractor Classifications H/H	2705037384	02-28-2017
Corman Construction, Inc.	F0467987	Foreign Corporation	Active	12001 Guilford Rd Annapolis Junction, MD 20701	Class A Contractor Classifications H/H	2701014794	10-31-2015
McLean Contracting Company	F0043929	Foreign Corporation	Active	6700 McLean Way Glen Burnie, MD 21060	Class A Contractor Classifications H/H MCC	2701000100	08-31-2016
Rummel, Klepper & Kahl, LLP (RK&K)	K0004178	LLP	Active	2100 East Cary St, Suite 309 Richmond, VA 23223	ENG	0411000271	02-29-2016
				2901 S. Lynnhaven Rd Suite 300 Virginia Beach, VA 23452	ENG	0411000667	02-29-2016
				721 Lakefront Commons Suite 203 Newport News, VA 23606	ENG	0411000443	02-29-2016
				12600 Fair Lakes Cir, Ste 300 Fairfax, VA 22030	ENG	0411000577	02-29-2016
				81 Mosher Street Baltimore, MD 21217	ENG	0407002860	12-31-2015

**ATTACHMENT 3.2.10**

**State Project No. 0064-965-264, Contract ID#: C00106665DB82**

**SCC and DPOR Information**

				900 Ridgefield Dr, Ste 350 Raleigh, NC 27609	ENG	0411001046	02-29-2016
A. Morton Thomas & Associates, Inc.	F0494312	Foreign Corporation	Active	1530 Breezeport Way, Building 4, Suite 300 Suffolk, VA 23435	ENG	0411000693	02-29-2016
ECS Mid-Atlantic, LLC	S1208216	LLC	Active	108 Ingram Road, Ste 1 Williamsburg, VA 23188	ENG	0411000382	02-29-2016
KDR Real Estate Services, Inc.	0571210-4	Corporation	Active	2500 Grenoble Rd Richmond, VA 23294	Real Estate Firm License	0226007129	12-31-2016
Land Planning & Design Associates, Inc.	01425545	Corporation	Active	310 E Main Street, Suite 200 Charlottesville, VA 22902	LA	0407001789	12-31-2015
Precision Measurements, Inc.	04504361	Corporation	Active	813 Diligence Drive Suite 121B Newport News, VA 23606	LS	0411000292	02-29-2016
PRR, Inc.	F1841594	Foreign Corporation	Active	n/a			
Sabra, Wang & Associates, Inc.	F1343203	Foreign Corporation	Active	101 W Broad St, Suite 301 Falls Church, VA 22046	ENG	0407005636	12-31-2015
Utility Professional Services, Inc.	05889878	Corporation	Active	PO Box 923 Colonial Beach, VA 22443	ENG	0407005942	12-31-2015

**ATTACHMENT 3.2.10**

**State Project No. 0064-965-264, Contract ID#: C00106665DB82**

**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>
Corman Construction, Inc.	Ryan Gregory Gorman, PE, DBIA	Richmond, VA	2660 Old Timber Way Powhatan, VA 23139	Professional Engineer	0402033522	06-30-2016
Rummel, Klepper & Kahl, LLP (RK&K)	Gary Sebastian Johnson, PE, DBIA	Richmond, VA	3808 Ivory Court Richmond, VA 23233	Professional Engineer	0402033863	09-30-2015
Rummel, Klepper & Kahl, LLP (RK&K)	John Michael McDowell, PE	Richmond, VA	10306 Eaton Place, Suite 240, Fairfax, VA 22030	Professional Engineer	0402015983	11-30-2015
A. Morton Thomas & Associates, Inc.	Michael Ray Davis, PE, CCM	Suffolk, VA	29070 Sunbeam Road Franklin, VA 23851	Professional Engineer	0402028305	07-31-2016
KDR Real Estate Services, Inc.	Allen Gunn Dorin, Jr.	Richmond, VA	2500 Grenoble Rd Richmond, VA 23294	Principal Broker License	0225108043	03-31-2017
	Allen G Dorin, Jr.	Richmond, VA	2500 Grenoble Rd Richmond, VA 23294	Certified Real Estate Appraiser	4001000562	11-30-2015



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E. V. WILLIAMS, INC.

**General**

SCC ID: 04784666  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 1/27/1997  
Status: Active  
Shares Authorized: 5000

**Principal Office**

925 S MILITARY HWY  
VA BEACH VA23464

**Registered Agent/Registered Office**

MELANIE F WHEELER  
442 RUTHERFORD AVE NE  
ROANOKE VA 24016  
ROANOKE CITY 217

**Select an action**

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CORMAN CONSTRUCTION, INC.

**General**

SCC ID: F0467987  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: DE  
Date of Formation/Registration: 11/2/1984  
Status: Active  
Shares Authorized: 1000

**Principal Office**

12001 GUILFORD ROAD  
ANNAPOLIS JUNCTION MD20701

**Registered Agent/Registered Office**

CT CORPORATION SYSTEM  
4701 COX ROAD, SUITE 285  
GLEN ALLEN VA 23060  
HENRICO COUNTY 143

**Select an action**

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**General**

SCC ID: F0043929  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: DE  
Date of Formation/Registration: 8/3/1933  
Status: Active  
Shares Authorized: 500000

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**Principal Office**

6700 MCLEAN WAY  
GLEN BURNIE MD21060

**Registered Agent/Registered Office**

VB BUSINESS SERVICES, LLC  
500 WORLD TRADE CTR  
101 W MAIN ST  
NORFOLK VA 23510  
NORFOLK CITY 212  
Status: Active  
Effective Date: 12/7/2010

# Commonwealth of Virginia



## State Corporation Commission

### *CERTIFICATE OF FACT*

*I Certify the Following from the Records of the Commission:*

On September 25, 2001, a statement of registration as a foreign registered limited liability partnership was filed in this office by Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership.

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

Nothing more is hereby certified



*Signed and Sealed at Richmond on this Date:  
January 24, 2013*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

CIS0357

# Commonwealth of Virginia



## STATE CORPORATION COMMISSION

*Richmond, March 24, 2006*

*This is to Certify that the statement of registration of*

**Rummel, Klepper & Kahl, LLP**

**(Date of registration - September 25, 2001)**

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



*State Corporation Commission*

*Attest:*

*Joel H. Beck*  
Clerk of the Commission



COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

Office of the Clerk

June 23, 2014

CT CORPORATION SYSTEM  
4701 COX ROAD SUITE 285  
GLEN ALLEN, VA 23060

RECEIPT

RE: RUMMEL, KLEPPER & KAHL, LLP

ID: K000417 - 8

DCN: 14-06-23-0501

Dear Customer:

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

The annual continuation report was filed on June 23, 2014.

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

Sincerely,

Joel H. Peck  
Clerk of the Commission

GPACCEPT  
CIS0313

P.O. Box 1197, Richmond, VA 23218-1197  
Tyler Building, First Floor, 1300 East Main Street, Richmond, VA 23219-3630  
Clerk's Office (804) 371-9733 or (866) 722-2551 (toll-free in Virginia) [www.scc.virginia.gov/clk](http://www.scc.virginia.gov/clk)  
Telecommunications Device for the Deaf-TDD/Voice: (804) 371-9206

## A. Morton Thomas

SCC eFile > Entity Search > Entity Details



### SCC eFile Business Entity Details



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## A. MORTON THOMAS & ASSOCIATES, INC.

### General

SCC ID: F0494312  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: MD  
Date of Formation/Registration: 11/26/1997  
Status: Active  
Shares Authorized: 52000

### Select an action

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### Principal Office

800 KING FARM BOULEVARD 4TH FL  
ROCKVILLE MD20850

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### Registered Agent/Registered Office

CT CORPORATION SYSTEM  
4701 COX ROAD, SUITE 285  
GLEN ALLEN VA 23060  
HENRICO COUNTY 143  
Status: Active  
Effective Date: 10/4/2013

## ECS Mid-Atlantic



### SCC eFile Business Entity Details



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## ECS - Mid-Atlantic, LLC

### General

SCC ID: S1208216  
Entity Type: Limited Liability Company  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 4/16/2004  
Status: Active

### Select an action

[File a registered agent change](#)  
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### Principal Office

14026 THUNDERBOLT PL STE 100  
CHANTILLY VA20151

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### Registered Agent/Registered Office



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**Business Entities**

**UCC or Tax Liens**

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**Additional Services**

**KDR Real Estate Services, Inc.**

**General**

SCC ID: 05712104  
 Entity Type: Corporation  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 1/30/2002  
 Status: Active  
 Shares Authorized: 100

**Principal Office**

2500 GRENOBLE RD  
 RICHMOND VA23294

**Registered Agent/Registered Office**

ALLEN G DORIN JR  
 2500 GRENOBLE RD  
 RICHMOND VA 23294  
 HENRICO COUNTY 143  
 Status: Active  
 Effective Date: 7/9/2003

**Select an action**

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**Business Entities**

**UCC or Tax Liens**

**Court Services**

**Additional Services**

**LAND PLANNING AND DESIGN ASSOCIATES, INC.**

**General**

SCC ID: 01425545  
 Entity Type: Corporation  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 12/21/1972  
 Status: Active  
 Shares Authorized: 10000

**Principal Office**

310 E MAIN ST STE 200  
 CHARLOTTESVILLE VA22902

**Registered Agent/Registered Office**

RICHARD G RASMUSSEN III  
 250 E HIGH ST  
 CHARLOTTESVILLE VA 22902  
 CHARLOTTESVILLE CITY 203  
 Status: Active  
 Effective Date: 2/5/2009

**Select an action**

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**PRECISION MEASUREMENTS, INC.**

**General**

SCC ID: 04504361  
 Entity Type: Corporation  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 7/24/1995  
 Status: Active  
 Shares Authorized: 5000

**Select an action**

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**Principal Office**

851 SEAHAWK CIRCLE  
 SUITE 103  
 VIRGINIA BEACH VA23452

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**Registered Agent/Registered Office**

DOUGLAS W DAVIS  
 WYNGATE BUSINESS PARK  
 516 BAYLOR CT  
 CHESAPEAKE VA 23320  
 CHESAPEAKE CITY 236  
 Status: Active  
 Effective Date: 6/4/2002

Screen ID: e1000



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**PRR Capital Region, Inc. (USED IN VA BY: PRR,Inc.)**

**General**

SCC ID: F1841594  
 Entity Type: Foreign Corporation  
 Jurisdiction of Formation: WA  
 Date of Formation/Registration: 11/9/2010  
 Status: Active  
 Shares Authorized: 50000

**Select an action**

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- [Resign as registered agent](#)
- [File an annual report](#)
- [Pay annual registration fee](#)
- [Order a certificate of good standing](#)
- [View eFile transaction history](#)
- [Manage email notifications](#)

**Principal Office**

1501 FORUTH AVENUE  
 SUITE 550  
 SEATTLE WA98101

[New Search](#) [Home](#)

**Registered Agent/Registered Office**

CT CORPORATION SYSTEM  
 4701 COX ROAD, SUITE 285  
 GLEN ALLEN VA 23060  
 HENRICO COUNTY 143  
 Status: Active  
 Effective Date: 10/4/2013



SCC eFile  
Business Entity Details



**SABRA, WANG & ASSOCIATES, INC.**

- SCC eFile
- SCC eFile Home Page
- Check Name
- Distinguishability
- Business Entity Search
- Certificate Verification
- FAQs
- Contact Us
- Give Us Feedback

---

- Business Entities

---

- UCC or Tax Liens

---

- Court Services

---

- Additional Services

**General**

SCC ID: F1343203  
 Entity Type: Foreign Corporation  
 Jurisdiction of Formation: MD  
 Date of Formation/Registration: 6/30/1998  
 Status: Active  
 Shares Authorized: 5000

**Select an action**

- [File a registered agent change](#)
- [File a registered office address change](#)
- [Resign as registered agent](#)
- [File an annual report](#)
- [Pay annual registration fee](#)
- [Order a certificate of good standing](#)
- [View eFile transaction history](#)
- [Manage email notifications](#)

**Principal Office**

101 WEST BROAD STREET  
 SUITE 301  
 FALLS CHURCH VA22046

[New Search](#) [Home](#)

**Registered Agent/Registered Office**

RAYMOND H SUTTLE JR  
 701 TOWN CENTER DRIVE  
 SUITE 800  
 NEWPORT NEWS VA 23606  
 NEWPORT NEWS CITY 211  
 Status: Active  
 Effective Date: 4/14/2011

Utility Pros



SCC eFile  
Business Entity Details

**Utility Professional Services, Inc.**

- SCC eFile
- SCC eFile Home Page
- Check Name
- Distinguishability
- Business Entity Search
- Certificate Verification
- FAQs
- Contact Us
- Give Us Feedback

---

- Business Entities

---

- UCC or Tax Liens

---

- Court Services

---

- Additional Services

**General**

SCC ID: 05889878  
 Entity Type: Corporation  
 Jurisdiction of Formation: VA  
 Date of Formation/Registration: 12/31/2002  
 Status: Active  
 Shares Authorized: 100

**Select an action**

- [File a registered agent change](#)
- [File a registered office address change](#)
- [Resign as registered agent](#)
- [File an annual report](#)
- [Pay annual registration fee](#)
- [Order a certificate of good standing](#)
- [Submit a PDF for processing \(What can I submit?\)](#)
- [View eFile transaction history](#)
- [Manage email notifications](#)

**Principal Office**

390 SHORE DRIVE  
 PO BOX 923  
 COLONIAL BEACH VA22443

[New Search](#) [Home](#)

**Registered Agent/Registered Office**

FREDERIC N HOWE III  
 390 SHORE DRIVE  
 P.O. BOX 923  
 COLONIAL BEACH VA 22443  
 WESTMORELAND COUNTY 196  
 Status: Active  
 Effective Date: 7/16/2013



## *DPOR Firm Licenses*

E.V. Williams, Inc.

<b>DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA</b>		
<b>EXPIRES ON</b> 02-28-2017	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 2705037384
<b>BOARD FOR CONTRACTORS CLASS A CONTRACTOR *CLASSIFICATIONS* H/H</b>		
EV WILLIAMS, INC 925 SOUTH MILITARY HWY VIRGINIA BEACH, VA 23467-5128		  Jay W. DeBoer, Director
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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

Corman Construction, Inc.

<b>DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA</b>		
<b>EXPIRES ON</b> 10-31-2015	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 2701014794
<b>BOARD FOR CONTRACTORS CLASS A CONTRACTOR *CLASSIFICATIONS* H/H</b>		
CORMAN CONSTRUCTION INC 12001 GUILFORD RD ANNAPOLIS JUNCTION , MD 20701-0160		  Gordon N. Dixon, Director
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McLean Contracting Company

<b>DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA</b>		
<b>EXPIRES ON</b> 08-31-2016	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 2701000100
<b>BOARD FOR CONTRACTORS CLASS A CONTRACTOR *CLASSIFICATIONS* H/H MCC</b>		
MCLEAN CONTRACTING COMPANY 6700 MCLEAN WAY GLEN BURNIE, MD 21060-6480		  Jay W. DeBoer, Director
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COMMONWEALTH OF VIRGINIA**

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

EXPIRES ON  
02-29-2016

NUMBER  
0411000271

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
RK&K  
2100 EAST CARY ST  
SUITE 309  
RICHMOND, VA 23223



*Nick A. Christner*  
Nick A. Christner, Interim Director

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COMMONWEALTH OF VIRGINIA**

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EXPIRES ON  
02-29-2016

NUMBER  
0411000667

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
2901 S. LYNNHAVEN RD  
SUITE 300  
VIRGINIA BEACH, VA 23452



*Nick A. Christner*  
Nick A. Christner, Interim Director

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0411000443

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
RK & K  
721 LAKEFRONT COMMONS  
SUITE 203  
NEWPORT NEWS, VA 23606



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Nick A. Christner, Interim Director

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COMMONWEALTH OF VIRGINIA**

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
RK&K  
12600 FAIR LAKES CIR, STE 300  
FAIRFAX, VA 22030

  
  
Jay W. DeBoer, Director

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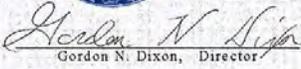
**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

EXPIRES ON 12-31-2015	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	NUMBER 0407002860
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
81 MOSHER ST  
BALTIMORE, MD 21217

  
  
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA**

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP  
900 RIDGEFIELD DR STE 350  
RALEIGH, NC 27609

  
  
Nick A. Christner, Interim Director

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A. Morton Thomas

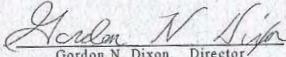
**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

<b>EXPIRES ON</b> 02-29-2016	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 0411000693
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

A MORTON THOMAS AND ASSOCIATES INC  
1530 BREEZEPORTRAY WAY, BUILDING 4  
SUITE 300  
SUFFOLK, VA 23435

  
  
Gordon N. Dixon, Director

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ECS-Mid Atlantic, LLC

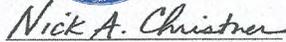
**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**

<b>EXPIRES ON</b> 02-29-2016	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 0411000382
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

ECS-MID-ATLANTIC LLC  
108 INGRAM RD STE 1  
WILLIAMSBURG, VA 23188

  
  
Nick A. Christner, Interim Director

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**License Details**    Related Licenses

<b>Name</b>	KDR REAL ESTATE SERVICES INC
<b>License Number</b>	0226007129
<b>License Description</b>	Real Estate Firm License
<b>Rank</b>	Firm License
<b>Address</b>	2500 GRENOBLE RD, RICHMOND, VA 23294
<b>Initial Certification Date</b>	2002-12-26
<b>Expiration Date</b>	2016-12-31
<b>In Charge Of</b>	DORIN, ALLEN GUNN JR

Land Planning and Design Associates, Inc.

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**  
9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

**EXPIRES ON**  
12-31-2015

**NUMBER**  
0407001789

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

PROFESSIONS: LA

LAND PLANNING AND DESIGN ASSOCIATES INC  
310 E MAIN STREET  
SUITE 200  
CHARLOTTESVILLE, VA 22902



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

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

Precision Measurements, Inc.

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA**  
9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

**EXPIRES ON**  
02-29-2016

**NUMBER**  
0411000292

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

PROFESSIONS: LS

PRECISION MEASUREMENTS INC  
813 DILIGENCE DRIVE  
SUITE 121B  
NEWPORT NEWS, VA 23606



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

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Sabra, Wang and Associates, Inc.

<b>DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION</b> <b>COMMONWEALTH OF VIRGINIA</b>		
<b>EXPIRES ON</b> 12-31-2015	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 0407005636
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS BUSINESS ENTITY REGISTRATION		
PROFESSIONS: ENG		
SABRA, WANG & ASSOCIATES, INC 101 W BROAD ST SUITE 301 FALLS CHURCH, VA 22046		 <i>Gordon N. Dixon</i> Gordon N. Dixon, Director
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Utility Pros

<b>DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION</b> <b>COMMONWEALTH OF VIRGINIA</b>		
<b>EXPIRES ON</b> 12-31-2015	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	<b>NUMBER</b> 0407005942
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS BUSINESS ENTITY REGISTRATION		
PROFESSIONS: ENG		
UTILITY PROFESSIONAL SERVICES INC UTILITY PROS P O BOX 923 COLONIAL BEACH, VA 22443		 <i>Gordon N. Dixon</i> Gordon N. Dixon, Director
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COMMONWEALTH OF VIRGINIA**  
9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

<b>EXPIRES ON</b> 06-30-2016		<b>NUMBER</b> 0402033522
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE

RYAN GREGORY GORMAN  
2660 OLD TIMBER WAY  
POWHATAN, VA 23139

  
  
Jay W. DeBoer, Director

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RK&K

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

<b>EXPIRES ON</b> 09-30-2015		<b>NUMBER</b> 0402033863
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE

GARY SEBASTIAN JOHNSON  
3808 IVORY CT  
RICHMOND, VA 23233

  
  
Gordon N. Dixon, Director

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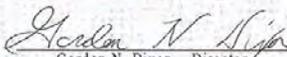
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COMMONWEALTH OF VIRGINIA**  
9960 Mayland Dr., Suite 400, Richmond, VA 23233  
Telephone: (804) 367-8500

<b>EXPIRES ON</b> 11-30-2015		<b>NUMBER</b> 0402015983
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE

JOHN MICHAEL MCDOWELL  
10306 EATON PLACE  
SUITE 240  
FAIRFAX, VA 22030

  
  
Gordon N. Dixon, Director

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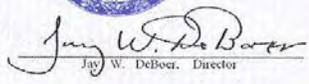
A. Morton Thomas & Associates

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

EXPIRES ON 07-31-2016	9960 Mayland Dr., Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500	NUMBER 0402028305
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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS  
AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE

MICHAEL RAY DAVIS  
29070 SUNBEAM ROAD  
FRANKLIN, VA 23851

  
  
Jay W. DeBoer, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

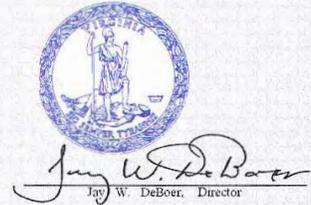
EXPIRES ON  
03-31-2017

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

NUMBER  
0225108043

REAL ESTATE BOARD - PRINCIPAL BROKER LICENSE  
POST IN A CONSPICUOUS PLACE  
THIS LICENSE TO BE IN CUSTODY AND CONTROL OF PRINCIPAL BROKER

ALLEN GUNN DORIN JR  
KDR REAL ESTATE SERVICES INC  
2500 GRENOBLE RD  
RICHMOND, VA 23294



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COMMONWEALTH OF VIRGINIA

EXPIRES ON  
11-30-2015

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

NUMBER  
4001000562

REAL ESTATE APPRAISER BOARD  
CERTIFIED GENERAL REAL ESTATE APPRAISER

ALLEN G DORIN JR  
2500 GRENOBLE ROAD  
RICHMOND, VA 23294



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## *Attachment 3.3.1*

# *Key Personnel Resumes*

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>								
a. Name & Title: <b>Mark D. Osenbaugh, DBIA – Project Development Manager</b>								
b. Project Assignment: <b>Design-Build Project Manager</b>								
c. Name of Firm with which you are now associated: <b>E. V. Williams, Inc.</b>								
d. Employment History: With this Firm <b>10</b> Years With Other Firms <b>21</b> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):  <b>Project Manager – E. V. Williams, Inc. (June 2005 – Present):</b> Mr. Osenbaugh manages EVW’s design-build projects in North Carolina and Virginia. He manages all aspects of multiple design-build projects with responsibilities including budgets, schedules, expenditures and billings, project change orders, subcontracts, and purchase agreements. He also assigns and manages project resources including personnel, equipment, and subcontractors. He has managed and completed projects ranging from \$500K to \$102M for both public and private clients.  <b>Construction Manager – Skanska (March 2000 – June 2005):</b> Responsible for engineering, design and constructability analysis for various construction activities including design build projects. Developed work plans, performed layout, coordinated subcontractors, oversaw safety and performed quality control inspections as contractor’s representative. Performed Quality Control Administration and inspection as Owner’s representative. Prepared Contract Administration Documentation in compliance with Specifications and Bid Documents.  <b>Project Engineer – Vico Construction Corporation (August 1997 – March 2000):</b> Performed all construction surveying and field layout for state, municipal, commercial and private projects related to utility installation and road construction. Also, calculated survey control. Responsible for adherence to company safety policies and quality control. Prepared daily diaries and project documentation. Designed concrete formwork, precast drainage structures and rigging required for various types of construction projects.  <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"><li>▪ Multiple Design-Build Projects</li><li>▪ High Traffic Volumes</li><li>▪ Complex I-64 Widening</li><li>▪ Local Geotechnical Knowledge</li><li>▪ High Profile/Public Awareness</li><li>▪ Environmental Stewardship</li></ul>								
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Old Dominion University, Norfolk, VA/AAS/2000/Civil Engineering Technologies; 2012/DBIA Professional (#135409)								
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Will hold Virginia Department of Environmental Quality - Responsible Land Disturber Certification and a VDOT Erosion and Sediment Control Contractor Certification prior to and for the duration of Construction.								
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b> <b>Route 13/158 Design-Build, Gates &amp; Hertford Counties, NC (\$56M)</b> <ol style="list-style-type: none"><li>1. Design-Build project that included the widening of 7.1 miles of US-13/158 from two lanes to a four-lane divided highway. Project structures included single span dual bridges over Buckhorn Creek, dual bridges over NC-45, a 1,200 LF bridge over the Chowan River, and the rehabilitation of the existing bridge over the Chowan River. Other major items were 218,000 CY of undercut, 1,131,000 CY of borrow fill, 22,000 LF of storm drain pipe, and 25,000 LF of water line. <b>As the DBPM, Mr. Osenbaugh led both the design management, with RK&amp;K, and construction field staff of this project.</b> He provided constructability reviews on the roadway design. He was responsible for selecting the most cost effective way to handle the highly organic soil conditions that can be as much as 24 feet deep. He was in charge of obtaining permits, and in acquiring local borrow pits for the project. Mr. Osenbaugh led the team that successfully acquired property from over 70 different owners including additional ROW during construction when NCDOT increased the project length by .7 miles. He also managed changes in interchange design and reconstruction which reduced the quantity of unsuitable soil excavation, eliminated the need for a temporary roadway to maintain traffic, avoided the relocation of some utilities as well as added protection to an existing 12 inch gas main. He was responsible for the project schedule and all updates as well as verifying compliance</li></ol> <table border="0" style="float: right;"><tr><td><b>Relevance to the Project</b></td></tr><tr><td>✓ Design-Build</td></tr><tr><td>✓ Geotechnical</td></tr><tr><td>✓ Environmental</td></tr><tr><td>✓ Roadway Widening</td></tr><tr><td>✓ Bridge Construction</td></tr><tr><td>✓ McLean</td></tr><tr><td>✓ RK&amp;K</td></tr></table>	<b>Relevance to the Project</b>	✓ Design-Build	✓ Geotechnical	✓ Environmental	✓ Roadway Widening	✓ Bridge Construction	✓ McLean	✓ RK&K
<b>Relevance to the Project</b>								
✓ Design-Build								
✓ Geotechnical								
✓ Environmental								
✓ Roadway Widening								
✓ Bridge Construction								
✓ McLean								
✓ RK&K								

for all appropriate logs for RFIs, transmittals, submittals, correspondence and meeting minutes. His traffic management plan was phased so that throughout the sequence of construction no roadways would be required to be completely closed or detrimentally impede the current traffic flow. **This project will be completed before the I-64 Capacity Improvements – Segment II project begins allowing Mr. Osenbaugh’s full dedication to project.**

2. E. V. Williams, Inc.; Design-Build Project Manager

3. July 2011- August 2015

**VDOT I-64 Widening at Battlefield Blvd, Chesapeake, VA (\$102M)**

1. This complex primary interstate project completely rebuilt the existing four travel lanes to eight travel lanes of reinforced concrete pavement, phased replacement of the Battlefield Blvd. widening of the CSX railroad bridges and construction of braided bridges from Greenbrier road to the high rise bridge. **As Project Manager, Mr. Osenbaugh was responsible for all construction activities on this Interstate widening project and was able to complete and deliver this complex high profile project over three months ahead of the project completion date.** Innovations led by Mr. Osenbaugh included incorporating the demolished concrete, crushed to a 21A gradation, into the Cement Treated Aggregate as required for the roadway section. This work and the production of the concrete were performed within the right-of-way, without the material leaving the site or interfacing with traffic. Utilizing the existing ramps at Battlefield Boulevard, the team was able to begin a critical activity, the reconstruction of the Battlefield Boulevard bridge was six months ahead of schedule. Working with the Department, he oversaw a revised sequence of construction allowed the CD lanes to be constructed and existing traffic to be shifted off the mainline, saving the department \$750K and reducing the construction schedule by three months.

**Relevance to the Project**

- ✓ I-64 Widening
- ✓ High Profile
- ✓ Local Geotechnical Knowledge
- ✓ MOT Requirements

2. E. V. Williams, Inc.; Project Manager

3. Feb. 2006 – July 2009

**VDOT Birdneck Road Improvements, Virginia Beach, VA (\$32M)**

1. The Birdneck Road project consisted of widening 2.9 miles of two-lane roadway to four lanes of divided roadway within the highly travelled beach access corridor. This included installation of new utilities within a network of existing utilities, new roadway pavement sections, ground improvements, traffic control, sound abatement walls, landscaping, brick paver walkways, signalization, lighting, and smart traffic systems, all built within a swampy marsh area and under current traffic conditions of an existing two-lane road. **Mark, as the Project Manager, led the construction efforts on this heavily congested and highly traveled thoroughfare that required complex phasing.** The project phasing required five phases for the maintenance of traffic to complete the project. Mr. Osenbaugh, working with the Department, was able to revise the MOT plan to three phases and reduce the project duration by five months. One of Mr. Osenbaugh’s major goals was to complete the project while minimizing the impact to the existing traffic flow. One way he accomplished this was by scrutinizing the MOT plan of every intersection. He then worked with VDOT construction, VDOT design and the City of Virginia Beach Traffic Engineering to incorporate ways to add additional turn lanes, improve queue length, decrease pinch points, increase turn radiuses, simplify the traffic patterns and generally add capacity. This proved very successful and helped to maximize the traffic flow and avoid problems. Another challenge on this project was highly plastic and organic soils encountered which is a risk factor on the DB I-64 Capacity Improvements – Segment II project. The industry standard of undercutting and backfill was not a viable option in many areas due to a large number of buried dry utilities. Mr. Osenbaugh worked with the Department to utilize a cement stabilization of the subgrade to minimize utility relocations while providing a stable subgrade. Partnering with the VDOT Team, he was able to dramatically decrease the time and reduced the monetary impacts to the project by \$200K.

**Relevance to the Project**

- ✓ High Profile
- ✓ Roadway Widening
- ✓ MOT Requirements
- ✓ Local Geotechnical Knowledge
- ✓ Environmental

2. E. V. Williams, Inc.; Project Manager

3. Jan. 2009 – July 2011

\* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>										
a. Name & Title: <b>Ryan Gorman, PE, DBIA – Design-Build Manager</b>										
b. Project Assignment: <b>Responsible Charge Engineer</b>										
c. Name of Firm with which you are now associated: <b>Corman Construction, Inc.</b>										
d. Employment History: With this Firm <b>19</b> Years With Other Firms <b>1</b> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):  <b>Design-Build Manager/Senior Estimator – Corman Construction (Jan. 2012-Present):</b> Mr. Gorman leads Corman’s South Design-Build efforts and estimating where he works on Corman Construction design-build procurements and project coordination of Engineering and Construction teams.  <b>Operations Manager – Corman Construction (Sept. 2009-Jan. 2012):</b> Oversaw the Corman South office where he provided personnel supervision, assisted in evaluating current/proposed systems, policies and procedures, determined labor requirements, outlined project plans, inspected/reviewed projects for safety and quality compliance and ensured projects are completed on time.  <b>Project Engineer/Superintendent/Project Manager/Sr. Project Manager – Corman Construction (Oct. 1996-July 2009):</b> Progressed from Project Engineer to Superintendent, Project Manager and Sr. Project Manager assigned to road, road widening, bridge, and combined sewer overflow projects for VDOT, City of Richmond, and Henrico County.  <b>Board Member / Virginia Transportation Construction Alliance (VTCA):</b> Current Board Member and is currently serving as Vice Chair on the Contractor Leadership Committee.  <b>SUMMARY OF RELEVANT EXPERIENCE</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">▪ Design-Build</td> <td style="width: 33%;">▪ Roadway Improvements</td> <td style="width: 33%;">▪ Road Widening</td> </tr> <tr> <td>▪ Bridge Construction</td> <td>▪ Local VDOT Projects</td> <td>▪ MOT</td> </tr> <tr> <td>▪ Utility Relocation</td> <td>▪ TMP</td> <td>▪ Permitting</td> </tr> </table>		▪ Design-Build	▪ Roadway Improvements	▪ Road Widening	▪ Bridge Construction	▪ Local VDOT Projects	▪ MOT	▪ Utility Relocation	▪ TMP	▪ Permitting
▪ Design-Build	▪ Roadway Improvements	▪ Road Widening								
▪ Bridge Construction	▪ Local VDOT Projects	▪ MOT								
▪ Utility Relocation	▪ TMP	▪ Permitting								
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic and State University, Blacksburg, VA/2001/Transportation Construction Management Institute Course; Clarkson University, Potsdam, NY/BS/1995/Civil Engineering										
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2002/Professional Engineer/VA (#04020033522); 2006/VDOT Erosion & Sediment Control Contractor Certification (#3121C); 2012/Designated Design-Build Professional (DBIA) #125243										
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 65%; vertical-align: top;"> <b>VDOT Route 29 Solutions Design-Build, Albemarle County, VA (\$116M)</b>  <b>1.</b> The Route 29 Solutions project was the first VDOT Design-Build project requiring a Design-Build Responsible Charge Engineer (RCE). As RCE, Mr. Gorman accepts full professional responsibility on this \$116M project for engineering decisions relating to the final work product. <b><i>He is facilitating coordination between the design team and construction team. Working directly with the DM and the CM, he is responsible to ensure what is designed for each project element is constructible and meets VDOT’s needs for this project. Most importantly, he is overseeing coordination of the design project elements from both a design and construction perspective.</i></b> He is working shoulder to shoulder with our Design Manager, Gary Johnson in a co-located project office. His duties will be reduced to part-time once the design is completed later this year and will allow him to have adequate time to perform as the RCE on the I-64 Capacity Improvements - Segment II DB project.  <b>2.</b> Corman Construction, Inc.; Responsible Charge Engineer </td> <td style="width: 35%; vertical-align: top; border-left: 1px solid black; padding-left: 10px;"> <b>Relevance to the Project</b>  <ul style="list-style-type: none"> <li>✓ <i>Responsible Charge Engineer</i></li> <li>✓ <i>Design-Build</i></li> <li>✓ <i>RK&amp;K Lead Designer</i></li> <li>✓ <i>Roadway Improvements</i></li> <li>✓ <i>VDOT Project</i></li> <li>✓ <i>Bridge construction</i></li> <li>✓ <i>Complex MOT</i></li> </ul> </td> </tr> <tr> <td style="vertical-align: bottom;"> </td> <td style="vertical-align: bottom;"> <b>3.</b> Jan. 2015 - Oct. 2017 </td> </tr> </table>		<b>VDOT Route 29 Solutions Design-Build, Albemarle County, VA (\$116M)</b> <b>1.</b> The Route 29 Solutions project was the first VDOT Design-Build project requiring a Design-Build Responsible Charge Engineer (RCE). As RCE, Mr. Gorman accepts full professional responsibility on this \$116M project for engineering decisions relating to the final work product. <b><i>He is facilitating coordination between the design team and construction team. Working directly with the DM and the CM, he is responsible to ensure what is designed for each project element is constructible and meets VDOT’s needs for this project. Most importantly, he is overseeing coordination of the design project elements from both a design and construction perspective.</i></b> He is working shoulder to shoulder with our Design Manager, Gary Johnson in a co-located project office. His duties will be reduced to part-time once the design is completed later this year and will allow him to have adequate time to perform as the RCE on the I-64 Capacity Improvements - Segment II DB project. <b>2.</b> Corman Construction, Inc.; Responsible Charge Engineer	<b>Relevance to the Project</b> <ul style="list-style-type: none"> <li>✓ <i>Responsible Charge Engineer</i></li> <li>✓ <i>Design-Build</i></li> <li>✓ <i>RK&amp;K Lead Designer</i></li> <li>✓ <i>Roadway Improvements</i></li> <li>✓ <i>VDOT Project</i></li> <li>✓ <i>Bridge construction</i></li> <li>✓ <i>Complex MOT</i></li> </ul>		<b>3.</b> Jan. 2015 - Oct. 2017					
<b>VDOT Route 29 Solutions Design-Build, Albemarle County, VA (\$116M)</b> <b>1.</b> The Route 29 Solutions project was the first VDOT Design-Build project requiring a Design-Build Responsible Charge Engineer (RCE). As RCE, Mr. Gorman accepts full professional responsibility on this \$116M project for engineering decisions relating to the final work product. <b><i>He is facilitating coordination between the design team and construction team. Working directly with the DM and the CM, he is responsible to ensure what is designed for each project element is constructible and meets VDOT’s needs for this project. Most importantly, he is overseeing coordination of the design project elements from both a design and construction perspective.</i></b> He is working shoulder to shoulder with our Design Manager, Gary Johnson in a co-located project office. His duties will be reduced to part-time once the design is completed later this year and will allow him to have adequate time to perform as the RCE on the I-64 Capacity Improvements - Segment II DB project. <b>2.</b> Corman Construction, Inc.; Responsible Charge Engineer	<b>Relevance to the Project</b> <ul style="list-style-type: none"> <li>✓ <i>Responsible Charge Engineer</i></li> <li>✓ <i>Design-Build</i></li> <li>✓ <i>RK&amp;K Lead Designer</i></li> <li>✓ <i>Roadway Improvements</i></li> <li>✓ <i>VDOT Project</i></li> <li>✓ <i>Bridge construction</i></li> <li>✓ <i>Complex MOT</i></li> </ul>									
	<b>3.</b> Jan. 2015 - Oct. 2017									

**VDOT I-64 Widening and Route 623 Interchange Improvements (Design-Build), Henrico and Goochland Counties, VA (\$34.8M)**

1. Performed bridge constructability reviews for replacement of exiting I-64 bridge. **Mr. Gorman coordinated with the designer to improve the bridge and roadway (MOT) designs from a compliance and constructability perspective.** Corman was the contractor responsible for this project which widened 4.52 mile length of I-64 1.05 miles west of Route 199 to 0.54 miles east of Route 238) from a four- to a six-lane divided highway, as well as interchange improvements at Route 623 which included traffic signal upgrading, widening the I-64 westbound ramp to Route 623 for an additional turn lane, adding a left turn lane on Route 623 southbound on I-64 eastbound, and widening the I-64 eastbound off-ramp to Route 623 for an additional turn lane.
2. Corman Construction, Inc.; Constructability Reviewer
3. Oct. 2013 – est. Fall 2015

- Relevance to the Project**
- ✓ Design-Build
  - ✓ I-64 Widening
  - ✓ Virginia Project
  - ✓ Bridge Construction
  - ✓ RK&K is Lead Designer
  - ✓ Major MOT efforts

**VDOT Route 1 Tie-In to Woodrow Wilson Bridge Urban Deck VA-4, Alexandria, VA (\$62.7M) - Portions of the project were Design-Build**

1. \$62.7M two-phased, multi-level bridge and roadway demolition/ reconstruction project. Widened ½ mile of the I-9 / 495 Beltway from six lanes to the final 14-lane configuration, one mile reconstruction of Washington Street and a new South Washington Street Urban Deck Bridge over I-495. **Mr. Gorman was the Project Manager responsible for the project, managed design completion and review (formwork, access platforms, support of excavation, utility support systems, temporary bridges, sound walls, value engineering proposals, MOT staging and erection drawings), ensured timely and accurate completion of office and project engineering requirements, as well as technical supervision of field operations. Portions of the project were Design-Build.** Mr. Gorman managed engineers, superintendents, and subcontractors and was responsible for short/long-range scheduling, purchasing, cost control, safety management, QC oversight, resource management, and troubleshooting. **He received a VDOT Commissioner’s Award for Outstanding Achievement.** All eight project schedule milestones were met.
2. Corman Construction, Inc.; Project Manager
3. Jan. 2003 – April 2008
- \* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

- Relevance to the Project**
- ✓ Bridge Construction
  - ✓ Interstate Widening
  - ✓ Portions Design-Build
  - ✓ RK&K Led GEC Team
  - ✓ Major MOT Impacts

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

**Route 29 Solutions Design-Build, Albemarle County, VA – As Responsible Charge Engineer,** Mr. Gorman’s time commitment to Design Management will decrease on the 29 project as the construction of the project commences this fall. Design is currently at the 60% stage.

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>		
a. Name & Title: <b>Michael Davis, PE, CCM - Associate</b>		
b. Project Assignment: <b>Quality Assurance Manager</b>		
c. Name of Firm with which you are now associated: <b>A. Morton Thomas and Associates, Inc. (AMT)</b>		
d. Employment History: With this Firm <u>3</u> Years With Other Firms <u>22</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <b>Associate, AMT (Feb. 2013-Present):</b> Mr. Davis is an integral team member in senior management with a concentration in the management and quality assurance of complex, sizeable transportation projects. He oversees design-build projects providing oversight and inspection services and ensuring the Quality Assurance and Quality Control plans are followed. This entails QA records review for compliance along with final audits of all QAM records for contractual compliance. <b>Assistant District Administrator – District Construction Engineer, VDOT (Oct 2010 – Feb. 2013):</b> Mr. Davis managed the Hampton Roads District Construction Program which included independently overseeing the Construction and Materials Unit in administering maintenance and construction contracts. He was responsible for the Quality Assurance of projects through the oversight of his staff and the contractor for each project performing the roles of QA and QC inspection. He ensured staff were trained and met performance metrics established for the District and State. By 2013, the program consisted of 51 projects valued at \$460M. Mr. Davis was responsible for the QC and QA of all projects through the use of Construction Division staff and Material Division staff. By adhering to the Manual of Instructions and specifications, the District delivered quality projects meeting VDOT's QA/QC Program. <b>Area Construction Engineer, VDOT (Oct. 2005 - Oct. 2010):</b> As ACE, Mr. Davis worked exclusively to manage quality assurance of VDOT projects in the District. He executed construction management for all construction and maintenance projects within District including two of the four underwater tunnels. He managed Quality Assurance of a team of inspectors and construction managers meeting the performance metrics of on time, on budget, CQIP, and Environmental Compliance yearly, while ensuring VDOT's Quality Management Plan was met. A typical construction season consisted of up to 20 contracts (\$20-\$30M). Mr. Davis was responsible for ensuring his staff of managers and inspectors performed all necessary QA and QC inspections and testing in accordance with the Materials Manual of Instructions to ensure quality built projects. <b>Acting Project Controls Engineer – Area Construction Engineer, VDOT (May 2008-Aug. 2008):</b> Mr. Davis served dual roles, Acting Project Controls Engineer and Area Construction Engineer where he was provided Quality Assurance on projects and was responsible for consultant contracts providing inspectors and engineering review service. He collaborated with Preliminary Engineering in the development of Special Provisions and Budgets for contracts during design phase. He also oversaw timely and accurate reporting of project data such as budget expenses and schedules for individual projects. <b>Project Manager, McLean Contracting Company – Southern Division (May 2003-Oct. 2005):</b> Mr. Davis established tracking methods and tracked performance for awarded contracts. This was performed through tracking equipment, man hours and production rates throughout the life of the project. He issued subcontracts and purchase orders, as well as developed project schedules and ensured appropriate timetables. He was responsible for all project submittals and negotiated change orders. He provided QA inspection and reviewed QC of work and materials and provided false work design calculations as needed. He provided QC management for Navy contracts through setting up the contracts QC plan and overseeing in the field. Navy contracts followed a very similar process of having the contractor managing QA and QC. Mr. Davis was responsible for drafting and administering the QA/QC plans. <b>Superintendent, McLean Contracting Company – Southern Division (June 1998-May 2003):</b> Mr. Davis successfully completed major bridge and pier contracts on time and within budget. He was responsible for managing the contract and delivery quality projects at the jobsite level. He provided quality assurance inspection and was responsible for the scheduling of the jobsite work and maintenance of all on-site equipment, and oversaw the quality and production of the jobsite work.		
<b>SUMMARY OF RELEVANT EXPERIENCE</b>		
<ul style="list-style-type: none"> <li>■ Understands VDOT's QA/QC Program</li> <li>■ Knows the Material Approval process</li> </ul>	<ul style="list-style-type: none"> <li>■ Managed multiple projects as Responsible Charge.</li> <li>■ Keen understanding of VDOT specifications and process during construction</li> </ul>	<ul style="list-style-type: none"> <li>■ Experienced in managing Inspection Staff</li> <li>■ Experienced in Bridge and Roadway Construction</li> </ul>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Old Dominion University, Norfolk, VA – BS/1989/Civil Engineering Technology		

<p>f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1998/Professional Engineer/VA (#0402028305); 2013/Professional Engineer/NC (#040498); 2012/Certified Construction Manager (#A2364); 2009/Master’s Certificate for Project Management from George Mason University</p>	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> <li>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> <li>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</li> </ol> <p><b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b></p>	
<p><b>I-264 Pavement Rehabilitation, Hampton Roads, VA (\$61M)</b></p> <ol style="list-style-type: none"> <li>1. Provided VDOT oversight and inspection services for this \$61M design-build project. Represented the District by ensuring the Quality Assurance and Quality Control plans were followed. Developed auditing documents for VDOT to perform reviews on contractor to ensure compliance with VDOT DB Manual and specifications. Assisted VDOT in performing reviews on Design submittals and Construction Documentation submittals in addition to overseeing justification for all work orders issued. <b>Duties includes auditing all QAM documentation to ensure compliance with VDOT Manual during the life of the project and performing final audit on all QAM records to ensure compliance for payment.</b> This experience provides Mr. Davis with a keen awareness of the DB process and what is needed to provide VDOT with a quality project backed up with the proper records.</li> <li>2. AMT; Quality Control &amp; Assurance Manager</li> </ol>	<p><b>Relevance to the Project</b></p> <ul style="list-style-type: none"> <li>✓ Design-Build</li> <li>✓ DB QA/QC requirements</li> <li>✓ Managing Field Conflicts</li> </ul> <p>3. Jan. 2014 – present</p>
<p><b>I-64 &amp; I-264 Pavement Rehabilitation, Hampton Roads, VA (\$30.7M)</b></p> <ol style="list-style-type: none"> <li>1. Provided VDOT oversight and inspection services for this \$30.7M design-build project. Represented the District by ensuring the Quality Assurance and Quality Control plans were followed. Developed auditing documents for VDOT to perform reviews on contractor to ensure compliance with VDOT DB Manual and specifications. Assisted VDOT in performing reviews on Design submittals and Construction Documentation submittals in addition to overseeing justification for all work orders issued. <b>Duties includes auditing all QAM documentation to ensure compliance with VDOT Manual during the life of the project and performing final audit on all QAM records to ensure compliance for payment.</b> This experience provides Mr. Davis with a keen awareness of the DB process and what is needed to provide VDOT with a quality project backed up with the proper records.</li> <li>2. AMT; Quality Control &amp; Assurance Manager</li> </ol>	<p><b>Relevance to the Project</b></p> <ul style="list-style-type: none"> <li>✓ Design-Build</li> <li>✓ DB QA/QC requirements</li> <li>✓ Managing Field Conflicts</li> </ul> <p>3. Jan. 2014 - March 2015</p>
<p><b>Hampton Boulevard Grade Separation, Hampton Roads, VA (\$38M)</b></p> <ol style="list-style-type: none"> <li>1. This project involved the Grade Separation of Hampton Boulevard (Route 337) and Norfolk Southern Railroad allowing traffic on Hampton Boulevard to cross under the main rail road line leading into the Port. Project spans five miles with work which includes utilities, milling, asphalt replacement/paving, pavement marking, MOT both day and night. This project involved ensuring that subgrades, piles, and concrete structures were built in accordance to the specifications. <b>Mr. Davis managed the project’s Quality Assurance through a staff of inspectors, engineers, and other resources, to ensure that the project was built to the quality as defined in the specifications.</b> This project also included multiple negotiations with the Navy, Railroad, FHWA, and the City of Norfolk. This project involved VDOT inspectors inspecting and testing a multitude of materials including pile driving, concrete bridge placement, and asphalt pavement. As DCE, Mr. Davis oversaw that the Materials Division and Construction Division properly inspected and tested all components of the materials as required by Contract and ensured it was well documented.</li> <li>2. VDOT; District Construction Engineer (DCE)</li> </ol>	<p><b>Relevance to the Project</b></p> <ul style="list-style-type: none"> <li>✓ Challenging Site Conditions</li> <li>✓ Bridge and Roadway Construction</li> <li>✓ Complex MOT</li> </ul> <p>3. June 2009 – Feb 2013</p>
<p>Mr. Davis’ current list of assignments and the anticipated duration of each assignment for all VDOT Design-Build projects in which he is obligated includes the following projects in the Hampton Roads District: UPC 104329; Part-time through November 2015 UPC 104330; Part-time through June 2015 UPC 104331; Part-time through November 2015</p>	
<p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>	
<p>h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.</p>	

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>		
a. Name & Title: <b>Gary S. Johnson, PE, DBIA – Director of Design-Build</b>		
b. Project Assignment: <b>Design Manager</b>		
c. Name of Firm with which you are now associated: <b>RK&amp;K</b>		
d. Employment History: With this Firm <u>5</u> Years With Other Firms <u>17</u> Years		
<p>Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p><b>Director of Design-Build – RK&amp;K (Sept. 2010-present):</b> As the Director of Design-Build, Mr. Johnson is responsible for the successful delivery of all design-build projects in Virginia. He is also responsible for all Structures projects in Virginia. He has more than 20 years of project management, design and construction inspection experience in structures, roadways, and mass transit stations. His extensive project management experience, formal training (MBA) and hands-on participation in inspection (NBIS), design and construction engineering assignments afford him in-depth knowledge of project requirements. Additionally, his experience with design-build projects has developed his full understanding of the implementation of bridge plans and projects through construction. He is a former member of the VTCA Engineering Consultant Leadership Committee and currently serves as the vice-chairman of the VTCA/VDOT Design-Build Committee where he serves as a voice of the industry to VDOT.</p> <p><b>Mid-Atlantic Unit Manager – T.Y. Lin International (May 2005-Sept. 2010):</b> Project Manager and Lead Structural Engineer for dozens of bridge projects. Oversaw staff of 20 structural engineers. Served as Engineer of Record on bridge replacement projects. Served as Principal in Charge for design-build projects in Virginia, North Carolina and Washington DC.</p> <p><b>Director of Virginia Operations – Ammann &amp; Whitney (June 1993-May 2005):</b> Project Manager and Lead Structural Engineer for projects throughout Massachusetts, Pennsylvania and Virginia. Served as Engineer of Record on bridge replacement and rehabilitation projects. Focused on rehabilitation of bridges damaged from over height loads and emergency response.</p>		
<b>SUMMARY OF RELEVANT EXPERIENCE</b>		
<ul style="list-style-type: none"> <li>▪ 20 years of transportation experience</li> <li>▪ 10 years of Design-Build experience in multiple states</li> </ul>	<ul style="list-style-type: none"> <li>▪ Masters in Business (MBA)</li> <li>▪ DBIA Professional</li> <li>▪ Expertise in roadway improvements projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Coordinates multidisciplinary engineering services</li> </ul>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:		
Virginia Commonwealth University, Richmond, VA – MBA/2003/Business Administration		
University of New Hampshire, Durham, NH - BSCE/1993/Civil Engineering		
f. Active Registration: Year First Registered/ Discipline/VA Registration #:		
1999/Professional Engineer/VA (#0402033863); 2010/DBIA Professional (#125387)		
g. Document the extent and depth of your experience and qualifications relevant to the Project.		
<ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol>		
<b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b>		
<b>I-64 Widening and Route 623 Interchange Improvements (Design-Build), Henrico and Goochland Counties, VA (\$34.8M)</b>		<b>Relevance to the Project</b>
<ol style="list-style-type: none"> <li>1. This project being performed with Corman as the Design-Builder and involves the widening of 4.5 miles of Interstate 64 to the inside from a four-lane divided freeway to a six-lane divided freeway and improvements to the I-64/Route 623 Interchange. It also includes two mainline bridge replacements. The interchange improvements include upgrading the existing traffic signal, widening the I-64 westbound ramp to Route 623 to provide an additional turn lane, adding a left turn lane on Route 623 southbound to I-64 eastbound, and widening the I-64 eastbound off ramp to Route 623 to provide an additional turn lane.</li> </ol>		<ul style="list-style-type: none"> <li>✓ <i>Design-Build</i></li> <li>✓ <i>Virginia Project</i></li> <li>✓ <i>Widening of I-64</i></li> <li>✓ <i>Bridge Design</i></li> <li>✓ <i>Retaining Walls</i></li> <li>✓ <i>Experience with Corman</i></li> <li>✓ <i>Extensive MOT</i></li> </ul>

Mr. Johnson also led the design of the bridges for this project, as well as multiple retaining walls required for the project. He was responsible for structural design including culvert design. Design is complete and construction is scheduled for completion in November 2015. During the proposal process, Mr. Johnson served as the lead coordinator amongst all of the disciplines to pull together the successful proposal. During the delivery of the project, **Mr. Johnson serves as the Principal in charge for this project and is fully involved in the entire design process as well as leading the structure design.**

2. RK&K; Principal-in-Charge / Lead Structural Engineer

3. Oct. 2013 – est. Fall 2015

**Route 29 Solutions (Design-Build), Albemarle County, VA (\$116.7M)**

1. Mr. Johnson serves as the Principal in charge for this project and is fully involved in the entire design process. He also serves as the Lead Structural Engineer he is responsible for structural design of the bridges and retaining walls for the overall project that will reduce congestion on the busiest north-south corridor in the Charlottesville / Albemarle County region. Project will improve Route 29 between Polo Grounds Road and Towncenter Drive, extend Berkmar Drive from Hilton Heights Road to Towncenter Drive, and construct a grade-separated intersection at Route 29 and Rio Road. **Mr. Johnson's responsibilities include coordination with multiple subconsultants, managing the design schedule, ensuring conformance with the contract documents, and adhering to the aggressive design schedule.** He personally oversaw the development of an advanced design where the Rio Road Bridge superstructure serves as a strut to support the retaining walls below. This innovative design will allow for the Grade Separated Intersection (GSI) to be constructed in 103 days. His extensive coordination with subconsultants and disciplines, including roadway, stormwater, right-of-way, utilities, traffic, geotechnical, lighting, and fire code experts is instrumental to delivering this design. This experience will prove to be an asset on the I-64 Capacity Improvements - Segment II project. Corman is JV partner of Design-Build Team. **Design for this project will be completed prior to the start of this new I-64 Capacity Improvements – Segment II project.**

**Relevance to the Project**

- ✓ Design-Build
- ✓ Bridge Design
- ✓ VDOT
- ✓ Experience with Corman
- ✓ Extensive MOT

2. RK&K; Principal-in-Charge / Lead Structural Engineer

3. March. 2015 – Est. Completion Oct. 2017

**NCDOT US 158 Over Yadkin River (Design-Build), Mocksville, NC (\$17M)**

1. Design Manager and Lead Structural Engineer for a roadway widening and bridge replacement project that included a nine-span bridge structure with a length of 1150 feet. The superstructure span arrangement consists of three, 3-span units made continuous for live load utilizing 72" Modified Bulb Tee girders. The substructure consists of three column bents founded on drilled shaft foundations. **Mr. Johnson led a multi-member, multi-disciplined project design team (including utilities, roadway, right-of-way, environmental, structures, and hydraulics) from proposal development through construction.** Complicating the project was extensive right-of-way negotiations, complex maintenance of traffic, complex hydraulic analysis, and an aggressive schedule. Maintenance of Traffic was complicated by a horizontal curve at the end of the bridge as well as the requirement to maintain all lanes during construction while replacing the bridge on its current alignment. Mr. Johnson was fully involved and in-charge of all design-related aspects from the pursuit to the project closeout. During construction, he was hands-on with the day-to-day management with the contractor and subcontractors performing the construction as well as serving as a liaison to the Client.

**Relevance to the Project**

- ✓ Design-Build
- ✓ Bridge Design
- ✓ Roadway Widening

2. T.Y. Lin International; Design Manager/Lead Structural Engineer

3. June 2008 – Sept. 2010

**DDOT New York Avenue (Design-Build), Washington, DC (\$18M)**

1. This is a major bridge replacement project in downtown Washington DC consisting of multi-span steel plate girders founded on multi-column piers constructed integrally with railroad crashwalls. The overall project was complicated by a significant substructure skew. Maintenance of Traffic during construction was the main driving force of the project and it was a deciding factor on bridge type and construction methods. Coordination with the railroad and overall MOT drove the most applicable structural alternatives. **Mr. Johnson, as the Design Manager, worked closely with the client, railroad, and contractor to arrive at the most feasible bridge replacement options.** Superstructure Options investigated by Mr. Johnson and his team included precast concrete, steel box girders, and concrete segmental construction. Working with the available budget, an overall project, consisting of a staged steel plate girder superstructure, was developed and delivered to a satisfied client.

**Relevance to the Project**

- ✓ Design-Build
- ✓ Bridge Design
- ✓ Roadway Widening

2. T.Y. Lin International; Design Manager

3. June 2008 – Feb. 2010

\* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>			
a. Name & Title: <b>Chris Martin – Construction Manager</b>			
b. Project Assignment: <b>Construction Manager</b>			
c. Name of Firm with which you are now associated: <b>E. V. Williams, Inc.</b>			
d. Employment History: With this Firm <u>5</u> Years With Other Firms <u>14</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):  <b>Construction Manager – E. V. Williams, Inc. (May 2010 – Present):</b> As Project Construction Manager, Mr. Martin works directly with designers, subcontractors and in-house construction forces overseeing every aspect of the construction. He carries extensive experience in complicated traffic phasing projects, permitting, ROW acquisition, Value Engineering and public outreach. <ul style="list-style-type: none"><li>• Construction Manager in charge of the Design-Build US-13 – Widening through Gates and Hertford Counties, NCDOT (\$54.5M)</li><li>• Construction Manager for the Wesleyan Dr Improvement/Northampton Blvd Intersection Improvement Project – Cities of Norfolk and Virginia Beach (\$8.2M)</li><li>• Construction Manager in charge of the I-64 Norview Ave. Improvement Project – VDOT (\$3.9M)</li></ul> <b>Construction Manager/GPS Manager – Mainline Contracting, Inc. (Feb. 2006 – Oct. 2009):</b> In the role as Construction Manager, Mr. Martin was responsible for multiple street construction, utility, and site projects. Scheduled project resources using SureTrack and Primavera software, coordinated materials and subcontractors, as well as ensured projects were operating on schedule and within budget.  <b>Construction Manager/GPS Manager – Mountain States Contractors (Div. Jones Bros., Inc.) (2000 – 2006):</b> As Construction Manager, Mr. Martin was responsible for large interstate and site construction projects involving multiple phases, utility relocations and complicated MOT under tight schedule constraints. He was also responsible for implementing GPS technology, using Terramodel software files, contributing to the efficiency of operations. <ul style="list-style-type: none"><li>• Construction Manager on 75-acre site development project – Asheville, NC (\$11M)</li><li>• Construction Manager on concrete highway and bridge project I-30 Interstate Loop – TXDOT (\$56M)</li><li>• Construction Engineer on US-171 Expansion paving and grading project – Florien, LA (\$40M)</li></ul>			
<b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"><li>▪ Design-Build</li><li>▪ Environmental Compliance</li><li>▪ Local Geotechnical Knowledge</li><li>▪ Complicated MOT</li><li>▪ Local VDOT Projects</li><li>▪ High traffic Volumes</li></ul>			
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: LeTourneau University, Longview, TX - AS/1998/Design Technology; Undergraduate Studies –Engineering; University of Memphis, Memphis, TN - 1999/Undergraduate Studies – Architecture			
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Mr. Martin will hold a Virginia Department of Environmental Quality - Responsible Land Disturber Certification and a VDOT Erosion and Sediment Control Contractor Certification prior to the commencement of Construction.			
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b> <b>Route 13/158 North Carolina Design-Build, Gates &amp; Hertford Counties, NC (\$56M)</b> <table border="0" style="width: 100%;"><tr><td style="width: 65%; vertical-align: top;"><ol style="list-style-type: none"><li>1. Project included the widening of 7.1 miles of US-13/158 from two lanes to a four-lane divided highway. Project structures include single span dual bridges over Buckhorn Creek, dual bridges over NC-45, a 1,200 LF bridge over the Chowan River, and the rehabilitation of the existing bridge over the Chowan River. Other major items were 17,000 CY of undercut, 1,131,000 CY of borrow fill, 22,000 LF of storm drain pipe, and 25,000 LF of water line. <b>As Construction Manager, Mr. Martin was responsible for the construction of</b></li></ol></td><td style="width: 35%; vertical-align: top;"><b>Relevance to the Project</b><ul style="list-style-type: none"><li>✓ Design-Build</li><li>✓ RK&amp;K &amp; McLean</li><li>✓ Multiple Structures</li><li>✓ Geotechnical</li><li>✓ Environmental</li><li>✓ Large Earthwork Volumes</li></ul></td></tr></table>		<ol style="list-style-type: none"><li>1. Project included the widening of 7.1 miles of US-13/158 from two lanes to a four-lane divided highway. Project structures include single span dual bridges over Buckhorn Creek, dual bridges over NC-45, a 1,200 LF bridge over the Chowan River, and the rehabilitation of the existing bridge over the Chowan River. Other major items were 17,000 CY of undercut, 1,131,000 CY of borrow fill, 22,000 LF of storm drain pipe, and 25,000 LF of water line. <b>As Construction Manager, Mr. Martin was responsible for the construction of</b></li></ol>	<b>Relevance to the Project</b> <ul style="list-style-type: none"><li>✓ Design-Build</li><li>✓ RK&amp;K &amp; McLean</li><li>✓ Multiple Structures</li><li>✓ Geotechnical</li><li>✓ Environmental</li><li>✓ Large Earthwork Volumes</li></ul>
<ol style="list-style-type: none"><li>1. Project included the widening of 7.1 miles of US-13/158 from two lanes to a four-lane divided highway. Project structures include single span dual bridges over Buckhorn Creek, dual bridges over NC-45, a 1,200 LF bridge over the Chowan River, and the rehabilitation of the existing bridge over the Chowan River. Other major items were 17,000 CY of undercut, 1,131,000 CY of borrow fill, 22,000 LF of storm drain pipe, and 25,000 LF of water line. <b>As Construction Manager, Mr. Martin was responsible for the construction of</b></li></ol>	<b>Relevance to the Project</b> <ul style="list-style-type: none"><li>✓ Design-Build</li><li>✓ RK&amp;K &amp; McLean</li><li>✓ Multiple Structures</li><li>✓ Geotechnical</li><li>✓ Environmental</li><li>✓ Large Earthwork Volumes</li></ul>		

*this project and led the team of E.V. Williams Inc., McLean Contracting and Rose Brothers Paving.* His background of working in challenging soils was invaluable in helping to devise the most cost effective solution to geotechnical challenges. Mr. Martin created and implemented project specific standards and programs for environmental controls, safety and quality. He provided valuable input in the interchange design which contributed to the reduction in the quantity of unsuitable soil excavation. He worked shoulder to shoulder with our geotechnical engineers to explore options to resolve varying geotechnical challenges. Options reviewed included undercuts, geotextile fabrics, geogrids, wick drains and rock columns. Mr. Martin was also very involved in the development of the TMP with the RK&K design staff. He has been responsible to execute the schedule, manage the actual construction process. This project includes adjacent wetlands and historic areas, each resulting in special concerns and challenges. Mr. Martin has monitored compliance with each of these concerns and requirements while simultaneously constructing this project in an expeditious manner.

2. E. V. Williams, Inc.; Construction Manager

3. July 2011- Present

**US-171 Expansion paving and grading project - Florien, LA (\$40M)**

1. This project consisted of conversion of US-171 from a two lane asphalt highway to a four lane divided concrete facility, including construction of four bridges. Mr. Martin served as the construction engineer for the contractor on this project, monitoring the construction of nearly 10 miles of new roadway. This earthwork consisted of cut to fill operations, undercut and replacement as well as soil stabilization and a number of surcharges. Mr. Martin coordinated the earthwork, including many locations involving stabilizing of soils, coordinated stabilization work with the client, including calculating condition dependent application rates of lime and cement additives. *As CM, Mr. Martin held weekly meetings with the field staff as well as coordinating the activities of the major subcontractors, bridge construction, and coordinating the contractor's GPS grading equipment with the DOT provided survey layout.*

**Relevance to the Project**

- ✓ Multiple Bridges
- ✓ Length of Project
- ✓ Large Earthwork Volumes
- ✓ Varying soil types and conditions

2. Mountain States Contractors (Div. Jones Bros. Inc.); Construction Mgr./GPS Mgr. 3. April 2003- July 2004

**I-30/US-71 Interstate Loop – TXDOT (\$56M)**

1. Bowie County US-71 Hwy Bypass of the Southwest quadrant of Texarkana, TX, and connecting into Arkansas was jointly built for the two states. This project consisted of 3.75 miles of new construction from US-59 to future Southbound I-49. This turnkey project consisted of one 2,460 ft. steel tub girder flyover, dual 4,900 ft. elevated roadway bridges (consisting of concrete pile trestle and concrete U-beam construction) over sensitive environmental areas, 500,000 CY of excavation, 1,300,000 CY of embankment, and 225,000 SY of continuously reinforced concrete paving. *Mr. Martin served as the Construction Manager for the contractor, Jones Bros Inc., finishing the project on time, and receiving in 2003 the AGC a "Construction Award for Recognition of Exemplary Cooperation and Performance in Construction of HP 735(1), US 71, Bowie County, Atlanta District."* Mr. Martin was responsible for daily project progress, coordination of plan changes, correction of plan discrepancies with actual measurement, survey adjustment, traffic changes, conducted Monthly project conferences, maintained the schedule of the project, and coordinated all activities of subcontractor's as well as various trades. Mr. Martin maintained a daily communication with personnel on site to progress the project thru all challenges that arose.

**Relevance to the Project**

- ✓ High Traffic Volumes
- ✓ Extensive MOT
- ✓ Flyover Bridge
- ✓ Extensive Bridgework
- ✓ Environmentally Sensitive areas
- ✓ Large Earthwork Volumes

2. Mountain States Contractors (Div. Jones Bros. Inc.); Construction Mgr./GPS Mgr. 3. February 2000-April 2003

\* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

**Route 13/158 North Carolina Design-Build; Completion Date Aug. 2015**

**VDOT Project C-35 Turnpike Boulevard;** Mr. Martin will be completed with his tasks on this project and will be available full-time for the I-64 Capacity - Segment II project when construction starts in the Fall 2016. He will be available to start his part-time duties during the design phase starting at the NTP which is slated for December 2015.

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>						
a. Name & Title: <b>John M. McDowell, PE – Senior Manager, Transportation</b>						
b. Project Assignment: <b>Maintenance of Traffic Manager</b>						
c. Name of Firm with which you are now associated: <b>RK&amp;K</b>						
d. Employment History: With this Firm <u>3</u> Years With Other Firms <u>31</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <b>Senior Manager, Transportation – RK&amp;K (2011 – Present):</b> In his role as Senior Manager for Transportation, Mr. McDowell is responsible for leading and directing the geometric design and plans productions for the roadway design, preparation of the Traffic Control Plans, Maintenance of traffic (MOT) Plans, as well as interfacing with the various elements of the roadway design including structures, drainage, signals and lighting design. Mr. McDowell has been responsible for developing the Traffic Management Plans and Maintenance of Traffic Plans for a wide variety of roadway projects in Virginia, including projects ranging from minor intersection improvements in congested urban areas to major interstate widening projects along I-495 and I-64. Mr. McDowell was certified in Advanced Work Zone Traffic Control in other states and is scheduled to complete the Virginia Advanced Work Zone Traffic Control Course in June 2015. <b>Associate Vice President, Project Director – HNTB (2007 – 2010):</b> Mr. McDowell oversaw and led the roadway design practice for the firm’s local office in Jacksonville, Florida. In this capacity, he was responsible for producing roadway design plans, Maintenance of Traffic (MOT) plans, Traffic Control Plans and contract documents for various state and local agencies. Mr. McDowell managed and led design of several urban roadway and interstate design projects, including serving as Deputy Design Manager for the I-495 HOT Lanes Project, Section 5 in Northern Virginia, including a review of the MOT for this high-profile project. He was responsible for managing project teams consisting of multiple disciplines and as many as five subconsultants on an individual project. <b>Senior Practice Builder – Kimley-Horn and Associates, Inc. (2002 – 2007):</b> Mr. McDowell managed and directed design of numerous state and local government roadway design projects, both widening of existing roads and roadways on new alignments. This included the maintenance of Traffic Plan for converting an existing arterial intersection to an interchange in Jacksonville, FL and the conversion of a highway overpass to an interchange in Sumter County, Florida. <b>Transportation Program Leader – Reynolds, Smith and Hills, Inc. (1996 – 2002):</b> Mr. McDowell managed an interdisciplinary department of 38 people engaged in transportation planning and design. He also managed some of the most complex assignments, requiring interdisciplinary coordination and coordination among several subconsultants.  <b>SUMMARY OF RELEVANT EXPERIENCE</b> <table border="0" style="width: 100%;"><tr><td>▪ 35 years of transportation experience</td><td>▪ VDOT Project Experience</td><td>▪ Coordinates multidisciplinary engineering services</td></tr><tr><td>▪ 30 years of design management experience</td><td>▪ Roadway widening and rehabilitation</td><td>▪ Relevant design-build experience</td></tr></table>	▪ 35 years of transportation experience	▪ VDOT Project Experience	▪ Coordinates multidisciplinary engineering services	▪ 30 years of design management experience	▪ Roadway widening and rehabilitation	▪ Relevant design-build experience
▪ 35 years of transportation experience	▪ VDOT Project Experience	▪ Coordinates multidisciplinary engineering services				
▪ 30 years of design management experience	▪ Roadway widening and rehabilitation	▪ Relevant design-build experience				
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Drexel University, Philadelphia, PA – BS/1980/Civil Engineering						
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <b>1985/Professional Engineer/VA (#0402015983); 1984/Professional Engineer/NC (#11801); 1984/Professional Engineer/SC (#10201); 1996/Professional Engineer/FL (#50507); 1984/Professional Engineer/OH (#48649)</b> *Virginia Advanced Work Zone Certification will be obtained prior to Notice to Proceed.						
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"><li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li><li>2. <i>Note whether experience is with current firm or with other firm.</i></li><li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li></ol> <b>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</b>						

**I-64 Widening and Route 623 Interchange Improvements (Design-Build), Henrico and Goochland Counties, VA (\$34.8M)**

1. This D-B project involves the widening of I-64 from a four-lane divided freeway, to a six-lane divided freeway and improvements to the I-64/Route 623 Interchange. The project begins at approximately 0.99 Miles West of Route 623 and ends approx. 0.38 Miles West of Route 271. The project length is approximately 4.52 miles. The additional through lanes will be constructed to the inside of I-64 in both directions. The interchange improvements will include upgrading the existing traffic signal, widening the I-64 westbound ramp to Route 623 to provide an additional turn lane, adding a left turn lane on Route 623 southbound to I-64 eastbound, and widening the I-64 eastbound off ramp to Route 623 to provide an additional turn lane. Working directly with Corman, Mr. McDowell performed various design activities and roadway QC. **Mr. McDowell was also instrumental in the development of the MOT plan for the project, including phasing, detours and plan development.** Mr. McDowell worked closely with our proposed Design Manager (Gary Johnson) on this project as well.
2. RK&K; Roadway Engineer/ Maintenance of Traffic Manager
3. Oct. 2013 – est. Fall 2015

**Relevance to the Project**

- ✓ Design-Build w/ Corman
- ✓ Fast Track Design
- ✓ I-64 widening
- ✓ Extensive MOT / TMP considerations

**I-495 Express Lanes and Jones Branch Connector Interchange (Design-Build), Tyson Corner (\$56M)**

1. Mr. McDowell served as the Lead Roadway/MOT Engineer for the planning and preliminary design of a new connector road from Jones Branch Road to Route 123 in the Tysons Corner area of Fairfax County. Mr. McDowell was responsible for the oversight of all planning design activities and coordinating between various team members including roadway, structures, drainage, traffic, MOT and landscape design components. **He was also directly responsible for the development of the roadway design and MOT design for the project, which included several phases and traffic shifts in order to maintain traffic on this busy corridor during construction.** A portion of the road was constructed as part of the Capital Beltway HOT Lanes project; we are widening bridges and extending the road across I-495 and connecting with Route 123. The project also includes the planning and design of a new roadway connecting the ramp of the Dulles Toll Road with the new Jones Branch Connector. This project was designed in accordance with the “complete streets” concept which provides accessible facilities for pedestrians and bicycles in addition to automobile traffic.
2. RK&K; Project Manager / Maintenance of Traffic Manager
3. Oct. 2011 – Jan. 2013

**Relevance to the Project**

- ✓ Interstate highway design
- ✓ Complex interchange design
- ✓ Complex MOT
- ✓ Design-Build

**Capital Beltway (I-495) HOT Lanes, Section 5, Fairfax County, VA; Virginia Department of Transportation (\$1B)**

1. Mr. McDowell was the Deputy Project Manager and Lead MOT Engineer for the addition of HOT Lanes to the I-495 corridor at I-66 in Fairfax County. Mr. McDowell was responsible for overseeing the roadway design, developing the MOT plan and coordinating between various team members including roadway, structures, drainage, and traffic design. **He was directly responsible for the development of the MOT design for the project.** Mr. McDowell developed a complex multi-phase MOT plan to maintain traffic along this corridor which included staging to construct three cell box culvert across the travel lanes of I-495 as well as staging for the widening/replacing overhead bridge structures within the project limits.
2. HNTB; Lead Roadway / Maintenance of Traffic Manager
3. Sept. 2008– June 2009

**Relevance to the Project**

- ✓ Design-Build
- ✓ Complex highway design
- ✓ Complex MOT

**I-10/Hammond Boulevard "Marietta" Interchange, Duval County, Florida Department of Transportation District 2, Jacksonville, FL (\$56M)**

1. Mr. McDowell served as the Lead Roadway/MOT Engineer for the reconstruction/relocation of this interstate interchange. He led the design of the new interchange to provide full movement access between Hammond Boulevard and I-10 and included the realignment of several local roads to meet the new interchange configuration. The project also include a new proposed bridge over I-10, traffic signals, a CSX mainline crossing improvement, lighting and sound walls along the north right-of-way line of I-10. Mr. McDowell was responsible for the management and coordination of all disciplines on the assignment. This project involved constructing a bridge over I-10. **Mr. McDowell developed a complex MOT plan that used nighttime lane closures on mainline of I-10 and routed traffic over the new interchange ramps to allow uninterrupted use of the work site for the bridge construction.** In addition, the reconstruction of the CSX railroad crossing required that the traffic on the road be detoured while the crossing was improved. Mr. McDowell created a detour plan to accommodate traffic over local roads during the railroad crossing reconstruction.
2. HNTB; Project Manager/ Maintenance of Traffic Manager
3. July 2007 – March 2010

**Relevance to the Project**

- ✓ Interstate highway design
- ✓ Complex MOT
- ✓ Interchange design

\* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.



***Attachment 3.4.1(a)***

***Lead Contractor-Work History Form***

**ATTACHMENT 3.4.1(a)**

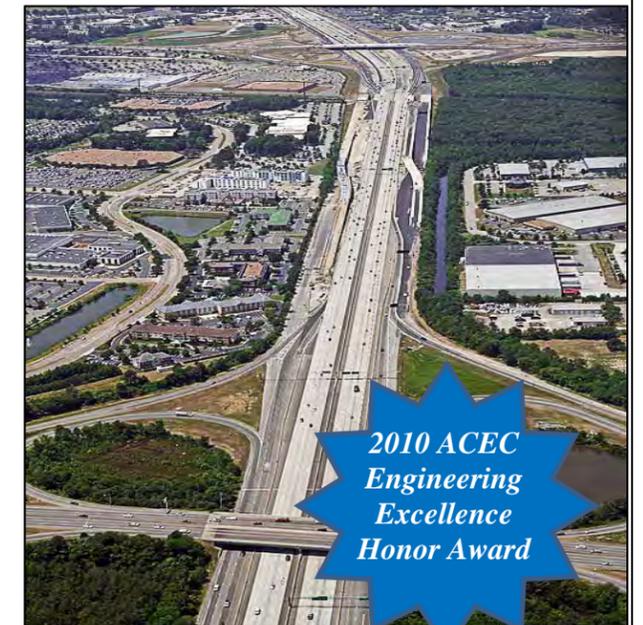
**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>I-64 Widening at Battlefield</b> Location: <i>Chesapeake, VA</i>	Name: <b>Kimley-Horn &amp; Associates Inc.</b>	Name of Client/ Owner: <b>VDOT</b> Phone: <b>757.494.5470</b> Project Manager: <b>Mr. Michael Johnson</b> Phone: <b>757.494.5470</b> Email: <b>Michael.J.Johnson@vdot.Virginia.gov</b>	<b>07/2009</b>	<b>03/2009</b>	<b>\$98,000</b>	<b>\$102,000</b> <i>(Owner directed additional scope)</i>	<b>\$102,000</b>

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

<b>Scope and Complexity Similarities</b>	<p><b>NARRATIVE DESCRIPTION</b> E.V. Williams, Inc. (EVW) was the prime contractor on this large scale urban highway project which involved the complete re-construction of I-64 from Greenbrier Boulevard to the I-464 Interchange. Also included in the scope of work was an additional widening of I-64 from the I-464 Interchange to the High Rise Bridge. The project involved reconstructing and widening four miles of I-64 from four to eight mainline lanes, re-configuring a standard cloverleaf intersection to include the addition of Collector Distributor (CD) Roadways for the entire length of the project, installation of several mechanically-stabilized earth retaining walls, design and construction of concrete sound walls, installation of traffic management systems, installation and rehabilitation of box culverts under the existing and proposed I-64, and the incorporation of large stormwater management facilities within the footprint of the I-64 corridor. Over five miles of new stormwater management piping and over four miles of modified median barrier were installed to control the drainage during construction activities. Mainline pavement sections included 13" of continuous reinforced concrete over cement treated aggregate. Feeder lanes consisted of full depth asphalt paving over cement treated aggregate. An additional asphalt pavement travel lane was added to the existing I-64 between I-464 and the High Rise Bridge. <b>EVW teamed up with McLean Contracting Company</b> to construct the new Battlefield Blvd. bridge which consisted of two new pre-stressed concrete girder bridges, two existing bridge widenings over the CSX Railroad, and two "braided" bridges on the CD Roadways between Greenbrier Parkway and Battlefield Blvd. The construction of the Battlefield Blvd. bridge required multiple phases of new construction with demo of the existing structure while maintaining existing traffic lanes over I-64 and without disruption to traffic on I-64 below.</p> <p>One of the top challenges on this project was how to construct this very complicated project, which required multiple phases and shifting traffic patterns, while reducing traffic impacts and avoiding shutting down access to this vital access point for Chesapeake's merchants and residents. The Team accomplished this by daily adhering to the highest standards for temporary traffic control and by being innovative to find better solutions. One example of this is that by working closely with VDOT, EVW was able to modify the original traffic control plan and utilize the existing ramps in lieu of constructing temporary ramps, allowing the Team to start the construction of the CD lanes and bridge widening six months ahead of schedule. An additional innovation was to place the concrete pavement operation within the project median with construction materials being delivered during off-peak and night hours. This allowed the construction operation to perform the concrete paving with no MOT impacts and provide a high quality product.</p> <p><b>SUCCESSFUL DELIVERY</b></p> <ul style="list-style-type: none"> <li><b>Innovation</b> - The project completion date was fixed at July 30, 2009. The project was substantially complete by March 2009, earning EVW the maximum early completion bonus. This allowed the Department to reconfigure a major tie-in and add an enhancement of an additional CD lane at the Route 168 interchange.</li> <li><b>Innovation</b> - The existing four travel lanes of reinforced concrete pavement were scheduled for demolition and disposal. Working with the department, the Team incorporated the demolished concrete, crushed to a 21A gradation, into the Cement Treated Aggregate as required for the roadway section. This work was performed within the right-of-way, without the material leaving the site or interfacing with traffic.</li> </ul> <p><b>Proposed Personnel for I-64 Capacity Improvements Project</b></p> <p>Mark Osenbaugh, Project Manager, (EVW) Keith Christiansen, Project Manager, (McLean)</p> <ul style="list-style-type: none"> <li><b>Traffic Management</b> - Utilizing the existing ramps at Battlefield Boulevard, the Team was able to begin a critical activity, the reconstruction of the Battlefield Boulevard bridge, six months ahead of schedule.</li> <li><b>Traffic Management</b> - Working closely with the Department, a revised sequence of construction allowed the CD lanes to be constructed and existing traffic to be shifted off the mainline, saving the Department \$750,000 and reducing the construction schedule by three months. Working as a team with the owner allowed us to solve the challenges of high traffic volumes, the complexities of a large project as well as the inevitable minor setbacks which resulted in a win-win project for VDOT, EVW and Third Party Stakeholders.</li> <li><b>Quality in the Final Roadway</b> - Utilizing a modified median barrier, EVW, working with the Department, was able to successfully control stormwater runoff and minimize any drainage/MOT impacts during construction and eliminate the risk of any median ponding within the project corridor.</li> </ul> <p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li>Having the design engineer on-board and attending each progress meeting eliminated bottlenecks and resolved issues in a timely manner.</li> <li>Storms, accidents and even one of the bridges on the project being damaged in an accident highlighted the importance of traffic management and contingency MOT plans.</li> <li>Developing contingency plans to allow for relief of congestion during hurricane evacuations, major accidents and tourist season greatly increased the project's success.</li> <li>Utilization of the median during off-peak hours for material deliveries and storage, minimized interfacing of construction activities with commuter traffic.</li> <li>Public outreach to keep local businesses, homeowners, and the motoring public informed of progress improved public appreciation and understanding during the construction process.</li> </ul>
<b>Proposed Personnel for I-64 Capacity Improvements Project</b>	
Mark Osenbaugh, Project Manager, (EVW) Keith Christiansen, Project Manager, (McLean)	
<ul style="list-style-type: none"> <li><b>Traffic Management</b> - Utilizing the existing ramps at Battlefield Boulevard, the Team was able to begin a critical activity, the reconstruction of the Battlefield Boulevard bridge, six months ahead of schedule.</li> <li><b>Traffic Management</b> - Working closely with the Department, a revised sequence of construction allowed the CD lanes to be constructed and existing traffic to be shifted off the mainline, saving the Department \$750,000 and reducing the construction schedule by three months. Working as a team with the owner allowed us to solve the challenges of high traffic volumes, the complexities of a large project as well as the inevitable minor setbacks which resulted in a win-win project for VDOT, EVW and Third Party Stakeholders.</li> <li><b>Quality in the Final Roadway</b> - Utilizing a modified median barrier, EVW, working with the Department, was able to successfully control stormwater runoff and minimize any drainage/MOT impacts during construction and eliminate the risk of any median ponding within the project corridor.</li> </ul> <p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li>Having the design engineer on-board and attending each progress meeting eliminated bottlenecks and resolved issues in a timely manner.</li> <li>Storms, accidents and even one of the bridges on the project being damaged in an accident highlighted the importance of traffic management and contingency MOT plans.</li> <li>Developing contingency plans to allow for relief of congestion during hurricane evacuations, major accidents and tourist season greatly increased the project's success.</li> <li>Utilization of the median during off-peak hours for material deliveries and storage, minimized interfacing of construction activities with commuter traffic.</li> <li>Public outreach to keep local businesses, homeowners, and the motoring public informed of progress improved public appreciation and understanding during the construction process.</li> </ul>	



*E.V. Williams is proud to have been presented on this project with the American Council of Engineering Companies – 2010 Engineering Excellence Honor Award*

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**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>Woodrow Wilson Bridge</b> <b>I-95 Telegraph Road Interchange Improvements</b> Location: <i>Alexandria, VA</i>	Name: <b>Potomac Crossing Consultants</b> ( <i>Parsons, Dewberry and Davis</i> )  RK&K led the GEC	Name of Client/ Owner: <b>VDOT</b> Phone: <b>1.800.367.7623</b> Project Manager: <b>John D. Lynch, PE</b> Phone: <b>540.829.7511</b> Email: <b>John.Lynch@VDOT.virginia.gov</b>	<b>06/2013</b>	<b>06/2013</b>	<b>\$236,393</b>	<b>\$267,910</b> (with owner requested changes)	<b>\$147,350</b> (Corman's portion of JV)

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

<p align="center"><b>Scope and Complexity Similarities</b></p> <ul style="list-style-type: none"> <li>Widening of a major interstate roadway</li> <li>Phased bridge construction with multiple traffic shifts</li> <li>Widening of existing 40+ year old structures</li> <li>Construction/extension of 11 box culverts</li> <li>Coordination with adjacent Interstate roadway construction</li> <li>Extensive public/community relations</li> <li>Traffic management</li> <li>Sound barrier walls</li> <li>Landscaping</li> <li>Railroad coordination</li> <li>VDOT project</li> <li>Coordination with third-party stakeholders</li> <li>Utility coordination and relocations</li> <li>Environmental permitting and protection</li> <li>Installation of "state of the art" ITS/communication systems</li> </ul>	<p><b>NARRATIVE DESCRIPTION</b> This fast-track, Corman-led Joint Venture project consisted of reconstructing the Telegraph Road Interchange and widening/reconstructing approximately 2.5 miles I-95/I-495, west of Route 1 to the Eisenhower Connector exit, to enable traffic to enter and exit Virginia by crossing the new Woodrow Wilson Bridge. Improvements included roadway/bridge reconstruction, intersection improvements, and utility relocations. The new grade-separated interchange provides access to eastbound Huntington Avenue and North Kings Highway from the Beltway Outer Loop and southbound Telegraph Road through elevated ramps over Telegraph Road, as opposed to signalized intersections, and refines traffic flow and provides easier/safer pedestrian access. Scope included constructing 11 ramps and bridges totaling 380,000 SF of bridge deck, driving approximately 80,000 LF of concrete and steel piles, drainage improvements, utility location and relocation, micro-tunneling, 11 box culverts, 36,500 CY of low permeability concrete, new traffic control systems, lighting, traffic and overhead signs, traffic management system upgrades, guardrails, railroad coordination with CSX, Norfolk Southern, WMATA, and VDOT, obtainment of right-of-way, landscaping, 25,000 SF of temporary retaining walls with soil anchors, E&amp;S controls that included General Water Permits, and an environmental mitigation project at nearby Cameron Run Wetlands. There were improvements to 24 lane miles with 321,000 SF of roadway paving, milling and resurfacing, extensive MOT, pavement marking, approximately 500,000 CY of excavation, 23 retaining and MSE walls (D-B element), four sound walls (D-B element), ADA compliant handicap ramps, and storm drainage with six storm water management ponds. Maintaining traffic for an ADT of 160,000 was the most critical aspect of the project's success. Six lanes (three lanes in each direction) of I-95 were maintained at all times during construction. The project team constructed a section of roadway, switched traffic to the new lanes and began improvements to the old roadway. With traffic control and safety being big concerns, much of the construction was completed at night and during off-peak traveling. The CK Constructors Team revised MOT plans, reducing the original design of six phases to three phases and from 12 shifts to six shifts. This positioned the team to meet all major interim milestones and their corresponding incentives, while improving public traveling conditions. Team partnering identified and resolved issues early in the planning stages.</p> <p><b>CORMAN'S ROLE</b> Corman, as the lead JV member, was responsible for all aspects of construction, including highways and structures, MOT, environmental permits and protection, public relations, coordination with adjacent contracts, and utility protection and relocation. This project required extensive coordination with adjacent projects, local residents, and utility companies was were handled by Corman in conjunction with VDOT's GEC. Daily coordination occurred onsite and weekly meetings were held at GEC offices to discuss work plans and public information. RK&amp;K was the lead GEC partner on this project.</p> <p><b>SUCCESSFUL DELIVERY</b> CQIP Review #4 Dated 5/20/11 – Overall Quality Rating -95.3% <i>“Scoring 95.3% for a project of the enormity and complexity of our VB 236 contract [the largest VDOT construction contract awarded to-date] is a truly significant positive achievement. It reflects our meeting the partnering mission statement commitments. I would like to extend my sincere appreciation to the VDOT/PCC/CKC partnership team for their steadfastness and resolve. I congratulate the team for having met the challenges in achieving this score, and thank them again. Let's keep up the good work.” – Jalal Masumi, VDOT's Deputy Project Manager</i></p> <p>This complex project had an aggressive schedule that intertwined with existing traffic patterns and other Woodrow Wilson Bridge projects that were accommodated while working over water, rail systems, and on the Capital Beltway, considered one of the busiest roads in the country. Weekly progress meetings were held with the owner, as well as meetings dealing with MOT, scheduling, and lane closures to discuss coordination with the other ongoing projects. We also coordinated the work with the local city, police, fire and other emergency responders, and obtained required noise, grading and lane closure permits. Construction occurred in three phases with six traffic shifts and commanded major interim milestone coordination from a demanding schedule with incentive/disincentive clauses. <b><i>This project was successfully delivered on time and on budget with the substantial completion date achieved 112 days early and the completion date 17 days less than the full incentive date. Actual completion date was June 27, 2013, 99% complete as of April 3, 2013, and was officially completed three days early. This project was also the winner of the 2013 VTCA Transportation Engineering Award.</i></b></p> <p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li>Since effective coordination among all Woodrow Wilson Bridge projects was paramount, corridor coordination and job progress meetings were held discussing issues/solutions, scheduling, partnering, safety, MOT, which mitigated conflicts and eased the flow of each project.</li> <li>Due to excessive traffic congestion, Corman proposed MOT revisions to improve traffic flow which eliminated three phases of construction and reduced traffic shifts. These revisions were implemented with VDOT's approval, resulting in improved public traveling.</li> <li>Contract drawings showed no utility conflicts. As work began, it became clear many conflicts existed. Rather than wait to discover them, Corman proactively identified and recorded all existing utility locations for the entire project. As a result, the original scheduled was maintained with extensive relocations coordinated with the schedule.</li> <li>The Corman-led JV developed the "Safety Time" Program which required crews to stop for five minutes at 9:00 am, 11:00 am and 1:30 pm to inspect, discuss, and immediately correct safety issues. Topics included identifying potential safety risks, reviewing methods, tools and equipment used, evaluating/discussing if work is being performed the safest way and what can be done to improve safety, and reviewing housekeeping (tripping, falling, pinching, struck-by hazards, etc.). Since instituting this program, injuries have been significantly reduced.</li> </ul>
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					Original Contract Value	Final or Estimated Contract Value	
Name: <b>Route 13/158 (Design-Build)</b> Location: <i>Gates &amp; Hertford Counties, NC</i>	Name: <b>Rummel, Klepper &amp; Kahl, LLP (RK&amp;K)</b>	Name of Client/ Owner: <b>North Carolina DOT</b> Phone: <b>252.332.4514</b> Project Manager: <b>Scott Emory</b> Phone <b>252.332.4514</b> Email: <b>semory@ncdot.gov</b>	<b>12/2014</b>	<b>08/2015</b> <i>(NCOT added 3,700 feet to the project limits resulting in contract extension.)</i>	<b>\$54,500</b>	<b>\$56,000</b> <i>(NCOT added 3,700 feet to the project limits resulting in additional contract value.)</i>	<b>\$56,000</b>

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

<p><b>Scope and Complexity Similarities</b></p> <ul style="list-style-type: none"> <li>• Design-Build</li> <li>• Interstate Design</li> <li>• Interstate &amp; Bridge Work</li> <li>• Project Size and Scope of Work</li> <li>• High Profile</li> <li>• Excessive Congestion &amp; MOT Requirements</li> <li>• Bridge Design</li> <li>• Geotechnical Challenges</li> <li>• Utility Coordination</li> <li>• Environmental Permitting and Protection</li> <li>• Bridge Deck Partial Removal and Overlay</li> </ul>	<p><b>NARRATIVE DESCRIPTION</b></p> <p>This Design-Build Project in Hertford and Gates Counties widens US 13/US 158 from US 158/NC45 near Winton to the US 158 Bypass in Tarheel. The improvements included 7.1 miles of four-lane divided facility, bridges, and the construction of an interchange at US 158/NC 45. Similar to I-64 Capacity Improvements – Segment II project, a major challenge was dealing with very poor soil conditions and maintaining current traffic volumes. The <i>E. V. Williams, Inc. Team included RK&amp;K</i> providing the design services and <i>McLean Contracting Company</i> constructing project structures that includes a new single-span 1,200-foot long bridge over the Chowan River, dual bridges at Buckhorn Creek, dual bridges at the Route 13 over NC 45 interchange and the rehabilitation of the existing bridge over the Chowan River that consisted of the removal of 1 ¼” of the deck and replacing with latex modified concrete. Other major items were 218,000 CY of undercut, 1,131,000 CY of borrow fill, 22,000 LF of storm drain pipe, 187,000 tons AGB, and 25,000 LF of water line.</p> <p>One of the major risks on the project was performing the undercut/soils remediation without detours or impacting the existing traffic. The Team utilized a slide rail system to accomplish the deep undercut to minimize any impacts to the existing roadway and traveling public. Additional innovation included providing phasing that eliminated the project and allowed detours without impacts to the project schedule.</p> <p><b>SUCCESSFUL DELIVERY</b></p> <ul style="list-style-type: none"> <li>• <b>Interchange Design and Reconstruction</b> – By reversing the grade separation at the Route13/158 Interchange and having Route 13 cross over Route 158, we were able to reduce the quantity of excavation of unsuitable soils. Further, we were able to remove the need for a temporary roadway to maintain traffic as well as minimize the relocation and protection of an existing 12” sewer force main.</li> <li>• <b>Traffic Management</b> – Utilizing innovative traffic control measures, the Team was able to phase the project’s sequence of construction to eliminate the need for any complete closure of the roadway (as allowed by the RFP), which improved traffic operations and safety of the project. An existing signalized intersection was also relocated on the newly proposed ramps reducing the construction activity and minimizing impacts to the traveling public.</li> <li>• <b>Roadway Design, Reconstruction and Widening</b> – An added value was brought to the project by improving the sight distance and increasing the design speed. This was accomplished by adjusting the vertical and horizontal curves and did not require additional ROW.</li> <li>• <b>ROW and Adjacent Property Owners</b> – It was a requirement on the project to minimize the impact to a Historical District. The Team completed all ROW acquisition on over 70 different parcels and was responsible for appraisals and negotiations that secured all ROW without having to proceed to condemnation on any parcel.</li> <li>• <b>Innovation</b> – During the RFP phase, the Team identified problems associated with locating the new roadway to the west of the existing road as called for in the RFP documents. Field exploration by staff showed that on the west side, unsuitable organic material extended well under the existing roadway and slope. On the east side, the Team discovered that proper undercutting and replacement with good embankment had already been accomplished. The Team also determined that the Department owned right-of-way on the east side of the roadway. Adding further complication to the west side expansion, the presence of a 12” gas main was discovered that ran parallel and within the NCDOT right-of-way in this area. Utilizing this information, the Team developed an ATC (Alternate Technical Concept) and submitted it to the Department for approval. This innovation saved the Department \$5,000,000 directly on undercutting and ROW and an additional \$3,000,000 by avoiding relocating the existing 12” gas main in its current location crossing the Chowan River. It also reduced the construction schedule by six months.</li> </ul> <p>• <b>Added Value</b> – Because of the Team’s cost effective handling of the project and excellent working relationship, NCDOT added .7 of a mile to the project limits under this contract that when completed, will improve service for the traveling public.</p> <p>• <b>Quality in the Final Roadway</b> – Over 280,000 sy of new roadway was constructed by using the latest GPS technology to speed production and provide a higher quality product. Terrain models were built in-house on AutoCAD 3D and the use of GPS on finish dozer and graders.</p> <p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li>• By moving the roadway location to the west side at Chowan River, we saved NCDOT over \$8,000,000 and six months construction time. As a result, the Department saved \$17.5M over the next responsible bidder.</li> <li>• Identifying all the areas where unsuitable soils existed and using our expertise gained from over 50 years of experience in similar conditions were critical to keeping the project on time and on budget. We will bring this same experience to the I-64 Capacity Improvements – Segment II Project, starting early to evaluate the soil conditions that will affect the project and performing a detailed analysis of each problem location to determine the best solution for that location.</li> <li>• <b>ROW Acquisition</b> - EVW was responsible for over 70 different parcels that were finalized without having to go to condemnation. EVW will start early to identify all ROW that is required. Once we have determined the project requirement, the team will diligently conclude the negotiations with the property owners.</li> </ul>	<p><b>Proposed Personnel for I-64 Capacity Improvements Project</b></p> <p>Mark Osenbaugh, Design Build Project Manager, (EVW) Chris Martin, Construction Manager, (EVW) Mike Merritt, Roadway Design Manager (RK&amp;K) Joe Rauseo, Noise Analysis Designer (RK&amp;K) Keith Christiansen, Project Manager, (McLean)</p>	 
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***Attachment 3.4.1(b)***

***Lead Designer Work History Form***

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>I-64 Widening and Route 623 Interchange Improvements (Design-Build)</b> Location: <i>Goochland and Henrico Counties, VA</i>	Name: <b>Corman Construction, Inc.</b>	Name of Client.: <b>Virginia DOT</b> Phone: <b>(804) 524.6433</b> Client Contact: <b>Shane Mann</b> Phone: <b>(804) 524.6433</b> Email: <b>shane.mann@vdot.virginia.gov</b>	<b>09/2013</b>	<b>11/2015</b>	<b>\$33,238</b>	<b>\$34,862 (Owner Approved Changes)</b>	<b>\$2,500</b>

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

Scope and Complexity Similarities	NARRATIVE DESCRIPTION
<ul style="list-style-type: none"> <li>• Design-Build</li> <li>• Interstate Design on I-64</li> <li>• I-64 Widening to Median</li> <li>• Bridge Design</li> <li>• MOT/TMP</li> </ul>	<p>RK&amp;K's Richmond office served as the Lead Designer for this Corman/RK&amp;K/ECS project which involved widening 4.5 miles of I-64 from a four-lane divided freeway to a six-lane divided freeway, with additional through lanes constructed to the inside of I-64 in both the eastbound and westbound directions. The project began west of the interchange with Route 623 and extended to Route 295 (Pouncy Tract Road), and included two replacement bridges and improvements to the I-64/Route 623 interchange. The I-64 interchange with Route 288, is also located within the project limits. This project is an excellent match to the I-64 Capacity Improvements – Segment II project in both scope and complexity. We offer the same team of Lead Designer (RK&amp;K), Geotechnical Engineer (ECS) and Contractor (Corman) for the I-64 Capacity Segment II project, bringing with us the experience gained from the I-64/Route 623 project.</p> <p><b>Roadway Design</b> – This segment of I-64 provides a critical link between downtown Richmond and the Richmond's "West End," with traffic volumes in this area at nearly 50,000 vehicles per day. I-64 also serves as the primary connection between the cities of Richmond and Charlottesville. Design on this freeway, with a 75-mph design speed, included the following roadway improvements: addition of one 12-foot wide lane in each direction of I-64, a 12-foot-wide paved shoulder in each direction, median guardrail installation and outside shoulder guardrail replacement. Upgrades to the existing outside shoulder included full depth reconstruction for a portion of the project length, as well as 2" mill and overlay for the remaining portions of the project. Improvements to the I-64/Route 623 interchange included widening both off ramps from I-64 to Route 623 to provide additional turn lanes, the addition of a left turn lane on Route 623 southbound to access I-64 eastbound, and upgrading the existing traffic signal.</p> <p><b>Structures and Bridges</b> – Twin replacement bridges were designed for I-64 over Little Tuckahoe Creek. The new 130' simple span prestressed concrete girder bridges replaced the existing three-span steel girder bridges. Design considerations included designing for staged construction, significant skew and extreme scour conditions. An innovative abutment design was used, incorporating MSE-type straps at the abutment walls to carry a portion of the lateral loads, reducing the number of augured piles required for lateral stability of the abutments.</p> <p>Structural design tasks on this project also included design of foundations for signal and sign structures, upgrades to pier protection barriers to meet current standards at existing overpasses, <b>and placement of five MSE retaining walls at existing culvert locations, similar to what may be needed on the I-64 Segment II project near Sta 2409+45. By using these walls to support the widened roadway, in lieu of extending the culverts, additional stream and wetland impacts were avoided.</b> Construction duration for installation of the MSE walls was also shorter than the option of culvert extensions.</p>
<p align="center"><b>Proposed Personnel for I-64 Capacity Improvements Project</b></p> <p>Gary Johnson (RK&amp;K), Tommy Peacock (RK&amp;K), Ashley Johnson (RK&amp;K), Mike Hogan (RK&amp;K), Ricky Woody (RK&amp;K), Dave Plum (RK&amp;K), Lee Yowell (RK&amp;K), and Randy Wirt (ECS)</p>	
<p><b>MOT/TMP</b> – RK&amp;K developed a comprehensive Transportation Management Plan (TMP) and Maintenance of Traffic (MOT) plans for managing traffic during construction, which included a traffic operations plan, temporary traffic control plan and public communications plan. The sequence of construction was designed so that construction could be accomplished in two phases, with two lanes of traffic in each direction maintained throughout construction. The TMP was designed in accordance with the allowable work hours and holiday and weekend restrictions implemented by VDOT for this project.</p> <p><b>Environmental</b> – RK&amp;K provided full service environmental design and permitting for this project, including: wetland delineations and stream assessments; determination of wetlands and stream compensatory mitigation requirements; securing rare, threatened and endangered species clearances; securing cultural resource clearances from the Virginia Department of Historic Resources; acquiring water quality permit authorizations and permit modifications; securing Clean Water Act Individual Permit, State Programmatic General Permit, Water Protection General Permit, and Virginia Stormwater Management Permit from the VDEQ; and environmental compliance assistance for the implementation of environmental commitments contained in the NEPA document.</p> <p><b>Geotechnical</b> – As part of the Corman/RK&amp;K Team, ECS provided full geotechnical services for this project. Work included subsurface explorations, laboratory testing including soil classification, strength, and consolidation parameters, design of permanent and temporary pavement sections, assessment and mitigation for unsuitable soils, foundation design for overhead sign and signal structures, and analysis of MSE retaining walls at culvert locations. ECS also provided foundation design for the replacement bridges and associated wingwalls, utilizing rock-socketed steel H-piles and an innovative design where MSE-style reinforcement straps were used to reduce the lateral load on abutment piles.</p> <p><b>Hydraulics / Drainage</b> – RK&amp;K performed a full Hydrologic and Hydraulic Analysis (H&amp;HA) for the bridge crossings over Little Tuckahoe Creek., including HEC-RAS modeling and scour analysis. Drainage design included design of stormwater management facilities, erosion and sediment control measures, bridge deck drainage, adequate outfall analysis, underdrains, storm sewer systems, and design of temporary drainage needs for MOT sequencing.</p> <p><b>SUCCESSFUL DELIVERY</b></p> <p>Plan submittals were delivered on schedule, allowing construction to begin on time; Two replacement bridges were designed that provided VDOT with new structures with a longer life and fewer maintenance issues than rehabilitating and maintaining the existing bridges, at a lower cost than repair and rehabilitation; Innovative use of MSE retaining walls at culvert locations to reduce cost and environmental impacts; This project earned the second highest Construction Quality Improvement Program (CQIP) score for a Design-Build project; Construction is on schedule to be completed by contract completion date; The DBE goal of 10% was exceeded.</p> <p><b>LESSONS LEARNED</b></p> <p><b>Innovative Design</b> – When implementing innovative design concepts in DB projects (such as the use of MSE straps at the abutments), it is important to engage VDOT early on in the project and make plan and design submittals as early as possible to allow time for VDOT review and approval. It is also important to weigh all of the impacts of a design decision early on, making sure that the full cost/benefit to the project is fully understood (i.e. – If adding retaining walls at culvert locations changes a borrow job to a waste job, ensures that the retaining wall option still provides the best cost benefit to the job); <b>Design During Pursuit</b> – By doing a full hydraulic analysis during the pursuit phase of this project, RK&amp;K determined that a replacement bridge with a smaller hydraulic opening than the original bridge was feasible, resulting in significant cost savings related to the bridges.</p> <p><i>"I travel this road several times a day and am very pleased with the traffic safety and direction signage. The travel through this area is very smooth and hope that the work is completed soon. Thank you very much for a job well done – Ron Brady, Goochland Resident"</i></p> <p>*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.</p>	

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>I-4744: I40 Widening &amp; Signing (Design-Build)</b> Location: <i>Wake County, NC</i>	Name: <b>S.T. Wooten</b>	Name of Client.: <b>North Carolina DOT</b> Phone: <b>919.707.6601</b> Project Manager: <b>Rodger Rochelle, PE</b> Phone: <b>919.707.6601</b> Email: <b>rdrochelle@dot.state.nc.us</b>	<b>06/2009</b>	<b>06/2011</b>	<b>\$49,000</b>	<b>\$49,000</b>	<b>\$3,900</b>

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

<p align="center"><b>Scope and Complexity Similarities</b></p> <ul style="list-style-type: none"> <li>Design-Build</li> <li>Interstate Design</li> <li>Interstate Widening</li> <li>Project Size</li> <li>Bridge Design</li> </ul>	<p><b>NARRATIVE DESCRIPTION</b></p> <p>RK&amp;K's Raleigh office served as the Lead Designer for the entire project with assistance from RK&amp;K's Richmond office. The 6.4 miles of I-40, from west of Wade Avenue to east of Jones Franklin Road is a critical commuter freeway with traffic volumes that exceed 130,000 per day. The project widened the existing four-lane divided roadway to a six-lane divided facility and included widening dual bridges over US 1/US 64 and dual bridges over eastbound Wade Avenue. With innovation and an aggressive design and construction schedule, the project approach circumvented complex traffic issues and was successfully completed nearly a full year ahead of schedule.</p> <p><b>Highway/Roadway Design</b> – I-40, known as the Triangle's "Main Street," is also a critical freeway. Traffic volumes exceeded 130,000 per day, which is far above the capacity of a freeway in this area. This rolling urban freeway with a 70-mph design speed included the following roadway improvements: design of one 12-foot wide lane in each direction of I-40 expanding the interstate from four to six lanes; a 12-foot-wide paved shoulder in each direction; median guardrail installation and shoulder guardrail replacement; at the eastbound I-40/Wade Avenue split, the roadway was expanded from two to three lanes.</p> <p><b>Pavement Markings and Signing</b> – As a heavily traveled urban facility, special attention was focused on signing and pavement markings.</p> <p><b>Intelligent Traffic Systems</b> – Responsible for the design of ITS communications cable routing plans, CCTV cameras, and ITS.</p> <p><b>Bridge Design:</b> Structures were designed for the bridge widening at Wade Avenue and US 1 / 64, as well as two sound barrier walls.</p> <p><b>Utilities</b> – Responsible for the identification of conflicting utilities, coordination of Level "A" S.U.E. data and management of utility coordination efforts. Utility design included the design and permitting of water services for the construction office and asphalt plant facilities.</p>
<p align="center"><b>Proposed Personnel for I-64 Capacity Improvements Project</b></p> <p>Mike Merritt, PE (RK&amp;K) Joe Rauseo (RK&amp;K)</p>	<p><b>SUCCESSFUL DELIVERY</b></p> <ul style="list-style-type: none"> <li>This project was awarded the 2011 NAPA Safety Innovations Award.</li> <li>Creative and innovative design and construction techniques completed this project a full year ahead of the client's required June 15, 2012 completion date.</li> <li>The project was delivered ahead of schedule and within budget through the use of innovative designs and creative construction techniques.</li> <li>Strict adherence to sediment and erosion control measures resulted in minimal environmental impacts.</li> <li>The project was noted by the client as one of their "finest transportation achievements." This project received several awards demonstrating the high quality of the team.</li> <li>Awards – ACEC/NC Engineering Excellence Award; 2011 AGC Pinnacle Award for Best Highway Project in the Carolinas; 2010 NAPA Safety Innovation Award.</li> </ul>
<p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li><b>Work Zone Access</b> – When widening to the median, using alternate methods for delivering materials to the median reduces exposure to traffic and reduces construction time.</li> <li><b>Coordination</b> – Close coordination with subconsultants and the Contractors is vital to a successful design-build project.</li> <li><b>Design Work Packages</b> – Using staged submittals of design plans (structure, traffic controls, erosion control, etc.) allowed work to begin much earlier than following the typical process. The process works especially well for median widening because right of way and permits are minimal.</li> <li><b>Maintenance of Traffic</b> – Additional traffic studies may yield more efficient MOT scenarios. These traffic studies are quite beneficial to the design-builder, owner, and traveling public.</li> </ul>	<div style="text-align: center;">  </div> <div style="text-align: right;">  </div>
<p><i>"I commend the entire Design-Build Team for completing this project quickly, safely, and cost effectively. The Design-Build Team's efforts exceeded NCDOT's expectations in innovation during both design and construction. Despite the numerous and complicated traffic control, schedule, subgrade, and public information challenged of this project, the S.T. Wooten/RK&amp;K total 'team approach' and responsiveness to the NCDOT contributed to one of North Carolina's finest transportation achievements." – Mr. Rodger Rochelle, PE Director of the NCDOT Transportation Program Management Unit - Source: ACEC Award - Endorsement Letter</i></p> <p>*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.</p>	

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: <b>I-95 Express Toll Lanes</b> Location: <i>Baltimore, MD</i>	Name: <b>Cherry Hill Construction</b>	Name of Client.: <b>Maryland Transportation Authority (MDTA)</b> Phone: <b>410.931.0808</b> Project Manager: <b>David Labella</b> Phone: <b>410.931.0808</b> Email: <b>dlabela@mdta.state.md.us</b>	<b>11/2011</b>	<b>11/2014</b>	<b>\$148,000</b>	<b>\$148,000</b>	<b>\$8,832</b>

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

<b>Scope and Complexity Similarities</b>	<p><b>NARRATIVE DESCRIPTION</b></p> <p>The I-95 Express Toll Lanes project addressed improvements to approximately 6.5 miles of I-95 on the northeast side of Baltimore, including the reconstruction of three major interchanges and the addition of four Express Toll Lanes (ETL's). RK&amp;K's Baltimore office, with assistance from their Richmond office, was responsible for the design of the I-95 interchange with MD 43, which was a traditional cloverleaf configuration. The new interchange also included direct connects to the ETLs. In addition to an expanded bridge crossing of MD 43 over I-95, RK&amp;K designed new bridges over the interchange directional ramps as well as the I-95 bridge over Campbell Boulevard.</p> <p><b>Roadway Design:</b> The major modification to I-95 consisted of adding two Express Toll Lanes (ETL) in each direction. The eight General Purpose Lanes (GPL) were maintained. The ETLs are located in the middle of the roadway and separated from the GPLs by a concrete barrier. Access from the ETL's to MD 43 is via ramps in the median of I-95 to a signalized intersection with MD 43. Directional ramps to and from the GPL's replace the loop ramps in the MD 43 interchange. This change required four additional bridges within the limits of the interchange, having a total of six new bridges. In order to accommodate the wider I-95 typical section, all of the existing bridges have been reconstructed.</p> <p>Retaining walls were included to minimize right-of-way requirements and reduce/eliminate impacts to environmental features. Other structural elements included noise walls, sign structures, and specialized drainage structures. The project also included the following design elements: surveys, utility designating, utility design (16 inch and 48 inch sanitary mains), signing, pavement markings, signalization, lighting (high mast and low level), right of way plat preparation, drainage, stormwater management, erosion control, wetland mitigation, forest stand delineations, pavement design and geotechnical investigation and analysis. Maintenance of traffic was also a complex element for the interchange design due to the high traffic volumes and the need to maintain the existing number of travel lanes. The project also required preparation of contract special provisions and a construction cost estimates. Special details were developed to protect an existing 108 inch water main during construction. RK&amp;K participated in public meetings and attended meetings with specific property owners. The design coordination with the adjoining design sections, local jurisdictions, and the Owner were critical to the project's design and design schedule. RK&amp;K also developed a 3D animated computer model of the interchange for presentation at meetings with the Authority and the public. Due to the toll components of the project, the design also accommodated ITS for dynamic message signs, toll gantries, fiber optics, cameras, and backup generators.</p> <p><b>SUCCESSFUL DELIVERY</b></p> <ul style="list-style-type: none"> <li>• Design schedule was accelerated and plan submittals were delivered on schedule to meet the overall Section 100 schedule to open ETL lanes by 2015.</li> <li>• Provided innovative design solutions for staging the construction of the MD 43 bridges while maintaining high volumes of traffic on I-95 and MD 43.</li> <li>• Four MSE Walls were used to save costs to ramp ETL Ramps to the MD 43 bridge.</li> <li>• Worked closely with all utility owners in preparing relocation design plans in a timely manner to meet project schedules.</li> <li>• Developed an innovative solution to install a 21 foot high retaining wall and noise wall adjacent to a very old 108 inch owned water main. Required a complex containment system to protect the water line during and after construction.</li> <li>• Designers worked closely with the contractor during construction responding to RFIs, shop drawings, MOT change requests, and etc. to meet construction completion dates. Response times to RFIs and shop drawings were completed within a couple of days and well in advance of the allotted review time of two weeks to expedite construction.</li> <li>• Assisted MDTA in preparing graphic displays and write-ups for the Public Outreach efforts for the project.</li> <li>• Impacts to environmental features were maintained or reduced to the original permits for the project.</li> </ul> <p><b>LESSONS LEARNED</b></p> <ul style="list-style-type: none"> <li>• <b>Construction Phasing</b> – Phasing of bridge removal and reconstruction was complex and required temporary piers to support the bridge until the I-95 lanes could be reconstructed.</li> <li>• <b>Utilities</b> – Coordination with utilities was extremely important. Baltimore Gas and Electric (BGE) was relocating a line through the area and substantial roadway cuts needed to be coordinated with them to ensure that the BGE line was installed at appropriate locations before the road construction commenced.</li> <li>• <b>Maintenance of Traffic</b> – An intensive MOT plans was developed that required significant amounts of temporary pavement on temporary ramp connections. Detailed alignments, profiles and cross sections were required to appropriately prepare the temporary roadways for traffic use.</li> </ul> <p>*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.</p>	 
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