Interstate 64
Capacity Improvements - Segment II

From: 1.05 Miles West of Route 199 (Humelsine Parkway)
To: 0.54 Miles East of Route 238 (Yorktown Road)
Newport News, York County, and James City County, Virginia

Contract ID No: C00106665DB82
May 28, 2015

Client: Virginia Department of Transportation
3.2
Letter of Submittal
3.3
Offeror’s Team Structure
3.3 Offeror’s Team Structure

Offeror/Legal Entity/Prime/General Contractor - Wagman, founded in 1902, continues today as a fourth generation, private family-owned heavy civil contractor specializing in transportation infrastructure and has grown to become a nationally recognized leader within the industry. Wagman is an experienced Design-Build (DB) Contractor who has partnered to complete the design and construction of over $1 Billion of transportation projects in the Mid-Atlantic Region.

In 2013, Wagman acquired Key Construction Company, Inc. (Key) and D.W. Lyle Corporation (D.W. Lyle). These acquisitions provided Wagman with an additional 50+ years of heavy construction experience in Virginia. Wagman retained the key personnel from these acquisitions whose knowledge, resources, and experience strengthen Wagman’s Team. With the acquisition of Key and D.W. Lyle, both of whom have an extensive history as VDOT contractors, Wagman has fully integrated its presence in Virginia. Furthermore, in February 2015 Wagman occupied a new office in Dinwiddie, Virginia. With innovative engineering experience and a large fleet of heavy equipment, we are well-positioned to manage this project and can ensure a successful end result. In addition, Wagman has been a producer and installer of Bridge Deck Overlay, including latex modified concrete, since 1970. Our local resources and knowledge of the area, combined with decades of experience working with owners, contractors and designers allows us to be a valuable resource to VDOT.

Lead Designer/Project Management/Highway/Structural Design/Traffic/TTS/MOT/Utilities/Surveying/Right-of-Way (VDOT Prequalified ROW Consultant) - JMT is a multi-disciplined, A/E employee-owned company that offers a full array of consulting and technology services for infrastructure projects (including DB) throughout the United States. JMT is currently ranked No. 75 in Engineering News-Record’s (ENR) Top 500 Design Firms and was also recently named the 2015 Mid-Atlantic Region Design Firm of the Year by ENR. JMT has completed thousands of highway and bridge projects ranging in complexity from local intersection improvements to the most multiphase interstate projects. They have a documented reputation for the development of innovative solutions for DB projects, on-time and within budget in a variety of project delivery methods including DB and Public-Private-Partnerships (P3). JMT has been the Lead Designer or Quality Control Manager on several DB projects and one P3 project throughout Virginia with total design and construction dollars exceeding $1 billion.

Wagman and JMT and the individual staff members of Wagman and JMT have a solid, long-term, work history of teaming and partnering on transportation and, in particular, roadway and bridge projects over the past 25 years. More than 85% of the Wagman/JMT DB Team’s (DBT) current work is being performed for repeat clients, illustrating our ability to deliver a safe, quality, and cost-effective project to our customers. The DBT takes pride in our total commitment to schedule and budget goals, particularly our ability to offer creative and innovative solutions to any design and/or construction obstacle.

Assisting the DBT is a hand-picked group of highly-qualified subconsultants that are adept in their field of expertise. These subconsultants include:

Lead Hydraulics/Noise Analysis/Transportation Management Plans/Environmental/Permitting/Public Involvement/Relations - Since 1946, McCormick Taylor (MT) has been providing engineering, environmental, planning and communications services to transportation clients throughout the Mid-Atlantic region. With over 470 people in 19 offices, their staff’s diverse strengths are in multi-modal transportation and transit planning and environmental analysis, public involvement and communications, traffic studies, highway, rail and bridge design, and construction inspection. Recently MT’s DB project involvement has been with the I-95 HOT Lanes, Greenview Drive, Route 460 Corridor, ICC, and CSX Cherry Hill Third track. The firm recently completed the VDOT I-64 Richmond to Hampton Roads Environmental Impact Statement (EIS), giving them project specific knowledge for this DB project area. Mr. Rick DeLong, PE, managed all of the roadway and traffic design activities for the I-64 EIS and was the Lead Highway Engineer for the I-64 Grove-Busch Gardens Interchange project, also located in the DB project area. MT has three Virginia offices located in Richmond, Verona and Bristol.
3.3 Offeror’s Team Structure

### DBT Subconsultants

<table>
<thead>
<tr>
<th>DBT Subconsultants</th>
<th>Firm</th>
<th>Project Experience in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCI Technologies, Inc.</td>
<td>ECS Mid-Atlantic, LLC</td>
<td>QC Management and Inspection</td>
</tr>
<tr>
<td>GET Solutions, Inc.</td>
<td>Engineering and Testing Services, Inc.</td>
<td>Geotechnical Engineering</td>
</tr>
<tr>
<td>Appraisal Review Specialist, LLC</td>
<td>Harrison Chavis &amp; Associates, Inc.</td>
<td>Review Appraisals (VDOT Prequalified)</td>
</tr>
</tbody>
</table>

### 3.3.1 IDENTITY OF AND INFORMATION ABOUT THE KEY STAFF

The DBT is led by qualified and capable professionals with local-area knowledge and strong DB experience. The DBT’s identified personnel have relevant experience on transportation projects (including DB) in roles similar to those proposed on this project team. The DBT structure employs best management practices, emphasizes intra-team communications, and empowers team members to solve issues at the most appropriate organizational level. Our proposed key staff members consisting of a Design-Build Project Manager, Responsible Charge Engineer, Independent Quality Assurance Manager, Design Manager, Construction Manager, and Maintenance of Traffic Manager, average 28 years of design and construction knowledge including significant experience with VDOT and innovative project delivery methods.

All DBT key staff members will meet their individual responsibilities as outlined on Pages 11-13 of the RFQ. The chart below introduces our Key Personnel; resumes are included in Appendix 3.3.1.

<table>
<thead>
<tr>
<th>DBT Key Personnel</th>
<th>Firm</th>
<th>Years</th>
<th>Project Experience in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anthony Bednarik, DBIA</td>
<td>WAGMAN</td>
<td>27</td>
<td>Design-Build Project Manager</td>
</tr>
<tr>
<td>2. Gregory M. Andricos, PE</td>
<td>WAGMAN</td>
<td>23</td>
<td>Responsible Charge Engineer</td>
</tr>
<tr>
<td>3. John K. Vicinski, PE, DBIA</td>
<td>JMT</td>
<td>31</td>
<td>Quality Assurance Manager</td>
</tr>
<tr>
<td>4. William (Bill) E. Schaub, PE</td>
<td>JMT</td>
<td>35</td>
<td>Design Manager</td>
</tr>
<tr>
<td>5. W. Michael Scalia</td>
<td>WAGMAN</td>
<td>27</td>
<td>Construction Manager</td>
</tr>
<tr>
<td>6. Randy L. Boice, PE</td>
<td>JMT</td>
<td>24</td>
<td>MOT Manager</td>
</tr>
</tbody>
</table>

### 3.3.2 ORGANIZATIONAL CHART

The organizational chart image provided on the next page shows the “chain of command” while identifying major functions to be performed by the DBT. The organizational chart also shows the reporting relationships of Key Personnel responsible for the management of design, construction, and QA/QC activities. The DBT has clearly defined roles and relationships.
3.3 Offeror’s Team Structure

Third Party Stakeholders
- York County / James City County
- City of Newport News
- City of Williamsburg / Colonial
- Yorktown Naval Weapons Station
- Hampton Roads TPO / Transit
- Virginia Port Authority / CSX
- Traveling Public / Tourism Industry
- Utility and Property Owners
- Emergency Services Responders
- Local Business and Education Institutions

VDOT
- Hampton Roads District Project Manager
  - Public Relations Mgr.
    - Patsy Napier
  - DB Project Manager
    - Anthony Bednarik, DBIA
  - Safety Manager
    - Wayne Johnson
  - Responsible Charge Engineer
    - Gregory Andricos, PE

Design Manager
- William (Bill) Schaub, PE

Lead Structural Engr./Railroad Coordination
- A. Trip Phaup, PE

Lead Hydraulic Engr.
- Brad Stimpson, PE
  - Kevin Huang, PE

Landscape Architect / Complete Streets
- Jon Conner, PLA, LEED

Right of Way
- Lee Cooper, R-W-NAC

Review Appraiser
- R. Scott Barber

Fee Appraiser
- Harrison Chavis, MAI

Design QA/QC Mgr.
- Robert Reed, PE

Lead Highway Engr.
- Rodney Haylett, PE

Highway Engr.
- Rick DeLong, PE

MOT Manager
- Randy Boice, PE

Utility Coord./Reloc.
- Dave Malinowski, PE

Surveys/SUE
- Michael Zmuda, LS, PE

Noise Wall Analysis
- Josh Wilson

Hwy. Superintendent
- Brad McClung

Struct. Superintendent
- Rodney McComas

Constr. MOT Mgr.
- Brian Kasky, ATSSA

Utility Coord./Constr.
- Jason Hershey, DBIA

Geotechnical Engr.
- Michael Lefler, PE
  - Camille Karan, PE

Environmental Mgr.
- Brennan Collier

Environ. Permitting
- Ian Frost, CEP, CE

QA Manager
- John Vinceski, PE, DEIA

QC Manager
- M. Dow Lassiter, PE

QC Staff Inspectors
- AMRL/CCRL Lab Testing
- KCI

Scheduler
- Mike Mansfield, PE

Project Controls
- Will Culbertson

Legend
- = Direct Report Line
- = Line of Communication
- = RCE Line of Communication
- = Key Personnel
3.3 Offeror’s Team Structure

3.3.2 ORGANIZATIONAL CHART NARRATIVE

Reporting Relationships of Key Personnel - The DBT organization is optimized to present clear, logical, reporting relationships to manage the design and construction of the Interstate 64 Capacity Improvements – Segment II project, while maintaining distinct responsibilities and project controls. The project organization is structured to facilitate timely and effective communication among all personnel, regardless of position. Practical lines of communication running between design, construction, and the independent QA/QC support staff, along with direct reporting to the DBPM allows all levels to function as a team. Our organizational structure is a successful model implemented by Wagman and JMT on similar DB projects.

The organizational chart further depicts that the main production staff interfaces with the Design-Build Project Manager (DBPM) will be comprised of the Responsible Charge Engineer (RCE), Independent Quality Assurance Manager (QAM), Design Manager (DM), Construction Manager (CM), and Maintenance of Traffic (MOT) Manager allowing effective communication among the Key Personnel. The DM, the CM, and the QAM will support and report to the DBPM in their respective areas of expertise. The DBPM will rely on the DM, the CM, and the QAM to effectively coordinate their individual Team elements and will use these Key Personnel to communicate to all Team members during design and construction. Details of the roles of each of Key Personnel and reporting relationships are listed below:

Design-Build Project Manager (DBPM) - The DBT organizational chart starts with VDOT at the pinnacle of the hierarchy. The DBT recognizes that all final decisions rest with VDOT. The DBT’s primary interface with VDOT will be through the DBPM, Mr. Anthony Bednarik, DBIA. In accordance with sound management practices and VDOT guidance, the DBPM serves in the most crucial role, one that defines success for all aspects of the project. Mr. Bednarik will be responsible for meeting DBT obligations under the Contract and avoiding and resolving disputes. He is the principal conduit for communication with VDOT, and exercises direct control over the design, construction, quality assurance, contract administration and other services required including public outreach functions.

One feature of the DBT proposal is the independence of the key support staff and specialty professionals whose roles are to assure that the highest levels of quality and safety are maintained throughout design and construction phases of the project. DBT members have years of experience with integrated quality and safety programs that have been refined and incorporated in best management practices for delivering innovative and award-winning DB projects.

Responsible Charge Engineer (RCE) – Mr. Gregory Andricos, PE will fill the role of RCE. He has the necessary expertise and experience required to supervise and exercise a degree of control for design and construction and shall accept full professional responsibility for engineering decisions relating to the final work product. Mr. Andricos will be fully integrated among the project team including specialty subcontractors and subconsultants and will be directly involved in or have supervisory direction and control authority in making and approving engineering decisions during construction. He will answer questions and inquiries relevant to engineering decisions relating to design and/or construction. Mr. Andricos will also communicate regularly with VDOT and has the authority to act on behalf of DBT to shut down the project if warranted. The RCE will ensure that engineering services are performed by qualified professionals licensed in Virginia. The RCE will report directly to the DBPM with lines of communications with the DM, CM and QAM.

Independent Quality Assurance Manager (QAM) – Quinn Consulting Services, Inc. (QCS) is the Team’s Independent Construction QA firm for this project. QCS commits Mr. John Vicinski, PE, DBIA to serve as the Independent QAM. He will report directly to the DBPM and communicate with the RCE on all quality issues. He will attend all project meetings. Mr. Vicinski will oversee a QA staff that will include a lead senior inspector, project inspectors, and a records administrator. Additionally, he will oversee the activities of the independent AMRL/CCRL certified off-site materials sampling and testing laboratory. The QAM will have the authority to suspend field activities in the event QA tasks or issues are not complete or construction work is found to be non-conforming.

Design Manager (DM) - The DBT org. chart clearly defines that all design disciplines for the project will report to the DM, Mr. William Schaub, PE. The approach to staffing these disciplines hinges on the concept of matching the requirements of this project to the experience and depth of knowledge of
staff best suited to fulfill these specific requirements. While the majority of the disciplines will be covered by JMT professionals, the Design Team does include several specialty subconsultants who will augment JMT and report directly to the DM. The DM will report directly to the DBPM and communicate with the RCE. During the design phase of the project, the DM will interface directly with each of the discipline leaders, whether that individual is a JMT staff member or a subconsultant contracted with JMT. Mr. Schaub will also establish and oversee the QA/QC program for design. The responsibilities of the Design QA/QC Team will be separated between QA and QC.

**Construction Manager (CM) – Mr. W. Michael Scalia** is the CM for the project who will oversee all major construction activities and will manage the Construction QC program, Construction MOT Manager, Field Superintendents, Subcontractors, Scheduler and Project Controls, and Construction Quality Control Manager (QCM) will all report directly to the CM. His tasks will include CPM schedule development and updating, resource planning and allocation, budgetary and cost control, subcontractors scheduling, MOT, ESC, and shop drawing review. The CM will report directly to the DBPM and will communicate with the RCE.

**Maintenance of Traffic (MOT) Manager – Mr. Randy Boice, PE** will serve as the lead to develop and implement the Transportation Management Plan for the project. He will be the key point of contact for issues arising relative to the MOT and will ensure that construction activities are coordinated with other roadway and tunnel work in the I-64 peninsula corridor, are communicated to the public, and that construction work zones are accomplished in accordance with applicable standards and requirements. Mr. Boice has held the Advance Level of VDOT’s Work Zone Traffic Control certification for over 4 years. His certification is currently pending renewal, prior to NTP. Mr. Boice’s experience includes traffic engineering, signal system design, TMP analysis and design; and the design of ITS/ETC systems. He will report to the DM and communicate regularly with the Construction MOT Manager.

Assisting the DBT is a hand-picked group of highly-qualified support personnel that are experts in their field of expertise. Please see the table below for a brief description of the qualifications and experience:

<table>
<thead>
<tr>
<th>DBT Support Personnel</th>
<th>Firm</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm</strong></td>
<td><strong>Years</strong></td>
<td><strong>DB</strong></td>
</tr>
<tr>
<td>Patsy Napier, Public Relations Manager</td>
<td>McCormick Taylor</td>
<td>46</td>
</tr>
<tr>
<td>M. Dow Lassiter, III, PE, QC Manager</td>
<td>RC1 Consulting</td>
<td>16</td>
</tr>
<tr>
<td>Robert Reed, PE, Design QA/QC Manager</td>
<td>JMT</td>
<td>40</td>
</tr>
<tr>
<td>Rick Delong, PE, Highway Engineer</td>
<td>JMT</td>
<td>22</td>
</tr>
<tr>
<td>Trip Phaup, PE, Structural Engineer/RR Coord.</td>
<td>JMT</td>
<td>26</td>
</tr>
<tr>
<td>Dave Malinoski, PE, Utility Coord. &amp; Reloc.</td>
<td>JMT</td>
<td>35</td>
</tr>
<tr>
<td>Brad Stimpson, PE, Hydraulic Engineer</td>
<td>JMT</td>
<td>19</td>
</tr>
<tr>
<td>Brennan Collier, Environmental Manager</td>
<td>JMT</td>
<td>19</td>
</tr>
</tbody>
</table>

All of JMT’s Design Team members are registered professionals in their areas of expertise in Virginia and have decades of infrastructure experience including innovative project delivery methods. In addition, JMT and our specialty sub consultants identified below are VDOT Prequalified ROW Acquisition firms.

**Mr. Harrison Chavis, MAI of Harrison Chavis & Associates, Inc.** is VDOT prequalified to perform appraisal services and is a Virginia Certified Appraisal Instructor. Over the past 25 years he has completed ROW Acquisition/Appraisals on projects throughout Virginia including in Hampton Roads.

**Mr. R. Scott Barber of Appraisal Review Specialist, LLC** is VDOT prequalified to perform appraisal review services. ARS has been providing appraisal review services for thousands of transportation projects over the past 40+ years.
3.4
Experience of Offeror’s Team
3.4 Experience of Offeror’s Team

RELATIONSHIP OF WAGMAN AND JMT

Wagman and JMT have a solid and long-term work history of teaming and partnering on transportation and, in particular, roadway and bridge projects including DB. The proposed individuals share the same history of working as a team. The successful completion of the following projects demonstrates that the DBT possesses the skills and knowledge to provide VDOT with an exceptional team for the design and construction of the I-64 Capacity Improvement – Segment II project. In addition, our focus on process, quality, planning, and scheduling make us an excellent team. Both organizations and our proposed key staff are very experienced with the DB process and have a proven cooperative work history. It should be noted that employees, now employed by Wagman/JMT, worked together and successfully completed other VDOT DB projects on-time and budget.

HIGHLIGHTED DBT PERSONNEL HISTORY

Based on our 25 year working relationship in delivering award-winning projects including DB, Wagman and JMT have allocated these senior executive managers to this project. Wagman’s Responsible Charge Engineer (RCE) Mr. Greg Andricos, PE and JMT’s Design Manager (DM), Mr. William (Bill) Schaub, PE have a 18+ year working relationship on DB highway and bridge projects (combined value over $200M) in Northern VA, DC and MD; and 12+ years of competitive “Best Value” and “Award-Winning” DB experience for VDOT, EFLHD, MDSHA and DDOT including:
- Mark Center Short and Mid-Term Improvement, Alexandria, VA
- Fairfax County Parkway Extension, Springfield, VA
- 9th Street Bridge Replacement, Washington, DC
- Taylor Street Bridge Replacement, Washington, DC
- I-95/ MD 202 and MD 214 Interchanges/Arena Drive Bridge over I-95, Prince George's County, MD

Mark Center Improv.    Fairfax County Parkway    9th Street Bridge Repl.    Taylor St. Bridge Repl.

Another long-term DBT relationship includes Wagman’s David Lyle, and JMT’s Lead Structural Engineer, Trip Phaup, PE who have a 22 year relationship working together on bridge and structure related projects including design-build projects, design-bid-build projects, value engineering (VE) redesigns, and construction engineering assignments for cofferdams, sheeting and shoring, crane lifting beams, and other miscellaneous structures. David and Trip first met at Virginia Tech while taking classes in Civil Engineering and Building Construction. They first worked together as Contractor’s project superintendent and Engineer’s construction inspector on the Pungo Ferry Road Bridge in the City of Virginia Beach which was completed in 1991 and have worked hand-in-hand since then on several projects (combined value over $50M) in Virginia including:
- Route 61 over New River, Route 460, and Old Virginia Avenue (DB), Town of Narrows, VA
- James Madison Highway (Route 15) Improvements (PPTA DB), Prince William County, VA
- Southpoint Parkway Bridge over Massaponax Creek Total Bridge Design, Spotsylvania County, VA
- I-95 (NBL and SBL) over CSX Railroad Superstructure Jacking Plans, Caroline County, VA

HIGHLIGHTED DBT WORK HISTORY

Recently DB projects that Wagman and JMT have worked together as a DBT include:
- VDOT, Odd Fellows Road Interchange at U.S. Route 29/460 and Road Improvements (DB), Lynchburg, VA ($29.8M) - Currently working on the design and construction on the interchange and improvements to approximately 1.0 miles of U.S. Route 29/460 and 1.3 miles of Odd Fellows Road.
- VDOT, Route 61 (MacArthur Ave) over New River, Route 460, and Old Virginia Avenue Bridge Replacement and Approaches (DB), Narrows, VA ($17M) - The DBT designed/constructed a 1,200-ft. long jointless replacement bridge/approaches. The scope included preliminary/final design for bridge, road and utilities; acquiring all environmental permits/approvals; providing QA/QC for design/construction; acquiring all required R/W; and performing multiphase MOT and overall project management. The DBT incorporated context sensitive solutions including overlooks on the bridge over the river, a Park & Ride facility, a bioretention facility, sidewalks, bike lanes and lighting.
Experience of Offeror’s Team

- **EFLHD/NPS, U.S. 209 Bridge Replacement and Approaches over Raymondskill Creek in Delaware**
  Water Gap National Recreation Area (DB), Pike County, PA - The DBT designed/constructed this bridge project which involved the replacement of the superstructure and rehab. of the substructure for a 56-year-old bridge. U.S. 209 was reconstructed/widened with improvements to an at-grade intersection.

- **PWCDOT/VDOT James Madison Highway (Route 15) Improvements (PPTA), Prince William County, VA ($52M)** - JMT as a subconsultant, designed two river crossing structures constructed by Wagman (D.W. Lyle). Also provided Stage II services for an additional bridge designed by others, ROW services, and utility designating services.

The DBT have also coordinated and worked together on several Design-Bid-Build projects including:

- **I-95/I-495/I-295/MD 210 Interchanges (Woodrow Wilson Memorial Bridge), Prince George's County, MD ($105.8M)** - During construction JMT worked with Wagman on VE proposals to reduce cost and schedule. The redesign of the approach fill using geofoam resulted in owner savings of $2M+.

- **Jones Branch Connector, Fairfax County, VA ($40M)** - Wagman (D.W. Lyle) constructed the existing Connector bridges now being widened/extended by JMT under the Connector final design.

- **I-695/I-95 Interchange (Section 100) Express Toll Lanes, Baltimore County, MD ($216.7M)** - JMT coordinated with Wagman (managing JV partner) during the construction. The collaboration resulted in accepted value engineering proposals totaling owner savings of $2M+.

**WAGMAN’S EXPERIENCE IN VDOT’S HAMPTON ROADS DISTRICT**

D.W. Lyle Corporation, acquired by Wagman in 2013, originated from Norfolk Contracting in Hampton Roads and completed many projects within the District starting in the 1950’s. The project pictured at right shows Mr. Dean W. Lyle working in the City of Norfolk as Project Supervisor. Dean was the owner of Norfolk Contracting and was instrumental in starting the D.W. Lyle Corporation.

**JMT’S DESIGN-BUILD EXPERIENCE IN VIRGINIA**

JMT is experienced with various procurement methods employed by owners, including DB, DBB, PPP, one-step, two-step best value, and stipulated sum competitions and maintains and nurtures a strong relationship with VDOT. They routinely employ a proactive approach to DB projects providing an interactive design process of collaboration/partnering with the contractor and VDOT to assure engineering excellence. Our successful proactive/partnering approach is evident in the numerous DB projects that JMT has worked on in Virginia. JMT also holds and has held numerous statewide contracts for Design and Traffic Engineering throughout the Commonwealth which further illustrates JMT’s experience and commitment to supporting and improving Virginia’s infrastructure. In addition to the above listed DB projects, other highlighted DB/P3 projects that JMT has participated as the Lead Designer and/or member of the Design Team include:

- **VDOT, Route 3 Widening (DB), Culpeper District, VA ($2.7M)** – JMT is leading design for the widening of Route 3 from two lanes to four lanes, a 5.5 mile section of roadway.

- **VDOT, Route 15/460 Approaches and Bridge over Buffalo Creek in the Town of Farmville, VA ($2.9M)** – JMT was the lead designer and provided design and construction QC for the bridge replacement, while maintaining the daily traffic for 3rd St. (Route 15/460) over Buffalo Creek.

- **VDOT, Coalfields Expressway/Corridor Q, Poplar Creek Section (PPTA-DB), Bristol District, VA ($248M)** – JMT was the lead designer for 4.3 miles of divided, four-lane principal arterial on brand new alignment through extremely mountainous terrain.

Additionally, JMT served as the lead designer on several successful DB projects in the mid-Atlantic region, including the award-wining **11th Street Bridges over Anacostia River and Interchanges ($375M) in our nation’s capital (photo on right).** JMT used innovative design techniques to refined the planning document alignments and interchanges to reduce costs and environmental/community impacts and saved the District DOT $81M.

These example projects described above demonstrate that members of the DBT’s key/support staff have a solid, long-term relationship delivering relevant, successful transportation projects in Virginia and surrounding area.
3.5

Project Risks
INTRODUCTION

Project risks and the management of the risks is the most critical activity for any Design-Build (DB) project. The Wagman/JMT DB Team (DBT) recognizes that each project presents different risks and the probability and impact that the risks pose on the project vary significantly. A best practice to ensure project success includes identification, impact analysis and a proactive risk mitigation/management plan. As the project evolves, the risk assessments and management/ mitigation strategies may change. The DBT takes a proactive approach to identification, mitigation and management of risks and continues the process throughout design and construction. We continually evaluate the effectiveness of our mitigation strategies and have mitigation strategies and processes in-place to analyze any new risks that may arise.

The DBT has carefully identified the three most relevant and critical project risks to mitigate to ensure successful project delivery. We considered numerous potential risks to the project including: geologic conditions, drainage and stormwater management (SWM), environmental permit acquisition, traffic control during construction, bridge rehabilitation/reconstruction, noise control, right-of-way (ROW), utilities, project schedule and stakeholders. Ultimately, we concluded that Traffic Operations and Safety, Agency Coordination, Acceptance and Approval and Existing Geotechnical Conditions are the three risks with the highest potential to adversely impact this project.

Below, we identify and analyze each risk, provide our initial mitigation strategy, and explain our expectation for the level of involvement required of VDOT and other stakeholders.

RISK NO. 1 – TRAFFIC OPERATIONS AND SAFETY

Maintaining safe and efficient operation of traffic during construction is of utmost importance on any project. According to the VDOT Traffic Engineering Division Annual Average Daily Traffic (AADT) Volume Estimates of 2014, an estimated 62,000 to 80,000 vehicles traveled the project corridor on a daily basis. This section of I-64 contains narrow left shoulders and two travel lanes in each direction which exacerbate the unstable flow conditions experienced in the corridor. This is especially noticeable around the tourist attractions of Busch Gardens, Water Country USA, Jamestown, and Williamsburg as well as the work shift periods around the Yorktown Naval Weapons Station. It is imperative for project success that optimal measures are implemented to safely maintain adequate traffic levels of service (LOS) during the construction phase since the implementation of the work zone will effectively decrease capacity and will increase the potential for incidents both during and between peak periods.

Why the risk is critical and the impact the risk will have on the project - Interstate 64 is the main artery for travel in the region. Maintaining traffic to allow the volume of commuters, tourists, truck traffic and emergency responders through the project corridor safely and fluidly is a risk to the schedule, project cost and public perception. Meanwhile, allowing safe and unhindered access to the work zones enables the design-builder to maintain schedule and progress the work efficiently. The DBT designers and contractors will find the optimum balance between these conflicting priorities through collaborating and leveraging their past experience on similar projects to create a well-executed Transportation Management Plan (TMP). This will ensure that the DBT avoids major delays along the project work areas; particularly during the peak tourism periods for Busch Gardens, Water Country USA, Jamestown, and Williamsburg.

Mitigation strategies the DBT may implement to address the risk - As outlined in the RFQ, the proposed scope of improvements will be to add a 12’ through lane and 12’ inside shoulder in both the eastbound and westbound directions. This proposed widening is to occur in the median, including the widening of bridges in the project area. Impacts to the interchanges are to be avoided. Limiting these improvements to the median area reduces complexity of the project but creates greater challenges for the maintenance of traffic (MOT) and construction operations for ingress and egress of construction equipment and materials.

Determining the appropriate traffic control, public communication and transportation operation strategies to be employed on this project will be one of the first activities during the design process and monitored/adjusted as necessary during construction. We will use lessons-learned from past experience. The DBT members have been
involved in similar interstate widening (within the median) projects and have developed successful mitigation strategies, such as:

1. Following Notice-To-Proceed (NTP), the DBT will initiate contact with the appropriate VDOT staff to conduct an Initial Scoping Meeting to present and discuss our traffic control, public communication and transportation operation strategies for the project.

2. A detailed TMP, including a Traffic Control Plan, Public Communications Plan, and Transportation Operations Plan will be prepared in accordance with VDOT’s IIM-LD-241.5 for Type C project and will be submitted to VDOT for review at the appropriate phases of the project development process.

3. Work zone impacts along this section of the I-64 corridor will be thoroughly considered to produce and implement an effective TMP for the project. The detailed traffic impact assessment will be prepared giving careful consideration to existing traffic patterns and crash data within the project area so as to provide contingency plans that address any incident that may occur within the work zone or the queue that could impact traffic flow. Identifying affected local and regional stakeholders, major traffic generators and emergency service providers will also be key to developing operational strategies such as emergency detour routes, hurricane evacuation, construction traffic, ingress/egress, median crossovers, and incident management plans to manage the work zone impacts to traffic. Careful consideration will be given to locating “fender bender” turn outs, emergency turnouts and possibly even a managed coordination of multiple tow truck “on call” companies. Frequent public outreach and media attention is a way to ease the commuter frustration.

4. Because of the width of the existing facility and the reduced pavement section of the outside shoulder, it is anticipated that at least a portion, if not all of the existing outside shoulder will have to be reconstructed to shift and support traffic while the construction in the median is being performed. Particular care will be given to how this shift will be accommodated as we approach the area between Exits 242 and 243 so that tie-ins to the acceleration & deceleration lanes and ramps can be made with minimal outside impacts. The left exit at westbound Exit 243B will be maintained during construction through the use of temporary pavement and lane shifts. Ensuring safe and efficient traffic operations in this section of the corridor will be of utmost importance to this project.

5. Careful attention will be given to the bridge widening over Burma Road and the railroad, and will be analyzed to ensure we are providing sufficient access to construct the piers and abutments and widening of the bridge deck while minimizing temporary impacts and maintaining traffic on both Burma Road and the rail siding. The DBT will ensure that the appropriate coordination with VDOT, the Naval Station, and CSX occurs during the TMP/MOT/Sequence of Construction (SOC) plan development and continuously during construction.

6. As with most widening projects, especially in this region, maintaining temporary drainage during construction will be a challenge. With the majority of the widening occurring in the median, including a combination of graded ditch sections and bifurcated median barriers, ensuring that the appropriate temporary drainage structures are installed to avoid any ponding issues will be critical.

7. The DBT will ensure safety by providing minimum lane, shoulder and clear zone widths at all times. Where minimum lateral offsets cannot be met, appropriate barrier protection will be provided. The DBT will ensure adequate sight lines are being maintained at all times when positioning barriers and other traffic control devices.

8. The DBT will use proven methods to access the median while minimizing the interface between construction traffic and interstate traffic, including night time delivery of materials, limiting the use of median cross roads between work areas, and maximize the use of off-peak work hours. The DBT will also evaluate technological solutions such as Advanced Traffic Management Systems for Construction, Dynamic Message Signs (DMS), communications with users, the development of smartphone applications, and variable speed limits through the work zones, particularly during off-peak periods.

Role the DBT expects VDOT or other agencies may have in addressing these project risks - We will provide all information pertaining to the TMP/MOT/SOC Plans to VDOT. The DBT will request a timely review, comment, and approval on our submittals. The DBT will coordinate with VDOT to communicate with stakeholders, i.e. Busch Gardens, Water Country USA, Yorktown Naval Weapons Station, Williamsburg Tourism, CSX, emergency responders, etc. This communication will be critical to the success of the project.
3.5 Project Risks

**RISK NO. 2 – ENVIRONMENTAL COMPLIANCE**

The Environmental Impact Statement (EIS) identified a number of environmental and social concerns and commitments that should be kept in mind as the project progresses into final design and construction. Keeping these commitments and involving each of the organizations can be accomplished; however, the risk lies in the management and timing of this coordination effort. The following is a summary of some of the most notable concerns and commitments that were identified during the previous project studies.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Concern/ Commitment</th>
<th>Coordination Required</th>
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<td><strong>Government Agencies</strong></td>
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<td>FHWA</td>
<td>Issuance of ROD</td>
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<td>ROW and Facility Access Impacts</td>
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As stated above, there remain a number of issues that will need to be addressed during the design and construction process. Some of the more prominent issues are related to environmental compliance which can have an adverse impact on the project schedule if not handled correctly.

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McCormick Taylor completed the EIS for the I-64 project; therefore, has intrinsic knowledge on project-specific environmental constraints/challenges and has already initiated coordination with many of the regulatory agencies/other stakeholders identified above concerned with environmental compliance.

A) **NATURAL RESOURCES** - There are a number of natural resources located within the project corridor. The DBT will provide the environmental reviews and obtain approvals/clearances for federal, state and local permits, as needed using our established working relationships with the federal, state and local agency representatives.

**Why the risk is critical and the impact the risk will have on the project** - While the EIS prepared a preliminary review of the wetlands and streams in the corridor, an official delineation of Waters of the US and jurisdictional determination from the USACE has not been completed. This work will be initiated immediately upon NTP. Upon confirmation of the Waters of the US, a Joint Permit Application (JPA) will be completed and submitted to the appropriate agencies. It is anticipated that the permits for this project may include a Clean Water Act.
3.5 Project Risks

(CWA) Section 404 Permit from the U.S. Army Corps of Engineers (USACE), a Virginia Water Protection (VWP) Permit from the Virginia Department of Environmental Quality (VDEQ), and a Subaqueous Bottomlands Permit from the Virginia Marine Resources Commission (VMRC). As part of this permitting process, the Coastal Zone Management Area Program checklist would also be completed. In addition, permits from the County Tidal Wetlands Board may be required for impacts to tidal waters, if confirmed by the USACE. Compensatory mitigation will be required as a permit condition for stream and wetland impacts that cannot be avoided through design measures. Based on the recent federal mitigation rule, preference for compensatory mitigation is as follows: purchase of mitigation “credits” from an approved bank in the approved service area; payment into an approved in-lieu fee fund; and on-site and off-site restoration. We will evaluate the necessary mitigation for this project in coordination with the localities and agencies to determine the appropriate approach.

The presence of any Threatened & Endangered (T&E) species in the vicinity of the corridor requires close coordination with the agencies. As part of the permitting process, the DBT will work closely with the regulatory agencies, to determine the requirements for all species and measures to avoid potential impacts. Due to the presence of federal/state listed T&E species and/or habitat documented within the vicinity of the project area, habitat assessment and species survey and construction time-of-year restrictions may be required. A review of the EIS, as well as the current agencies databases, identified the state threatened Mabee’s Salamander and the federal threatened Northern Long Eared Bat as potentially within the project corridor. Coordination/potential habitat surveys will be needed for these species. Potential time-of-year restrictions and/or limitations on tree removal may be enforced.

Mitigation strategies the DBT may implement to address the risk – DBT members have been involved in numerous environmentally sensitive projects throughout the mid-Atlantic. Using past experience, the DBT has developed the following proven and successful mitigation strategies:

1. Develop an environmental task force that will create and implement a commitment tracking database and review all design and construction submittals for compliance. DBT members successfully implemented a program similar to this on the ICC project. Members of the task force will attend other design task force groups to maintain compliance.
2. Upon NTP, the corridor will be surveyed, as required, to identify and map environmental resources. We will then utilize our design and construction experience to avoid or minimize impacts. We reduced impacts on the ICC over 10% from the estimated impacts in the EIS.
3. Prior to construction, Wagman will create a project specific Environmental Compliance Plan, and provide training to construction forces regarding best practices. During construction, we will conduct a daily inspection of all environmental protective devices such as exclusion fence or E&S controls.

Agency coordination will be initiated upon NTP to obtain the permits and clearances to comply with the project schedule. This is especially important if T&E surveys are required within a limited survey window and to adjust the construction, if necessary, to allow for construction time-of-year restrictions.

Role the DBT expects VDOT or other agencies may have in addressing these project risks – The DBT will provide all information pertaining to the natural resources and environmental impacts and mitigation strategies for the project and a list of environmental commitments made to the community, environmental agencies and any other third party stakeholder. We will request input, review and comment on our environmental plan, design submissions and construction plans.

B) CULTURAL RESOURCES - One of the most challenging components of the environmental compliance process is gaining clearance for issues related to cultural resources and satisfying Section 106 of the National Historic Preservation Act. Having developed and documented cultural resource commitments previously, we are very familiar with all aspects of the commitments made as a result of the Section 106 Process.

Why the risk is critical and the impact the risk will have on the project - The programmatic agreement (PA) for cultural resources provides a blueprint for the Section 106 process. One of the main stipulations of this document is the provision for the archaeological survey of all areas of ground disturbance which are associated with the project. It is assumed that the project area will have been archaeologically surveyed by VDOT’s on-call cultural resource consultant, however its findings are not known to the DBT at this time. It will be important to determine as early as possible the extent of these survey efforts and the status of VDOT and Virginia Department of Historic Resources’ (VDHR) review. In the EIS, commitments were made to avoid impacts to Redoubt 8 and the Williamsburg Battlefield, however additional resources identified, such as the site noted on the RFP plans at
Station 2448+00, may also need to be avoided. In addition to ground disturbances for the proposed travel lanes and adjacent shoulders, other areas such as storage yards, access roads, or stormwater management facilities are considered as part of the project and may require additional survey efforts.

**Mitigation strategies the DBT may implement to address the risk** - Using lessons learned from the EIS and previous project experience, the DBT has developed the following strategy for navigating the cultural resource issues connected with this project:

1. Upon NTP, cultural resource specialists for the DBT will initiate contact with appropriate VDOT staff in order to determine the extent of the on-going cultural resource studies and the status of Section 106 coordination;
2. Cultural resource specialists for the DBT will review all design and construction plans to insure compliance with existing the PA, as well as to determine if all areas of proposed ground disturbance have been appropriately surveyed for cultural resources;
3. If significant cultural resources are identified within the project area, the DBT will use its previous experience to work with project designers and other interested parties in order to avoid or minimize adverse impacts. During construction, if significant cultural resources are discovered within the project area, the Construction Team will stop work immediately and notify authorities, and develop a plan to address the resource.

**Role the DBT expects VDOT or other agencies may have in addressing these project risks** - VDOT, in consultation with VDHR, will determine the effect this project will have on cultural resources and have the ability to review and comment on our plan to address cultural resources. Cultural resource specialists on the DBT possess the necessary background and experience to ensure this process is conducted as expeditiously as possible in order to avoid project delays.

C) SWM - Stormwater quality/quantity compliance is an important part of this project, in particular as a result of the changing agency oversight and procedures. The project must address VDOT and DEQ’s SWM design and regulatory permitting requirements, including VDOT’s SWM Program and the Chesapeake Bay TMDL Program. The VDOT SWM program areas include E&S Control, Post Construction SWM, Virginia Stormwater Management Program (VSMP) Construction and the MS4 Permits. Based on our understanding of the new regulatory processes/procedures in these areas, meeting their requirements will present risks to the project.

**Why the risk is critical and the impact the risk will have on the project** - Preliminary plans prepared for the project show a reduced highway median width, new pavement widening along the median and areas identified for SWM facilities located outside of the roadway shoulders. The project area has shallow groundwater depths and includes four water crossings (Whiteman’s Swamp, King Creek, Skiffes Creek, and Blows Mill Run) that may affect location of the BMPs, which are FEMA regulated floodways and have delineated 100-year floodplains. VDOT’s policy is to not locate SWM facilities within a 100-year floodplain and therefore BMPs locations must be scrutinized to ensure they are located in the appropriate areas. There is also the possibility that Nutrient Credit banks in the area may not have available credits to meet the project needs. Also, stormwater management sequence of construction will greatly influence the construction phasing, which the DBT will address during design development and throughout construction of the project.

In addition, the new DEQ SWM program requires analysis and treatment of stormwater for the entire corridor, rather than just the additional lanes, which increases the potential size and quantities of SWM facilities. Each of the BMPs must be constructed within the NEPA approved and permitted corridor and therefore it is critical to understand the need for SWM along the corridor to ensure there is ample space within the ROW and project area for design and construction. As an example, a cultural resource may be present at a proposed SWM facility, causing a desirable location to be precluded, and therefore other options might need to be investigated.

**Mitigation strategies the DBT may implement to address the risk** – The DBT will design the SWM conveyance systems and necessary SWM BMPs to fit within the existing ROW and environmental constraints, and will explore application of other BMPs where necessary, such as possibly utilizing the center median strip rather than the outside portion of the corridor. We will investigate utilizing bio-swales or sand filters to limit the footprint of stormwater BMP’s. In addition, the DBT will coordinate with watershed nutrient banks in order to reserve the necessary credits that may need to be purchased for this project. All submissions will be reviewed by DBT members that understand the regulations to ensure compliance. This review process will minimize impacts to the schedule and cost. The DBT will establish project specific training, so that all personnel working on the project understand the regulations and commitments, and have the knowledge to keep the project in environmental compliance with applicable policies.
3.5 Project Risks

Role the DBT expects VDOT or other agencies may have in addressing these project risks – The DBT will request input, review and comment from VDOT and VDEQ as needed to ensure our environmental plan, design submissions and construction plans meet the appropriate standards. Mitigation strategies will be supported by VDOT Administration’s policy guidance, submission of the plan set and VSMP Construction Permit to DEQ and training. VDOT’s support for addressing the new VSMP Construction Permit requirements beginning July 1, 2014, whether applying for the new permit or reapplying from coverage under the current permit will be essential to addressing the risk associated with meeting permit requirements.

RISK NO. 3 – EXISTING GEOTECHNICAL CONDITIONS

The DBT is comprised of geotechnical professionals with many years of experience in designing and constructing VDOT projects within the unique geologic setting of this project. Specifically, the roadway alignment passes through the surficial exposures of the Shirley Formation, as well as the Windsor and Bacons Castle Formations of Williamsburg, Virginia. These formations primarily include 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 review of the Geotechnical Data Report (GDR) dated October 23, 2013, the near surface soils (below topsoil layer) are generally anticipated to include existing Fill (typically CL and SC) ranging in thickness from 0 (no fill) to about 12.5 feet and transitioning to the alluvial and terrace deposit soils (CH, CL, SM and SC) to the maximum depths investigated of up to about 100 feet. The alluvial soils below the surficial existing fill or alluvium contain significantly thick deposits of soft, compressible, highly plastic soils (CH, MH, and OH). The Yorktown Formation generally underlies the shallower alluvial soils and is typically associated with competent strata into which deep foundations are commonly founded.

Why the risk is critical and the impact the risk will have on the Project - The unknowns of subsurface conditions have the potential to place numerous financial and schedule risks on the project. The potential risks identified include: (1) potentially unsuitable soils, (2) settlement of embankment fills, (3) bridge foundations (4) effect of high groundwater table on stormwater management and (5) extent of reuse of existing pavements and shoulder replacement. The DBT has extensive experience in risk assessment and development of mitigation strategies for these risks. The risk assessment and mitigation strategy for the top three Subcomponent Groups of the project geotechnical risk is provided below:

Group 1-Potentially Unsuitable Soils - Based on the geographic location of the project alignment and the boring logs and laboratory test result from the GDR, the existing subgrade soils could be unsuitable for roadway embankment and pavement subgrades. Subgrade soils classifying as highly-plastic clays, silts (CH/MH) and soils with natural moisture contents well in excess of optimum moisture contents are unsuitable and 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 and the time required to modify or remove and replace these soils with suitable fill.

Mitigation strategies the DBT may implement to address the risk - To mitigate the potential for unsuitable soils to negatively affect the project schedule, the DBT will focus early phase geotechnical explorations along the length of the alignment and especially around low-lying areas. 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 California Bearing Ratio (VTM-8) tests. The results of these tests will help delineate the lateral extent and depth of unsuitable soils to allow for proactive measures such as soil treatment including lime and cement and soil management to be taken in early earthwork construction phases.

Group 2-Settlement and Stability of Embankment Fill - New embankment fills will be constructed at bridge approaches to accommodate bridge widenings. In addition, substantial fills (>5 feet) will be required at various locations to accommodate the new lanes/shoulder construction. Soft soil layers exist; therefore, fill-induced settlement must be evaluated by the DBT prior to construction. Fill-induced settlement could lead to problems with the new and existing bridge foundations caused by imposing downdrag on the piles, as well as post-construction settlement of new pavements, affecting the levelness and “rideability” of the new lanes and approaches. In addition, placement of the new approach embankments could lead to global stability problems which must be evaluated. Settlement monitoring of the deeper fill areas could impact the project schedule if not accounted for early-on in the construction process.
Mitigation strategies the DBT may implement to address the risk - To help mitigate and plan for this risk, 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 (>5 feet) locations to compliment traditional Standard Penetration Testing (SPT) and laboratory consolidation and strength testing. The field and laboratory test results will be used to determine settlement rates and magnitudes, and to provide anticipated settlement monitoring durations for inclusion in the project schedule, similar to work performed by JMT at the 11th Street Bridge project.

The DBT has considerable project experience in the vicinity of the project with settlement data from similar approach embankments on soft alluvial soils. Using the design parameters developed from the laboratory and field testing programs, settlement and global stability analyses will be performed for the approach embankments. Should the results of the testing indicate excessive settlements and/or unacceptable global stability safety factors, ground improvement strategies will be implemented. Ground improvement techniques that will be investigated and applied as required are Wick Drains & Surcharge, Stone Columns, Lightweight Aggregate (LWA), EPS Geofoam Blocks, Rigid Inclusions such as Vibro-Concrete and Controlled Modulus columns with a Load Transfer Platform (LTP) and Geogrid Reinforced Embankments.

In order monitor the effectiveness of the ground improvements instrumentation and monitoring system will be incorporated into the design. The monitoring systems for settlement issues would typically include vibrating-wire piezometers and settlement plates and in some cases magnetic, rod and flexible extensometers and anchors. For slope stability issues, inclinometers are commonly used. Threshold limit values would be developed for the settlement and global stability movements and plans of action will be developed if threshold limit values are reached.

If the conditions described above are encountered, it is very important to have frequent communication with the highway designer and bridge/structural designer. It is also important to have involvement throughout construction as it is typically necessary to provide adjustments and modifications to the design. In addition to providing design efforts, plans, reports and specifications will need to be produced. The DBT has experience with the type of ground improvement methods described above on projects such as the I-95/I-495/I-295 interchange as part of the Woodrow Wilson Memorial Bridge replacement and the 11th Street Bridge replacement over the Anacostia River and interchanges.

Group 3 - Bridge and Culvert Foundations - The foundation design of the I-64 capacity improvements/widening will be dependent on soil types and relative densities/consistencies as well as scour analyses. The borings presented in the Geotechnical Data Report (GDR) show very soft/loose to soft/loose soil profiles to depths ranging from approximately 40 to 70 feet in some instances. The DBT will focus early phase explorations on the borings for the bridge structures with emphasis on material classification, including grain size analyses, Atterberg Limits testing, and laboratory strength testing. Scour potential of the near surface soils will be studied and accounted for in the design for culvert extensions and associated foundations. Scour can affect the long-term stability of foundations and will be evaluated during the design phase.

Mitigation strategies the DBT may implement to address the risk - Deep foundation systems developing significant amounts of their capacity from skin friction (such as large displacement piles, drilled shafts, or augured piles) will be considered in lieu of non-displacement deep foundation systems such as H-piles. Deeper borings will be drilled 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. Careful consideration of geotechnical investigation field and laboratory testing will be followed. In-situ testing (CPTu, DMT, and PMT) of the on-site soils can be used to compliment traditional SPT soil test borings. Additional SPT or bulk soil samples will also be collected and a gradation analysis including hydrometer testing will be performed in order to provide adequate gradation information for scour analysis. The results of the scour analysis will be incorporated into the design of the culvert foundations. Wagman self performs most deep foundation solutions such as H-pile, pre-stressed pile, drilled shafts or drilled pile and Wagman’s in-house geotechnical engineers will assist the Design Team with constructability reviews.

Role the DBT expects VDOT or other agencies may have in addressing these Project risks - VDOT and other agencies will be responsible for timely reviews, comment, and approval of geotechnical analysis, design, and recommendations.
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

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<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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### ATTACHMENT 3.1.2

**Project: 0064-965-264, Contract ID#: C00106665DB82**  
**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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**DBE statement within Letter of Submittal** confirming Offeror is committed to achieving the required DBE goal  

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<td>Section 3.2.11</td>
<td>yes</td>
<td>1</td>
<td></td>
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</table>

**Offeror’s Team Structure**

| Key Personnel Resume – DB Project Manager | Attachment 3.3.1 | Section 3.3.1.1 | no | Appendices |
| Key Personnel Resume – Responsible Charge Engineer | Attachment 3.3.1 | Section 3.3.1.2 | no | Appendices |
| Key Personnel Resume – Quality Assurance Manager | Attachment 3.3.1 | Section 3.3.1.3 | no | Appendices |
| Key Personnel Resume – Design Manager | Attachment 3.3.1 | Section 3.3.1.4 | no | Appendices |
| Key Personnel Resume – Construction Manager | Attachment 3.3.1 | Section 3.3.1.5 | no | Appendices |
| Key Personnel Resume – Maintenance of Traffic Manager | Attachment 3.3.1 | Section 3.3.1.6 | no | Appendices |

| Organizational chart | NA | Section 3.3.2 | yes | 4 |
| Organizational chart narrative | NA | Section 3.3.2 | yes | 5-6 |
## Statement of Qualifications Checklist and Contents

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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<tr>
<td><strong>Experience of Offeror’s Team</strong></td>
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<tr>
<td>Lead Contractor Work History Form</td>
<td>Attachment 3.4.1(a)</td>
<td>Section 3.4</td>
<td>no</td>
<td>Appendices</td>
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<td>Lead Designer Work History Form</td>
<td>Attachment 3.4.1(b)</td>
<td>Section 3.4</td>
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<td>Appendices</td>
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<td><strong>Project Risk</strong></td>
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<td>Identify and discuss three critical risks for the Project</td>
<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>9-15</td>
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Attachment 210
(Form C-8 RFQ)
Acknowledgement of the RFQ, Revision and/or Addenda
3.26
Affiliated and/or Subsidiary Companies of the Offeror
**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.

- The Offeror does not have any affiliated or subsidiary companies.
- Affiliated and/ or subsidiary companies of the Offeror are listed below.

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate</td>
<td>Wagman Construction, Inc.</td>
<td>231 North George Street, York, PA 17401</td>
</tr>
<tr>
<td>Affiliate (Parent)</td>
<td>Wagman Companies, Inc.</td>
<td>3290 North Susquehanna Trail, York, PA 17406</td>
</tr>
</tbody>
</table>
3.27 Certification Regarding Debarment Forms (Primary and Lower Tier)
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: ___________________________ Date: May 12, 2015
William E. Schaub, P.E.

Vice President

Title

Johnson, Mirmiran & Thompson, 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.

[Signature] May 6, 2015 Chief Executive Officer
Date Title

McCormick Taylor, 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.

Signature

May 13, 2015

Date

President

Title

Quinn Consulting 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.

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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] 5/19/2015  [CEO]
Date  Title

Froehling & Robertson, 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 5/14/2015

Date

Joel S. Keels, CCM
Vice President
Title

KCI Technologies, 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  5/19/2015  Chief Engineer

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

Signature Date Title

Senior Vice President

May 11, 2015

EEE Consulting, 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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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]  May 8, 2015  Director

[Signature]  Date  Title

Endesco, 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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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] [D. Mark Schofield, P.E.] 5/14/2015  Principal Geotechnical Engineer

Date Title

Geotechnical Environmental and Testing Solutions, Inc. dba GET Solutions, 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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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

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

______________________________  __________________
Signature                    Date               Title

Engineerng and Testing Services, Inc.
Name of Firm

05/18/2015
Vice President
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARTMENT
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] 5/15/2015  Managing Partner
Signature  Date  Title

Appraisal Review Specialists, LLC
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 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] [5-19-15] [President]
[Title]

[Name of Firm]
3.28
Offeror’s VDOT Prequalification Certificate
WAGMAN & F. C. WAGMAN, INC.
PREQ. EXP : 10/31/2015

--PREQ ADDRESS ------------------ WORK CLASSES (LISTED BUT NOT LIMITED TO)
3290 NORTH SUSQUEHANNA TRAIL  003 - MAJOR STRUCTURES
YORK, PA 17406-9754              007 - MINOR STRUCTURES
PHONE : 717-764-8521              011 - CLEARING AND GRUBBING
FAX : 717-764-2799               080 - DEMOLITION OF STRUCTURES
                                      101 - EXCAVATING

BUSINESS CONTACT: BECKER, TODD EUGENE
EMAIL: ESTIMATING@WAGMAN.COM

--------DBE INFORMATION-------
DBE TYPE : N/A
DBE CONTACT: N/A
Surety Letter
May 15, 2015

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

Re: A Design-Build Project
Contract ID #CO0106665DB82
State Project No.: 0064-965-2644, P101, R201, C501, B627, B628, B629, B630, B631, B632,
B633, B634, B635, D603, D604, D605, D606, D607, D608
Interstate 64 Capacity Improvements - Segment II
From: 1.05 miles west of Route 199 (Humelsine Parkway)
To: 0.54 miles east of Route 238 (Yorktowne Road)
Newport News, York County and James City County, Virginia

Dear Sirs:

As surety for G.A. & F.C. Wagman, Inc., Continental Casualty Company, with A.M. Best Financial Strength Rating "A" and Financial Size Category "XV", is capable of obtaining 100% Performance and 100% Labor and Materials Payment Bonds in the amount of $185,000,000 (estimated contract value) and said bonds will cover the project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this projects.

Sincerely,

Continental Casualty Company

By: Patricia C. Robinson
Attorney-in-Fact
POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Eugene M Fritz, Kathy R Reisinger, Donald R Wert, Patricia C Robinson, Deborah L Cotton, James R Gould, Joseph G Buyakowski, Alson O Wolcott, Jr. Individually

of Mechanicsburg, PA, their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 15th day of August, 2013.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Paul T. Bruflat
Vice President

State of South Dakota, County of Minnehaha, ss:

On this 15th day of August, 2013, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.

My Commission Expires June 23, 2015

J. Mohr
Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 15th day of May, 2015.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

D. Bult
Assistant Secretary

Form F6853-4/2012
Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company at a meeting held on May 12, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of Continental Casualty Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of National Fire Insurance Company of Hartford.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

"RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective."

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of American Casualty Company of Reading, Pennsylvania.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 23rd day of April, 2012:

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."
3.210
SCC and DPOR Information Tables and Supporting 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.

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.A. &amp; F.C. Wagman, Inc.</td>
<td>F019898-8</td>
<td>Corporation</td>
<td>Active</td>
<td>3290 North Susquehanna Trail York, PA 17406</td>
<td>Class A Contractor</td>
<td>2701015887</td>
<td>01-31-2017</td>
</tr>
<tr>
<td>Johnson, Mirmiran &amp; Thompson, Inc.</td>
<td>F149901-3</td>
<td>Corporation</td>
<td>Active</td>
<td>72 Loveton Circle Sparks, MD 21152</td>
<td>ENG, LA, ARC, LS</td>
<td>0407001314</td>
<td>12-31-2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>272 Bendix Road, Suite 260 Virginia Beach, VA 23452</td>
<td>ENG, LS</td>
<td>0411000440</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9201 Arboretum Parkway Suite 310 Richmond, VA 23236</td>
<td>ENG, LS</td>
<td>0411000029</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13921 Park Center Rd. Suite 140 Herndon, VA 20171</td>
<td>ENG, LS</td>
<td>0411000441</td>
<td>02-29-2016</td>
</tr>
<tr>
<td>McCormick Taylor, Inc.</td>
<td>F129691-4</td>
<td>Corporation</td>
<td>Active</td>
<td>North Shore Commons A 4951 Lake Brook Dr., Suite 275 Glen Allen, VA 23060</td>
<td>ENG</td>
<td>0407004111</td>
<td>12-31-2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>111 Mill Place Pkwy., Unit 105 Verona, VA 24482</td>
<td>ENG</td>
<td>0411000771</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2426 Lee Highway, Suite 208 Bristol, VA 24202</td>
<td>ENG</td>
<td>0411001043</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 Capital Drive, Suite 400 Harrisburg, PA 17110</td>
<td>ENG</td>
<td>0411000725</td>
<td>02-29-2016</td>
</tr>
<tr>
<td>Quinn Consulting Services Incorporated</td>
<td>0492551-7</td>
<td>Corporation</td>
<td>Active</td>
<td>1801 Pleasure House Road Suite 101 &amp; 102 Virginia Beach, VA 23455</td>
<td>ENG</td>
<td>0411001133</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14160 Newbrook Drive, Suite 220 Chantilly, VA 20151</td>
<td>ENG</td>
<td>0407003733</td>
<td>12-31-2015</td>
</tr>
<tr>
<td>Froehling &amp; Robertson, Inc.</td>
<td>0027211-2</td>
<td>Corporation</td>
<td>Active</td>
<td>3015 Dumbarton Road Richmond, VA 23228</td>
<td>ENG</td>
<td>0407000098</td>
<td>12-31-2015</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10
State Project No. 0064-965-264, Contract ID#: C00106665DB82

### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCI Technologies, Inc.</td>
<td>F059869-0</td>
<td>Corporation</td>
<td>Active</td>
<td>6802 Paragon Place, Suite 410, Richmond, VA 23230</td>
<td>ENG</td>
<td>0411000938</td>
<td>02-29-2016</td>
</tr>
<tr>
<td></td>
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<td>936 Ridgebrook Road, Sparks, MD 21152</td>
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<td>0411000983</td>
<td>02-29-2016</td>
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<tr>
<td>ECS Mid-Atlantic, LLC</td>
<td>S120821-6</td>
<td>Limited Liability Company</td>
<td>Active</td>
<td>108 Ingram Road, Suite 1, Williamsburg, VA 23188</td>
<td>ENG</td>
<td>0411000382</td>
<td>02-29-2016</td>
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<tr>
<td>EEE Consulting, Inc.</td>
<td>0504941-6</td>
<td>Corporation</td>
<td>Active</td>
<td>8525 Bell Creek Road, Mechanicsville, VA 23116</td>
<td>ENG</td>
<td>0407003798</td>
<td>12-31-2015</td>
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<td>Enesco, Inc.</td>
<td>F133736-1</td>
<td>Corporation</td>
<td>Active</td>
<td>438 N. Frederick Ave., Suite 455, Gaithersburg, MD 20877</td>
<td>ENG</td>
<td>0407005431</td>
<td>12-31-2015</td>
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<td>Geotechnical Environmental &amp; Testing Solutions, Inc.</td>
<td>0541847-0</td>
<td>Corporation</td>
<td>Active</td>
<td>204-B Grayson Road, Virginia Beach, VA 23462</td>
<td>ENG</td>
<td>0407004018</td>
<td>12-31-2015</td>
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<td>Engineering and Testing Services, Inc.</td>
<td>0557195-5</td>
<td>Corporation</td>
<td>Active</td>
<td>5226 Indian River Road, Suite 103, Virginia Beach, VA 23464</td>
<td>ENG</td>
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<td>12-31-2015</td>
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<tr>
<td>Appraisal Review Specialists, LLC</td>
<td>T049068-2</td>
<td>Limited Liability Company</td>
<td>Active</td>
<td>3058 Mount Vernon Rd, Suite 12, Hurricane, WV 25523</td>
<td>Appraisal Business Registration</td>
<td>4008001735</td>
<td>04-30-2016</td>
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<tr>
<td>Harrison Chavis &amp; Associates, Inc.</td>
<td>0357892-9</td>
<td>Corporation</td>
<td>Active</td>
<td>6021 West Broad Street, Richmond, VA 23230</td>
<td>Appraisal Business Registration</td>
<td>4008001419</td>
<td>12-31-2016</td>
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</table>
### DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual's Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual's DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<tbody>
<tr>
<td>G.A. &amp; F.C. Wagman, Inc.</td>
<td>Gregory Michael Andricos</td>
<td>York, PA</td>
<td>4202 Kilbourne Drive Fairfax, VA 22032</td>
<td>ENG</td>
<td>0402032211</td>
<td>07-31-2016</td>
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<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>John Kevin Vicinski</td>
<td>Chantilly, VA</td>
<td>4609 Marble Rock Court Chantilly, VA 20151</td>
<td>ENG</td>
<td>0402026380</td>
<td>08-31-2015</td>
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<tr>
<td>Johnson, Mirmiran &amp; Thompson, Inc.</td>
<td>William E. Schaub</td>
<td>Sparks, MD</td>
<td>3805 Three Wood Drive Hampstead, MD 21074</td>
<td>ENG</td>
<td>0402047571</td>
<td>07-31-2016</td>
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<td>Johnson, Mirmiran &amp; Thompson, Inc.</td>
<td>Randy Lawrence Boice</td>
<td>Herndon, VA</td>
<td>6071 Greenway Court Manassas, VA 20112</td>
<td>ENG</td>
<td>0402030511</td>
<td>12-31-2016</td>
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<td>Appraisal Review Specialist, LLC</td>
<td>Rayman Scott Barber</td>
<td>Hurricane, WV</td>
<td>3058 Mount Vernon Road Hurricane, WV 25526</td>
<td>Real Estate Appraiser</td>
<td>4001012258</td>
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<td>Harrison Chavis &amp; Associates, Inc.</td>
<td>Harrison M. Chavis</td>
<td>Richmond, VA</td>
<td>P.O. Box 11536 Henrico, VA 23230</td>
<td>Real Estate Appraiser</td>
<td>4001000011</td>
<td>10-31-2015</td>
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</table>
.1 SCC Business Entity Registration Information
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 1 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk's Office website.

CISM0180 CORPORATE DATA INQUIRY

CORP ID: F019898 - 8  STATUS: 00 ACTIVE  STATUS DATE: 10/08/10
CORP NAME: WAGMAN, INC., G. A. & F. C.

DATE OF CERTIFICATE: 09/20/1967  PERIOD OF DURATION:  INDUSTRY CODE: 00
STATE OF INCORPORATION: PA PENNSYLVANIA  STOCK INDICATOR: S STOCK
MERGER IND:  CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y  MONITOR INDICATOR:
CHARTER FEE: 2500.00  MON NO:  MON STATUS:  MONITOR DTE:
R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER
16TH FLOOR, 1111 EAST MAIN STREET
CITY: RICHMOND  STATE : VA ZIP: 23219-0000
R/A STATUS: 5 B.E. AUTH IN VI  EFF. DATE: 09/11/12  LOC : 216
ACCEPTED AR#: 214 14 6056  DATE: 10/08/14  CURRENT AR#: 214 14 6056  DATE: 10/08/14
STATUS: A  ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
14 1,700.00

(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 11 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

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CISM0180 CORPORATE DATA INQUIRY

CORP ID: F149901 - 3 STATUS: 00 ACTIVE STATUS DATE: 10/17/06
CORP NAME: Johnson, Mirmiran & Thompson, Inc.

DATE OF CERTIFICATE: 10/17/2006 PERIOD OF DURATION: INDUSTRY CODE: 70
STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: ROBERT GALLAGHER

STREET: 9201 ARBORETUM PKY STE 140 AR RTN MAIL:
CITY: RICHMOND STATE: VA ZIP: 23236-0000
R/A STATUS: 2 OFFICER EFF. DATE: 09/06/07 LOC: 120
ACCEPTED AR#: 214 53 9854 DATE: 08/19/14 CHESTERFIELD CO
CURRENT AR#: 214 53 9854 DATE: 08/19/14 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
14 100.00

(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 10 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

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CORPORATE DATA INQUIRY

CISM0180

CORP ID: F129691 - 4
CORP NAME: McCORMICK TAYLOR, INC.

DATE OF CERTIFICATE: 06/02/1997
PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: PA
STOCK INDICATOR: S
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y
CHARTER FEE: 150.00
R/A NAME: NATIONAL CORPORATE RESEARCH, LTD.

STREET: 250 BROWNS HILL COURT
CITY: MIDLOTHIAN
STATE: VA
ZIP: 23114-0000
R/A STATUS: 5
B.E. AUTH IN VI
EFF. DATE: 06/09/14
LOC: 120
ACCEPTED AR#: 214 11 2554
DATE: 07/28/14
CHESTERFIELD CO
CURRENT AR#: 214 11 2554
DATE: 07/28/14
STATUS: A
ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
15 490.00 490.00 70,000

(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 9 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

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CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0492551 - 7 STATUS: 00 ACTIVE STATUS DATE: 12/01/08

CORP NAME: QUINN CONSULTING SERVICES INCORPORATED

DATE OF CERTIFICATE: 10/24/1997 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

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

R/A NAME: JOHN H QUINN JR

STREET: 2208 S KNOLL ST AR RTN MAIL:

CITY: ARLINGTON STATE: VA ZIP: 22202-2134

R/A STATUS: 4 ATTORNEY EFF. DATE: 10/24/97 LOC : 106

ACCEPTED AR#: 214 12 5293 DATE: 08/22/14 ARLINGTON COUNT

CURRENT AR#: 214 12 5293 DATE: 08/22/14 STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

14 100.00

(Screen Id:/Corp_Data_Inquiry)
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05/20/15
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0027211 - 2 STATUS: 00 ACTIVE STATUS DATE: 11/13/09
CORP NAME: FROEHLING & ROBERTSON, INCORPORATED
DATE OF CERTIFICATE: 10/11/1924 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 2480.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: WILLIAM H HOOFNAGLE III
STREET: 1900 ONE JAMES CENTER AR RTN MAIL:
901 E CARY ST
CITY: RICHMOND STATE : VA ZIP: 23219-0000
R/A STATUS: 4 ATTORNEY EFF. DATE: 09/21/11 LOC : 216
ACCEPTED AR#: 214 13 2353 DATE: 09/08/14 RICHMOND CITY
CURRENT AR#: 214 13 2353 DATE: 09/08/14 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
14 1,700.00 1,100,000

(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 1 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

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<th>CORP ID:</th>
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<td>DATE OF CERTIFICATE:</td>
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<td>PERIOD OF DURATION:</td>
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<td>STATE OF INCORPORATION:</td>
<td>DE DELAWARE</td>
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<td>MERGER IND:</td>
<td>S SURVIVOR</td>
<td>CONVERSION/DOMESTICATION IND:</td>
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<td>GOOD STANDING IND:</td>
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<tr>
<td>CHARTER FEE:</td>
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<td>R/A NAME:</td>
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<tr>
<td>STREET:</td>
<td>Bank of America Center, 16th Floor</td>
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<td>CITY:</td>
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(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 12 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

05/20/15
13:06:21
LLCM3220 LLC DATA INQUIRY
LLC ID: S120821 - 6 STATUS: 00 ACTIVE STATUS DATE: 04/16/04
LLC NAME: ECS - Mid-Atlantic, LLC
DATE OF FILING: 04/16/2004 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF FILING: VA VIRGINIA MERGER INDICATOR: CONVERSION/DOMESTICATION INDICATOR:
PRINCIPAL OFFICE ADDRESS
STREET: 14026 THUNDERBOLT PL STE 100
CITY: CHANTILLY STATE: VA ZIP: 20151-0000
REGISTERED AGENT INFORMATION
R/A NAME: JAMES A ECKERT
R/A STATUS: 2 O/D OF CORP M/M EFF DATE: 04/16/04 LOC: 129 FAIRFAX COUNTY
YEAR FEES PENALTY INTEREST BALANCE
15 50.00

(Screen Id:/LLC_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 8 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0504941 - 6 STATUS: 00 ACTIVE STATUS DATE: 08/04/04
CORP NAME: EEE CONSULTING, INC.

DATE OF CERTIFICATE: 06/23/1998 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 700.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX ROAD, SUITE 285 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060-0000
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC : 143
ACCEPTED AR#: 214 52 6530 DATE: 05/23/14 HENRICO COUNTY
CURRENT AR#: 214 52 6530 DATE: 05/23/14 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
15 1,700.00 1,700.00 333,000

(Screen Id:/Corp_Data_Inquiry)
Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 11 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

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CORPORATE DATA INQUIRY

CORP ID: F133736

CORP NAME: ENDESCO, INC.

DATE OF CERTIFICATE: 05/07/1998

PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: MD MARYLAND

STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y

MONITOR INDICATOR:

CHARTER FEE: 200.00

MON NO: MON STATUS: MONITOR DTE:

R/A NAME: CORPORATION SERVICE COMPANY

STREET: Bank of America Center, 16th Floor

1111 East Main Street

CITY: RICHMOND STATE: VA ZIP: 23219-0000

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 04/29/11 LOC: 216

ACCEPTED AR#: 215 08 2521 DATE: 05/08/15

CURRENT AR#: 215 08 2521 DATE: 05/08/15

STATUS: A ASSESSMENT INDICATOR: 0

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES

15 670.00 100,000

(Screen Id:/Corp_Data_Inquiry)
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Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

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**Commonwealth of Virginia State Corporation Commission**

**CISM0180 CORPORATE DATA INQUIRY**

**CORP ID:** 0541847 - 0 **STATUS:** 00 **ACTIVE** **STATUS DATE:** 08/04/04

**CORP NAME:** Geotechnical Environmental and Testing Solutions, Inc.

**DATE OF CERTIFICATE:** 06/16/2000 **PERIOD OF DURATION:** **INDUSTRY CODE:** 00

**STATE OF INCORPORATION:** VA **VIRGINIA** **STOCK INDICATOR:** S **STOCK**

**MERGER IND:** **CONVERSION/DOMESTICATION IND:**

**GOOD STANDING IND:** Y **MONITOR INDICATOR:**

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

**R/A NAME:** TERENCE MURPHY

**STREET:** KAUFMAN & CANOLES PC **AR RTN MAIL:**
150 W MAIN ST STE 2100

**CITY:** NORFOLK **STATE:** VA **ZIP:** 23510-1609

**R/A STATUS:** 4 **ATTORNEY EFF. DATE:** 07/17/02 **LOC:** 212

**ACCEPTED AR#:** 214 09 7448 **DATE:** 06/25/14 **NORFOLK CITY**

**CURRENT AR#:** 214 09 7448 **DATE:** 06/25/14 **STATUS:** A **ASSESSMENT INDICATOR:** 0

**YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES**
15 100.00 100.00 5,000

(Screen Id:/Corp_Data_Inquiry)
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CORPORATE DATA INQUIRY

CORP ID: 0557195 - 5
STATUS: 00 ACTIVE
STATUS DATE: 05/05/09

CORP NAME: Engineering and Testing Services, Inc.

DATE OF CERTIFICATE: 04/12/2001
PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA
STOCK INDICATOR: S

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y

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

R/A NAME: COLLEEN PATRICE NABHAN

STREET: 5226 INDIAN RIVER ROAD
AR RTN MAIL:
SUITE 103

CITY: VIRGINIA BEACH
STATE: VA ZIP: 23464-0000

ACCEPTED AR#: 215 05 6082
DATE: 03/23/15

CURRENT AR#: 215 05 6082
DATE: 03/23/15

YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
15 100.00

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(Screen Id:/Corp_Data_Inquiry)

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Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.

<table>
<thead>
<tr>
<th>LLCM3220</th>
<th>LLC DATA INQUIRY</th>
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<tbody>
<tr>
<td>LLC ID:</td>
<td>T049068 - 2 STATUS: 00 ACTIVE STATUS DATE: 02/03/12</td>
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<tr>
<td>LLC NAME:</td>
<td>Appraisal Review Specialists, LLC</td>
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| DATE OF FILING: 02/03/2012 | PERIOD OF DURATION: 99/99/9999 | INDUSTRY CODE: 00 |
| STATE OF FILING: WV WEST VIRGINIA | MERGER INDICATOR: |
| CONVERSION/DOMESTICATION INDICATOR: |
| PRINCIPAL OFFICE ADDRESS |
| STREET: 3058 MOUNT VERNON RD |

| CITY: HURRICANE | STATE: WV ZIP: 25526-0000 |
| REGISTERED AGENT INFORMATION |
| R/A NAME: INCORP SERVICES INC |
| STREET: 7288 HANOVER GREEN DR |

| RTN MAIL: |
| CITY: MECHANICSVILLE | STATE: VA ZIP: 23111-0000 |
| R/A STATUS: 5 ENTITY AUTHORIZ EFF DATE: 02/03/12 LOC: 142 HANOVER COUNTY |
| YEAR FEES PENALTY INTEREST BALANCE |
| 15 50.00 |

(Screen Id:/LLC_Data_Inquiry)

Please note: The SCC website will be unavailable Thursday, May 21, from 6 p.m. to 11 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

Alert to business entities regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS or ANNUAL BUSINESS SERVICES is available from the Bulletin A link of the Clerk’s Office website.
.2 DPOR Office
Registration Information
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG, LA, ARC, LS

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

Gordon M. Dixon, Director
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG, LS

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

Nick A. Christner
Interim Director
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG, LS

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

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Nick A. Christmas
Interim Director
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG, LS

JOHNSON MIRIMAN & THOMPSON INC
13921 PARK CENTER RD
SUITE 140
HERNDON, VA 20171

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

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

PROFESSIONS: ENG

MCCORMICK TAYLOR INC
NORTH SHORE COMMONS A
4951 LAKE BROOK DR SUITE 275
GLEN ALLEN, VA 23060

Gordon N. Dixon, Director

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
MCCORMICK TAYLOR INC
111 MILL PLACE PARKWAY
UNIT 105
VERONA, VA 24482

PROFESSIONS: ENG

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SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

EXPIRES ON
02-29-2016

NUMBER
0411000771

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

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

PROFESSIONS: ENG

MCCORMICK TAYLOR INC
2426 LEE HIGHWAY
SUITE 208
BRISTOL, VA 24202

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Nick A. Christner, Interim Director

COMMONWEALTH OF VIRGINIA
BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION NUMBER: 0411001043 EXPIRES: 02-29-2016
PROFESSIONS: ENG
MCCORMICK TAYLOR INC
2426 LEE HIGHWAY
SUITE 208
BRISTOL, VA 24202

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

NUMBER
0411000725

PROFESSIONS: ENG

MCCORMICK TAYLOR INC
5 CAPITAL DRIVE SUITE 400
HARRISBURG, PA 17110

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

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INC
1801 PLEASURE HOUSE RD
STE 101 & 102
VIRGINIA BEACH, VA 23455
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INC
14160 NEWBROOK DR
SUITE 220
CHANTILLY, VA 20151
FROEHLING & ROBERTSON, INC
3015 DUMBARTON ROAD
RICHMOND, VA 23228
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSION: ENG

KCI TECHNOLOGIES INC
6802 PARAGON PLACE
SUITE 410
RICHMOND, VA 23230
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-29-2016

NUMBER
0411000983

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

PROFESSIONS: ENG

KCI TECHNOLOGIES INC
936 RIDGE BROOK ROAD
SPARKS, MD 21152

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

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

PROFESSIONS: ENG

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

Nick A. Christner, Interim Director

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

POCKET CARD

COMMONWEALTH OF VIRGINIA
BOARD FOR APICLIDIA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000382 EXPIRES: 02-29-2016
PROFESSIONS: ENG
ECS-MID-ATLANTIC LLC
108 INGRAM RD STE 1
WILLIAMSBURG, VA 23188

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

PROFESSIONS: ENG

EEE CONSULTING INC
8525 BELL CREEK RD
MECHANICSVILLE, VA 23116
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

PROFESSIONS: ENG

ENDESCO, INC.
438 N FREDERICK AVE
SUITE 455
GAITHERSBURG, MD 20877

Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

PROFESSIONS: ENG

GEOTECHNICAL ENVIRONMENTAL & TESTING SOLUTIONS INC
204-B GRAYSON ROAD
VIRGINIA BEACH, VA 23462

Gordon N. Dixon, Director

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

(POCKET CARD) COMMONWEALTH OF VIRGINIA

BOARD FOR APESCLIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407004018 EXPIRES: 12-31-2015
PROFESSIONS: ENG
GEOTECHNICAL ENVIRONMENTAL & TESTING SOLUTIONS INC
204-B GRAYSON ROAD
VIRGINIA BEACH, VA 23462

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

PROFESSIONS: ENG

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

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Gordon N. White, Director

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION

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

Nick A. Christner
Interim Director
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The license information in this application was last updated at Wed May 20 02:50:17 EDT.

The disciplinary action information in this application was last updated at Wed May 20 02:50:17 EDT.

DPOR License Lookup build 1,025 (built 2015-05-19 12:38:05).
.3 DPOR Key Personnel Registration Information
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

GREGORY MICHAEL ANDRICOS
4202 KILBOURNE DRIVE
FAIRFAX, VA 22032

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

WILLIAM E SCHAUDB
3805 THREE WOOD DR
HAMPSTEAD, MD 21074

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
.4 DPOR Registration for Non-APELSCIDLA Individuals
REAL ESTATE APPRAISER BOARD

CERTIFIED GENERAL REAL ESTATE APPRAISER

RAYMAN SCOTT BARBER
3058 MOUNT VERNON RD
HURRICANE, WV 25526

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
10-31-2015

NUMBER
4001 000011

REAL ESTATE APPRAISER BOARD
CERTIFIED GENERAL REAL ESTATE APPRAISER

HARRISON M CHAVIS
PO BOX 11536
HENRICO VA 23230

Gordon N. Dixon, Director
3.3.1

Key Personnel Resume Forms
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: ANTHONY W. BEDNARIK, DBIA</td>
</tr>
<tr>
<td>Vice President of Design-Build / Major Pursuits</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td>Design-Build Project Manager (DBPM)</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td>G.A. &amp; F.C. Wagman, Inc.</td>
</tr>
<tr>
<td>d. Employment History: With this Firm 15 Years With Other Firms 12 Years</td>
</tr>
</tbody>
</table>

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):

G.A. & F.C. Wagman, Inc.

| Start Date: 1999 | End Date: Present | Position: Vice President (Starting 2011) |

Currently, Anthony is Vice President of Design-Build / Major Pursuits for G.A. & F.C. Wagman, Inc. Anthony is responsible for all major project pursuits and more importantly Anthony is involved in every Design-Build project for Wagman from pursuit to final completion. For the past 15 years Anthony has worked as a Design-Build Project Manager, DB Coordinator, Project Manager and estimator. Over the past two years Anthony has worked with the new acquisition of Key Constructors and D.W. Lyle, integrating estimating and engineering staff and coordinating major and Design Build pursuits.

- 2011-2014 VP DB (DB projects: Route 1 at Fort Belvoir, I-78 Fairfax County, VA)
- 2008-2011 Assistant DBPM ICC B MD 200 from MD 97 to US 29, Montgomery & Prince George’s Counties, MD
- 2006-2008 Assistant DBPM ICC A MD 200 from I-270/I-370 to East of MD 97, Montgomery County, MD
- 2003-2006 DBPM Youghiogheny Reservoir Bridge Replacement, Somerset County, PA
- 2001-2003 PM 4 projects - Salisbury Bypass Contract A & B, Route 115 Widening, Berlin MD, Route 54 Hurricane Evacuation Route Upgrade, new structure and road widening Fenwick Island DE.

| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
| Bucknell University, Lewisburg, PA/BS/1987/Civil Engineering |

| f. Active Registration: Year First Registered/ Discipline/VA Registration #: |
| DBIA Certified Professional, ARTBA Project Management Academy, ASCE |
| VA DEQ Responsible Land Disturber (RLD) Certification No. 42696 |

| g. Document the extent and depth of your experience and qualifications relevant to the Project. |
| 1. Note your role, responsibility, and specific job duties for each project, not those of the firm. |
| 2. Note whether experience is with current firm or with other firm. |
| 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation. |

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

1. **MDSHA, Intercounty Connector (ICC MD 200), Contract B (DB), Montgomery & Prince George’s Counties, MD ($560 M) - Assistant Design-Build Project Manager.** Served as Wagman’s senior representative. Using lessons learned on the ICC Contract A, Anthony was instrumental in the successful prosecution of Contract B. He was responsible for design coordination from environmental to roadway and structures. He worked with designers and field personnel to assure that the design met all environmental commitments, design requirements, and constructability constraints. He worked with the design and field personnel for initial survey/geotechnical investigation through submission of design packages for construction. Any design modifications initiated from the field would be facilitated by him to minimize schedule impacts. He assisted with the initial project schedule. He was involved in organizing the project management team, bringing people together from three different companies to create an integrated organization. Other duties included interaction with public outreach, to inform people of the latest designs and any impacts to the local communities. Also assisted in the design and construction of a Single Point Urban Interchange with integrated intersections. Anthony assisted the management team coordinate the partnering process for the project. Many features of this project were similar to the I-64 Segment II project such as geotechnical difficulties using various foundation solutions such as caissons and piling; Environmental Compliance; third party coordination, utility relocation, interchanges with existing cross roads, noise walls and complex maintenance of traffic.

**Firm:** G.A. & F.C. Wagman, Inc. | **Project Dates:** January 2009 – November 2011
(2.) MDSHA, Intercounty Connector MD 200, Contract A (DB), Montgomery County, MD ($483 M) - Assistant Design-Build Project Manager. As Wagman’s senior representative on the project, Anthony served as Assistant DBPM during project start-up and was responsible for design coordination, utility relocation, project mobilization, and early data gathering such as survey and geotechnical borings. He assisted disciplines with technical expertise, and constructability including acquisition of MDE permits, acquisition of ROW, earthmoving, utilities, and structures. He coordinated with the third party QC firm and the environmental compliance firm. As part of the project senior management, public outreach/partnering plans were developed to inform third party stakeholders and resolve issues. Prior to his assignment on ICC B, Anthony established the process to coordinate the ITS, Electronic Toll Collection (ETC) and electrical components of the project that included miles of interconnect to coordinate multiple traffic signals. In addition the project had to coordinate all ITS instrumentation with the existing system operated by the owner. Similar feature to I-64 Segment II was the widening and reconstruction of I-370. Over one mile of I-370 was widened to the median, sections were reconstructed and the existing structures were widened then overlaid with Latex Modified Concrete.

**Firm:** G.A. & F.C. Wagman, Inc.  |  **Project Dates:** Fall 2007 – July 2011

(3.) PennDOT District 12-0, Youghiogheny Reservoir Bridge Replacement and Route 40 Widening (DB), Somerset County, PA ($27M) - Design-Build Project Manager. Responsible for this project in western PA. He was responsible for schedule, budget coordination of field personnel and subcontractors. As permitted by PennDOT procurement, Wagman prepared a successful alternate bridge design for this 1,500 ft. long bridge across Youghiogheny Reservoir. Through design/construction innovation, the alternate bridge design eliminated two piers in the 80 ft. deep lake, resulting in significant time and cost savings to the Owner, as well as minimizing environmental and recreational impact on the lake. During the redesign of the structure, Anthony was responsible for all design coordination and field activities, including interaction with the Owner and permitting agencies such as the USACE. The project also included reconstruction/widening of existing Route 40 for 3 miles. The project included large caissons installed in an USACE controlled lake that fluctuated by 40 feet over the course of a year. Close coordination with the USACE maintained the project schedule and minimized environmental impacts.

**Firm:** G.A. & F.C. Wagman, Inc.  |  **Project Dates:** February 2003 – August 2006

(4.) FHWA-EFLHD/VDOT, U.S. Route 1 Widening at Fort Belvoir (DB), Fairfax, VA ($70M) – Project Executive. Responsible with the project pursuit including design coordination and oversight, implementation of the QA/QC management plan and JV partner coordination through award. The Project consisted of the widening of a 3.68 mile segment of US 1 (Richmond Hwy.) from Telegraph Rd. to Mount Vernon Hwy. including widening from four through lanes to six through lanes, the addition of left/right turn lanes at intersections and connecting roadways, and provision of a multi-use trail, pedestrian sidewalk, and construction of new bridges over the Accotink Creek. This project involved extensive utility relocation, third party coordination, right-of-way acquisition, environmental compliance, unexploded ordinance due to close proximity of Ft. Belvoir, and increased capacity to a heavily traveled roadway.

**Firm:** G.A. & F.C. Wagman, Inc.  |  **Project Dates:** April 2013 – April 2014

(5.) PennDOT District 3-0, Mill Creek Bridge Replacement and Route 15 Widening (DB), Chester County, PA ($10M) – Design-Build Project Manager. This project, one of the first DB bridge projects awarded in PA, required completion of a 1,510 ft. long bridge structure to widen the existing high-level bridge across Tioga Lake from two to four lanes. He was responsible for supervision of all construction activities and design coordination during design activities, which were carried on simultaneously in order to meet an aggressive schedule in an area with a limited construction season. Other aspects of this project included approach highway design and construction, a Contractor designed MOT scheme, and coordination with the USACE lake management operations. He created a modified QC Plan for construction activities and coordinated QC testing with the Owner. Coordination with third party stakeholders was critical to the success, along with coordination within the overall widening project to increase capacity from Pennsylvania to New York.

**Firm:** G.A. & F.C. Wagman, Inc.  |  **Project Dates:** February 1999 – August 2001

* 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. **Not required for DBPM.**
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> GREGORY M. ANDRICOS, PE</td>
</tr>
<tr>
<td>President/COO</td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Responsible Charge Engineer (RCE)</td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> G.A. &amp; F.C. Wagman, Inc.</td>
</tr>
<tr>
<td><strong>d. Employment History:</strong> With this Firm 1 Years With Other Firms 22 Years</td>
</tr>
<tr>
<td>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):</td>
</tr>
</tbody>
</table>

**G.A. & F.C. Wagman, Inc.**

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>April 2015</th>
<th>End Date:</th>
<th>Present</th>
<th>Position:</th>
<th>President/COO/Design-Build Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Corporate executive responsible for field operations, business development, design-build, estimating, administration, quality and safety, with direct oversight of select critical project Design-Build projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**G.A. & F.C. Wagman, Inc.**

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>May 2014</th>
<th>End Date:</th>
<th>Present</th>
<th>Position:</th>
<th>Executive Vice President/Design-Build Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Company Executive with principal responsibility for civil operations including: safety, quality control, estimating, engineering, and construction for Design-Build and conventional projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cherry Hill Construction, Inc.**

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>July 2010</th>
<th>End Date:</th>
<th>June 2014</th>
<th>Position:</th>
<th>Vice President/General Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Corporate Officer with full profit loss responsibility for Cherry Hill Construction, Inc. overseeing all estimating, management, and construction operations with direct management of all D-B projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>October 1999</th>
<th>End Date:</th>
<th>June 2014</th>
<th>Position:</th>
<th>Design-Build Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Primary Point of Contact with principal responsibility for overseeing all design and construction efforts from proposal through final acceptance, including QA/QC for four two step “best value” Federal Highway Administration-Eastern Federal Lands Highway Division D-B projects (combined value over $200M) in VA, DC and MD.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>October 1999</th>
<th>End Date:</th>
<th>June 2014</th>
<th>Position:</th>
<th>Bridge/Structures Division Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Principal responsibility for estimating and construction of all bridges and structures companywide. Served as the chief bridge engineer to review all design and construction related issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>November 1995</th>
<th>End Date:</th>
<th>July 1997</th>
<th>Position:</th>
<th>Bridge Engineer/Design-Build Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Served as liaison with lead design (JMT) on Arena Drive project (first MDSHA DB project). Coordinated activities of estimating and design functions to produce construction documents for owner approval.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>August 1993</th>
<th>End Date:</th>
<th>November 1995</th>
<th>Position:</th>
<th>Contractor QA/QC Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities:</td>
<td>Developed and executed the Contract QA/QC Program in support of major runway improvements at Dulles International Airport. Scheduled and monitored inspection programs, sampling, testing, analysis and reporting. Addressed non-conformance issues and implemented recovery plans to assure quality performance.</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Military Institute, Lexington, VA/Bachelor of Science/1992/Civil Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998/Virginia Registered Professional Engineering No. 0402 032211 (Also registered in MD)</td>
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</tbody>
</table>

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<tr>
<th><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project:</strong></th>
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<tr>
<td>2. <strong>Note whether experience is with current firm or with other firm.</strong></td>
</tr>
<tr>
<td>3. <strong>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</strong></td>
</tr>
</tbody>
</table>

*(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.*)
(1.) FHWA-EFLHD/VDOT, Fairfax County Parkway (FCP) Extension (DB), Springfield, VA ($112.5M)  
*Design-Build Project Manager.* Primary Point of Contact (POC) for the DBT and supervising a staff consisting of engineers, public relations professionals, ROW specialists, permit specialists, utility coordinators, QA/QC, and field personnel. Responsible for managing the project from the proposal through all phases of permit, design, and construction. Coordinated with multiple stakeholders (VDOT, FHWA-EFLHD, DOD, USACE, Fairfax County DPWES) to ensure the project meet contractual requirements of all agencies.  
As the DBPM, he ensured strict adherence to the QA/QC programs for both design and construction. Project included 6 major highway bridge structures, highway and local ramps and interchanges (including widening and ramp widening of I-95), more than 2.7 miles of roadway construction, utility relocation, stringent environmental concerns and SWM practices, and an extremely aggressive contract completion schedule. Context sensitive means/methods were used in the design of the Accotink Creek bridge structure minimizing impact to the watershed.  
Additional design work enhanced multi-modal accessibility at the Fullerton Rd. intersection. Served on the VA Mega Projects Community Resource Board during this project & received a “Star Partner” award for his exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA and USACE. This project won the 2013 DBIA Award for Merit, 2013 DBIA Mid-Atlantic Region Transportation Award and also received recognition from ACEC and VTCA.  

(2.) FHWA-EFLHD/VDOT, Mark Center Short and Mid-Term Improvements (Design-Build), Alexandria, VA ($9.2M)  
*Design-Build Project Manager.* Primary POC for the DBT supervising a staff consisting of engineers, public relations professionals, ROW specialists, permit specialists, utility coordinators, QA/QC, and field personnel. Responsible for the overall project design, QA/QC, shareholder coordination, contract administration and construction oversight.  
As the DBPM, he ensured strict adherence to the QA/QC programs for both design and construction. The shareholder coordination required regular meetings with City of Alexandria, WMATA, commercial and residential property owners, and the Winkler Botanical Preserve. The shareholder coordination was especially challenging since the numerous shareholders were intimately involved and concerned with every particular aspect of these critical improvements necessary to alleviate complex transportation and storm water management issues they were already experiencing due to increased traffic volumes and impervious surfaces resulting from the accelerated opening of the Mark Center. This fast track D-B Project saw the Short-Term improvements designed, permitted, and open to traffic in Sept. 2012 (5 months after NTP) and Mid-Term improvements completed in July 2013.  

(3.) FHWA-EFLHD/DDOT, 9th Street Bridge Replacement over Railways / New York Avenue (DB), Washington, DC ($58.4M)  
*Design-Build Project Manager.* Primary point of contact for the DBT and supervised a staff consisting of engineers, professionals, context sensitive artisans, R/W specialists, utility coordinators, inspectors, managers, QA/QC and field personnel for this project. Managed this project from the proposal that provided the overall best value through all phases of permitting, design and construction. Project requires multi-disciplined design efforts to facilitate the phased removal and complete reconstruction of an existing structure spanning NY Ave as well as active CSX and Amtrak Railroads. Context sensitive solutions were used in the design of the bridge structure, which resulted in numerous enhancements including widened sidewalks and bicycle lanes, and architectural elements. A partnership was established between all project shareholders including the EFLHD, DDOT, CSX, Amtrak, and the U.S. Postal Service.  

(4.) MDTA, I-95 Section 100 Express Toll Lanes (ETL): I-895 to South Kenwood/ Chesaco Avenue Bridge, Baltimore County, MD ($96.6M)  
*Field Operations Manager.* Consisted of extensive highway widening of a section of I-95, the primary interstate artery on the East Coast in order to provide two ETL in each direction. Responsible for providing construction services extending 1.8 miles from the I-895 split to south of the Kenwood Ave Bridge. The ETL consist of a 12’ outside shoulder, two 12’ lanes and a 4’ inside shoulder. Also included extending the Chesaco Ave Bridge and providing soil nail walls at both the Chesaco and Hazelwood Avenue structures. Also included were 8 retaining and 9 Noise Abatement Walls used to reduce permanent impact to adjoining properties and stay within the existing right-of-way. Mr. Andricos worked directly with JMT’s ROW specialists to negotiate temporary subterranean easements with individual property owners to permit the use of temporary tiebacks to provide more economical temporary support of excavation.  

(5.) FHWA-EFLHD/DDOT, Taylor Street Bridge Replacement over Railways / Brookland Avenue (DB), Washington, DC ($9.7M)  
*Design-Build Project Manager.* Primary POC for the DB Team and supervising a staff consisting of engineers, inspectors, managers, QA/QC and field personnel. He was instrumental in establishing a partnership between all project shareholders including the owners, local authorities, railroad utilities, and design/builders. This project involved the phased removal and complete reconstruction of an existing structure spanning active CSX, AMTRAK, and WMATA railroads.  

*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. **Not required for RCE.**
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>JOHN K. VICINSKI, PE, DBIA</th>
<th>Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td><strong>Quality Assurance Manager (QAM)</strong></td>
<td></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td><strong>Quinn Consulting Services, Inc.</strong></td>
<td></td>
</tr>
<tr>
<td>d. Employment History:</td>
<td>With this Firm <strong>6</strong> Years With Other Firms <strong>25</strong> Years</td>
<td></td>
</tr>
</tbody>
</table>
| | 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):
| Quinn Consulting Services, Inc. |
| **Start Date:** June 2008 | **End Date:** Present | **Position:** Quality Assurance Manager |
| **Responsibilities:** | As Quality Assurance Manager, worked exclusively on VDOT design-build projects in lead QA and QC roles. Also holds the position of Corporate Radiation Safety Officer. |
| Alpha Corporation |
| **Start Date:** September 1995 | **End Date:** June 2008 | **Position:** V.P./Director of Transportation Services |
| **Responsibilities:** | Managed up to 25 contracts simultaneously primarily providing CEI services on design-build, district-wide, and project specific projects for VDOT and other transportation clients. |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: | University of Pittsburg, Johnstown, PA/BS/1982/Civil Engineering |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #: | 1992/Virginia Registered Professional Engineering No. 0402 026380 (Also registered in MD and PA) |
| | Design-Build Professional (DBIA) |
| | VA DEQ Erosion and Sediment Control Inspector Certification (ESCCC) No. 1401 |
| | VDOT Materials School Certifications: Concrete, Asphalt Field I and II, Slurry Surfacing, Surface Treatment, Soils and Aggregate Compaction, Pavement Marking and Guardrails, Intermediate Level MOT and Flagging, ACI Level I, Nuclear Gauge Safety and Hazmat Transport |
| g. Document the extent and depth of your experience and qualifications relevant to the Project. |
| 1. **Note your role, responsibility, and specific job duties for each project, not those of the firm.** |
| 2. **Note whether experience is with current firm or with other firm.** |
| 3. **Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.** |
| (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) |
| (1.) VDOT, U.S. Route 50 Widening (DB), Loudoun and Fairfax Counties, VA ($585M) – **Quality Assurance Manager.** Responsible for this approximately 58 million dollar design-build project to widen Route 50 in Fairfax and Loudoun Counties between Rte. 742 (Poland Road) to Rte. 28 (Sully Road) from a four-lane divided highway to a six-lane divided highway. Responsibilities include oversight of the QA team that works closely with the Contractor’s QC team to assure that the project adheres to the project specific QA/QC Plan and the Minimum Requirements for QA and QC as set forth in the VDOT DB Manual. |
| Responsibilities of the QA team include: scheduling and chairing activity preparatory meetings; performing the required QA inspection and testing; monitoring the performance and documentation of the QC team, reviewing and approving monthly pay estimates, developing project punch lists, and addressing non-conforming items with contractor QC personnel. Similar to the I-64 Segment II project this project required the QAM to prepare, schedule and deliver preparatory inspection meetings that utilized the VDOT Minimum Requirements as set forth in the Design-Build Manual. In addition, QAM gained experience delivering a successful Design-Build project to VDOT under heavy traffic conditions and public scrutiny. |
| **Firm:** Quinn Consulting Services, Inc. | **Project Dates:** September 2011 – September 2015 (anticipated) |
(2.) VDOT, I-495 (Capital Beltway) HOT Lanes PPTA ($1.5B) – Area QC Engineer. This project added two-lanes in each beltway direction, replaced more than 50 bridges and overpasses, upgraded 10 interchanges, and improved bike and pedestrian access for 14 miles of I-495. Responsible for managing teams of inspectors to provide QC inspection and testing services in accordance with the project specific QA/QC plan and VDOT Minimum Requirements for QA and QC on DB & PPTA Projects. Responsibilities also included interfacing with project design engineers on RFI’s, field design changes, and non-compliance reports and daily coordination with QA and GEC personnel.

Firm: Quinn Consulting Services, Inc. | Project Dates: November 2008 – April 2010

(3.) FHWA-EFLHD/VDOT, Fairfax County Parkway (FCP) Extension Phase III (DB), Springfield, VA ($22M) – QAM. Project elements included the construction of a six-lane divided limited access highway; the Franconia-Springfield Parkway interchange improvements; a SUP alongside a portion of relocated Rolling Rd; sound barriers along relocated Rolling Rd and Ramp D; and a new bridge over the FCP. Oversaw QA and QC staff to make certain the project was completed in accordance with the contract documents and the VDOT DB Minimum Standards. Other responsibilities included facilitating preparatory meetings before new activities were begun, documenting asphalt and aggregate testing within the FHWA QL Pay System, and coordinating QA laboratory testing services.


(4.) Gilberts Corner Roundabouts Route 15/Route 50 (DB), Loudoun County, VA ($14M) – QAM. On construction of (4) new traffic circles installed near the intersection of Rt. 15 and Rt. 50 in Loudoun County, Va. Responsible for overseeing all QA and QC activities and assuring that work was performed in accordance with the project specific QA/QC plan and VDOT’s Minimum QC/QA Requirements for DB & PPTA Projects. In the initial stages of the project, helped write the QA/QC plan and assemble a team of QA inspectors and QC technicians that had the required experience and certifications to implement the plan and track all project documentation. Reviewed and signed monthly pay estimates after comparing pay requests with actual progress and compliance with minimum QA/QC technical standards. Similar to the I-64 Segment II project included public relations work in an area (Middleburg, VA) that was/is highly sensitive to traffic disruptions, environmental issues, and project aesthetics which is very similar to the work being performed in the Williamsburg area.


(5.) VDOT, Route 27/244 Interchange (DB), Arlington, VA ($50M) – QAM. This project included the replacement of the Washington Blvd. Bridge over Columbia Pike that was built in the 1940’s by the War Dept. as part of the Pentagon Roadway Network. The new bridge has many architectural and aesthetic features including; decorative pylons in each corner, haunched steel fascia girders with a two-tone paint scheme to mimic the previous arch, a relief pattern incorporated into the vertical outer surfaces, a concrete block pattern on retaining and abutment walls, and medallions with images reflecting the historical significance of Freedmen’s Village, for which the bridge will be named. Responsibilities on this project included overseeing all of the QA oversight and testing as well as monitoring the QC program for compliance with the project specific QA/QC plan as well as the VDOT Minimum Requirements for QA and QC on DB and PPTA Projects.

Firm: Quinn Consulting Services, Inc. | Project Dates: March 2012 – August 2012 (Anticipated)

* 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.

Mr. Vicinski will only have one active part-time (8hr/week) VDOT QAM assignment when I-64 Segment II is scheduled to begin construction.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
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<td><strong>b.</strong> Project Assignment:</td>
</tr>
<tr>
<td><strong>c.</strong> Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td><strong>d.</strong> Employment History: With this Firm: <strong>10</strong> Years</td>
</tr>
</tbody>
</table>

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):

**Johnson, Mirmiran & Thompson, Inc. / Duration of Employment:** February 2008 to Present
- **Position:** Vice President/Design-Build Practice Leader / Responsibilities: Was promoted to Vice President in February of 2008 and is currently JMT’s Practice Leader for transportation design-build efforts throughout the United States. Has lead and completed multiple DB projects in Northern Virginia, MD and PA.

**Johnson, Mirmiran & Thompson, Inc. / Duration of Employment:** January 2005 to January 2008
- **Position:** Senior Associate/Civil-Structural Engineer / Responsibilities: Worked on numerous transportation and facility projects for federal and state agencies including the VDOT, FHWA-EFLHD and MDOT agencies.

**Wallace Montgomery and Associates, LLP / Duration of Employment:** August 2003 to December 2004
- **Position:** Project Manager/Chief Structural Engineer/GIS Manager / Responsibilities: Managed the construction document preparation of numerous highway and bridge projects.

**STV, Inc. / Duration of Employment:** May 1983 to August 2003
- **Position:** Project Manager/Chief Structural Engineer/GIS Manager / Responsibilities: Experienced in planning and design and managing the construction document preparation of numerous highway/bridge projects.

<table>
<thead>
<tr>
<th><strong>e.</strong> Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Maryland, College Park, MD/BS/1984/Civil Engineering</td>
</tr>
<tr>
<td>Essex Community College, Essex, MD/AA/1981/General Studies</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th><strong>f.</strong> Active Registration: <strong>Year First Registered/ Discipline/VA Registration #:</strong></th>
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<tbody>
<tr>
<td>2010/Virginia Registered Professional Engineer No. 0402 47571 (Also registered in DC/DE/MD/PA/SC/WV/VI)</td>
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</table>

(1.) FHWA-EFLHD/VDOT, Fairfax County Parkway (FCP) Extension (DB), Springfield, VA ($112.5M) - **Design Manager.** Executed the design & design QA/QC program, which included 2 interchanges, roadways, 7 bridges, and widening of I-95. Oversaw the multi-disciplined design effort using over 75 engineers with multiple design firms for geotechnical investigations/analysis/engineering per VDOT MOI, environ. mitigation for hazardous materials, permitting, roadway and structural design, traffic engineering, SWM, drainage, ESC, shared use path, lighting, utility relocations/coord., ROW plat development, public coordination including Citizen Information/Pardon-Our-Dust meetings and in depth stakeholder coordination with USACE BRAC Integration office, Fort Belvoir DPW, ENRD and Fairfax County. Segments I/II of the mainline Parkway, was opened to traffic on Sept. 2010, two months ahead of schedule. Segment IV was opened in June 2011, one month ahead of schedule. FCP is located in NOVA between the Franconia-Springfield Pkwy., I-95, Fort Belvoir, the NGA’s headquarters, adjacent businesses/residences. He managed: the widening I-95 to accommodate new exit Ramp to NGA; relocated portions of Rolling Rd. and reconstr. of Fullerton Rd., both heavily traveled local roadways; Structural design of 7 bridges one of which included a bridge widening of a highly skewed bridge on I-95 off Ramp H over Backlick Rd., CIP and MSE retaining walls, extensions of 8’x 8’ box culvert, and sound walls; Traffic design that addressed safety concerns in and around long-term work zone closures and temporary lane closures through the development of an extensive TMP and participated in public outreach program. He initiated early meetings with utility owners and provided design assistance in the development of their plan/estimate submittals. He directed adjustments that minimize relocation of 20” water and 8” gas lines along Barta Rd. and coord. utility relocations with U.S. Army owned/maintained facilities. There were no project delays related to utility relocations. He successfully coordinated with other contracts along I-95 and at NGA for MOT and design ties for H/V alignments, lighting and the NGA secured gate facility. |

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** October 2008 - July 2011
(2) FHWA-EFLHD/DDOT, 9th St. Bridge Replacement over Railways/NY Ave (DB), Washington, DC ($58.4M) - Design Manager. Responsible for executing the design & QA/QC program for replacement of a 7-span structure while maintaining roadway traffic along a congested arterial and freight and passenger railroad operations near DC's Union and Amtrak's Ivy City Stations. A streamlined, 4-span bridge over CSX, Amtrak and NY Ave, along with the reconstruction and widening of NY Ave and realignment and construction of 3 new signalized intersections were part of project. Led the multi-discipline design team that included field surveys, geotechnical, roadway, structural, traffic, SWM, ESC, drainage, environ. permitting, PH 1 archaeological invest., categorical exclusion revision, decorative lighting, utility relocations, landscaping, public relations, ROW acquisition services and electric traction design to facilitate the phased removal and complete reconstruction of the existing structure and the reconstruction of 9th St. and NY Ave (U.S. 50) Interchange. The 9th St. project was located along heavily traveled roadways. The roadways within the 9th St. project carried an AADT of 60,000 vehicles on NY Ave and 24,000 vehicles on 9th Street per day. Maintaining this volume of traffic mandated 7 major traffic phases to accommodate 1,700 ft. of multilane full depth pavement reconstruction and widening along NY Ave. He directed detailed MOT plan development to address the reconstruction of NY Ave and 9th St. Bridge, a 645’ long 4-span structure, spanning NY Ave, and CSX/Amtrak railroads. He attended meetings with CSX and Amtrak to gain acceptance of the design, sequence of construction and demolition plans. The Bridge included context sensitive designs such as widened sidewalks and bicycle lanes, ADA compliant crosswalks, and aesthetic architectural elements. The project required extensive 3rd party coordination. Formal Partnering was employed by the team. The project was completed on schedule. 

Firm: Johnson, Mirmiran & Thompson, Inc. | Project Dates: September 2006 - July 2011

(3) FHWA-EFLHD/VDOT, Mark Center Short & Mid-Term Improvements (DB), Alexandria, VA ($9.2M) - Design Manager. Responsible for executing the design and QA/QC program of this roadway widening and intersection improvements project, which included ROW acquisition services, retaining wall design, utility relocations/coord., roadway widening, full depth reconstruction and widening of Interstate on-Ramp to I-395 from Seminary Rd. and intersection improvements. Other services included roadway lighting, signing, signals, drainage, SWM, ESC, landscaping, and obtaining permits. Attended public meetings for property acquisitions and Pardon Our Dust meetings and managed the appraisals/appraisal reviews associated with the acquisition of ROW and Easements per VDOT ROW requirements. Although smaller in size than I-64 Segment II, this project required full depth reconstruction and widening of the Interstate on-Ramp to I-395 from Seminary Rd. to be complete and open to traffic within 4-months of NTP. The accelerated design/permitting services, included obtaining VDOT approval for necessary design waiver; the ramp was opened to traffic on schedule. The project required extensive coordination with local stakeholders, including VDOT, businesses, bus service and the travelling public. Developed a project website for stakeholders/patrons to review schedule/traffic shift information, graphics and to solicit feedback.

Firm: Johnson, Mirmiran & Thompson, Inc. | Project Dates: April 2012 to July 2013

(4) MDTA, I-95/I-695 Interchange (Sect. 100) Express Toll Lanes (ETL) Contract 1301, Baltimore County, MD ($216.7M) - Deputy Project Manager. Responsible for executing the design & design QA/QC program for the final design for the initial $216.7M contract of the $450M I-95/I-695 interchange which is part of the $875M I-95 ETL Section 100 mega project. The project involved a major interchange and interstate design. Participated in the supervision of the design of highways, bridges, retaining walls, utility relocations, geotechnical program and drainage facilities. Though not a DB project, this fast-tracked project required design services to be efficiently completed to meet the MDTA 10 month design schedule. The I-95/I-695 interchange design involved 11 lane-miles of I-95, 12 lane-miles of I-695, 1 lane-mile of local roads and 16 lane-miles of ramps, 22 bridges, 30 retaining walls, 6 noise barriers and 5 culverts. Median Interstate widening was required to accommodate the reconstruction and additional median ETL lanes. Environmental elements including monitoring and design for Stemmer’s Run stream relocation; drainage; ESC; SWM; and H/H modeling. The projects geotechnical subsurface exploration program included obtaining more than 500 borings. The geotechnical report detailed recommendations for bridge foundations, scour, retaining walls, evaluation of slope stability & pavement design. Design was completed on schedule. It should be noted that Wagman was part of a contractor Joint Venture that constructed the initial contract.

Firm: Johnson, Mirmiran & Thompson, Inc. | Project Dates: April 2005 - April 2011

(5) MDSHA, U.S. 40 at MD 715 Interchange and Improvements (DB), Harford County, MD ($17M) - Design Manager. Responsible for executing the design & QA/QC program for upgrading this interchange that included widening of a 2 span bridge on MD 715 over U.S. 40 from 4-lanes to 6-lanes, incorporation of aesthetic bridge features, design improvements to U.S. 40 and MD 715, connecting ramps, and adjoining roadways, for a total project length of approx. 2.4 miles, evaluation and extension of large diameter culvert. Median widening of MD 715 roadway was required for the geometric improvements and to add lane capacity. Bill oversaw the multi-disciplined design effort utilizing over 25 engineers, CADD technicians and other specialists with multiple design firms whose work included geotechnical investigations/analysis/engineering, environmental permitting, roadway and structural design, traffic engineering, MOT plans and TMP, SWM, drainage, ESC, lighting, utility relocations / coordination, and in depth stakeholder coordination with MDSHA, U.S. Army, Harford Co. DPW, City of Aberdeen and the general public. Although smaller in size, the $17M D-B project adjacent to Aberdeen Proving Ground (APG) was needed to accommodate heavy traffic volumes resulting from APG - BRAC. Contract included, roadway lighting, signing, three signals, stream relocation design, drainage design, SWM, ESC, landscaping, utility relocation design/coordination including relocation design of 1,100 LF of 16” water main. Project required extensive coordination with BGE for relocation of gas and power distribution facilities and for obtaining MDE permits.

Firm: Johnson, Mirmiran & Thompson, Inc. | Project Dates: November 2010 – July 2013

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title:</td>
</tr>
<tr>
<td><strong>W. MICHAEL SCALIA</strong></td>
</tr>
<tr>
<td>General Superintendent</td>
</tr>
<tr>
<td>b. Project Assignment:</td>
</tr>
<tr>
<td><strong>Construction Manager (CM)</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
</tr>
<tr>
<td><strong>G.A. &amp; F.C. Wagman, Inc.</strong></td>
</tr>
<tr>
<td>d. Employment History: With this Firm <strong>12</strong> Years With Other Firms <strong>25</strong> Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent first) your employment history, position, general</td>
</tr>
<tr>
<td>responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15</td>
</tr>
<tr>
<td>years of employment history, please list the history for those years you have worked. Project specific</td>
</tr>
<tr>
<td>experience shall be included in Section (g) below):</td>
</tr>
<tr>
<td><strong>G.A. &amp; F.C. Wagman, Inc.</strong></td>
</tr>
<tr>
<td><strong>Start Date:</strong> July 2003 <strong>End Date:</strong> Present <strong>Position:</strong> General Superintendent</td>
</tr>
<tr>
<td><strong>Responsibilities:</strong> Coordination of field personnel to ensure the project in completed on time and within budget, safely</td>
</tr>
<tr>
<td>and without environmental incident. Wagman’s designation of Superintendent or General Superintendent is equal to</td>
</tr>
<tr>
<td>VDOT’s Construction Manager description.</td>
</tr>
<tr>
<td><strong>IA Construction Corporation</strong></td>
</tr>
<tr>
<td><strong>Start Date:</strong> May 1990 <strong>End Date:</strong> June 2003 <strong>Position:</strong> Superintendent</td>
</tr>
<tr>
<td><strong>Responsibilities:</strong> Management of field personnel, subcontractor and material deliveries; maintain schedule, and</td>
</tr>
<tr>
<td>production. Wagman’s designation of Superintendent or General Superintendent is equal to VDOT’s Construction</td>
</tr>
<tr>
<td>Manager description.</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>▪ Huntingdon Area High School</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>▪ VA DEQ Responsible Land Disturber (RLD) Certification (Pending, will obtain prior to NTP)</td>
</tr>
<tr>
<td>▪ VDOT Erosion and Sediment Control Contractor Certification (ESCCC) (Pending, will obtain prior to NTP)</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be</td>
</tr>
<tr>
<td>considered for evaluation.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a</td>
</tr>
<tr>
<td>similar function.)</td>
</tr>
<tr>
<td>(1.) <strong>EFHLD/VDOT, U.S. Route 1 Widening at Fort Belvoir (DB), Fairfax, VA ($70M)</strong> – <strong>Construction Manager/General Superintendent.</strong> Mike is responsible for all field safety, production, schedule, quality control, environmental compliance and cost. Mike leads construction field operations constructing this 3.68 mile widening and increased capacity project in Fairfax County, VA. This is a Design Build project for Eastern Federal Lands of Federal Highway where we are adding 2 lanes, and reconstructing a bridge over the Accotink Creek. Mike coordinates with the many third party stakeholders such as Ft Belvoir, utility owners, property owners, local business and VDOT. The project schedule is limited with environmental restrictions and a ROW acquisition schedule that controls the construction phasing. Other items of note: maintenance of traffic, construction sequencing, signalization, IT, environmental compliance, erosion and sedimentation control, subbase, paving drainage pipe, SWM ponds and UXO identification. Many historic buildings must be preserved and tourist attractions such as Mt. Vernon created unique traffic situations.</td>
</tr>
<tr>
<td><strong>Firm:</strong> G.A. &amp; F.C. Wagman, Inc.</td>
</tr>
</tbody>
</table>
(2.) MDSHA, Intercounty Connector MD 200, Contract A (DB), Montgomery County, MD ($483M) – Construction Manager/General Superintendent. As the General Superintendent, Mike plans, coordinates and provides technical direction to all field personnel on the Intercounty Connector, Contract A DB project. The project was 8.5 miles in length with 7.5 miles of new highway and 1 mile of interstate widening and reconstruction. Mike started out as the Environmental Superintendent responsible for supervising environmental compliance crews, installation of erosion and sediment controls, construction of streams/culvert crossings and final stormwater management facilities. Mikes’ knowledge and experience quickly elevated him to the General Superintendent of all field operations where his crews moved over two million cubic yards of excavation, over 35,000 linear feet of storm drainage. Installation of over 500,000 square yards of stone base and coordination with major subcontractors such as asphalt paving, electrical, landscaping, Intelligent Transportation Systems (ITS) and Open Road Tolling. Some unique responsibilities included relocation of multiple gas, power, and communication utilities, coordinating over 30 PEPCO power drops, and installing six new traffic signals as well as project wide lighting and electrical systems. Similar feature to I-64 Segment II was the widening and reconstruction of I-370. Over one mile of I-370 was widened to the median, sections were reconstructed and the existing structures were widened then overlaid with Latex Modified Concrete.


(3.) MDSHA, MA-4 - Woodrow Wilson Memorial Bridge, Oxon Hill, MD ($105M) – Construction Manager/General Superintendent. Mike coordinated, planned, and supervised foremen, contractors, and craft activities for roadway work on the Woodrow Wilson Bridge Contract MA-4 in Oxon Hill, Maryland. This project was the final contract for the Maryland approach to the Woodrow Wilson Memorial Bridge where we tied into the new bridge and reconstructed the inner and outer loop of the Capital Beltway (I-495). Mike was the General Superintendent for all roadway operations on this contract; specific responsibilities included earth moving, grading, drainage, retaining wall, MSE walls, paving, utility relocation, environmental compliance and major traffic control. As Superintendent, Mike was responsible for major traffic switches to allow the reconstruction and widening of the Capital Beltway (I-495/I-95). Through Mike’s leadership we achieved an “A” rating for all Erosion and Sedimentation installation and maintenance. Mike was involved with the team that proposed a two million dollar value engineering proposal to the owner to modify the foundations and fill requirements at Bridge 29.


(4.) MDSHA, MB-4 Woodrow Wilson Memorial Bridge, Oxon Hill, MD ($105M) – Construction Manager/General Superintendent. This contract was just north of the MA-4 project above. Mike supervised all field activities for roadway work on this Contract. This project was the last contract rebuilding the interchange of I-495 and Maryland 210. On this contract the inner loop and outer loop of the Capital Beltway (I-495) was reconstructed. Mike was responsible for coordination with adjacent projects to ensure a smooth transition for the travelling public. Mike was instrumental in the major traffic switches required to widen and rebuild the beltway. As the General Superintendent for all roadway operations on this contract; Mike was responsible for earth moving operations, grading, drainage, retaining wall construction, MSE wall installation, utility relocation, paving, environmental compliance and major traffic control. Through Mike’s leadership and his ability to coordinate between multiple contracts we achieved an “A” rating for all Erosion and Sedimentation installation and maintenance when following the approved Sequence of construction. All E&S was maintained to receive the “A” rating for the duration of construction.


(5.) PennDOT, I-78 Overhead Bridge Replacements, Berks County, PA ($7.4M) – Construction Manager/ General Superintendent. Mike was Wagman’s onsite manager for this design-build project. The project was part of an overall Interstate widening project along the Interstate corridor. The project included removing and replacing existing overhead bridges ahead of the interstate widening. Mike assisted with the design development with constructability reviews and executed the construction on time and within budget. Traffic was a major concern, since the bridge replacements were over a heavily travelled Interstate 78 in Pennsylvania and Mike executed the operational portion of the Traffic Maintenance Plan without incident. Heavy truck traffic and weekend traffic headed to the Poconos (a favorite vacation destination) required an experienced construction manager and Mike performed his job flawlessly. Mike assisted with right-of-way acquisition and construction sequencing during the design development. Mike was instrumental in obtaining a permit modification to assist PennDOT. The owner failed to get the proper hydraulic and hydrology information, and when it was discovered during design and the start of construction, Mike worked with the owner to maintain the project schedule.


* 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. Mr. Scalia anticipates ending his obligations on the U.S. Route 1 Widening at Fort Belvoir (DB) in Fairfax, VA as on-site full-time Construction Manager by February 2016. He will be able to make a smooth transition to his role as CM on-site full-time for the duration of construction operations on I-64 Segment II project.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> <strong>RANDY L. BOICE, PE</strong></td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> <strong>Maintenance of Traffic (MOT) Manager</strong></td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> <strong>Johnson, Mirmiran &amp; Thompson, Inc.</strong></td>
</tr>
<tr>
<td><strong>d. Employment History: With this Firm 10 Years With Other Firms 14 Years</strong></td>
</tr>
<tr>
<td><strong>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):</strong></td>
</tr>
<tr>
<td>**Johnson, Mirmiran &amp; Thompson, Inc.</td>
</tr>
<tr>
<td><strong>Position(s):</strong></td>
</tr>
<tr>
<td><strong>Responsibilities:</strong></td>
</tr>
<tr>
<td><strong>e. Education:</strong> Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>**Clarkson University</td>
</tr>
<tr>
<td><strong>f. Active Registration:</strong> Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>**1996</td>
</tr>
<tr>
<td><strong>Also registered in DC, FL, MD, NC, NY, PA</strong></td>
</tr>
<tr>
<td><strong>VDOT Guardrail Inspection Training (GRIT) No. ISP-0310110-06</strong></td>
</tr>
<tr>
<td><strong>g. Document the extent and depth of your experience and qualifications relevant to the Project.</strong></td>
</tr>
<tr>
<td><strong>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</strong></td>
</tr>
<tr>
<td><strong>2. Note whether experience is with current firm or with other firm.</strong></td>
</tr>
<tr>
<td><strong>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</strong></td>
</tr>
<tr>
<td><em><em>(List at least three (3), but no more than five (5) relevant projects</em> for which you have performed a similar function.)</em>*</td>
</tr>
</tbody>
</table>
| **1.) FHWA-EFLHD/VDOT | Fairfax County Parkway (FCP) Extension (Design-Build), Springfield, VA ($112.5M) – Lead Traffic/MOT Engineer.** | Design of the FCP between Rolling Road on the north and Fullerton Road on the south. This project is the final segment required to complete the FCP, and includes construction of a four-lane divided, limited access highway, designed to facilitate future widening to 6 lanes within the project right-of-way. The project also included widening the ramp from I-95 to the FCP including OH Interstate signing and pavement markings, culverts and a bridge on said ramp. Responsibilities included the development of the traffic management plan and detour analysis for detouring interchange traffic through local streets, signing and pavement marking design for the mainline, side streets, and ramps; traffic signal designs for 6 intersections; and, roadway lighting design. Corridors with new signals were modeled and optimized. CORSIM, VISSIM and Synchro were all
used in the design development and corridor optimization and for analyzing work zone impacts for the transportation management plan (TMP). Evaluated on site field conditions while the detours were in operation to ascertain that the analysis results coincided with “real world” activities.

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** October 2008 – July 2011

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**(2.) Fairfax County DOT | Jones Branch/Scotts Crossing Connector Final Design, Fairfax County, VA (S40M) – Lead Traffic/MOT Engineer.** Responsible for the development of the Transportation Management Plan and the traffic engineering elements for the 0.5 mile Jones Branch Connector over the Capitol Beltway and the I-495 Express Lanes. This includes evaluating a detour plan along the I-495 toll lanes for the closure of the Jones Branch Drive exit. Responsible for the development of the project transportation management plan (TMP) including the Operations Plan, Communications Plan and the strategies to offset the work zone and detour traffic impacts. Ultimately responsible for the overall traffic engineering and Intelligent Transportation System (ITS) designs to include signing, pavement marking, traffic signals, lighting and ITS elements.

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** February 2014 – On-Going

---

**(3.) FHWA-EFLHD/VDOT | Mark Center Short and Mid-Term Improvements (Design-Build), Alexandria, VA (S9.1M) – Lead Traffic/MOT Engineer.** Responsible for the development of the Transportation Management Plan (TMP) and the traffic engineering elements for the improvements to Seminary Rd at the I-395 interchange including the ramps to I-395, the Mark Center Drive intersection and the Beauregard St intersection including turn lanes on Beauregard Street in Alexandria, VA. The project included coordination with FHWA-ELFHD, VDOT, the City of Alexandria, and the U.S. Department of Defense. The work included evaluating pedestrian crossing alternatives for crossing Seminary Road at Mark Center Drive immediately west of the I-395 interchange. Responsible for the development of the project TMP including the Operations Plan, Communications Plan and the strategies to offset the work zone traffic impacts. The TMP also addressed pedestrian and bicycle concerns along with vehicles.

Ultimately responsible for the overall traffic engineering and ITS designs to include signing, pavement marking, traffic signals, lighting and ITS elements.

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** April 2012 – July 2013

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**(4.) VDOT | I-64 Hampton Roads Bridge-Tunnel (HRBT) Expansion Feasibility Study, Norfolk to Hampton, VA (S280K) – Project Manager.** Responsible for the development of an alternatives feasibility study for the expansion of the HRBT and the I-64 corridor between I-664 and I-564. It has long been recognized that the existing Hampton Roads Bridge-Tunnel facility either needed capacity improvements or have another crossing added to the area. Six alternatives to improve the capacity of the existing facility were presented to the Secretary of Transportation for study by the local governing delegation and JMT was selected to lead the study. The alternatives included adding additional tunnel capacity in various forms; including the implementation of High Occupancy Vehicle (HOV) or High-Occupancy Toll (HOT) lanes, reversible lanes, as well as the addition of general purpose lanes; and adding a high level bridge crossing. The project included the development of peak hour travel demand forecasts. Traffic analysis was performed using VISSIM and HCS. JMT worked and coordinated with bridge and tunnel consultants under separate contracts with VDOT to compose the report. JMT also prepared presentation materials for public meetings with the citizens at either end of the bridge-tunnel and well as with the local government officials. JMT presented the results with the Secretary and the Chief Engineer.

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** August 2008 – March 2009

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**(5.) MDTA | I-95/I-695 Interchange (Section 100) Express Toll Lanes (ETL) Contract 1301, Baltimore County, MD (S216.7M) – Traffic Team Leader.** Responsible for the design of signing, pavement markings, and Intelligent Transportation System (ITS) equipment and communications for the corridor improvements and construction of the Express Toll Lanes along I-95. Responsibilities included designing field equipment locations, conduit and fiber optic cable layouts to the field equipment as well as signing and pavement marking for the interchange during two segments of the project. Also oversaw the development of maintenance of traffic signing during the individual construction phases of each segment. The traffic monitoring and information dissemination equipment placement was coordinated with adjacent projects to the north and south. An interim communications system was developed to get field equipment energized or existing equipment maintained throughout the construction period. The interim system used a combination of fiber optic cable and wireless communications. Special provisions for all of the specialized ITS equipment were researched, developed and finalized for this project and for use with the adjacent projects.

**Firm:** Johnson, Mirmiran & Thompson, Inc. | **Project Dates:** April 2005 – April 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.  **Not required for MOT Manager.**
3.4.1 Work History Forms (Lead Contractor & Designer)
3.4.1(a)
Lead Contractor
Work History Form
Narrative describing 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 project they will have on this Project, so the relevance of this work can be considered accordingly.

**Project Highlights**

- 1st large meg DB project in Maryland.
- Project included 18 bridges with 271,000 SF of bridge deck.
- Extensive measures were taken to minimize the environmental impacts including installing large box culverts to allow large mammals to pass under the highway and eliminate contract with motorists; relocated over 100 box turtles; tree harvesting; culverts designed for fish passage; and reforestation areas.

**Similar Scope Activities to I-64 Sec. I**

- Traffic Operations and Safety – Created full TMP and developed MOT plans to accommodate construction and access for widening existing I-370; access to the median.
- Employed full-time ATSSA MOT Manager for the project.
- Environmental Compliance – Maintained a Commitment tracking database, design through construction. Reduced Environmental impacts by 10%. Coordinated with third party agencies.
- Existing Geotechnical Conditions - Required various types of bridge foundations. The ability to self-perform drilled shafts, driven piles, and predrilled pile foundations was key to successful project completion. Completed an existing paving study of I-370 to match widening and upgrade the existing highway.

**Similar Risks to I-64 Sec. II**

- Traffic Operations and Safety – Created full TMP and developed MOT plans to accommodate construction and access for widening existing I-370; access to the median.
- Employed full-time ATSSA MOT Manager for the project.
- Environmental Compliance – Maintained a Commitment tracking database, design through construction. Reduced Environmental impacts by 10%. Coordinated with third party agencies.
- Existing Geotechnical Conditions - Required various types of bridge foundations. The ability to self-perform drilled shafts, driven piles, and predrilled pile foundations was key to successful project completion. Completed an existing paving study of I-370 to match widening and upgrade the existing highway.
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)</th>
</tr>
</thead>
</table>
| 2) I-495 (Capital Beltway) High Occupancy Toll (HOT) Lanes and Dulles Toll Road (DTR) Interchange (P3-DB) Tysons Corner, VA SINGLE CONTRACT* | HNTB Corporation | Fluor Lane, LLC  
P: 571-480-4652  
PM: Bob Portley  
P: 571-527-3602  
E: bob.portley@fluor-lane.com | 12/2012 | 12/2012 (Actual) | $34,945 | $43,062 (Final)  
Additional $8,117 of work was completed within the original contract schedule |

**Scope/Project Description**
- This project consisted of new bridges and ramps to carry new HOT/HOV lanes over DTR and ramps to connect DTR to HOT/HOV lanes. A combination of foundation techniques were used to address the variability of the surface conditions and space limitations of the work zone in this project delivery. We self-performed spread footings, drilled shafts, driven pile and pre-drilled pile. All substructure and superstructure concrete was self-performed. Excellent working relationships with subcontractors T.D. Read Steel Co., Inc. and Tavares Concrete provided additional resources to meet VDOT and Fluor-Lane, LLC’s DBE commitment and project schedule requirements. Erection of prestressed concrete girders over DATR and ramps was self-performed. Wagman successfully worked with another Fluor Lane, LLC subcontractor to plan and coordinate the Structural Steel Staging and Erection.
- This project changed significantly after the original contract was executed:
  - MWAA, VDOT and Fluor-Lane, LLC negotiated to add additional lanes and ramps for DTR.
  - Some bridges that had originally been structural steel superstructures were changed to prestressed concrete girders superstructures to accommodate fast track changes and long lead times.
  - The entire project was constructed in the median of I-495 with heavy traffic (ADT exceeded 140,000 vehicles on I-495 and exceeded 100,000 vehicles on Dulles Toll Road).
  - Extensive planning was executed throughout the entire project schedule to address ingress/egress of construction vehicles, materials, and permanent construction.
  - A number of bridges carrying I-495 were lengthened to accommodate additional travel lanes along the Dulles Toll Road below.
  - To further increase roadway capacity without impacting adjacent properties. MSE wall quantities increased approximately 35% to allow more room for ramps and lanes between roadways.
- This additional $8,117,000 of work was completed within the original contract schedule.

**PROJECT HIGHLIGHTS**
- Completed ahead of required schedule and under budget.
- Met all DBE goals established on this project.
- Built 16 bridges and approximately 165,000 SF of MSE wall.

**SIMILAR SCOPE ACTIVITIES TO I-64 SEG. II**
- Design-Build
- Roadway
- Survey/Right-of-Way
- Structures and Bridges
- Environmental
- Geotechnical
- TCD/TMP
- Utility Coord./Relocation
- Widening to Median
- Landscaping
- Public Involvement/Rel.
- ITS
- Context Sensitive Sols.
- QA/QC
- Third-Party Coordination
- Overall Project Mgmt.
- Interstate Widening
- Increased Capacity

**SIMILAR RISKS TO I-64 SEG. II**
- Traffic Operations and Safety - Extremely high traffic counts (AADT~ 140,000) required detailed advanced planning and coordination not only within the construction team but with stakeholders.
- Environmental Compliance - Complied with project wide environmental compliance plan.
- Existing Geotechnical Conditions - Required various types of bridge foundations. The ability to self-perform drilled shafts, driven piles, and pre-drilled pile foundations was key to successful project completion.

*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.
**LEAD CONTRACTOR - WORK HISTORY FORM**

**LIMIT 1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>Scope/Project Description</th>
<th>PROJECT HIGHLIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walman was the Lead Contractor for the reconstruction of 1.34 miles of I-95/495 Inner Loop Express, portions of I-295 northbound and southbound and construction of 11 associated ramps. Constructed 8 bridges which included both curved steel girders and concrete girder bridges. 11 retaining walls that included CIP MSE walls, MSE walls and wire walls with a CIP veneer. 440,000 CY roadway excavation. Settlement and consolidation was an issue so over 561,000 LF of wick drains were installed, geotechnical instrumentation installed and monitored, 5 month waiting period for consolidation and placement of lightweight foam concrete for backfill. 16,000 LF storm drainage. 131,500 LF steel piles were driven. 17,000 SF temporary support of excavation installed. Temporary bridge (contractor design) installed for haul road access using temporary geosynthetic walls at the abutments. Extensive traffic control needed to reconstruct Manassas I-95/495/1-295. Project included extensive landscaping, irrigation, signing, lighting and ITS work. Erosion &amp; sediment control work was critical with work being performed adjacent to the Potomac River along with environmental sensitivity due to bald eagle nesting area. The Woodrow Wilson Memorial Bridge carries an AADT of over 150,000 vehicles. We used a design-build element to save the owner over $1.2 million. Walman redesigned the approach and bridge foundation for the structure over the I-95 Capital Beltway. This structure and approach carried a shared use path along the Potomac over the Capital Beltway and onto the Main Woodrow Wilson Bridge Structure. The shared use path on this project connected with the shared use project on Walman’s I-95/495 &amp; MD 210 project shared use path. During construction Johnson, Mirmiran &amp; Thompson, Inc. (JMT) worked with Walman on value engineering proposals to reduce cost and schedule. The redesign of the approach fill using geosynthetic consist in owner savings of over $2 million. Demonstrates a Well Integrated Organization with Proven Cooperative Work History and Team Experience and Complementary Skills and Experience - The Similar Scope Activities lists work completed that will be needed on the I-64 Capacity Improvement – Segment II project. The proposed staff and their demonstrated experience with similar scope items will ensure continuity in the DBT and its approach and results in an experienced team that is integrated and has a proven history of completing projects on time and within budget. Relevant and Verifiable Evidence of Good Performance - Walman received five separate contracts for the Woodrow Wilson Memorial Bridge (WWMB) replacement project. The contracts totaled over $270M, and involved constructing the new National Harbor interchange and reconstructing the I-295 interchange, portions of the MD 210 interchange and along the I-95/495 Maryland corridor up to the new WWMB. Maintenance and protection of traffic was extensive as a result of the project’s location along the heavily traveled I-95 / 495 corridor, outside Washington, DC. Walman was the most involved contractor, per dollar volume for this renowned project. Walman completed this project ahead of schedule and under budget, delivered on DBE goals and maintained an “A” rating for ESC during construction. Walman was recognized on this project and received the following awards: <strong>2012 Alliance Award - Northern Virginia Transportation Alliance (NVTA)</strong>  <strong>2011 Award of Excellence, Partnering Bronze Award - Maryland Quality Initiative (MdQI)</strong>  <strong>2010 Award of Excellence, Major Roadway Over $10 Million - Maryland Quality Initiative (MdQI)</strong></td>
<td>- Completed ahead of required schedule and under budget. - Met all DBE goals established on this project. - Built 16 bridges and approximately 140,000 LF of MSE wall. - Achieved an “A” rating for ESC during construction.</td>
</tr>
<tr>
<td>PROJECT HIGHLIGHTS</td>
<td>SIMILAR SCOPE ACTIVITIES TO I-64 SEG. II</td>
</tr>
<tr>
<td>- Design-Build</td>
<td>Structures and Bridges</td>
</tr>
<tr>
<td>- Roadway</td>
<td>Environmental</td>
</tr>
<tr>
<td>- Survey/Right-of-Way</td>
<td>Geotechnical</td>
</tr>
<tr>
<td>- Structures</td>
<td>Hydraulics</td>
</tr>
<tr>
<td>- TCD/TMP</td>
<td>Noise Walls</td>
</tr>
<tr>
<td>- Public Involvement/Rel.</td>
<td>Utility Coord./Relocation</td>
</tr>
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<td>- ITS</td>
<td>Increased Capacity</td>
</tr>
<tr>
<td>- Cont Sensible Sols.</td>
<td>Landscaping</td>
</tr>
<tr>
<td>- QA/QC</td>
<td>Railroad Coordination</td>
</tr>
<tr>
<td>- Third-Party Coordination</td>
<td>Interstate Widening</td>
</tr>
<tr>
<td>- Overall Project Mgmt.</td>
<td>Widen to Median</td>
</tr>
</tbody>
</table>

**SIMILAR RISKS TO I-64 SEG. II**

- Traffic Operations and Safety - Required trained, dedicated employees and traffic control resources. Safe, well maintained and efficient traffic control was the “first contact” with public road users. Executed major traffic switches to rebuild inner and outer loop
- Environmental Compliance - Maintained an “A” Rating for Erosion and Sedimentation controls for entire project
- Existing Geotechnical Conditions – Experience allowed for the construction team to be innovative to create safer, more economical solutions. This resulted in reducing project durations and cost. Self-performed pileing and other geotechnical elements

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**ATTACHMENT 3.4.1(a)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange, Inner Loop Local and Inner Loop Express at Woodrow Wilson Memorial Bridge Prince George’s Co., MD</td>
<td>Johnson, Mirmiran &amp; Thompson, Inc./Whitman, Requardt &amp; Associates, LLP A Joint Venture</td>
</tr>
</tbody>
</table>

**WAGMAN**

<table>
<thead>
<tr>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities</th>
<th>d. Contract Completion Date (Original)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland State Highway Administration</td>
<td>05/2009</td>
</tr>
<tr>
<td>P: 703-691-6710</td>
<td></td>
</tr>
<tr>
<td>PM: Shirleine Cleveland, PE (currently VDOT’s NOVA DB Program Manager)</td>
<td></td>
</tr>
<tr>
<td>P: 703-713-2084</td>
<td></td>
</tr>
<tr>
<td>E: <a href="mailto:shirleine.cleveland@vdot.virginia.gov">shirleine.cleveland@vdot.virginia.gov</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/2009 (Actual)</td>
<td>$93,187</td>
<td>$105,839</td>
</tr>
<tr>
<td>(due to change orders and owner-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>granted time extensions)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 listing will be evaluated.**
3.4.1(b)

Lead Designer

Work History Form
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 list will be evaluated.

## LEAD DESIGNER - WORK HISTORY FORM

**LIMIT 1 PAGE FORMAT**

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

### PROJECT HIGHLIGHTS

- **JMT received the “Star Partner” awards for their exceptional dedication, teamwork, and professionalism by NGA & USACE.
- “I am extremely pleased with the performance of CRC & JMT...they provided more collaborative and responsive to our needs and concerns throughout the project.”
- Tom Fatheree, VDOT/BRC Coord.

### SIMILAR SCOPE ACTIVITIES TO I-64 SEG. II

- **Design-Build**
- **Roadway**
- **Structures and Bridges**
- **Environmental/Permitting**
- **Landscaping**
- **Civil/Geotech**
- **Utilities**
- **Construction**
- **Access**
- **Transportation Engineering Awards for VDOT Projects Greater than $10M; ACEC/VA**
- **Honor Award for Excellence; and the ACEC/MD Merit Award; DBIA Mid-Atlantic Region**

### SIMILAR RISKS TO I-64 SEG. II

- Traffic Operations and Safety – Developed detailed MOT plans for I-95 widening with consideration of adjacent projects. Stakeholder meetings help to gain acceptance.
- Developed project wide TMD. Modeled MOT phasing Coordinated with VDOT Northern Region Operations Center
- Environmental Compliance - Instituted formal partnering with the local and diverse stakeholders to address their goals. Conducted extensive public outreach/community meeting
- Existing Geotechnical Conditions - Performed vibration analysis and rock property prediction of rock drilling on existing infrastructure. Also, adjusted profiles to reduce soil-rock contact and minimize disturbance of contaminated materials.

### TFC STAFF PROPOSED FOR I-64 SEG. II

- Greg Andricos, PE (JMT) – Design-Build Project Manager
- Brian Schaub, PE (JMT) – Project Manager
- Rodney Hayzell, PE (JMT) – Design Engineer
- Mike Leffler, PE (JMT) – Geotechnical Engineering
- Jon Conner, PLA, LEED AP (JMT) – Landscape Architecture
- Ian Frost, CE (REE) - Environmental/Permitting

1. VA DOT's budget was increased by $500 million, and $2 billion in VA DOT's reserved funds was considered. 2. The project was completed in 2008, and a final report was released in 2009. 3. The project was completed in 2010, and a final report was released in 2011.

The Virginia Army National Guard was using the creek as a reference point to determine the location of a new bridge over the creek. The project was completed in 2011, and a final report was released in 2012.

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The work took place in the Anacostia neighborhood, one of Washington’s oldest neighborhoods, and about 1.5 miles from the U.S. Capitol. The construction zone was surrounded by a number of office buildings, including the Washington Navy Yard facilities, as well as residences and commercial facilities. In such a large metro region, extensive traffic engineering plans/analysis and MOT was critical in keeping construction on schedule. The work also included surveys, SUE, grading, drainage, SWM, pavement design, shared use paths, cast in place and MSE retaining walls, noise/sound walls, lighting, traffic signals, landscaping, sign/striping, geotechnical engr./exploration/stability analyses, utility relocations/coordination, and environmental permitting and compliance monitoring.

The geologic conditions present along the banks of the Anacostia river proved to be challenging. The footprint of this project incorporated two bridges crossing of existing CSXT tracks, three bridges that accommodated future CSXT track expansions and the envelop of an existing CSXT tunnel via Washington Avenue. The collaboration with CSXT resulted in a win-win situation such that both projects would function and accommodate each other. The work included surveys, SUE, grading, drainage, SWM, pavement design, shared use paths, cast in place and MSE retaining walls, noise/sound walls, lighting, traffic signals, landscaping, sign/striping, geotechnical engr./exploration/stability analyses, utility relocations/coordination, and environmental permitting and compliance monitoring.

JMT authored the NEPA Reevaluation of the FEIS and provided all environmental compliance and permitting efforts. JMT was responsible for all landscape design and Visual Quality elements including transition to earn the designation as a “Gold Level Walk Friendly Community” by the Pedestrian and Bicycle Information Center.
### LEAD DESIGNER – WORK HISTORY FORM

**LIMIT 1 PAGE PER PROJECT**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Start Date</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3) I-95/I-695 Interchange</td>
<td>G.A. &amp; F.C. Wagman, Inc.  (Wagman) / McLean Contracting Company (McLean) A Joint Venture</td>
<td>Maryland Transportation Authority (MDTA)  P: 410.931.0110 x251 PM: Mr. David LaBella, PE P: 443.271.8804 E: <a href="mailto:diablerta@mdot.state.md.us">diablerta@mdot.state.md.us</a></td>
<td>04/2011</td>
<td>04/2011 (Actual)</td>
<td>$208,440</td>
<td>$216,788 (Actual)</td>
</tr>
</tbody>
</table>

**PROJECT HIGHLIGHTS**

- First project within Maryland to implement both general purpose and managed lanes in the same facility.
- "I can personally say that JMT has delivered a product of the highest quality on this project. JMT managed their design budgets and two large construction project in a meticulous fashion and was extremely responsive to the aggressive design schedule the MDTA imposed on JMT. Mr. David LaBella, PE, Major Programs Mgr. (02-14-2013)

### SIMILAR SCOPES ACTIVITY TO I-64 SEG. II

<table>
<thead>
<tr>
<th>Scope/Project Description</th>
<th>Project Value (in thousands)</th>
<th>Purpose</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway</td>
<td>$64 SEG. II</td>
<td>Traffic Safety &amp; Efficiency</td>
<td>TEP and modeling were developed that minimized impacts to the traveling public by maintaining all existing lanes during construction.</td>
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<tr>
<td>Survey/Right-of-Way/SUE</td>
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<td>Structures and Bridges</td>
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<td>Environmental Geotechnical</td>
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<td>Hydraulics &amp; SWM</td>
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<td>TC &amp; TMP</td>
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<td>Noise Walls</td>
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<td>Utility Coord./Relocation</td>
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<td>Widening to Median</td>
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<td>Landscaping</td>
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<td>Public Involvement/Rel.</td>
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<td>ITS</td>
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<td>Context Sensitive Sols.</td>
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<td>QA/QC</td>
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<td>Third-Party Coordination</td>
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<td>Overall Project Mgmt.</td>
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<tr>
<td>Internate Widening</td>
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</tbody>
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### SIMILAR RISK TO I-64 SEG. II

- Traffic Operations and Safety - Efficient TCP and modeling were developed that minimized impacts to the traveling public by maintaining all existing lanes during construction.
- Project Schedule - Fast tracked design of over 1,100 drawings, detailed estimates and specifications for this complex multilevel interchange within 10 months.
- Existing Geologic Conditions – Performed geotechnical engineering services including more than 500 borings, testing and associated reports within a fast tracked 10 month design period.

**SINGLE CONTRACT**

Baltimore Co., MD JMT

**JMT** served as lead/prime designer for this complex multilevel fast tracked interchange design project. JMT designed the preliminary engineering for Section 100 of the I-95 Express Toll Lane project and final design on the I-95/I-695 Interchange. This project involved reconstructing the I-95/I-695 interchange to eliminate a braided interchange and upgrade the interchange to allow construction of Express Toll Lanes through the interchange. The project included two mainline bridges on I-95 and four long curved steel fly-over ramp structures to connect I-95 to I-695. In addition, the structural work included several small approach bridges, MSE retaining walls, and noise barriers. Though not a DBB project, this fast-tracked project required design services to be efficiently completed to meet the MDTA 10 month design schedule. More than 1,200 plans were produced for advertisement during the 10 month design duration allowing the project to be completed on schedule.

The highway design encompassed an array of design elements, i.e. horizontal and vertical alignments, typical sections and minimizing impacts to existing right of way and utility company facilities. The final design included (1) lane-miles of I-95, (12) lane-miles of I-695, (1) lane-mile of local roads and (16) lane-miles of ramps which included multiple widening’s of the I-95 median in multiple locations along the Interstates to accommodate the median Express Toll Lanes, proposed geometry and ultimate lane configurations.

The preliminary structural design work included superstructure type evaluations, span arrangements, pier location and sizes, and constructability. Prepared final design plans for (22) bridges, (38) retaining walls, (7) noise barriers and (5) box culverts at the interchange. JMT’s design also implemented the latest technologies in Traffic and ITS Management. Section 100 is the first project within MD to implement both general purpose and managed lanes in the same facility. JMT performed travel demand forecasts for the various alternatives, and conducted travel time runs and performed traffic counts. In addition, JMT performed capacity and operational analyses, for all MOT designs in the project area. JMT also led the design of the Intelligent Transportation System (ITS)/Electronic Toll Collection elements for the entire project that included coordination of the fiber optic communication and wireless communication design between adjacent projects. JMT designed an interim wireless CCTV system implemented during construction to maintain video surveillance throughout the construction period. The ITS elements included CCTV surveillance, DMS, RMS, fiber optic and wireless communication designs and temporary connections to vital ITS infrastructure in the core of the interchange and the video surveillance system.

Geotechnical engineering included obtaining 500+ borings and associated testing, pavement design, including subgrade stabilization for soft material using lime stabilization, stability design for foundations, MSE walls and slopes. Most of the subgrade soils in the project area, including the median consisted of fill soils with high moisture contents and SPT N-values less than or equal to 4 (four) which indicate soft soils. These soil conditions posed a critical risk to the Project construction and life of the pavement. To address this risk, JMT focused on reducing material undercut by chemically treating the existing soils using lime and cement stabilization.

Field surveys were performed and used various techniques, including reflectorless field surveys and low level aerial helicopter surveys that minimized impacts to vehicular traffic. Other services included wetland/forest delineation, coordination with environmental agencies for permitting requirements, H/H design including stream relocation and rehabilitation designs, SWM, SUE investigations and delineation, utility coordination/relocations, including relocation of power transmission towers and large diameter natural gas transmission mains, and extensive public involvement and coordination. JMT used focused group meetings with agencies, utility companies and communities to establish a partnering environment. The work also included: noise/sound walls, lighting, traffic signals, landscaping, signing/striping, and environmental permitting and compliance monitoring.

JMT coordinated with Lead Contractors JV of Wagman/MeLean during the construction on this project. Collaboration between design/construction resulted in value engineering proposals involving foundations, MOT and utilities that saved the project several million dollars as well as reduced the schedule and increased safety of the traveling public and workers.

Demonstrate a Well Integrated Organization with Proven Cooperative Work History and Team Experience and Complementary Skills and Experience - The Personnel listed on the right side of this form will be assigned to the I-64 Capacity Improvement – Segment II project. The Similar Scope Activities list work completed that will be needed on this DBB project. The proposed staff and their demonstrated experience with similar scope items will ensure continuity in the DBB and its approach and results in an experienced team that is integrated and has a proven history of completing projects on time and within budget. Relevant and Verifiable Evidence of Good Performance - This project has relevance because of the similar size, section, breadth of expertise required and JMT’s capability for fast-tracking design on a heavily traveled interstate highway system. This project was recognized with several awards from National Partnership for Highway Quality – National Achievement Award, Special Recognition for a Structure Project; MDOT – Award of Excellence, Partnering, Partnering Silver, Mid-Atlantic Construction – Best of 2010 and Merit Awards; American Concrete Institute, MD Chapter – Excellence in Concrete Award; and ACEC/MD – Honor Award for Studies. Research & Consulting Engineer Services.

*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 list will be evaluated.*