July 2, 2019

Statement of Qualifications
A Design-Build Project

I-95 Northbound Rappahannock River Crossing

Spotsylvania County, City of Fredericksburg, Stafford County, Virginia

From: 1.16 miles South of Route 3 (Plank Road)
To: 0.44 Miles South of Route 8900 (Centreport Parkway)

VDOT
Virginia Department of Transportation

State Project Number: 0095-111-270
Federal Projct Number: NHP-095-2(531)
Contract ID Number: C00105510DB106

WAGMAN | JMT
A DESIGN-BUILD TEAM

Section 3.2

Letter of Submittal

A DESIGN-BUILD TEAM

WAGMAN

General Construction | Heavy Civil | Geotechnical

Wagman Heavy Civil, Inc.
26000 Simpson Road
North Dinwiddie, VA 23803-8943

July 2, 2019

Mr. Suril R. Shah, P.E., DBIA,
Alternative Project Delivery Division
Virginia Department of Transportation
Central Office Mail Center
1401 East Broad Street
Richmond, Virginia 23219

RE: **Statement of Qualifications (SOQ)**
I-95 Northbound Rappahannock River Crossing
From: 1.16 miles South of Route 3 (Plank Road)
To: 0.44 Miles South of Route 8900 (Centreport Parkway)
A Design-Build (DB) Project
RFQ No: C00105510DB106

Dear Mr. Shah:

Wagman Heavy Civil, Inc. (Wagman) is pleased to submit our SOQ for I-95 Northbound Rappahannock River Crossing in Spotsylvania County, City of Fredericksburg, and Stafford County, Virginia. In accordance with the Letter of Submittal requirements for Section 3.2 we offer the following additional information for review:

3.2.1/3.2.2 Authorized Representative/Point of Contact
Glen Mays, DBIA, Design-Build Project Manager
26000 Simpson Road, North Dinwiddie, VA 23803-8943
P. 804.631.0000 | F. 804.733.6281
Email: gkmays@wagman.com

3.2.3 Principal Officer Information.
Greg Andricos, PE, President/COO
3290 N. Susquehanna Trail, York, PA 17406-9754
P. 717.767.8292 | F. 717.767.5546
Email. gmandricos@wagman.com

3.2.4 Offeror's Structure, Financial Responsibility, and Bonding Approach. Wagman Heavy Civil, Inc. is a corporation and will take financial responsibility for this project; we have no liability limitations. A single 100% performance bond and 100% payment bond shall be provided for the total Design-Build contract value.

3.2.5 Full Legal Name of Lead Contractor is Wagman Heavy Civil, Inc. and Lead Designer is Johnson, Mirmiran & Thompson, Inc. (JMT).

3.2.6 Affiliated and Subsidiary Companies. The full legal name and address of all affiliated and/or subsidiary companies are provided on Attachment 3.2.6 in the Appendix.

3.2.7 Certificates Regarding Debarment. Certificates Regarding Debarment for the Primary firm (Attachment 3.2.7 (a)) and the Lower Tier firms (Attachment 3.2.7 (b)) are included in the Appendix.

3.2.8 VDOT Prequalification Certifications. Wagman's VDOT prequalification number is W002, and our status is active and in good standing; the prequalification and certifications are included in the Appendix.

3.2.9 Evidence of Obtaining Bonding. Evidence of a letter of surety is found in the Appendix stating Wagman is capable of obtaining a performance and payment bond based on the current estimated Design-Build contract value referenced. This bond will cover the project and any warranty period.

3.2.10 Compliance with Laws and Required Registration. Current SCC Certificates, DPOR licenses, and staff licenses are included in the Appendix.

3.2.11 Achieving a Twelve Percent (12%) DBE Participation Goal. Wagman is committed to achieving a twelve percent (12%) DBE participation goal for the entire value of the contract.

Wagman has a long and successful history serving Virginians on numerous projects. As a single, integrated Design-Build Team, we will design and construct I-95 Northbound Rappahannock River Crossing to ensure the greatest opportunity for success, including the potential for an expediated delivery. We will build upon our existing transparent working relationship with VDOT and third-party stakeholders further promoting trust, confidence, and collaboration. Thank you for the opportunity to submit our Statement of Qualifications.

Respectfully,
Wagman Heavy Civil, Inc.

Glen Mays, DBIA
Design-Build Project Manager

Section 3.3

Offeror's Team Structure

A DESIGN-BUILD TEAM

Wagman will provide the Virginia Department of Transportation (VDOT) with an experienced and integrated Design-Build Team (DBT) for the **I-95 Northbound (NB) Rappahannock River Crossing.** Wagman has carefully selected individuals with relevant expertise from a number of regionally acclaimed firms to provide the most robust team for this Project. These individuals will ultimately report to executive management of Wagman throughout construction.

The timing of this procurement provides a **unique opportunity** for the **current Design - Build Team** (DBT) of Wagman Heavy Civil, Inc. (Wagman) and JMT to build upon our existing partnerships with VDOT and other stakeholders to safely deliver the I-95 Northbound Rappahannock River Crossing in an expedited manner.

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 DB Contractor who has partnered to complete the design and construction of over $1 Billion of transportation projects in the Mid-Atlantic Region. Wagman's ability to self-perform roadway, bridge, drainage, geotechnical, foundations, latex overlay, grooving and grinding is unique in this industry. With innovative engineering experience, a staff of 11 registered PE's and a large fleet of heavy equipment, we are well-positioned to manage this project within schedule and budget while incorporating best practices related to safety, quality and the environment.

Wagman is nationally recognized for our innovative programs to promote worker safety and health as core values of the transportation design and construction industry. In addition to numerous other awards, most recently, The Virginia Transportation Construction Alliance (VTCA) awarded Wagman Heavy Civil, Inc. the **2019 Contractor Safety Award** as recognition for our outstanding safety programs and performance.

Lead Designer / Project Management / Highway / Structural Design / Traffic Engineering / MOT / Environmental Permitting / Geotechnical / Hydraulics / Utilities / Surveying / SUE / 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 USA. JMT is currently ranked No. 14 in *Engineering News-Record's (ENR)* Top Transportation Firms. JMT has completed thousands of highway and bridge projects ranging in complexity from local intersection improvements to multiphase interstate projects. They have a documented reputation for the development of innovative solutions for DB projects, delivery of projects on-time and within budget for a variety of project delivery methods including DB and Public-Private-Partnerships (P3). JMT has been the Lead Designer or Quality Assurance Manager on several DB/P3 projects in Virginia with total design and construction dollars exceeding $1 Billion.

Wagman, JMT and the proposed individual staff members 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 DBT's current work is being performed for repeat clients, illustrating our ability to deliver a safe, quality, and cost-effective project to our customers.

On the following page, is a list of hand-picked, highly qualified subcontractors and subconsultants that are adept in their field of expertise that will assist the Wagman/JMT DBT.

Benefits that our **existing DBT** provides to VDOT include but are not limited to:

- existing relationships and active communication protocols with major project shareholders
- understanding the access and permitting requirements for working in sensitive areas (including the Rappahannock River, canal, etc.)
- real time electronic document control using PlanGrid
- multi-sequenced ESC/SWM
- implementation of enhanced construction entrances (protected buffer area for acceleration/deceleration) while limiting impacts to the traveling public
- extensive knowledge of existing soils within the corridor and appropriate mitigation/amendment

Construction Subcontractor and Subconsultants	
Quinn Consulting Services Incorporated	QA Management and Inspection *DBE #626289*
CES Consulting, LLC	QC Management, Inspection and Utility Coordination *DBE #690040*
Design Subconsultants	
Harris Miller Miller & Hanson Inc.	Noise Analysis *SWaM/DBE#665488*
Three Oaks Engineering, Inc.	Environmental Permitting/Mussel Survey *SWaM/DBE/WBE* # 709895
Hassan Water Resources, LLC	Hydraulic/Hydrologic Analysis *SWaM # 662801/MBE # DB2010-0337-2015*
Schnabel Engineering, Inc.	Geotechnical Engineering

3.3.1 IDENTITY OF AND INFORMATION ABOUT THE KEY PERSONNEL

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 (active partnering via PlanGrid), empowers team members to solve issues at the most appropriate organizational level, and establishes procedural rigor required for full CQIP compliance. This approach has been successfully demonstrated on previous **VDOT DB projects, including I-95 Southbound CD Lanes Rappahannock River Crossing, Route 7 Widening and Bridge Rehabilitation over DTR and DIAAH, Odd Fellows Road Interchange**, and **Route 61 Bridge Replacement.** Our proposed key staff members consist of **a Design-Build Project Manager, Entrusted Engineer in Charge, Quality Assurance Manager, Design Manager, Construction Manager, and Lead Structural Engineer** with a combined total of over 139 years of design and construction knowledge, which includes significant experience with VDOT and innovative project delivery methods.

All key personnel identified in the organization chart will remain on the team throughout the duration of procurement and construction for the I-95 NB Rappahannock River Crossing project. Resumes showcasing their individual experience are included in Attachments 3.3.1 of the Appendix. These staff members have the requisite experience to fulfill their individual responsibilities as outlined in Section 3.3 of the RFQ and are employed full-time by their respective firms.

3.3.2 ORGANIZATIONAL CHART/NARRATIVE (org chart is located on page 6 of 15)

Reporting Relationships of Key Personnel - The DBT organizational structure proposed for this project utilizes a successful, fully integrated team implemented and refined by Wagman and JMT on previous award-winning DB projects. Our core team is optimized to present clear, logical, and functioning reporting relationships to manage the design and construction of the I-95 NB Rappahannock River Crossing project. The project organization is structured to facilitate timely and effective communication among all personnel, regardless of position. Details of the roles of Key Personnel and reporting relationships are listed below:

Design-Build Project Manager (DBPM) – Mr. Glen Mays, DBIA The DBT organizational chart starts with VDOT at the pinnacle of the hierarchy. VDOT's primary interface will be the **DBPM.** In accordance with sound management practices, the DBPM serves in the most crucial role, one that defines success for all aspects of the project. Mr. Mays will institute and lead the integrated Wagman Team approach to collaboratively meet all RFP requirements under the contract, as well as incorporating our numerous **value-added services**, while answering any questions or inquiries and avoiding and resolving any disputes. He is the principal conduit for communication with VDOT and exercises direct control over the integrated DBT including design, construction, materials, equipment, labor procurement, quality assurance, quality control, contract administration, safety and public outreach. The EIC, DM, CM, QAM, Public Involvement/Relations Manager, Senior Construction Manager, and Safety Manager will report directly and support 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.

Entrusted Engineer in Charge (EIC) – **Mr. Jerry Whitlock, PE, DBIA** is a full time employee of Wagman (the lead contractor that will enter into the contract with VDOT) and will report directly to the DBPM, with open lines of communication with the DM, CM, VDOT and QAM. Mr. Whitlock is a registered, licensed PE in the Commonwealth of Virginia. Through diligent coordination between design and construction, he has 14 years of experience delivering safe and functional DB projects in Virginia. This experience includes overseeing the design team to ensure that complex engineering decisions involving multi-disciplinary work are made in a timely manner at the appropriate level by qualified and experienced engineers. In addition, Mr. Whitlock has served with progressive responsibilities in the full spectrum of DB roles on complex roadway/interchange projects from Quality Manager, CM, Deputy DBPM, and corporate DB Integration Manager. In his current corporate role as well as in the EIC project role, Mr. Whitlock is empowered to make, or cause to be made, complex engineering decisions for the project, including the evaluation of how any decision affects the project. Mr. Whitlock is performing in a very similar role as Deputy DBPM on the Southbound I-95 Rappahannock River Crossing Project, where he is working hand in hand with the DBPM, DM, RCE, CM, and QAM to ensure issues are addressed by qualified and experienced personnel and that these solutions work for the project as a whole.

Independent Quality Assurance Manager (QAM) – **Mr. Scott Shropshire, PE, CCM** is the independent QAM and will report directly to the DBPM and will ensure that all work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. Mr. Shropshire's direct reports include quality assurance inspectors, the off-site materials sampling and testing laboratory, and other QA staff. The QAM organization will, through the DBPM, establish communication paths to the construction quality control and construction organization to ensure that the QAM is apprised of activities and to ensure that corrective activities and remediations are implemented as quickly as possible. Scott is familiar with the challenges associated with the successful delivery of this project as he is currently supporting the QAM on the I-95 SB project on a part time basis by performing pre CQIP internal documentation and process audits. Scott is currently serving as the QAM on the following projects: **Route 630/I-95 (Courthouse Road) project** (anticipated assignment until July 2020), **Route 606 (Mudd Tavern Road) over I-95**(anticipated assignment until June 2019), and **SB Rappahannock River Bridge Crossing on I-95** (anticipated assignment until May 2022).

Design Manager (DM) – **Mr. Rodney Hayzlett, PE** is the DM for the project and the organizational chart clearly defines that all design disciplines for the project will report to him. Mr. Hayzlett is currently serving in the same role on the I-95 Southbound CD Lanes Rappahannock River Crossing (Design-Build) project. 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. 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. Hayzlett will also establish and oversee the QA/QC program for design.

Construction Manager (CM) – **Mr. Ryan Tibbs, DBIA** is the CM for the project and will be onsite during construction operations to oversee all major construction activities and will manage the Construction QC program, Project Superintendents, Construction MOT Manager, Field Superintendents, Project Engineer (responsible for managing PlanGrid, tracking quantities, and assisting with schedule updates/payment applications), Survey Manager, Subcontractors, and Construction Quality Control Manager (QCM). Mr. Tibbs' responsibilities will include CPM schedule development and updating, resource planning and allocation, budgetary and cost control, subcontractor scheduling, MOT, ESC, and shop drawing review. The CM will have communication with the DM during design development, and the EIC and QAM throughout the project. Utility relocators and major subcontractors will report to the CM. The CM will report directly to the DBPM. Mr. Tibbs also holds RLD and ESCCC certifications. Ryan is not currently assigned to an active project. As such, he is immediately available for the I-95 NB Rappahannock River Crossing project.

Lead Structural Engineer (LSE) – **Mr. Trip Phaup, PE** will serve as the LSE for the project and will report directly to the DM. The LSE will be responsible for structural design of the bridges and retaining walls. In addition, the LSE will review designs, verify and modify designs, if necessary, based on field conditions and construction activities related to dismantling and removing portions of existing structures, installing foundations, handling and erecting girders, and making superstructure and substructure repairs.

Mr. Phaup is currently serving in the same role on the I-95 Southbound CD Lanes Rappahannock River Crossing (Design-Build) project.

VALUE ADDED PERSONNEL

To supplement the experience of our key personnel in mitigating risk and to provide the specialist experience required for the **I-95 Northbound Rappahannock River Crossing project**, our Team is ***exceeding the Statement of Qualifications (SOQ) requirements*** by committing the ***Value Added*** personnel below to the Project. These individuals will play an important role in our ability to complete the work ahead of schedule, within budget, and in a safe, quality manner with minimal resource requirements from VDOT. These personnel will remain on our DBT for the duration of the DB contract. Their responsibilities and reporting relationships are described in the table below.

Value Added Personnel	Experience
Brian Curtis, PE **Lead Roadway Engineer** 21 Years Experience Reports directly to the DM	Mr. Curtis has delivered the RFC plans for the SB I-95 CD Lanes - Rappahannock River Crossing DB project. He has a long history working in this corridor, beginning with the Outer Connector. He was responsible for developing the Rte 17 Interchange concept for the I-95 Access Study and then was project manager on the I-95 Exit 133 to 130 IMR setting up the SB and NB CD lanes projects for obtaining FHWA approval.
Melissa Burgh, PE **Lead Hydraulics Engineer** 14 Years Experience Reports directly to the DM	Mrs. Burgh is a certified Erosion & Sediment Control Inspector and SWM Combined Administrator. She has prepared the drainage and SWM designs for the SB I-95 CD Lanes - Rappahannock River Crossing DB project and served as lead E&S compliance inspector for the project performing regular audits/inspections with Wagman to ensure compliance on the project.
Ian Frost, CEP, LEED AP **Lead Environmental Manager** 30 Years Experience Reports directly to the DM	Mr. Frost coordination efforts with regulatory agencies has delivered the required environmental permits and managed TOY restrictions on the SB I-95 CD Lanes - Rappahannock River Crossing DB project allowing the DB Team to get ahead of schedule. Mr. Frost was formerly a VDOT Environmental Permit Manager and DEQ Program Manager.
Elisabeth McCollum **Public Relations Manager** 17 Years Experience Reports directly to the DBPM	Mrs. McCollum is currently successfully leading the public relations efforts on SB I-95 CD Lanes - Rappahannock River Crossing DB project and has developed a collaborative working relationship with the VDOT Fredericksburg District Public Communication staff. Glowing feedback has been received from project stakeholders on the DB Team's public interactions to date.
Michelle Bolding, PE **Lead Geotechncial Engineer** 14 Years Experience Reports directly to the DM	Ms. Bolding has led an extensive geotechnical data collection and analysis effort on the SB I-95 CD Lanes - Rappahannock River Crossing DB project. She has issued geotechnical engineering recommendations for foundations, unsuitable materials, pavement sections, settlement monitoring, light-weight fills, slope protections, and solutions for acid-sulfate soils and low-plasticity lean clays.
Carl Benton **Senior Construction Manager** 36 Years Experience Reports directly to the DBPM	Mr. Benton will ensure the I-95 NB project is kicked off correctly and initial E&S controls are in compliance with regulations and permits. He is currently Senior Construction Manager on the SB I-95 CD Lanes - Rappahannock River Crossing DB project. He has Wagman ahead of schedule and in environmental compliance on the current project.
Jeremy Rogers **Project Superintendent** 21 Years Experience Reports directly to the CM	Mr. Rogers is currently Project Superintendent on the SB I-95 CD Lanes - Rappahannock River Crossing DB project. He brings relevant experience to the NB I-95 project gained from successfully progressing the current project at or ahead of schedule successfully mitigating all access, geotechnical, and environmental challenges within constrained work areas. The schedule for this project allows Jeremy to successfully complete the SB project while beginning construction operations for the NB project.
David Colbert **Quality Control Manager** 31 Years Experience Reports directly to the CM	Mr. Colbert has a significant amount of experience working with Quality Assurance and Quality Control on VDOT projects. His experience as QAM on Design-Build projects and as Design Construction Services Manager on the $2.1B Elizabeth River Tunnels Project brings invaluable experience to the DB Team.
Matt McLaughlin **Utility Coordination** 34 Years Experience Reports directly to the CM	Mr. McLaughlin is currently serving as utility coordinator for the DB Team during construction of the SB I-95 CD Lanes - Rappahannock River Crossing DB project. He has kept utilities off the critical path on the project.

Third Party Stakeholders

Businesses, educational institutions, EMS, Fredericksburg Area Metropolitan Planning Organization (FAMPO), Regional Transit Organizations, Commuter Services, Friends of the Rappahannock, Fredericksburg Trail Alliance, Fredericksburg City and Stafford County Public Schools, National Park Service, Virginia Railway Express, Departments of Parks and Recreation and other Recreational groups , DMV, DEQ, Army Corps of Engineers, Traveling Public, Police, Fire and Rescue, Property Owners and Utility Companies

Other VDOT Projects in Area

Extension of I-95 Express Lanes to Route 17 (FREDEX)
I-95 Southbound CD Lanes

VDOT Virginia Department of Transportation — **Fredericksburg District Project Manager**

DB Project Manager
Glen Mays, DBIA ●

Project Resources Group
Greg Andricos, PE
Robert Gallagher, PE
WAGMAN JMT

Public Involvement/Relations Manager
Elisabeth McCullum

Senior Construction Manager
Carl Benton

Safety Manager
Joe Goss ● ■ ◆

Entrusted Engineer in Charge
Jerry Whitlock, PE, DBIA ● ■ ◆

Design QA Manager
Robert Reed, PE

Design QC Manager
Independent Reviewers

Design Manager
Rodney Hayzlett, PE

Construction Manager
Ryan Tibbs, DBIA ● ■ ◆

QA Manager
Scott Shropshire, PE, CCM (Q)

Lead Structural Engineer
Trip Phaup, PE

Structural Engineer
Stephen Hanes, PE

Roadway Design
Brian Curtis, PE

Traffic Engineering/MOT/ITS
Randy Boice, PE

Drainage/SWM/ESC
Melissa Burgh, PE

Environmental Permitting
Ian Frost, CEP, AICP, LEED AP
Three Oaks (Mussel Survey)

Hydrologic and Hydraulic Analysis
Pilar McClelland, PE
Gamal Hassan, PE (HWR)

Noise Analysis
Walter Kulis, PE
Christopher Bajdek (HMMH)

Survey/SUE
Michael Zmuda, LS, PE

Geotechnical Engineer
Michael Leffler, PE
Michelle Bolding, PE❖(S)
Ed Drahos, PE (S)

Right-of-Way
Gerald Krebs, SR/WA

Utility Coordination/Design
Dave Malinoski, PE

Project Superintendent
Jeremy Rogers ● ■ ◆

Structures Superintendent
Mike Dugan

Highway Superintendent
Brian Blankenship

E & S Superintendent
Ian Westbrook ● ■ ◆

Construction MOT Mgr.
Brad McClung ● ■ ◆

Project Engineer
Berkley Hawkins ● ■ ◆

Utility Coordination/Constr.
Matt McLaughlin, CCM (CES)

QC Manager
David Colbert (CES) ◆

Lead Bridge QC Inspector
Ried Jaff (CES) ◆

Lead Roadway QC Inspector
Patrick Pritt (CES) ◆

Supporting QC Inspectors

AMRL/CCRL Lab. Testing

Survey Manager
Adam Staples

Subcontractors
TBD

Lead Roadway QA Insp.
Noah Pate(Q) ◆

Lead Bridge QA Insp.
Chris Goss(Q) ◆

Specialized Engineering

Supporting QA Inspectors

LEGEND

——— = Direct Report Line
- - - = Line of Communication
= Value Added Personnel
= Key Personnel

● = RLD ■ =ESCCC ◆ = VDOT Intermediate Work Zone
❖ = Geotechnical Engineer of Record

Wagman Heavy Civil, Inc.
Johnson, Mirmiran & Thompson, Inc.
Harris Miller Miller & Hanson, Inc. (HMMH)*
Schnabel Engineering, LLC (S)
CES Consulting, LLC (CES)*
Hassan Water Resources, LLC (HWR)*
Three Oaks Engineering *
Quinn Consulting Services Incorporated (Q)*
*DBE and/or SWaM firm

DESIGN
CONSTRUCTION
INDEP. QA/QC

WAGMAN JMT

Section 3.4

Experience of Offerors Team

A DESIGN-BUILD TEAM

Section 3.5

Project Risks

A DESIGN-BUILD TEAM

The first step in managing risk is to identify the risks. The Wagman Team conducted a Risk Workshop modeled on the system utilized by VDOT to assess and assign risks. Although all viewpoints of risk were considered, the Wagman Team concentrated more on risks affecting the team's ability to deliver the project on-time and within budget.

The Risk Workshop identified over 50 individual risks. These risks were evaluated by degree of impact (1 to 3) and probability of occurrence (1 to 3). A risk factor was calculated for each risk; (risk factor = degree of impact multiplied by probability of occurrence) and ranged from 1 to 9. Of the over 50 individual risks, 14 received a risk factor of 6 or higher. These are shown with score in the table to the right:

Identified Risk	Risk Factor
Constructing Rappahannock River bridge in a constrained workspace	9
Maintenance of traffic at Route 17 Interchange	9
Meeting SWM requirements within project footprint	9
Coordination with adjacent projects (FredEx and I-95 SB CD Lanes)	9
Large number of parcels with potential for acquisition including relocation of businesses near Route 17 including potential Title 6 issues	6
Encountering highly plastic materials not suitable to 2:1 cut slopes	6
Presence of Acid-sulfate and high plasticity soils	6
Ability to reuse existing pipes and culverts - original system is 50+ years old	6
Providing proposed typical section at existing bridge overpasses, Rte. 3, Cowan, Fall Hill, and Truslow Rd	6
Changing water conditions at Rappahannock River	6
Pedestrians along Route 17 through the work zone	6
Coordinating with 3rd party stakeholders - businesses, Friends of Rappahannock, Fredericksburg Trail Alliance, residents, commuters, first responders, EMS, City of Fredericksburg, Spotsylvania, and Stafford	6
Availability of labor and materials with other ongoing VDOT advertisements > $3 B	6
Designing Option 1 flyover to VDOT standards without DW/DE	6

From our risk evaluation process, the following three risks were determined to be the most critical to the success of the I-95 NB Rappahannock River Crossing Project from the viewpoint of the Wagman Team as they all scored a 9 and will be discussed in detail:

1) **Constructing Rappahannock River Bridge in a Constrained Workspace**
2) **Maintenance of Traffic at Route 17 Interchange**
3) **Meeting Stormwater Management Requirements within Project Footprint**

While these top 3 risks are generally similar to the risks that our existing DB Team is successfully mitigating on the current SB I-95 CD Lanes D-B Project, we believe these risks become amplified with regards to the I-95 NB Project as the I-95 corridor becomes further constrained as the SB I-95 and FredEx projects are constructed. Although the coordination of these projects also scored a 9 on our risk register, the DBT has already established a good working relationship with the FredEx Project Team and is uniquely positioned to expedite the permitting and construction of I-95 NB project by supplementing our existing DBT. As such, the coordination of existing projects did not necessitate designation as a top 3 risk. Additionally, our DB Team is prepared to implement best management practices to mitigate the risks per the attached table as well as others as they are identified.

However, when responding to the RFP, the Wagman Team will develop a risk management plan for the project that will include a risk register which includes all the risks identified during our workshop with a risk factor of 6 or higher. This plan will include strategies to respond to each of those risks, and the party or individual best responsible for managing the risk.

This will allow the Wagman Team to create mitigation plans, build contingencies into the project or adjust the project schedule to manage the risk.

During delivery of the project, the Wagman Team's DBPM will be responsible for managing the risk on the project. The diagram above left shows the steps Mr. Mays will follow throughout the length of the project to manage the risk. Risks will be reviewed and re-evaluated by the Wagman Team monthly until they have been mitigated or are no longer considered a risk. Mitigation strategies will be modified as necessary and new risks will be added to the register and tracked as they are identified.

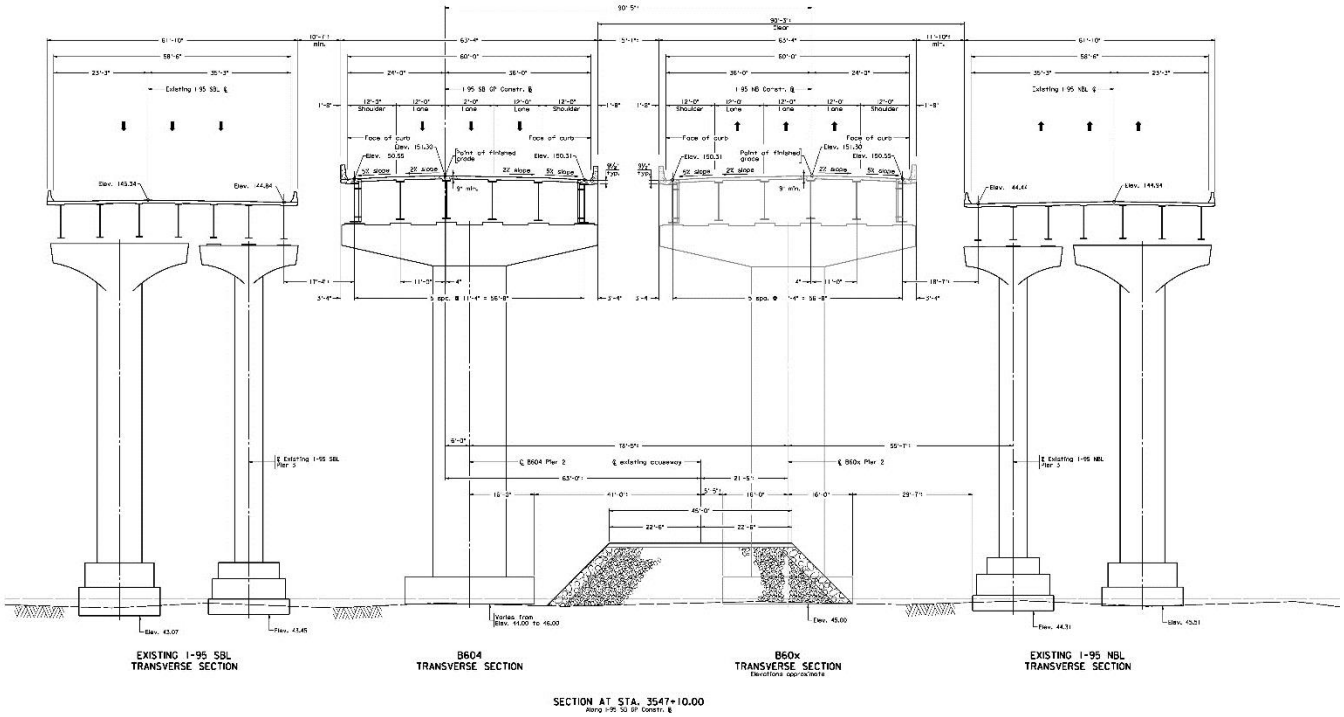
Risk No. 1 | CONSTRUCTING RAPPAHANNOCK RIVER BRIDGE IN A CONSTRAINED WORK SPACE

Risk Identification: As part of the I-95 NB Rappahannock River Crossing project, the Wagman Team will be responsible for designing and constructing a new, fourth bridge over the Rappahannock River between the new SBL bridge that the DBT is currently constructing and the existing NBL bridge. Working in the physically constrained space between the existing bridges is critical to the success of the project and presents risk associated with schedule, budget, environmental restrictions, and construction activities. The constrained work space includes physical constraints and time related constraints including limited available work space, potentially numerous and overlapping Time of Year (TOY) restrictions, challenging site access due to frequent high river flows, and existing environmental conditions and cultural resources present at the site.

All work must be performed in a sequenced manner in order to temporarily address SWM during all activities including: constructing a causeway, abutments, and piers; erecting girders and pouring a concrete deck over 100 feet above the river, removing the causeway, and converting to permanent SWM facilities on abutment slopes. Specific challenges related to this risk include:

- A very constrained and narrow work space – there is 90' +- clear from edge of deck of the new SBL bridge to edge of deck of the existing NBL bridge.
- The new SBL bridge temporary causeway is in place and occupies over half of the available work space.
- It will be challenging for two separate contractors to safely and effectively work at the same time in the same constrained area.
- Questions to answer in addressing this risk include –
  - How to fit two (2) potential causeways between the new SBL bridge and existing NBL bridge while maintaining river access to users?
  - How to construct the abutments while maintaining traffic on I-95 including support of excavation, etc.
  - How to construct the piers including support of excavation on steep slopes and cofferdams within the river.
  - How to erect girders when there is only 15' +- clear between new SBL and new NBL bridge and 12' +- clear between new NBL bridge and existing NBL bridge with little to no room for crane boom movement.
  - How to place deck concrete – from below or from the adjacent bridge.

Wagman's Completed Major River Crossings	Length
Route 340 over Shenandoah River	1,910-ft
Route 61 over New River	1,141-ft
Chesterfield Power Bridge over Proctors Creek	1,389-ft
Route 360 over Dan River	2 @ 2,144-ft
Franklin Turnpike Ext over Fall Creek	2 @ 640-ft
US 58 over Nottoway River	1,200-ft
I-95 over Meherrin River	2 @ 540-ft
US 15 over Rivanna River	464-ft
US 1 over Nottoway River	481-ft & 321-ft
US 1 over Meherrin River	563-ft & 259-ft
US 22 over Lehigh River	2@640-ft
I-83 over Susquehanna River	2 @ 3,315-ft
Choptank River Bridge	8,650-ft
Sunbury Bridge over Susquehanna River	2,844-ft
I-78 over Lehigh River	1,250-ft
SR 7 over Christian River	682-ft
Shickshinny Bridge over Susquehanna River	877-ft
I-695 over Bear Creek	3,870-ft
I95/395 Interchange over Patapsco River	2 @ 8,000-ft 2 @ 4,000-ft
Route 1 Spur over Puncheon Run	2 @ 650-ft
Route 15 over Hammond Lake	1,510-ft
I-80 over Susquehanna River	1,151-ft
Route 50 over Wicomico River	2 @ 456-ft
Harvey Taylor Bridge over Susquehanna River	4,817-ft
Route 54 Causeway over Bay	6,627-ft
Youghioghenny River Crossing	1,545-ft
Susquehanna River Bridge	2 @ 5,600-ft
Route 52 Causeway over IC Waterway	2 @ 2,570-ft 2 @ 2,460-ft
NJTA GSP SB Bridge over Great Egg Harbor	3,840-ft 770-ft
ICC A over Rock Creek	2 @ 460-ft 2 @ 300-ft
ICC B over Paint Branch	6 @ 580-895-ft 2 @ 1,140-ft 2 @ 1,280-ft



Why the risk is critical: Constructing a bridge in a constrained work space including gaining access to, and working within the Rappahannock River is very challenging and is a critical risk to address on the project for reasons summarized below -

- Economically feasible access to the Rappahannock River is critical to the proposed bridge construction work, yet very limited due to existing construction work on the I-95 SB CD Lanes – Rappahannock River Crossing project.
- If the NB Rappahannock River project is awarded to a Design-Builder other than the Wagman Team, there will be major challenges associated with limited work space in the river crossing bridge work zone. Challenges include the phasing, permitting and installation of additional causeway access in the Rappahannock River.
- Based on the Environmental Assessment/FONSI, TOY will be imposed by the environmental permits for in-stream work due to anadromous fish migration from February 15 to June 30 and potential in-stream TOY restrictions may be imposed for mussel species from March 15 to May 31 and August 15 to October 15. Additionally, the DBT believes that a mussel survey must be performed within 30 days prior to any causeway modifications.
- Construction activities will be impacted by river access due to ingress and egress to the work zone, the limited area to work, positioning of equipment and personnel, and major storm events, which can preclude river access. Some storm events may require removal of all equipment, material, and workforce from any causeway until the water recedes. The dynamic nature of this river has been documented for centuries as reflected by its name (Rappahannock) meaning "River of Quick, Rising Water" in the Algonquian language. As such, water levels fluctuate over the course of a normal year (as indicated in the chart located on page 11) and will impact production and schedule. As we have experienced in the past 16 months, high flows from storm events are happening more frequently. Any access such as a causeway will impact the environmental resources such as wetlands, floodplains, historic resources, trails, and the river and will require permits from regulatory agencies.

If the river access/TOY restrictions delay a critical bridge construction activity or prevent repairs to a causeway or cofferdam thus delaying bridge completion, then the project completion could be delayed. This risk is magnified because of several outside factors that cannot be controlled by the Wagman Team -

- In-stream construction activities such as causeway installation or cofferdam installation must be scheduled around both the river access/TOY restrictions as well as periods of high flow. The unpredictability of storms adds to the scheduling challenge posed by the river access/TOY restrictions.

- The Wagman Team expects that the causeways and cofferdams could be damaged from high flows and may need repair at some time during the construction. These repairs may require in-stream work and that may need to be completed during the river TOY restrictions. Without relief from the permitting agencies, the in-stream repairs may not be allowed during the TOY restrictions.

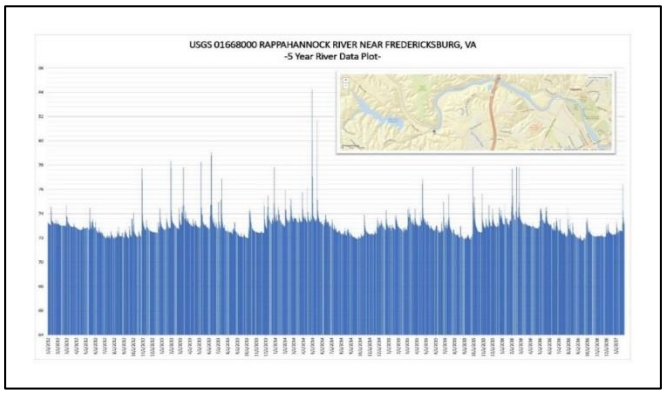
Wagman is fully aware of the challenges of working in the constrained area for the construction of the NB Bridge over the Rappahannock River. Construction of the SB Bridge will be ongoing from the causeway for that structure while work on the NB bridge is progressing. Wagman is exploring the same innovative methods for erection of the girders which will help to mitigate environmental, safety and schedule concerns. Because Wagman holds the approved permit to work in this location through May 2022, our DBT can streamline the regulatory approvals because the existing causeway only requires minor modifications to realign the existing causeway to facilitate construction of the NB bridge. Therefore, we are confident that Wagman can expedite delivery of the project. Furthermore, the DBT intends to accelerate the removal of all temporary access (including causeway) thereby eliminating all temporary impacts to the river well in advance of the contractual project completion date. This provides a great benefit to the environment, native species, trail and river users.

Risk Impact on the Project: One of the significant risks for the project is the constrained work space and limited feasible access to the Rappahannock River, and the potential for schedule delays because of multiple contractors working in a tight work zone and river access challenges from the expected time of year restrictions for in-stream work and the potential for high flows in the river precluding access to the Rappahannock River for the bridge construction.

Risk Mitigation Strategy: With the Wagman Team's substantial experience with similar large bridge projects, and its current position as the Design-Builder on the I-95 SB CD Lanes – Rappahannock River Crossing project, Wagman is in a unique position to employ proven strategies to mitigate the risks associated with a constrained work space and river access, including the following -

1. As the current Design-Builder on the I-95 SB CD Lanes – Rappahannock River Crossing project, Wagman has already established an exclusive license agreement with the City of Fredericksburg to improve, operate and maintain the existing access road to the Rappahannock River that will also facilitate the construction of the NB bridge.
2. As the Design Builder for both the SB and NB projects, Wagman will be able to completely eliminate the substantial challenges associated with the coordination of work activities between two different contractors working in a very limited work area.
3. Wagman has already studied the river patterns and the water elevation history in the Rappahannock River to determine the optimum causeway height to minimize impacts to the work zone during rain events. Wagman has also used this strategy on several other projects including the I-95 Bridges over Meherrin River, Susquehanna River Bridge, Chesterfield Power Plant Bridge over Proctors Creek, and Route 61 over New River Bridge Replacement.
4. Wagman has already established a proven effective relationship with the permitting agencies with jurisdiction over the work in and around the Rappahannock River.
5. The Wagman Team has a good understanding of the foundation conditions in the area of the proposed NBL bridge based on experience in constructing the SBL bridge. With in-house foundation engineers and specialty foundation construction knowledge, Wagman has the ability to evaluate types of foundations that can be constructed with minimal impact to the river and with minimal or no need for cofferdams. For example, Wagman and JMT selected drilled shafts on the Route 61 Narrows Bridge Replacement project in order to avoid constructing cofferdams subject to overtopping and minimize temporary impacts.
6. Wagman's design for the SB project causeway has already been approved by the regulatory agencies and has performed well hydraulically since its installation. The Wagman design is one of the first causeways approved in Virginia that consumes more than 50 percent of the stream width. Because, the footprint is larger than normally allowed, we can expedite the bridge construction and minimize disturbance of the river that normally occurs from the normal flip flopping of the causeway from side to side.
7. Use temporary bridges within the causeway to allow increased water flow as Wagman did on the current I-95 SB CD Lanes – Rappahannock River Crossing Project.
8. Transfer the causeway during low flow and outside of the TOY restrictions within the river working 24 hours a day, 7 days a week until the work is complete. Wagman relocated a 2500-ft long stone causeway within the banks of a river in 5 days using this approach.

9. Create a comprehensive access plan to allow the flow of equipment, material and people. The Wagman Team will create a plan illustrating the access, causeway, new piers, existing piers, crane locations, cofferdams material storage and environmental resources.
10. Store material outside of the flood plain and prefabricate and transport items such as rebar cages to the work area on the causeway mitigating a crowded work area. Wagman used this technique successfully on causeway projects such as the Route 61 over New River Bridge Replacement, Susquehanna River Bridge, Chesterfield Power Plant Bridge over Proctors Creek, and is currently using this technique on the I-95 SB CD Lanes – Rappahannock River Crossing project.
11. Develop a detailed schedule for all in-stream activities that avoids the TOY restrictions and provides some schedule flexibility for lack of river access due to high flows.
12. Conduct mussel surveys (for the dwarf wedge mussel and possibly green floater using a certified individual) early in the project to determine if any protected mussel species are present in the river. This will be particularly important for the NB project because the regulatory agencies have indicated their intent to increase the length of the mussel survey from what was required for the SB project. If protected mussels are absent, we will request an exemption from the mussel TOY restriction. If they are present, then we would re-locate the individuals to a suitable location that will not be affected by the construction activities and request a waiver from the TOY restrictions.



Data for River Flow Versus Time of Year
Used to Select Causeway Elevation
I-95 SB CD Lanes over Rappahannock River

13. If necessary due to conflicts with critical repairs or in-stream activities, coordinate with the agencies (DGIF, DCR, and NMFS and the permitting agencies) to secure relief from the TOY restrictions such as:
    - shaving time off the front end or back end of time of the anadromous fish TOY depending on the actual schedule of the fish migration for that particular year. We have already been successful in securing this relief on the SB project from the agencies.
    - securing an exemption for in-stream activities for short construction activities. Typically, this type of relief requires water quality monitoring to ensure that sedimentation and turbidity levels do not pose an adverse impact to anadromous fish or mussels

Role of VDOT and other Agencies: The DBT is fully committed to assuming full responsibility for this risk. We anticipate a similar role for VDOT and anticipate "partnering with the regulatory agencies" especially DEQ, USACE, and VMRC throughout the permitting as we have done on the SB project. VDOT could help with agency coordination with DEQ, USACE, VMRC, DGIF, DCR, and NMFS to expedite their review of requests for temporary relief from TOY restrictions, should that be necessary.

Risk No. 2 | MAINTENANCE OF TRAFFIC AT ROUTE 17 INTERCHANGE

Risk Identification: A critical risk for this project is the successful maintenance of traffic (MOT) during the construction of the interchange modifications at I-95 and Route 17. In addition to high volumes of traffic on the general-purpose lanes, the temporary traffic control plan must maintain high volumes of traffic on the interchange ramps and adjacent NB CD road while the NB CD road bridge is replaced. The geometry for the bid option that converts the NB I-95 off-ramp to NB Route 17 into a flyover and shifts the alignment of NB Route 17 further north complicates the construction sequencing.

Why This Risk Is Critical: The interchange at I-95 and Route 17 serves as a critical connection providing a vital alternative route to the west of the heavily congested Northern Virginia region. The interchange also serves as the key access point to developed areas of Stafford County. Any disruption to this important interchange could have severe repercussions to first responders, the travelling public and commerce throughout the region. The proposed interchange will require reconstruction of busy ramps within a tightly constrained physical area. Separate components of the interchange are tightly and closely intertwined with each other:

- NB CD lanes: The NB CD lanes bridge over Route 17 carries the NB on and off ramps to Route 17. Maintaining traffic on and under the bridge while replacing the bridge and maintaining access to the Route 17 ramps will be a challenge as the bridge needs to be raised in elevation of approximately 2'.

- Bid Option – Flyover Ramp for NB I-95 to NB Route 17 movement: Construction of this ramp requires the removal of the existing NB I-95 to NB Route 17 ramp and shifting the alignment of the NB Route 17 lanes to the north. Sequencing of these changes will be a challenge. Temporary ramp connections to enter NB I-95 must be positioned to avoid the new bridge during construction. Utilities will need to be relocated prior to improvements beginning. Construction of the flyover ramp could be delayed until utility relocations and ROW acquisition are completed.
- Unknowns: The southern terminus for the FredEx HOT lanes occurs in the Rt. 17 interchange location and tie into connector ramps from the NB I-95 Rappahannock River Crossing. Timing of completion or delays with the FredEx project could impact the schedule of critical construction activities on the project.

Multiple short-term phases may be needed to move traffic through the construction zone. Each shift in traffic will require detailed design, planning, implementation, and monitoring and public notice.

Wagman completed a high-profile project on I-95 (200,000 adt) that had 47 separate construction phases impacting I-95 mainline and adjacent interchanges. The project won both MdQI awards for Partnering and overall project.

Critical construction activities in the interchange areas will include earthwork movement, aggregate placement, drainage box culverts, SWM facilities, noise barriers, concrete barriers, retaining walls, bridge construction, and asphalt paving. All these activities involve heavy machinery and trucks, making safe ingress and egress extremely critical. Hence, construction vehicles entering and exiting the work zones on the interstate will add to the risk to the traveling public.

Impacts: From a shared viewpoint safety, public convenience, and disruptions to travel and commerce in this highly congested area are at risk. From the DBT viewpoint, disruptions to material delivery and work operations not only impact safety and public opinion, but also affect the schedule. The impact of inadequately planning and communicating construction activities with the traveling public could have severe consequences as identified below:

- travel delays
- public dissatisfaction with the Project
- amplified safety hazards for both the contractor and the traveling public
- increased response time for emergency vehicles

Wagman was nationally recognized as the winner of the 2016 ARTBA-National Safety Award. Public Safety will remain a priority for the duration of the project.

Risk Mitigation Strategy: The Wagman Team has implemented successful strategies, as identified below, to safely maintain traffic through work areas and keep safety and mobility the top priorities. We will strategize and mitigate the risk in the following stages:

Design Phase: An effective Transportation Management Plan (TMP) and strategies to minimize disruption to the traffic flow will be imperative to ensure that public perception of this important project remain positive and supportive. Several of our team members are already certified in ATTSA Advanced MOT design or VDOT Intermediate Work Zone Control for field implementation of MOT. The Wagman Team will be responsible for developing efficient construction phasing, determining safe and effective work zone strategies (i.e. temporary traffic control plans), and ensuring proper traffic operations management in accordance with a detailed and approved TMP. Our Team has successfully delivered an integrated TMP (over 180,000 ADT) on the Woodrow Wilson Bridge (WWB); JMT developed the TMP and Wagman executed the TMP for rebuilding two interchanges and creating local access roads. The DBT has also successfully managed traffic at the Route 17 Interchange during construction of the new I-95 GP lanes bridge over Route 17 on the I-95 SB CD lanes project and prepared a TMP approved by VDOT for the whole project.

During design, the entire team will have an essential role in defining construction sequences, locating detours, and addressing public safety and the safety of our workers. Based on our detailed understanding of the *Virginia Work Area Protection Manual* and the *Manual on Uniform Traffic Control Devices*, all MOT strategies will be designed incorporating appropriate temporary traffic control, lighting, and adequate vehicle acceleration and deceleration lengths. Most work zones will be separated physically by temporary concrete barrier.

Experienced construction personnel will be involved with the design team to ensure constructability, as Wagman and JMT have done on the new Odd Fellows Interchange in Lynchburg, VA and currently on the I-95 SB CD Lanes project. Multi-phased construction sequencing must be detailed to a high level of precision to avoid design

and operational conflicts. A basic tenet will be to separate work zones from the traveling public and allow safe and clear access to the construction zones. Concepts could include relocating ramp movements, shoulder widening to shift lanes, constructing extra width on bridges for shifted traffic. Work areas that do not require ROW acquisition or utility relocation can be started early in the construction sequence. Temporary ramp connections and acceleration lanes would be located to allow safe construction of the NB CD lane bridge. The DBT is committed to develop and install barrier protected enhanced construction entrances allowing construction vehicles to accelerate and decelerate separate from through traffic where practical. These enhanced entrances have improved safety on the I-95 SB CD Lanes project.

Construction Phase: Wagman has extensive experience working along the I-95 corridor (I-95 SB CD Lanes, I-95 Ashland, I-95 Meherrin, Woodrow Wilson Bridge, I-95/I-695 Interchange, I-95/I-495 HOT lanes, I-95/I-395 Latex) and the following practices and resources helped our team execute a safe and timely project and will be implemented on the I-95 NB Rappahannock River Crossing Project.

- MOT Manager with ATTSA and VDOT Intermediate Work Control
- Daily coordination meeting to discuss traffic switches, detours, lane closures, and other MOT issues.
- Four Week look-ahead schedule (updated weekly)
- Strategically plan deliveries of materials at off peak hours
- Develop emergency pull off areas for the traffic in our work zone, giving motorists a safe area for emergencies with minimal impact to traffic.
- Daily inspection of the work zone for MOT compliance

The DBT is committed to supporting public outreach efforts to notify the public concerning MOT issues and provide communication with Project Stakeholders and the traveling public. In addition to aiding VDOT with development of content for public distribution documents and various news media, we will use additional message boards for traveler's guidance, broadcast on the message boards major traffic switches or changes to the traffic pattern. We will limit hauling activities on local non-residential streets wherever possible, and schedule multiple "Pardon our Dust" meetings to provide construction and traffic shift updates. We will plan our major activities around the local school calendars, major events in Fredericksburg, etc. Wagman recently completed a very complex project on I-95 in Baltimore, with 47 unique traffic phases, where we coordinated with the Inner Harbor and both sports stadiums. We won the MdQI Gold Partnering award for this effort!

The DBT public communications efforts led by Elisabeth McCollum on the I-95 SB CD Lanes project has been publicly acknowledged as effective. The DBT has developed user friendly graphics to relay changes in traffic patterns to the general public and emergency responders. The project has required significant public engagement with many stakeholders including recreational users of the river. The Fredericksburg Trails Alliance has reported publicly on their website. "We met the … Team back on May 21, 2018 at the jobsite… they have exceeded our expectations and have really done an amazing job by doing everything that they said they would do and more." The project team has turned what was considered a risk to the project during procurement to a project benefit through building strong stakeholder relationships.

Incident Management Plan (IMP): The Wagman Team will prepare for unexpected and unplanned events such as disabled vehicles, accidents, emergencies, and other special occasions. We will develop incident management plan to provide the following:

- On-call towing service to quickly respond to disabled vehicles
- Law enforcement, fire and ambulance access to work zone during incidents
- Coordination with first responders and TOC
- 24/7 contacts for emergency notification of an incident
- Coordinated Emergency Management Plan inclusive of signage
- Agency/Stakeholder responsivity matrix
- Pre-staged detour equipment and material needs
- Pre-planned messages for various types of incidents
- Kick-off meeting with first responders in the area

Role of VDOT and other Agencies: We anticipate VDOT's role to be associated with review and approval of the Temporary Traffic Control Plans and TMP (including IMP). We understand that the lane closure times and restrictions will be identified in the RFP documents. The DBT will be coordinating all design and traffic plans with other adjacent projects being managed by VDOT such as FredEx and the I-95 SB CD Lanes project. We expect VDOT will coordinate all lane closures among the projects including giving priority when needed. We

also anticipate VDOT will remain closely involved in the public information and outreach process during design and construction, updating the Improve 95 website and releasing press releases. During construction, we anticipate VDOT will coordinate with VA State Police, will remain active on site, and will coordinate with our DBT to ensure a safe work site for motorists and construction personnel.

Risk No. 3 | STORMWATER MANAGEMENT REQUIREMENTS WITHIN PROJECT FOOTPRINT

Risk Identification: As part of the Project, the DBT is responsible for collecting, storing, treating, and releasing stormwater within the project limits in accordance with VDOT's stormwater management (SWM) requirements and VDOT's Drainage Manual. To successfully accomplish this task in a cost-effective manner, the Wagman Team will design a storm water system that relies on utilizing all or a majority of the existing storm sewer systems and culverts along and under I-95 to convey the stormwater runoff into and out of the proposed SWM facilities. This project will not be grandfathered and therefore will be required to meet Part II B Technical Criteria of the VDOT SWM requirements. This includes using the energy balance method to compute the maximum discharge to natural stream channels from the project site. A majority of the outfalls for this project discharge to natural channels. The energy balance method, with the utilization of the improvement factor, often results in detaining the post development discharge. The current plans have identified SWM facilities throughout the corridor within the existing ROW limited access limits as well as some locations with requiring proposed additional right-of-way and limited access. Additionally, a number of the identified facilities are shown within the drainage area of stormwater facilities for the I-95 SB CD Lanes project. The ability to meet SWM requirements for the project within the existing and proposed ROW and limited access is considered a risk on this Project.

Why the Risk is Critical: The preliminary design identifies multiple locations of stormwater facilities that are long and narrow with many centered along high berms adjacent to existing ditches. This will require significant grading to be utilized as a BMP to treat roadway drainage. Most stormwater facilities are meant to have rather flat sloped bottoms, additional grading to achieve the storage capacity and preferred geometric configuration could pose a risk of additional ROW. A number of these locations are also set back away from the roadway, where maintenance access could be an issue. This results in concerns as to whether the current conceptual SWM layout provides adequate treatment for the proposed improvements, and whether or not the layout accounts for maintenance access and the associated grading required for plan approval and long-term operations of the facilities. Additionally, there are concerns about the limitation of the type of facilities based on the location of the water table at these locations. The vetting process for the stormwater facilities proposed in the I-95 SB CD Lanes project resulted in a number of the locations being eliminated due to the depth to water table. Given that ideal locations for attenuating flow is close to the outfall and given that these outfalls are located in low-lying areas, the depth to water table will be a factor in determining the type of facility chosen.

In addition, it needs to be confirmed that the proposed SWM pond locations are adequate to receive the project's requirements for impervious runoff from the existing and proposed roadway accounting for the profile and superelevation criteria. Proposed drainage patterns will need to be confirmed to be adequate in meeting the SWM regulations. Another consideration with this risk is if the proposed SWM locations will adequately attenuate the runoff flows given the more stringent requirements of the Part II B design criteria.

Risk Impact on the Project: If the current proposed SWM ponds are determined to be inadequate or deficient for meeting the project requirements for technical criteria part II-B of VDOT's SWM Regulations, the following impacts could be introduced to the project:

- Need to Acquire ROW or Easements: In the concept plan, the proposed SWM ponds are within the limits of existing and proposed ROW/limited access. However, if the conceptual SWM plan is found to be deficient, additional ROW or easements may be necessary to add additional SWM ponds or increase the size of the currently proposed ponds. Acquisition of ROW or easements could impact the project cost due to the addition of appraisals, ROW oversight and negotiations, and property values.
- Additional Environmental Impacts: It is our understanding that VDOT is currently finalizing the environmental document for the impacts identified on the RFQ plans. There could be additional environmental impacts that are not accounted for in the environmental document because of adding additional SWM ponds or increasing the size of the current proposed ponds. This could require additional coordination with the agencies and revision to the document to address the unaccounted-for impacts as well as avoidance and minimization measures; thereby potentially delaying construction.

- Schedule Impacts: Installation of additional SWM ponds or increasing the size of the current ponds will slow down the earth moving activities thereby affecting the scheduling of construction activities and potentially delaying the project completion. Additional submittals will also need to be approved. If additional ROW or easements are required, the overall project schedule could be impacted to account for the proper environmental coordination and ROW process.
- Increased Construction Costs: Installation of additional SWM ponds or increasing the size of the current ponds will be costlier for design and construction items including additional ROW and environmental efforts. One alternative to acquisition of additional ROW, would be to use retaining walls or gabion walls to limit the grading for the stormwater BMP and stay within the existing ROW; however, this alternative would add unaccounted-for project costs.
- Maintenance of Traffic: Additional MOT could be required for the additional SWM ponds, especially in the areas of the roadway where currently no construction activities are anticipated.

Risk Mitigation Strategy: The Wagman Team has a successful track record of dealing with similar SWM challenges on other Virginia projects using innovative stormwater solutions. The table below shows some of those examples.

Project	Proposed SWM Ponds	Use 1% Rule	Purchase Nutrient Credits	Minimize Footprint
I-95 SB CD Lanes (DB)	■	■	■	■
Route 7 Widening	■	■	■	■
Fairfax County Parkway (DB)	■	■		■
Odd Fellows Road (DB)	■	■	■	■
Route 1 Featherstone	■	■	■	■
Route 360 Hull Street Road	■	■	■	■

The Wagman Team could use the following strategies to minimize or eliminate the risk to schedule and cost:

- Prepare a preliminary drainage analysis and SWM strategy for the project to verify the number, type, and size of SWM facilities required within the project limits to meet the requirements of the Part II B Technical Criteria of the VDOT SWM Regulations.
- The Wagman Team will utilize the 1% rule for water quantity to the extent possible for all outfalls within the project limits that directly discharge to the Rappahannock River or any other large watershed in which the criteria can be utilized to eliminate the need for water quantity control at the appropriate outfalls.
- Maximize the potential for nutrient credits purchase to satisfy water quality requirements to eliminate potential SWM facilities accordingly.
- Perform geotechnical investigations to identify proximity of groundwater and infiltration rates of existing soils so that basins can be located and sized appropriately.
- The results of the updated SWM strategy will be shared with VDOT, and where additional facilities or enlarging current facilities are required, we will determine the best approach so that schedule and cost impacts are minimized, and ROW and easement acquisitions avoided or minimized. For example, we could use innovative SWM techniques such as LID, retaining walls, gabion walls etc. that minimize the BMP and grading footprint.

- Potential environmental impacts will be mitigated through early coordination with VDOT and the permitting agencies. Delineation of jurisdictional wetlands and streams will be completed early in the project, to refine the design to avoid impacts to the extent possible. Avoidance and minimization efforts will be documented to assist in permit approvals.
- Additional ROW staff will stand ready to assist if additional ROW or easements need to be acquired.

Role of VDOT and other Agencies: The role of VDOT concerning this risk item is to review and approve the SWM strategy for the project early in the process to confirm the use of the 1% rule, applicability of purchasing nutrient credits, and possible need for additional stormwater treatment for the project. It is anticipated that SWM facilities will be needed in addition to the potential to purchase nutrient credits to meet the project's requirements to satisfy both quality and quantity requirements of the Part II B Technical Criteria of the VDOT SWM Regulations. Once VDOT has concurred on the strategy and it has been incorporated into the final plan design, then VDOT would issue plan approval for construction.

Appendix

VDOT
Virginia Department of Transportation

Attachment 3.1.2

Statement of Qualifications Checklist and Contents

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.1.2

Project: 0095-111-270

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

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

ATTACHMENT 3.1.2

Project: 0095-111-270

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix
Key Personnel Resume – Entrusted Engineer In charge	Attachment 3.3.1	Section 3.3.1.2	no	Appendix
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.3		Appendix
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.5	no	Appendix
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1	Section 3.3.1.6	no	Appendix
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	3-5

ATTACHMENT 3.1.2

Project: 0095-111-270

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Apendix
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	7-15

VDOT
Virginia Department of Transportation

Attachment 2.10

Form C-78-RFQ

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00101510DB106

PROJECT NO.: 0095-111-270

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

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

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

1. Cover letter of RFQ – May 13, 2019
   (Date)
2. Cover letter of _____
   (Date)
3. Cover letter of _____
   (Date)

SIGNATURE

7-2-2019
DATE

Glen K. Mays
PRINTED NAME

VP / General Manager VA Ops.
TITLE

VDOT
Virginia Department of Transportation

Attachment 3.2.6

Affiliated/Subsidiary Companies

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.6

State Project No. 0095-111-270

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.**

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Wagman, Inc.	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Wagman Construction, Inc.	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Wagman Investments, Ltd.	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Route 52 Constructors	3290 North Susquehanna Trail, York, PA 17406
Affiliate	404 Corridor Safety Constructors	3290 North Susquehanna Trail, York, PA 17406
Affiliate	Corman – Wagman, A Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate	Intercounty Constructors	120 White Plain Road, Suite 310, Tarrytown, NY 10591
Affiliate	Wagman-Trumbull-Week, JV	3290 North Susquehanna Trail, York, PA 17406

VDOT
Virginia Department of Transportation

Attachment 3.2.7(a)

Debarment Form – Prime

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

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

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

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

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

Signature	Date	Title
	6/18/19	VP/General Manager VA Ops.

Wagman Heavy Civil, Inc.
Name of Firm

VDOT
Virginia Department of Transportation

Attachment 3.2.7(b)

Debarment Form – Lower Tier

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	July 2, 2019	Senior Vice President
	Date	Title

Johnson, Mirmiran & Thompson, Inc.

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	6/24/2019 Date	President Title

CES CONSULTING, LLC
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	6/25/2019 Date	President & CEO Title

Harris Miller Miller & Hanson Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	Date	Title
	6/4/2019	President

Hassan Water Resources, PLC

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	Date	Title
Elizabeth Quinn Viviski	6/10/19	President

Quinn Consulting Services, Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Edward G. Drahos	June 5, 2019	Senior Reviewer
Signature	Date	Title

Schnabel Engineering, LLC
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-111-270

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

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

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

Signature	6/18/2019	President
	Date	Title

Three Oaks Engineering

Name of Firm

VDOT
Virginia Department of Transportation

Section 3.2.8

VDOT Prequalification Evidence

WAGMAN | JMT
A DESIGN-BUILD TEAM

VDOT

Virginia Department of Transportation

Date Printed: 06/26/2019
12:00 AM

Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 6/26/2019
- W -

Vendor ID: W002
Vendor Name: WAGMAN HEAVY CIVIL, INC.
Prequal Level: Prequalified
Prequal Exp: 10/31/2019

-- PREQ Address --
3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406-9754
Phone: (717)764-8521
Fax: (717)764-2799

Work Classes (Listed But Not Limited To)
003 - MAJOR STRUCTURES
007 - MINOR STRUCTURES
011 - CLEARING AND GRUBBING
080 - DEMOLITION OF STRUCTURES
101 - EXCAVATING

Bus. Contact: BECKER, TODD EUGENE
Email: ESTIMATING@WAGMAN.COM

-- DBE Information --

DBE Type: N/A
DBE Contact: N/A

VDOT
Virginia Department of Transportation

Section 3.2.9

Surety Letter

WAGMAN | JMT
A DESIGN-BUILD TEAM

CNA SURETY
151 N. Franklin Street
Chicago, IL 60606

June 4, 2019

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

Re: A Design-Build Project
RFQ No.: C00105510DB106
I-95 Northbound Rappahannock River Crossing
From : 1.16 Miles South of Rte. 3 (Plank Road)
To 0.44 Miles South of Rte. 8900 (Centreport Parkway)
Spotsylvania County, City of Fredericksburg, Stafford County, Virginia
State Project No: 0095-111-270
Federal Project No : NHP-095-2 (531)
Contract ID Number: C00105510DB106

Dear Sirs:

As surety for Wagman Heavy Civil, Inc., Western Surety 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 $126,500,000 (estimated contract value) and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.

As always, Western Surety Company reserves the right to perform normal underwriting at the time of any bond request, including, without limitation, prior review and approval of relevant contract documents, bond forms, and project financing.

Sincerely,

Western Surety Company

By: Patricia C Robinson
Patricia C. Robinson , Attorney-in-Fact

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

James R Gould, Alson O Wolcott Jr, Robert N Striewig Jr, Eugene M Fritz, Patricia C Robinson, Kathy R Reisinger, Donald R Wert, Anthony S Phillips, Kristen D Shive, Individually

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

- In Unlimited Amounts -

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

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 18th day of March, 2019.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

State of South Dakota
County of Minnehaha } ss

On this 18th day of March, 2019, 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 the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021

J. MOHR
NOTARY PUBLIC SOUTH DAKOTA

J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation 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 corporation this 4th day of June, 2019.

WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-7-2012

Go to www.cnasurety.com > Owner / Obligee Services > Validate Bond Coverage, if you want to verify bond authenticity.

VDOT
Virginia Department of Transportation

Attachment 3.2.10

SCC and DPOR Registration Documents

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.2.10

State Project No. 0095-111-270

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	**SCC Information (3.2.10.1)**			**DPOR Information (3.2.10.2)**			
	SCC Number	**SCC Type of Corporation**	**SCC Status**	**DPOR Registered Address**	**DPOR Registration Type**	**DPOR Registration Number**	**DPOR Expiration Date**
Wagman Heavy Civil, Inc.	F019898-8	Foreign Corporation	Active	3290 North Susquehanna Trail York, PA 17406	Class A Contractors	2701015887	01-31-2021
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	9201 Arboretum Pkwy. Suite 310 Richmond, VA 23236	ENG, LS	0411000029	02-29-2020
Johnson, Mirmiran & Thompson, In.	F149901-3	Foreign Corporation	Active	40 Wight Avenue Hunt Valley, MD 21030	ENG, LS, ARC, LA	0407001314	12-31-2019
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	272 Benedix Rd. Suite 260 Virginia Beach, VA 23452	ENG, LS	0411000440	02-29-2020
Johnson, Mirmiran & Thompson, Inc.	F149901-3	Foreign Corporation	Active	13921 Park Center Rd. Suite 140 Herndon, VA 20171	ENG, LS	0411000441	02-29-2020
CES Consulting	S3416007	Limited Liability Company	Active	23475 Rock Haven Way Suite 255 Dulles, VA 20166	ENG	0407005783	12-31-2019
Harris Miller Miller & Hanson Inc.	F1451857	Foreign Corporation	Active	N/A	N/A	N/A	N/A
Hassan Water Resources, PLC	S2293282	Limited Liability Company	Active	2255 Parkers Hill Dr. Maidens, VA 23102	ENG	0413000299	12-31-2019

ATTACHMENT 3.2.10

State Project No. 0095-111-270

SCC and DPOR Information

Quinn Consulting Services, Inc.	04925517	Corporation	Active	14160 Newbrook Dr. Suite 220 Chantilly, VA 20151	ENG	0407003733	12-31-2019
Schnabel Engineering, LLC	S0889123	Limited Liability Company	Active	9800 JEB Stuart Pkwy. Suite 100 Glen Allen, VA 23059	ENG	0411000322	02-29-2020
Three Oaks Engineering, Inc.	F1950528	Foreign Corporation	Active	N/A	N/A	N/A	N/A

ATTACHMENT 3.2.10

State Project No. 0095-111-270

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	**Individual's Name**	**Office Location Where Professional Services will be Provided (City/State)**	**Individual's DPOR Address**	**DPOR Type**	**DPOR Registration Number**	**DPOR Expiration Date**
Johnson, Mirmiran & Thompson, Inc.	Rodney Nelson Hayzlett	Richmond, VA	5048 Long Creek Lane Chester, VA 23831	Professional Engineer	0402032936	01-31-2021
Johnson, Mirmiran & Thompson, Inc.	Arthelius Augustus Phaup, III	Richmond, VA	402 Waveny Road Richmond, VA 23229	Professional Engineer	0402023335	06-30-2020
Quinn Consulting Services, Inc.	Steven Scott Shropshire	Chantilly, VA	5203 Yellow Birch Drive Fredericksburg, VA 22407	Professional Engineer	0402035812	06-30-20219
Wagman Heavy Civil	Jerry Todd Whitlock	York, PA	6808 Meridian Ct Chesapeake Beach, MD 20732	Professional Engineer	0402043179	01-31-2020

VDOT
Virginia Department of Transportation

SCC Documentation

WAGMAN | JMT
A DESIGN-BUILD TEAM

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Business Entity Details

Help

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

Wagman Heavy Civil, Inc.

General

SCC ID: F0198988
Entity Type: Foreign Corporation
Jurisdiction of Formation: PA
Date of Formation/Registration: 9/20/1967
Status: Active
Shares Authorized: 4000000

Principal Office

3290 NORTH SUSQUEHANNA TRAIL
YORK PA17406

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
100 Shockoe Slip Fl 2
Richmond VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 1/1/2018

Select an action

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

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Screen ID: e1000

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Business Entity Details

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Johnson, Mirmiran & Thompson, Inc.

General

SCC ID: F1499013
Entity Type: Foreign Corporation
Jurisdiction of Formation: MD
Date of Formation/Registration: 10/17/2006
Status: Active
Shares Authorized: 1000

Select an action

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

New Search | Home

Principal Office

40 WIGHT AVE
HUNT VALLEY MD21030

Registered Agent/Registered Office

ROBERT GALLAGHER
9201 ARBORETUM PKY STE 140
RICHMOND VA 23236
CHESTERFIELD COUNTY 120
Status: Active
Effective Date: 9/6/2007

Screen ID: e1000

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SCC eFile
Business Entity Details

Help

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

Business Entities
UCC or Tax Liens
Court Services
Additional Services

CES Consulting, LLC

General

SCC ID: S3416007
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 10/14/2010
Status: Active

Principal Office

23475 ROCK HAVEN WAY
SUITE 255
DULLES VA20166

Registered Agent/Registered Office

AVTAR SINGH
6773 LEOPOLDS TRAIL
HAYMARKET VA 20169
PRINCE WILLIAM COUNTY 176
Status: Active
Effective Date: 5/18/2016

Select an action

- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File a principal office address change
- Pay annual registration fee
- Order a certificate of fact of existence
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications

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Screen ID: e1000

Alert to business entities regarding mailings from VIRGINIA COUNCIL FOR CORPORATIONS or U.S. BUSINESS SERVICES is available from the Bulletin Archive link of th Clerk's Office website.

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SCC eFile
Business Entity Details

Help

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

Harris Miller Miller & Hanson Inc.

General

SCC ID: F1451857
Entity Type: Foreign Corporation
Jurisdiction of Formation: MA
Date of Formation/Registration: 12/6/2000
Status: Active
Shares Authorized: 300000

Principal Office

77 SOUTH BEDFORD STREET
BURLINGTON MA01803

Registered Agent/Registered Office

C T CORPORATION SYSTEM
4701 Cox Rd Ste 285
Glen Allen VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 6/12/2015

Select an action

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

New Search | Home

Screen ID: e1000

Alert to business entities regarding mailings from VIRGINIA COUNCIL FOR CORPORATIONS or U.S. BUSINESS SERVICES is available from the Bulletin Archive link of th Clerk's Office website.

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SCC eFile
Business Entity Details

Help

Hassan Water Resources, PLC

General

SCC ID: S2293282
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 7/16/2007
Status: Active

Principal Office

2255 PARKERS HILL DR
MAIDENS VA23102

Registered Agent/Registered Office

GAMAL E HASSAN
2255 PARKERS HILL DR
MAIDENS VA 23102
GOOCHLAND COUNTY 137
Status: Active
Effective Date: 5/4/2010

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File a principal office address change
Pay annual registration fee
Order a certificate of fact of existence
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications

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SCC eFile
Business Entity Details

Help

QUINN CONSULTING SERVICES INCORPORATED

General

SCC ID: 04925517
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 10/24/1997
Status: Active
Shares Authorized: 5000

Principal Office

14160 NEWBROOK DRIVE
SUITE 220
CHANTILLY VA20151

Registered Agent/Registered Office

JOHN H QUINN JR
2208 S KNOLL ST
ARLINGTON VA 22202
ARLINGTON COUNTY 106
Status: Active
Effective Date: 10/24/1997

Select an action

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

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Screen ID: e1000

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SCC eFile
Business Entity Details

Help

Schnabel Engineering, LLC

General

SCC ID: S0889123
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 12/19/2002
Status: Active

Principal Office

9800 JEB STUART PARKWAY
SUITE 200
GLEN ALLEN VA23059

Registered Agent/Registered Office

C T CORPORATION SYSTEM
4701 Cox Rd Ste 285
Glen Allen VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 10/4/2013

Select an action

File a registered agent change
File a registered office address change
Resign as registered agent
File a principal office address change
Pay annual registration fee
Order a certificate of fact of existence
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications

New Search | Home

Screen ID: e1000

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SCC eFile
Business Entity Details

Help

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

Three Oaks Engineering, Inc.

General

SCC ID: F1950528
Entity Type: Foreign Corporation
Jurisdiction of Formation: NC
Date of Formation/Registration: 1/7/2014
Status: Active
Shares Authorized: 1000000

Principal Office

324 BLACKWELL ST. SUITE 1200
DURHAM NC27701

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
100 Shockoe Slip Fl 2
Richmond VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 1/1/2018

Select an action

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

New Search | Home

Screen ID: e1000

VDOT
Virginia Department of Transportation

DPOR Office Documentation

WAGMAN | JMT
A DESIGN-BUILD TEAM

DPOR License Lookup License Number 2701015887

License Details

Name	WAGMAN HEAVY CIVIL INC
License Number	2701015887
License Description	Contractor
Firm Type	Corporation
Rank [1]	Class A
Address	3290 NORTH SUSQUEHANNA TRAIL, YORK, PA 17406
Specialties [2]	Highway / Heavy (H/H)
Initial Certification Date	1976-10-29
Expiration Date	2021-01-31

1 Refer to the Statutory Definitions (http://law.lis.virginia.gov/vacode/title54.1/chapter11/section54.1-1100/) for descriptions of the rank or class of license (A, B, or C) that determines the monetary limits on contracts/projects.

2 Refer to the Classification Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-20) and Specialty Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-30) for detailed definitions of these classifications and specialties.

DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
01-31-2021

NUMBER
2701015887

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS H/H

WAGMAN HEAVY CIVIL INC
3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406

DPOR

Jay W. DeBoer, Director

Status can be verified at http://www.dpor.virginia.gov

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DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS H/H
NUMBER: 2701015887 EXPIRES: 01-31-2021

WAGMAN HEAVY CIVIL INC
3290 NORTH SUSQUEHANNA TRAIL
YORK, PA 17406

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

DPOR License Lookup License Number 0411000029

License Details

Name	JOHNSON, MIRMIRAN & THOMPSON, INC.
License Number	0411000029
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	9201 ARBORETUM PKWY SUITE 310, RICHMOND, VA 23236
Initial Certification Date	1992-03-24
Expiration Date	2020-02-29

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402023016	GALLAGHER, ROBERT TAYLOR	Professional Engineer License	Engineering	2020-01-31
0403002078	ZMUDA, MICHAEL WILLIAM	Land Surveyor License	Land Surveying	2019-12-31

Showing 1 to 2 of 2 entries

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
02-29-2020

NUMBER
0411000029

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

PROFESSIONS: ENG, LS

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

Status can be verified at http://www.dpor.virginia.gov

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DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000029 EXPIRES: 02-29-2020
PROFESSIONS: ENG, LS
JOHNSON, MIRMIRAN & THOMPSON, INC.
9201 ARBORETUM PKWY
SUITE 310
RICHMOND, VA 23236

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DPOR-PC (02/2017)

DPOR License Lookup License Number 0407001314

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0407001314
License Description	Business Entity Registration
Rank	Business Entity
Address	40 WIGHT AVE, HUNT VALLEY, MD 21030
Initial Certification Date	1982-08-30
Expiration Date	2019-12-31

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402023730	CLEMENT, PAUL FRANKLIN	Professional Engineer License	Engineering	2020-12-31
0402023760	WOLNIAK, MATTHEW J	Professional Engineer License	Engineering	2020-12-31
0401006089	RUBELING, ALBERT WILLIAM JR	Architect License	Architecture	2019-07-31
0403003034	STICKLES, DAVID KEITH	Land Surveyor License	Land Surveying	2019-12-31
0402032610	SMITH, JAMES WALTER	Professional Engineer License	Engineering	2020-06-30
0406001444	CONNER, JON SCOTT	Landscape Architect License	Landscape Architecture	2019-12-31
0402020282	CHENG, DANIEL T	Professional Engineer License	Engineering	2019-09-30

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EXPIRES ON
12-31-2019

NUMBER
0407001314

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

PROFESSIONS: ENG, LS, LA, ARC

JOHNSON MIRMIRAN & THOMPSON INC
40 WIGHT AVE
HUNT VALLEY, MD 21030

Jay W. DeBoer, Director

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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407001314 EXPIRES: 12-31-2019
PROFESSIONS: ENG, LS, LA, ARC
JOHNSON MIRMIRAN & THOMPSON INC
40 WIGHT AVE
HUNT VALLEY, MD 21030

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DPOR-PC (02/2017)

DPOR License Lookup License Number

0411000440

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0411000440
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	272 BENDIX ROAD SUITE 260, VIRGINIA BEACH, VA 23452
Initial Certification Date	2006-03-06
Expiration Date	2020-02-29

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402015764	LUNING, MICHAEL PERRY	Professional Engineer License	Engineering	2019-07-31
0402031186	FOWLER, JOHN DUSTIN	Professional Engineer License	Engineering	2020-02-29
0402018688	TAYLOR, CHRISTOPHER ARMAND	Professional Engineer License	Engineering	2020-07-31
0402021268	MOORE, WALTER MERRITT	Professional Engineer License	Engineering	2020-07-31
0403001728	HASKETT, MARK ANTHONY	Land Surveyor License	Land Surveying	2020-01-31
0402019314	CAMPBELL, GARY DALE	Professional Engineer License	Engineering	2021-02-28
0403002234	STICKLES, CHARLES BRIAN	Land Surveyor License	Land Surveying	2020-06-30

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1

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02-29-2020

NUMBER
0411000440

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

PROFESSIONS: LS, ENG

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

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Jay W. DeBoer, Director

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DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000440 EXPIRES: 02-29-2020
PROFESSIONS: LS, ENG
JOHNSON MIRMIRAN & THOMPSON INC
272 BENDIX ROAD
SUITE 260
VIRGINIA BEACH, VA 23452

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DPOR-PC (02/2017)

DPOR License Lookup License Number 0411000441

License Details

Name	JOHNSON MIRMIRAN & THOMPSON INC
License Number	0411000441
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	13921 PARK CENTER RD SUITE 140, HERNDON, VA 20171
Initial Certification Date	2006-03-06
Expiration Date	2020-02-29

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402018550	REED, ROBERT G	Professional Engineer License	Engineering	2021-04-30
0402030511	BOICE, RANDY LAWRENCE	Professional Engineer License	Engineering	2020-12-31

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

EXPIRES ON
02-29-2020

NUMBER
0411000441

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

PROFESSIONS: ENG

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

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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000441 EXPIRES: 02-29-2020
PROFESSIONS: ENG
JOHNSON MIRMIRAN & THOMPSON INC
13921 PARK CENTER RD
SUITE 140
HERNDON, VA 20171

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DPOR-PC (02/2017)

DPOR License Lookup License Number 0407005783

License Details

Name	CES CONSULTING LLC
License Number	0407005783
License Description	Business Entity Registration
Firm Type	LLC - Limited Liability Company
Rank	Business Entity
Address	23475 ROCK HAVEN WAY SUITE 255, DULLES, VA 20166
Initial Certification Date	2010-11-05
Expiration Date	2019-12-31

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402035169	SINGH, AVTAR	Professional Engineer License	Engineering	2021-01-31

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

EXPIRES ON
12-31-2019

NUMBER
0407005783

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

PROFESSIONS: ENG

CES CONSULTING LLC
23475 ROCK HAVEN WAY
SUITE 255
DULLES, VA 20166

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Jay W. DeBoer, Director

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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005783 EXPIRES: 12-31-2019
PROFESSIONS: ENG
CES CONSULTING LLC
23475 ROCK HAVEN WAY
SUITE 255
DULLES, VA 20166

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DPOR-PC (02/2017)

DPOR License Lookup License Number 0413000299

License Details

Name	HASSAN WATER RESOURCES PLC
DBA Name	HWR
License Number	0413000299
License Description	Professional Limited Liability Company
Rank	Professional Limited Liability Company
Address	2255 PARKERS HILL DRIVE, MAIDENS, VA 23102-2244
Initial Certification Date	2009-07-06
Expiration Date	2019-12-31

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402033382	HASSAN, GAMAL ELDIN	Professional Engineer License	Engineering	2021-06-30

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12-31-2019

NUMBER
0413000299

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
PROFESSIONAL LIMITED LIABILITY COMPANY

PROFESSIONS: ENG

HASSAN WATER RESOURCES PLC
HWR
2255 PARKERS HILL DRIVE
MAIDENS, VA 23102-2244

DPOR

Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer, Director

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DPOR-LIC (02/2017)

DPOR License Lookup License Number 0407003733

License Details

Name	QUINN CONSULTING SERVICES INCORPORATED
License Number	0407003733
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	14160 NEWBROOK DR STE 220, CHANTILLY, VA 20151
Initial Certification Date	1998-03-05
Expiration Date	2019-12-31

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402026380	VICINSKI, JOHN KEVIN	Professional Engineer License	Engineering	2019-08-31

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Telephone: (804) 367-8500

EXPIRES ON
12-31-2019

NUMBER
0407003733

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

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INCORPORATED
14160 NEWBROOK DR
STE 220
CHANTILLY, VA 20151

Jay W. DeBoer, Director

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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
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NUMBER: 0407003733 EXPIRES: 12-31-2019
PROFESSIONS: ENG
QUINN CONSULTING SERVICES INCORPORATED
14160 NEWBROOK DR
STE 220
CHANTILLY, VA 20151

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

DPOR License Lookup License Number

0411000322

License Details

Name	SCHNABEL ENGINEERING, LLC
License Number	0411000322
License Description	Business Entity Branch Office Registration
Business Type	LLC - Limited Liability Company
Rank	Business Entity Branch Office
Address	9800 JEB STUART PKWY STE 100, GLEN ALLEN, VA 23059
Initial Certification Date	2003-04-16
Expiration Date	2020-02-29

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402018670	DIGGS, PAUL EMMETT	Professional Engineer License	Engineering	2021-02-28

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DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
02-29-2020

NUMBER
0411000322

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

PROFESSIONS: ENG

SCHNABEL ENGINEERING, LLC
9800 JEB STUART PKWY STE 100
GLEN ALLEN, VA 23059

DPOR

Jay W. DeBoer, Director

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000322 EXPIRES: 02-29-2020
PROFESSIONS: ENG
SCHNABEL ENGINEERING, LLC
9800 JEB STUART PKWY STE 100
GLEN ALLEN, VA 23059

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

VDOT
Virginia Department of Transportation

DPOR Key Personnel Documentation

WAGMAN | JMT
A DESIGN-BUILD TEAM

DPOR License Lookup License Number 0402043179

License Details

Name	WHITLOCK, JERRY TODD
License Number	0402043179
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CHESAPEAKE BEACH, MD 20732
Initial Certification Date	2008-01-02
Expiration Date	2020-01-31

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
01-31-2020

NUMBER
0402043179

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

JERRY TODD WHITLOCK
6808 MERIDIAN CT
CHESAPEAKE BEACH, MD 20732

DPOR

Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer Director

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DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402043179 EXPIRES: 01-31-2020

JERRY TODD WHITLOCK
6808 MERIDIAN CT
CHESAPEAKE BEACH, MD 20732

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

DPOR License Lookup License Number 0402032936

License Details

Name	HAYZLETT, RODNEY NELSON
License Number	0402032936
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CHESTER, VA 23831
Initial Certification Date	1999-01-25
Expiration Date	2021-01-31

DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
01-31-2021

NUMBER
0402032936

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

RODNEY NELSON HAYZLETT
5048 LONG CREEK LANE
CHESTER, VA 23831

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Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer, Director

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DPOR-LIC (02/2017)

DPOR License Lookup License Number 0402023335

License Details

Name	PHAUP, ARTHELIUS AUGUSTUS III
License Number	0402023335
License Description	Professional Engineer License
Rank	Professional Engineer
Address	RICHMOND, VA 23229
Initial Certification Date	1992-06-25
Expiration Date	2020-06-30

DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).

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Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
06-30-2020

NUMBER
0402023335

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

ARTHELIUS AUGUSTUS PHAUP III
402 WAVENY ROAD
RICHMOND, VA 23229

Status can be verified at http://www.dpor.virginia.gov

Jay W. DeBoer, Director

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DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402023335 EXPIRES: 06-30-2020

ARTHELIUS AUGUSTUS PHAUP III
402 WAVENY ROAD
RICHMOND, VA 23229

(FOLD)

Status can be verified at http://www.dpor.virginia.gov

DPOR-PC (02/2017)

DPOR License Lookup License Number 0402035812

License Details

Name	SHROPSHIRE, STEVEN SCOTT
License Number	0402035812
License Description	Professional Engineer License
Rank	Professional Engineer
Address	FREDERICKSBURG, VA 22407
Initial Certification Date	2005-06-10
Expiration Date	2021-06-30

Related Licenses [1]

License Number	License Holder Name	License Type	Relation Type	License Expiry
0410000156	RINKER DESIGN ASSOCIATES PC	Professional Corporation Branch Office Registration	Engineering	2020-02-29

Showing 1 to 1 of 1 entries

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
06-30-2019

NUMBER
0402035812

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

STEVEN SCOTT SHROPSHIRE
5203 YELLOW BIRCH DRIVE
FREDERICKSBURG, VA 22407

DPOR

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

VDOT
Virginia Department of Transportation

Attachment 3.3.1

Key Personnel Resume

WAGMAN | JMT
A DESIGN-BUILD TEAM

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Glen Mays, DBIA, Vice President/General Manager**

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

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) : **Wagman Heavy Civil, Inc., Full time**

d. Employment History: With this Firm 5 Years With Other Firms 31 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Wagman Heavy Civil, Inc.
Start Date: December 2014 End Date: Present Position: Vice President/General Manager – VA Operations.
Responsibilities: Company officer with principal responsibility for civil operations in Virginia including: safety, quality control, estimating, engineering, and construction for Design-Build and conventional projects. In this capacity Mr. Mays reports directly to the President/COO of Wagman Heavy Civil and leads a team of over 100 construction professionals including: managers, engineers, estimators, surveyors, administrators, and field personnel. Glen has over 35 years of experience in the management of heavy civil projects ranging from $5M to over $200M. These projects include VDOT, Design-Build, and major interstate projects.

Granite Construction Company
Start Date: December 2010 End Date: 2014 Position: Design Build Project Manager
Responsibilities: Primary Point of Contact (POC) with principal responsibility for overseeing all design and construction efforts from proposal through final acceptance, including Quality Control for $45M FDOT Design Build Project on I-75.

Hubbard Construction
Start Date: 2009 End Date: 2010 Position: Tampa Division Manager
Responsibilities: Division Manager responsible for all aspects of civil work on a $110M urban highway Design-Bid-Build financed project for FDOT in Tampa.

Skanska USA Civil
Start Date: 2008 End Date: 2009 Position: Senior Project Manager
Responsibilities: Senior Project Manager responsible for the civil work on the $214M Tampa Interchange project being performed via a Joint Venture with Flatiron.

Cherry Hill Construction, Inc.
Start Date: 1994 End Date: 2008 Position: Design Build Project Manager, Projects Director, Division Manager
Responsibilities: Mr. Mays had 13 years of experience in estimating, managing, and administering numerous projects inclusive of conventional bid-build and Design-Build for various private and public clients including VDOT and Maryland State Highway Administration.

Summary of Relevant Experience

- DBPM with JMT as Engineer
- 35 Years Construction Mgmt.
- Public Outreach/Coordination
- Delivered $100M of Design-Build
- OSHA 10/30
- Integrated Utility/ROW Mgmt.
- VDOT Compliant QA/QC
- Develop/Manage complex TMP
- Interstate Widenings/Interchanges

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Military Institute, Lexington, Virginia / BS / 1983 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2019 / Design-Build Institute of America (DBIA) / D-2872
2018 / Virginia DEQ Responsible Land Disturber / RLD10897

c. 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 only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

VDOT – I-95 Southbound CD Lanes – Rappahannock River Crossing, Stafford County, VA ($101 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Design-Build Project Manager
Beginning Date: November 2018	**End Date:** Present

Specific Responsibilities: As Design-Build Project Manager (DBPM), Mr. Mays is responsible for the overall design and construction of this $101M project that includes construction of approximately five miles of new interstate roadway, a major bridge structure over the Rappahannock River, as well as three additional bridge structures over US Route 17. Involved with the project since the pursuit phase, Mr. Mays leads an integrated Design-Build team to successfully achieve project goals. He is responsible for ensuring that the team meets or exceeds Quality Assurance/Quality Control project requirements. Mr. Mays is the primary point of contact for VDOT and all third-party stakeholders. He coordinates with adjacent projects including the I-95 Express Lanes Fredericksburg Extension project, and the I-95 Safety Improvements at Route 3 project. Glen also leads the team's public outreach efforts to effectively communicate with the numerous stakeholders.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Interstate Roadway	Coordination with Adjacent Projects
Major Bridge Structure	Permitting/Environmental	Utility Relocation Coordination
TMP	Engineered Causeway	Cofferdams
In Water Work	Stakeholder Coordination	ITS/Signing

Florida Department of Transportation (FDOT) – I-75 Reconstruction and Widening Design Build, Pasco County, FL ($45 million)

Name of Firm: Granite Construction Company	**Project Role:** Design-Build Project Manager
Beginning Date: 2013	**End Date:** 2015

Specific Responsibilities: Primary point of contact (POC) supervising a staff consisting of engineers, public relation professionals, ROW specialists, utility coordinators, and field personnel. Also responsible for managing the project from the proposal through all phases of permit, design, utility relocation, and construction. This project required the widening and reconstruction of over 7.5 miles of both Northbound and Southbound Interstate 75. This required multiphase MOT with engineered construction entrances to facilitate the safe ingress and egress of construction traffic with regards to the high-speed Interstate traffic. Physical construction activities included; erosion & sediment control, dewatering, clearing and grubbing, excavation and embankment, over 9 miles of storm drain piping, a dozen SWM ponds using bio-retention best practices, soil stabilization, aggregate base, asphalt paving, pavement markings, guardrail, and lighting.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Interstate Roadway	Coordination with Adjacent Projects
Permitting/Environmental	Geotechnical	TMP
Hydraulics/SWM	Public Outreach	Utility Relocation Coordination
ITS/Signing		

Dominion Virginia Power – Chesterfield Haul Road and Bridge, Chesterfield, VA ($21 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Project Executive
Beginning Date: June 2015	**End Date:** July 2016

Specific Responsibilities: Project Executive responsible for the delivery of this fast-track project supervising a team of construction engineers, safety professionals, and field personnel. The project required the construction of a 1,389 LF major bridge structure spanning Proctor's Creek and environmentally sensitive wetlands; a 4,700 LF access road to Abutment A; and a 2,800 LF North Haul Road to Abutment B, all built specifically for heavy, high volume truck traffic. The eleven-span bridge was constructed using high performance concrete and is 32' wide with two 12' lanes. Steel sheet pile cofferdams were installed at nine of the ten pier locations to facilitate the driving of permanent steel piles followed by cast in place concrete caps. The North Haul Road contains a 300' VDOT RW-3 retaining wall adjacent to the Chesterfield Wastewater Treatment Plant. The haul road and bridge were opened to traffic on time and is in use by Dominion for the construction and access to the new Fossil Fuel Combustion Product landfill. The project was centrally focused on safety, environmental best practices, and schedule and was successfully completed through teamwork and coordination between both Wagman and Dominion. The project completes the first phase of the Chesterfield Integrated Ash Project to meet Dominion's long-term goals.

Similarities with the I-95 Northbound Rappahannock River Crossing

Engineered Causeway	Roadway Construction	Major Bridge Structure
Cofferdams	Deep Foundations	In Water Work
Temporary Bridges	Environmental Best Practices	Utilities
Coordination with Adjacent Projects		

* 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 and for Quality Assurance Manager (QAM), provide a current list of assignments, role, and the anticipated duration of each assignment. **Not required for Design-Build Project Manager.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Jerry T. Whitlock, PE, DBIA, PMP, CCM, Design Build Integration Manager**

b. Project Assignment: **Entrusted Engineer in Charge (EIC)**

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) : **Wagman Heavy Civil, Inc., Full time**

d. Employment History: With this Firm 4 Years With Other Firms 10 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Wagman Heavy Civil, Inc.

Start Date: July 2015 End Date: Present Position: Design-Build Integration Manager

Responsibilities: Primary Point of Contact responsible directly to the Design-Build Project Manager (DBPM) for overseeing Design-Build projects from award through design, construction and final acceptance, including direct supervision and control of multiple design consultants, QA/QC programs and procedures, schedule, budget and all construction engineering.

Cherry Hill Construction, Inc.

Start Date: January 2012 End Date: June 2015 Position: Construction Manager/Project Manager

Responsibilities: Exercise second level management over Design-Build projects from award through final acceptance with principle responsibility over construction and QC activities including project schedule and budget. Construction Manager on $9M interstate interchange project, Mark Center Short and Mid-term Improvements project.

Start Date: June 2005 End Date: December 2011 Position: Senior Project Engineer

Responsibilities: Exercise first level management over Design-Build projects from award through final acceptance with principle responsibility for QC, submittals, project schedule, construction engineering, requests for information (RFI), maintenance of traffic (MOT) and survey. Mr. Whitlock served as Quality Control Manager and Lead Project Engineer for the $58M 9th Street Bridge Replacement Design-Build, then Lead Project Engineer for the $112M Fairfax County Parkway Extension Design-Build, then Construction Manager for $9M Mark Center Short and Mid-Term Improvements Design-Build.

United States Navy

Start Date: December 2005 End Date: Present Position: Civil Engineer Corp Officer

Responsibilities: Management of assigned Department of Navy construction, facilities and personnel. This includes self-performed construction and design (horizontal and vertical), contracting of construction and design services, acquisition of major end items, leadership and management of units up to 630 personnel, and facilities management, inspection and operations. All services performed in permissive, austere and/or hostile environments both overseas and in the continental US. Mr. Whitlock has managed over $250M in Design-Build construction projects as Construction Manager, QAM, DBPM, and Owner's representative.

Summary of Relevant Experience

- 14 Years Interchange Design Mgmt.
- 14 Years Construction Mgmt.
- Mgmt. of $385M in DB Projects
- Mgmt. of 13 roadway DB Projects
- Registered PE
- Integrated Utility/ROW Mgmt.
- VDOT Compliant QA/QC
- Develop/Manage complex TMP
- 3 Major Interstate Projects in VA

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:

West Virginia University, Morgantown, WV / MS / 2003 / Civil Engineering
Virginia Military Institute, Lexington, Virginia / BS / 2002 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

2008 / Virginia Registered Professional Engineering No. 0402043179 (Also registered in DE, DC, FL, and MD)
2013 / Virginia DEQ Responsible Land Disturber / 39701

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

a. *Note your role, responsibility, and specific job duties for each project, not those of the firm.*
b. *Note whether experience is with current firm or with other firm.*
c. *Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.)*

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

VDOT – I-95 Southbound CD Lanes – Rappahannock River Crossing, Stafford County, VA ($101 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Deputy Design-Build Project Manager
Beginning Date: January 2018	**End Date:** Present

Specific Responsibilities: Responsible directly to the Design-Build Project Manager to supervise and control our design firms to ensure that all engineering services meet the contract requirements and are constructible within the project's schedule and budget. Directly responsible to integrate completed and ongoing construction activities into the design and vice versa as both progress concurrently. Upon design approval responsible for approval, escalation and resolution of field adjustments to the design as required. Responsible for clarification of design during construction. Assist the DBPM supervise and ensure that design and construction activities are well integrated and coordinated with adjacent projects. Responsible to ensure QA & QC activities are integrated into all facets of the project, including ensuring design consultants follow the project's QA/QC Plan and document control during design.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Interstate Roadway	Coordination with Adjacent Projects
Major Bridge Structure	Permitting/Environmental	Utility Relocation Coordination
TMP	Engineered Causeway	Cofferdams
In Water Work	Stakeholder Coordination	ITS/Signing

Maryland Department of Transportation – US 50 to East of Holly Road (DB), Caroline, Queen Anne's & Talbot Counties, MD ($105 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Design-Build Integration Manager
Beginning Date: February 2016	**End Date:** May 2018

Specific Responsibilities: Responsible directly to the Design-Build Project Manager to supervise and control all three joint venture designers to ensure that all engineering services meet the contract requirements and are constructible within the project's schedule and budget. Responsible to ensure all design consultants follow the project's QA/QC Plan. Directly responsible to integrate completed and ongoing construction activities into the design and vice versa as both progressed concurrently. Upon design approval responsible for making or causing to be made design changes as required.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Roadway	Structures and Bridges
Environmental	Geotechnical	TMP
Hydraulics/SWM	Public Outreach	Overall Project Mgmt.

VDOT – Route 7 Widening and Bridge Rehabilitation over Dulles Toll Road and Airport Access Highway (DB), Vienna, VA ($42 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Deputy Design-Build Project Manager
Beginning Date: June 2015	**End Date:** May 2018 (Completed Early)

Specific Responsibilities: Primary Point of Contact responsible directly to the DBPM for overseeing the project from award through design, construction and final acceptance. Accountable to the DBPM for ensuring integration of the Design-Build Team and functioned as the main project authority for making and approving engineering decisions/changes during design and into construction and for communicating these changes to VDOT management. Also responsible to the DBPM for direct supervision and control of multiple design consultants, QA/QC programs and procedures, schedule, budget and all construction engineering. This project consists of removal and replacement of the bridge superstructure, rehabilitation and raising the substructure, widening the superstructure, and construction of Shared Use Paths in both directions including overpasses and underpasses.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Roadway Construction	Structures and Bridges
Geotechnical	Utilities	Hydraulics
Coordination with Adjacent Projects	TMP	Public Outreach

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

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 Entrusted Engineer in Charge.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **S. Scott Shropshire, PE, CCM**

b. Project Assignment: **Quality Assurance Manager (QAM)**

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): **Quinn Consulting Services, Inc. – Full-Time**

d. Employment History: With this Firm **1** Years With Other Firms **22** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Quinn Consulting Services, Inc.
Start Date: April 2018 **End Date:** Present **Position:** ***Professional Engineer/Quality Assurance Manager***
Responsibilities: Mr. Shropshire's responsibilities as Quality Assurance Manager (QAM) include providing construction quality oversight on contract work with a varying degree of complexity and scope. Responsible for the quality assurance inspection and testing of all materials and work performed on the project. Ensures all work, materials, sampling and testing are in conformance with the Approved for Construction plans, specifications, and contract documents. Verifies all design related work packages submitted for payment have been certified by the Design Manager. Plans and conducts Preparatory Inspection Meetings prior to the start of scheduled work activities. Monitors the construction quality control program. Issues Non-Conformance Report for deficient work and determine acceptance following corrective action. Reviews project inspection documentation and maintains the project's Materials Notebook. Certifies all work has been completed in conformance with the contractual documents for request for payment.

Rinker Design Associates
Start Date: 2014 **End Date:** 2015 **Position:** ***Director of Construction, Southern Virginia Region***
Responsibilities: Mr. Shropshire oversaw all construction inspection, quality assurance and quality control activities. He provided leadership and direction on all construction engineering assurance and inspection activities, coupled with seamlessly working with design staff in accomplishing constructability reviews and providing construction recommendations/suggestions during development of project plans, ensuring all construction inspection and testing were performed, completed, and recorded in accordance with contract documents.

A. Morton Thomas & Associates, Inc.
Start Date: 2014 **End Date:** 2015 **Position:** ***Quality Control Engineer***
Responsibilities: Mr. Shropshire focused on the delivery of transportation related projects through Design-Build procurements. He performed as the Quality Control Manager, accountable to the Design-Build Project Manager, reporting inspection and testing results during construction operations. Implemented inspection and testing requirements for contract related work in accordance with the approved, project specific QA/QC Plan.

Virginia Department of Transportation
Start Date: 2006 **End Date:** 2014 **Position:** ***Area Construction Engineer/Acting Residency Administrator***
Responsibilities: Mr. Shropshire was the construction program responsible charge engineer for a 14-county area. He provided leadership and technical guidance for inspectors, construction managers, contract administration and consultant staff in the delivery of the six-year highway construction program via traditional Design-Bid-Build and Design-Build procurements.

Virginia Department of Transportation
Start Date: 2004 **End Date:** 2005 **Position:** ***Acting Residency Administrator/ Assistant Residency Administrator, Fredericksburg, Virginia***
Responsibilities: Mr. Shropshire was responsible for delivering the residency maintenance program. He conducted assessments and reviews of complaints to develop cost effective solutions for maintenance problems. Directed maintenance and engineering staff in the resolution of maintenance issues for a wide range of projects of varying complexity.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Military Institute, Lexington, Virginia/BS/1996/Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2005/Professional Engineer/ 0402 035812

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 only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

Interstate 95/Route 630 (Courthouse Road) Interchange Relocation and Widening – Fredericksburg, Virginia

Name of Firm: Quinn Consulting Services, Inc.	**Project Role:** Quality Assurance Manager
Beginning Date: April 2018	**End Date:** July 2020

Specific Responsibilities: Mr. Shropshire leads the QA/QC team and reviews project documentation for this $185.3 Million bridge and roadway reconstruction project. He is responsible for assuring compliance with the VDOT Minimum Standards on Design-Build Projects and the project QA/QC Plan. In addition, Scott chairs Preparatory Meetings, reviews and approves monthly pay estimates, and issues and documents the resolution of project Non-Compliance Reports (NCR's). Project work activities include but are not limited to; erosion & sediment control, MOT operations, clearing & grubbing, grading and drainage, subbase and paving, structure demolition, steel H-pile driving, concrete construction for various bridge elements, precast bulb-T girder erection, striping, and signage. This project relocates the I-95 Exit 140 interchange slightly southward of the existing interchange. It also relocates the intersection of Courthouse Road and Route US 1 southward to align with Hospital Center Blvd. The new interchange bridges will be constructed in a diverging diamond interchange (DDI) configuration. Bridge abutments and piers are supported by MSE walls at each approach. Courthouse Road will be widened to 4 lanes between US Route 1 and I-95. West of I-95, Courthouse Road will be widened to 4 lanes as well to just west of Ramoth Church/Winding Creek Roads. As part of the construction, the intersection of Ramoth Church/Winding Creek Roads will be realigned at a traffic signal. This work will also relocate and expand the VDOT Park & Ride lot on Courthouse Road.

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Interstate Interchange	Structures and Bridges
Permitting/Environmental	Stakeholder Coordination	Interchange Construction

Route 606 exit 118, Mudd Tavern Road over I-95 – Fredericksburg, Virginia

Name of Firm: Quinn Consulting Services, Inc.	**Project Role:** Deputy Quality Assurance Manager
Beginning Date: December 2018	**End Date:** September 2019

Specific Responsibilities: As Quality Assurance Manager (QAM) on this $13.6 million project, Mr. Shropshire oversees the implementation of the project QA/QC Plan, delivers and documents Preparatory Meetings, approves Monthly Pay Estimates, oversees the maintenance of the project Materials Book, issues and documents the resolution of project Non-Compliance Reports (NCR's), and reviews project QA and QC documentation for compliance with VDOT Minimum Standards on Design-Build Projects. The project includes the replacement of the Route 606 bridge over I-95 with the required tie-ins to Route 606 and interstate ramps and roadway improvements to Route 606. The Route 606 Bridge Replacement over I-95 (UPC 100829) includes the replacement of the Route 606 Bridge over Interstate 95, along with the required tie-ins to Route 606 and the interstate ramps. In addition, it will include some minor work on the northbound interstate ramps. The bridge will be constructed for the ultimate design for Route 606, a four (4) lane divided roadway, and will include left turn lanes for access onto the interstate. A sidewalk will be installed on each side of the proposed bridge. The Route 606 East Roadway Improvements (UPC 105463) includes the widening of Route 606 to a four-lane typical section on the eastern side of the I-95/Route 606 (Mudd Tavern Road) interchange. A sidewalk will be constructed along the southern side of Route 606. Segments of a sidewalk will also be constructed along the northern side of Route 606. This portion of the Project also includes the construction of an intersection at the eastern terminus and the relocation of Mallard Road which will tie into the intersection.

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Interstate Interchange	Structures and Bridges
Permitting/Environmental	Stakeholder Coordination	Geotechnical

I-95 Southbound Rappahannock River Bridge Crossing – Fredericksburg, Virginia

Name of Firm: Quinn Consulting Services, Inc.	**Project Role:** Deputy Quality Assurance Manager
Beginning Date: September 2018	**End Date:** May 2022

Specific Responsibilities: Mr. Shropshire's responsibilities as Deputy QAM comprise of Quality Assurance inspection and testing of all materials used and work performed on the Project, to include monitoring of the contractor's Quality Control (QC) program. He ensures that all work and materials, testing, and sampling are performed in conformance with the contract requirements, the "Approved for Construction" plans and specifications. The goal of this $132 million project is to reduce Interstate 95 congestion at Fredericksburg by providing local traffic with an additional route to travel between Route 17 and Route 3 without merging into the interstate's general-purpose lanes. Three new I-95 southbound lanes will be constructed in the current median of I-95 for through traffic between just north of Exit 133 (Route 17) in Stafford County and just south of Exit 130 (Route 33) in the City of Fredericksburg. The three existing I-95 southbound lanes from north of Route 17 to south of Route 3 will be converted to three southbound lanes for local traffic. An additional bridge over the Rappahannock River will be built parallel to the existing I-95 southbound bridge to carry the new lanes for through traffic. The existing I-95 interchanges at Route 17 and Route 3 will also be modified, as well as ramps to the Safety Rest Area and Virginia Welcome Center.

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Interstate Roadway	Coordination with Adjacent Projects
Major Bridge Structure	Permitting/Environmental	Stakeholder Coordination

* 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 and for Quality Assurance Manager (QAM), provide a current list of assignments, role, and the anticipated duration of each assignment.

Route 630/I-95 (Courthouse Road) – QAM – anticipated assignment until July 2020

Route 606 (Mudd Tavern Road) over I-95 – QAM – anticipated assignment until June 2019

SB Rappahannock River Bridge Crossing on I-95 – Deputy QAM – anticipated assignment until May 2022

Upon successful award of the NB Rappahannock project, Mr. Shropshire will be made available to the project.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Rodney Hayzlett, PE, Vice President**

b. Project Assignment: **Design Manager (DM)**

c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): **Johnson, Mirmiran & Thompson, Inc. (JMT), Full Time**

d. Employment History: With this Firm **15** Years With Other Firms **8** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Johnson, Mirmiran & Thompson, Inc.

Start Date: December 2001 **End Date:** Present **Position:** ***Vice President***

Responsibilities: Mr. Hayzlett was promoted to Vice President in March of 2013 and serves as the Section Head for Virginia Highways Group. He has been instrumental in the successful management and design of many VDOT, Federal, county and municipal transportation projects including Design-Build procurements. Project responsibilities include signing and sealing plans for ROW acquisition and construction; management of design sub-consultants; internal coordination between discipline leaders; implementation and monitoring of the design QA/QC process; and coordination with construction staff and QA/QC staff. Also serves as a single point of contact between the client and DBPM during design and construction of DB projects, and oversees the construction support services provided by engineering staff.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Tech, Blacksburg, VA / Bachelor of Science / 1993 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
1999 / Professional Engineer / 0402 032936

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 only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

VDOT, I-95 Southbound Lanes, Rappahannock River Crossing, Stafford, VA (Design-Build)

Name of Firm: JMT	**Project Role:** Design Manager
Beginning Date: January 2018	**End Date:** Ongoing

Specific Responsibilities: As Design Manager, Mr. Hayzlett is responsible for the professional engineering services to **add six miles of three new southbound general-purpose lanes** in a notoriously congested area of Fredericksburg Virginia **along Interstate I-95**. The lanes will be added to the existing median of I-95, and the existing southbound lanes of I-95 will be converted to a collector-distributor road between Route 3 and Route 17 separating the weaving movements for the local traffic from the through traffic headed south on I-95. The project will connect with the planned southern extension of the Express Toll Lanes (FREDEX) from Northern Virginia.

JMT is teamed with Wagman Heavy Civil, Inc. construction firm and is serving as the prime design firm on the project. The project includes **four bridges; a new 1,200-foot-long, 100-foot-high bridge over the Rappahannock River and a new bridge over Route 17** for the new general purpose lanes along I-95 southbound in the median, and **two replacement bridges for the existing I-95 southbound crossings of Route 17** that will ultimately become part of the collector-distributor roadway. The project's **stormwater management strategy utilizes 2 on-site stormwater management ponds, 11 biofilters, water quality grass swales, and the purchase of nutrient credits**.

The project had significant environmental impacts to jurisdictional streams and wetlands and required an **Individual Permit from the ACOE and DEQ** for the project along with significant coordination with the regulatory agencies on the placement of a causeway in the Rappahannock River meeting all of the environmental requirements and restrictions. Gained early approval on an **early work package that allowed Wagman Heavy Civil, Inc to go to work early in the median area along I-95 for grading, deep drainage, and erosion & sediment control construction outside of the jurisdictional areas** until the Individual Permit was approved by the agencies. JMT also developed a complex **Type C TMP that alternately diverts both NB and SB traffic into the median** to facilitate the bridge replacements over Route 17 and the use of a temporary signal to close loop ramps to rebuild their tie-ins. Rodney is responsible for signing and sealing plans for ROW acquisition and construction; management of design sub-consultants; internal coordination between discipline leaders; implementation and monitoring of the design QA/QC process; and coordination with construction staff and QA/QC staff. .

Similarities with the I-95 Northbound CD Lanes – Rappahannock River Crossing

Heavily Traveled Limited Access Highway	Phased Construction	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

FHWA-EFLHD/VDOT, Fairfax County Parkway Extension, Springfield, VA (Design-Build)

Name of Firm: JMT	**Project Role:** Highway Design Manager
Beginning Date: October 2008	**End Date:** July 2011

Specific Responsibilities: As Highway Design Manager, Mr. Hayzlett was responsible for the design and roadway construction of a $112 million segment of the Parkway between Rolling Road (Route 638) on the north and Fullerton Road on the south including feasibility studies and 30% design for a commuter parking lot. This project was the final segment required to complete the Parkway, and included construction of **a four-lane divided, limited access highway, designed to facilitate future widening to 6 lanes within the project right-of way**. Oversaw the multi-disciplined design effort using over 75 engineers with multiple design firms for geotechnical investigations/analysis/engineering per VDOT MOI, **environmental 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. The FCP project had an **extremely aggressive schedule** of 750 calendar days to design, permit, relocate utilities, and construct the parkway. The critical portion, Segments I & II of the mainline FCP, was opened to traffic **two months ahead** of schedule while Segment IV was opened to traffic **one month ahead** of schedule.

He managed: the widening of I-95 to accommodate a new exit Ramp to NGA; relocated portions of Rolling Road and reconstruction of Fullerton Road, 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 Road, 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 a 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 Road and coordinated 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 geometric alignments, lighting and the NGA secured gate facility.

Mr. Hayzlett received a "Star Partner" award for his exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA & USACE. In addition to the NGA Star Partnering Award, this project has received the DBIA National/Merit Award; DBIA Mid-Atlantic/Transportation Award; ACEC-MW/Honor Award for Excellence; VTCA/Transportation Engineering Award; ACEC-MD/Honor Award; and the ACEC-VA/Merit Award.

Similarities with the I-95 Northbound CD Lanes – Rappahannock River Crossing

Heavily Traveled Limited Access Highway	Phased Construction	Quality Control
Stormwater Management Design	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

VDOT, Odd Fellows Road Interchange at US Route 29/460 and Road Improvements, City of Lynchburg, VA (Design-Build)

Name of Firm: JMT	**Name of Firm:** JMT
Beginning Date: November 2015	**Beginning Date:** November 2015

Specific Responsibilities: As Design Manager, Mr. Hayzlett was responsible for the professional engineering services to upgrade and extend Odd Fellows Road to US 460/29 in Lynchburg, VA a Design-Build Project with an approximate $29.5 million contract value. JMT is teamed with Wagman Heavy Civil, Inc. construction firm and serving as the prime design firm on the project. The project includes the design/construction of a **new tight diamond interchange between Odd Fellows Road and US 460/29; widening and reconstruction of 1.5 miles of Odd Fellows Road to a three-lane typical section** with a two-way left turn lane, curb and gutter, sidewalk and a 10-foot shared use path; reconstruction and **widening of a bridge over the Norfolk Southern Railroad**; and construction of **three roundabouts** along Odd Fellows Road. The project included a **combination of 3 proposed stormwater management basins and the purchase of nutrient credits to meet VDOT SWM Requirements**. The project is being designed under a very aggressive design-build schedule, which requires the close weekly coordination between VDOT, the City, FHWA, and Wagman Heavy Civil, Inc.

He coordinated with **adjacent construction projects** that required modification and integration of the adjacent work zones into the project's **TMP plan to develop one cohesive work zone for the safety of workers and traveling public**. The **project had significant environmental impacts to jurisdictional streams and wetlands and required an Individual Permit from the ACOE and DEQ** for the project. He was responsible for signing and sealing plans for ROW acquisition and construction; management of design sub-consultants; internal coordination between discipline leaders; implementation and monitoring of the design QA/QC process; and coordination with construction staff and QA/QC staff.

Similarities with the I-95 Northbound CD Lanes – Rappahannock River Crossing

Heavily Traveled Limited Access Highway	Phased Construction	Quality Control
Safety of Traveling Public	Utility Coordination/Relocation	Overall Project Management
Traffic Management Plans	ROW Coordination	Roadway Widening

h. For Key Personnel required to be on-site full-time for the duration of construction and for Quality Assurance Manager (QAM), provide a current list of assignments, role, and the anticipated duration of each assignment. **Not required for Design Manager.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Ryan Tibbs, DBIA / Construction Manager**

b. Project Assignment: **Construction Manager (CM)**

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time) : **Wagman Heavy Civil, Inc., Full time**

d. Employment History: With this Firm 4 Years With Other Firms 9 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Wagman Heavy Civil, Inc.

Start Date: 2015 **End Date:** Present **Position:** ***Construction Manager***

Responsibilities: Mr. Tibbs, serves as a Construction Manager at Wagman Heavy Civil and has 13 years of experience in the management of heavy civil construction projects with 8 years of design-build experience. He is responsible for project schedules, budget, cost control, purchasing, subcontractor management, safety, quality control, quality assurance and management on various projects throughout Virginia. He manages interchange, interstate and limited access highway, road, bridge, and roundabout transportation infrastructure projects. He provides strategic project planning and implementation, constructability reviews during design phase, takeoff and estimating, leads a team of project and construction engineers, and works with design and construction teams on innovative techniques and processes to successfully execute projects. He is skilled in collaboration, communication, construction means and methods, cost controls and forecasting, estimating, CPM scheduling, and contract administration.

Shirley Contracting Company, LLC.

Start Date: 2006 **End Date:** 2015 **Position:** ***Project Engineer, Deputy Construction Manager, Construction Manager.***

Responsibilities: Mr. Tibbs served as Project Engineer, Deputy Construction Manager and Construction Manager. Mr. Tibbs coordinated daily with the owner, subcontractors, field crews and the QC team to plan the work and schedule inspections; prepared and updated the project CPM schedule, 3-week look-ahead schedules, and daily work schedules; managed the budget and cost projections; prepared the monthly requisition; and handled subcontractor/supplier scoping and purchasing. He managed all aspects of the project for the owner including shop drawings and submittals, environmental inspections and coordination, and site safety plans and implementation. Project focus is to complete on-time and under budget while maintaining high quality and a stellar safety record.

Summary of Relevant Experience

- CM with JMT as Engineer
- 13 Years Construction Mgmt.
- Public Outreach/Coordination
- Delivered $108M of Design-Build
- 8 Years Design-Build
- Integrated Utility/ROW Mgmt.
- VDOT Compliant QA/QC
- Develop/Manage complex TMP
- Interstate Widenings/Interchanges

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:

Virginia Military Institute, Lexington, Virginia / BS / 2006 / Biology

f. Active Registration: Year First Registered/ Discipline/VA Registration #:

2019 / Design-Build Institute of America (DBIA Professional) / D-2820
2019 / Institute for Sustainable Infrastructure (ENV SP Professional) / 29277
2008-Current / Erosion and Sediment Control Contractor Certification (ESCCC) Expires 12/16/2021 / 1-03204
2008-Current DEQ Responsible Land Disturber (RLD) / Expires 08/24/2022 / RLD04878
2013-Current / VDOT Intermediate Work Zone Expires 3/31/2022 / 030118762
2019 / VDOT Concrete Field Certified, VDOT Soils and Aggregate Certified
2006-Current / OSHA 30, First Aid, CPR, Fall Protection, Trench Excavation

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 only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

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

VDOT – I-64 Exit 91 Interchange Improvement D-B Project, Fishersville, VA ($21 million)

Name of Firm: Shirley Contracting Company, LLC.	**Project Role:** Construction Manager
Beginning Date: January 2013	**End Date:** June 2015

Specific Responsibilities: As Construction Manager, Mr. Tibbs was responsible for management of construction operations for the D-B interchange reconstruction project. The project included construction of four signalized intersections, road widening, demolition and replacement of the existing two-lane bridge over I-64 and phased

construction of a new four-lane roadway with ramp turn lanes including MSE wall abutments. Reporting to the DBPM, Mr. Tibbs was responsible for the overall day-to-day project management, superintendent coordination, scheduling self-perform and subcontractor work activities and material acquisition. He was involved in public/community relations meetings. He managed the site safety plan, holding weekly safety meetings. He performed constructability reviews during the design phase, maintained project budget, created and maintained CPM schedules, submittal coordination, RFI submission, 6-week look ahead schedules and conducted bi-weekly progress meetings with VDOT, FHWA, QA and QC. Mr. Tibbs coordinated utility relocations including power and communications. He coordinated with the Right-of-Way team for construction while acquiring 24 parcels for road widening and utility relocations.

Similarities with the I-95 Northbound Rappahannock River Crossing

Design-Build	Utility Relocation Coordination	TMP
Limiting Impacts to Public	Structure/Bridge	Permitting/Environmental
Stakeholder Coordination	Phased Interstate Construction	Managed QC Program

Dominion Virginia Power – Chesterfield Power Station Road and Bridge Project, Chesterfield County, VA ($21.1 million)

Name of Firm: Wagman Heavy Civil, Inc.	**Project Role:** Construction Manager
Beginning Date: June 2015	**End Date:** December 2016

Specific Responsibilities: As Construction Manager, Mr. Tibbs was responsible for the overall day-to-day project management and construction operations performed on the 18 month, $21.1M Dominion project. The project included roadwork from Coxendale Road to the landfill, including a 1,389LF 10 pier 11 span bridge that spans Proctor's Creek. The project was constructed while maintaining access for station employees, and in coordination with two adjacent contractors working onsite constructing the landfill and ash silo project. Mr. Tibbs provided schedule updates, managed the project budget, performed constructability reviews, integrated the utility relocations and installation of new utilities with the construction activities, scheduled all subcontractors and crews, and communicated project issues and solutions to the owner. An aggressive timeline, superior safety and environmental compliance were project requirements. The project was completed on time and met the substantial completion date of July 2016 for the opening of the bridge, due to intensive, critical planning and coordination between the owner, engineer, suppliers, subcontractors and craft personnel. Mr. Tibbs and Wagman worked with the owner and designer to adapt means and methods to achieve project success within the original project substantial completion date when significant geotechnical conditions were discovered. Unknown geotechnical conditions had to be managed. One geotechnical condition created significant modifications to bridge access potentially requiring permit modifications or additional ROW. Mr. Tibbs worked closely with the owner, Schnabel and permitting agencies to keep the project on track by developing solutions and innovative approaches to maintain construction within existing ROW limits and existing environmental permit parameters. Mr. Tibbs coordinated with JMT to do a pavement analysis and design for Coxendale Rd, work included: VDOT LUP/CUP permit, field work (traffic control and cores), VDOT plan submission, comment responses and approval.

Similarities with the I-95 Northbound Rappahannock River Crossing

Coordination with Adjacent Projects	Major Bridge/Structure/In Water Work	TMP
Aggressive Schedule	Causeway/Cofferdams/Confined Workspace	Permitting/Environmental

City of Richmond – East Riverfront Transportation Improvements Project, Richmond, VA ($10.5 million)

Name of Firm: Wagman Heavy Civil	**Project Role:** Construction Manager
Beginning Date: February 2017	**End Date:** June 2018

Specific Responsibilities: As Construction Manager, Mr. Tibbs was responsible for the overall day-to-day project management and construction operations performed on the 15 month, $10.5M City of Richmond project. The project won the 2019 American Public Works Association Mid-Atlantic Project of the Year. The purpose of the project was to upgrade the transportation network in the east end of the City with construction of a new roundabout, MSE wall, road and intersection. The project included installation of electric duct bank to place the above power lines below ground, new waterline and sanitary utility installation. Mr. Tibbs managed the subcontractors, field crews, QA and QC, schedule inspections, preparing and updating the project CPM schedule, 3-week look ahead schedules, managing the budget, preparing the monthly requisition, and purchasing. He managed shop drawings and submittals, environmental inspection and coordination, site safety plans and implementation. Working in and around highly traveled roadways, while maintaining the safe and efficient passage of the traveling public. The project connected to the E. Main Street bridge constructed by Wagman, and managed by Mr. Tibbs in 2017 and an adjacent contractor performing work on VDOT's Bus Rapid Transit (BRT) project. The project required extensive coordination with the City traffic engineer, effective Traffic Management Plans (TMP) to construct the road by diverting traffic in phases and performed critical traffic switches during nights and off peak hours. Mr. Tibbs successfully managed a TMP to ensure that construction work was safely executed and phased to maintain safety and schedule. Successful utility coordination/relocation, along with third party coordination with owners, design team and construction team were critical to project success. Mr. Tibbs provided close coordination of the project QC plan. Coordination with the design team during design development improved constructability through the RFI process to avoid delays. The project was completed on time and ready for use by BRT.

Similarities with the I-95 Northbound Rappahannock River Crossing

Coordination with Adjacent Projects	Utility Relocation Coordination	TMP
Structure/MSE Wall	Stakeholder Coordination	Aggressive Schedule

For Key Personnel required to be on-site full-time for the duration of construction and for Quality Assurance Manager (QAM), provide a current list of assignments, role, and the anticipated duration of each assignment. Mr. Tibbs is not currently on an active project and will be available full time when the project begins.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Trip Phaup, PE, Vice President**

b. Project Assignment: **Lead Structural Engineer (LSE)**

c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part time): **Johnson, Mirmiran & Thompson, Inc. (JMT), Full Time**

d. Employment History: With this Firm **10** Years With Other Firms **20** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Johnson, Mirmiran & Thompson, Inc.

Start Date: March 2009 **End Date:** Present **Position:** ***Vice President***

Responsibilities: Serves as Vice President responsible for business development, strategic growth, operations, and staff development in the Transportation service line of JMT's Virginia offices. Major responsibilities focus on growing JMT's bridge and structure capabilities and clients including the Virginia Department of Transportation and Virginia localities. Currently oversees a staff of six (6) bridge engineers and technicians and serves as Project Manager on a VDOT Structure and Bridge Division Statewide Task Order Contract and a City of Hampton Bridge Inspection Contract for 39 bridges and culverts. Serves as Lead Structural Engineer (LSE) for bridge and structure designs on other JMT Design-Build, task order, and project specific contracts. **Mr. Phaup has been continuously pursuing, working, and designing bridges and retaining walls for Wagman on VDOT Design-Build projects.** Accountable for the quality, schedule, and budget on assigned road and bridge projects. Performs structural design and quality control reviews of structural design of highway and miscellaneous structures including preparing design calculations, plan details, construction cost estimates, and special provisions. Provides construction engineering design services for contractors including sheeting and shoring, cofferdam, and other temporary structure design, and value engineering redesigns of awarded projects.

CH2M Hill

Start Date: June 2008 **End Date:** February 2009 **Position:** ***Group Leader/Project Manager***

Responsibilities: Served as Group Leader overseeing the performance and development of a staff of transportation engineers and technicians. Served as Project Manager accountable for the quality, schedule, and budget on numerous transportation projects. Performed structural design and quality control reviews of structural design of highway and miscellaneous structures including preparing design calculations, plan details, construction cost estimates, and special provisions. Performed quality assurance reviews of construction plans for bridges and structures for VDOT under a General Engineering Consultant contract.

STV/Ralph Whitehead Associates

Start Date: September 2003 **End Date:** May 2008 **Position:** ***Group Leader/Project Manager/Senior Engineer***

Responsibilities: Served as Group Leader overseeing the performance and development of a staff of structural engineers and technicians. Served as Project Manager accountable for the quality, schedule, and budget on numerous bridge and structures projects. Performed structural design and quality control reviews of structural design of highway, railway, and miscellaneous structures including preparing design calculations, plan details, construction cost estimates, and special provisions. Reviewed shop drawings and provided consultation during construction. Provided construction engineering design services for contractors including sheeting and shoring, cofferdam, and other temporary structure design, and value engineering redesigns of awarded projects.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Virginia Commonwealth University, Richmond, VA / Masters of Business Administration / 2002 / Business
Virginia Tech, Blacksburg, VA / Masters of Science / 1988 / Civil Engineering emphasis in Structures
Virginia Tech, Blacksburg, VA / Bachelors of Science / 1987 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
1992 / Professional Engineer / 0402 023335

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 only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

VDOT, I-95 SB CD Lanes – Rappahannock River Crossing Project, City of Fredericksburg, Stafford and Spotsylvania Counties, VA (Design Build)

Name of Firm: JMT	**Project Role:** Lead Structural Engineer
Beginning Date: January 2018	**End Date:** On-going

Specific Responsibilities: As Lead Structural Engineer, Mr. Phaup is responsible for the structural design of 4 bridges and multiple retaining walls and plan preparation of 4 bridges on the $100 million Design-Build project to add CD lanes to I-95 SB over Route 17 and the Rappahannock River. Mr. Phaup worked closely with the Design Build Contractor to develop constructible and economical bridge designs that met the project's technical and schedule requirements. The project includes a 1200' long, 5-span, continuous structural steel plate girder bridge over the Rappahannock River with spans of 170'-270'-270'-270'-207'. The 90'+ tall, hammer head piers are oriented to coincide with existing bridge piers and avoids environmental and cultural resource site features. The project also includes three (3), 145' long, 2-span, continuous for live load prestressed concrete bulb tee beam bridges, with PCBT29 beam spans of 70' – 75', over Route 17. Jointless bridge technology is incorporated into all bridges by using the VA Alternate Abutment on the river bridge and fully integral abutments wrapped behind MSE walls with drystack architectural finish on the Route 17 bridges. Mr. Phaup is currently providing construction engineering services including verifying and modifying designs based on field conditions; reviewing proposed means and methods for construction activities related to dismantling and removing portions of existing structures, installing support of excavation and foundation structures, handling and erecting bridge girders; reviewing shop drawings and submissions; and responding to Requests For Information. ***The project is the mirror image of the proposed I-95 Northbound Rappahannock River Crossing project.***

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Lead Structural Engineer Role	Wagman Contractor
Long Bridge (1200')	Steel Plate Girder Spans (270')	Bulb Tee Spans (75')
Crosses Rappahannock River	Jointless Bridges	Construction Adjacent to Interstate

Construction of Bridges in a Constrained Work Space

VDOT, Odd Fellows Road Interchange at US Route 29/460 and Road Improvements, City of Lynchburg, VA (Design Build)

Name of Firm: JMT	**Project Role:** Lead Structural Engineer
Beginning Date: November 2015	**End Date:** August 2018

Specific Responsibilities: As Lead Structural Engineer, Mr. Phaup was responsible for the structural design of the bridges and retaining walls on a $29.5 million Design-Build project to upgrade and extend Odd Fellows Road to US Route 460/29 in the City of Lynchburg, VA. The project included the design and construction of a new tight diamond interchange between Odd Fellows Road and US Route 460/29 including a 274' long bridge over US Route 460/29. The project also included the design of a 244' long replacement bridge on Odd Fellows Road over the Norfolk Southern Railroad. Mr. Phaup provided senior engineering oversight for structural engineers working on the project, coordinated with road engineers on project geometry and geotechnical engineers on bridge and retaining wall foundations. Mr. Phaup provided engineering oversight during construction including reviewing shop drawings and submissions, responding to Requests For Information, and verifying and modifying designs based on field conditions.

The project was recognized with an ACEC Virginia Merit Award in 2019

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Lead Structural Engineer Role	Wagman Contractor
Long Bulb Tee Spans (137')	Jointless Bridge – Integral Abutments	Construction Adjacent to Arterial

VDOT, Route 61 (MacArthur Avenue) over the New River, Route 460, and Old Virginia Avenue Bridge Replacement, Town of Narrows, VA (Design Build)

Name of Firm: JMT	**Project Role:** Design Manager / Lead Structural Engineer
Beginning Date: January 2011	**End Date:** August 2014

Specific Responsibilities: As Design Manager and Lead Structural Engineer, Mr. Phaup was responsible for the Route 61 Bridge Replacement Design-Build project in the Town of Narrows, VA. The $16.8 million project replaced the existing, structurally deficient bridge that crosses the New River, Route 460, and Old Virginia Avenue with a new, 1141', two-lane bridge with sidewalks and included reconstruction of the roadway approaches at both ends of the proposed structure. The design scope of services included survey, subsurface utility engineering, road design, bridge design, drainage and stormwater management design, hydrologic and hydraulic analysis, geotechnical engineering, environmental permit acquisition, utility coordination and relocations, right-of-way acquisition, signing and marking, and public involvement. In addition, Mr. Phaup was responsible for all structural design activities for the bridge and retaining walls and provided engineering oversight during construction including reviewing shop drawings and submissions, responding to Requests For Information, and verifying and modifying designs based on field conditions. ***The project was recognized with a VTCA Transportation Engineering Award in 2016 and an ACEC Virginia Engineering Excellence Award in 2017.***

Similarities with the I-95 Northbound Rappahannock River Crossing

VDOT Design-Build Project	Lead Structural Engineer Role	Wagman Contractor
Long Bridge (1141')	Long Bulb Tee Spans (133')	Jointless Bridge - VA Alt Abutments
Crosses Major River	Bridge Construction from Causeways	Challenging Geology – Drilled Shafts

h. For Key Personnel required to be on-site full-time for the duration of construction and for Quality Assurance Manager (QAM), provide a current list of assignments, role, and the anticipated duration of each assignment. **Not required for Lead Structural Engineer.**

Attachment 3.4.1(a)

Lead Contractor Work History Form

A DESIGN-BUILD TEAM

ATTACHMENT 3.4.1(a)

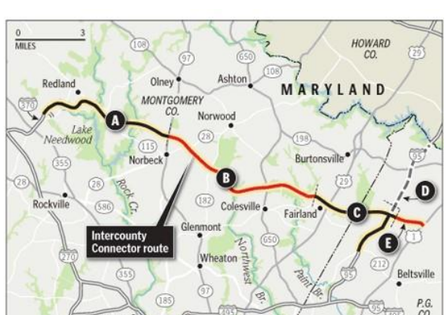
LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **Intercounty Connector, Contract B (DB) SINGLE CONTRACT** Location: **Montgomery & Prince George's Counties, MD**	Name: **Parsons Transportation Group** **Additional Designer: Coordinated with JMT on adjacent DB Project. Schnabel Engineering was the geotechnical engineer of record.**	Name of Client/ Owner: **Maryland State Highway Administration** Phone: **410-545-8863** Project Manager: **Sean Campion, Head of MDOT SHA Alternative Delivery** Phone: **410-545-8863** Email: **Scampion@sha.state.md.u**	**11/2011**	**11/2011** *(Actual)*	**$545,092**	**$578,000** *(Final - Due to Owner-Approved Change Orders)*	**Wagman was a 20% equity partner in the Intercounty Constructors Joint Venture entity that was contractually responsible for the delivery of this $578,000 Design-Build Project. Proposed Lead Contractor Wagman's Fee was $115,600.**

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

SCOPE/PROJECT DESCRIPTION | ICC, Contract B was a $578M Design-Build, Best Value Transportation project extending from MD 97 to US 29. Wagman was an equity member of a fully integrated construction joint venture, so we were joint and severable with each partner and financially responsible for the entire project. Contract B involved 8 miles of new controlled access, six-lane, tolled roadway with two interchanges; MD 650 New Hampshire Avenue and MD 182 Layhill Road. Existing cross roads were widened to upgrade the facilities due to increased traffic volume. The work included 2.5 million cy of excavation, drainage, temporary detours for cross roads, utility relocations, 13 bridges, 300,000 sf of noisewalls, 500,00 sy asphalt paving and retaining walls. 10 major waterway crossings were constructed using causeways, temporary bridges and engineered access roads. SWM facilities such as bio-swales, underground SWM basins, grass swales and redundant erosion and sedimentation features were used. As a team the Contractor co-located with the owner and designers to address issues on a minute by minute basis. The project included ITS to inform the public and open road tolling to collect tolls that included hardwired and cellular connections. The ITS and ETC system had to be integrated with the existing system maintained by the State. Quality control was the responsibility of the Design-Builder and Wagman managed the program. The ICC project was an extremely environmentally and community sensitive project and extensive measures were planned by the Design-Build team to minimize the environmental impact of this project. We received incentives to reduce impacts for wetlands & streams during design and construction; reducing impacts by more than 10% from anticipated in the EIS. Using dedicated E&S crews, we earned additional incentives for maintaining compliance for E&S above normal standards during construction. Schnabel Engineering designed roadway, paving and structure foundations. Wagman's internal geotechnical engineers worked closely with Schnabel Engineering to design foundations and address unsuitable soils on the project. Alternate pier locations were developed to minimize impacts with wetlands, streams and underground utilities. Our survey team utilized three dimensional modeling to increase production of the bulk excavating. Working with the model and adjusting vertical and horizontal alignment, Wagman reduced excavation elements, eliminated excess material to be hauled off site and reduced height of noisewalls; thus reducing cost and impacts.



RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE | This project won the following awards:
2013 Award of Excellence, Partnering Silver Award – MDQI; 2012 National Design-Build Award – DBIA; 2012 Exemplary Ecosystem Initiatives Award - FHWA; 2012 Best Transportation Project – Mid Atlantic- ENR; 2012 America's Transportation Award Top 10 Finalist – AASHTO; 2012 Alliance Award - NVTA; 2012 Globe Award for Environmental Excellence – ARTBA

EXPERIENCE WITH SIMILAR PARAMETRS as the I-95 Northbound Rappahannock River Crossing Project

Experience in successfully coordinating with adjacent projects: ICC Contract B was a completely independent project and contract but the DBT had to coordinate with two adjacent contracts; ICC Contract A was connected to the west and ICC Contract C (JMT was the designer) was to the east. Noisewall for ICC B was constructed within ICC C so close coordination of design and construction was required. Many local contracts were also coordinated along the 8 mile project.

Experience constructing a bridge in a constrained workspace: The waterway crossings were constructed within very narrow right of way limits. The new interchange bridges had to be constructed in tight confines without interruption to traffic.

Use of innovative design solutions and construction techniques: The DBT utilized Alternative Technical Concepts including use of caissons instead of spread footings to minimize permanent impacts to wetlands and flood plains and use of underground stormwater management facilities to minimize the thermal impact to fresh water streams after a rain event.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: Two major interchanges were constructed without any significant impacts to traffic. The DBT developed an extensive Transportation Management Plan to handle cross traffic and interchange traffic. The new highway bisected many crossroads, neighborhoods and communities with minimal impact. Utility relocations were performed without interruption to service. The DBT coordinated with the Maryland-National Capital Park and Planning Commission to avoid impacting park users.

Finishing contracts on time or earlier than the original contract milestone date: Project was completed on time.

Previous success in taking and managing calculated risks and realizing incentives: Wagman utilized many Alternate Technical Concepts and other innovations to reduce cost, improve schedule or improve environmental performance. These included the adjustment of vertical alignment to reduce excavation and waste. The DBT also earned over $6 million in environmental incentives due to reduction of impacts to streams, wetlands, forests, champion trees, and rate/threatened/endangered species.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing Project

Risk 1 – Constructing a bridge in a constrained workspace: Ten waterway crossings were constructed within very narrow right of way limits with strict constraints on environmental disturbance.

Risk 2 – Maintenance of Traffic at Route 17 Interchange: Project developed an extensive Transportation Management Plan to handle cross traffic, interchange traffic and the opening of the overall project from I-95 to I-370.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: A project wide environmental compliance plan was developed. Wagman reconstructed several existing SWM facilities to handle the new stormwater run-off and new SWM regulations. New underground SWM structures were used to accommodate ROW restrictions. Redundant E&S devices were utilized in sensitive areas such as the water crossings and floodplains Bio-swales and other best management practices for water quality and quantity were implemented.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **MD 404 – US 50 to East of Holly Road Design-Build** Location: **Caroline, Queen Anne's and Talbot Counties, MD**	Name: **WM/JMT/RK&K, Joint Venture, a joint venture composed of Wallace Montgomery & Associates, LLP, Johnson Mirmiran & Thompson, Inc., and Rummel, Klepper & Kahl, LLP**	Name of Client/ Owner: **Maryland State Highway Administration** Phone: **443-956-8386** Project Manager: **Fred Valente** Phone: **443-956-8386** Email: **Fred.Valente@kci.com**	**09/2018**	**12/2018** *(Due to Owner-Approved Change Orders)*	**$104,998**	**$111,815** *(Due to Owner-Approved Change Orders and receipt of $362K in environmental incentives)*	**$24,622** *(Based on JV %)*

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

SCOPE/PROJECT DESCRIPTION | Maryland Route 404 (MD 404) is a 55-mph principal arterial that serves commuters, commercial trucking, and summer vacationers traveling to and from the Delmarva Region. The project consisted of widening approximately 9.2 miles of the MD 404 corridor from a two-lane to a four-lane divided highway from US Route 50 to the west of Denton, Maryland. The project improved safety, provided adequate capacity and efficient highway operations, and enhanced mobility for travelers while minimizing impacts to adjacent resources. The project scope consisted of design and construction of two additional lanes along the existing alignment, which created a dual divided four-lane highway and implemented innovative "J" Turn and Continuous Green "T" intersections to eliminate crossover movements and unprotected left turns from side streets. The additional improvements included a bridge over Norwich Creek; roadway cross culverts; new and rehabilitated roadway pavement and drainage systems; stormwater management (SWM) facilities; roadway lighting; signing; pavement marking; and ITS devices.

Wagman Heavy Civil, Inc.; the managing partner of the joint venture, teamed with David A. Bramble, Inc.; and Allan Myers as the contracting team to form 404 Corridor Safety Constructors. As the managing partner, Wagman led the overall supervision and direction of the project; performed design coordination and reviews; utility coordination; and interfaced with MDOT SHA. The construction scope of the project was divided into three geographical segments where each joint venture partner acted as the general contractor performing and overseeing the work within their respective segment. Wagman's segment was 2.5 miles of the project, including the Norwich Creek Bridge, two box culvert extensions, four major elliptical pipe crossings, and 200,000 cubic yards of excavation.

From the development of our TMP through construction, The Team limited impacts to the travelling public and local stakeholders. The Team minimized congestion and impacts during construction by: notifying and communicating regularly with property owners, local law enforcement, and first responders addressing specific mobility concerns; providing a minimum seven-day notice to the community through public outreach (mailers, website updates, social media) of any major traffic pattern changes; constructing and maintaining physical access to properties within the project limits; and coordinating with the local agriculture community to maintain access and mobility for farm equipment by scheduling their movements within the project to reduce impacts to operations.

The 404 Corridor Safety Constructors Design-Build Team partnered with MDOT SHA and project stakeholders to execute design and construction that delivered a substantially-completed (full opened roadway) project within 18 months while maintaining continuous access to all adjacent properties. Our Team achieved these objectives by expediting design and construction planning to manage, mitigate, and minimize cost and schedule risks.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE | The project was awarded the 2018 Project of the Year and Excellence awards by ABC Chesapeake Shore Chapter; the 2019 Partnering Bronze Award and Project of the Year award by MDQI; and the 2019 DBIA Mid-Atlantic Region Honor Award.

EXPERIENCE WITH SIMILAR PARAMETERS as the I-95 Northbound Rappahannock Project

Experience in successfully coordinating with adjacent projects: At the start of the project, the MD 404 Dualization from West of MD 309 to Cemetary Road Phase 1B project was still underway. This project bordered the Eastern terminus of Wagman's segment of the MD 404 Design-Build project. The DBT worked closely with the adjoining project team to coordinate our approach to the project to minimize impacts to the traveling public, their ongoing operations, and our field operations. This included regular discussions with their team about their schedule, coordination of traffic shifts, and coordination of work in adjoining areas.

Experience constructing a bridge in a constrained workspace: The new Norwich Creek Bridge was built adjacent to the existing and operational bridge that carried traffic throughout construction. Due to limited right of way, relocated utilities remained close to the outside of the new bridge. Norwich Creek is a sensitive environmental resource that has a 25-foot stream buffer where no disturbance is allowed; therefore, we were required to build temporary cofferdam protection to construct the bridge substructure.

Use of innovative design solutions and construction techniques: Through the ATC process we provided innovative design solutions and techniques that resulted in benefits to the owner. The DBT utilized an ATC that granted us the ability to reduce the RFP pavement section by substituting a portion of the section with an in-situ soil cement treatment. This solution provided a betterment to the project cost and schedule by reducing excavation needed on the project. The project included rehabilitation of the existing roadway that ultimately became the new Eastbound roadway. The DBT implemented another ATC to utilize Ultra-Thin Bonded Overlay to improve rideability and life-cycle costs of composite concrete and asphalt pavement sections and accelerate construction.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: The DBT implemented a plan to communicate with stakeholders through public outreach prior to any major traffic pattern change.

Finishing contracts on time or earlier than the original contract milestone date: Substantial completion was achieved prior to the contract requirement. The contractual final completion date was extended due to owner directed changed in stormwater management facilities for the benefit of adjoining property owners.

Previous success in taking and managing calculated risks and realizing incentives: Due to the aggressive schedule, risk management was paramount to the success of MD 404. The project had a substantial completion date eighteen months from NTP with $22K/day LD's. Our innovative JV formation approach that segmented the project and allowed the ability to supplement resources if necessary, provided us the ability to mitigate the schedule risk and capitalize on the achievement of incentives. The project earned all early completion incentives with a total value of $6M and $362K in environmental incentives.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing

Risk 1 – Constructing a bridge in a constrained workspace: The Norwich Creek bridge was constructed in tight confines due to the existing bridge that remained open to traffic, nearby utilities due to right of way limitations, and environmental constraints.

Risk 2 – Maintenance of Traffic at Route 17 Interchange: The DBT implemented a robust public outreach program to inform and communicate with public and stakeholders in order to minimize disruptions to traffic.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: The DBT utilized linear SWM facilities where necessary to fit within the project footprint while reducing impacts to forest and wetlands by 3.47 acres.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **Route 7 Widening and Bridge Rehabilitation over the Dulles Toll Road and Dulles International Airport Access Highway (DB)** Location: **Tyson's Corner, VA**	Name: **Rinker Design Associates (Lead Design & Civil)** **Additional Designers: WRA (Structural)** **Wagman Heavy Civil, Inc. (Specialty Foundations)** **(JMT performed preliminary design for VDOT)**	Name of Client/ Owner: **Virginia Department of Transportation** Phone: **703-259-1940** Project Manager: **Arif Rahman** Phone: **703-259-1940** Email: **md.rahman@vdot.virginia.gov**	**05/2018**	**05/2018** *(Actual – Projected was completed 5 days early)*	**$39,887**	**$42,200** *(Final - Due to Owner-Approved Change Orders)*	**$42,200**

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

SCOPE/PROJECT DESCRIPTION | This $42.2M design-build project for the Virginia Department of Transportation reconstructed and widened the structurally deficient Route 7 bridge over Dulles Toll Road and the Dulles International Airport Access Highway from four lanes to six lanes. Limited clearances within Metropolitan Washington Airports Authority's (Airports Authority) right-of-way required the design and installation of permanent foundations using micropiles to widen the existing bridge piers between Dulles Toll Road and the Dulles Access Highway. The project also included a 10' wide shared-use path for pedestrians and bikes to travel in each direction. This path incorporates grade separated crossings, including two pedestrian bridges and three pedestrian tunnels.

Over 80% of this project was constructed on the Airports Authority's property through agreements with VDOT. Design and construction of this project involved close coordination with the Airports Authority to ensure that the project limits were within the Airports Authority's approved property limits and that portions of the final construction that become Airports Authority property, exceeded their construction standards. Airports Authority facilities that were designed and constructed as part of this project include roadway lighting, bridge protection barrier, bridge substructure, grading for future CD lanes, and overhead sign structures.

This project included an extremely aggressive schedule for both design and construction that was mitigated using the "rolling Design-Build" method for all structures work on the project. An effective QA/QC program was essential to the success of the project and helped avoid delays due to rework. Daily communication between all members of the QA/QC team was maintained throughout construction to ensure that work met or exceeded quality requirements. Weekly QA/QC meetings were held to discuss and resolve any issues. Two-week look-ahead schedules were used to monitor and adjust QA/QC resources as needed based on workloads and work shifts.

Use of micropile foundations minimized impacts to the adjacent pavement during construction of the bridge substructure. Other innovative design efforts led to a joint elimination over a pier in one of the pedestrian overpasses, which improves the long-term maintenance concerns.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE | The most notable enhancement included by the Design Build Team (DBT) in the low-price proposal was the mitigation of potential utility delays and compression of the project schedule. The construction phasing of the bridge replacement was reduced from seven phases to four phases by adjusting the bridge alignment and constructing the northern widening in the first phase concurrent with the interior widening. This also allowed the DBT to provide a corridor for the utilities to relocate eight months ahead of the RFP documents. The DBT also self-performed construction of the new utility duct bank to mitigate potential schedule impacts by utility construction crews.

Due to overall excellence in quality of craftsmanship, technical challenges, difficulty of execution, and aesthetics, the Heavy Construction Contractors Association awarded the DBT the *2018 Award for Excellence in Infrastructure*.

EXPERIENCE WITH SIMILAR PARAMETERS as the I-95 Northbound Rappahannock River Crossing Project

Experience in successfully coordinating with adjacent projects: Daily coordination was required with the Silver Line project and Airport Authority's noise wall projects to ensure smooth and efficient operation of both the Dulles Toll Road and the Dulles International Airport Access Highway.

Experience constructing a bridge in a constrained workspace: The new bridge had to be constructed within the narrow median of the Dulles Toll Road and Dulles International Airport Access Highway.

Use of innovative design solutions and construction techniques: Specialty geotechnical foundations were designed and constructed to deal with the workspace constraints. These foundations included drilled shafts, top down tieback walls, and micropiles. These innovative design and construction techniques minimized lane shifts and helped reduce the number of construction phases further reducing impacts to the travelling public.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: Route 7 has an annual average daily traffic volume (AADT) of 60,000 per day while the Dulles Toll Road has a AADT of 65,000 per day. Additionally, Route 7 is an important bicycle and pedestrian link across the Dulles Toll Road. This project required a complex Traffic Management Plan and coordination with Fairfax County Department of Transportation to safely manage these high traffic volumes and accommodate pedestrian traffic. Multiple shifts of Route 7 were required in order to construct the new bridge in phases without reducing lanes. Lanes were temporarily closed only during off-peak periods.

Finishing contracts on time or earlier than the original contract milestone date: Project was completed and accepted five days earlier than the contract date.

Previous success in taking and managing calculated risks and realizing incentives: The DBT adjusted the bridge alignment in order to reduce construction phasing of the bridge from seven phases to four phases.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing

Risk 1 – Constructing a bridge in a constrained workspace: Innovative solutions and several specialty pieces of equipment were used to self-perform the geotechnical work within the tight confines of the medians on the Dulles Toll Road and Dulles International Airport Access Highway, including a compact drilling rig and custom discharge assembly for offsite disposal of drill cuttings.

Risk 2 – Maintenance of Traffic at Route 17 Interchange: Project required a complex Traffic Management Plan which required multiple phases and traffic shifts. Very high AADT within project limits. Lanes were temporarily closed only during off-peak periods. Phasing was reduced from seven phases to four phases. Bridge and ramps were opened to traffic six months before the project end date.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: The DBT utilized nutrient credits for quality and adjusted drainage design to meet existing quantity requirements. Redesigned drainage in order to eliminate a major open SWM pond on MWAA right of way. Developed a matrix and tracked temporary and permanent impacts to ensure permit compliance.

Attachment 3.4.1(b)

Lead Designer Work History Form

A DESIGN-BUILD TEAM

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **I-95 Southbound CD Lanes Rappahannock River Crossing (Design-Build)** Location: **Stafford, VA**	Name: **Wagman Heavy Civil, Inc.**	Name of Client/ Owner: **Virginia Department of Transportation** Phone:**540-372-3549** Project Manager: **Robert Ridgell, PE** Phone: **540-372-3549** Email:**robert.ridgell@vdot.virginia.gov**	**2/2018**	**5/2022 (Estimated)**	**$101,600 (Original)**	**$101,600 (Estimated)**	**$9,600 JMT Design Fee**

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, elements, and/or contract listed will be evaluated.

(LEAD/PRIME DESIGNER – JMT / OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; VIRGINIA BEACH, VA; AND HUNT VALLEY, MD)

Release for Construction (RFC) plans were submitted on June 10, 2019 for approval to commence construction.

PROJECT DESCRIPTION

JMT is the lead designer for this $101.6M DB project to add six miles of three new southbound general-purpose lanes in a notoriously congested area of Northern Virginia. The lanes will be added to the existing median of I-95, and the existing southbound lanes will be converted to a collector-distributor road between Route 3 and Route 17. The project includes four bridges; a new 1,200-foot-long, 100-foot-high bridge over the Rappahannock River for the new general-purpose lanes in the median, a new bridge over Route 17 for the general-purpose lanes, and two replacement bridges for the existing I-95 crossings of Route 17. The project will connect with the planned southern extension of the Express Toll Lanes from Northern Virginia.

JMT was responsible for managing a multi-discipline team consisting of roadway design, bridge design, drainage design, stormwater management design, environmental permitting, traffic and ITS design, geotechnical investigation and testing, public involvement, surveying, utility designation, and noise wall analysis and design. JMT was also responsible for securing all environmental permits and right of way for the project. During construction, JMT will provide engineering oversight, and is responsible for addressing request for information from the contractor and perform shop drawing reviews. The DBT is embracing VDOT's use of PlanGrid for document control, using it for plan submittals, RFIs and tracking and addressing issues in the field.

The project has required coordination with the following agencies, FHWA, VDOT, EPA, Department of Environmental Quality, US Army Corps of Engineers, Virginia Marine Resources Commission, Virginia Department of Game and Inland Fisheries, City of Fredericksburg, Stafford County, and Spotsylvania County. The project also involves extensive coordination with three other major construction projects that overlap construction limits with this project.

JMT along with VDOT is conducting an active public involvement campaign for the project. The public involvement includes a series of Pardon Our Dust public meetings that occur at each major switch in traffic during construction to inform citizens what to expect and how to navigate the construction work zones. Stakeholders coordinated with to date, include local emergency responders from the region, homeowners concerned about noise walls, environmental groups such as Friends of the Rappahannock, river and trail user groups and utility companies. Other activities include monthly newsletters, project website, and social media notifications.

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

The project has required significant public engagement with many stakeholders including recreational users of the river. The Fredericksburg Trails Alliance has reported publicly on their website. "We met the … Team back on May 21, 2018 at the jobsite… they have exceeded our expectations and have really done an amazing job by doing everything that they said they would do and more." The project team has turned what was considered a risk to the project during procurement to a project benefit through building strong stakeholder relationships.

EXPERIENCE WITH SIMILAR PARAMETERS as the I-95 Northbound Rappahannock River Crossing Project

Experience in successfully coordinating with adjacent projects: The DBT successfully coordinated with VDOT and the Route 3 Safety Improvement Project contractor to have ITS conduit runs adjusted so they would not require relocation as part of the I-95 SB CD Lanes project. Currently, the DBT is coordinating with the FredEx Team on design and field activities.

Experience constructing a bridge in a constrained workspace: The new Rappahannock River bridge is being constructed between the existing NB and SB I-95 Bridges and between steep river banks adjacent to cultural resources (historic canal) and recreation trails. The new I-95 SB GP lanes bridge over Route 17 is being constructed between existing NB and SB I-95 bridges while maintaining traffic along Route 17.

Use of innovative design solutions and construction techniques: The project team redesigned the southern terminus of the project to achieve 1200' longer acceleration and merge distances and set up the project for a better tie-in to a future widening project. The design team incorporated a number of details into the bridge designs to reduce the need for future inspection and maintenance including: 1) Using a continuous for live load bridge superstructure 2) Using low permeability, low shrinkage concrete in all superstructure elements; 3) Providing corrosion resistant reinforcing steel 4) Designing a jointless bridge using VDOT's fully integral abutments; 5) Using prestressed concrete bulb-T beams without the need to paint; and 6) Using approach slabs with sleeper pads to reduce the "bump" at the end of the bridge.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: To reduce construction vehicles on NB and SB I-95 during peak congestion times, the DBT has performed most of the moving of earthwork from areas south of the river to north of the river at night.

Finishing contracts on time or earlier than the original contract milestone date: Design of the project started in February 2018, and through the development of an early work plan set, construction begin early in August 2018 while the remainder of the project continued under design. RFC plans were submitted on June 10, 2019 and construction is on or ahead of scheduled to be completed prior to May 2022.

Previous success in taking and managing calculated risks and realizing incentives: The DBT took calculated risk in designing the bridge prior to getting geotechnical boring data in the river. This allowed the construction of the Rappahannock River Bridge to begin early and increased the DBT's chances to realize the early completion project incentives.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing Project

The I-95 SB CD Lanes project shares the following risks with the I-95 Northbound Rappahannock River Crossing Project providing the Wagman Team with relevant experience to successfully manage these risks.

Risk 1 – Constructing a bridge in a constrained workspace: The new Rappahannock River bridge is being constructed between the existing NB and SB I-95 Bridges over the Rappahannock River Bridge and between steep River banks adjacent to cultural resources (historic canal) and recreation trails.

Risk 2 – Maintenance of Traffic at Route 17 Interchange: The design includes complex MOT plans to maintain traffic during construction involving major detours of both southbound and northbound I-95 traffic. The proposed scheme uses a temporary traffic signal to control ramp movements at the Route 17 interchange.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: Through the use of purchasing nutrient credits, water quality swales, and the efficient conveyance of runoff to adequate outfalls, the stormwater management design eliminated fourteen bioretention facilities from the RFP design reducing the long-term maintenance costs and reducing environmental impacts.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **11th Street Corridor: Bridges over the Anacostia River and Interchanges (Design-Build-to Budget)** Location: **Washington, DC**	Name: **Skanska USA Civil Southeast Inc./Facchina Construction Company A Joint Venture**	Name of Client: **District Department of Transportation (DDOT)** Phone: **202-673-6813** Project Manager: **Mr. Joseph Dorsey** Phone:**202-671-4605** Email: **Joseph.Dorsey@dc.gov**	**12/2009**	**11/2015 (Actual)**	**$260,000 (Original)**	**$375,079 (Actual)** **(Owner issued a significant change that increased scope and construction value.)**	**$17,300 Design Fee**

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

(LEAD AND PRIME DESIGNER – JMT / OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; WASHINGTON, DC; AND HUNT VALLEY, MD)

SCOPE/PROJECT DESCRIPTION - Without direct access between the Southeast Freeway (I-695) and the northern segment of the Anacostia Freeway (DC 295/I-295) congestion along the 11th Street Bridges near Capitol Hill in the District had long been a problem for local/regional traffic alike. The primary goals of the 11th Street Bridges project were to complete all freeway connections to accommodate thousands of daily commuters and to replace structurally-deficient bridges along the 11th Street corridor. Undertaking the largest construction job in the history of DDOT and also the first transportation project administered by DDOT to be delivered by the DB-to-Budget procurement method, the DB Team provided three new major continuous steel multi-girder bridge crossings of the Anacostia River and two complex interchanges with the Southeast Freeway and the Anacostia Freeway. The major structures included a 5 span, 866-foot-long bridge, a 5 span, 926-foot-long bridge, and a 10 span, 1,650-foot-long bridge. Spans ranged up to 234 feet for the main span over the Anacostia River. In total, the project included 18 bridges and 25 retaining walls. In addition, innovative design techniques that reduced environmental and community impacts were utilized to work within budget constraints. **With a total design and construction cost of $375M, DDOT saved a total of approximately $85M from the original engineer's estimate**.

As lead designer, JMT provided technical services which included: highway and structural design; subsurface utility investigations; geotechnical engineering; traffic analysis and complex MOT plans for various phases of construction; utility coordination; design of utility relocations; drainage, ESC/SWM; environmental permitting including Section 404 and 401 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, U.S. Coast Guard, and National Park Service permitting; environmental monitoring, compliance, and training programs; hazardous materials and other environmental investigations; landscaping design; field surveys and visual quality control. A challenge to this project, posed by the clients as part of the DB-to-Budget procurement, was how to maximize construction of crucial project elements including rehabilitation or replacement of existing bridges and providing interchange connectivity.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE - Through strong partnerships among owner, contractor, and designer; innovations in design that helped save $85M; and by exceeding the expectations of other agencies and the public; the 11th Street Bridges project shines as few projects of its size can claim. The new bridges connect freeways, enable better accessibility to DC neighborhoods, enhance safety for residents, and improve regional connections. The design/construction techniques used allowed for the DB team to construct a project with a 75-year service life, which will minimize DDOT's future maintenance and operations. Local roadways were designed with provision for future multi-modal use for nearby communities. A All work was completed while maintaining environmental compliance throughout construction over a major waterway. This project is truly a "*Design-Build Done Right*" project following DBIA's project motto. Client testimonials include:

"The team impressed me with their technical expertise, can-do attitude, and insistence on excellence in all facets throughout the project."
- Joseph Dorsey, PE, DDOT Civil Engineering Project Manager, 11th Street Bridges D-B

"I have worked with a lot of firms and JMT has been a firm very easy to work with, there is never any issues or any problems. JMT understands the Design-Build process."
- Bjarne Gudmundsen, Skanska USA Design-Build Manager

EXPERIENCE WITH SIMILAR PARAMETERS as the I-95 Northbound Rappahannock River Crossing Project

Experience in successfully coordinating with adjacent projects: JMT initiated meetings to obtain information related to future development associated with the Anacostia Waterfront Initiative. As part of these meetings, the planning documents were reviewed and the layout to the bridges were adjusted to minimize impacts to the planned initiative. In addition, CSX meetings confirmed planned projects, including improvements to their existing VA Ave Tunnel. DC Water/Verizon were also concerned with the construction in and around their facilities. JMT designed deep foundations that bridged the utilities/avoided relocations of these facilities and thereby eliminated schedule conflicts.

Experience constructing a bridge in a constrained workspace: The project included 3 bridges across the navigable water, 18 land bridges, and approximately 16 miles of new roadway. The new bridges crossing the Anacostia River were constructed parallel to 2 existing bridge crossings carrying heavy commuter traffic. The western portion of the project was adjacent to the U.S. Navy Yard, while the eastern portion terminated on the existing DC 295/I-295 roadway. CSX maintained 2 rail lines in the project limits and our team worked collaboratively with CSX to dismantle/remove a bridge structure and construct 3 new independent bridges over separate rail lines in Anacostia and Capitol Hill, while active rail traffic ran nonstop below.

Use of innovative design solutions and construction techniques: Revised Alignments - Our design minimized impacts by reducing the overall interchange height 25 ft. and the TMP included MOT phasing, layout of temporary signing, marking, channelization devices, temporary pavement/barrier, and detour plans; **Mobility** - Innovative design resulted in 70% of the project being constructed without major interruption to vehicular traffic thereby limiting impacts to the traveling public for an extended period of construction; **Environmental Compliance** - Design accommodated benefits to nearby neighborhoods based on input received during our extensive public relations efforts; **Innovative Ground / Geotechnical Improvements** - Light Weight Aggregate, GeoFoam Block, Geo-Steel, and Geo-Concrete Columns were successfully employed to mitigate settlement and global stability issues reducing environmental impacts; and **Project Schedule** - Strategically broke the project design into discrete work packages to facilitate construction and ordering of long lead items to meet the fast track schedule.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: JMT's innovative design resulted in 70% percent of the project being constructed without major interruption to vehicular traffic, thereby limiting impacts to the traveling public for an extended period of construction.

Finishing contracts on time or earlier than the original contract milestone date: The original construction estimate was $460M. JMT's innovative design equated to 70% of the functional elements in the original planning study for 58% of the funding and was completed on-time at a fixed price of $260M. As a result of the team's cost-effective design and construction, the DB team was awarded $90.7M in additional scope to complete the final design and construction of the total project, to provide the full functionality considered in the NEPA documentation.

Previous success in taking and managing calculated risks and realizing incentives: The contractor maintained a risk matrix which was a topic of discussion during design review meetings during which new risk were identified, and existing risks reassessed.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing Project

Risk 1 – Constructing a bridge in a constrained workspace on a high traffic volume (>110,000 ADT) interstate system: Completed all freeway connections between I-695 & DC 295/I-295, providing maximum accessibility, while separating local traffic from regional traffic.

Risk 2 – Maintenance of Traffic (MOT): As a major commuter route within the nation's capital and a major emergency route, JMT's design solutions allowed for 70% of the project to be constructed out of daily traffic resulting in minimal impact to the existing road network users, enabling a single traffic shift from the existing roadway to the proposed roadway that was executed outside of peak hours and provided a safe construction work zones.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: Throughout the project, JMT worked closely with the DDOT, DDOE, and DC Water to ensure all SWM and drainage requirements were met and delivered in a cost effective SWM plan. This plan required water quality treatment for 100% of the impervious area within the project footprint. JMT evaluated using LID practices to meet this objective.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **Fairfax County Parkway (FCP – Route 286) Ext. (DB) SINGLE CONTRACT** Location: **Springfield, VA**	Name: **Cherry Hill Construction, Inc.**	Name of Client/ Owner: **Eastern Federal Land Highways Division** Phone: **703-440-9086** Project Manager: **Mr. Timothy Brown** Phone: **703-440-9086** Email: **timothy.brown@dot.gov**	**4/2008**	**07/2011 (Actual)**	**$73,756**	**$112,416 (Actual)** ***(Received a significant contract modification adding the DB Segment IV, which increased the scope by 25%)***	**$11,538 JMT Design Fee**

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, elements, and/or contract listed will be evaluated.

(LEAD/PRIME DESIGNER – JMT OFFICE LOCATIONS INVOLVED IN DESIGN: RICHMOND, VA; HERNDON, VA; VIRGINIA BEACH, VA; AND SPARKS, MD)

FCP (Route 286)/DAR Interchange

SCOPE/PROJECT DESCRIPTION: The U.S. Army was relocating 8,500 jobs to the National Geospatial-Intelligence Agency (NGA) Campus East at Fort Belvoir North Area in VA as part of BRAC in 2011. The extension of Fairfax County Parkway (FCP) to I-95 near Fort Belvoir was needed to mitigate the expected traffic impacts. The single contract project included designs referenced as Segment I, II and IV.

The design included a new interchange at FCP and Barta Road for access to the NGA facility interior roadway network. This project was the final segment required to complete the Parkway, and included construction of a four-lane divided, limited access highway, designed to facilitate future widening to six lanes within the project right-of way. Included three bridge structures over the Accotink Creek. The FCP project also included widening of I-95 to accommodate a new exit lane and ramp designed as a certified Defense Access Road to provide direct access to the NGA. Segment IV included completion of two additional bridges and the Boudinot Dr. Interchange. Structure work included seven new bridges including a bridge widening of a severely skewed bridge on I-95 off-ramp H over Backlick Road, upstream/downstream extensions of an 8'x 8' reinforced concrete box culvert, multiple sound walls, cast in place and MSE retaining walls.

The FCP work included: surveys, SUE, grading, drainage, SWM, pavement design, shared use paths, lighting, traffic signals, landscaping, signing/striping, geotechnical engineering/exploration/stability analyses, utility relocations/coordination, ROW plans/plats and extensive environmental services, including permitting and compliance monitoring.
Our team initiated early meetings with utility owners and provided assistance in the development of their plan/estimate submittals by providing design plans and profiles in CAD for them to design their relocations against. The team adjusted roadway to minimize relocation of 20" water line and 8" gas line along Barta Road that avoided delays to construction schedule. Completed relocations of 1,420 LF of water mains and several 8" sewer along Fullerton Road, and coordinated utility relocations with several other utility owners.

The Design-Build Team hosted numerous public outreach events ("Citizen Information" and "Pardon-Our-Dust" meetings) and accommodated public involvement during the course of the project. We developed and implemented a web site that provided weekly update notifications of traffic shifts and scheduled phasing activities/shifts.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:
The FCP project had an extremely aggressive schedule of 750 calendar days to design, permit, relocate utilities, and construct the parkway. The critical portion, Segments I & II of the mainline FCP, was opened to traffic two months ahead of schedule while Segment IV was opened to traffic one month ahead of schedule.

This project was recognized with several awards: National DBIA– Merit Award; DBIA Mid-Atlantic Region – Transportation Award; VTCA – Transportation Engineering Awards for VDOT Projects Greater than $10M; ACEC/VA – Merit Award; ACEC/MW – Honor Award for Excellence; and the ACEC/MD – Honor Award.

Rodney Hayzlett was one of several JMT employees who received a "Star Partner" award for their exceptional dedication, teamwork, and professionalism in support of the project's goals by the NGA and USACE.

EXPERIENCE WITH SIMILAR PARAMETERS as the I-95 Northbound Rappahannock River Crossing Project

Experience in successfully coordinating with adjacent projects: The I-95 SB exit ramp to the FCP was coordinated with the project of extending the HOT Lanes which extended a fourth travel lane southbound on I-95 that impacted how the ramp gore tied down to I-95.

Experience constructing a bridge in a constrained workspace: The FCP bridge over Fullerton Road was constructed in a single phase in an urban area adjacent to existing businesses maintaining access throughout construction.

Use of innovative design solutions and construction techniques: The project incorporated an innovative ATC prepared at pre-bid that was referred to the "Fullerton Flip" where FCP was flipped to go over Fullerton Road minimizing reconstruction of Fullerton Road and impacts to adjacent businesses along with raising the profile of FCP through Fort Belvoir reducing the risk of excavating contaminated material.

Limiting impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction: Modeling of MOT phasing impacts using Synchro and SimTraffic were used to provide acceptable LOS. A detour was provided to allow single phase bridge construction of the grade separation for Fullerton Road to improve efficiencies in construction and promote safety for the workers and traveling public.

Finishing contracts on time or earlier than the original contract milestone date: The project had an extremely aggressive schedule of 750 calendar days to design, permit, relocate utilities, and construct the parkway. The critical portion, Segments I & II of the mainline FCP, was opened to traffic two months ahead of schedule while Segment IV was opened to traffic one month ahead of schedule.

Previous success in taking and managing calculated risks and realizing incentives: To meet the extremely aggressive completion schedule of 750 calendar days and begin construction in early 2009, our team separated the project into two major work packages, dividing at the Accotink Creek, a distinct physical feature within the limits of the project.

SIMILAR RISKS as the I-95 Northbound Rappahannock River Crossing Project

The Fairfax County Parkway Extension project shares the following risks with the I-95 Northbound Rappahannock River Crossing Project providing the Wagman Team with relevant experience to successfully manage these risks.

Risk 1 – Constructing a bridge in a constrained workspace: The FCP bridge over Fullerton Road was constructed in a single phase in an urban area adjacent to existing businesses maintaining access throughout construction.

Risk 2 – Maintenance of Traffic at Route 17 Interchange: Project included MOT on I-95 with traffic volumes over 100,000 vpd. TMP/MOT plans were in accordance with MUTCD and VDOT WAPM. Modeling of MOT phasing impacts using Synchro and SimTraffic were used to provide acceptable LOS. A detour was provided to allow construction of the grade separation for Fullerton Road to improve efficiencies in construction and promote safety for the workers and traveling public.

Risk 3 – Meeting Stormwater Management Requirements within Project Footprint: Both water quantity and water quality was handled with the proposed SWM basins provided on the project. Extensive coordination with the regulators was required as noted above with the existence of on-site hazardous materials in which the fate and transport model was used to confirm no migration of hazardous materials into the proposed SWM facilities. The 1% rule as utilized for the watersheds that outfall directly to Accotink Creek to eliminate water quantity requirements at those locations. The system was designed around the hazardous material locations.

State Project Number: 0095-111-270
Federal Projct Number: NHP-095-2(531)
Contract ID Number: C00105510DB106