Submitted to:



STATEMENT OF QUALIFICATIONS

A DESIGN-BUILD PROJECT

I-64 HAMPTON ROADS EXPRESS LANES (HREL) SEGMENT 1A

FROM: 0.150 MILES EAST OF PATROL ROAD TO: 0.663 MILES EAST OF TIDEWATER DRIVE

CITY OF NORFOLK, VIRGINIA

State Project No.: 0064-122-470 **Federal Project No.:** NHPP-064-3(520) **Contract ID Number.:** C00117840DB112







Bowman

3.2 LETTER OF SUBMITTAL







March 3, 2022

Attn: Bryan Stevenson, P.E., DBIA Virginia Department of Transportation APD Division 1401 E. Broad Street Richmond, Virginia 23219 I-64 Hampton Road Express Lanes (HREL) Segment 1A VDOT Project No.: 0064-122-470 Federal Project No.: NHPP-064-3(520) Contract ID Number: C00117840DB112

Dear Mr. Stevenson:

Allan Myers (Myers), Whitman Requardt & Associates (WRA), Quinn Consulting Services (Quinn), Aldridge Electric (AE), and Bowman Consulting (BOW), herein referred to as the Myers Team, is proud to offer the resources and expertise required to successfully design and construct the I-64 HREL Segment 1A Project (Project). The Myers Team is uniquely positioned to deliver the Project while minimizing additional efforts. Our **experienced team** brings the talent and background demanded of such a complex project, with our five proposed key personnel bringing 150 collective years of industry experience. Our **demonstrated experience on similarly complex projects**, including VDOT's I-64 Segment II DB and multiple I-95 Express Lane projects, are proof of our ability to deliver project success. We have carefully reviewed the RFQ and present a **clear understanding of risks**, and provide informed mitigation strategies to ensure successful Project delivery.

As requested by Section 3.2 of the RFQ, we present the following information:

- 3.2.1 Allan Myers VA, Inc., is the legal entity who will execute a contract with VDOT.
- 3.2.2 Entrusted Engineer in Charge Thomas Heil is the Point of Contact for the Myers Team:

	Thomas Heil, P.E., DBIA	(571) 485-0387 (Telephone)	
	12500 Fair Lakes Circle, Suite 150	(703) 272-7230 (Fax)	
	Fairfax, VA 22033	tom.heil@allanmyers.com	
3.2.3	Executive Vice President of Operations Aaron Myers is the Principal Officer for the Myers Team:		
	Aaron Myers	(804) 290-8500 (Telephone)	
	301 Concourse Boulevard, Suite 300	(804) 418-7935 (Fax)	
	Glen Allen, VA 23059	aaron.myers@allanmyers.com	
3.2.4	Allan Myers VA, Inc. is a registered corp	poration in the Commonwealth of Virginia and will take full	

- financial responsibility for the Project.3.2.5 Allan Myers VA, Inc. will serve as Lead Contractor. Whitman, Requardt & Associates, Inc. will serve as Lead Designer.
- 3.2.6 Affiliated and subsidiary companies of Allan Myers VA, Inc. are listed in Appendix 3.2.6.
- 3.2.7 Executed debarment forms are included for all firms on the Myers Team in Appendix 3.2.7.
- **3.2.8** Allan Myers VA, Inc., is active, in good standing, and prequalified to bid on the Project (Pregualification #G303). Evidence of pregualification is included in Appendix 3.2.8.
- **3.2.9** Allan Myers has the capability to obtain a performance and payment bond for the \$117M estimated contract value of the Project as exhibited by the surety letter in Appendix 3.2.9.
- **3.2.10** All team members satisfy SCC and DPOR requirements and full-size copies of individual licenses for all business entities are provided in Appendix 3.2.10.
- 3.2.11 Allan Myers is committed to achieving the minimum 12% DBE participation goal for the entire value of the contrast.

Respectfully,

Aaron T. Myers Executive VP of Operations, Allan Myers

3.3 OFFEROR'S TEAM STRUCTURE





3.3.1 KEY PERSONNEL IDENTITY AND INFORMATION

The Myers/WRA Design-Build (DB) team has successfully managed Express Lane, ramp relocation, bridge widening, and ITS/TMS network integration projects for VDOT, including the I-64 Segment II and the current I-66 Outside the Beltway P3 projects. Delivery certainty begins with excellent people, and so we again propose Ed Hilferty and Tom Heil, who both led success on I-64 Segment II, to this Project's team. All key personnel reflect our team's history and commitment to quality work for VDOT, completed ahead of schedule and within budget. *Figure 1* introduces their experience. Appendix 3.3.1 provides detailed resumes.

K	ey Personnel	Yrs	Relevant Experience	Project Highlights
	Design-Build Project Manager (DBPM) Ed Hilferty	30	-Extensive interstate widening experience -20+ years DB experience -I-64 corridor widening experience	-I-64 Segment II DB -Middle Ground DB -I-95 Express Toll Lanes
	Entrusted Engineer in Charge (EIC) Tom Heil, PE, DBIA	36	-Extensive VDOT DB experience -Design & construction experience -EIC or similar role on 5 DB projects	-I-64 Segment II DB -MD 404 Dualization DB -I-66 Outside the Beltway P3
	Quality Assurance Manager (QAM) Richard Allen	27	-QAM on 7 VDOT DB projects -M.A., Civil Engineering -QA on I-95 Express and I-66 OTB	-I-95 Express Toll Lanes -I-66 Outside the Beltway -Route 7 Over Dulles Toll Road
WRA	Design Manager (DM) John Maddox, PE	36	-VDOT DB Express Lanes experience -10 VDOT interstate widening projects -Joint DB experience with Myers	-I-95 Express Lane Extension DB -I-81 Bridge over New River -I-81 Bridge over Maury River
	Construction Manager (CM) Jeff Snow	21	-Extensive interstate widening experience -VDOT Hampton Roads recent projects -Successful DB project delivery	-I-95 Express Toll Lanes -Rte 58 Laskin Rd Reconstruction -US 40/MD 715 Interchange DB

Figure 1: Key Personnel Experience Overview

3.3.2 ORGANIZATIONAL STRUCTURE

The Myers Team is organized to maximize a simple, efficient, and cost-effective Project delivery. We have clearly defined authority, reporting lines, escalation paths, and communications within our Team as well as with VDOT and third parties to ensure the independence of QC and QA programs. Our Organizational Chart (*Figure 2*) lays out these roles fully, but we begin with a brief narrative of our team's functional relationships and communications.

FUNCTIONAL RELATIONSHIPS AND COMMUNICATION AMONG TEAMS & KEY PERSONNEL Effective communication on this complex Project begins at the team level. Each construction and design partner has physical offices concentrated in the DMV. Adding in each team member's presence in the Project region, the Myers Team will employ regular in-person collaboration and communications, as well as on-site coordination with VDOT and third parties, to fuel our functional relationships and support an effective DB process.

- Whitman, Requardt & Associates (WRA), Lead Designer & Construction QC, brings 65 years of service on more than 20 interstate highway projects for VDOT.
- Quinn Consulting Services (Quinn), Quality Assurance, is well positioned to lead QA through QAM Richard Allen's extensive experience performing QAM functions on 7 VDOT projects.
- Aldridge Electric (AE), Electric/ITS Construction, will draw on its longstanding relationships with VDOT and nationwide experience on ETLs (including VDOT's I-95 Express Lane Extension DB) to ensure we provide ITS delivery certainty to the Project.
- **Bowman Consulting (BOW), Right-of-Way**, will draw on its significant VDOT experience, such as right-of-way services in support of improvements to over 60 miles of the I-66 corridor.
- McCallum Testing Laboratories (MCT), QA Testing, specializes in construction inspection and testing in Southeastern Virginia and will provide QA Testing services for the Project.
- Geotechnical Environmental and Testing Solutions (GET), QC Testing, will provide QC testing independent of QA efforts. Based in Virginia Beach, GET will draw on local experience, including the I-564 Intermodal Connector in Norfolk.

3.3 Offeror's Team Structure

Design-Build Project Manager Ed Hilferty is ultimately responsible for all design and construction processes. He reports to VDOT and serve as our Team's primary Project point of contact. He works closely with QAM Richard Allen, EIC Tom Heil, DM John Maddox, and CM Jeff Snow to develop and implement a schedule- and cost-conscious approach to design and construction during the design and construction phase. Ed ensures we achieve all contractual obligations and requirements; deliver the project safely, on-time, and within budget; and proactively counteract and resolve any disputes. He coordinates with VDOT and our Team's PR liaisons for public outreach, Schedule Manager Jon Mountenay to manage schedule risks before they become critical, and Safety Manager Sandra Genter to prioritize public safety during construction.

Entrusted Engineer in Charge Tom Heil, PE, DBIA, reports to DBPM Ed Hilferty and works closely with design staff, construction personnel, and estimators to ensure all engineering work is fully-integrated and consistent with the Project's contractual and technical requirements. He serves the Project full-time once design begins and coordinates with DM John Maddox to compile the complete AFC plan set. During construction, Tom oversees and approves all engineering decisions in coordination with the designer, quality team, construction team, and VDOT.

Quality Assurance Manager Richard Allen reports to DBPM Ed Hilferty. Onsite full-time for the duration of construction, he manages QA inspection/testing, maintains the Materials Notebook, and ensures that all work and materials meet contract requirements. Richard communicates frequently with VDOT, participates in weekly coordination meetings, and confirms construction QC is functioning properly.

Design Manager John Maddox, PE, reports to DBPM Ed Hilferty and manages a multidisciplinary team to meet design schedule milestones and ensure design conformance with all contractual and technical requirements. Supported by Design QA/QC Manager Mitch Johnson, PE, he oversees adherence to the DQMP. John coordinates with EIC Tom Heil and CM Jeff Snow to develop an efficient, constructible design. He engages in weekly design review status meetings to ensure consistency with means and methods. During construction, John validates design assumptions, approves shop drawings, and prepares as-builts.

Construction Manager Jeff Snow reports to DBPM Ed Hilferty and is onsite full-time throughout construction. He oversees all roadway and bridge construction operations and MOT. During design, Jeff works with DM John Maddox, EIC Tom Heil, and DBPM Ed Hilferty to evaluate innovative approaches and develop a sequence of work consistent with construction means and methods. With support from QC Manager Michael Johnson, Jeff manages QC efforts to ensure contract compliance for the work and materials.

Public Relations Liaison Shannon Moody works closely with VDOT and DBPM Ed Hilferty to develop and implement a comprehensive public outreach effort for the Project. Her integration with the design and construction teams ensures our Team creates transparency, builds public trust, and reduces Project impacts to motorists, residents, and businesses in the City of Hampton. Shannon's experience on the I-64 Segment II and I-95/Temple Ave DB projects reflects her PR perspective and success in building community support.

Schedule Manager Jon Mountenay reports to DBPM Ed Hilferty and communicates with key staff to maintain focus on the Project schedule. Jon develops a realistic and detailed schedule during the proposal phase to analyze how design decisions and construction means and methods impact the schedule, budget, and compliance with contractual requirements. As the Project progresses, he works with the design and construction teams to monitor schedule progress and timely completion per the original contract date.

The Express Lanes ITS Team includes subject matter experts focused on the entire project lifecycle. It supports VDOT's system and network continuity from design, construction, testing, and commissioning into operations. Steve Schweitzer (**Express Lane ITS CM**) leads this team and reports to CM Jeff Snow. He coordinates with **Express Lane/ITS Specialist** Jeff Cheng, PE, to deliver comprehensive technical and electrical services including pre-planning, value engineering, and ITS/electrical installation. Steve has 8 years of transportation experience, including the current VDOT I-64 C62 EL–Segment 2 contract.

Environmental Compliance Manager Laurel Smith reports to DM John Maddox, PE, coordinates directly with CM Jeff Snow, and oversees environmental constraints that require coordination and compliance. In this role, Laurel ensures all Project activities conform to the applicable environmental regulatory permit conditions and meet environmental commitments. Laurel acted in this same role on I-64 Segment III.

Figure 2 (next page): Organizational Chart



3.3 Offeror's Team Structure

3.4 EXPERIENCE OF THE OFFEROR'S TEAM





3.4 Experience of Offeror's Team

3.4 EXPERIENCE ON PROJECTS OF SIMILAR SCOPE AND COMPLEXITY

The Myers Team has the expertise required to design and construct the Project on time and on budget, despite its unique challenges. Our past success in delivering similar projects—including the notable examples for VDOT we include in this SOQ—demonstrates our ability to deliver certainty while safely maintaining traffic, minimizing environmental impacts, and limiting inconveniences suffered by residents and businesses in the project area. *Figure 3* summarizes key points of relevance in the Work History Forms we supply in *Appendix 3.4.1*.

	Lead Contractor: Myers			Lead Designer: WRA		
Relevance	VDOT I-64 Segment II DB	I-476 Widening	MDTA I-95 Express Toll Lanes	VDOT I-64 Bottoms Bridge DB	I-95 / I-495 / I-295 Interchange	95 EL / Opitz Blvd Reversible Ramp
Construction Cost	\$141M	\$207M	\$53M	\$46M	\$30M	\$50M
Interstate Design/Construction	✓	✓	✓	✓	√	✓
Express / Toll Lanes			✓			✓
Shoulder Rehabilitation	✓	✓	✓	✓	✓	✓
Bridge Widening and Rehabilitation	✓	✓	✓	✓	✓	✓
High-Volume Urban Area	✓	✓	✓	✓	✓	✓
Limited Construction Space	✓	✓	✓	✓	✓	✓
Geotechnical Challenges	✓	✓	✓	✓	✓	✓
Sensitive Environmental Concerns	✓	✓	✓	~	~	

Figure	3.	Relevance	of Work	History	Forms
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DEMONSTRATING PREVIOUS EXPERIENCE IN PROJECT SELECTION PARAMETERS

The Myers Team draws on deep experience on projects of similar scope and complexity that involved each of the six experience parameters defined in the RFQ. The following narrative briefly demonstrates our experience and approach to these parameters, while each project featured in *Appendix 3.4.1* describes its relation to these evaluation criteria in detail.

Finishing contracts on time or earlier than the original contract fixed completion date: The DB delivery model can expedite the Project schedule, ensure adherence to the original completion date, and proactively address issues, but only if the builder and designer have the experience, planning, and coordination needed to realize these benefits. Both Myers and WRA bring this history and capability. In addition to our dedicated workforce of 2,400+ employees, Myers has fine-tuned its onboarding process to efficiently align new hires and subcontractor partners. By quickly aligning our Team, we can focus on Project solutions and productivity. Our detailed, operation-level planning and scheduling processes optimize production, eliminate obstacles, and deliver Project certainty. Upon Project award, our Team will finalize a resource-loaded baseline CPM schedule to serve as the driving force behind all long-term and short-term planning. In addition, we will develop/review detailed look-ahead schedules for each crew in weekly planning meetings to coordinate upcoming activities, proactively identify potential schedule challenges or constraints, and determine any need for additional resources or resequencing of work to expedite delivery.

Experience in successfully coordinating with adjacent projects: Any DB effort must coordinate successfully with adjacent projects to integrate design elements, coordinate construction activities, and maintain safe traffic flow throughout the project duration. WRA coordinated its design and maintenance of traffic (MOT) work for the I-95 / I-495 / I-295 Interchange alongside four other active adjacent projects in both VA and MD, one of the largest and most complex projects in the region. With so much concurrent work on interconnected roadways, any design or MOT change would

3.4 Experience of Offeror's Team

impact traffic operations and schedules for multiple projects. Through extensive coordination with both owners and contractors, WRA met all design schedules under accelerated conditions. Myers faced similarly critical MOT logistical requirements on I-64 Segment II. Thoughtful, regular communications with adjacent work and project teams on Segments I and III resulted in proactive and effective coordination for traffic control and stakeholder outreach.

Delivering projects in developed urban corridors: Urban settings pose unique challenges to heavy civil construction projects, limiting space and amplifying the risks and pressures of safety, congestion, public impacts, and delivery certainty. The Myers Team has proven its ability to commandeer success in urban corridors across the region, including Norfolk, Richmond, and the DMV. Myers' experience includes the \$52M Central Avenue Streetscape and Harbor Point Connector Bridge in the center of the City of Baltimore to connect downtown to the new Harbor Point development site, as well as two segments of the I-95 Express Tolls Lanes corridor widening for MDTA, valued at \$96M, to create more efficient mobility in a heavily populated urban setting.

Use of innovative design solutions and construction techniques: The Myers Team stands by its history of innovations and new construction techniques for VDOT. Crafted with purpose and delivered thoughtfully, these leading-edge solutions lead to greater certainty for project delivery while positioning VDOT on the forefront of its industry. WRA has delivered design solutions to fit the project location to minimize impacts and decrease long-term maintenance to include:

- I-95 over Reymet Road ABC Superstructure Replacement (2022)
- I-64 over Shockoe Valley & CSXT Rapid Mill and Latex Overlay (2015)
- Opitz Blvd. over I-95 Superstructure widening with joint eliminations (2022)
- I-64 over Chickahominy River Superstructure widening with deck replacement and joint elimination (2019)

Myers takes pride in responding to project challenges with innovative solutions and techniques. On the I-64 Segment II project, Myers addressed challenges of design, schedule, and constructability presented by the RFQ concept plans that proposed an inside widening of I-64 near Burma Road. In response, Myers suggested a localized shift of the Interstate widening to the outside. This increased clearances underneath the structure by a simple shift of the centerline and reset two existing girders in the proper construction phase. The solution eliminated a phase of construction and allowed Myers to fully open the travel lanes to traffic on time.

Limiting impacts to the traveling public and affected businesses and communities: Virginians broadly support infrastructure investments—and especially to bridges—but also bear several costs of major civil construction projects. The Myers Team draws on extensive experience limiting construction impacts for the traveling public and minimizing congestion on interstate/bridge widening projects. This MOT experience has included working entirely behind barrier, utilizing moveable barrier, and implementing short-term lane closures. We evaluate time-of-day restrictions and detours and deploy them as necessary to meet project needs and expedite construction. On the I-95 / I-495 / I-295 Interchange project, WRA took a lead role in coordinating multiphase MOT plans and multiple construction project phasing to minimize congestion along I-95 / I-495 during construction.

Developing and managing effective communication strategies with business owners and key stakeholders: An effective communication strategy goes hand-in-hand with design and construction solutions that address community and stakeholder concerns. Our current work on the I-66 Outside the Beltway project demonstrates how we maximize public awareness of project activities. We created partnerships with key stakeholders, proactively anticipate/address community concerns, and build strong relationships with stakeholders over the life of the Project. In addition to holding stakeholder and public meetings, we guide and issue emails, social media posts, signage, and website updates. The Central Avenue DB project in downtown Baltimore requires a high-level of communication with local business owners and residents due to its location in a congested urban area. We regularly update a project website with project activities and impacts, make door-to-door visits to discuss impacts with affected residents/businesses, inform travelers with signage indicating that businesses remain open through construction, and coordinate activities with other projects in the area. Myers also works closely with the City and local elected officials on routine public meetings, media outreach, and stakeholder communication.

3.5. PROJECT RISKS





3.5 Project Risks

The Myers Team's collective experience on seven VDOT Design-Build (DB) projects has contributed to the following risk management strategies our Team will implement for the I-64 HREL Segment 1A Project:

- Optimizing traffic flow during construction to minimize impacts to vehicular traffic;
- Supporting a robust outreach program with Project stakeholders to increase transparency and public trust; and
- Reducing costs and controlling schedule by self-performing all major construction elements for the Project.

In consideration of the most relevant and critical risks for the Project, the Myers Team reviewed the RFQ documents including associated plans, reports, and assessments and visited the Project site. We selected the following three critical risks which could significantly impact the Project's success by impacting public safety, delaying the schedule, and creating design/construction inefficiencies that increase cost.

RISK #1: CONSTRUCT NEW EXPRESS LANES ON I-64 OVER I-564 & RTE 165 (E. LITTLE CREEK RD) BRIDGE STRUCTURE AND APPROACHES

WHY THE RISK IS CRITICAL:

The Project scope calls for the conversion of the existing reversible single express lane from Sta 6002 to 6059 into a new dual-lane configuration facility. The new system will have a single dedicated WB express lane separated by traffic barrier from a reversible direction lane. In addition, a new slip ramp from WB I-64 will provide access to the dedicated lane at approx. Sta 6052. Maintaining traffic for installation of the barrier within the roadway and bridge sections while converting this area into the new configuration is a critical risk for the Project due to the narrow widths and limited access available through this section. To accomplish the installation of the barrier on both the bridge and roadway will require providing access from both the EB and WB ends of the Project and with the current bi-directional capability of the lane configuration creates risks for the installation of the barrier for construction to include, but not limited to:

Traffic Pattern: Depending on the time-of-day, traffic will be going either EB or WB, causing a high degree of focus on traffic throughput and less emphasis on expediting construction, thereby leading to longer durations and higher costs during installation of the new median barrier.

Geometrics: Within the proposed zone to install the new barrier, the current **roadway cross section** is only 32 ft wide with permanent traffic barrier on each side, creating a closed section. The barrier is integrated with the retaining walls supporting the roadway on both sides which precludes any use of temporary widening to assist with traffic patterns during construction. Within the **bridge transverse section**, it is also 32 ft wide to match the approach roadway section. With the roadway and bridge section both constrained by existing outside barriers, the narrow section creates a significant impediment for the construction of the proposed median barrier in the middle of the current facility while under traffic.

Bridge and Roadway Construction: With varying roadway and structural elements through the section of the proposed barrier, our Team will be required to review and employ alternative approaches to construction, reducing the opportunity for efficiencies otherwise found with repetitive and typical details. *Figure 4* illustrates the current geometrics along the structure section (Sta 6022–6031). Construction of the new bridge median barrier to meet current requirements (42" Single Slope Median Concrete Barrier SSMB-1) will require removal of current concrete deck on both sides of the future median up to 2 ft to allow for the new barrier to be composite with the deck. This will result in a minimum of a 6 ft wide section of concrete deck removal in the middle of the existing bridge structure.





3.5 Project Risks

With only 32 ft available, and a minimum of 6 ft removed down the center and the installation of a temporary barrier to separate traffic from the work zone, only 11 ft is left between the temporary barrier and permanent barrier, resulting in a 9 ft travel lane with a 1 ft offset on each side which is unacceptable. On the roadway approach section, similar physical constraints leave only 12 ft between the temporary and permanent barriers, also a very narrow section. Due to the bridge geometrics, there is not sufficient room to construct an MB-7/SSMB-1 barrier as called for in the concept plans and maintain the single traffic lane on the bridge structure.

POTENTIAL IMPACTS:

The current configuration of the Express Lane (EL) along this section of I-64 makes exclusive use of a single reversible direction lane starting near the western end of the Project. This section of roadway requires significant reconstruction to create the new configuration to allow full time bi-directional EL access. Impacts to the ability to use the EL during construction are a significant risk and have significant impacts. To accomplish the Project goals, construction will impact the travel lanes in both directions throughout the duration of construction. The impacts to the EL could equate to lost revenue, presenting a risk that our Team's construction means and methods and TMP will be required to be addressed. The lost usage can come from several different potential problems.

If construction activity requires extended closures to complete work in certain sections, this will require keeping the lanes closed. Additionally, the section along the elevated structure poses a difficult constructability solution to manage. Installing a new SSMB-1 type barrier system along an existing bridge deck will create a significant disruption along the length of the structure. There is not enough room along the structure to safely conduct construction while maintaining traffic. This will require managing lane closures and making productive use of the scheduled downtimes for the lanes.

Additional impacts to lane use could come from motorist confusion. Effective communication of when the lanes are open in each direction is critical. Confused travelers may opt not to use the lanes based on a lack of knowledge regarding availability and timing of openings and closings. Motorist may also opt out of the EL use if the construction zone is congested and creates a safety concern. Extremely narrow lanes bordered by walls on both sides will often cause drivers to slow down. This could create congestion within the lanes and deter users. These impacts would result in lost revenue.

Outside of the impact on revenues, lack of access or use of the EL will impact the surrounding infrastructure. Inability to use the EL, either because the lanes are closed for construction or a lack of schedule information, will lead to impacts on the mainline general-purpose lanes. Travelers that otherwise may use the EL will redirect into the general-purpose lanes adding to the traffic volumes. If lanes cannot be available because of construction, this will reduce the ability for the lanes to create additional capacity during rush periods, worsening traffic in the area.

MYERS TEAM MITIGATION STRATEGIES:

Each section identified in this risk requires its own approach to balancing constructability while maintaining the operations of the Express Lanes. As noted in the risk description above, there are several sections within the length of roadway called out for conversion to a multilane system. Effective mitigation strategies require looking at each of these elements individually and then analyzing as a whole system the best means and methods to mitigate the risk.

Bridge/Roadway Sta 6020-6031: The elevated section calls for construction of a new median barrier (SSMB-1) in the middle of the bridge to separate future dedicated WB lane from the reversible lane. There are a couple of options that can meet this goal, each with advantages and potential drawbacks. This section includes the elevated structure as well as the approach roadway section on the east side including the merge from the I-64 EB slip ramp.

The simplest and most cost-effective solution is to use a permanent precast bolt down system. This option provides the fastest means with the least impact to the existing use of the express lanes during construction. Using a precast barrier allows offsite fabrication and delivery to the Project for storage ahead of planned construction periods. The system would include a pocket in the barrier to permit bolting with a stainless-steel bolt through the deck to plates mounted on the underside of the bridge deck. The pocket could be filled with grout if needed to cover the bolt system from exposure to the environment. On the roadway approach section (Sta 6020-6022), we would construct a permanent cast-in-place MB7D type section that would transition to the precast on the structure. Installing such a system could take place in phases during normal shutdown periods of the EL.

3.5 Project Risks

The construction of the system would take multiple shifts and in between work shifts. During the EL operational periods, traffic would use the existing reversible lane with a TMP that would include barrier and attenuators at the open ends of the construction zone and temporary lane restriping to move traffic onto one side of the bridge, using the existing shoulder area that is currently not striped for traffic. This traffic setup would progress across the structure in shifts.

As an alternative to the bolt down pre-cast option, a cast-in-place solution is feasible but will require more time and therefore more impacts to the operations of the EL. The width of existing structure (Sta 6022-6031) does not allow enough room to construct a CIP solution that is composite with the deck reinforcing and maintain traffic. As presented in *Figure* above, the typical section is only 32 ft wide on the bridge structure. The SSMB-1 median barrier installation on the bridge will require a minimum 6 ft wide partial deck removal to below the second mat of reinforcing. Maintaining traffic would entail a 2 ft wide barrier along the edge of the removed section. With a 1 ft offset to this traffic barrier and the existing parapet leaves only 9 ft for traffic.

To solve for these constraints, Myers proposes to construct limited amounts of the SSMB-1 section and deck reconstruction during weekend closures of the EL. This approach allows for construction on the weekends with placing the EL back into service before Monday morning rush hour. During this process we would implement a TMP that moves traffic to the north side of the EL using the existing shoulder as part of a temporary travel lane. At the beginning of a weekend shift, after securing the EL closure, we would remove a specific length of the deck section, construct the new barrier and then place back the necessary amount of deck closing up the open section. To accomplish this, the barrier would require high early strength concrete and very high early latex for the deck. Temporary attenuators would be set at the ends of the completed section of barrier and temporary traffic barrier set to close off the open ends of the construction zone. Traffic operations would return to the normal weekday schedule. Each weekend this process would continue to complete the section from Sta 6020 to 6031, including the roadway approach section from the I-64 EB slip ramp.

Myers' Proven Risk Mitigation: I-64 Segment II

Myers has demonstrated its ability to manage and deliver VDOT solutions for ramps in highvolume, urban settings with limited physical space for work. On the I-64 Segment II project, Myers slip-formed pier protection, footings, and walls using weekend ramp shutdowns to minimize construction impacts for the Busch Gardens and Route 199 Interchanges.

Roadway Sta 6031-6048: Starting with the roadway section on the east side of the bridge structure, approx. Sta 6031 to 6048, we can temporarily maintain a single lane of traffic in a reduced speed and lane-width configuration. From the east abutment of the bridge our phasing will separate the lane into two sections. In Phase 1, we propose to shift traffic north along the top edge of the road section while we reconstruct the pavement and install the new permanent barrier along the south/bottom half of the roadway. There is enough room to place a temporary traffic barrier along the northern edge of the sawcut line for construction of the MB7D type permanent traffic barrier. Placing the barrier in this location allows for a single 11 ft wide reversible traffic lane with a 1 ft offset to the barrier on each side. This temporary lane permits a Phase 1 construction section that is a total of 15 ft wide. Installing the new MB7D barrier will use 2 ft of this construction area and the remaining 13 ft is for reconstruction of the pavement. In Phase 2, we will reverse this traffic pattern and can make use of the permanent MB7D, now in place, as our work zone separation with no temporary barrier. In Phase 2, the traffic will use the new south side of the roadway in the permanent 12 ft travel lane with a 2 ft offset to the inside barrier and 1 ft offset to the outside, as required for the final section.

Roadway Sta 6002-6020: The roadway section of the EL from Sta 6002 to 6020 is for dedicated WB traffic only. This section is only active when the EL are in the WB direction. By using the north side of the EL for our traffic pattern during WB operations the traffic can continue to make use of this ramp. Reconstruction of this pavement can take place in conjunction with regular EL closures, while work progresses on the reversible direction section of the EL and also when EB operations are in place.

ROLE OF VDOT AND OTHER AGENCIES:

In addition to VDOT, there are several other entities/agencies with which coordination is essential to ensure successful management of this risk, in particular the US Navy and the City of Norfolk. Our design and construction methods will endeavor to limit impacts to the transportation network in the area. However, the changes to the traffic patterns will affect

3.5 Project Risks

each of these stakeholders with impacts to the transportation network around their facilities. We anticipate VDOT's role will be consistent with other recent design-build projects, providing review and approval of the construction submission packages, especially the TMP package.

RISK #2: PART-TIME SHOULDER LANE AND EXPRESS LANES SYSTEM ENHANCEMENTS

The construction of the EB High Occupancy Toll (HOT) Part-Time Shoulder Lane (PTSL) and WB/Reversible Express Lanes (EL) requires modifications to the existing I-64 General Purposes (GP) lanes and EL, including 2.2 miles of EB inside and outside widening (Sta 969-1085); modification of the existing EB EL entrance (Sta 984-995); realignment/widening of the WB GP lanes and EL roadways (Sta 6045-6059); and WB inside and outside widening (Sta 2815-3076). This construction causes significant impact to the existing reversible EL and existing tolling, ITS, and signing infrastructure. Key impacts we have identified from the RFQ Concept Plans include replacement of existing pricing DMS signs (Sta 980 & 987), existing fiber optic lines between I-64 WB and the EL (Sta 6032-6059) and along the left side of I-64 EB (Sta 1031-1021), existing EL guide and regulatory signs and structures, 3 existing DMS, and several existing CCTVs and traffic detectors. All these existing assets are critical for operation of the EL and GP lanes. The introduction of new PTSL and modified EL traffic operations also necessitates the replacement and upgrade of existing tolling, ITS, and signing infrastructure and the introduction of new systems such as lane use control. The RFQ Concept Plans propose approximately 10 DMS signs 4 lane use control signs 6 CCTVs 2 toll gantries and 1 registry

Concept Plans propose approximately 10 DMS signs, 4 lane use control signs, 6 CCTVs, 2 toll gantries and 1 registry point, 22 vehicle detectors, 2 roadway gates, 3 generator assemblies, and 16 sign structures. The western limit of the Project is shared with the HRBT project, including the HRBT Tolling Infrastructure Project. It is anticipated that fiber optic communications lines will be required to interface with HRBT and the signing for the EB PTSL and EB Reversible EL entrance overlaps into HRBT limits. This Project constructs the initial WB entrance to the EL (Sta 3026) and a slip entrance (Sta 2815) that interfaces with HRBT project limits. The eastern Project limit is shared with the Segment 1B project which constructs HOT PTSL in both directions where similar ITS and signing interfaces and overlap are anticipated. Construction for HRBT and Segment 1A are proposed concurrently, requiring significant coordination of design and construction efforts.

WHY THE RISK IS CRITICAL:

The successful completion of the Project is fully dependent upon the PTSL and EL systems construction. From our Team's experience designing and constructing similar traffic systems management & operations and toll facility projects on roadways with existing sytems in operation, we understand that minimizing the risk associated with the PTSL and EL System Enhancements in this Project is dependent upon the following critical items:

- It is critical to keep the existing EL and existing tolling and ITS systems operational. System replacements, upgrades, and expansions must be well-coordinated in design and construction to eliminate the risk of disruption to systems when transitioning from existing to temporary and proposed conditions.
- Tolling, ITS, and signing infrastructure must be installed, tested, and integrated for the successful implementation of PTSL and modified EL operations and on-time completion of the Project. This is also critical for construction phase changes that impact different parts of existing systems or that change traffic patterns and require temporary designs or activation of proposed equipment.
- Design and construction coordination with adjacent projects are critical so that interfaces and overlap that directly affect the PTSL and EL systems can be installed and activated without redesign or delays that affect implementation/opening or increase cost and schedule risk.
- The PTSL and EL system designs must be well coordinated with the roadway and structural designs for safe maintenance access and constructability, and so an efficient construction sequence can be developed.

POTENTIAL IMPACTS:

Failure to maintain operations of the existing tolling, ITS, and signing systems can lead to several impacts. Unforeseen impacts can lead to schedule delays while repairs are made, such as delayed construction of EL widening at Sta 6045 to 6059 for a fiber repair. Outages also affect safety, such as the inability to operate the roadway gates and open or close entrances/exits to the reversible lanes at Sta 991-998 or Sta 31-35. HRTAC's toll revenue will suffer if there is an unforeseen impact to pricing DMS signs or the tolling system that prevents collection of tolls. VDOT's traffic monitoring

3.5 Project Risks

and incident response, which are especially critical in work zones, will be negatively impacted from outages affecting the existing 5 CCTVs or 3 DMS within the Project limits, increasing overall traffic impacts.

If the tolling, ITS, and signing infrastructure construction is not sequenced or properly coordinated with adjacent projects and stakeholders such as VDOT's Toll and ITS System Integrators, resulting construction delays will affect the Project's construction phase changes and overall completion schedule. While fiber communication systems typically offer redundancy, work on the fiber system will require careful coordination with VDOT and adjacent construction contracts to avoid network outages.

Our review of the Project anticipates that construction of I-64 EB, WB, and the EL will need to proceed concurrently to meet the final completion schedule. Early mitigation of construction impacts to existing tolling, ITS, and signing infrastructure will thus be critical path. Failure to address early construction impacts, which can be worsened by long lead times for items such as sign and ITS structures and ITS devices, could lead to overall schedule delays.

The interface and overlap with the HRBT and Segment 1B projects will add both schedule and cost risk to the Segment 1A project if construction schedules or MOT conflicts occure and Segment 1A work cannot proceed. These risks are also increased if each of the Project's responsibilities are not clearly defined where there are points of interface/overlap. This can further impact Project interim milestones and incentives/disincentives.

MYERS TEAM MITIGATION STRATEGIES:

To mitigate risk of potential impacts associated with the PTSL and EL construction, our Team proposes the following mitigation strategies that we have successfully used on past VDOT projects, see *Figure 5*.

To ensure that EL, tolling, and ITS are kept operational, the Myers Team will review the roadway, drainage, and structural construction to identify all impacts to existing ITS and toll infrastructure (with a focus on schedulesensitive impacts) and identify opportunities to construct new infrastructure by phase of construction. We will develop a design that locates proposed infrastructure out of conflict and minimizes temporary work. For example, addressing the fiber impact to the existing fiber line in the median from Sta 6032 to Sta 6059 should ensure that it does not conflict with proposed outside widening. We will ensure all existing infrastructure is properly located before performing work to minimize the risk of unforeseen outages and the potential impacts described above, allowing systems to be kept operational with Figure 5: VDOT I-95 Southern Terminus Extension



WRA and Aldridge Electric (formerly Chesapeake Electrical Systems) successfully delivered VDOT's I-95 Southern Terminus Extension (STE) Project extending the I-95 Express Lanes 2.2 miles with new entry and exit ramps. The STE project included tolling and ITS system elements identical to the Segment 1A project that were constructed while keeping the existing Express Lanes operational. WRA and Aldridge Electric implemented the same mitigation strategies to minimize risk allowing the project's new exit and entrance ramps to be opened by the project's interim milestone, resulting in early project completion.

smooth transitions from existing to proposed conditions. We will follow VDOT's Notice of Impact (NOI) process for any impacts affecting the normal operation of Department assets and will not proceed without approvals.

For schedule sensitive structures, devices, or existing asset impacting mitigation (e.g. items required early in construction or interim milestones), we will address long lead times by developing breakout design/construction packages to prioritize critical components. Aldridge Electric (AE) has leveraged pre-fabrication capabilities (as illustrated in *Figure 6*) to address schedule sensitivity for electrical service racks on VDOT's I-64 Express Lanes Segment 2 project and will apply the same pre-fab solutions as part of the Myers Team for successful delivery of Segment 1A project. This strategy also reduces construction risk by providing consistent service rack design and installation with minimal punch-list items. It further decreases risks to safety by reducing the number of lane closures compared to a traditional field-build approach, which minimizes roadway exposure for construction crews and VDOT's inspection staff and decreases the traveling public's exposure to work zone

Figure 6: Prefabricated ITS Systems

3.5 Project Risks



activity. Pre-fabricated solutions also enable us to hedge regional staffing resource concerns.

We will conduct careful, thoughtful planning with VDOT and the adjacent projects. Doing so will ensure that design, construction, and schedules are well-coordinated, with ample time allowed for testing, integration, and burn-in of critical tolling and ITS infrastructure. This coordination will also include development of cutover plans for network, communications, ITS, and power changes. AE has extensive experience maintaining the operations of existing networks and a proven record of reducing network risks by coordinating between construction and tolling or ITS integrators. We have a deep understanding of the migration plans, asset databases, and the testing and commissioning/turnover processes directly with VDOT. We will leverage our extensive network and ITS knowledge from the VDOT I-64 Express Lanes Segment 2 project and will share best practices to identify technical issues early in the design process and create customized solutions to ensure network continuity for the project. Our coordination with adjacent projects and Segment 1A design development will include sign unveiling plans for introduction of the PTSL and modified EL operations which are reviewed for MUTCD compliance and consistency with the overall HREL network.

We will hold regular design coordination with VDOT to establish the design approach and share progress. Critical impacts and transitions will be reviewed to gain VDOT consensus on the approach before developing a full design. This design coordination will engage other design disciplines as needed to review site design considerations for safe access or constructability (e.g., sign foundations between barriers, generator access, etc.).

We will explore options to accelerate the PTSL and/or EL construction and opening to mitigate traffic impacts and minimize potential toll revenue loss. For example, opening the new EB PTSL may reduce traffic impacts associated with construction on the reversible EL roadway.

ROLE OF VDOT AND OTHER AGENCIES:

VDOT's role as the operator and maintainer of the EL and future PTSL will include review, approval, and participation/oversight during the testing, integration, and burn-in of all PTSL and EL components. VDOT will facilitate coordination with their Toll and ITS integrators, maintenance contractors, and the adjacent projects. HRTAC has critical involvement as the primary funding source for the Segment 1A project and overall HREL network. Our Team's efforts to minimize disruption to existing systems; our efficient approach to the PTSL, Express Lane, and associated infrastructure design and construction; our coordination efforts with adjacent projects; and our experience performing identical work for VDOT that eliminates any "learning curve" will reduce VDOT's overall effort through the PTSL and EL construction process.

3.5 Project Risks

RISK #3: EXISTING CONCRETE BARRIER / DRAINAGE INTERFACE

WHY THE RISK IS CRITICAL:

The RFP Plans and typical sections propose utilizing approx. 8,000 lf of existing concrete barrier where the I-64 EB or WB GP travel lanes are shifting onto an existing paved shoulder and the reconstruction of the existing EL. The existing concrete barrier must maintain a minimum height of 32 inches and the asphalt buildup must not exceed the original 3-inch vertical face at the base of the concrete barrier or it will be required to be replaced. Additionally, the plans propose constructing a trench drainage system just in front of the existing concrete barrier in some areas. The installation of the trench drainage system will be challenging to construct without impacting the existing concrete barrier especially at the Modified DI-1 outlet drainage structures with a depth of over 7 ft. In some locations, the plans include both the trench drainage system above a proposed storm drain system, requiring the construction of a 7 ft to 8 ft deep trench located just off the face of the existing concrete barrier. The existing concrete median barrier would not have the appropriate support

due to the proposed trenching during construction to install the pipe and would have traffic operating on the opposite side of the barrier in several cases.

The Project faces the risk that the existing concrete barrier may need to be totally replaced due to constructability concerns. *Figure 7* summarizes the locations where the RFQ calls for utilizing the existing concrete barrier.

Figure 7: Locations of Existing Concrete Barrier in RFP Plans

LOCATION	STATIONS	LENGTH
I-64 Reversible	6022+98 to 6048+95 LT & RT	5,194 ft
I-64 WB	3017+55 to 3016+14 Median	141 ft
I-64 EB	1025+75 to 1040+00 Median	1,425 ft
I-64 EB	1040+00 to 1046+10 LT & RT	1,220 ft
I-64 WB	3070+24 to 3076+66 LT	642 ft
	TOTAL	8,622 ft

POTENTIAL IMPACTS:

There are two elements of the risk that could impact the design and construction of the I-64 Segment 1A delivery. The first is being able to design an alignment, profile, and typical section that meets the design requirements for the Project that is dictated by the existing elevation at the base of the concrete barrier. The second is the constructability of the proposed design to avoid impacting the existing concrete barrier.

Design of Proposed Travel Lanes – An effective survey will be required to evaluate the existing pavement elevation, cross-slope, and how the existing travel lanes will be shifted permanently onto the existing shoulders without impacting the performance of the existing concrete barrier. A shift of 7 ft onto a 10 ft paved shoulder on a tangent section would result in a change of elevation of approximately 2.5 inches (7 ft times the change in shoulder slope from 5% to 2%). The original design of the concrete barrier included only a 3-inch vertical face at the base of the barrier for future resurfacing, once exceeded the existing concrete barrier must be replaced or modified to achieve a crash tested barrier. It is probable I-64 has already been resurfaced several times and the existing vertical face of the concrete barrier is less than 3 inches and affects the evaluation of maintaining the existing barrier.

Constructability of Proposed Drainage System near the Face of the Existing Concrete Barrier – If the Myers Team can design a roadway section to retain the existing concrete barrier, the reduced shoulder width will require the construction of a trench drain system and in many cases a storm drainage pipe beneath it. The means and methods to construct the storm drain 7 to 8 ft below the existing concrete barrier will be expensive because a supported excavation trench must be provided while maintaining the functionality of the existing concrete barrier. There is a significant risk of the ability to maintain the entire existing concrete barrier without undermining the aggregate base below. The additional cost and time required to construct the trench drain and storm drainage pipe while maintaining the existing concrete barrier itself.

Replacement of the Existing Barrier – The reconstruction or replacement of the concrete barrier would require an additional phase of construction where travel lanes exist on the opposite side of the existing barrier that will increase construction cost, extend the construction schedule, and impact operations of the express lanes.

3.5 Project Risks

MYERS TEAM MITIGATION STRATEGIES:

The Myers Team mitigation will evaluate alternative methods to address the design and construction challenges of utilizing the existing concrete barrier as proposed in the RFQ Plans. The risk factors to be considered are:

- Impacts to the traveling public by providing a design that provides additional shoulder width and/or reduced traffic shifts during construction
- The cost of alternative means and methods of construction to maintain the existing barrier
- Potential impacts to the delivery schedule for construction

Alternative Designs: The Myers Team will evaluate design modifications that would either provide additional shoulder width, or design an innovative drainage system to eliminate the deep storm drainage pipe located at the base of the existing concrete barrier. From our review of the RFQ Plans, achieving a greater shoulder width would require either reducing shoulder/ lane widths, minor shifts in alignment, or modification of existing barriers that would increase the amount of new construction through the areas utilizing existing concrete barrier. The RFQ Plan typical sections shows a minimum 3 ft shoulder in many of these areas. The proposed trench drain is a ACO HD-200 Trench Drain with a maximum depth of 20.83 inches. A storm drainage system with inlets will be required to connect to the trench drain due to the limited hydraulic capacity of the trench drains. This will intercept flow from the trench drain pipe that is under them to an inlet that outlets into the existing drainage system.

The Myers Team would evaluate a special design trench inlet system for these areas that would function as both the trench drain and the storm drainage system to the outlet of the existing drainage system. This would eliminate the construction of a deeper installation trench for the pipe as proposed in the RFQ design and ensure the functionality of the existing concrete barrier. This design approach would improve safety by eliminating the deep installation trench that would have required a trench box or sheeting and shoring. It also minimizes the potential for providing temporary median barrier on the opposite side to protect the existing concrete barrier from a traffic impact. The special design would only require the maintenance of a single drainage system by eliminating the storm drain pipe. The cost and time to construct the special design trench inlet section would be similar to the construction of the system proposed in the RFQ Plans.

Constructability of Storm Drainage Pipe (Length of EB I-64 from approx. Sta 1025 to 1046): The final design may require the reconstruction of portions of the existing median barrier in the areas noted above and the modification of the barrier on top of the existing retaining wall. Reconstruction of the existing concrete barrier would have a major impact on maintenance of traffic and the schedule for each phase of the Project.

The Myers Team mitigation approach will begin with a detailed evaluation of the design. This design would require a survey with the detail and accuracy needed to determine the existing pavement elevation at the face of the existing concrete barrier with detail on the barrier to check the design controls of height of the barrier and ensure the base of the barrier remains within design criteria. The survey required would be a mobile lidar and would be needed with the release of the RFP to allow the full evaluation of the risk in pricing the construction of the Project. If the pavement elevation survey must be acquired after selection of a design-builder for the Project, maintaining the Project schedule will be difficult due to the time necessary to acquire the needed surveys. The design approach would require the ability to vary the shoulder cross slope to maintain the barrier height where possible.

The length of EB I-64 from approximate Sta 1025 to 1046 presents a constructability challenge. The planned trench drain system runs directly in front of the existing concrete barrier. The design calls for the trench drain to be a minimum 1 ft from the face of the existing barrier. In this stretch of highway, given the location of the future shoulder use PTSL the drain system will have to be constructed at the minimum allowable distance from the existing concrete barrier to remain out of the travel lane.

This creates a problem with maintaining the existing concrete barrier as called for in the RFQ plans. The excavation to install both the trench drain and storm drainage pipe and inlet sections are extremely close to the existing concrete barrier and are at a depth that is most likely below the bottom of the concrete barrier. The RFQ plans have a proposed Modified DI-1 design that shifts the throat of the inlet off center to allow for the trench drain, storm drainage pipe and inlet to be constructed closer to the wall. The primary issue is to maintain the fill below the existing concrete barrier during construction and to prevent undermining the barrier as we excavate to build the drain systems.

3.5 Project Risks

The RFQ Plans call for over a 7 ft deep pipe trench and inlet that will require excavation support for worker safety (deeper than 5'). Also given the proximity of the existing concrete barrier some type of excavation support will be required to support the barrier and surrounding roadway. A traditional trench box installation for the manhole and storm drainpipes is too large to fit in such a tight configuration and will not protect from the undermining of the existing concrete barrier. Regular sheet pile also presents a similar fit issue in such a narrow area.

The Myers Team considered several options for construction of the RFQ Plan trench drain and storm drainage pipe in this area. To construct the system as shown, the depth of the storm pipe and inlets requires shoring. The depth and width of the excavation will require some type of tight sheeting with cross-bracing over the excavation and allow enough room to install the trench drain, storm drainage system, and proposed inlet.

We also examined potential methods to eliminate the need for the modified DI-1 as shown in the RFQ plans for this tight section of highway. Our proposal is to increase the size and depth of the proposed trench drain. This option would allow for the elimination of the inlets along the section of highway by running the trench drain the length of this section to connect with the DI-1 and outlet pipe beyond the section of highway.

A larger, deeper trench drain (see *Figure 8*) will carry more water away from this section to a point down the highway where there is more room for a larger inlet and outlet pipe. In this option, we would construct a cast-in-place trench drain section approximately 3' deep. Utilizing a CIP section allows flexibility in the location of



the trench, better control over the installation of the grates, and the ability to make finer adjustments to the trench to create the proper slope. At this depth, we can support the existing barrier section without resorting to extensive and impractical support of excavation measures.

Reconstruction of the Existing Concrete Barrier: Alternatively, if there simply is not enough room to construct the proposed storm drainage system and outlet structures, we would propose removing only the sections of the concrete barrier that cannot be economically retained due to constructability. Reconstruction may allow for the adjustment of the barrier location to improve safety and reduce the drainage infrastructure required for the Project; this may, however, require additional maintenance of traffic during construction.

ROLE OF VDOT AND OTHER AGENCIES:

VDOT will play a significant partnering role in any special design trench drainage systems. Trench drains have not been utilized extensively by VDOT and will require a detailed review by design, construction, and maintenance staff. The controlling of spread of the proposed and temporary travel lanes will improve safety and the early installation of the trench drain system will be a critical element of coordination from day one.

APPENDIX 3.1.2 SOQ CHECKLIST





ATTACHMENT 3.1.2

Project: 0064-122-470 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 3.1.2
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix 2.10
Letter of Submittal (on Offeror's letterhead)				1
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix 3.2.6
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix 3.2.7
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix 3.2.8

ATTACHMENT 3.1.2

Project: 0064-122-470 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix 3.2.9
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix 3.2.10
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix 3.2.10
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix 3.2.10
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix 3.2.10
Full size copies of DPOR Registration (Non- APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix 3.2.10
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				2-3
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	2-3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix 3.3.1
Key Personnel Resume – Entrusted Engineer in Charge (EIC)	Attachment 3.3.1	Section 3.3.1.1	no	Appendix 3.3.1

ATTACHMENT 3.1.2

Project: 0064-122-470 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix 3.3.1
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix 3.3.1
Organizational chart	NA	Section 3.3.2	yes	4
Organizational chart narrative	NA	Section 3.3.2	yes	2-3
Experience of Offeror's Team				5-6
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix 3.4.1
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix 3.4.1
Project Risk				7-15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	7-15

APPENDIX 2.10 FORM C-78-RFQ





Form C-78-RFQ

TITLE

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

RFQ NO.	C00117840DB112
PROJECT NO .:	0064-122-470

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 – January 20, 202	2
	(Date)	
2. Cover letter of	RFQ- February 10, 202 (Date)	2
3. Cover letter of		
ALIA	(Date)	
/ /MTHA		March 3, 2022
SIGNATURE	Ξ	DATE
Allan Myers VA, Inc. by: Aaron T.	Myers	Executive Vice President - Operations

PRINTED NAME

APPENDIX 3.2.6 LIST OF AFFILIATED AND SUBSIDIARY COMPANIES





ATTACHMENT 3.2.6

State Project No. 0064-122-470

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
Parent	Allan Myers, Inc.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan A. Myers, Co.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan Myers DE, Inc.	638 Lancaster Ave, Malvern PA 19355
Affiliate	Allan Myers Management, Inc.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan Myers Materials MD, Inc.	638 Lancaster Ave, Malvern PA 19355
Affiliate	Allan Myers Materials PA, Inc.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan Myers Materials, Inc.	638 Lancaster Ave, Malvern PA 19355
Affiliate	Allan Myers MD, Inc.	2011 Bel Air Rd, PO Box 278, Fallston MD 21047
Affiliate	Allan Myers PA, Inc.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan Myers Transport Co.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Allan Myers, L.P.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Affiliate	Compass Quarries, Inc.	638 Lancaster Ave, Malvern PA 19355
Affiliate	The Myers Group, Inc.	1805 Berks Rd, PO Box 98, Worcester PA 19490
Subsidiary	FAM Construction, LLC	3877 Fairfax Ridge Road, Suite 300C, Fairfax, VA 22030
Subsidiary	US 460 Mobility Partners, LLC	7025 Harbour View Blvd, Suffolk VA 23435

APPENDIX 3.2.7 DEBARMENT FORMS





<u>CERTIFICATION REGARDING DEBARMENT</u> <u>PRIMARY COVERED TRANSACTIONS</u>

Project No.: 0064-122-470

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 🛛. Mvers

March 3, 2022 Date

Executive Vice President -Operations Title

Allan Myers VA, Inc. Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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

February 22, 2022 Date Thomas G. McLindens President Title

Aldridge Electric, Inc.

Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project No.: 0064-122-470

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.

M. Just Degalor Signature

2/22/2022 Date

Executive Vice President / Regional Manager Title

Bowman Consulting Group Ltd. Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project No.: 0064-122-470

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.

Chnice A. Katton

2-22-2022 Date Senior Client Development Manager Title

Signature

Geotechnical Environmental and Testing Solutions, Inc.

Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project No.: 0064-122-470

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.

2128/22 Vice President Jon W. Ebbert, P.E. Signature Date Title

McCallum Testing Laboratories Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

The prospective lower tier participant certifies, by submission of this proposal, that neither it 1) 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.

Where the prospective lower tier participant is unable to certify to any of the statements in this 2) 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.

ab Haim Vicingle

Signature

2/17/2022 Date

President Title

Quinn Consulting Services, Inc. Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

The prospective lower tier participant certifies, by submission of this proposal, that neither it 1) 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.

John P Maddag

2/28/2022 Date

Partner Title

Whitman, Requardt & Associates, LLP

Name of Firm

Signature
APPENDIX 3.2.8 COPY OF CURRENT LISTING OF THE FIRM'S VDOT PREQUALIFICATION







 Date Printed:
 02/23/2022

 s
 12:00 AM

 22
 Page 278

Includes All Qualified Levels As Of 2/23/2022 - M -

Vendor ID: G303 Vendor Name: ALLAN MYERS VA, INC. Prequal Level: Prequalified Prequal Exp: 07/31/2022

-- PREQ Address --301 CONCOURSE BLVD SUITE 300 GLEN ALLEN, VA 23059 Phone: (804)290-8500 Fax: (804)418-7935

Work Classes (Listed But Not Limited To)

002 - GRADING 003 - MAJOR STRUCTURES 004 - ASPHALT CONCRETE PAVING 007 - MINOR STRUCTURES 013 - ROADWAY MILLING 171 - SURFACE TREATMENT

Bus. Contact: TREADWELL, MADELYN
Email: MADELYN.TREADWELL@ALLANMYERS.COM

-- DBE Information --

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

Vendor ID: N1020 Vendor Name: N TO N FIBER, INC. Prequal Level: Prequalified Prequal Exp: 07/31/2022

-- PREQ Address --

8661 VIRGINIA MEADOWS DRIVE MANASSAS, VA 20109 Phone: (703)331-3884 Fax: (703)331-3854 Work Classes (Listed But Not Limited To)

045 - UNDERGROUND UTILITIES 058 - DRILLING AND BLASTING 101 - EXCAVATING

Bus. Contact: NOONE, STEPHEN MICHAEL Email: INFO@NTONFIBER.COM

-- DBE Information --

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

APPENDIX 3.2.9 SURETY LETTER









March 3, 2022

Commonwealth of Virginia Virginia Department of Transportation (VDOT) 1401 East Broad Street Richmond, VA 23219

Re: Contract ID Number: C00117840DB112, State Project No.: 0064-122-470, Federal Project No.: NHPP-064-3(520), I-64 Hampton Roads Express Lanes (HREL) Segment 1A, From: 0.150 miles East of Patrol Road To: 0.663 miles East of Tidewater Drive

To Whom It May Concern:

Allan Myers VA, Inc., a subsidiary of Allan Myers, Inc., is a highly regarded and valued client of Fidelity and Deposit Company of Maryland, Zurich American Insurance Company, and Berkshire Hathaway Specialty Insurance Company. As sureties for Allan Myers VA, Inc., with A.M. Best Financial Strength Rating and Financial Size Category as listed below, and authorized to transact business in the Commonwealth of Virginia, Allan Myers VA, Inc. is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction for approximately One Hundred Seventeen Million and No/100 Dollars (\$117,000,000.00), and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Please be advised that this authorization is subject to standard underwriting throughout the request for qualification process, including a review of the contract terms, bond forms, project financing and any other pertinent underwriting information.

Sincerely,

Fidelity and Deposit Company of Maryland (AM Best Rating A+ (XV)) Zurich American Insurance Company (AM Best Rating A+ (XV)) Berkshire Hathaway Specialty Insurance Company (AM Best Rating A++ (XV))

- flinde

Melissa J. Hinde Attorney-in-Fact

MJH/sam

cc: Nyoka Brooks, Fidelity and Deposit Company of Maryland & Zurich American Insurance Company Kevin O'Brien, Berkshire Hathaway Specialty Insurance Company

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

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Harry C. ROSENBERG, Elizabeth P. CERVINI, David C. ROSENBERG, Matthew J. ROSENBERG, Denise M. BRUNO, Julia R. BURNET, Joyce M. HOUGHTON, Jonathan F. BLACK, David A. JOHNSON, Stephanie S. HELMIG, Melissa J. HINDE, James M. DISCIULLO, John E. ROSENBERG of Wayne, Pennsylvania, EACH, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 24th day of May, A.D. 2021.



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

By: Robert D. Murray Vice President

Dawn & Brown

By: Dawn E. Brown Secretary

State of Maryland County of Baltimore

On this 24th day of May, A.D. 2021, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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



Constance a. Dunn

Constance A. Dunn, Notary Public My Commission Expires: July 9, 2023

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790

EXTRACT FROM BY-LAWS OF THE COMPANIES

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

CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 3rd day of March ______, 2022 .



By: Brian M. Hodges Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims 1299 Zurich Way Schaumburg, IL 60196-1056 www.reportsfclaims@zurichna.com 800-626-4577

Authenticity of this bond can be confirmed at bondvalidator.zurichna.com or 410-559-8790



Power Of Attorney

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY

Know all men by these presents, that BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, NATIONAL INDEMNITY COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: Joyce M. Houghton, David C. Rosenberg, Jonathan F. Black, Matthew J. Rosenberg, Harry C. Rosenberg, David A. Johnson, Stephanie S. Helmig, Julia R. Burnet, Denise M. Bruno, Elizabeth P. Cervini, John E. Rosenberg, Melissa J. Hinde, James M. DiSciullo, 595 E. Swedesford Road, Suite 350 of the city of Wayne, State of Pennsylvania, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY.

By:

David Fields, Executive Vice President



NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY and Vice President of NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



Deofoy Dilinio

Notary Public

I, Ralph Tortorella, the undersigned, Officer of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, see hereunto affixed the seals of said Companies this March 3, 2022.



Officer

NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

By:

David Fields, Vice President



or via mail

via fax to (617) 507-8259,

pecialty.com,

via email at <u>claimsnotice@bhsi</u>

453-9675,

number at (855)

toll free

24-hour 뒿 5 3

please contact

us of a claim

To notify

Company. One tincoln Street, 23rd Floor

Berkshire Hathaway Specialty Insurance

Department, Berkshire Hathaway Specialty Insuranc THS POWER OF ATTORNEY IS VOID IF ALTERED

euthenticity of this Power of Attorney please contact us at: BNSISurety 02111 | {770} 625-2516 or by enail at <u>lemifer Porter Bhispeciality com</u>

To verify the Boston, MA

ARTICLE V.

CORPORATE ACTIONS

• • • •

EXECUTION OF DOCUMENTS:

. . . .

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

(1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and

(2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneysin-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneysin-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

APPENDIX 3.2.10 SCC AND DPOR INFORMATION





ATTACHMENT 3.2.10

State Project No. 0064-122-470

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)								
	SCC Information (3.2.10.1)				DPOR Information (3.2.10.2)			
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date	
Aldridge Electric, Inc.	F1190786	Stock Corporation	Active	844 East Rockland Road Libertyville, IL 60048	Class A Contractor	2705103235	03-31-2024	
Allan Myers VA, Inc.	01137801	Stock Corporation	Active	301 Concourse Blvd, Suite 300 Glen Allen, VA 23059	Class A Contractor	2701009872	12-31-2022	
				3951 Westerre Pkwy Suite 150, Richmond, VA 23233	Business Entity Branch Office Registration	0411000610	02-29-2024	
Bowman Consulting Group Ltd.	11139594 Stock Corporation	Stock Active Corporation	Active	1300 Central Park Blvd, Fredericksburg, VA 22407	Appraisal Business Registration	4008001873	03-31-2024	
				1300 Central Park Blvd, Fredericksbrg, VA 22401	Business Entity Branch Office Registration	0411000421	02-29-2024	
Geotechnical Environmental and Testing Solutions, Inc.	05418470	Stock Corporation	Active	5465 Greenwich Rd, Virginia Beach, Virginia 23462	Business Entity	0407004018	12-31-2023	

ATTACHMENT 3.2.10

State Project No. 0064-122-470

SCC and DPOR Information

McCallum Testing LLC dba McCallum Testing Laboratories, Inc.	S5234440	LLC	Active	1808 Hayward Avenue, PO Box 13337 Chesapeake, VA 23325	Business Entity	0407003087	12-31-2023
				14160 Newbrook Drive, Suite 220, Chantilly, VA 20151	Business Entity	0407003733	12-31-2023
Services, Incorporated	04925517	Corporation	Active	tive 1801 Pleasure House Rd, Suite 101,102 Virginia Beach, VA 23455	Business Entity Branch Office	0411001133	02-29-2024
Whitman, Requardt & Associates, LLP	K0003824 Ger Partne			9030 Stony Point Pkwy, Suite 220 Richmond, VA 23235	Business Entity Branch Office	0411000133	02-29-2024
		General Partnership	Active	801 South Caroline St. Baltimore, MD 21231	Business Entity	0407001676	12-31-2023
				1320 Central Park Blvd, Suite 224, Fredericksburg, VA 22401	Business Entity Branch Office	0411000861	02-29-2024

ATTACHMENT 3.2.10

State Project No. 0064-122-470

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
Allan Myers VA, Inc.	Thomas M. Heil	Glen Allen, VA	120 E Randolph Ave Alexandria, VA 22301	Professional Engineer	0402044111	01-31-2023
Quinn Consulting Service, Inc.	Richard Meinrad Allen	Chantilly and Virginia Beach, Virginia	443 Shady Dell Road, Thomasville, PA 17364	Professional Engineer	0402036809	11-30-2023
Whitman, Requardt & Associates, LLP	John Patrick Maddox	Richmond, VA	2825 Willbrook Drive Henrico, VA 23223	Professional Engineer	0402026613	01-31-2024

Entity Information

Entity Information	
Entity Name: Entity ID:	ALDRIDGE ELECTRIC, INC. F1190786
Entity Type: Entity Status:	Stock Corporation Active
Series LLC: Reason for Status:	N/A Active and In Good Standing
Formation Date: Status Date:	N/A 04/28/2015
VA Qualification Date:	03/18/2003
Period of Duration:	Perpetual
Industry Code:	0 - General
Annual Report Due Date:	03/31/2022
Jurisdiction:	DE
Charter Fee:	\$100.00
Registration Fee Due Date:	03/31/2022
Registered Agent Information	

RA Type: Entity Locality: HENRICO COUNTY RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: C T CORPORATION SYSTEM Registered Office Address: 4701 Cox Rd Ste 285, Glen Allen, VA, 23060 - 6808, USA

Principal Office Address

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=112092&source=FromEntityResult&isSeries = false

License	Details
Name	ALDRIDGE ELECTRIC INC
License Number	2705103235
License Description	Contractor
Firm Type	Corporation
Rank ¹	Class A
Address	844 EAST ROCKLAND ROAD, LIBERTYVILLE, IL
	60048
Specialties ²	Electrical (ELE)
	Highway / Heavy (H/H)
Initial Certification Date	2006-03-03
Expiration Date	2024-03-31

- 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.
- 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.

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

Entity Information

Entity Name:Allan Myers VA, Inc.Entity ID:01137801Entity Type:Stock CorporationEntity Status:ActiveEntity Status:ActiveSeries LLC:N/AReason for Status:Active and In Good StandingFormation Date:10/06/1967Status Date:11/19/2013VA Qualification Date:10/06/1967Period of Duration:PerpetualIndustry Code:0 - GeneralAnnual Report Due Date:N/AJurisdiction:VACharter Fee:\$0.00Registration Fee Due Date:Not Required	Entity Information	
Entity TypeStock CorporationEntity StatusActiveSeries LLCN/AReason for StatusActive and In Good StandingFormation Date:10/06/1967Status Date:11/19/2013VA Qualification Date:10/06/1967VA Qualification Date:0 - GeneralIndustry Code:0 - GeneralAnnual Report Due Date:N/AJurisdictionVARegistration Fee Due Date:Not Required	Entity Name Entity ID	Allan Myers VA, Inc. 01137801
Series LLC:N/AReason for Status:Active and In Good StandingFormation Date:10/06/1967Status Date:11/19/2013VA Qualification Date:10/06/1967Period of Duration:PerpetualIndustry Code:0 - GeneralAnnual Report Due Date:N/AJurisdiction:VACharter Fee:\$0.00Registration Fee Due Date:Not Required	Entity Type Entity Status	Stock Corporation
Formation Date:10/06/1967Status Date:11/19/2013VA Qualification Date:10/06/1967Period of Duration:PerpetualIndustry Code:0 - GeneralAnnual Report Due Date:N/AJurisdiction:VACharter Fee:\$0.00Registration Fee Due Date:Not Required	Series LLC Reason for Status	N/A Active and In Good Standing
VA Qualification Date: 10/06/1967 Period of Duration: Perpetual Industry Code: 0 - General Annual Report Due Date: N/A Jurisdiction: VA Charter Fee: \$0.00 Registration Fee Due Date: Not Required	Formation Date Status Date	: 10/06/1967 : 11/19/2013
Period of Duration: Perpetual Industry Code: 0 - General Annual Report Due Date: N/A Jurisdiction: VA Charter Fee: \$0.00 Registration Fee Due Date: Not Required	VA Qualification Date	: 10/06/1967
Industry Code: 0 - General Annual Report Due Date: N/A Jurisdiction: VA Charter Fee: \$0.00 Registration Fee Due Date: Not Required	Period of Duration	Perpetual
Annual Report Due Date: N/A Jurisdiction: VA Charter Fee: \$0.00 Registration Fee Due Date: Not Required	Industry Code	: 0 - General
Jurisdiction: VA Charter Fee: \$0.00 Registration Fee Due Date: Not Required	Annual Report Due Date	: N/A
Charter Fee: \$0.00 Registration Fee Due Date: Not Required	Jurisdiction	: VA
Registration Fee Due Date: Not Required	Charter Fee	\$0.00
	Registration Fee Due Date	Not Required

Registered Agent Information RA Type: Entity Locality: HENRICO COUNTY RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: C T CORPORATION SYSTEM Registered Office Address: 4701 Cox Rd Ste 285, Glen Allen, VA, 23060 - 6808, USA

Principal Office Address

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Address: (https://www.scc.virginia.gov/clk/clk_contact.aspx) Contact Us

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=42888&source=FromEntityResult&isSeries = false

l iconso Dotails

Name	ALLAN MYERS VA INC			
License Number	2701009872			
License Description	Contractor			
Firm Type	Corporation			
Rank ¹	Class A			
Address	301 CONCOURSE BLVD SUITE 300, GLEN ALLEN,			
	VA 23059			
Specialties ²	Highway / Heavy (H/H)			
Expiration Date	2022-12-31			

- 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.
- 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.

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Entity Information

Entity Information	
Entity Name: Entity ID:	Bowman Consulting Group Ltd. 11139594
Entity Type: Entity Status:	Stock Corporation Active
Series LLC: Reason for Status:	N/A Active and In Good Standing
Formation Date: Status Date:	11/13/2020 11/25/2020
VA Qualification Date:	11/25/2020
Period of Duration:	Perpetual
Industry Code:	0 - General
Annual Report Due Date:	N/A
Jurisdiction:	DE
Charter Fee:	\$750.00
Registration Fee Due Date:	Not Required
Registered Agent Information	

RA Type: Entity Locality: RICHMOND CITY RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA Name: CORPORATION SERVICE COMPANY Registered Office Address: 100 Shockoe Slip Fl 2, Richmond, VA, 23219 -4100, USA

Principal Office Address

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=11139594&source=FromEntityResult&isSeries = false

License Details

Name	BOWMAN CONSULTING GROUP LTD
License Number	0411000610
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	3951 WESTERRE PKWY SUITE 150, RICHMOND,
	VA 23233
Initial Certification Date	2009-07-17
Expiration Date	2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0403003124	MACAULAY, CRAIG STEVEN	Land Surveyor License	Land Surveying	2023-01-31
0402049766	GARCIA, CARLOS G	Professional Engineer License	Engineering	2023-11-30
0403003046	KOUGOULIS, NICHOLAS JOHN	Land Surveyor License	Land Surveying	2023-12-31
0402054328	HAMMONDS, BRETT WARREN	Professional Engineer License	Engineering	2022-05-31
0402024712	DELOYE, KEVIN ROBERT	Professional Engineer License	Engineering	2024-02-29
0403001906	FRALIN, RICHARD LEE	Land Surveyor License	Land Surveying	2023-01-31
0402057178	COX, KEVIN M	Professional Engineer License	Engineering	2023-12-31
0402043805	FRANCIS, SPENCER MACKENZIE	Professional Engineer License	Engineering	2024-01-31
0402036886	JACKSON, ANN WILSON	Professional Engineer License	Engineering	2024-01-31
0402032887	JACKSON, JONATHAN HATCH	Professional Engineer License	Engineering	2023-01-31

Showing 1 to 10 of 10 entries

License Details				
Name License Number	BOWMAN CONSULTING GROUP LTD 4008001873			
License Description Firm Type	Appraisal Business Registration			
Rank	Business Entity			
Address	1300 CENTRAL PARK BLVD, FREDERICKSBURG, VA 22407			
Initial Certification Date Expiration Date	2016-03-14 2024-03-31			

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License Details Name BOWMAN CONSULTING GROUP LTD **License Number** 0411000421 **License Description Business Entity Branch Office Registration** Rank **Business Entity Branch Office** Address 1300 CENTRAL PARK BLVD, FREDERICKSBRG, VA 22401 **Initial Certification Date** 2005-10-03 **Expiration Date** 2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402040214	TROIDL, JUSTIN ROBERT	Professional Engineer License	Engineering	2022-12-31
0403002953	CREEL, ALBERT LEE III	Land Surveyor License	Land Surveying	2022-06-30

Showing 1 to 2 of 2 entries

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Entity Information

Entity Information	
Entity Name: Entity ID:	Geotechnical Environmental and Testing Solutions, Inc. 05418470
Entity Type: Entity Status:	Stock Corporation Active
Series LLC: Reason for Status:	N/A Active and In Good Standing
Formation Date: Status Date:	06/16/2000 07/27/2020
VA Qualification Date:	06/16/2000
Period of Duration:	Perpetual
Industry Code: Annual Report Due Date:	0 - General N/A
Jurisdiction: Charter Fee:	VA \$750.00
Registration Fee Due Date:	Not Required

Registered Agent Information	
RA Type: Locality:	Entity RICHMOND CITY
RA Qualification:	BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA
Name: Registered Office Address:	CORPORATION SERVICE COMPANY 100 Shockoe Slip Fl 2, Richmond, VA, 23219 - 4100, USA

Principal Office Address Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us

(https://www.coc.virginia.gov/olk/olk_contact.gopy)

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=296334&source=FromEntityResult&isSeries = false

License Details

Name	GEOTECHNICAL ENVIRONMENTAL & TESTING
	SOLUTIONS INC
License Number	0407004018
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	5465 GREENWICH RD, VIRGINIA BEACH, VA 23462
Initial Certification Date	2000-09-12
Expiration Date	2023-12-31

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402046947	CATON, CHRISTOPHER MICHAEL	Professional Engineer License	Engineering	2023-06-30
0402033932	SCHOLEFIELD, DAVID MARK	Professional Engineer License	Engineering	2022-04-30
0402039988	ESPILONDO-MURDOCK, MARIA EUGENIA	Professional Engineer License	Engineering	2022-07-31

Showing 1 to 3 of 3 entries

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Entity Information

Entity Information	
Entity Nam Entity I	e: McCallum Testing LLC D: S5234440
Entity Typ Entity Statı	e: Limited Liability Company us: Active
Series LL Reason for Statı	C: No ıs: Active
Formation Dat Status Dat	te: 09/11/2014 te: 12/10/2019
VA Qualification Dat	re: 09/11/2014
Period of Duratic	n: Perpetual
Industry Coc	le: 0 - General
Annual Report Due Dat	te: N/A
Jurisdictic	n: VA
Charter Fe	ee: N/A
Registration Fee Due Dat	e: Not Required

Registered Agent Information

RA Type: Individual Locality: CHESAPEAKE CITY RA Qualification: Member of the Virginia State Bar Name: EDWIN H. GREEN Registered Office Address: 501 INDEPENDENCE PARKWAY, SUITE 201,

CHESAPEAKE, VA, 23320 - 5174, USA

Principal Office Address

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us

(https://www.coc.virginia.gov/olk/olk_contact.gopy)

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=775771&source=FromEntityResult&isSeries = false

License Details

License Number 0407003087	
License Description Business Entity Registration	
Firm Type Corporation	
Rank Business Entity	
Address 1808 HAYWARD AVENUE PO BOX 13337,	
CHESAPEAKE, VA 23325	
Initial Certification Date 1992-05-14	
Expiration Date 2023-12-31	

Related Licenses¹

License	License Holder	License Type	Relation	License
Number	Name		Type	Expiry
0402034560	EBBERT, JON WAYNE	Professional Engineer License	Engineering	2022-07-31

Showing 1 to 1 of 1 entries

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Entity Information

Entity Information	
Entity Name: Entity ID:	QUINN CONSULTING SERVICES INCORPORATED 04925517
Entity Type: Entity Status:	Stock Corporation Active
Series LLC: Reason for Status:	N/A Active and In Good Standing
Formation Date: Status Date:	10/24/1997 12/01/2008
VA Qualification Date:	10/24/1997
Period of Duration:	Perpetual
Industry Code: Annual Report Due Date:	0 - General N/A
Jurisdiction: Charter Fee:	VA \$50.00
Registration Fee Due Date:	Not Required

Registered Agent Information

RA Type: Individual Locality: ARLINGTON COUNTY RA Qualification: Member of the Virginia State Bar Name: JOHN H QUINN JR Registered Office Address: 2208 S KNOLL ST, ARLINGTON, VA, 22202 - 2134,

USA

Principal Office Address

Privacy Policy (https://www.scc.virginia.gov/privacy.aspx) Contact Us

(https://www.cog.virginia.gov/olk/olk_contact.gov)

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=71579&source=FromEntityResult&isSeries = false

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	2023-12-31

Related Licenses¹

License	License Holder	License Type	Relation	License
Number	Name		Type	Expiry
0402026380	VICINSKI, JOHN KEVIN	Professional Engineer License	Engineering	2023-08-31

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License Details

Name	QUINN CONSULTING SERVICES INCORPORATED
License Number	0411001133
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	1801 PLEASURE HOUSE RD STE 101,102,
	VIRGINIA BEACH, VA 23455
Initial Certification Date	2014-06-25
Expiration Date	2024-02-29

Related Licenses¹

License	License Holder	License Type	Relation	License
Number	Name		Type	Expiry
0402040981	CLARKE, RICHARD LAYNE	Professional Engineer License	Engineering	2023-05-31

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Entity Information

Entity Information	
Entity Name: Entity ID:	WHITMAN, REQUARDT & ASSOCIATES, LLP K0003824
Entity Type: Entity Status:	General Partnership Active
Series LLC: Reason for Status:	N/A GP - LLP Status Only
Formation Date: Status Date:	08/10/2000 08/10/2000
VA Qualification Date:	08/10/2000
Period of Duration:	N/A
Industry Code:	0 - General
Annual Continuation Report Due Date:	N/A
Jurisdiction:	N/A
Charter Fee:	N/A
LLP Status:	Yes
Registration Fee Due Date:	Not Required

Registered Agent Information	
RA Type: Locality:	Entity RICHMOND CITY
RA Qualification:	BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA
Name: Registered Office Address:	CORPORATION SERVICE COMPANY 100 Shockoe Slip Fl 2, Richmond, VA, 23219 - 4100, USA

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(https://www.coc.virginia.gov/olk/olk_contact.gopy)

https://cis.scc.virginia.gov/EntitySearch/BusinessInformation?businessId=368532&source=FromEntityResult&isSeries = false

License Details

Name	WHITMAN REQUARDT AND ASSOCIATES
License Number	0411000133
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	9030 STONY POINT PKWY STE 220, RICHMOND,
	VA 23235
Initial Certification Date	1996-11-12
Expiration Date	2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402026613	MADDOX, JOHN PATRICK	Professional Engineer License	Engineering	2024-01-31
0402023410	SELI, DANIEL JOSEPH	Professional Engineer License	Engineering	2022-06-30

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License Details

Name	WHITMAN, REQUARDT AND ASSOCIATES LLP
License Number	0407001676
License Description	Business Entity Registration
Rank	Business Entity
Address	801 SOUTH CAROLINE ST, BALTIMORE, MD 21231
Initial Certification Date	1982-09-03
Expiration Date	2023-12-31

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402026707	HASSON, DENNIS JUDE	Professional Engineer License	Engineering	2024-01-31
0406000536	PALM, HERBERT WILLIAM	Landscape Architect License	Landscape Architecture	2023-09-30
0403002231	KING, GREGORY	Land Surveyor License	Land Surveying	2022-06-30

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License Details

Name	WHITMAN, REQUARDT AND ASSOCIATES LLP
License Number	0411000861
License Description	Business Entity Branch Office Registration
Rank	Business Entity Branch Office
Address	1320 CENTRAL PARK BLVD SUITE 224,
	FREDERICKSBURG, VA 22401
Initial Certification Date	2011-08-25
Expiration Date	2024-02-29

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402051494	COLEMAN, LEONARD KEELON DESHAE	Professional Engineer License	Engineering	2023-05-31

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Name License Number License Description Rank Address Initial Certification Date Expiration Date HEIL, THOMAS M 0402044111 Professional Engineer License Professional Engineer ALEXANDRIA, VA 22301 2007-10-04 2023-01-31

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License De	etails
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Name License Number License Description Rank Address Initial Certification Date Expiration Date ALLEN, RICHARD MEINRAD 0402036809 Professional Engineer License Professional Engineer THOMASVILLE, PA 17364 2001-11-30 2023-11-30

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License Details

NameMADDOXLicense Number04020266License DescriptionProfessionRankProfessionAddressRICHMONInitial Certification Date1996-01-2Expiration Date2024-01-3

MADDOX, JOHN PATRICK 0402026613 Professional Engineer License Professional Engineer RICHMOND, VA 23233 1996-01-23 2024-01-31

Related Licenses¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0411000133	WHITMAN REQUARDT AND ASSOCIATES	Business Entity Branch Office Registration	Engineering	2024-02-29

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1 The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

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APPENDIX 3.3.1 KEY PERSONNEL RESUME FORMS





ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Edward Hilferty, Vice President of Construction
- b. Project Assignment: Design-Build Project Manager (DBPM)
- c. Name of the Firm with which you are now associated: Allan Myers (Myers)
- d. Employment History: With this Firm <u>24</u> Years Other Firms <u>6</u> Years

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

Allan Myers, Vice President of Construction (2012–present): Responsible for the management of design and construction processes for design-build projects, quality management, and supervision/ oversight of all aspects of the work to ensure all contractual obligations are met. Ed manages large teams composed of design professionals, construction managers, and subconsultants all focused on providing an on-time and within budget project. He oversees contract administration, material procurement, subcontractor management, planning and scheduling of work activities, submittals, pay estimates, and labor/equipment resources. He collaborates/coordinates with owners/ clients (including VDOT) and other project stakeholders to answer questions/inquiries relevant to the Project, mitigate and resolve disputes, and build/maintain positive customer relationships. Ed actively participates in public outreach meetings and ensures public concerns are promptly and appropriately addressed. Ed has experience overseeing multiple projects with construction values in excess of \$200M.

Allan Myers, Senior Project Manager (2002–2012): Responsible for managing all aspects of his projects including planning and scheduling work activities, coordination with the owner and other stakeholders, design consultants, private utility owners, and public outreach for all phases of construction. Ed managed and provided supervision for large teams of construction personnel from commencement of construction through project closeout. He oversaw the field construction activities to ensure project delivery met or exceeded all expectations of quality, safety, schedule, budget, and environmental requirements. Ed managed up to 10 projects for a combined value of \$125M.

Allan Myers, Project Manager (1997–2002): Managed all aspects of his projects including scheduling work activities, engineering, submittals, pay estimates, coordination with owner, subs, suppliers, and stakeholders, customer satisfaction, and safety for all phases of construction. Ed supervised multiple superintendents, field managers, and office construction staff including project engineers, scheduling, safety staff, and administrative personnel. He ensured all contractual obligations were met, managed changes in contractual requirements, and proactively resolved any disputes.

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

Drexel University, Philadelphia, PA/BS/1994/Civil Engineering

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

- 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-64 SEGMENT II DESIGN-BUILD (\$141M), NEWPORT NEWS, VA

Firm: Allan Myers

Role: Design-Build Project Manager

ger **Dates:** 01/2016 – 11/2019

Role: Responsible for all aspects of the project performance, ensuring contractual obligations are achieved, and delivering the project safely, on-time, and within budget. Oversaw design and construction, quality management, and contract administration. Coordinated with VDOT to proactively resolve disputes and participated in public meetings.

Project Description: This project widened seven miles of I-64 from four-lanes to six-lanes and included the full depth reconstruction of the existing lanes, adding one 12-foot-wide travel lane, and one 12-foot-wide paved shoulder in each direction to improve safety and ease congestion. The project also included the widening/rehabilitation of nine bridges, 19 ramps, three interchanges, four flyover bridges, extensive MOT, box culvert extensions, retaining walls, and SWM features. Widening occurred in the existing interstate median to avoid impacts to existing interchanges. Traffic impacts were successfully coordinated with the adjacent corridor widening project.

Similarities: The scope of work on this VDOT DB project included interstate widening along I-64 and extensive bridge widening and rehabilitation. Required coordination with adjacent projects along the urban project corridor. Design optimization included reducing utility impacts, drainage design optimization, and comprehensive maintenance of traffic planning and implementation.
Impact on the Project: Ed oversaw the project team and organizational structure that included more than 50 people for various engineering, construction, and administrative positions. Several innovative design optimizations were developed that produced schedule benefits including adjusting median widths which eliminated the need for over 10,000 LF of median barrier and longterm maintenance concerns. Relocated utilities at nine bridges without schedule disruptions resulting in eliminating 75% of potential utility impacts and reducing SWM facilities by 50% (54 to 26), saving money and reducing future maintenance. The project was constructed within budget and opened to traffic ahead of schedule.

VDOT MIDDLE GROUND BOULEVARD DESIGN-BUILD (\$39M), NEWPORT NEWS, VA

Firm: Allan Myers

Role: Design-Build Project Manager

Dates: 05/2014 - 04/2015

Role: Responsible for all aspects of project performance, construction, ensuring contractual obligations are achieved, and delivered the project safely, on-time, and within budget. Ed oversaw all elements of design and construction, quality management, and contracted administration and worked collaboratively with VDOT and third-party stakeholders to complete the project promptly and with transparency.

Project Description: This project extended Middle Ground Boulevard from its previous termini at Route 143 (Jefferson Avenue) 1.2 miles to Route 60. Myers was responsible for overall design and construction including 1.2 miles of primarily new mainline four-lane divided highway, widening of urban principal arterial roadways at Jefferson Avenue and Warwick Boulevard to provide turn lanes to the new roadway, and intersection improvements to improve safety and ease congestion. Additional scope of work included a bridge over CSXT Railroad; public and private utility relocations including 2,640 LF water line relocation and 1850 LF sanitary sewer relocation; acquisition of 72 parcels including 56 relocations; improvement of intersections along the mainline as well as reconstruction of private and commercial entrances affected by construction; rehabilitation or removal and replacement of unsuitable soils; installation of four new SWM basins; and replacement of a sanitary sewer pump station. Bridge design optimizations included using concrete girders in place of structural steel and modifying the bridge from three to two-spans, reducing future maintenance needed.

Similarities: The first VDOT DB project roadway project in the Hampton Roads District, this project included roadway widening and bridge construction in similar geotechnical conditions and widening of highly, congested primary arteries in an urban setting. Coordination with various project stakeholders included CSXT, the City of Newport News, and HRSD to incorporate betterments that accommodate future growth in the region. Impacted utilities included Dominion Virginia Power, Newport News Water Works, HRSD, Virginia Natural Gas, City lighting, Cox Communications, Level 3 Communications, and Verizon.

Impact on the Project: Ed's leadership as DBPM resulted in schedule improvements and productivity gains through adjustment of MOT sequencing and changes/additions to resources allocated to the project. He also worked with Newport News/HRSD to accommodate future growth by including a sanitary sewer force main betterment in the Project. Minimized potential safety risks by implementing an alternative TMP approach. Maintained access to private and commercial property entrances during reconstruction through continuous coordination and a strong public communication plan. Traffic impacts were minimized by utilizing soil stabilization for unsuitable solids in lieu of waste which would have created additional truck traffic.

MDTA I-95 EXPRESS TOLL LANES I-695 TO CAMPBELL BLVD (\$53M), WHITEMARSH, MD Dates: 05/2008 - 12/2010

Firm: Allan Myers Role: Senior Project Manager

Role: Oversaw all aspects of construction, design coordination, and contract administration for the project. Ed's responsibilities included oversight of all construction operations, coordination with the MDTA and the engineer of record, proactive identification of potential issues, dispute resolution at the lowest responsible level, and oversight of safety and operations. Ed was responsible for schedule performance and allocation of resources to meet the project needs, client satisfaction, and budget performance.

Project Description: Reconstruction and widening of 1.8 miles of I-95 as well as repairs to the existing MD 43 bridges over I-95 to improve safety and ease congestion. The existing eight-lane divided highway was reconfigured to eight general purpose lanes and four express toll lanes. Four lanes of traffic were safely maintained in each direction through this congested corridor during construction. The project interfaced with two other major projects to the north and south. Maintenance of traffic and lane shifts were safely coordinated with the adjacent projects to minimize traffic impacts and reduce the potential for safety issues. Construction included 54,000 SF of sound walls and four new SWM facilities.

Similarities: This interstate widening project maintained traffic throughout the conversion of the existing highway to add four express toll lanes. The project scope required adjacent project coordination, bridge construction/widening, sign structures, SWM facilities, sound walls, and utility coordination.

Impact on the Project: Ed led the development of a value engineering proposal to change the foundation design of a critical arch culvert resulting in overall risk reduction and significant schedule benefits. He maintained excellent public relations with business parks adjacent to the corridor during construction of noise walls that required construction access through private property. Ed led and managed a project team which included 17 engineers, superintendents and administrative personnel which led to the project being completed on time and within budget.

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

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Tom Heil, Director of Design-Build
- b. Project Assignment: Entrusted Engineer in Charge (EIC)
- c. Name of the Firm with which you are employed at the time of submitting SOQ.: Allan Myers (Myers)
- d. Years' experience: With this Firm 9 and Years With Other Firms 27 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):

Allan Myers – Director of Design-Build/Design-Build Manager (2012 – Present): Tom is fully integrated with all Myers' DB efforts and is responsible for the design and construction coordination throughout the pursuit, bid preparation, and execution phases. Tom's combined design and construction experience enables him to supervise the design, construction, and QA/QC with a high level of scrutiny to ensure all contractual obligations are met and deliver a functional, constructible, and safe Project. He takes immediate action to resolve matters involving potential hazards to keep in accordance with adhering to our stringent safety standards. Tom works closely with the EOR, construction personnel, and estimators to ensure schedule and budgetary compliance and design consistency with the project's contractual / technical requirements. He manages all design efforts to obtain AFC plans and once in construction, he ensures that all design related questions/changes are contract compliant and properly coordinated with the client, the EOR, quality team, and the construction team. Tom works closely with all key and support staff, including VDOT, stakeholders, utility companies, and agencies, to ensure the approved design plans are closely followed throughout construction. He is highly engaged with public outreach and stakeholder coordination efforts and works closely with Myers' internal PR Manager to proactively seek feedback and incorporate it into the design and construction approach as appropriate. Tom models a partnering approach to design and construction for all team members and is committed to proactive dispute resolution and contingency planning. Tom serves in multiple roles, depending on project size and complexity, including:

- <u>DBPM</u>: Served as Myers DBPM for two VDOT DB projects a bridge replacement and interchange modification project. Provided project oversight, managed the design and construction from proposal development through project close-out, coordinated with VDOT and stakeholders, oversaw temporary roadway closures, and managed the project punch lists to expedite final completion.
- <u>Design-Build Integrator</u>: Supported the DB Team with design oversight for six DB projects ranging in size from \$14M to \$2.4B for various clients including VDOT, MDOT SHA, and the City of Baltimore.
- <u>Entrusted EIC / RCE or Equivalent (reference additional details below)</u>: Served as the RCE on both the Myers/Wagman \$104M MD 404 Project for MDOT SHA and the Myers I-64 Segment II DB Project for VDOT.

RK&K – Director, Transportation (2008 – 2012): Tom managed RK&K's NOVA Design Office, where his responsibilities included client coordination, design management, oversight of final plan development, resolving design challenges while meeting budgetary constraints, and ensuring all pre-construction work products met strict quality standards and VDOT design specs.

RK&K – Design, Associate (1997 – 2008): Tom was responsible for environmental support of major transportation initiatives in the Mid-Atlantic region. He served as the environmental subject matter expert and prepared/supported development of NEPA documents (CE's, EA's, and EIS's) and environmental permitting efforts.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Maine (Orono, Maine). Bachelor's Degree in Civil Engineering, 1986 University of Maryland (College Park, MD). Master's Degree in Civil Engineering, 1996
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1994/PE/VA/ #044111; 2017/DBIA/D-2293
- 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 another 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.)

I-64 SEGMENT II, DB (\$138M) NEWPORT NEWS/ JAMES CITY/ YORK COUNTIES, VA

Firm: Allan Myers **Role:** Responsible Charge Engineer **Dates:** 01/2016 – 11/2019 **Role:** Served as RCE and fully integrated into the design and construction teams, primary VDOT liaison during design, and control over all engineering decisions and/or design modifications during construction. **Project Description:** Widening of I-64 from four to six-lanes from Exit 247 (Yorktown Road) to west of Exit 242 (Humelsine Parkway). The improvements included full-depth reconstruction of the existing lanes, the addition of one 12-foot-wide travel lane and one 12-foot-wide paved shoulder in each direction, and repair and widening of nine existing bridges and six box culverts located within the Project limits.

Similarities: The scope of work on this VDOT design-build project included seven miles of widening along I-64 as well as bridge repair/rehabilitation. Required coordination with adjacent projects along the urban project corridor. Design optimization included reducing utility impacts, drainage design optimization, and comprehensive maintenance of traffic planning and implementation.

Impact on the Project: Tom's impact serving as the RCE on the I-64 Segment II project was most prominent when working with VDOT/Myers to recover schedule lost to delays in full design approvals. Tom worked closely with the VDOT project management team, the DBPM, QAM, and Myers CM to develop and secure phased plan-approval packages to allow issuance of AFC plans, receive Notice to Commence Construction letters, and begin construction while final roadway/bridge plans were being approved. His efforts allowed the project to progress to construction 60 to 90 days prior to final design approvals.

MD 404 DB (\$104M) CAROLINE/QUEEN ANNE/TALBOT COUNTIES, MD

Firm: Allan Myers

Dates: 8/2016 to 7/2018

Role: Served as JV DM during procurement, design, and construction (essentially VDOT RCE function) and fully integrated into the design and construction team. Responsible for MDOT SHA liaison during design and control over all engineering decisions and/or design modifications during construction. Answered to MDSHA on all construction compliance related to design and delivery of as-built construction documents that meet the AFC plans and contract.

Role: Responsible Charge Engineer

Project Description: Design and construction of \$104 million MD 404 into a four-lane divided highway from US 50 to east of Holly Road. The nine-mile roadway was constructed in three parallel segments by the construction JV. The scope includes clearing, earthwork, drainage, pavement reconstruction, SWM, landscaping, signing, ITS, intersection lighting, new bridge over Norwich Creek, and utility coordination.

Similarities: Similar to the I-64 Segment 1A Project, this project required highway widening within a congested corridor that serves seasonal traffic heading from the mainland to the eastern shore. Involved complex MOT to keep traffic moving during construction, and advanced coordinated outreach to the project stakeholders to ensure that the conflicts between construction and the traveling public were minimized.

Impact on the Project: This \$104M DB Project was the highest construction priority of Governor Hogan who mandated a completed project (design and construction) in 18 months. Tom and his team delivered the completed design and continued to work with MDOT SHA to resolve construction requested design changes focused on stakeholder requests, ESC modifications/changes, and drainage/SWM issues related shallow flat slopes on the Maryland eastern shore.

VDOT I-66 OUTSIDE THE BELTWAY P3 (\$1.2B) FAIRFAX COUNTY, VA

Firm: FAM Construction (Ferrovial/Myers DBJV) Role: Design-Build Integrator Dates: 11/2017 - 01/2021Role: Served as the DB Integrator acting as a liaison between the DB Team, the Engineer of Record (EOR) and the Department / General Engineering Consultant (GEC). Responsible for oversight of the design Approval for Construction (AFC) documents and control over engineering decisions and /or design modifications during construction. Answered to the Department on all construction compliance related design issues. Main function was to work with the EOR, DB Team, the Department, and the GEC to achieve acceptance of the AFC plans and documents to allow construction to commence.

Project Description: This project will transform 22.5 miles of I-66 into a multimodal corridor that moves more people, provides more reliably, and offers new travel options. The project is a public-private partnership among VDOT and I-66 Express Mobility Partners. Significant bridge structures include B616 Jermantown Road, a 407-ft-long, two-span steel bridge with Virginia abutments and wall piers with drainage/girder conflict; B620 Cedar Lane, a 291-ft-long, two-span steel bridge with semi-integral abutments and wall piers (staged) with drainage/girder conflict; and B621 Gallows Road, a 359-ft-long, two-span steel bridge with semi-integral abutments and wall piers (staged) with drainage/girder conflict. The project relieves congestion and threads through a dense residential/ commercial area requiring walls at all of the abutments to reduce right-of-way impacts.

Similarities: VDOT DB interstate widening project that will convert existing HOV lanes and add express toll lanes while maintaining existing general-purpose lanes through a congested urban corridor with complex MOT. MOT components requiring phased construction, significant bridge construction and widening, and numerous utilities.

Impact on the Project: Tom was brought into the I-66 project to resolve design issues that had arisen between the DB Team, the EOR, and the VDOT/GEC. These issues revolved around plan preparation and substantial comments identified by the Department that required resolution for the plans to be approved for construction. Working closely with the Department's CM and the GEC's PM, they spearheaded a working group process to review comments, offer resolution recommendations, and ensure that the final design adhered to the agreed upon approach to finalize the approved for construction plans.

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

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

Name & Title: Richard Allen, P.E., DBIA a.

b. Project Assignment: Quality Assurance Manager

c. Name of the Firm with which you are employed at the time of submitting SOQ.: Ouinn Consulting Services (OCS)

Employment History: With this Firm 8 Years With Other Firms 20 Years d.

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., Quality Assurance Manager (2013 – Present): Responsible for overseeing the Quality Assurance process, providing oversight of the QA staff and coordination of QA/QC testing requirements on Virginia Department of Transportation Design-Build projects.

Unemployed (2012-2013)

Dulles Transit Partners, LLC (JV Team- Bechtel & URS), Unity Structural Engineer (2007-2012): Served as a Unit Lead Structural Engineer and provided Quality Assurance Oversight during the construction phase on this \$1.6B Dulles Metrorail (Silver Line) Light Rail Design-Build PPTA Project in Northern Virginia.

Reinforced Earth Company, Regional Engineer (2000-2007): Oversaw the complete and final design of MSE wall drawings and calculations including internal, external, and occasionally global stability on projects throughout the United States.

Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: e. Old Dominion University | Norfolk, VA | 1995 | ME | Civil Engineering Pennsylvania State University | State College, PA | 1992 | BS | Civil Engineering

- f. Active Registration: Year First Registered/ Discipline/VA Registration #: First Year Registered | Professional Engineer | Virginia | Reg #
 - 2001 | Professional Engineer |Virginia | 0402036809
 - 2014 | Professional Engineer | Washington DC | PE907497
 - 2014 | Professional Engineer | Maryland | PE44586
 - 2001 | Professional Engineer | Pennsylvania | PE055535E
- Document the extent and depth of your experience and qualifications relevant to the Project. g.
 - 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.
 - Provide beginning and end dates for each project; projects older than fifteen (15) years will not be 3. 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-66 OUTSIDE THE BELTWAY DESIGN BUILD- PPTA PROJECT (\$3.7B), NORTHERN VA

Firm: Quinn Consulting Services **Role:** Ouality Assurance Manager Dates: 10/2017- Present Role: As QAM, Richard's responsibilities included implementing and maintaining the Quality Management System (QMS); providing leadership to a team of Quality Assurance (QA) inspectors; monitoring and verifying the Quality Control (QC) Process; scheduling, facilitating, and preparing meeting minutes for Preparatory Inspection Meetings; providing document management support; initiating the non-conformance process; conducting internal/external design and construction auditing; overall internal auditing responsibilities to verify that the QA/OC material sampling and testing process meets or exceeds the contract minimum requirements, ensuring proper Materials Notebook documentation; and materials sampling and testing audits.

Project Description: This Design-Build project modified nearly 23 miles of I-66 to provide two (2) express lanes in each direction alongside three regular travel lanes from I-495 to University Boulevard near Route 29 in Gainesville, with dedicated express lanes access points, and space in the median reserved for future transit. It included the installation of Intelligent Transportation System (ITS) equipment including fiber optic cable, cameras, variable message signs, lane control signals, reversible gates, etc. In addition, the project consists of 80+ bridges, 4,000 park and ride spaces, new and expanded commuter bus service throughout the corridor, safety and operational improvements at key interchanges, auxiliary lanes between interchanges, and bicycle and pedestrian paths and connections.

Similarities: High-volume, high-complexity transportation construction project. Coordination with numerous subcontractors, designers, and stakeholders. Scope included: roadway, survey, structure and bridge, geotechnical, hydraulics, traffic control devices, transportation management plan, right-of-way, utilities, public involvement/relations, quality assurance and quality

control, Intelligent Transportation Systems, signage and lighting, construction engineering and inspection, overall project management, environmental work and water quality, Permanent noise mitigation (soundwalls), and Utility work.

Impact on the Project: Mr. Allen was able to use his extensive experience on all facets of construction projects to successfully manage a staff of over 20 QA inspectors for the duration of this project. As QAM, Mr. Allen and his team performed all required QA testing and inspections to ensure a high quality and low maintenance project and also oversee the QC program run by the contractor. Having a QAM with experience on such large and complex projects provided owners with confidence that the project would be completed on-time and on-budget with minimal need for oversight by State employees.

VDOT ROUTE 7 OVER DULLES TOLL ROAD DESIGN BUILD (\$45M), CITY, ST

Firm: Quinn Consulting Services Role: Quality Assurance Manager

Dates: 06/2015-05/2018

Role: As QAM, Richard was responsible for overseeing the project Quality Assurance process, providing oversight of the project QA staffing and coordination of QA/QC testing requirements. Additional responsibilities included verification that all work performed on the project is inspected and tested in accordance with the VDOT minimum requirements for QA and QC on design-build and Public-Private Transportation Act (PPTA) projects and the project specific QA/QC plan.

Project Description: This \$45M design-build project for VDOT consisted of the following activities: new construction of Route 7 west of Tyco Road to tie into previous Route 7 improvements conducted under the Metrorail (Silver Line) project including widening from four lanes to six lanes; complete deck replacements of two bridges over the DTR including abutments and substructure repairs; addition of a shared use path in each direction of Route 7; drainage and storm water management improvements; and design and construction of several noise barrier and MSE abutment walls.

Similarities: High-volume, high-complexity Bridge and Road construction. Provide sustainable solutions. Scope Included roadway, structure and bridge, environmental, traffic control devices, transportation management plan, right-o f-way, utilities, public involvement/relations, quality assurance and quality control, signage and lighting, construction engineering and inspection, overall project management.

Impact on the Project: Mr. Allen's work as QAM on this project led directly to a successful project delivery. Mr. Allen chaired preparatory inspection meetings for all distinct elements of work to ensure that all construction and inspection staff were cognizant of their specific roles in the completion of the work. Mr. Allen also managed the non-conformance process to ensure that non-conforming work was brought to the attention of all parties quickly, proposed solutions were accepted by all parties, solutions were implemented as described and that the root cause of non-conforming work was understood in an effort to prevent repeated issues. Mr. Allen also reviewed and organized all project quality documentation to ensure that the documents turned over to the owner at the end of the project provided an accurate description of the work performed.

I-95 EXPRESS LANES DESIGN-BUILD PPTA PROJECT (\$925M), NORTHERN VA

Firm: Quinn Consulting Services Role: Quality Assurance Manager Dates: 10/2013 - 10/2015

Role: As QAM, Richard's responsibilities included implementing and maintaining the Quality Management System (QMS) throughout the project; providing leadership to a team of QA inspectors responsible for monitoring and verifying the QC process; scheduling, facilitating, and preparing meeting minutes for preparatory inspection meetings; and initiating the non-conformance process for those items reported by the QA inspection and testing team. He conducted internal and external design and construction auditing; overall internal auditing responsibilities to verify that the QA/QC material sampling and testing process meets or exceeds the contract minimum requirements, and the Materials Notebook documentation is in conformance with the established process; and provided materials sampling and testing audits to ensure practices and procedures are consistent throughout the project. Richard conducted periodic auditing of erosion and sediment control measures and project documentation to verify adherence with the project requirements and recommended procedural improvements as deemed necessary. He provided continuing improvement to the existing QA/QC process.

Project Description: The VDOT P3 I-95 Express Lane project was divided into four segments. Segment 1 (8.3 miles) – Garrisonville Road to Dumfries Road, two lane reversible section on new location (seven new bridges, inclusive of two flyovers and northbound slip ramp). Segment 2 (7 miles) – Dumfries Road to Prince William Pkwy., maintained geometry of existing roadway. Segment 3 (11.9 miles) – Prince William Parkway to I-495, added third lane. Segment 4 (2.2-miles) – I-495 to north of Edsall Road, added 3rd Lane.

Similarities: High-volume, high-complexity transportation construction project. Provide sustainable solutions. Coordination with numerous subcontractors, designers, and partners and stakeholders. Scope included: roadway, survey, structure and bridge, environmental, traffic control devices, transportation management plan, right-of-way, utilities, public involvement/relations, quality assurance and quality control, Intelligent Transportation Systems, noise mitigation, environmental work and water quality, signage and lighting, construction engineering and inspection, overall project management.

Impact on the Project: Mr. Allen was an integral part of not only the Quality Assurance team but the Design-Build team as a whole on this project. He maintained an open line of communication with all project stakeholders throughout the project so that parties were able to work together to ensure quality, manage risk and meet project deadlines. Mr. Allen monitored all parts of the QA/QC work to ensure compliance with the approved QA/QC plan and made changes as necessary throughout the job to provide the utmost confidence that all work was completed in accordance with the project documents.

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

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

I-66 Outside the Beltway / Complete [December 2022] | Commitment to I-64 1A: 100%

Richard's commitment to I-66 will end in 2022, and he will be available to dedicate 100% of his efforts to the Project.

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: John Maddox, P.E. - Partner

b. Project Assignment: Design Manager

c. Name of the Firm with which you are employed at the time of submitting SOQ.: Whitman, Requardt & Associates, LLP (WRA)

d. Employment History: With this Firm <u>26</u> Years With Other Firms <u>10</u> Years

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

Partner/Senior VP/Design Manager/Project Engineer (1995 -Present): John has served as a Project Manager for major VDOT design projects continuously since 1997 and as the Design Manager on multiple VDOT Design-Build projects. He routinely manages the design of major interstate/freeway widening and reconstruction projects ranging in construction value from \$30 million to \$200 million and specializes in the design of complex projects requiring a multi-discipline design team. As Design Manager, John is responsible for the complete design effort including ensuring conformance with contract documents, constructability, risk evaluation and quality assurance/quality control throughout the project team.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Montgomery, West Virginia | B.S. | 1985 | Civil Engineering
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1989 | Professional Engineer | VA Registration #0402026613
- 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 DB I-95 SOUTHERN EXTENSION OF THE EXPRESS LANES (\$36.9M) STAFFORD, VA

Firm: WRA Role: Design Manager

Dates: June 2016 – Dec 2017

Role: As Design Manager, John was responsible for WRA's complete design efforts for the project included the design of a reversible single lane extension within the median of I-95 with a major extension of the ITS systems for the operations of the Express Lanes. John coordinated the Toll/ITS Task Force to facilitate the design and construction of the proposed ITS systems including advance pricing signage, gate control systems, back up generation sites, vehicle detection and CCTV cameras connected into Transurban's Traffic Operations Center. VDOT requested a major redesign of the entire project after approval of the "Approved for Construction" plans based on coordination with the proposed Transurban/VDOT P3 agreement for the extension of the Express Lanes to Fredericksburg, VA. The redesign provided grading and drainage for widened the Express Lane to two reversible lanes. John was responsible for the QA/QC program for the design of the project.

Project Highlights: The 2.2-mile extension of the Express Lanes on I-95 at Garrisonville included additional access points to the I-95 general purpose lanes at the southern terminus of the project. The project storm drainage design included enclosing the entire median drainage system requiring multiple deep drainage structures and a complex evaluation of SWM requirements. WRA proposed an innovative green wall to steepen embankment slopes to avoid the relocation of an existing stream. WRA completed the final noise analysis report and designed a 4,000' long sound barrier at the Garrisonville interchange. The design efforts completed by WRA included roadway, hydraulic, SWM, retaining walls, sound barriers, utility relocation and coordination, traffic engineering, lighting, public involvement, quality assurance.

Similarities: VDOT Design-Build, interstate express lanes, ITS/tolling systems, sound barrier, poor soils & MOT

Impact on the Project: John's knowledge of VDOT SWM requirements resulted in the elimination of several proposed facility and eliminated all right of way impacts of the project allowing for the acceleration of the project and reduced future maintenance cost. The elimination of the stream impacts significantly reduced VDOT's cost for stream mitigation. The Tolling/ITS Task Force allowed for the seamless integration of the ITS systems into Transurban's Traffic Operation Center.

VDOT I-81 BRIDGE REPLACEMENT OVER THE NEW RIVER AND EXIT 105 MODIFICATIONS (\$116M) MONTGOMERY AND PULASKI COUNTIES, VA

Firm: WRA Role: Design Manager

Dates: Feb 2011 – Dec 2014

Role: Design Manager responsible for the complete design of the project through PAC plans. John led the alternative development efforts for the replacement of the I-81 bridges and proposed interchange modifications at Exit 105, the selected alternative eliminated a major portion of the interchange improvements by replacing the Rte. 232 bridge in its existing location with phased construction of the bridge. WRA's innovative design included soil nail/MSE retaining walls at the abutments and the use of micro piles to accelerate the bridge construction. The I-81 bridges are shifted into the existing median to maintain two travel lanes in each direction during construction and the final bridge carries three lanes with full shoulders.

Project Highlights: The project included 1.72 miles of improvements to the existing four-lane interstate. The two new bridges on I-81 included three 12' lanes and two 12' shoulders approximately 80' above the river. The two I-81 bridge structures are each 1,680' and are continuous haunched structural steel that consists of 7 spans up to 270' in length. The bridge design featured continuous (jointless) deck by utilizing the VA style abutments and are some of the longest fully continuous structural steel bridges in VA. The bridges are located in a complex geologic karst setting resulting in the utilization of drilled shaft foundations within the river bottom. The maintenance of traffic required a detailed evaluation of construction access, complex construction phasing including temporary drainage. In addition, the existing bridge on Rte. 232 over I-81 was replaced with a new 2-span haunched structural steel bridge structure.

Similarities: Major interstate bridges, interstate widening, MOT, geotechnically challenging project.

Impact on the Project: John's experience on designing widening projects on I-81 with high truck volumes with steep grades and high operating speed resulted in designing the median crossovers with a higher design speed of 70 mph to improve safety during construction and provided for phased construction of the widening into the median.

ATKINSON BOULEVARD OVER I-64 AND CSX (\$53M) YORK COUNTY, VA

Firm: WRA Role: Design Manager

Dates: Sept 2017 – Dec 2020

Role: Design Manager responsible for complete engineering services for a new four-lane divided east-west arterial between Warwick Boulevard and Jefferson Avenue. Led coordination efforts with the City, VDOT, CSX and the permitting agencies. Managed the design teams for a 1,750' long bridge and approach embankments in a complex geologic setting with deep highly compressible soils. The bridge approach embankment was design to handle a settlement of approximately 3' utilizing a complex construction phasing of the embankment located over an existing stream with a proposed triple box culvert. John led the QA/QC for the design efforts for the project.

Project Highlights: The 1.2-mile project included a major bridge crossing over CSX railroad, I-64 and wetlands for a length of 1,750 feet. The new bridge structures consist of 11 units with 85-inch bulb tee concrete girders. The bridge is one of the longest continuous concrete (jointless) bridges in VA to reduce long-term maintenance. Access to the bridge was limited by the existing wetlands, requiring the embankments to be elevated utilizing two phase MSE retaining walls designed to handle the proposed settlement. The project design required a full hydraulic analysis of a new triple cell box. The environmental permits for the project required extensive coordination with the COE. The project included the design of a sound barrier with a length of 1,925.

Similarities: Major bridge in Hampton Roads, in soft soils with MSE embankments, MOT on I-64, sound barrier, environmental permitting.

Impact on the Project: John's understanding of VDOT/FHWA environmental documents and COE permitting resulted in a corridor analysis proving the selected project location was the least environmental impactive alternative. The coordination with the COE was extensive and included the evaluation of temporary impacts for trestles and construction access. The design coordination of bridge and approach embankments through the wetlands required innovative approaches to minimize environmental impacts.

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

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Jeffrey Snow, Senior Project Manager
- b. Project Assignment: Construction Manager (CM)
- c. Name of the Firm with which you are employed at the time of submitting SOQ.: Allan Myers (Myers)
- d. Years' experience: With this Firm <u>19</u> Years With Other Firms <u>2</u> Years

Please list chronologically (most recent experience 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 experience, please list the experience for those years you have worked. Project specific experience shall be included in Section (g) below):

Allan Myers, Sr. Project Manager (2013-Present): Manages all aspects of his projects including planning and scheduling work activities; coordination with the owner and other stakeholders, design consultants, private utility owners; and public outreach for all phases of construction. Jeff oversees construction activities to ensure project delivery that meets or exceeds all expectations of quality control (QC) ensuring the materials used and work performed meet contract requirements and approved-for-construction plans and specifications. He is on site for the duration of the construction operations, guaranteeing that schedule and budget meets or exceeds the project requirements. Jeff oversees deputy project managers, superintendents, and project engineers for large interstate widening and bridge rehabilitation projects. He has been responsible for the onsite construction management of three major interstate widening projects and more than 10 bridge reconstruction/rehabilitation projects.

Allan Myers, Project Manager (2005-2013): Managed all aspects of his projects; responsibilities included planning and scheduling work activities; engineering submittals; pay estimates; coordination with owner, subcontractors, suppliers and other stakeholders; customer satisfaction; and safety for all phases of construction.

Allan Myers, Project Engineer (2002-2005): Responsible for submittals and approvals of shop drawings, work plans for crews, safety planning, QA/QC for structural work, and owner liaison. Jeff was responsible for the scheduling of structural crews and related subcontractors and development of weekly schedules to support expedited project delivery per the CPM schedule.

- Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University, Blacksburg, VA/BS/2000/Civil Engineering Virginia Polytechnic Institute and State University, Blacksburg, VA/MS/2002/Civil Engineering
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2014/Virginia DEQ RLD Certification/#41837 2012/VIDOT ESCC/#2 00220 Certification will be an an advantage of the second secon

2013/VDOT ESCC/#2-00220 - Certification will be renewed prior to the commencement of construction

- 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.)

MDTA I-95 EXPRESS TOLL LANES, I-695 TO CAMPBELL BLVD (\$53M) WHITEMARSH, MD

Firm: Allan MyersRole: Construction ManagerDates: 07/2007 – 12/2010Role: As construction manager, Jeff was responsible for project team leadership, managing project schedule within budget, coordination with adjacent contracts working within the same corridor, and construction quality control. He managed a variety of owner-requested scope changes and developed a strong relationship with the owner's representatives.

Project Description: The project reconstructed and widened 1.8 miles of I-95 and included contingent repairs to the existing MD 43 bridges over I-95. The eight-lane divided highway was reconfigured to eight general purpose lanes and four express toll lanes. Four lanes of traffic were safely maintained in each direction throughout construction. The scope of work included phased replacement of a deteriorating large diameter structural plate pipe arch culvert under the entire width of I-95 with a pre-cast concrete arch culvert; new storm water management facilities; wetland mitigation facilities; retaining wall structures; 56,000 SF of noise walls on over 4,000 VLF of 30" and 36" diameter caissons; 7 miles of concrete barrier walls; landscaping; signing and pavement marking; ITS with toll gantry foundations and conduit; new non-public turn around ramps; and underground utilities. **Similarities:** Part of a reconstruction effort through the I-95 corridor, the project widened I-95 NB & SB while maintaining

all lanes of traffic. The team proactively coordinated traffic impacts for all major traffic shifts.

Impact on the Project: Under Jeff's leadership, Myers implemented value engineering proposals including re-design of arch culvert foundations from drilled shafts to H-piles in an existing stream. Jeff was directly involved in all details of construction and the operational planning while providing a high level of QC oversight. Jeff developed a positive working relationship with MDTA's onsite representative, Jeff and his team incorporated additional work requests for substructure repairs for the MD 43 bridge over I-95 and served in an "on-call" contractor role along the project corridor, completing additional slope repairs, clean up, and other miscellaneous work.

VDOT RTE 58 (LASKIN RD) RECONST./BRIDGE REPLACEMENT (\$81M) VIRGINIA BEACH, VA

Firm: Allan MyersRole: Construction ManagerDates: 09/2019 – 12/2022Role: As construction manager, Jeff is responsible for managing all aspects of construction, including maintaining the projectschedule, planning operations within budget, coordinating with adjacent projects, and overseeing construction quality control. Jeffand his team are working closely with VDOT and the City of Virginia Beach to incorporate owner-initiated design changes intothe project while reducing impacts to neighboring businesses and residents.

Project Description: Smart-scale road reconstruction of Rte 58 from First Colonial Rd to Birdneck Rd for approx. 2-miles. Reconstruction and reconfiguration of the roadway within the existing footprint, from two mainline lanes in each direction with adjacent service roads to three lanes in each direction. The project replaces the existing bridge over Linkhorn Bay, to meet the new design flood elevation, and includes raising the roadway as much as three feet. This imposes challenges with respect to maintenance of traffic during phased construction. The project also upgrades six signalized intersections along the corridor and includes extensive underground utility work consisting of over 60,000 LF of sanitary, storm, water, and HRSD force main piping. **Similarities:** VDOT Hampton Roads District urban project corridor; phased approach to reconstruction and widening of roadway and bridge including stormwater and environmental management, geotechnical (poor soils and use of lightweight aggregate) and MOT challenges (phased construction while maintaining traffic and access to businesses and homes along the corridor). Direct coordination with the same and similar project stakeholders including public and private utilities, the City of Virginia Beach, residents, and businesses.

Impact on the Project: Jeff and his team are successfully collaborating with VDOT and project stakeholders, including HRSD, Virginia Natural Gas, Dominion Energy, Verizon, Cox, and VBS to maintain access and service during construction. Jeff's attention to detail and collaborative approach have been an asset in planning the multiple traffic shifts and high degree of coordination required to successfully maintain access to area residents and businesses while making room for the improvements. The project abuts Linkhorn Bay, a sensitive environmental area that drains to the ocean. Under Jeff's leadership, the team has successfully coordinated with VDOT and VDEQ to ensure the proper E&S controls are implemented and maintained including the use of cofferdams and turbidity curtains for the phased bridge reconstruction work.

MDOT SHA US 40/MD 715 INTERCHANGE DB PROJECT (\$17.7M) HARFORD COUNTY, MD

Firm: Allan MyersRole: Construction ManagerDates: 10/2010 - 07/2012Role: As construction manager, Jeff was responsible for all aspects of construction including planning and scheduling work
activities; engineering submittals; paying estimates; coordination with owner, subcontractors, suppliers and other stakeholders;
customer satisfaction; and safety for all phases of construction.

Project Description: Located adjacent to Aberdeen Proving Grounds (APG), this project accommodated additional personnel being relocated to APG as part of the U.S. Department of Defense's (DOD) BRAC initiative and improve access for over 8,700 vehicles arriving at APG each morning. The scope of work included widening of MD 715 in both directions, upgrading the US 40/MD 715 interchange, widening MD 715 bridge over US 40. A 300' long, 20' high MSE retaining wall was designed to support and relocate the ramp. Stormwater management consisted of approx. 20,000 LF of new pipe, four SWM ponds and associated ESC design, and features including wet ponds, detention dry ponds, grass swales, and roadside ditches.

Similarities: Like the I-64 Segment 1A project, this DB project included roadway and bridge widening, retaining walls, and stormwater management in an urban area near the Aberdeen Proving Grounds military installation. Detailed MOT and detour plans were prepared to address closing Ramp 6 to allow for construction. The detour plan included the design of a temporary signal along U.S. 40 to accommodate movements lost by the closure of Ramp 6.

Impact on the Project: Jeff was responsible for the management and collaboration of the design team; providing construction input into design; and managing construction operations including schedule and resource management, safety and subcontractor management, and quality control. He worked closely coordinated construction with Harford County, the City of Aberdeen, and MDOT SHA to complete this DB project on schedule and within budget.

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

Jeff's current assignment for VDOT's Rte 58 Reconstruction/Bridge Replacement project will be completed in 12/2022.

APPENDIX 3.4.1 WORK HISTORY FORMS





ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name &	b. Name of the prime	c. Contact information of	d. Contract Completion	e. Contract Completion	f. Contract Value
Location	design consulting firm	the Client or Owner and	Date (Original)	Date (Actual or	Original Contract Value
	responsible for the overall	their Project Manager who		Estimated)	-
	project design.	can verify Firm's			
		responsibilities.			
Name: VDOT I-64	Name: Rinker Design	Name of Client: VDOT			
Segment II Capacity	Associates	Project Manager: Mike		04/2019 (Substantial)	
Improvements		Davis	04/2019 (Substantial)		
		Phone: 757-925-2680		11/2019 (Final)	\$138,747
Location: Newport News,		Email:	05/2019 (Final)	*Resolution of subcontractor	
York County, and James		mike.davis@VDOT.virginia.gov		issue delayed final acceptance	
City County, VA					

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.

RFQ Evaluation Criteria Met

- ✓ Opened the roadway to traffic ahead of the original contract fixed completion date
- ✓ Successfully coordinated with adjacent Segment I project
- Delivered the project in a developed urban corridor
- Used innovative design solutions and construction techniques
- \checkmark Limited impacts to the traveling public and minimized congestion during construction
- Developed and managed effective communication strategies with key stakeholders

FIRM & ROLE: Myers was the Lead Contractor for this Project.

RELEVANCE TO I-64 HREL SEGMENT 1A: This VDOT design-build project involved reconstruction/widening of I-64, adding an additional lane in each direction; rehabilitation/widening of the existing bridges along this stretch of roadway; and coordination with the adjacent Segment I project. Proposed key personnel from this project include Ed Hilferty (DBPM) and Tom Heil (EIC).

PROJECT OVERVIEW: This seven-mile highway-widening project demolished the existing two-lane roadway and shoulders in each direction and replaced them with three lanes and new, wider shoulders. The project included widening and rehabilitation of nine bridges over the seven-mile distance; two bridges at Burma Road, Penniman Road, Jefferson Avenue, and Yorktown Road as well as a single ramp bridge at Exit 243B.

SCHEDULE PERFORMANCE: The project was fully opened to three lanes of traffic

in each direction on April 10, ahead of the April 12 Substantial Completion milestone goal for the project. When issues were encountered with meeting the construction schedule, Myers supplemented subcontractor work forces with additional internal resources to expedite critical path bridge construction work. Widening work at each of the nine bridge locations occurred simultaneously to ensure the substantial completion milestone would be met. Eliminating 75% of the potential utility impacts created flexibility in the design and construction schedules to address other issues without impacting substantial completion and opening the new roadway to traffic.

"I've been amazed during the past few months as I've watched the widening of I-64 between Williamsburg and Newport News, Virginia. Typically, when there is road construction it's not something that drivers passing by notice. However, there is something different about Allan Myers Construction. ... It seems that construction is moving much faster than most road projects seen. Hats off to the management for operating a company that through observation appears to be at the top of their game.'

- Carey Parker, Local Roadway User, via Email

COORDINATION WITH ADJACENT PROJECTS: Construction of the Project occurred in conjunction with I-64 Segments I and III which bookended the project on the east and west. Segment I to the east was finishing when the project started and Segment III was starting as the project finished, requiring coordination with both. The Myers Team proactively coordinated traffic impacts including lane shifts, striping, and traffic control devices for major traffic shifts. Myers participated in regular coordination meetings with the adjacent project teams to coordinate traffic control, stakeholder outreach, and other aspects of the project.

URBAN PROJECT CORRIDOR: The I-64 project corridor had traffic volumes of roughly 52,000 vehicles per day. Each of the nine bridge rehabilitation and widenings were constructed in constrained work spaces. Bridge construction constraints were the most challenging at the 400 ft long Jefferson Avenue bridge due to the 130-degree skew, creating a bridge nearly parallel to the roadway on Jefferson Ave. The clearance between I-64 and construction activities for pile driving and girder erection was only 6 ft to live traffic. After widening was complete, the two structures were only 4 ft apart.

INNOVATIVE DESIGN SOLUTIONS & CONSTRUCTION TECHNIQUES: Traffic impacts were minimized by using an outside widening near Burma Road even though RFP Conceptual plans showed an inside widening. To increase clearances under the existing structures for an outside widening, the crown point was shifted toward the outside and the outer two girders were reset to match the new superelevation. This innovative solution allowed the widening to occur without encroaching on clearances beneath the existing structure. To eliminate future maintenance costs, the existing stub abutment at Jefferson Avenue was retrofitted to a Virginia Abutment. This allowed existing beams to remain in their same state of fixity while removing the old strip seal details. Eliminated the need for the open top, concrete storage basins shown in the RFP Conceptual plans by utilizing grassed swales and other channel storage facilities to manage quantitative storage needs. Elimination of the large concrete basins reduced cost and improved schedule for drainage construction items. Discovered that the Project qualified for SWM grandfathering from Part IIB to Part IIC and reduced the number of SWM facilities by 50% from 54 to 26, providing cost savings as well as reduced future maintenance.

LIMITING PUBLIC IMPACTS AND MINIMIZING CONGESTION: For this project, Myers committed a MOT Manager on staff to manage any shifts in traffic and manage the work zone. The MOT manager worked closely with the roadway design team to ensure a seamless link between design and construction, limiting shifts or change in traffic patterns. A plan was set in place to notify stakeholders, the traveling public, and those in the community in a timely manner when major shifts were made.

COMMUNICATION STRATEGIES WITH BUSINESS OWNERS AND KEY STAKEHOLDERS: The Myers Team worked closely with VDOT Hampton Roads Public Affairs to deliver routine project updates and traffic impact information to the community and project stakeholders. Email blasts and news releases were the primary means of communicating this critical information to the public and community. Myers provided progress photos and traffic information for use in these communications. Additionally, Myers participated in stakeholder meetings, community meetings such as a Pardon Our Dust, and meetings with first responders. Variable message signs also provided advance notification to motorists regarding traffic impacts and changes.

e (in thousands)	g. Dollar Value of Work				
Final or Estimated	Performed by the Firm				
Contract Value	identified as the Lead				
	Contractor for this				
	procurement.(in thousands)				
\$141,370 *Increases due to addition landscaping and bridge repairs	\$141,370				

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name &	b. Name of the prime	c. Contact information of	d. Contract Completion	e. Contract Completion	f. Contract Value	
Location	design consulting firm	the Client or Owner and	Date (Original)	Date (Actual or	Original Contract Value	
	responsible for the overall	their Project Manager who		Estimated)		
	project design.	can verify Firm's				
		responsibilities.				
Name: I-476 Widening	Name: Urban	Name of Client / Owner:				
and Reconstruction	Engineering	PA Turnpike Commission				
(Bethel Rd to Fretz Rd)		Project Manager:	11/2016	08/2017		
		Mike Shaak	*09/2017 revised contractual	*Differing site conditions	\$197,977	
Location: Montgomery		Phone: 717-831-7538	completion date	Dijjering sile conditions		
County, PA		Email:				
		mshaak@paturnpike.com				

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 work performed only by the Offeror's firm.

RFQ Evaluation Criteria Met

- Experience in successfully coordinating with adjacent projects
- Project in a developed urban corridor
- Used innovative design solutions and construction techniques
- \checkmark Limited impacts to the traveling public and minimized congestion during construction
- Developed and managed effective communication strategies with key stakeholders

FIRM & ROLE: Myers was the Lead Contractor for this Project.

RELEVANCE TO I-64 HREL SEGMENT 1A: Part of a corridor-wide improvement program, this urban highway reconstruction and widening project increased capacity, reduced commuter delays, and improved public safety.

PROJECT OVERVIEW: With traffic volumes of 67,000 ADT and an

expected increase to 100,000 vpd within 10 years, this project was part of a \$2 billion statewide initiative to upgrade the 70+ year-old Turnpike facility to meet current design standards, improve safety, and reduce congestion for drivers. The project involved full depth reconstruction and widening of approx. 5¹/₂ miles of limited-access interstate from MP 25.67 to MP 31.34. The existing four-lane roadway was widened to six 12foot travel lanes (three NB and three SB) with 12-foot shoulders and replacement of six mainline bridges and two overhead bridges. Construction was carried out in three major stages; (1) interchange work, (2) outsides of the roadway, and (3) insides of the roadway.

The project included four box culvert extensions, four arch culvert extensions, 20 retaining walls, four soil nail walls, five sign structures, and 17 sound barriers. Myers constructed 205,000 SF of MSE retaining walls which were concrete panels with metal straps, 400,000 SF of sound walls were a combination of structure and ground mount soil nail and shotcrete walls with rock sculpting. The limited project footprint met stormwater management requirements using 28 individual SWM features, including temporary and permanent basins, naturalized swales, and rain gardens. Myers constructed two limited access ramps that included completely new electronic tolling facilities and infrastructure. Myers also installed an overhead Dynamic Message Sign on a new gantry structure, as well as all-new infrastructure along the mainline and ITS conduit and junction boxes along the entire length of the project.

Myers performed multiple 4-5 hour Plan X Turnpike shutdowns, both single- and dual-direction, throughout the project to demolish and construct multiple bridges along the mainline and overhead. Myers also performed multiple 10-minute traffic stops along the Turnpike to reset bearings.

SCHEDULE PERFORMANCE: Myers met the modified contractual schedule completion. The project also included a milestone for removal of the temporary detour to reconstruct/widen the Bustard Rd bridge over I-476. The bridge was completed ahead of schedule and the roadway was opened to traffic two days earlier than the required date.

COORDINATION WITH ADJACENT PROJECTS: As part of the corridor-wide improvements, coordination was required with two active projects during construction. The adjacent project to the south (constructed by others) and the Harleysville Bridge over I-476 (constructed by Myers) required weekly coordination of traffic patterns and stoppages, as well as coordination of any plan changes at the project interfaces.

URBAN PROJECT CORRIDOR: The urban nature of the project corridor presented significant challenges with maintenance of traffic during construction. Myers maintained a full-time traffic crew during all hours of traffic impacts to maintain signage/delineators/traffic controls. Flaggers were assigned to all ingress/egress from the mainline roadway during active work hours. Myers completed all traffic shifts during night/weekend shifts with a workforce of 50+ people around the clock. Reconstruction of the Lansdale interchange at MP31 required five phases on construction to maintain access for the 30,000+ vehicles that entered/exited the toll road at this location.

INNOVATIVE DESIGN SOLUTIONS & CONSTRUCTION TECHNIQUES: Myers was responsible for design-build H-pile and lagging systems for 16 locations to support excavation at all bridges, MSE structures, and box culverts. To maintain construction progress, Myers' developed a revised MOT concept using an hourglass configuration to safely maintain traffic without delaying the project. The hourglass shifted two-lanes of traffic twice in each direction within a 6-mile area and was implemented without major issues.

The pavement design specified six lifts of asphalt and required a stepped detail with 6-inch reveal at each layer; however, the 6-inch reveal at each step could not be present due to asphalt sloughing during paving. Prior to placing the first lift of asphalt in subsequent phases, specialized milling machines provided the necessary vertical face and reveal for each layer of asphalt. Excessive swell on over 1 million CY of excavation required placement of fill at numerous infields within the project limits and an additional offsite disposal site. Subgrade preparation required extensive undercutting for unsuitable soils and rock encountered within 1 ft of the roadway subbase. One-foot rock undercuts were stabilized with 2A aggregate and accounted for approx. 30% of undercut required; one-foot undercuts for unsuitable subgrade soils were replaced with geotextile fabric and 2A aggregate (approx. 15% of required undercuts); and 2 ft undercuts were filled with b-rock (approx. 50% of required undercuts). After removal, the existing concrete pavement was crushed onsite to produce suitably sized materials for fill areas and the new roadway subbase. Excess excavated material was blended with imported material to make topsoil onsite.

LIMITING PUBLIC IMPACTS AND MINIMIZING CONGESTION: To limit impacts to mainline interstate traffic during construction, Myers crews utilized local access roads to enter construction work areas wherever feasible, reducing the required mainline access points by 25% (from 18 to 13). Any work that impacted traffic was completed at night, including traffic switches, milling, paving, and striping. To minimize the overall duration of construction impacts, Myers optimized paving operations and set aggressive production goals. Crews set a company record for asphalt placed in a single shift, placing 280 loads (6,344 tons) in 10 hours and 49 minutes—one load of asphalt placed every 2.3 minutes. Only exceptional coordination, cooperation, and commitment from production, construction, and transportation teams could produce such results.

COMMUNICATION STRATEGIES WITH BUSINESS OWNERS AND KEY STAKEHOLDERS: Myers construction team coordinated with the local municipalities for additional lane/road closures of the local roads below I-476 to expedite construction of bridge substructures and reconstruct the local roads.

RECOGNITION: NAPA Quality in Construction Award (2018); PAPA Pavement Quality Award (2019)

e (in thousands)	g. Dollar Value of Work
Final or Estimated	Performed by the Firm
Contract Value	identified as the Lead
	Contractor for this
	procurement.(in thousands)
\$207,344 *Owner approved change orders for differing site conditions, waste area management, and unit price quantities	\$207,344

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name &	b. Name of the prime	c. Contact information of the Client or Owner and	d. Contract Completion	e. Contract Completion	f. Contract Value	g. Dollar Value of Work	
Location	responsible for the overall	their Project Manager who	Date (Original)	Estimated)	Original Contract Value	Contract Value	identified as the Lead
	project design.	can verify Firm's					Contractor for this
		responsibilities.					procurement.(in thousands)
Name: MDTA I-95	Name: URS and RK&K	Name of Client: MDTA					
Express Toll Lanes from	Joint Venture	(MD Transportation Authority)					
Rossville to Campbell		Phone: 410-537-1000				\$53,748	
Blvds		Project Manager:	10/2010	10/2010	\$52,477	* Additional work requested by	\$53,748
		Gradon Tobery				owner	
Location: Baltimore, MD		Phone: 410-931-0808					
,		Email: gtobery@I-95GEC.com					

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.

RFQ Evaluation Criteria

- Experience in successfully coordinating with adjacent projects
- Use of innovative design solutions and construction techniques \checkmark
- Limited impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction
- Developed and managed effective communication strategies with business owners and other key stakeholders

FIRM AND ROLE: Myers served as the lead contractor for this Project.

RELEVANCE TO I-64 HREL SEGMENT 1A: This project included widening and reconstruction, bridge and shoulder rehabilitation, complex MOT, major culvert extensions, retaining and noise walls, geotechnical challenges, and stormwater management improvements for a high-volume, urban interstate Express Toll Lane with limited construction space. Proposed staff Ed Hilferty (PM) and Jeff Snow (CM) served in the same roles on this effort as they will for the I-64 HREL Segment 1A Project.

PROJECT OVERVIEW: The project was designed to ease congestion and improve traffic flow along the heavily traveled I-95 corridor. The project reconstructed I-95 for 1.80 miles to the north of the I-695 interchange between Rossville and Campbell Blvds, including contingent repairs to the existing Maryland 43 bridges over I-95. The existing eight-lane divided highway was reconstructed into twelve total lanes-eight general-purpose lanes and four express toll lanes. The scope of work included 300,000 CY of Excavation Cut/Fill, 400,000 SY of Graded Aggregate Base, 130,000 SY of Milling, 150,000 TN of Hot Mix Asphalt, 12,000 LF of Storm Drain, 54,000 SF of sound walls, two retaining walls, Precast Arch Culvert System and Stream Diversion, four new SWM ponds, and a Wetland Mitigation Pond.

SCHEDULE PERFORMANCE: Myers delivered the project on-schedule and within budget, successsfully navigating the inherent challenges of the high-volume, urban setting and an unprecedented blizzard that crippled the region. The project's exemplary safety record-with zero lost time injuries-further ensured our successful schedule performance.

COORDINATION WITH ADJACENT PROJECTS: This project interfaced with two other major projects to the north and south. MOT and lane shifts were safely coordinated between contractors to minimize impacts. To start our work on this project, the adjacent express toll lanes projects needed to be finished with their paving. Myers assisted the adjacent projects with final paving operations to allow

timely commencement of construction on this segment of the corridor improvements. This additional work is shown in the increased final project cost.





DEVELOPED URBAN CORRIDOR: Located just northeast of Baltimore's I-695 Beltway, the project corridor handles daily commuter traffic to and from downtown Baltimore. The toll facility provides seven lanes of free-flowing traffic, thus improving mobility throughout the whole region.

INNOVATIVE DESIGN SOLUTIONS AND CONSTRUCTION TECHNIOUES: Geotechnical conditions posed unique challenges, including undercutting and stream flooding during storms and periods of rain. A deteriorating large-diameter structural plate pipe arch culvert ran under the entire width of I-95 and required replacement. The pre-cast concrete arch culvert replacement was both an environmentally sensitive and critical path work element. The stream in this area was subject to flow fluctuations during storm events and had to be flumed directly through the work area. Myers proposed a change in foundation design due to the subsurface conditions on the project, and MDTA approved the use of H-piles instead of cassions. These expedited construction techniques provided a more stable construction process. Major erosion and sediment control measures were required due to the project's proximity to the Chesapeake Bay.

The project also included two retaining walls which were constructed in a top-down fashion and were 482' long and 256' long. H-piles were embedded in 36" diameter caissons and installed at 8'spacing. Timber lagging was utilized and a 10" thick reinforced concrete wall was cast-in-place to the front of the H-piles. Construction of the shorter wall required one row of tiebacks.

LIMITING PUBLIC IMPACTS AND MINIMIZING CONGESTION: Myers performed the bulk of the work during night time operations to minimize traffic delays and enhance safety to the traveling public—particularly during rush hour. Public safety was also increased by eliminating left exits, improving interchanges, and reducing conflict points. Construction maintained four lanes of traffic in each direction through

this congested corridor while widening to the outside of the existing NB and SB roadways. Once these new outside lanes were completed, traffic was moved to these lanes so Myers could reconstruct the middle of I-95.

COMMUNICATION STRATEGIES WITH BUSINESS OWNERS AND KEY STAKEHOLDERS: Given the environmental sensitivity of the project, Myers communicated regularly with MDTA's E&S consultant, Greenman-Pederson, who awarded our team an "A" rating on Environmental Management at the conclusion of the effort.

"Allan Myers is always willing to go the extra mile. Immediate response to all issues.' - Gradon Toberv

(Past Performance Questionnaire)



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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified as
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement. (in thousands)
				or Estimated)		Estimated)	
Name: VDOT I-64 Bottoms	Name: Corman-Branch, a Joint	Name of Client: VDOT					
Bridge DB, Widening Exist	Venture	Phone: 804-674-2452				\$46,586	
200 to 205		Project Manager: Scott Fisher	07/2017	08/2019	\$43,385	* Owner-initiated	\$3,631
Location: Henrico and New		Phone: 804-674-2452				sound barriers	
Kent Counties, VA		Email: scott.fisher@vdot.virginia.gov				sound burners	

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/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.

RFO Evaluation Criteria

- Experience in successfully coordinating with adjacent projects
- Use of innovative design solutions and construction techniques \checkmark
- \checkmark Limited impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction



 \checkmark Developed and managed effective communication strategies with business owners and other key stakeholders

FIRM AND ROLE: Prime design firm responsible for the final engineering design documents and approvals. Design services were provided from WRA's Richmond, VA office.

RELEVANCE TO I-64 HREL SEGMENT 1A: This design-build project widened I-64 for 4.5 miles and included bridge widening with deep foundations. Proposed design staff involved in this project included John Maddox (DM), Jeremy Schlussel, Gail Kuttesch, Kyle Kennedy, Taylor Sprenkle, Jeff Cheng, David Gertz, Nick Nies, Joe Felton, Paul Martin, and Mitch Johnson.

PROJECT OVERVIEW: Median widening to add one 12 ft lane and one 10 ft shoulder (4 ft paved) in each direction between Route I-295 (Exit 200) to Route 249 (Exit 205). Extension of accel/decel lanes at both the eastbound and westbound DMV weigh stations and connection of the pedestrian tunnels in between. Design services included highway, hydrologic/hydraulics, SWM, ESC, geotechnical engineering, pavement, noise analysis and sound barrier, maintenance of traffic, signing, lighting, pavement markings, bridge, retaining walls, utility relocation/coordination, public involvement, permitting, and stakeholder coordination.

Bridge Engineering: The project widened two existing bridges (B-624 and B-625) over the Chickahominy River. The existing bridges each consisted of four simple span AASHTO Girders with three intermediate piers for a total length of 280 ft. The widened portion of the bridges modified the existing roadway crown point, which required coordination with the roadway design and special detailing on the bridge structure to accommodate this modification. In addition to the widening, the existing concrete decks were removed and replaced along with rehabilitation of all of the elements which were to remain in place. The widened piers and abutments are supported on deep pile foundations designed for scour protection. The final configuration detailed the widened bridge such that it appears that it was built with the original 1960s bridge structure. ITS/Lighting/Signing Integration: The project included installation of two ITS conduits and 96-count fiber SMFO communications cable on the eastbound shoulder between the west project limit and the existing CCTV at MM 203.4, installation of three additional traffic monitoring cameras, lighting along the extended weigh station accel/decel lanes, seven overhead sign structures, and signing/pavement markings.

Hydraulic Analysis and Stormwater Management: An H&HA was completed for the bridges over the Chickahominy River. Two SWM detention basins were constructed within the median of I-64. In both locations, these were graded beyond the clear zone to eliminate the need for guardrail and additional impervious pavement. Repairs to existing storm drainage pipes and box culverts were completed with the project. Geotechnical Analysis and Design: Geotechnical services included pavement, slope recommendation, foundation design services for the bridge, retaining walls and sound barrier. Investigations were performed to ensure the existing shoulders could accommodate temporary traffic shifts. The impacts of additional embankment at the bridge approaches were evaluated for the effects of down drag on the existing piles.

Maintenance of Traffic: With the high traffic volumes on I-64 and the I-64/I-295 interchange, requirements for the work zone were restrictive with significant penalties for impacts to I-64 traffic operations. Prior to widening the median, portions of the outside shoulders were strengthened to accommodate traffic. After widening was complete, traffic was shifted onto the new pavement while the outside ramp lengthening, sound barrier construction, and clearzone clearing was completed. In coordination with VDOT's Regional Traffic Engineer, the speed limit was reduced during construction. Lane closures were limited to nights and coordinated with regional traffic operations and emergency responders. Sound Barriers: WRA performed noise data collection and final analyses to confirm the preliminary limits in the VDOT conceptual plans. As a result, the sound barrier wall was extended to a total length of 6,700 ft, including a portion of retaining wall/sound barrier system.

SCHEDULE PERFORMANCE: Close integration of the design and construction staff ensured that early work packages accelerated the start of construction including shoulder strengthening, SWM/ESC, and MOT signage/barrier service. The design eliminated all right of way impacts allowing for the timely delivery of final plans. These early design efforts were critical to the project finishing on time and received an incentive bonus, despite multiple flooding events and a significant extension to the sound barriers.

COORDINATION WITH ADJACENT PROJECTS: The project team coordinated with DMV on installation of equipment upgrades for the scales and facilities.

DEVELOPED URBAN CORRIDOR: I-64 traffic volumes are similar to volumes and commuter traffic are similar to traffic operations in an urban area. The design avoided all right-of-way impacts by using a retaining wall/sound barrier system and designing SWM within the median.

INNOVATIVE DESIGN SOLUTIONS AND CONSTRUCTION TECHNIQUES: The proposed design eliminated the extension of several major box culverts by using an MSE wall to retain the embankment fill over the existing box culverts. This approach also reduced environmental impacts by eliminating the stream impacts and the complex construction methods and dewatering for the construction of the box culverts.

LIMITING PUBLIC IMPACTS AND MINIMIZING CONGESTION: Early evaluation of the existing paved shoulder to temporarily carry traffic resulted in the existing shoulders requiring only a minor milling and overlay to eliminate the existing rumble strips. These strategies significantly reduced the number of required lane reductions, reduced traffic shifts to accommodate construction, and minimized congestion associated with the construction activities. All temporary lane closures were performed at night when traffic volumes were at their lowest. The Team worked closely with the DMV regarding impacts to their entrances and exits, which led to the temporary closure of the weigh stations for internal equipment upgrades while significantly improving traffic operations and reducing congestion during construction.

COMMUNICATION STRATEGIES WITH BUSINESS OWNERS AND KEY STAKEHOLDERS: WRA supported VDOT and the team to develop a stakeholder communication plan which included targeted radio, television, and social media alerts as well as regular stakeholder meetings. Stakeholders identified early in the project included first responders, the DMV, motor carrier services, weigh station staff, Henrico and New Kent Counties, utility companies, local residents, business, and county schools. The team maintained and updated email newsletter to keep stakeholders well informed about the project status. WRA also conducted and managed the required public meetings for the proposed sound barriers, led the design coordination with DMV to extend the decel and accel lanes to the weigh stations and the connection of the pedestrian tunnel under I-64. The coordination resulted in DMV agreeing to temporally close the weigh station during construction significantly improving traffic operations and safety during construction. Communication with property owners adjacent to the DMV weigh stations and the sound barrier was ongoing throughout construction.

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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified as
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: I-95/I-495/I-295 Interchange Reconstruction for Woodrow Wilson Bridge (Contract MA-4) Location: Prince George's	Name: G.A. & F. C. Wagman, Inc.	Name of Client: MDOT SHA Phone: 410.545.8838 Project Manager: Eric Marabello Phone: 410.545.8770 Email: emarabello@mdot.maryland.goy	05/2005	11/2009	\$81,587	\$93,187 * Addition of owner requested retaining walls and tie-ins with National Harbor Development	\$3,980

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/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.

RFO Evaluation Criteria

- Experience in successfully coordinating with adjacent projects
- Use of innovative design solutions and construction techniques
- \checkmark Limited impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction
- \checkmark Developed and managed effective communication strategies with business owners and other key stakeholders

FIRM AND ROLE: Whitman, Requardt & Associates, LLP (WRA), in a Joint Venture with JMT, performed preliminary and final design engineering services for a new \$205 million interstate interchange in conjunction with the \$1 billion Woodrow Wilson Bridge (WWB) replacement project and the \$1+ billion development of National Harbor (NHD). The project design was led by WRA's Baltimore, MD office with bridge design support from the Richmond, VA office.



RELEVANCE TO I-64 HREL SEGMENT 1A: WRA successfully delivered the I-95/I-495/I-295 complex interchange project on an accelerated schedule. within a developed urban corridor, with complex bridge structures and challenging geotechnical conditions. Proposed staff Jeremy Schlusse, Jeff Cheng, and *Monica Paylor* were involved with the project design.

PROJECT OVERVIEW: The interchange was phased into four construction contracts with this MA-4 contract the final contract to complete the interchange. Widening and reconstruction of I-95/I-495 (1.3 miles) inner loop to complete the construction of the six highway lanes in each direction in an express/local configuration from WWB to the MD 210 Interchange and widening/reconstruct of I-295. This contract completed the I-95/I-495/I-295 Inner Loop roadways to allow the opening of the WWB second bridge. WRA's design services included highway, drainage, SWM, ESC, MOT, signing, lighting, traffic signalization, landscape architecture, bridge foundations, retaining walls, reinforced side slopes, bridges, and retaining walls.

Structure Design: Design of three I-95 mainline bridges, two pedestrian trail bridges, and thirteen retaining walls. MSE retaining walls were utilized for the first time for MDOT, many of which were two-stage wire-faced MSE walls with facing placed after substantial settlement had occurred, eliminating the effect of settlement on the wall aesthetics.

Hydraulic Analysis, Stormwater Management (SWM) and Erosion and Sediment Control (ESC): A complete new open storm drain system was designed to convey roadway drainage to SWM facilities outfalling to the Potomac River. A multi-phased ESC plan was required to implement ESC to prevent sediment from being discharged into the environmentally sensitive Smoot's Cove of the Potomac River.

Geotechnical Design: WRA performed all geotechnical services during design and construction of the project, including subsurface investigation, foundation design, retaining wall design, subgrade analyses, shoreline protection, ground improvement, and construction support. To meet the project schedule and design criteria established by MDOT SHA and FHWA, design phase geotechnical services in this area of the project included

recommendations for staged construction, wick drains, high strength geotextile, surcharge fill, geotechnical instrumentation, temporary fabric wrapped walls, two-stage MSE walls, and lightweight fill consisting of lightweight foam concrete fill.

Roadway Reconstruction: Existing I-95/I-495 inner loop four lane roadway was completely reconstructed to a six -lane two-way roadway consisting of a four-lane local roadway and two-lane express roadway. A portion of the I-95 inner loop was reconstructed and converted to I-95/I-495 Outer Loop two-lane Express roadway. This project also completed ramps to the National Harbor Development (NHD) complex.

Maintenance of Traffic: The roadway alignments were designed to maintain six lanes of through traffic at all times and maintain connections to I-295 and MD 210. Extensive multi-phase maintenance of traffic plans were required to maintain traffic along the I-95/I-495 and I-295 corridor. This contract maintained traffic to the existing WWB bridge as the new WWB outer loop bridge was being completed. The design required both temporary and permanent devices, including signing, signalization, marking, lighting, and ITS devices (CCTV, CMS, RWIS, side-fire detectors and TAR signing). The project required the design of a power distribution system that provides electrical service to all traffic control devices at the interchange. Traffic Control Devices. Traffic engineering services included the design of completely new interchange signing, roadway lighting, ITS, pavement marking. Coordination with VDOT was required to maintain ITS devices within the interchange but under VDOT control. SCHEDULE PERFORMANCE: WRA maintained the project design and construction schedules by partnering with the adjacent projects and private developments throughout design and construction. WRA developed four different bid packages for the interchange project construction to achieve the schedules of the project and adjoining projects, including an early works package to address the poor soil conditions at the northern end of the WWB. WRA modified the design to accommodate changes in the NHD ramps while maintaining critical construction schedules for the I-495/95 phasing with the WWB. All design schedules were met under accelerated conditions.

COORDINATION WITH ADJACENT PROJECTS: The coordination of five major design projects along I-495/I-95 corridor in both VA and MD was one of the most complex projects in the region and included extensive coordination throughout the corridor on MOT, signing and ITS facility for each phase of construction. The I-495/I-95/I-295 interchange design and construction required extensive coordination with the WWB, MD 210 Interchange and the NHD all under design and construction simultaneously. DEVELOPED URBAN CORRIDOR: I-495/I-95/I-295 interchange is in a highly urbanized area with traffic volumes over 200,000 vehicles per day with closely spaced ramps and complex multi-level interchanges requiring extensive retaining walls and sound barriers to minimize property impacts and noise impacts to adjacent development. The contract included a hiker/biker trail originating from MD 210, running along the Potomac River and overpassing I-95/I-495 to WWB. Full access to the future NHD was provided with ramp connections from I-95/I-495 and I-295. INNOVATIVE DESIGN SOLUTIONS AND CONSTRUCTION TECHNIQUES: WRA proposed utilizing dynamic pile monitoring and CAPWAP analyses to shorten pile lengths, the first time ever for MDOT, resulting in significant savings on pile costs. Due to the predicted settlement of up to 3' in the approaches to the WWB, WRA proposed two-stage MSE retaining wall to allow for the final aesthetics facing of the retaining wall to be placed after substantial settlement had occurred. LIMITING PUBLIC IMPACTS AND MINIMIZING CONGESTION: Due to the high volume of corridor traffic, the main goal of the construction phasing was to minimize impacts to existing traffic operations and motorist safety. A significant portion of the design efforts focused on detailing plans to guide traffic through the construction area while providing construction access. Each element of design and construction was coordinated with adjacent projects. COMMUNICATION STRATEGIES WITH BUSINESS OWNERS AND KEY STAKEHOLDERS: WRA had a lead role coordinating the design with stakeholders including VDOT, DCDOT, FHWA, state and federal permitting agencies, and the public. Provided support for engaging the public and key stakeholders during design and construction. The highly publicized project included public notices of all major traffic shifts requiring extensive coordination with VDOT, DCDOT and local agencies.

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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value (in thousands)		g. Design Fee for the Work
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	Performed by the Firm identified as
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	the Lead Designer for this
				Date (Actual	(Original)	(Actual or	procurement.(in thousands)
				or Estimated)		Estimated)	
Name: 95 Express Lanes -	Name: Contractor: TBD	Name of Client: Transurban, USA					
Opitz Boulevard Reversible	Lead Designer: WRA	Phone: 571-355-0086	06/2022	11/2024	\$50,000	\$50,000	
Ramp		Project Manager: Jordan Pitt	$\frac{00/2022}{(\text{Drainated})}$	(Estimated)	(Estimated)	(Estimated)	\$4,993
Location: Prince William		Phone: 571-355-0086	(Projected)	(Estimated)	(25000000)	(20000000)	
County, VA		Email: jpitt@transurban.com					

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/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.

RFQ Evaluation Criteria

- ✓ Experience in successfully coordinating with adjacent projects
- \checkmark Use of innovative design solutions
- ✓ Limited impacts to the traveling public and affected businesses and communities, including commitments to effective strategies to minimize congestion during construction



 Developed and managed effective communication strategies with key stakeholders

FIRM AND ROLE: WRA is the lead designer for the interchange modification to provide a direct access ramp from and to the 95 Express Lanes (EL) to Opitz Blvd. WRA completed all preliminary and final designs including an Interchange Access Report (IAR) including regional traffic study and environmental permitting. Final delivery method will be Construction Manager/General Contractor (CMGC) where WRA will also perform post-bid engineering in conjunction with the selected contractor via a two-step selection process. **RELEVANCE TO I-64 HREL SEGMENT 1A:** The 95 Express Lane-Opitz Connector project includes reversible managed lane construction, interstate ramp construction, bridge widening and rehabilitation, coordination with adjacent projects, interstate interchange design, ITS tolling systems and integration, public involvement and limited access changes. We are proposing *the same full design team* (as described in the *Section 3.3* Org Chart of this SOQ) that delivered the 95 EL / Opitz Blvd project on an accelerated schedule for the I-64 1A Project.

PROJECT OVERVIEW: The project includes the construction of a new south-facing reversible ramp connecting the EL and Opitz Blvd at a signalized intersection to improve access to the EL. During NB operations, the ramp will provide NB 95 EL users the opportunity to exit onto Opitz Blvd. During SB operations, the ramp will provide a new entrance from Opitz Blvd onto the SB 95 EL. The existing ramp from the SB I-95 GP lanes to the SB EL located south of Opitz Blvd will be relocated south of the Dale Blvd interchange since the new Opitz Blvd ramp impacts the existing ramp. Design services include IAR, highway design, hydraulics, SWM, ESC, geotechnical engineering, pavement design, CE including noise analysis, and stakeholder coordination. Plans include MOT, ITS systems and integration plans for gate-controlled directional EL access, traffic signal system, signing, lighting, pavement markings and utility relocation. Structural designs include bridge widening/rehabilitation and design of two retaining walls.

Bridge Engineering: The existing 471 ft bridge structure, which consists of a 106 ft simple span, a two-span haunched continuous unit (168 ft- 168 ft), and a 27 ft simple span, was completed in the 1980s. WRA performed a deck evaluation, material testing, and field evaluation to document the bridge conditions. The existing longitudinal joint is being removed to allow for a reconfiguration of the transverse section to add a median barrier and turn lanes along with a barrier-separated sidewalk. Due to the unique nature of the bridge framing plan and proposed re-configuration, WRA developed a full 3D FEM model of the bridge to evaluate how the widening and the "tee" intersection would behave due to the location of the intersection being almost at mid-span of the 168 ft span of the 2-span continuous unit. WRA designed new single column piers on deep foundations along with the widening of the abutments. WRA evaluated removal of the joints and was able to remove 3 of the 4 existing deck joints.

ITS/Lighting/Signing Integration: The project includes design of gate-controlled access for the relocated SB GP to SB EL ramp, and for the new turn lanes connecting Opitz Blvd to a new reversible EL ramp. ITS subsystems to be installed include over 6 miles of fiber optic

cabling, 5 CCTV cameras, 11 incident detection cameras, 3 vehicle detectors, 27 traffic gates, two emergency back-up power generators, and system controllers. All ITS is integrated with the EL Traffic Management Center. Signing includes 12 overhead sign structures with seven DMS signs for pricing / traffic advisory and new interchange guide signs. Lighting is provided on Opitz Blvd and both proposed ramps to ensure lighting of all turn lanes, gate-controlled, and merge/diverge areas.

Hydraulic Analysis and Stormwater Management: The Opitz Blvd project was designed to ensure compliance with VDOT drainage design criteria and the VSMP Part IIB regulations. To meet SWM requirements, an existing detention basin will be retrofitted with additional capacity for increased runoff, and nutrient credit purchased for water quality requirements. The existing pipes were video surveyed to compile an existing pipe conditions report. The report recommended pipe repairs to ensure the lifespan of the existing drainage system. Geotechnical Analysis and Design: Geotechnical services include a program of existing data analysis combined with new borings and field data. The report includes bridge foundation recommendations, retaining wall and pavement designs. WRA designed a cantilever soldier pile wall to flank Opitz Blvd and accommodate the entrance ramp lane leading to the bridge. Back-to-back MSE walls were designed utilizing FHWA guidelines for elevated ramps. Settlement of the MSE walls were designed address compressible soils. Existing shoulder pavements were cored to validate shoulder structure and ensure shoulder reconstruction is not necessary for temporary lane shifts. The geotechnical report provided information for sign foundation design by pre-boring to allow the contractor to advance overhead sign design and accommodate long-lead material procurement. Maintenance of Traffic: High traffic volumes on Opitz Blvd, I-95, and 95 EL require maintaining existing through lanes, with lane reductions only during nighttime and other select hours. Because the Opitz Blvd ramp sits within the footprint of the existing I-95 SB GP slip ramp to the EL, the relocated slip ramp and its ITS systems must be rebuilt and integrated prior to construction of the elevated ramp. Stage 1 MOT plans prioritize access to the relocated slip ramp including ITS equipment and decel and accel lanes. Through lanes on I-95 are shifted 2 feet onto the shoulder. By maximizing abutment reconstruction work space in the initial stage accelerated the Opitz bridge work and project delivery. Noise Analysis: Per Federal and State noise regulation/policy, the 95 Express Lanes-Opitz Blyd Connector gualified as a Type I Federal-aid project due to the improvements including interchange and ramp modifications. WRA preformed Preliminary and Final Design Noise Analysis. SCHEDULE PERFORMANCE: WRA began the IAR and preliminary engineering in February, 2021 and after a successful Public Hearing were contracted by Transurban in October 2021 to proceed with final design efforts for a RFO advertisement for a CMCG procurement in January 2022. WRA has meet this very aggressive schedule and is delivering the RFP final plans in March 2022 with an anticipated contractor award in May 2022. COORDINATION WITH ADJACENT PROJECTS: To integrate the project with the adjacent Neabsco-Potomac Parking Garage, WRA worked with Transurban and Prince William County (PWC) to ensure overlapping project elements were coordinated and covered in a PWC Resolution detailing project responsibilities. A portion of the Opitz project's pedestrian connectivity overlaps with the Parking Garage roadway improvements: to mitigate potential construction conflict PWC added a portion of sidewalk to their project. The parking garage is a DB project by PWC. DEVELOPED URBAN CORRIDOR: High traffic volume and the proximity of the Sentara Northern Virginia Medical Center mean existing through lanes must be available on Opitz Blvd at all times. The MOT design will keep two lanes in each direction available to reduce potential backups along Opitz Blvd. A retaining wall will eliminate impacts to the adjacent VDOT maintenance vard while providing space for ITS gates. signage, and controller cabinets in the restricted space behind the curb. INNOVATIVE DESIGN SOLUTIONS: The design of the connection of the elevated EL ramp into the existing Opitz Blvd bridge required for full 3D FEM analysis of the proposed and existing structures to completely evaluate the bridge design and construction phasing.



12500 Fair Lakes Circle #150 Fairfax, VA 22033 703-502-7500



801 South Caroline St Baltimore, MD 21231 410-235-3540



2005 Old Greenbrier Rd Chesapeake, VA 23320 847-680-5200



14160 Newbrook Drive, Suite 220 Chantilly, VA 20151 703-818-0721



12355 Sunrise Valley Drive, Suite 520 Reston, VA 20191 703-464-1000