December 8, 2020 Electronic Submittal

Statement of Qualifications
A Design-Build Project

Boundary Channel Drive at I-395 Interchange

Arlington County, Virginia

From: 0.06 miles west of Connector Road
To: Long Bridge Drive

VDOT

State Project No. 6587-000-R89, P101, R201, C501
Federal Project No. NHPP-5B01 (120)
Contract ID No. C00116394DB109

FMC Since 1972 FORT MYER CONSTRUCTION | VOLKERT

3.2 | Letter of Submittal

FORT MYER CONSTRUCTION CORPORATION
Building the American Dream for DC, Maryland, and Virginia
2237 33rd Street, NE • Washington, DC • 20018 | p: 202.636.9535 | f: 202.526.8572

Sudha Mudgade, PE, PMP, DBIA
Alternative Project Delivery Division
Virginia Department of Transportation (VDOT)
1401 East Broad Street
Richmond, VA 23219

December 8, 2020

Re: Boundary Channel Drive at I-395 Interchange, RFQ No. C00116394DB109

Dear Ms. Mudgade,

Fort Myer Construction Corporation (FMCC) is pleased to submit our Statement of Qualifications for the above-referenced project. We have assembled a team of highly qualified design and construction professionals with exceptional expertise to successfully meet the goals and objectives of this project.

3.2.1 Legal Entity FMCC is the legal entity who will execute the contract with VDOT.

3.2.2 Point of Contact for the Offeror
Sam Patel, DBIA, Senior Project Manager
2237 33rd Street NE, Washington, DC 20018
P: 202.627.2320 | F: 202.526.8572
Email: spatel@fortmyer.com

3.2.3 Principal Officer of the Offeror
Jose Rodriguez, President
2237 33rd Street NE, Washington, DC 20018
P: 202.636.9535 | F: 202.526.8572
Email: jrodriguez@fortmyer.com

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

3.2.5 Full Legal Name of Lead Contractor: Fort Myer Construction Corporation **Lead Designer**: Volkert, Inc.

3.2.6 Affiliated and Subsidiary Companies. The Offeror does not have any affiliated or subsidiary companies.

3.2.7 Certificates Regarding Debarment. FMCC executed a *Certification Regarding Debarment Form Primary Covered Transactions* (Attachment 3.2.7 (a)); and all other team members executed *Certification Regarding Debarment Form Lower Tier Covered Transactions* (Attachment 3.2.7 (b)). All are in the Appendix.

3.2.8 VDOT Prequalification Certification. FMCC's VDOT prequalification number is **F034**, and our status is active and in good standing; our evidence of prequalification is included in the Appendix.

3.2.9 Evidence of Obtaining Bonding. A letter of surety is found in the Appendix stating FMCC is capable of obtaining a performance and payment bond based on the current estimated contract value referenced in Section 2.1. This bond will cover the project and any warranty period.

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

3.2.11 DBE Commitment. FMCC is committed to achieving the **12% DBE** participation goal for the entire contract value.

Respectfully,

Manuel Fernandes
Senior Vice President, Chief Operations and Development Officer
Fort Myer Construction Corporation

3.3 Offeror's Team Structure

The **Fort Myer-Volkert Team** has successfully delivered two high-profile Design-Build (D-B) projects for VDOT in Northern Virginia – the *I-66 Pavement Rehabilitation* and the *I-495 Northern Section Shoulder Lane Use* projects – both improved conditions for the traveling public on critical commuter thoroughfares. The I-66 project improved ride quality by 200% and the I-495 project reduced commuter congestion, both with minimal impacts to the public during construction – maintaining traffic and access safely is always our highest priority. We look forward to bringing the benefits of our mutual experience, combined expertise, and collaborative working relationship to the *Boundary Channel Drive at I-395 Interchange D-B Project*.

Fort Myer Team Benefits

- VDOT experience
- Multiple D-B projects delivered for VDOT
- Ability to self-perform all major work items
- Established stakeholder relationships including with utility owners

The success of these projects, and others in our respective portfolios, demonstrates the commitment of both firms to finding best-value solutions for transportation improvements through a collaborative approach – the basis of our approach and team structure for VDOT's *Boundary Channel Drive at I-395 Interchange D-B Project*. In addition, our team provides VDOT with seamless communication and coordination as we bring back together our seasoned and locally experienced staff into a cohesive team, ready to provide an integrated effort to meet the challenges of the project. We work well with one another; we know the VDOT's infrastructure and requirements; and we know how to best use the benefits of D-B methodology to mitigate risks.

Our Design-Build Team

Fort Myer Construction Corporation (Fort Myer) is the Lead Contractor of the D-B Team, responsible for managing all aspects of the project, including design, construction, utility coordination, right-of-way (ROW) acquisition, QA, QC, environmental compliance, safety, and public involvement and stakeholder coordination. We strategically chose team members with experience in similar projects in Arlington County, to create an organizational structure that capitalizes on our collaborative history and resulting relationships, and the strengths of each team-member firm to deliver a successful project to VDOT.

Fort Myer Asphalt Plants

With so many active transportation projects in the NOVA region, by owning and operating 2 state of the art asphalt plants within 6 miles of the project, brings great cost and time savings to VDOT. We can directly control the paving operations for the Project by prioritizing our plant schedule to expedite project delivery.

Fort Myer has been providing heavy civil infrastructure construction in Northern Virginia for nearly 50 years and has an extensive portfolio of providing high-quality solutions that improve operations and safety on the region's roadways. The local region is our backyard. Our team members are comfortable with the challenges presented by projects such as the *Boundary Channel Drive at I-395 Interchange D-B Project*.

Our Lead Designer, Volkert, Inc. (Volkert) is a trusted partner and responsible for coordinating all design disciplines and overseeing all design activities throughout the life of the project. Volkert is a multidisciplinary transportation engineering firm serving local DOTs and municipalities for 60 years, delivering roadway improvement projects with challenges similar to those anticipated on this interchange project – improvements on a high-volume roadway with constraints such as limited ROW, complex utilities, and multiple stakeholders, including a heavily involved public.

Volkert has a national reputation as a leading provider of D-B best practices for complex transportation infrastructure; and brings VDOT and the D-B team a collaborative and partnering approach to finding innovative and cost-effective solutions to challenges. On the *I-66* and *I-495 Northern Section Shoulder Use* D-B projects noted above, Volkert and Fort Myer collaborated to develop an integrated CPM schedule and work packages that allowed concurrent design and construction. Volkert's VDOT knowledge and relationships provided opportunities for design waivers and exceptions that supported the schedule and have resulted in less impacts to the traveling public – an approach we will employ throughout this project when beneficial.

In an effort bring to bring additional D-B strength to the project, we have enhanced our team's depth of experience and resources by adding the following subconsultants in the indicated critical disciplines:

CES Consulting, LLC (CES) is providing Quality Assurance Management and **Utility Coordination Management**, and brings the team experience in early planning, coordination, and communication with utility providers in Northern Virginia. In the past 6 years, CES has provided quality assurance (QA) and quality control (QC) management, project controls, safety management, quality auditing, and utility management services for 20 D-B and private-public partnerships (P3) projects in Virginia totaling $8B in construction value. Relevant projects include the *I-395 Express Lanes GEC* in Alexandria and Arlington, where CES served as the Construction Management Lead and worked collaboratively with federal, state, and local stakeholders to plan solutions to complex field issues and expedite approvals.

ATCS, P.L.C. (ATCS) is providing environmental, permitting, and noise / abatement services. ATCS brings a breadth of experience working on major transportation and transit projects in the area, working with many of the same stakeholders and agencies that will have approval over this project including WMATA, NPS, and the Pentagon, among others. Their environmental staff have the unique ability to work through the design of project while focusing on constructability and working with the regulatory agencies on negotiating a buildable project that provides benefits to all stakeholders. ATCS has participated in all aspects of project development and implementation from planning to NEPA document development, and ultimately final design and construction. Our understanding of the complex regulations governing construction projects in the region allows us to provide efficient review of design submittals for compliance with all environmental commitments, codes, standards, regulations, and laws.

Terracon Consultants (Terracon) is providing geotechnical services, bringing experience garnered from providing geotechnical engineering for 60+ VDOT projects, their expertise addressing subsurface challenges found within Virginia including 210+ projects located in Arlington County, and highly over-consolidated clays of the Potomac Group found within the County which have issues related to slope instability and excessive shrink/swell characteristics. Terracon has completed 55 D-B projects in Virginia; examples of projects containing roundabouts similar to the Boundary Channel Drive pursuit include *I-395 Express Lanes, Ramps, and Interchanges, Route 7/Route 690 Interchange, and Warrenton Southern Interchange.* Also relevant to this D-B project, they have provided geotechnical services for *USACE Pentagon Reservation Boundary Channel Drive Vehicle Access Control Point (VACP), Route 27/244 Interchange Modifications,* and are currently providing geotechnical services for Arlington National Cemetery Defense Acquisition Roadway that includes interchange improvements at Columbia Pike and I-395.

Diversified Property Services Inc. (DPS) is managing the ROW and land acquisition services and reports to the DM. As a VDOT prequalified ROW acquisition firm, they will manage all areas of appraisal and appraisal review services, negotiations, acquisition of rights, expert witness testimony, and relocations. They are experienced in local, State, and Federal real estate acquisition regulations, including USPAP, Uniform Relocation Assistance & Real Property Acquisition Policies Act, the VDOT ROW & Utilities Manual of Instructions, and the Code of Virginia. DPS has extensive D-B experience with 40+ projects in Virginia including *Route 28 PPTA; Route 50 Widening; I-95 Route 630 Reconstruction & Widening; I-64 Exit 91 Interchange; Route 29 Bridge over Little Rocky Run; Route 657/Centreville Road*; and a three-year D-B with Shirley Contracting in Spotsylvania County.

J2 Engineers, Inc. (J2) is providing design survey services and reports to the DM. Their staff brings extensive survey experience including topographic/location surveys, horizontal and vertical control surveys, boundary surveys, as-built surveys, ALTA/ACSM surveys, bathymetric surveys, ROW plats, deed and records research, utility surveys, and coordination with VDOT.

Insight, LLC (Insight™) is providing utility test pitting, and since 2004, provide the full range of subsurface utility services throughout the DC Metro area. Insight™ project experience includes utility designation services along the north side of the Pentagon covering five acres in support of the *WHS Pentagon Force Main Project*; *Amazon Corporate Headquarters Project* in Arlington, where they installed 18 utility monitoring points; and *Project Journey at Reagan National Airport*, where they performed utility designation and utility locating services.

3.3.1 | IDENTIFICATION & QUALIFICATIONS OF KEY PERSONNEL

Fort Myer has assembled a team of highly qualified and locally experienced individuals, many of whom have previous experience working together in and for VDOT. Our key staff and key design firms are based in Northern Virginia and have experience with delivering roadway, traffic, utilities, ROW, and construction projects in the region to VDOT standards. The **Fort Myer team** – in particular our Key Personnel – will remain intact for the duration of the contract, providing continuity of leadership as we deliver the project. Many of our Key Personnel are replicating roles they have held on similar projects – and on Fort Myer D-B teams – and all bring in-depth understanding of the reporting structure of the team as outlined below. Their detailed qualifications and experience can be found in their *Attachment 3.3.1 – Key Personnel Resume Form.*

KEY POSITION	KEY PERSONNEL	FIRM
Design-Build Project Manager (DBPM)	Sam Patel, DBIA	Fort Myer Construction Corporation
Quality Assurance Manager (QAM)	Avtar Singh, PE	CES Consulting, LLC
Design Manager (DM)	Nelson "Ty" Lee, PE	Volkert, Inc.
Construction Manager (CM)	Joao Constantino	Fort Myer Construction Corporation

3.3.2 | ORGANIZATIONAL CHART & REPORTING RELATIONSHIPS

The **Fort Myer team** structure seamlessly integrates design, construction, QA/QC, and associated disciplines such as ROW, utility coordination, environmental compliance, public involvement, and stakeholder coordination into a cohesive process. Our organizational chart shows the "chain of command" of all companies on the D-B Team, including individuals responsible for the disciplines proposed. It identifies major functions and defines the reporting relationships of personnel responsible for the integrated management of design, construction, and QA/QC activities. The chart further illustrates the design team's collaborative relationships, led by the DM, and how that unit integrates with the construction team through the DBPM. Solid lines identify the direct reporting relationships of our team members. Dashed lines represent lines of communication inherent to our collaborative approach.

Project success starts and concludes with collaboration built upon continuous communication. From regular team meetings to issue-specific stakeholder meetings to public meetings, communication drives collaborative issue resolution from award to project delivery. During the design phase the design team seeks valuable input from the construction team as the designers develop constructible plans; and conversely the construction team enlists the perspective of the design team as challenges arise in the field. They mutually recognize the valuable perspective each brings to the design and construction on behalf of the project.

DBPM: Sam Patel, DBIA (Fort Myer) is VDOT's primary point-of-contact for the Project, and is responsible for management of overall project design, construction, quality management, and construction administration for the project. As DBPM, he is responsible for meeting all contract obligations. He is empowered to answer questions and inquiries relevant to the project; and he will also coordinate any required public outreach and public meetings. Mr. Patel can bring all the team resources to this project and has full authority over all aspects of this project.

Mr. Patel brings this team and VDOT his previous collaboration with Volkert on the successfully delivered $46.2M VDOT D-B *I-66 Rehabilitation* and $15M *I-495 Northern Section Shoulder Use* projects. In addition, he was the DBPM on VDOT's *Braddock Road & Pleasant Valley Road Intersection Improvement D-B Project*, which included similar scope elements. As such, he will achieve success on this D-B project through consistent communication and collaboration with VDOT, all members of the D-B team, and stakeholders to meet or exceed contract obligations.

Our goal regarding quality is to minimize or eliminate non-compliance issues prior to their occurrence through comprehensive inspection, frequent communication, well-defined documentation, and by holding point and pre-activity meetings.

QAM: Avtar Singh, PE (CES) reports directly to the DBPM, and is responsible for overseeing construction quality. He is from a completely independent firm with no contractual relationship and no involvement in construction operations or quality control inspection and testing; and through our reporting structure he is completely independent of the design and construction teams. He brings 26 years of construction management and project controls experience focused on transportation infrastructure. His experience includes QA, QC, and OIA (owner's independent assurance) management of routine and complex D-B-B, D-B, and P3 projects including QA and QC management of several D-B projects involving the construction of five roundabouts.

Due to Mr. Singh's QAM leadership and expertise, VDOT has rated his QAM services as 'Exceeds Expectations' and he has earned excellent CQIP scores for QA services ranging up to 100%. As the former Area Construction Engineer for VDOT's NOVA District, Mr. Singh was responsible for more than 28 projects with a cumulative construction value of more than $230M. He ensured that project startup, execution and closeout processes complied with VDOT and FHWA standards.

DM: **Ty Lee, PE (Volkert)** reports to the DBPM and has overall responsibility for management of the design, and the establishment and oversight of the design QA/QC program. Mr. Lee's role includes confirming the overall Project design complies with the contract documents, oversight of design subconsultants, and coordination with each of the design support discipline leads shown on the Organizational Chart. As DM, he will work closely with the DBPM to develop best-value solutions; confirm consistent design plan development and coordination among design elements; and attend progress, coordination, and public outreach meetings for the project. He will also oversee establishment and implementation of the design QA/QC program, which will be followed by Volkert and all design subconsultant team members.

Of relevance to this project was his role as VDOT Project Manager on the *Courtland Interchange on Route 58*, in Hampton Roads District. With Volkert as the prime consultant, Mr. Lee oversaw the development of a design that included two roundabouts as the preferred alternative to add capacity and improve safety. Once he joined Volkert and *Courtland Interchange on Route 58* was under construction, he provided construction phase support services including constructability reviews.

CM: Joao Constantino (Fort Myer) reports to the DBPM. He has responsibility for oversight of all construction activities on the project and will be on the Project Site for the duration of construction operations. Mr. Constantino will renew his Virginia DEQ Responsible Land Disturber Certification along with the VDOT Erosion & Sediment Control Contractor Certification prior to commencement of construction. In his role, Mr. Constantino oversees all construction and construction QC activities to ensure the materials used and work performed meets or exceeds contract requirements and the "approved for construction" plans and specifications. He is also involved in reviewing designs for constructability with the DM. Mr. Constantino has three decades of experience working for regional DOTs, including VDOT and Arlington County. His most recent VDOT D-B experience with Volkert as the Lead Designer was the $15M *I-495 Northern Section Shoulder Use Project*. He is a key resource tapped for projects requiring fast-track delivery and extensive communication with stakeholders, like the successfully completed $14M *St. Elizabeth's Infrastructure* D-B project for DC Department of General Services, which included design, permitting, and construction all delivered within a tight 9 month schedule. He also led the team for a roadway project on a confidential government compound and his leadership was praised for being professional and providing excellent paving work.

Value-Added Personnel

The **Fort Myer team** includes personnel who enhance the team's expertise and ability to resolve project challenges and meet VDOT's requirements for quality, safety, budget and schedule.

Utilities Coordinator: Matt McLaughlin (CES) reports to the DBPM. He is responsible for coordination of utility relocations, including verifying conflicts; determining cost responsibilities; conducting utility field inspections; coordinating utility relocation design; reviewing and recommending approval of utility relocation plans and estimates; and oversight of utility relocations. He will review, verify and coordinate the modifications of utility designs to resolve potential conflicts. Mr. McLaughlin's 34 years of experience includes utility coordination and management for 400+ projects in VDOT's NOVA District, including nine years as a VDOT NOVA District Utility Construction Manager. As a result, he knows the procedures and requirements of most major utility providers in Northern Virginia and has established productive working relationships that foster partnering and cooperation. His experience includes resolving utility conflicts with minimum impacts and disruptions to utility services, including working together with Sam Patel (DBPM) on the *Braddock Road & Pleasant Valley Road Intersection Improvement D-B Project* for VDOT. He has coordinated well over 200 lane miles of utility relocations and recommended strategies for reducing cost, conflicts, and ROW impacts and mitigating delays saving agencies significant costs and time.

Roadway Design Lead: Jason Jiménez-Pisani, PE (Volkert) reports to the DM and brings 17 years of roadway design experience, many leading design efforts for VDOT projects. His design experience includes roadways, interchanges, interstates, pedestrian facilities, drainage, and conventional and green SWM infrastructure projects as well as the recently constructed roundabout in Hillsboro, VA. Relevant VDOT projects include the *Courtland Interchange on Route 58*, where he led roadway and roundabout design and TMP phasing for the new interchange; and the *MLK Expressway Extension, Elizabeth River Crossing/Midtown Tunnel (D-B) P3*, where he led roadway engineering for the design of a one-mile, four-lane, elevated, limited-access toll facility.

Structural Design Lead: Brian Graham, PE (Volkert) reports to the DM and brings 21 years of structural design experience for VDOT and Arlington County that includes the replacement of the superstructure and repair of the substructure of Arlington County's forthcoming first transportation D-B procurement, *West Glebe Road Bridge over Four Mile Run*. He developed 30% design plans and recently completed bridging plans and technical requirements documents to be utilized in this procurement. Other Arlington County projects include the *Columbia Pike over Four-Mile Run* bridge project, where he developed plans to widen the existing five-foot-wide sidewalk in addition to details to install a new deck drainage system and extend the existing drop inlets at each end of the bridge; lighting design; and new rails. Additionally, he has provided structural design on numerous VDOT D-B projects including *MLK Expressway Extension of Elizabeth River Tunnels P3, I-581 & Elm Avenue D-B, Rolling Road* D-B.

Traffic Engineering Lead: Hari Thaker, PE, PTOE (Volkert) reports to the DM. Also, on the *West Glebe Road Bridge over Four-Mile Run*, he developed the conceptual sequence of construction plans for the two lanes of traffic (one in each direction) which will be maintained throughout construction and additionally located streetlight at each corner of the bridge and on the bridge railing in accordance with Arlington County DES Signal and Street Lighting Standards.

Public Relations Manager: Anna Kelly (Fort Myer) reports to the DBPM and will coordinate and implement public outreach activities as a liaison between VDOT, the County, the traveling public, and other stakeholders. She will provide updates on construction operations and their potential impacts. Working closely with VDOT and the County, she will develop the communication programs and strategies to achieve project goals and promote the project's progress and success to all stakeholders and the public.

3.3 | OFFEROR'S TEAM STRUCTURE

PRIMARY STAKEHOLDERS

Arlington County | Pentagon | National Park Service | National Capital Planning Commission | Multimodal Commuters & Traveling Public | WMATA | FAA | Regional Transit Providers

VDOT

PUBLIC RELATIONS MANAGER
Anna Kelly [1]

DESIGN-BUILD PROJECT MANAGER
Sam Patel, DBIA [1]

UTILITY COORDINATOR
Matt McLaughlin [3]

DESIGN MANAGER
Ty Lee, PE [2]

SAFETY MANAGER
Joel Llopez, CHST, STS-C [1]

CONSTRUCTION MANAGER
Joao Constantino [1]

QUALITY ASSURANCE MANAGER
Avtar Singh, PE [3]

DESIGN SERVICES

Roadway Engineer
Jason Jiménez-Pisani, PE [2]

Traffic Engineer
Analyses & Traffic Control Devices
TMP / MOT
Hari Thaker, PE, PTOE, RSP [2]

Signing/Marking
Mitsuru Tanaka, PE, PTP, PTOE [10]

Structural Engineer
Brian Graham, PE [2]

Drainage & SWM
Adane Bobo, PE [2]

Utilities Engineer
Bharat Bhargava, PE [2]

Landscape Architect
Oliver Boehm, RLA [2]

Environmental Engineer & Permitting
Scott Shifflett, PE [4]

Geotechnical Engineer
Sushant Upadhyaya, PhD, PE, PMP, RMP [5]

Survey
Eric Erickson, LS [7]

ROW Manager
Gina Anthony [6]

Fee Appraisal
VDOT Prequalified Individual

Fee Appraisal Review
VDOT Prequalified Individual

DESIGN QA/QC

Design QA
Jeff Cutright, PE [2]

Design QC
Bobby Hester, PE [2]

CONSTRUCTION SERVICES

Survey Manager
Mike Baeilashak [1]

Roadway Superintendent
Joseph Santos [1]

Electrical Superintendent
Travis White [1]

MOT Superintendent
Inmar Cruz [1]

Utility Test Pitting
Insight, LLC [9]

QC Manager
Ali Dar [8]

AMRL Certified QC Lab
Dulles Engineering
(Chantilly, VA) [8]

AMRL Certified QA Lab
Dulles Geotechnical & Materials Testing, Services, Inc. [11]
(Chantilly, VA)

ADDITIONAL STAKEHOLDERS & THIRD PARTIES

Dominion Virginia Power (DVP) | PEPCO | Arlington County Environmental Services (Water & Sewer) | Washington Gas | Verizon | AT&T | Windstream KDL | Jones Communications | Century Link/Level 3 Communications | Zayo Communications | Fiberlight, LLC | Verizon Business

All firms and key personnel shown are committed to remaining on the team for the duration of the contract.

LEGEND

- Key Personnel
- Communication / Coordination Lines
- Reporting Lines
- ▲ DBE

[1] Fort Myer Construction Corp.
[2] Volkert, Inc.
[3] CES Consulting, LLC ▲
[4] ATCS, P.L.C.
[5] Terracon Consultants, Inc.
[6] Diversified Property Svcs. Inc.▲
[7] J2 Engineers, Inc.
[8] Dulles Engineering, Inc.
[9] Insight, LLC
[10] EXP U.S. Services, Inc.
[11] Dulles Geotechnical & Materials Testing, Services, Inc.

3.4 | Experience of the Offeror's Team

Please see Attachment 3.4.1 for the Lead Contractor and Lead Designer Work History Forms in Appendices.

3.5 | Project Risks

The Fort Myer team member's experience on numerous major D-B transportation projects, and our joint experience on multiple D-B projects and pursuits in the last few years have contributed to successful implementation of risk mitigation strategies identified in this section. In consideration of the risks most relevant and critical to the success of this Project, our team reviewed the RFQ documents and plans, visited the Project site, reached out to utility owners, and attended the public meeting November 5, 2020.

After evaluating the goals of the Project and all inherent risks through a comprehensive risk analysis workshop, the Fort Myer team has identified the following risks as critical to the success of the *Boundary Channel Drive at I-395 Interchange D-B Project*:

Multimodal traffic mobility during construction	Stakeholder reviews and impacts to the schedule
Condition and capacity of existing stormwater management infrastructure	Coordination with ongoing projects
Subsurface and foundation issues near and under I-395 bridge over Boundary Channel Drive	Security-sensitive infrastructure
Utility relocations	Environmental permitting
Right-of-Way (ROW) impacts and acquisitions	Interface with I-395 Incident Traffic Management Plan

Based upon our comprehensive evaluation and assigning numerical rankings to each of these risks, below are the **three most critical risks** to the Fort Myer team for a successful project delivery and to achieve the Project goals (i.e., access, safety, congestion mitigation, fulfill Arlington County Master Transportation Plan (MTP) goal, and address the regional priorities of the stakeholder partners and their priorities).

1. **Traffic Mobility During Construction** - Optimizing traffic flow during construction to reduce the likelihood of incidents and improve corridor operations through a proactive Transportation Management Plan (TMP).
2. **Utilities: Coordination & Management** – Controlling the construction schedule and minimizing costs through early and often coordination during design phase by identifying relocation and mitigation scenarios.
3. **Stakeholders Coordination & Impacts –** Facilitating the design and permit approval process and schedule through rigorous coordination with multiple project stakeholders. Each is involved in the design and/or permit review process and it is incumbent on the Fort Myer team to carefully focus on each's respective precedence in their united priority to successfully accomplish the Project goals.

RISK NO. 1: TRAFFIC MOBILITY DURING CONSTRUCTION

Risk Description

Maintenance-of-Traffic (MOT) is always a concern on any construction project, however, the risk is more pronounced in urban congested areas, and certainly in this highly visible and sensitive area. With the confluence of Long Bridge Drive, I-395 and the Boundary Channel Drive traffic, coupled with the introduction of new traffic patterns created by two roundabouts at the interchange ramp terminals, MOT is a critical risk. Over 93,500 vpd travel I-395 corridor and many utilize Boundary Channel Drive to access the Pentagon to the west and south to Crystal City. In addition to vehicular traffic, pedestrians and bicyclists utilize this corridor with upwards of 3,200 users per day, making pedestrian and bicyclist safety paramount. Continued safe and easy accessibility to Mount Vernon Trail, Pentagon Metrorail Station, Pentagon, Long Bridge Park (including new aquatic center) and Route 1 is also vital to the success of this Project.

Why This Risk is Critical & How It May Impact the Project

Success of a project depends on the user's and observer's perspectives. Stakeholders will deem the project a success or failure depending on impacts to their special interests. For an owner such as VDOT, traffic operation, budget and schedule are metrics for measuring success that can be greatly diminished by disruption. The traveling public and the community will determine the success of this Project by the experiences they encounter commuting through the work zone during construction. This intersection of Bound Channel Drive and Long Bridge Drive already has confusing access points to I-395 Northbound, poor bike connections to Mount Vernon Trail, and to the Pentagon. In addition, having inadequate MOT and communication can cause driver and stakeholder frustration, which can cause unsafe traffic maneuvering through the work zone, project schedule delays, and increased costs. Given the use of this corridor by multimodal users, including vehicles of varying sizes, bicyclists, and pedestrians the risk of mobility through this corridor becomes critical.

Risk Mitigation Strategies

The primary focus of the Fort Myer team is to construct the *Boundary Channel Drive at I-395 Interchange D-B Project* in a safe and timely manner. Although not an all-inclusive list, the key considerations will be to

maintain satisfactory traffic operation, provide accessibility to the non-motorized users, and develop the operational and communication strategies that will inform the stakeholders and adjacent projects about the progress, updates, major traffic shifts, incident management, and timeline throughout the course of the Project.

We anticipate developing a Type 'C' TMP including requisite temporary traffic control plans, Transportation Operations Plan and Public Communications Plan. The TMP ensures coordination with the VDOT NRO Traffic Operations Center (TOC), Arlington County's Traffic Management Center, Pentagon and other stakeholders regarding traffic pattern changes, response to accidents, incident management response, and restoring normal traffic operations. MOT plans are developed to ensure the safety of all those who utilize the corridor not only for daily commute but also for recreational purpose. The Fort Myer team is committed to evaluating all possible scenarios for MOT to ensure construction of the Project will occur in a fiscally responsible, timely, and safe manner. Provisions will also be made for weather and scheduled events that could be expected to generate significant changes in traffic volumes and operations to the area the area.

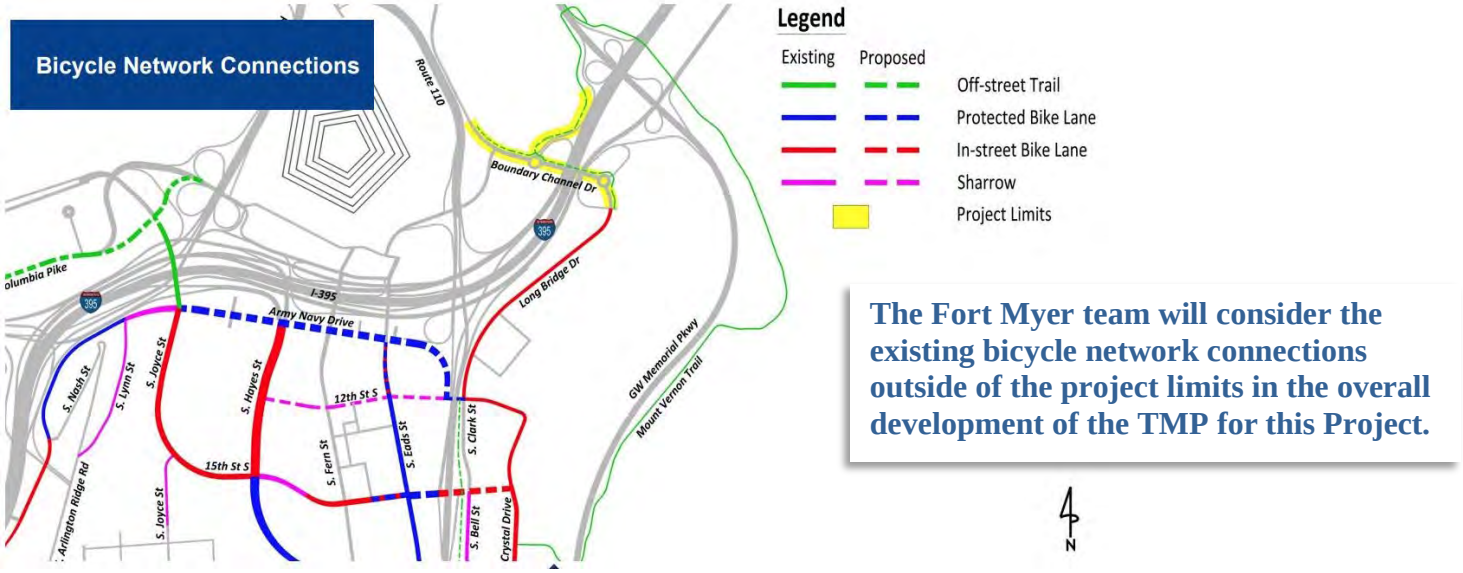
Local Traffic Operations Considerations.

Although classified as a minor urban arterial, Boundary Channel Drive plays a vital role in the local traffic operations. It not only provides direct access to the Pentagon parking lots, it also contributes to maintaining mobility and traffic circulation in this part of Arlington County for significant volumes of vehicles (car, truck, and transit), pedestrians, and bicyclists every day – weekends included. The ability of large vehicles, including EMS vehicles, (WB-62 classifications) to navigate the corridor needs to be considered. Furthermore, with the introduction of roundabouts, removal of the I-395 southbound off-ramp as well modifications to the other three I-395 ramps, MOT plans will play a vital role to ensure smooth traffic operations to maintain safe access through the corridor and to facilities, such as the Pentagon, Arlington National Cemetery, and the Long Bridge Park.

To mitigate the risk associated with MOT, the Fort Myer team will expedite construction activities. Schedule with advance work packages and efficient phasing will reduce the construction timeframe. This will advance the Project schedule while also limiting inconvenience to the traveling public. It is our intent to have a particularly well-lit work zone to provide a safer work zone for all users (construction crews and public travelers alike) that will serve to minimize driver confusion in a constrained project footprint, especially during winter months, when daylight hours are limited. Fort Myer construction crews also always include a minimum of two certified flaggers as part of any construction crew, in addition to the fulltime on-site certified MOT manager.

Multimodal Users

Often overlooked in the discussion of MOT plans are impacts to the multimodal users including pedestrians and bicyclists. A construction plan with an efficient phasing of construction to safely accommodate pedestrian and bicyclists mobility and access to Mount Vernon Trail and Long Bridge Park during construction activities is paramount. Multiple short-term phases may be needed to move traffic through the construction zone and enable access to these well-travelled trails. Each shift in traffic will require detailed design, planning, implementation, monitoring, and dynamic public notification. Devices such as pedestrian barricades, Type III barricades with R9-9 signs and R11-V3 signs, and audible message devices will be used for bicyclists and pedestrian MOT. In addition, temporary curb ramps with platforms may also be installed, if needed.



The Fort Myer team will consider the existing bicycle network connections outside of the project limits in the overall development of the TMP for this Project.

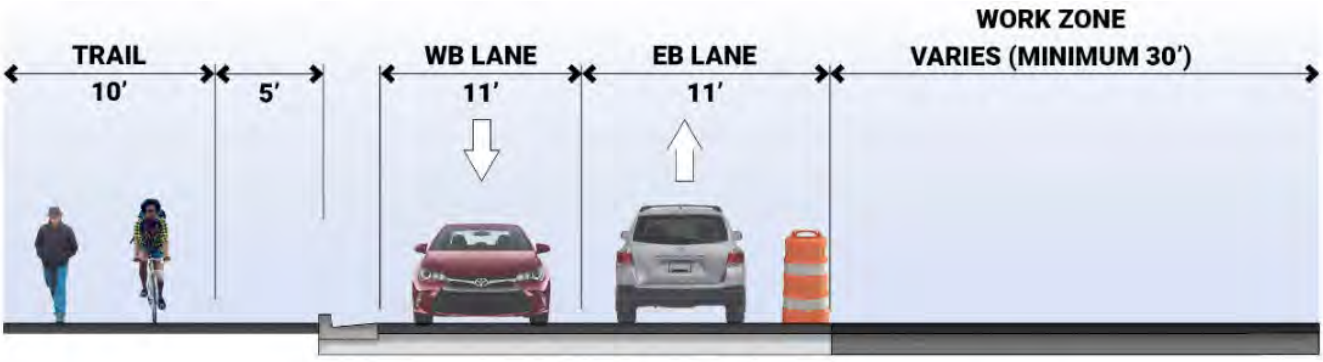
Communications

The Fort Myer team will work closely with stakeholders and adjacent projects to keep them informed regarding construction activities. Public outreach as part of the TMP will be critical to minimize impacts to the motorists, pedestrians, and bicyclists using a proactive public outreach program. The program will be implemented in coordination with VDOT to safeguard the travelling public and contractors, both, in the approaching work zone. An informed public further promotes the project's success. We will prepare the necessary materials (updates to project website, social media posts, radio, and television announcements) to assist VDOT and these stakeholders in current conditions, what to expect during and after construction, and how to navigate roundabouts safely and efficiently. Our direct responsibility includes, but not limited to, posting advance Variable Message Signs (VMS) along the I-395 corridor and ground mounted signs on adjacent arterial roads and Mount Vernon Trail leading to the construction activities and work zone. In the event of utility relocations, the early meetings with utility owners during the design phase will help finalize MOT plan(s) and sequence such that utility relocations, if needed, are covered in proposed project phasing as part of the TMP.

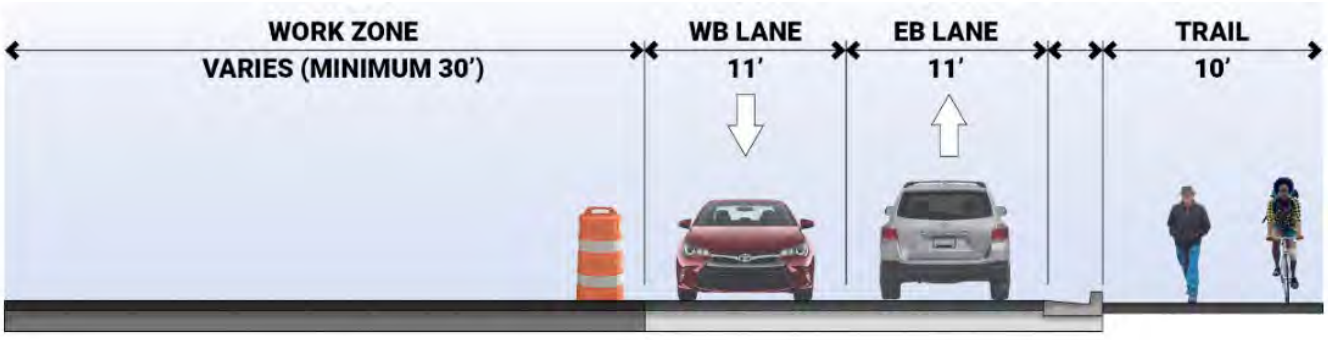
Lane Closures & Detours & Early Learning

Another key item to mitigate the MOT risk incudes deliberate lane closures, specifically, to reduce the number of lanes on Boundary Channel Drive to two lanes (i.e., one lane in each direction) mimicking the final project configuration. This will allow for larger work area for construction as well as material and equipment storage, and most importantly, faster project delivery. Intermittent lane closures during non-peak hours may be needed. Detour plans will be developed identifying alternate routes if needed, particularly for EMS activities. Detailed traffic analysis will be conducted to evaluate the 'pre-construction/existing' and 'during construction' conditions. Capacity constraints will be identified, and mitigation measures executed to avoid/minimize the traffic impacts resulting from detoured trips along alternate routes. This option will be examined in conjunction with above strategies.

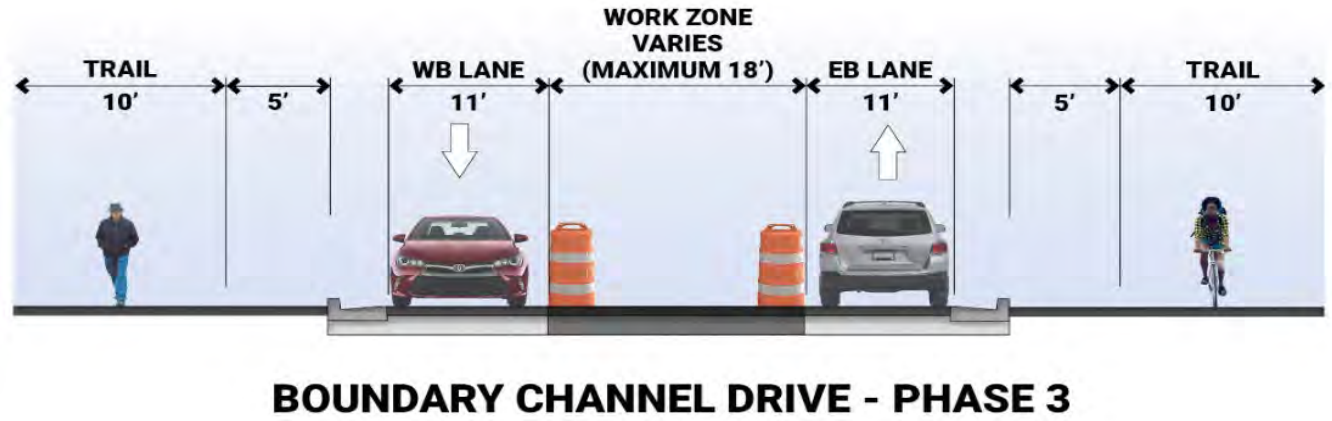
The following preliminary concepts demonstrate how MOT may be utilized for the Boundary Channel Drive west of the western roundabout. During the RFP and design of this project, further examination of options will be explored in order to develop final MOT plans that safely and efficiently moves traffic throughout this corridor during construction.



BOUNDARY CHANNEL DRIVE - PHASE 1



BOUNDARY CHANNEL DRIVE - PHASE 2



BOUNDARY CHANNEL DRIVE - PHASE 3

When implementing any lane closure, the Fort Myer team will also be cognizant of erosion and sediment control measures, including the areas where stone construction entrances are installed. Safe ingress and egress of construction vehicles. Therefore, dump trucks, tractor trailers, construction machinery and service trucks and those areas will always be well lit and cleared of any hazards. The location of ingress and egress points will also be strategically designated to eliminate safety risks for all. Some construction activities like storm water utility crossings and major traffic switches will be performed at nighttime to minimize interruptions to the end users. Fort Myer also owns and operates two state-of-the-art asphalt plants less than six miles from the project site, enabling ready access to the project site throughout project duration.

Incident Management

The ability to provide incident management and allow EMS vehicles necessary access is a critical part of the overall TMP. Our Incident Management Plan's focus is to plan for unexpected and unplanned events – accidents, emergencies, disabled vehicles, and potentiality of government motorcades. We will incorporate temporary variable message signs within the corridor and along I-395 in advance of the work zone to provide real time updates and driver information; this is crucial to insuring safe travel during the construction period. Should an incident occur, the Fort Myer team will be able to provide the appropriate access for EMS vehicles taking into consideration the necessary accommodation of large vehicle sizes. Our TMP will include a detailed incident management plan to provide:

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

Role of VDOT & Other Agencies

We expect VDOT, Arlington County, the Pentagon (including the National Capital Planning Commission (NCPC), and National Park Service (NPS) will participate in the review, discussions, and approval of design plans including the Temporary Traffic Control Plans as part of the overall TMP (including IMP and MOT); we expect the lane closure times and restrictions will be forthcoming in the RFP documents. We also understand that it will be the Fort Myer team's responsibility to coordinate the use of any staging areas for the Project.

We anticipate VDOT's coordination on public outreach efforts and updating stakeholder public affairs officials with consistent project progress and traffic patterns messaging. This is to ensure the traveling public and EMS will be provided with enough information and in a timely manner to make educated decisions about alternate routes and/or best times to travel (these include: Arlington County, NPS, Pentagon, NCPC, and utility companies).

RISK NO. 2: UTILITIES: COORDINATION & MANAGEMENT

Risk Description

Coordination and management of existing and potential utilities utility relocations is critical for a successful project and will be one of the first priorities addressed in the design phase of this D-B project. Utilities (in any location) are vital to the public; but in this location, they are elevated to the stature of critical in services provided related to national defense and security. Service must be maintained throughout the construction process, protected in-place and not damaged. (Utilities identified within the Project area are listed in the table below and our team does realize the potential presence of some unmarked utilities that may serve major stakeholders like the Pentagon.)

Dominion Virginia Power (DVP)	Windstream KDL
PEPCO	Jones Communications
Arlington County Environmental Services (Water & Sewer)	Century Link/Level 3 Communications
Washington Gas	Zayo Communications
Verizon	Fiberlight, LLC
AT&T	Verizon Business

Why This Risk is Critical & How It May Impact the Project

Major reasons why utility coordination becomes critical risk on D-B projects is lack of a detailed survey and inaccurate as-built information (at the current RFQ or RFP stage of procurement) and limited authority of the Fort Myer team with regard to the utility provider's schedule and performance. This uncertainty and limited control on utility providers' resources and actions can have major impacts on the construction sequence, ROW/easements, impacts to travelling public, project schedule, and ultimately project costs. In addition, this corridor serves major stakeholders like the Pentagon which may have additional utilities that are not identified on the concept plans. The current corridor already identifies12 major utility owners/ providers, but each carrier may also carry multiple other carriers within their respective infrastructure.

While electrical and telecommunication lines run throughout the limits of the Project and will be carefully considered in the design and construction process, large diameter water and sewer lines are also present and pose potential conflicts. Of particular note, a 16" Sanitary Force Main runs parallel to the project on the western terminus prior to crossing the proposed improvements (depth, pipe type, and age will need to be further investigated), as well as a 96" Intake line running perpendicular to the proposed improvements (depth, pipe type, and age will need to be further investigated). Additional 8"-12" water lines are also present in the corridor. This will increase the amount of coordination required for the Project as these lines pose potential conflicts with proposed drainage, relocation of other utilities, and increasing bridge clearance height.

Risk Mitigation Strategies

Mitigation measures and options include avoidance of existing utilities to the greatest extent possible during design development. The Fort Myer team will collaboratively work with the utility companies to minimize relocation efforts (e.g., use existing "slack" in the pull boxes to accommodate adjustments in-place; and, incorporate an extensive test pitting and utility designation effort early in the design process to confirm accuracy of survey and provided as-builts.)

Below are the efforts that we will begin early as the RFP stage in an effort to best mitigate this overall risk:

1. **Identify all utility owners as early as we can in the RFP and design phase.** Obtain as-built information from all utility owners at a very early stage, perform test pits and detailed on-site subsurface utility investigation which will compare owner's records with survey information. The Miss Utility locations may also identify other utility systems that are not already identified.
2. **Investigate the detailed documentation of pre-existing conditions and locations of all utilities on site including preconstruction photographs and videos.** With regard to underground utilities, verify proper documentations once utilities and their respective conditions are exposed via test pitting methods. The Fort Myer team has brought on board Insight, LLC, an experienced utility location and mapping company in the DMV area. They will conduct test pits via vacuum excavation. During this investigation phase, we will document the "slack" these utility lines may have in the pull boxes which may help in "lift and lay" techniques during construction.
3. **Upon conclusion of the subsurface utility investigations, share the findings of any damaged infrastructure or as-built information that differs from utility owner's data.** This will help everyone get on the same wavelength and use that as the base in advancing the Project design forward.

4. **Communicate and coordinate early and often with utility owners, VDOT, and stakeholders.** Establish open communication channels throughout the Project. Understand challenges each respective utility owner faces in its relocation efforts and come up with a mutual plan that works for all parties.
5. **Conduct open discussion meetings inviting all utility owners so that mutual and/or contributing conflicts are avoided, mitigation strategies are discussed, and protection procedures are established.** Also, discussion of the construction sequence for utility owners, so all utility owners are on the same page, minimizes last-minute surprises. Communication lines between the Fort Myer team and utility owners will always be open and often, to circumvent unforeseen conflicts which may cause a change in plans. All parties involved will be consulted immediately upon such change; and, all approvals will be received prior to proceeding with relocation and construction efforts.
6. **Discuss means and methods of utility protection of systems in place.** Every utility company has their own preference and requirement for horizontal and vertical clearance from another utility or construction element. It is important to factor those clearances, as well as incorporate the safety factor to those clearances during the design phase to avoid interruptions or delays during construction.
7. **Provide scope, concept plans and schedule to utility owners as early as possible**.
8. **Utility Coordinator, Matt McLaughlin, will lead the utility task force that will identify potential conflicts impacting design and construction.** Constructability reviews will occur at early design stages and may include solutions like altering roadway profiles, spline grades, relocation of proposed storm sewer, pavement build-ups and other temporary or permanent construction elements. Utility mitigation strategies that include protecting the system in-place, lowering in-place, and lift and lay horizontally will also be discussed. Projects like this, that are heavily congested with long lead time frames to relocate utility systems, will need “out of the box” thinking to resolve utility conflicts. The use of existing land rights will be utilized to the greatest extent for any utility adjustments. The utility companies' Plan and Estimates will be coordinated with the Designer to ensure that the utility relocation(s) scope resolves the conflicts and does not create other ones. Communication has already started with some of the utility company providers on this Project. Items that have been discussed include ownership of the duct system, additional utility company owners in the area, the size of the fiber optic cables, challenges to relocate the systems, obtaining as-built plans, relocation time frames as well as potential mitigation strategies.
9. **The Fort Myer team’s ROW team member, Diversified Property Services, Inc., will coordinate and communicate with VDOT and utility owners at every design revision** to ensure there are no issues or conflicts in the preparation of easement documents (including prescriptive rights) to expedite ROW acquisition. Diversified Property Services will manage the handling of all appraisals and appraisal review services, negotiations, acquisition of rights for any ROW needs for this project with VDOT-approved fee and review appraisers.
10. **The Fort Myer team will share and track Project schedules with all utility owners, VDOT, and stakeholders, to ensure timely start and finish of relocation efforts.** A Utility Relocation Phasing and Scheduling Plan will be developed that shows when the utilities will be relocated in correlation to the construction of the roadway improvements. This will be developed for all of the utility companies to maximize their resources as well as avoid issues with the roadway phasing schedule. Our team will also ensure there is a recovery plan in place to mitigate a potential delay from any one of the utility providers. Recovery efforts may include resequencing the work, self-performing activities, and working nights/weekends to accommodate construction schedule.
11. **The protection and conflict resolution for the fiber optic systems are very important, but the same can be said for the underground power systems.** These systems do not have the flexibility that fiber optic facilities have; so, it is important to validate the location of these systems horizontally and vertically. The locations that already have drainage crossings will be utilized for the proposed drainage to the greatest extent possible.

Role of VDOT & Other Agencies

We expect VDOT will participate in design and relocation meetings with utility providers. VDOT will review and approve the relocation plans prior to start of the relocation efforts and will approve any associated permits and ROW documents. The Fort Myer team will communicate, coordinate, and manage the utility relocation efforts with the utility providers on this project from the beginning to its successful completion. We will deal with any utility company that is unresponsive and VDOT will be kept apprised of the progress of the utility relocation efforts through regular meetings and reports. And if need be, VDOT will be requested to help in expediting the relocation efforts through communication with utility companies.

RISK NO. 3: STAKEHOLDERS COORDINATION & IMPACTS

Risk Description

Coordination and management of the numerous and varied major stakeholders that include VDOT, Pentagon, NCPC, NPS, and Arlington County including their Department of Environmental Services, present a challenge in the consolidation of each stakeholders' preferences, design criteria, and ultimate design approval of our work packages. If coordination efforts by all stakeholders are not aligned to the Project commitments and goals, they can have negative impacts on the schedule and budget.

Why This Risk is Critical & How It May Impact the Project

Impacts to the *Boundary Channel Drive at I-395 Interchange D-B Project* include:

- Potential delays in timely design approvals from multiple major stakeholders
- Delays caused by coordination with adjacent projects
- Possible revisions to the design packages and construction sequencing due to input from bike and pedestrian advocacy groups, particularly WABA and FABB

These present critical risks and schedule ramifications on the overall project delivery schedule of the Project. The critical path on respective work package approval(s) could present significant impacts to the overall schedule of this D-B project delivery as well as potentially be detrimental to the respective delivery schedules of adjacent projects underway by these and other stakeholders as well as additional imminent projects.

Each stakeholder has its own respective priorities, design specifications, guidelines and requirements as well as preferences within their jurisdictions—design standards for roadways, stormwater management and transportation management guidelines, trails and shared use paths, sidewalks, curb and gutter, and accommodation of utilities. The success of this project lies in satisfying these major stakeholders (each involved in the design approval process) collectively and expeditiously while meeting compliance with VDOT and FHWA standards. Below are the interests and potential impacts each of the major stakeholders can have on this Project:

- **Arlington County:** Gateway project in their jurisdiction; unique design standards and integral member of design review and approval process; Arlington Public Art group may make request to include special art and/or specialized lighting.
- **Pentagon:** Accessibility and security; more than 25,000 Department of Defense employees - military, civilian, and contractors work here.
- **National Capital Planning Commission (NCPC):** As part of the Washington Headquarters Services (WHS) is responsible for safeguarding DoD's real property (the Pentagon here) and includes liaison activities that includes (among others) utilities, and transportation; conduct design reviews in advisory and/or approval capacity.
- **National Park Service (NPS):** Accessibility to the Mount Vernon Trail; property owner of necessary easements for utilities requiring approval.
- **WMATA:** Accessibility to the Pentagon Metro Station (Blue/Yellow Lines) with a major local and commuter bus transit center.
- **Federal Aviation Administration (FAA):** Potential schedule delays in issuance of permits.
- **Utilities:** Must maintain access and provide uninterrupted service throughout construction.
- **Local Advocacy Groups:** Washington Area Bicyclists Association (WABA) and Fairfax Allegiance for Better Bicycling (FABB), Friends of the Mount Vernon Trail (pedestrian) – active advocacy groups interested in safe accessibility to the Mount Vernon Trail which includes connectivity to five trails in the Washington area network of trails and shared use paths; these trails are actively walked, hiked, and biked seven days a week.

Risk Mitigation Strategies

Fort Myer was a critical part of the team when Long Bridge Park was constructed in 2011 for Arlington County. Fort Myer reconstructed the entire length of Long Bridge Drive from Boundary Channel Drive to Route 1. In addition, Fort Myer has also performed major site work at the Pentagon. So, from the construction coordination point of view, our team realizes the importance of maintaining schedule commitments and partnering with stakeholders in the area. In addition, our lead designer, Volkert, Inc., has routinely generated design plans for VDOT as well as in accordance with Arlington County and/or Federal standards including, but not limited to roadway plans, interstate/interchange plans, bridge plans, and transportation management plans. We also develop environmental permits, identify ROW impacts, determine both private and public utility impacts, and continually assess and analyze risks to a project.

As mentioned in ***Risk No.2: Utilities: Coordination & Management***, early and ongoing coordination with each of the utility owners is critical to getting timely design approval and appropriate permitting secured as soon as possible. The Fort Myer team will develop a communications plan to diligently coordinate with utility owners and primary stakeholders, in order to delve deeper into each's expectations with regard to design preferences and requirements. While we are familiar with the respective design manuals and design standards of each of these stakeholders, we will schedule coordination meetings with each of them as soon as possible upon Notice to Proceed to clarify priorities and collective preferences. Some of the early development steps and processes will initiate at the RFP stage. Respective meetings will be held with both the utility owners and these major stakeholders. The focus will be on their particular issues and to demonstrate our genuine intent to protect their facilities and interests, respectively, as well as to expedite any mutual issues with other stakeholders' projects.

Value Added Staff Experience with Stakeholder Expectations

Staff proposed on this *Boundary Channel Drive at I-395 Interchange D-B* Project have longstanding relationships and work histories with the primary stakeholders involved in this project that will promote prompt design plan(s) approval to advance construction. Each is thoroughly familiar with the respective design standards and preferences of these major stakeholders as well as the prescriptive design standards of VDOT. That our design staff have worked on projects both for and with these agencies is an advantageous mitigating factor to the 21-day turnaround of design package approvals.

Brian Graham, PE, will provide structural engineering support on the Fort Myer team. He has a long-term association with Arlington County and has been leading structural design services on Volkert's ongoing contract with Arlington County Department of Environmental Services' Engineering Services for Inspection & Design Rehabilitation of Bridges since 2016. As the Structural Task Lead, he manages the development of repair and maintenance contracts, design plans, and cost estimates, and provides engineering services, on an as-needed basis, for the County's 35 vehicular and pedestrian bridges and culverts.

Mr. Graham also serves as the Project Manager on Arlington County's *On-Call Streetscape & Structural Analysis & Design Services* leading structural design services that have included preparing bridge repair plans, superstructure replacements, and bridge retrofits to support utilities. On a current representative task, *West Glebe Road Over Four Mile Run*, he managed concept design and development of bridging documents and the technical requirements for the D-B procurement of the County's first transportation D-B project which is advancing now. In this role he coordinated daily with the County during the design development for replacement of the superstructure and repair of the substructure. Concept designs were presented at a Public Meeting, and Mr. Graham advanced the chosen alternative to 30% design. The rehabilitated structure is now scheduled for a D-B delivery which will provide improved multimodal facilities along this vital connection between Arlington County and City of Alexandria.

Under the two contracts listed above, Mr. Graham has managed over 20 transportation related projects for Arlington County in the past four years. Working on these projects has given him and his structural design team an in-depth knowledge of Arlington's design standards and requirements. Being a part of these projects has also allowed him to become very familiar with Arlington County Staff and what their expectations are. Mr. Graham routinely meets with staff members from various groups with the County including engineers, landscape architects, planners and members of the public art group.

Hari Thaker, PE, PTOE, RSP, will provide the traffic engineering services on the Fort Myer team. His experience includes traffic engineering studies, data collection and analysis, and traffic and streetlight design supporting the operational efficiency and safety of multimodal intersections and corridors. His expertise germane to Boundary Channel Drive and I-395 includes network modeling, roundabouts, pedestrian access improvements, corridor studies, and traffic calming projects in urban areas. He prepares and reviews complex TMPs, including Temporary Traffic Control and MOT Plans, and performs on-site and shop drawing reviews.

Mr. Thaker is well-versed in FHWA, VDOT, MUTCD and AASHTO standards as well as those of Arlington County and the NPS. On the *Clark-Bell Extension* for Arlington County, Mr. Thaker designed streetlight upgrades for a protected bicycle trail along Clark Street and Bell as part of the transformation of an area recently selected by Amazon for its HQ2. The signal design features include bus priority signals, a bike signal for the new bicycle trail along with traditional vehicle traffic signal, and ITS fiber communication plans. He developed the sequence of construction utilizing phased approach to minimize traffic disruption and to maintain multimodal mobility. Curbside management included sidewalks and planting areas developed according to Arlington County standards; the project also included bicycle and transit accommodations. Similarly, he is familiar with the standards of the Washington Headquarters Services (WHS) in the National Capital Region and has managed traffic, access management studies at the Fort Meade Campus and National Naval Medical Center (now Walter Reed National Medical Center) as well as developed TMPs including extensive MOT schemes on VDOT I-66 and I-495.

State and local agencies have relied on **Matt McLaughlin (CES), our Utilities Coordinator**, to coordinate utility work for 400+ projects in Northern Virginia and to resolve utility conflicts with minimum impacts and disruptions to utility services. As a former VDOT NOVA District Utility Construction Manager and as a consultant, he has coordinated well over 200 lane miles of utility relocations and recommended strategies for reducing cost, conflicts, and ROW impacts and mitigating delays that have saved agencies significant costs and time. While at VDOT, he managed the district-wide utility construction program including reviews and approvals of utility relocation plans and estimates; utility mitigation; coordination and inspections of utility relocations; resolution of utility conflicts; development of policies, procedures and field protocols and a utility mapping system that uses advanced technologies to create electronic as-built plans. He developed the utility phasing concept, which allows for concurrent ROW acquisition while the utilities are being relocated. VDOT still asks him for assistance for unresponsive utility companies.

As addressed specifically in ***Risk No. 1: Traffic Mobility During Construction***, it is incumbent upon the Fort Myer team to provide up-to-date and consistent information with regards to the Project status to VDOT and the major stakeholders on this Project. The Fort Myer team is committed to proactively provide these communications and assistance through:

- Dynamically supply current, real time information to the respective public affairs offices of these stakeholders on a regular basis.
- Provide real time updates to the VDOT Public Affairs Office for incorporation on the VDOT Project website and dissemination to the stakeholders' public affairs offices.
- Meet with the various constituency groups to include the bicyclists (WABA, FABB) and other interested parties/groups such as the Friends of the Mount Vernon Trail (pedestrians) to address their concerns during VDOT-hosted "Pardon our Dust" and public outreach meetings.

Role of VDOT & Other Agencies

We acknowledge that VDOT will need to coordinate design reviews and approvals with Arlington County, the Pentagon (including NCPC), and NPS. We would encourage VDOT to get a commitment from all design review stakeholders for a fixed review timeframe and adhere to it. Also, getting an order of precedence for design guidelines from each of these stakeholders would be beneficial, in case of stakeholder review/comments conflicts. We intend to involve VDOT and Arlington County (and the other major stakeholders) in all our communications in coordination and outreach efforts for the Project's best interests.

3.6 | Appendices

3.1.2 | SOQ Checklist

ATTACHMENT 3.1.2

Project: 6587-000-R89

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 Tab 3.1.2**
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	**Appendix Sec. 2.10**
Letter of Submittal (on Offeror's letterhead)				**Page 1**
Authorized Representative's signature	NA	Section 3.2.1	yes	**Page 1**
Offeror's point of contact information	NA	Section 3.2.2	yes	**Page 1**
Principal officer information	NA	Section 3.2.3	yes	**Page 1**
Offeror's Corporate Structure	NA	Section 3.2.4	yes	**Page 1**
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	**Page 1**
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	**Appendix Tab 3.2.6**
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	**Appendix Tab 3.2.7**
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	**Appendix Tab 3.2.8**
Evidence of obtaining bonding	NA	Section 3.2.9	no	**Appendix Tab 3.2.9**
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	**Appendix Tab 3.2.10**
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	**Appendix Tab 3.2.10.1**

ATTACHMENT 3.1.2

Project: 6587-000-R89

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	**Appendix Tab 3.2.10.2**
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	**Appendix Tab 3.2.10.3**
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	**None**
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	**Page 1**
Offeror's Team Structure				**Page 2**
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	**Page 3**
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	**Appendix Tab 3.3.1.1**
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	**Appendix Tab 3.3.1.2**
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	**Appendix Tab 3.3.1.3**
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	**Appendix Tab 3.3.1.4**
Organizational chart	NA	Section 3.3.2	yes	**Page 6**
Organizational chart narrative	NA	Section 3.3.2	yes	**Pages 4-5**
Experience of Offeror's Team				**Appendix Tab 3.4.1**

ATTACHMENT 3.1.2

Project: 6587-000-R89

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

2.10 | Form C-78-RFQ

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00116394DB109
PROJECT NO.: 6587-000-R89

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 – October 21, 2020 (Date)
2. Cover letter of RFQ – November 17, 2020 (Date)
3. Cover letter of RFQ – November 20, 2020 (Date)
4. Cover letter of RFQ – December 1, 2020 (Date)

SIGNATURE — DATE: Dec. 8, 2020

Manuel E. Fernandes — PRINTED NAME

Senior Vice President — TITLE

3.2.6 | List of Affiliated & Subsidiary Companies

ATTACHMENT 3.2.6

State Project No. 6587-000-R89

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

3.2.7 | Debarment Certifications

3.2.7(a) Primary Covered Transactions

ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 6587-000-R89

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	December 8, 2020 Date	Manuel E. Fernandes, Senior Vice President Title

FORT MYER CONSTRUCTION CORPORATION

Name of Firm

3.2.7(b) Lower Tier Covered Transactions

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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	12/7/2020 Date	Senior Vice President, Mid-Atlantic Region Title

Volkert, Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

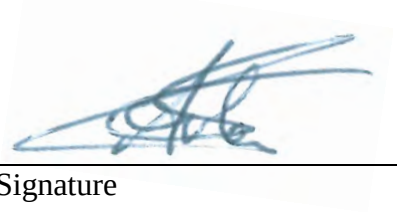
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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	12/02/2020 Date	President Title

CES Consulting, LLC
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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.

Jason Kacamburas	12/3/2020	Operations Manager
Signature	Date	Title

ATCS, PLC

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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.

	12/02/2020	Principal/Office Manager
Signature	Date	Title

Terracon Consultants, Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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: Lauretta Dabbride Date: 12/14/20 Title: President

Name of Firm: Diversified Property Services, Inc.

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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	12/03/2020 Date	Principal Title

J2 Engineers, Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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.

	12-2-2020	Principal
Signature	Date	Title

Dulles Engineering, Inc

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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

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

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

Signature	Date	Title
[signature]	11-7-2020	PRESIDENT

INSIGHT, LLC
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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.

Amir A. Arab	12/3/2020	Vice President, Mid Atlantic Sector
Signature	Date	Title

EXP U.S. Services, Inc.

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 6587-000-R89

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.

	12/07/2020	President
Signature	Date	Title

Dulles Geotechnical and Material Testing Services Inc

Name of Firm

3.2.8 | VDOT Prequalification

Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 12/2/2020
- F -

Vendor ID: F375
Vendor Name: G. B. FOLTZ CONTRACTING, INC.
Prequal Level: Prequalified (Currently Inactive)
Prequal Exp: 05/31/2021

-- PREQ Address --
P.O. BOX 337
MT. JACKSON, VA 22842
Phone: (540)477-2220
Fax: (540)477-3298

Work Classes (Listed But Not Limited To)
101 - EXCAVATING

Bus. Contact: CURRY, LORIE
Email: GBFOLTZ@SHENTEL.NET

-- DBE Information --

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

Vendor ID: F034
Vendor Name: FORT MYER CONSTRUCTION CORPORATION
Prequal Level: Prequalified
Prequal Exp: 05/31/2021

-- PREQ Address --
2237-33RD ST., N.E.
WASHINGTON, DC 20018-1594
Phone: (202)636-9535
Fax: (202)526-8572

Work Classes (Listed But Not Limited To)
003 - MAJOR STRUCTURES
004 - ASPHALT CONCRETE PAVING
006 - PORTLAND CEMENT CONCRETE PAVING
045 - UNDERGROUND UTILITIES
055 - BRIDGE REPAIRS

Bus. Contact: SHRENSKY, LEWIS FRANK
Email: FORTMYER@FORTMYER.COM

-- DBE Information --

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

3.2.9 | Letter of Surety

Willis Towers Watson

Telephone: (205) 871-3300
Fax: (205) 871-0602
Website: www.willistowerswatson.com

Direct Line: (205) 868-0295
Direct Fax: (205) 871-0602
E-mail: ann.hamby@willistowerswatson.com

December 8, 2020

Virginia Department of Transportation
Richmond, VA

RE: Fort Myer Construction Corporation
Project: Boundary Channel Drive at I-395
Contract ID No. NHPP-5B01(120)
State Project No.: 6587-000-R89, P101, R201, C501
Federal Project No.: C0016394DB109
Bid Date: December 8, 2020

To Whom It May Concern:

This letter will serve to confirm that Fort Myer Construction Corporation (FMCC) is a highly regarded and valued client of Willis of Maryland, Inc. and Western Surety Company (a C N A Company).

Western Surety (CNA Surety) has an AM Best Financial Strength Rating of "A" and a Financial Size category of " XIV. "

Western Surety Company has had the privilege of providing surety bond credit to FMCC for many years. The firm has an outstanding reputation in the industry for quality workmanship and excellent relationships with their clients. Western Surety Company has extended bonding credit to FMCC in excess of $100 million per project and in the range of $ 500 million for their overall program.

We are prepared to provide Bid, Performance and Payment Bonds for the reference project. Provided Fort Myer Construction Company and make application to us prior to the commencement of the work and we are satisfied with the prevailing underwriting conditions, including but not limited to acceptable contract forms, contract terms and conditions, warranty periods and bond forms. There is ample surety capacity for this project.

We highly recommend Fort Myer Construction Company to you.

Very truly yours,

WESTERN SURETY COMPANY

By:_____
Ann Hamby, Attorney-In-Fact

Willis of Alabama, Inc.
2101 6th Avenue North
Suite 725
Birmingham, Alabama 35203

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

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

Ben Thompson, C Scott Hull, Susan S. Gardner, Debbie Mantooth, Ann Hamby, Robert E Barnes Jr, Gloria L Toellner, Individually

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

- In Unlimited Amounts -

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

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

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 20th day of November, 2017.

WESTERN SURETY COMPANY

Paul T. Bruflat, Vice President

State of South Dakota
County of Minnehaha } ss

On this 20th day of November, 2017, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021

J. MOHR
NOTARY PUBLIC SOUTH DAKOTA

J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 8th day of December, 2020.

WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-7-2012

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

3.2.10 | SCC & DPOR Information Tables

ATTACHMENT 3.2.10

State Project No. 6587-000-R89

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Fort Myer Construction Corporation	0150814-2	Corporation	Active	2237 33rd Street, NE Washington, DC 20018	CLASS A	2701015396	08-31-2022
Volkert, Inc.	F1366592	Corporation	Active, In Good Standing	6225 Brandon Ave. Suite 540 Springfield, VA 22150	LA, ENG	0407002610	12-31-2021
CES Consulting, LLC	S3416007	Limited Liability Company	Active, In Good Standing	23475 Rock Haven Way, Suite 255 Dulles, VA 20166	ENG	0407005783	12-31-2021
ATCS, P.L.C.	S0048720	Limited Liability Company	Active	13861 Sunrise Valley Drive, Suite 200 Herndon, VA 20171	ENG, LS	0413000006	12-31-2021
Terracon Consultants, Inc.	F1574286	Stock Corporation	Active, In Good Standing	10841 S Ridgeview Road, Olathe, KS 66061	ENG	0407004003	12-31-2021
Diversified Property Services, Inc.	F1304106	Stock Corporation	Active	20 E Timonium Road, Suite 111 Timonium, MD 21093	Appraisal Business Registration	4008001190	11-30-2022
J2 Engineers, Inc.	06784730	Corporation (S)	Active, In Good Standing	602 S. King Street, Suite 100 Leesburg, VA 20175	ENG, LS	0410000267	02-28-2022
Dulles Engineering, Inc.	08141996	Corporation (S)	Active, In Good Standing	4230 Lafayette Center Drive, Suite AB Chantilly, VA 20151	ENG	0405002161	12-31-2021

ATTACHMENT 3.2.10

State Project No. 6587-000-R89

SCC and DPOR Information

Insight, LLC	S1203118	Limited Liability	Active	11105 Brookline Dr., Fairfax, VA 22030	Class A	2705159269	12-31-2021
EXP U.S. Services, Inc.	2020042114 368149	Corporation	Active, In Good Standing	56 Queen Street East, Suite 301 Brampton, Ontario, L6V 4M8, Canada	ENG	0411001455	2-28-2022
Dulles Geotechnical & Material Testing Services, Inc.	07582323	Corporation	Active, In Good Standing	14155 Sullyfield Circle, Suite H, Chantilly, VA 20151	ENG	0407006236	12-31-2021

ATTACHMENT 3.2.10

State Project No. 6587-000-R89

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**
Volkert, Inc.	Nelson Tyler Lee, PE	Virginia Beach, VA	4160 Bridle Way Virginia Beach, VA 23456	PE	0402034119	07-31-2022
CES Consulting, LLC	Avtar Singh, PE	Dulles, VA	6773 Leopolds Trail Haymarket, VA 20169	PE	0402035169	01-31-2021

3.2.10.1 Firm SCC Registration Copies

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	FORT MYER CONSTRUCTION CORPORATION	Entity ID:	01508142
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	02/11/1974	Reason for Status:	Active and In Good Standing
VA Qualification Date:	02/11/1974	Status Date:	05/25/1979
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	VA	Annual Report Due Date:	02/28/2021
Registration Fee Due Date:	02/28/2021	Charter Fee:	$10.00

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

Address: 2237 33RD ST NE, WASHINGTON, DC, 20018 - 0000, USA

Principal Information

Title	Director	Name	Address	Last Updated
President	Yes	JOSE RODRIGUEZ	1450 EMERSON AVE., UNIT 414, MCLEAN, VA, 22101 - 0000, USA	01/15/2019
VP/S/T	Yes	LEWIS F SHRENSKY	10708 BALANTRE LANE, POTOMAC, MD, 20854 - 0000, USA	01/15/2019
VP/SR GEN COUNS	No	CHRISTOPHER M. KERNS	2848 DAVENPORT ST., NW, WASHINGTON, DC, 20008 - 0000, USA	01/15/2019
	Yes	AURORA RODRIGUEZ	1450 EMERSON AVE., UNIT 414, MCLEAN, VA, 22101 - 0000, USA	01/15/2019
	Yes	BARBARA SHRENSKY	10708 BALANTRE LN, POTOMAC, MD, 20854 - 0000, USA	01/15/2019

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name: Volkert, Inc.
Entity ID: F1366592
Entity Type: Stock Corporation
Entity Status: **Active**
Formation Date: N/A
Reason for Status: Active and In Good Standing
VA Qualification Date: 01/21/1999
Status Date: 02/28/2020
Industry Code: 0 - General
Period of Duration: Perpetual
Jurisdiction: AL
Annual Report Due Date: 01/31/2021
Registration Fee Due Date: 01/31/2021
Charter Fee: $50.00

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

Address: PO Box 7434, Mobile, AL, 36670 - 0434, USA

Principal Information

Title	Director	Name	Address	Last Updated
ASST CONTROLLER	No	PAULA A. BEASLEY	11 North Water Street, Suite 18290, Mobile, AL, 36602 - 0000, USA	05/21/2020
Secretary	No	ROGER GUILIAN	11 North Water Street, Suite 18290, Mobile, AL, 36602 - 0000, USA	05/21/2020
SENIOR VICE PRESIDENT	Yes	KEITH P WEAKLEY	6225 BRANDON AVE, STE 540, Springfield, VA, 22150, USA	05/21/2020
CHAIRMAN	Yes	David Allsbrook	5430 Wade Park Blvd, Suite 410, Raleigh, NC, 27607, USA	05/21/2020

Current Shares

Total Shares: 2250

State Corporation Commission
Clerk's Information System

Entity Information

Entity Name:	CES Consulting, LLC	Entity ID:	S3416007
Entity Type:	Limited Liability Company	Entity Status:	**Active**
Formation Date:	10/14/2010	Reason for Status:	Active
VA Qualification Date:	10/14/2010	Status Date:	10/14/2010
Industry Code:	70 - Other Professional Companies	Period of Duration:	Perpetual
Jurisdiction:	VA		
Annual Report Due Date:	N/A		
Registration Fee Due Date:	Not Required	Charter Fee:	N/A

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	ATCS, P.L.C.	Entity ID:	S0048720
Entity Type:	Limited Liability Company	Entity Status:	Active
Formation Date:	06/30/1994	Reason for Status:	Active
VA Qualification Date:	06/30/1994	Status Date:	11/28/2001
Industry Code:	73 - Architects	Period of Duration:	12/31/2044
Jurisdiction:	VA	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	N/A

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 ROAD, SUITE 285, GLEN ALLEN, VA, 23060 - 0000, USA

Principal Office Address

Address:	13861 SUNRISE VALLEY DR, SUITE 200, HERNDON, VA, 20171 - 0000, USA

Principal Information

Management Structure:	N/A

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	Terracon Consultants, Inc.	Entity ID:	F1574286
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	N/A	Reason for Status:	Active and In Good Standing
VA Qualification Date:	01/21/2004	Status Date:	01/21/2004
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	DE	Annual Report Due Date:	01/31/2021
Registration Fee Due Date:	01/31/2021	Charter Fee:	$50.00

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

Address: 10841 S. RIDGEVIEW RD, OLATHE, KS, 66061 - 0000, USA

Principal Information

Title	Director	Name	Address	Last Updated
President	Yes	M GAYLE PACKER	10841 S RIDGEVIEW RD, OLATHE, KS, 66061 - 0000, USA	12/27/2018
Treasurer	No	DONALD J. VRANA	10841 S RIDGEVIEW RD, OLATHE, KS, 66061 - 0000, USA	12/27/2018
Secretary	No	MICHAEL J. YOST	10841 S RIDGEVIEW RD, OLATHE, KS, 66061 - 0000, USA	12/27/2018
	Yes	TIMOTHY W. ANDERSON	4685 ASH AVE. STE H4, TEMPE, AZ, 85282 - 0000, USA	12/27/2018
	Yes	C. HAROLD COBB	11555 CLAY ROAD, SUITE 100, HOUSTON, TX, 77043 - 0000, USA	12/27/2018

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	DIVERSIFIED PROPERTY SERVICES OF VIRGINIA, INC.	Entity ID:	F1304106
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	N/A	Reason for Status:	Active and In Good Standing
VA Qualification Date:	08/05/1997	Status Date:	11/11/2019
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	MD	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	$50.00

Registered Agent Information

RA Type:	Individual	Locality:	FAIRFAX COUNTY
RA Qualification:	Officer of the Corporation		
Name:	BRENDAN R HANTZES	Registered Office Address:	3771 VERMACCHIA DR, CHANTILLY, VA, 20151 - 0000, USA

Principal Office Address

Address:	20 E TIMONIUM RD SUITE 111, TIMONIUM, MD, 21093 - 0000, USA

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	J2 Engineers, Inc.	Entity ID:	06784730
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	06/04/2007	Reason for Status:	Active and In Good Standing
VA Qualification Date:	06/04/2007	Status Date:	06/04/2007
Industry Code:	70 - All professions not listed above	Period of Duration:	Perpetual
Jurisdiction:	VA	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	$550.00

Registered Agent Information

RA Type:	Individual	Locality:	LOUDOUN COUNTY
RA Qualification:	Director of the Corporation		
Name:	JAMES C BISHOFF	Registered Office Address:	602 SOUTH KING STREET, SUITE 100, LEESBURG, VA, 20175 - 0000, USA

Principal Office Address

Address: 4080 LAFAYETTE CENTER DRIVE, SUITE 330, CHANTILLY, VA, 20151 - 0000, USA

Principal Information

Title	Director	Name	Address	Last Updated
Vice President	Yes	JAMES C BISHOFF	40168 BRADDOCK RD, ALDIE, VA, 20105 - 0000, USA	06/21/2019
S/T	No	SAFIYE BISHOFF	40168 BRADDOCK RD, ALDIE, VA, 20105 - 0000, USA	06/21/2019
	Yes	ERIC W ERICKSON	355 DUKE LANE, BLUEMONT, VA, 20135 - 0000, USA	06/21/2019
President	Yes	JEFFREY L GILLILAND	6997 CLIFTON FOREST DR, CLIFTON, VA, 20124 - 0000, USA	06/21/2019

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	Dulles Engineering, Inc.	Entity ID:	08141996
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	01/26/2017	Reason for Status:	Active and In Good Standing
VA Qualification Date:	01/26/2017	Status Date:	12/09/2019
Industry Code:	70 - All professions not listed above	Period of Duration:	Perpetual
Jurisdiction:	VA	Annual Report Due Date:	01/31/2021
Registration Fee Due Date:	01/31/2021	Charter Fee:	$50.00

Registered Agent Information

RA Type:	Individual	Locality:	LOUDOUN COUNTY
RA Qualification:	Director of the Corporation		
Name:	ALI DAR	Registered Office Address:	42033 FOLEY HEADWATERS ST, ALDIE, VA, 20105 - 0000, USA

Principal Office Address

Address: 4230 LAFAYETTE CENTER DR., STE AB, CHANTILLY, VA, 20151 - 0000, USA

Principal Information

Title	Director	Name	Address	Last Updated
	Yes	ALI DAR	42033 FOLEY HEADWATERS ST, ALDIE, VA, 20105 - 0000, USA	01/09/2018

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	Insight, LLC	Entity ID:	S1203118
Entity Type:	Limited Liability Company	Entity Status:	Active
Formation Date:	04/13/2004	Reason for Status:	Active
VA Qualification Date:	04/13/2004	Status Date:	06/21/2017
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	VA	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	N/A

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

Address:	11105 BROOKLINE DRIVE, FAIRFAX, VA, 22030 - 0000, USA

1901501076

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

January 3, 2019

CT CORPORATION SYSTEM
14707-A WILLAR ROAD
CHANTILLY, VA 20151

RECEIPT

RE: **Insight, LLC**

ID: **S1203118**

DCN: **1901035459**

Dear Customer:

This is to acknowledge the filing of a statement of change of registered office and/or registered agent for the above-referenced limited liability company with this office.

The effective date of the change is January 3, 2019.

If you have any questions about this matter, please contact this office at the addresses or telephone numbers shown below.

Sincerely,

Joel H. Peck
Clerk of the Commission

RECEIPT
CISECOM

1901501076

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

eFile
(12/09)

STATEMENT OF CHANGE OF REGISTERED OFFICE AND/OR REGISTERED AGENT

1. RE: **Insight, LLC**

   ID: **S1203118**

2. Current registered agent's name and registered office address on record (including the jurisdiction in which the registered office is physically located):
   CT CORPORATION SYSTEM
   4701 COX ROAD, SUITE 285
   GLEN ALLEN, VA 23060-0000 (HENRICO COUNTY)

3. The current registered agent is a domestic or foreign stock or nonstock corporation or limited liability company authorized to transact business in Virginia.

4. The registered agent's name and registered office address after this statement is filed with the Commission (including the jurisdiction in which the registered office is physically located):
   CT CORPORATION SYSTEM
   14707-A WILLAR ROAD
   Chantilly, VA 20151 (FAIRFAX COUNTY)

5. The registered agent named in item 4 is a domestic or foreign stock or nonstock corporation or limited liability company authorized to transact business in Virginia.

6. After the foregoing change or changes are made, the limited liability company will be in compliance with the requirements of § 13.1-1015 of the Code of Virginia.

Signed on January 3, 2019, on behalf of Insight, LLC
By: Taylor Platas, Office Administrator
/s/ Taylor Platas

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	EXP U.S. Services Inc.	Entity ID:	F1859646
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	05/02/2011	Reason for Status:	Active and In Good Standing
VA Qualification Date:	05/02/2011	Status Date:	05/02/2011
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	DE	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	$50.00

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

Address:	56 QUEEN STREET EAST, SUITE 301, BRAMPTON, Ontario, L6V 4M8, CAN

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name:	Dulles Geotechnical and Material Testing Services, Inc.	Entity ID:	07582323
Entity Type:	Stock Corporation	Entity Status:	**Active**
Formation Date:	11/26/2012	Reason for Status:	Active and In Good Standing
VA Qualification Date:	11/26/2012	Status Date:	12/19/2018
Industry Code:	0 - General	Period of Duration:	Perpetual
Jurisdiction:	VA	Annual Report Due Date:	N/A
Registration Fee Due Date:	Not Required	Charter Fee:	$50.00

Registered Agent Information

RA Type:	Individual	Locality:	LOUDOUN COUNTY
RA Qualification:	Director of the Corporation		
Name:	TARIQ BIN HAMID	Registered Office Address:	42727 STRALOCH TERRACE, ASHBURN, VA, 20147 - 0000, USA

Principal Office Address

Address:	14155 SULLYFIELD CIRCLE, SUITE H, CHANTILLY, VA, 20151 - 0000, USA

3.2.10.2 Firm DPOR Registration Copies

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
08-31-2022

NUMBER
2701015396

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS CBC ELE H/H RBC

FORT MYER CONSTRUCTION CORPORATION
2237 33RD ST NE
WASHINGTON, DC 20018

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS CBC ELE H/H RBC
NUMBER: 2701015396 EXPIRES: 08-31-2022

FORT MYER CONSTRUCTION CORPORATION
2237 33RD ST NE
WASHINGTON, DC 20018

(FOLD)

AUG 21 2020

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

DPOR-PC (02/2017)

DPOR License Lookup License Number 0407002610

License Details

Name	VOLKERT INC
License Number	0407002610
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	6225 BRANDON AVE STE 540, SPRINGFIELD, VA 22150
Initial Certification Date	1983-07-29
Expiration Date	2021-12-31

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2021

NUMBER
0407005783

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

PROFESSIONS: ENG

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

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005783 EXPIRES: 12-31-2021
PROFESSIONS: ENG
CES CONSULTING LLC
23475 ROCK HAVEN WAY
SUITE 255
DULLES, VA 20166

(FOLD)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2021

NUMBER
0413000006

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

PROFESSIONS: ENG, LS

ATCS P L C
13861 SUNRISE VALLEY DR STE 200
HERNDON, VA 20171

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL LIMITED LIABILITY COMPANY
NUMBER: 0413000006 EXPIRES: 12-31-2021
PROFESSIONS: ENG, LS
ATCS P L C
13861 SUNRISE VALLEY DR STE 200
HERNDON, VA 20171

(FOLD)

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

DPOR-PC (02/2017)

PATENTS 5,197,70 5,340,159

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2021

NUMBER
0407004003

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

PROFESSIONS: ENG

TERRACON CONSULTANTS INC
ATTN: MICHAEL J YOST
10841 S RIDGEVIEW ROAD
OLATHE, KS 66061

DPOR

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

Mary Broz-Vaughan, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

License Search | Advanced License Search | Disciplinary Action Search

License Details

Name	DIVERSIFIED PROPERTY SERVICES OF VIRGINIA INC
License Number	4008001190
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	20 E TIMONIUM ROAD SUITE 111, TIMONIUM, MD 21093-0000
Initial Certification Date	2000-11-29
Expiration Date	2022-11-30

The license information in this application was last updated at Mon Dec 07 02:50:18 EST

License Lookup legal disclaimer

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
02-28-2022

NUMBER
0410000267

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

PROFESSIONS: LS ENG

J2 ENGINEERS INC
602 S KING ST
STE 100
LEESBURG, VA 20175

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
12-31-2021

NUMBER
0405002161

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

PROFESSIONS: ENG

DULLES ENGINEERING INC
4230 LAFAYETTE CENTER DR STE AB
CHANTILLY, VA 20151

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL CORPORATION REGISTRATION
NUMBER: 0405002161 EXPIRES: 12-31-2021
PROFESSIONS: ENG
DULLES ENGINEERING INC
4230 LAFAYETTE CENTER DR STE AB
CHANTILLY, VA 20151

(FOLD)

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

DPOR-PC (02/2017)

DPOR License Lookup License Number 2705159269

License Details

Name	INSIGHT LLC
License Number	2705159269
License Description	Contractor
Firm Type	LLC - Limited Liability Company
Rank [1]	Class A
Address	14707 A WILLARD RD, CHANTILLY, VA 20151
Specialties[2]	Highway / Heavy (H/H)
Initial Certification Date	2015-12-11
Expiration Date	2021-12-31

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.

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

DPOR License Lookup build 1,426 (built 2020-10-01 09:09:15).

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
02-28-2022

NUMBER
0411001455

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

PROFESSIONS: ENG

EXP U.S. SERVICES, INC
56 QUEEN ST EAST
STE 301
BRAMPTON, ONTARIO, L6V 4M8 CANADA

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001455 EXPIRES: 02-28-2022
PROFESSIONS: ENG
EXP U.S. SERVICES, INC
56 QUEEN ST EAST
STE 301
BRAMPTON, ONTARIO, L6V 4M8 CANADA

(FOLD)

License Details Related Licenses

Name	DULLES GEOTECHNICAL AND MATERIAL TESTING SERVICES, INC
License Number	0407006236
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	14119 SULLYFIELD CIR STE H, CHANTILLY, VA 20151
Initial Certification Date	2013-02-15
Expiration Date	2021-12-31

The license information in this application was last updated at Mon Dec 07 02:50:18 EST.

License Lookup legal disclaimer

3.2.10.3 Key Personnel DPOR Registration Copies

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
01-31-2021

NUMBER
0402035169

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

AVTAR SINGH
6773 LEOPOLDS TRAIL
HAYMARKET, VA 20169

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

Jay W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402035169 EXPIRES: 01-31-2021

AVTAR SINGH
6773 LEOPOLDS TRAIL
HAYMARKET, VA 20169

(FOLD)

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

DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON
07-31-2022

NUMBER
0402034119

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

NELSON TYER LEE JR
4160 BRIDLE WAY
VIRGINIA BEACH, VA 23456

DPOR

Mary Broz-Vaughan, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

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: **Sam Patel, DBIA, *Sr. Project Manager***

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

c. Name of the Firm with which you are employed at the time of submitting SOQ.: **Fort Myer Construction Corporation (Fort Myer), Washington, DC, Full-Time**

d. Employment History: With this Firm **11** Years With Other Firms **2** 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):

A Senior Project Manager with Fort Myer since 2009, **Mr. Sam Patel, DBIA,** possesses a wealth of construction management experience having served in various positions throughout his career, as Lead Estimator, Project Manager, Field Engineer, and Quality Control Engineer. He is well-respected for his creativity and leadership. In addition to his vast experience leading every aspect—from safety, quality, and MOT to overseeing operations, crews and scheduling—Sam understands how to facilitate effective communication between a project team and the client, and foster partnership. This communication is one of the reasons the projects he oversees are successful for everyone involved.

Firm: **Fort Myer Construction** **Start Date:** 2018 **End Date:** present
Position: *Sr. Project Manager.* General responsibilities include oversight and management of heavy highway construction projects (Design-Build (D-B) and Design-Bid-Build delivery methods) including procurement/technical phase efforts, leading the design/constructability overviews for D-B projects, leading weekly/bi-weekly progress meetings, creating and tracking project schedules, material procurement, managing field crews and subcontractors, overseeing quality control and document control, overseeing reconciliation of monthly quantities, billings and schedule updates, conducting pre-activity meeting for major tasks, implementation of QA/QC and safety plan, participating in public outreach events representing the project team, primary point of contact for DOT clients for negotiations and discussing any issues about company's performance. As Project Manager, Sam led projects like the $20M *Columbia Pike Multimodal Street Improvements* for Arlington, VA and the $91M *I-295/Malcolm X Interchange Improvements* for DDOT.

Firm: **Fort Myer Construction** **Start Date:** 2009 **End Date:** 2018
Position: *Lead Estimator / Project Manager.* General responsibilities in this position include leading procurement and purchasing efforts for heavy highway construction projects (ranging from $1M to $500M projects), identifying risks and its mitigation, coordinating with subcontractors and estimating team to lead best value procurement through various procurement methods, serving as D-B Coordinator/Manager for D-B Projects, leading execution of subcontracts and QA/QC Plans, and participate in large projects on project level. Also conduct lessons learned sessions with project team during and after project execution. Involved with projects as the Lead Estimator ranging from the $2M Reconstruction of Long Bridge Drive to accommodate Long Bridge Park for Arlington, VA, to the role of D-B Coordinator for the award-winning $46M *Rehabilitation of I-66* for VDOT, completed in 2012.

Firm: **Milan Construction Enterprises, NJ** **Start Date:** 2008 **End Date:** 2009
Position: *Site Superintendent.* General responsibilities in this position included oversight of site operations for three new hotels on a 10-acre parcel, including site clearing, grading, storm water drainage, building pads, site concrete, plumbing, mechanical and architectural elements of the project. Participated in owner meetings with County and with financial institutions to make sure permit requirements and schedules were met.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
University of Maryland, Baltimore County, MD | BS | 2008 | Mechanical 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.)

BRADDOCK ROAD (ROUTE 620) & PLEASANT VALLEY (ROUTE 609) ROUNDABOUT PROJECT, FAIRFAX COUNTY, VA, VDOT

D-B Project Manager. Sam led the D-B team from the procurement phase through successful project completion for this $4.2M D-B roundabout project. He presented in "Pardon our Dust" meetings to public outreach meetings and oversaw design efforts to make sure public comments and utility companies (NOVEC, Dominion Virginia Power, Fiber Light and Quest) comments were incorporated into the project. Monitored and participated in the Easement and ROW negotiations and deeds. Sam led the development of a QA/QC Manual for the project and fully supported its implementation. He led D-B coordination workshops between utility companies and the Fort Myer D-B team to make sure all risks were identified and addressed. He participated actively in MOT phasing work sessions to ensure MOT patterns maximized the construction activities with minimum interruption to the public and utility companies. He created and updated baseline schedule, and oversaw monthly billings including as-built submissions, DEQ requirements, coordination with adjacent projects, coordination with local businesses like Cox Farms to ensure their Spring and Fall festivals go without any interruptions from the construction operations and provide them with proper MOT for their business entrances. Due to the political nature of this project, funded by Loudon County and built in Fairfax County, Sam had to meet with Loudon County delegates and supervisors to share the County's progress and concerns. He also coordinated with VDOT during every phase of the project and made sure all the risks were mitigated for VDOT in a timely and successful manner. The project had ZERO safety incidents. Construction Cost: $4.2M

Project Start & End Dates: 04/2014 - 06/2016 | ***Firm:*** Fort Myer | ***Reference:*** Chan Basnayake, PE, PMP, CCM - (703) 259-2947 - chan.basnayake@VDOT.Virginia.gov

ST. ELIZABETH'S EAST CAMPUS STAGE 1 PHASE 1 INFRASTRUCTURE IMPROVEMENTS – TEMPORARY SURFACE PARKING LOTS, WASHINGTON, DC, DEPARTMENT OF GENERAL SERVICES (DGS)

D-B Project Manager. This D-B project involved the construction of three temporary surface parking lots on St. Elizabeth's East Campus. The parking lots are located at the Dorothea Dix Administration Building, R.I.S.E Demonstration Center, and Parcel 15 located at 2730 Martin Luther King, Jr. Avenue, SE. This project was in response to the ongoing redevelopment of the East Campus, including the need for additional temporary parking for the Gateway Pavilion, and the entertainment and sports arena facility. The project scope included 50,000 CY of excavation, erosion and sediment control, pavement demolition, mill and overlay, full depth asphalt pavement, shared use path, sidewalks, connections to existing businesses and buildings, utility relocations (Pepco and DC Water), site lighting and new storm water drainage. This $13.8M fast paced project had to be designed, permitted, and constructed in a little over 10 months. ***Responsibilities:*** Led the D-B team from procurement phase to its successful completion. The design for the lots and streets had to be coordinated with DDOT, DC Events, and DOES. Under Sam's supervision, all design milestones were achieved ahead of time, as a result of detailed design submissions, over the shoulder reviews from stakeholders during design phase to eliminate confusion after construction begins, making risk matrix and keeping track of mitigation efforts. Construction crews worked six days a week for six months to make sure the project was delivered ahead of time, opening events were already planned for DC Events. At the end, project delivery was applauded by all stakeholders and the project has ZERO safety incidents. Construction Cost: $13.8M

Project Start & End Dates: 07/2018 - 05/2019 ***Firm:*** Fort Myer | ***Reference:*** Allam Al-Alami - (202) 441-2027 - alam.al-alami@dc.gov

I-495 NORTHERN SHOULDER LANE USE DESIGN-BUILD PROJECT, FAIRFAX COUNTY, VA, VDOT

D-B Coordinator. Sam led the D-B team from the procurement phase and through the post award, scope validation, and up to 100% design drawings phase. The project scope included 1.5-mile of shoulder strengthening that will allow traffic to travel on the left shoulder of northbound I-495 from where the 495 Express Lanes end to the George Washington Parkway. The scope also included Intelligent Transport Systems (ITS), 12,000 CY of hard surface pavement demolition, erosion and sediment controls, 45,000 tons of asphalt pavement, 6500 LF of concrete barrier overlay, and drainage improvements. He played an active role in leading client partnering efforts throughout the project and ensured every element was on track. Sam led the design task groups where demolition and MOT packages were broken out in individual design packages, allowing the reviews and construction to begin earlier. Under his coordination efforts, construction activities went smoothly without any design interruptions and constructability issues. The updates to comment logs from reviewers and adherence to risk mitigation matrix was a key to delivering design submittals on time. He participated on bi-weekly construction meetings providing guidance from schedule and constructability point of view and made sure the schedule and budget were maintained. The project was safely and timely completed with ZERO safety incidents. Construction Cost: $15.4M

Project Start & End Dates: 02/2014 – 05/2015 | ***Firm:*** Fort Myer | ***Reference:*** Paul Nishimoto, Project Manager – (703) 259-2362 – paul.nishimoto@VDOT.Virginia.gov

* 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.

N/A

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Avtar Singh, PE, CCM, DBIA, President & Quality Assurance Manager**

b. Project Assignment: **Quality Assurance Manager**

c. Name of the Firm with which you are employed at the time of submitting SOQ.: **CES Consulting, LLC (CES), Dulles, VA, Full-Time**

d. Employment History: With this Firm **10** Years With Other Firms **16** 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):

Avtar Singh, PE, CCM, DBIA, has 26 years of construction management and project controls experience focused on transportation infrastructure. His experience includes QA, QC, and OIA (owner's independent assurance) management of routine and large Design-Bid-Build (D-B-B), Design-Build (Dd)B, and P3 projects ranging in project value up to $565M. This experience includes QA and QC management of several D-B projects involving the construction of 5 roundabouts. Due to Avtar's QAM leadership and expertise, VDOT has rated his QAM services as 'Exceeds Expectations' and he has earned excellent CQIP scores for QA services ranging up to 100%. As the former Area Construction Engineer for VDOT's Northern Virginia District, Avtar was responsible for more than 28 projects with a cumulative construction value of more than $230M. He ensured that project startup, execution and closeout processes complied with VDOT and FHWA standards.

Name of Firm: CES Consulting, LLC **Start Date:** 2010 **End Date:** present

Position: *President & QAM.* Avtar is a hands-on manager who actively manages QA services for D-B projects. He develops and updates QA/QC plans and monitors compliance; conducts QA audits of the design QA/QC plan; manages QA inspection and testing to confirm correct frequency and accuracy of QC inspection and testing; approves materials testing reports; identifies and resolves non-compliant work and testing results; certifies compliance to contract requirements; leads preparatory inspection meetings; coordinates witness and hold points; prepares QA reports and NCRs; maintains the non-conformance log, deficiency log, and project testing /frequencies Materials Notebook; and generates the punch list and verifies completion.

Name of Firm: VDOT NOVA District **Start Date:** 2006 **End Date:** 2010

Position: *Area Construction Engineer.* Avtar managed VDOT D-B-B projects and provided oversight of locally administered projects in Prince William and Loudoun counties. He managed VDOT construction managers, inspectors and office staff performing construction management of multiple concurrent projects. He was responsible for constructability and biddability reviews prior to advertisement, project startup and execution, pay application certifications, and contract closeouts. He confirmed compliance with VDOT and FHWA standards; resolved contractual issues with the district and central offices and field issues; reviewed and negotiated work orders; and resolved construction and schedule claims.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
George Washington University, Washington, DC | Master's Certificate | 2007 | Project Management
Queens University, Kingston, Ontario in Canada | MS | 1994 | Civil Engineering
Queens University, Kingston, Ontario in Canada | BS | 1992 | Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2001 | Professional Engineer | VA 0402 035169

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.)

US 15/17/29 Warrenton Southern Interchange Design-Build, Fauquier County, VA, VDOT

Quality Assurance Manager. Avtar managed QA services for the construction of an innovative interchange (using a modified barbell interchange Concept) with two roundabouts at each end of the precast-concrete bridge to replace a signalized intersection. The single-lane roundabouts can handle tractor-trailers up to 69 feet long. The project also features a 2,000-foot-long pedestrian path across the bridge. Avtar drafted the Construction Quality Management Plan; managed QA inspection, testing, and documentation to ensure all construction activities were inspected, tested and documented properly; reviewed and certified pay applications; coordinated OIA/IV testing with VDOT; and coordinated with the FHWA Area Engineer. Avtar recommended solutions to field challenges such as safety concerns due to extensive work in heavy traffic, limited staff to inspect day and night operations, and multiple MOT patterns to allow construction of the multiple ramps coming off the roundabouts, coordination. In a 2020 VDOT performance evaluation, Avtar's QA/QC plan as well as the QA materials testing and QA inspection services, received an **'Exceeds Expectations' rating**. Due to Avtar's leadership and attention to detail, the QA team received a **CQIP score of 100%.** Construction Cost: $19.6M

Project Start & End Dates: 02/2018 – 10/2020 | ***Firm:*** CES | ***Reference:*** Gregory Cooley - (434) 906-7979 - gregory.cooley@VDOT.Virginia.gov

Route 772 Transit Connector Bridge, Loudoun County, VA, Loudoun County DTCI

Loudoun County DTCI Quality Control Manager. Avtar managed QC services for the construction of a new 411-foot-long, three span, steel-girder bridge over the Dulles Greenway Toll Road, roadway approaches; the Moorfield Boulevard extension to Croson Lane; a roundabout; and a shared use path. Avtar set up the QC processes and procedures needed to ensure that QC inspectors properly tested (per frequency of testing matrices) and documented construction operations. This included QC IDRs, Materials Book testing logs sheets as related to QC work, C-107s, as-built information submitted to the contractor for updating SWPPPs, Work Zone checklists, materials testing reports, and information for deficiency and NCR logs. He recommended solutions to project challenges including meeting construction milestones within very restrictive MOT guidelines; working with a locality with limited D-B experience to ensure federal and state funding requirements were met; and coordinating with, and tying into, an adjacent developer-constructed road. Avtar ensured that non-conforming work items were rectified within established timelines and participated the monthly meetings with the contractors, designers, and Loudoun County and VDOT representatives. Construction Cost: $17M

Project Start & End Dates: 05/2016– 02/2018 | ***Firm:*** CES | ***Reference:*** Ron Mallory - (703) 737-8822 - Ronald.Mallory@loudoun.gov **or** Horace Culpeper - (571) 205-2605 - Horace.Culpeper@loudoun.gov

Albemarle Bundled Projects, Charlottesville, VA, VDOT

Quality Assurance Manager. Avtar manages QA services for the D-B project delivery of six projects, including two new single-lane roundabouts to enhance safety, new connecting roads to enhance connectivity, a diverging diamond interchange to improve traffic flow and volume connecting to I-64, and entrance/exit ramp improvements to eliminate dangerous traffic weaving concerns. The design-builder concurrently works on designing several projects while starting construction on approved projects, which requires extensive collaboration and coordination to confirm compliance with approved design and construction QA/QC plans. Avtar drafted the construction QA/QC plan; manages QA inspection and documentation to ensure construction activities are inspected, tested and documented properly; reviews and approves inspection documentation; and reviews and certifies pay applications. Challenges include construction under heavy traffic adding safety concerns; coordinating multiple projects at various phases of scoping, design, and construction; scheduling and maximizing the work of limited staff to inspect and document multiple projects simultaneously. Construction Cost: $28.5M

Project Start & End Dates: 07/2019 – 02/2023 | ***Firm:*** CES | ***Reference:*** Gregory Cooley - (434) 906-7979 – gregory.cooley@VDOT.Virginia.gov

* 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.

- Albemarle Bundled Projects | Quality Assurance Manager (part-time) | Project Completion June 2022
- I-95 Express Lanes Fredericksburg Extension | Quality Assurance Manager (part-time) | Project Completion July 2022

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Nelson "Ty" Lee, Jr., PE, Senior Project Manager /Director of Transportation**

b. Project Assignment: **Design Manager**

c. Name of the Firm with which you are employed at the time of submitting SOQ.: **Volkert, Inc. (Volkert), Virginia Beach, VA & Springfield, VA, Full-Time**

d. Employment History: With this Firm **3** Years With Other Firms **31** Years

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

Ty Lee, PE, has more than three decades of experience with the management and successful delivery of complex, multi-disciplinary projects including Design-Build (D-B), with scope of work similar to the *Boundary Channel Drive at I-395 Interchange D-B Project*. His experience includes the development and on-time delivery of right-of-way (ROW) and construction plans, constructability reviews, cost estimating, risk analysis, and public hearing support. With 22 years of experience working with the City of Virginia Beach and nine years of experience working with VDOT, Ty has collaborated with regional, VDOT, and FHWA officials, elected officials, citizen organizations, and numerous other third-party stakeholders to resolve a wide range of transportation issues. *Ty also served as the VDOT PM for the Oak Grove Roundabout, VDOT Hampton Road District's first roundabout ($5M).* His multi-faceted experience provides him with the technical expertise and knowledge of policy, laws, and regulations to provide innovative and Common Sense Engineering (CSE) solutions. This serves projects well when coupled with his ability to act decisively in coordination with multiple agencies and local jurisdictions to build consensus and support for the project. In his leadership role at Volkert, Ty manages, coordinates, and oversees multiple projects, assuring that the Owner's standards for quality, cost and schedule are met, and he will bring those skills to this D-B project.

Name of Firm: Volkert, Inc. **Start Date:** 2017 **End Date:** present
Position: *Senior Project Manager/Director of Transportation.* Ty is responsible for Volkert's transportation projects in the Hampton Roads area. He provides overall management and leadership, verifying that projects are completed on-time and within budget; and meet the local, State, and federal standards and regulations.

Name of Firm: VDOT Hampton Roads District **Start Date:** 2009 **End Date:** 2017
Position: *Senior Project Manager.* Ty managed roadway Six-Year Improvement Plan (SYIP) projects with a total cost in excess of $300M. He briefed management and citizens on the status of projects within SYIP. He managed and directed consultants and VDOT Central Office designers to ensure successful completion of the projects.

Name of Firm: VDOT Hampton Roads District **Start Date:** 2008 **End Date:** 2009
Position: *Assistant District Location & Design Engineer.* Ty served as the lead designer of a project design team during the design of primary, secondary, and urban roadway projects within the Hampton Roads District. He supervised design staff, and developed project schedules, estimates, and project manpower reports. He provided QA/QC of roadway projects for various disciplines within the District, including the *Project Management Office* and *Urban Office*.

Name of Firm: **City of Virginia Beach, Public Works/Engineering** **Start Date:** 2004 **End Date:** 2008
Position: *Engineer IV.* Ty managed the *Roadway Project Management Office*; supervised design professionals and construction inspection staff; and established the project support office, as well as the systematic development of preliminary alignments, scopes and estimates. He provided capital programming/budgeting and was responsible for the roadways section of the *Capital Improvement Program (CIP),* which included approximately 55 projects/programs with an estimated cost in excess of $400M.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Old Dominion University, Norfolk, VA | BS | 1994 | Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2000 | Professional Engineer | VA 0402034119

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.)

US 15/17/29 Warrenton Southern Interchange, Fauquier County, VA, VDOT

Design Manager. The US 15 / 17 / 29 / 29 Business (Warrenton Bypass) corridor is a busy commuter route carrying approximately 43,500 motorists each day. With substantial growth in the area, traffic is expected to increase to more than 74,000 by 2040. During Ty's preliminary design, the project was selected for the Alternative Delivery Program. Ty finalized the preliminary design promoting roundabout(s) construction; subsequently supported VDOT with the development of bridging documents and support at the Public Hearing; provided review of the D-B construction documents; and continued to provide support during construction at VDOT request. Ty provided design review QA and constructability reviews on behalf of VDOT for the replacement of the existing at-grade intersection, with a grade-separated interchange to improve safety and capacity. His responsibilities also included review of design submittals to verify conformance with contract documents, VDOT, and AASHTO standards, including the geometric design criteria, drainage design criteria, roundabout performance analysis, a design-waiver for shared-use path; and traffic analysis. Future reviews will include bridge TS&L plans; roadway plans; and landscape plans. ***Evidence of Good Performance:*** Based on Ty's performance in the development of the PD&E and bridging documents for the project, Volkert was asked to provide Design QA during the D-B delivery of the project. Construction Cost: $19.6M

Project Start & End Dates: 02/2019 – 11/2020 | ***Firm:*** Volkert | ***Reference:*** William Stowe, PE - (540) 827-7287 - william.stowe@VDOT.Virginia.gov

Courtland Interchange on Route 58, Southampton County, VA, VDOT

VDOT Project Manager. Ty managed the development of the design of a new interchange that consolidates three intersections on Route 58, a four-lane, divided, east-west highway and a National Highway Safety designated corridor. A roundabout interchange was chosen as the preferred alternative due to the added capacity and safety inherent to roundabouts. The design included 2.9-miles of roadway improvements, two roundabouts, ramps, retaining walls, two new pre-stressed concrete bulb-tee bridges, and constructed wetlands. Utility relocations and ROW acquisitions were reduced by widening in the median. ***Evidence of Good Performance:*** The roundabout alternative resulted in reduced ROW and environmental impacts, increased safety and capacity, and provides a gateway into the town. At VDOT request, Volkert continued to provide construction phase services and after joining Volkert, Ty provided constructability reviews and additional construction phase services until construction completion. Construction Cost: $15M

Project Start & End Dates: 03/2016 – 12/2018 | ***Firm:*** VDOT | ***Reference:*** Bruce Duvall, PE - (757)956-3054 - bruce.duvall@VDOT.Virginia.gov

Southern Corridor Connector, Waynesboro, VA, VDOT

Project Manager. This future roadway is a key regional improvement project, designed to alleviate congestion, and improve access to adjacent industrial, commercial and residential properties. Ty led the alignment study and design for a new SMART SCALE 1.6-mile multimodal two-lane roadway with ***a new roundabout, a shared-use path***, and a new rail crossing. The design includes roadway alignments, stormwater, and drainage, as well as development of wetlands impact minimization strategies. Plans were developed to VDOT standards in accordance with the LAP manual and included coordination with the City of Waynesboro and local stakeholders. ***Evidence of Good Performance:*** Ty led the ***development of roundabout alternatives*** to meet the anticipated need for WB-67 truck movements along the corridor, per VDOT policy. His CSE approach resulted in a designed roundabout option with a 90-foot inscribed diameter to meet the turning requirements. Although the designed roundabout reduced construction costs, based on public input, the owner selected a standard four-legged intersection in lieu of the roundabout. Construction Cost: $12M

Project Start & End Dates: 09/2021 anticipated – 03/2024 anticipated | ***Firm:*** Volkert | ***Reference:*** Thomas Marando, PE - (540) 332-7746 - thomas.marando@VDOT.Virginia.gov

* 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. N/A

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Joao Constantino, Construction Manager**

b. Project Assignment: **Construction Manager**

c. Name of all Firms with which you are employed at the time of submitting SOQ: **Fort Myer Construction Corporation (Fort Myer), Washington, DC, Full-Time**

d. Employment History: With this Firm **16** Years With Other Firms **11** 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):

Mr. Joao Constantino is a Construction Manager responsible for directing and supervising the construction and Quality Control activities to ensure work and materials meet contract requirements and the "approved for construction" plans and specifications. Joao also ensures all safety measures meet and/or exceed all safety policies. He is responsible for the overall successful delivery of all construction and field related activities on time and within budget.

Name of Firm: **Fort Myer Construction** Start Date: 2013 End Date: Present

Position: *Construction Manager*. Joao is responsible for management of field construction activities for Design-Build (D-B) and Design-Bid-Build projects, which include adherence to the QA/QC plans, ensuring materials used and work performed meet all contract requirements and approved plans and specifications, supervision of field personnel, coordination with stakeholders and subcontractors, and accurate and timely daily job reports. As the Construction Manager for DDOT's $20M *Minnesota Avenue Revitalization – Phase 2*, Joao supervised all field activities, which included reconstruction of full depth pavement, installation of storm and water utilities, installation of duct banks and manholes, site electrical, erosion and sediment control and landscaping. As Construction Manager for Fairfax County's $9.5M *Lee Highway/Route 29 Widening Phase 3*, Joao was entrusted to oversee a significant amount of night work as his crews constructed an additional travel lane northbound. Joao provides overall leadership for construction along the 1.8-mile site, compliance with contract documents and approved plans and specifications, safety, quality and environmental oversight, and subcontractor and third-party coordination.

Name of Firm: **Civil Construction** Start Date: 2002 End Date: 2013

Position: *General Superintendent*. Joao was responsible for overseeing all field operations including scheduling, work execution, planning, ordering materials, quantities consolidations, and quality control.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Howard Community College, Columbia, MD | Associates Degree | 1999 | Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
VDOT Erosion & Sediment Control (ESCCC) | Responsible Land Disturber (RLD) | OSHA 10 | Intermediate Work Zone Traffic Control Training | Flagger Certification

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.)

COLUMBIA PIKE MULTIMODAL STREET IMPROVEMENTS, ARLINGTON, VA, ARLINGTON COUNTY– *Construction Manager*. Joao managed construction on-site, and scoped, priced, procured, and managed subcontractors for this critical Arlington County $20M project. He resolved field issues; and oversaw document, schedule, cost, and claims management services during construction of all underground utilities and installation of dry utility duct banks for Dominion Virginia Power, Verizon, and COMCAST. Roadway improvements included full depth roadway reconstruction, shared-use path, relocation of bus shelters, sidewalks, curb and gutter, ADA ramps, streetlights, the replacing and/or modifying of existing traffic signals, and landscaping. He led construction scheduling meetings, utility coordination meetings with Arlington County and utility companies. He participated in cost meetings during construction to ensure budgets and timelines were met. He successfully coordinated with stakeholders and subcontractors while managing multiple Fort Myer crews and ensured that the traffic management plan was followed all the time. Joao ensured there were safe and ADA complaint travel ways for pedestrians and bicyclists throughout the work zone and project limits. He successfully coordinated the transfer of all overhead utilities including Comcast and Verizon to newly built underground infrastructure. Joao kept multiple subcontractor crews and Fort Myer's own multiple crews on schedule; and provided daily detailed reports and as-builts to the Project Manager. He also ensured all quality control and safety measures were properly adhered to according to

Fort Myer, VDOT and County safety and environmental standards. Joao participated in constructability reviews for the revised Traffic Management Plan and utility relocation plans. Under his supervision, the crews built dedicated transit stations for the bus systems of Arlington Transit and WMATA, without any impacts to the route schedules. ***Evidence of Good Performance:*** This project exhibits Joao's ability to manage the construction of a quality product safely, within the projected budget, and ahead of schedule, while performing night-time construction to minimize traffic disruptions to busy transportation corridors in Arlington, VA. Completion of the project provided increased vehicular safety, and reduced congestion. Complex utility coordination and public outreach were involved in this project. Joao orchestrates several moving parts to meet milestones on time and keep tasks moving forward in a timely fashion. Construction Cost: $20.5M

Project Start & End Dates: 02/2018- 11/2020 | ***Firm:*** Fort Myer | ***Reference:*** Edward Sanders, Project Officer - (571) 220-7047 - esanders@arlingtonva.us

ROUNDABOUT AT OAKTON COMMUNITY PARK - PHASE 2A INTERSECTION IMPROVMENTS, FARIFAX, VA, FCDOT – *Construction Manager.* Joao managed the construction of a constructed a roundabout and several other road treatments in the efforts to alleviate traffic congestions on a major arterial road and avoid. Joao's duties included overall management for the construction activities including scheduling labor, material and equipment and managing a complex MOT. Joao communicated extensively with project stakeholders and public outreach staff to ensure the lane closure requests and the planned sequence of construction activities were notified to commuters and residents via the right platforms. Under his supervision, the implementation of the traffic management plan was safely executed without any backups or interruptions to a heavily travelled corridor. This project was located at the entrance of Oak Community Park, and Joao ensured entrance was open and maintained all times and traffic has safe mobility through there. He was also responsible for the project compliance with VDOT DEQ requirements and RLD requirements. He ensured project controls were in place and executed, led schedule meetings, provided direction for superintendents, represented Fort Myer in meetings with client representatives, ensured adequate staffing and materials acquisition. Joao oversaw the crews constructing a reinforced-concrete traffic roundabout at the intersection of Hunter Mill Road and Mystic Meadow Way with associated road improvements including concrete and asphalt sidewalks, curb ramps, concrete medians, and curb and gutter. Additional work included storm drainage, site improvements, asphalt restoration, site lighting, landscaping and pavement markings. ***Evidence of Good Performance:*** This project is an example of one the first roundabout's in Virginia. Due to congestion and safety problems, VDOT and Fairfax County DOT (FCDOT) are committed to improving safety and mobility for all road users in the commonwealth area. By incorporating innovative intersections and interchanges such as roundabouts, Virginia agencies were pleased to work with the Fort Myer Construction team to improve safety, increase efficiency, reduce speeds, and provide long term cost effectiveness and aesthetics for the residents. Construction Cost: $1.8M

Project Start & End Dates: 06/2018-05/2018 | ***Firm*:** Fort Myer | ***Reference*:** Sanjala Bajracharya, Engineer III, Utilities Design & Construction Division - (703) 324-3018 - sanjala.bajracharya@fairfaxcounty.gov

D-B OF I-495 NORTHERN SECTION SHOULDER USE, FAIRFAX, COUNTY, VA, VDOT – *Construction Manager.* Joao was primarily responsible for managing the construction activities of this complex D-B interstate widening project. He got involved in the very early RFP stage for this project and provided some innovative construction techniques to complete the project on time and budget. He was very critical in providing his inputs especially when it came to MOT and drainage design packages. Upon NTP, Joao was proactive with his communications with the Transurban HOT lanes project. This project required close coordination with the Transurban Hot Lanes Project as it was at the very north terminus of the I-495 Hot lanes and the ITS system (for this new D-B Project) was supposed to be integrated with overall VDOT control center. He also led the coordination efforts with Dominion to install the SE-9 services of the new ITS and streetlight system on the project. This project consisted of rehabilitation of I-495 Pavement (including 48,000 Tons of asphalt), subgrade stabilization, seal repairs, storm drainage repairs, concrete barrier modifications, intelligent transportation system, bride scupper and drainage repairs, bridge joint repairs and pavement markings. Joao led the crews with daily safety talks and preconstruction activities with the QC Team. He ensured all crews and subcontractors had a clear direction on their scope and he ensured the labor, material and equipment needs were satisfactory to accomplish the tasks once mobilized on I-495. He respected the comments from the QA staff and addressed any non-conformances in an expedited fashion. He ensured the daily reports including any as-builts, material tickets and equipment reports were compiled accurately, to further complement the QC reports. Joao always addressed all safety measures immediately and as a result there were zero incidents on the project. ***Evidence of Good Performance:*** This project exhibits Joao's ability to manage the construction of a quality product safely, within the projected budget, and ahead of schedule, while performing night-time construction to minimize traffic disruptions to a busy transportation corridor in the Northern Virginia region. Completion of the project provided increased vehicular safety, and reduced congestion. Construct Cost: $15.4M

Project Start & End Dates: 04/2014 - 06/2015 | **Firm:** Fort Myer | **Reference:** Paul Nishimoto, Project Manager - (703) 259-2362 - paul.nishimoto@VDOT.Virginia.gov

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

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

Columbia Pike Multimodal Street Improvements | $20M | Arlington, Virginia | Anticipated Completion: 11/2020 (final punch list)

3.4.1 | Work History Forms

3.4.1(a) Lead Contractor

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **DESIGN-BUILD OF BRADDOCK ROAD (RTE. 620) & PLEASANT VALLEY ROAD (RTE. 609) INTERSECTION IMPROVEMENT** Location: **Fairfax County, VA**	Name: **Whitney Bailey Cox & Magnani, LLC**	Name of Client: **VDOT NOVA District** Phone: **(703) 259-0243** Project Manager: **Chan Basnayake, PE, PMP, CCM** Phone: **(703) 259-2947** Email: **chan.basnayake@vdot.virginia.gov**	**06/2016**	**06/2016**	**$4,178**	**$4,200**	**$4,200**

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

"Design-Builder was prompt in addressing issues that would affect the construction schedule, in a proactive manner. D-B B maintained good professional relationships with all the stakeholders to promote partnering spirit."

~ Chan Basnayake, PE, Area Construction Engineer

Fort Myer Construction was awarded this $4.1M D-B project by VDOT, to add a roundabout at intersection of Braddock Road (Route 620) and Pleasant Valley Road (Route 609) in Fairfax County, Virginia, to accommodate increased traffic capacity and enhance vehicular and pedestrian safety. The existing four-way stop produced congestion and caused significant delays during peak travel times. The new roundabout includes crosswalks and curb ramps for pedestrians, landscaping, and lighting.

SUCCESS IN COMPLEX UTILITY RELOCATIONS

This was a very politically sensitive D-B project that had a lot of complex factors including right of way acquisitions, utility relocations, critical MOT, and active businesses and stakeholders. Critical coordination was required with utility companies like NOVEC, Verizon, COX and Fiber light to accommodate their utility infrastructure relocations within the revised ROW and easements. Fort Myer has multiple meetings with all utility owners, together, through workshops to alleviate any utility conflicts and risks. Each utility owner schedules were also discussed and agreed in these meetings.

VIGILANT MAINTENANCE-OF-TRAFFIC

The MOT plan required extensive analysis and design alternatives to maintain mobility during construction for an extremely congested intersection. The travel lanes were only 11-feet wide, restricting traffic and construction space. MOT plans were developed keeping the utility relocations in mind, maneuvering of emergency vehicles through the construction zones, mobility of large tractor trailers (WB-62) through the work zones and maintaining access to adjacent business like Cox Farms. Careful implementation advance warning signs, traffic signs and flagging operations were maintained through roundabout construction and drainage construction to safely direct the flow of traffic and maintain a safe work zone. Major activities were scheduled during off-peak hours to minimize impact to the residents and commuters. VDOT staff and Cox Farms Owner complimented our team on our partnering spirit and positive customer service among multiple stakeholders.

ON-TIME & WITHIN BUDGET COMPLETION: The project was completed on time and within budget.

EVIDENCE OF GOOD PERFORMANCE: Fort Myer received excellent marks for the Timeliness, business relations, and stakeholder partnership for this project. Fort Myer also maintained detailed quality control/ assurance documents on site and had ZERO safety incidents on the project.

RELEVANT ELEMENTS

- ✓ Design-Build
- ✓ Roadway improvement
- ✓ Multiple stakeholder
- ✓ Utility relocation
- ✓ Lighting
- ✓ Erosion & Sediment Control
- ✓ Drainage upgrades
- ✓ Critical MOT minimizing congestion
- ✓ Coordination with adjacent projects
- ✓ Drainage upgrades
- ✓ Public outreach
- ✓ Roundabout construction

KEY & OTHER PERSONNEL INVOLVEMENT ON THIS PROJECT

- ✓ Sam Patel, DBIA, *D-B Project Manager*
- ✓ Matt McLoughlin, *Utility Coordinator*

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Fairfax, Virginia

FIRM ROLE

- ✓ Lead Contractor

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **STRINGFELLOW ROAD (ROUTE 645) WIDENING TO FAIR LAKES** Location: **Fairfax, VA**	Name: **Rinker Design Associates**	Name of Client: **VDOT NOVA District** Phone: **703-259-0243** Project Manager: **Chan Basnayake, PE, PMP, CCM** Phone: **(703) 259-2947** Email: **chan.basnayake@vdot.virginia.gov**	**03/2012**	**05/2015**	**$22,300**	**$23,700**	**$23,700**

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.

"VDOT greatly appreciates your company's efforts to complete this project on time and under budget. Thanks to good faith partnering efforts between Fort Myer and the Department, the Project Team was able to meet two previous critical project milestones and place the new roadway in service seven months prior to the contract completion date."

~ Oscar Jamilla, DPE, PMP, Senior Construction Manager

This 1.8-mile section of Stringfellow Road connects two major roads, Route 50 and Route 29, which were severely congested in both directions. Fort Myer was responsible for widening of the entire 1.8-mile corridor, a five- to six-foot wide sidewalk on the west side of Stringfellow Road, and a ten-foot wide shared use path on the east side; wide curb lanes to accommodate bicyclists; drainage improvements; landscaping; adding a left-turn lane northbound to Route 50; and modifying the southbound approach to Route 50 to improve traffic flow. Other design features were a custom engineered precast concrete CONSPAN arch structure spanning 50-feet at Rocky Run and improvements to two Fairfax County parks (Poplar Tree and Greenbriar) within the project limits.

LIMITING IMPACTS TO THE TRAVELING PUBLIC: EFFECTIVE TRAFFIC CONTROL PLAN

This highly traveled commuter roadway runs by Rocky Run Middle School and Chantilly High School, Chantilly Regional Library, and three Fairfax County Parks. During construction the Fort Myer managed the work to mitigate disruption in use of these facilities. In addition, this two-mile corridor is home to five major utility runs with spurs and crossings throughout and there were no major utility delays due to advanced planning and cooperation with stakeholders. Fort Myer worked closely with VDOT to develop a revised traffic control plan that reduced the project from four to two construction phases. This revised plan, along with other recovery efforts, allowed the project to be opened to four full lanes two months ahead of schedule, minimizing the inconvenience to commuters, pedestrians and bicyclists.

SUCCESSFUL PUBLIC OUTREACH & PARTNERSHIP WITH STAKEHOLDERS: VDOT praised Fort Myer not only for working ahead of schedule, but also for our success in working with community stakeholders, including residents, HOA's, Fairfax County Schools, and the Fairfax County Park Authority, to ensure their needs were met throughout the project. Important community businesses and services remained accessible through construction and contacts were well-informed of what to expect during construction and how to resolve any concerns. Fort Myer participated in public outreach events, providing extensive support to VDOT in answering public questions. Some of the comments were even incorporated to modify the MOT sequence. Fort Myer's efforts were applauded by all stakeholders in this corridor.

AHEAD OF SCHEDULE DELIVERY & WITHIN BUDGET COMPLETION: Even with scope additions made by VDOT, the project achieved early schedule milestone completions. VDOT commended our team for timeliness of performance.

EVIDENCE OF GOOD PERFORMANCE: Fort Myer received a commendation letter from VDOT congratulating our project team on meeting two critical project milestones, having the new roadway configuration in service two months prior to the contract completion date and our success in working with community stakeholders.

RELEVANT ELEMENTS

- ✓ Roadway reconfiguration
- ✓ Multiple stakeholders involved
- ✓ VDOT Acceptance
- ✓ Shared-use path
- ✓ NOVA District
- ✓ Utility relocation
- ✓ Drainage upgrades
- ✓ Critical MOT
- ✓ Coordination with adjacent projects
- ✓ Public outreach

KEY & OTHER PERSONNEL INVOLVEMENT ON THIS PROJECT

- ✓ Sam Patel, DBIA, *Lead Estimator*

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Fairfax, Virginia

FIRM ROLE

- ✓ Lead Contractor

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: **COLUMBIA PIKE (ROUTE 244) MULTIMODAL STREET IMPROVEMENTS** Location: **Arlington, VA**	Name: **Kimley-Horn & Associates**	Name of Client: **Arlington County** Phone: **(703) 228-4719** Project Manager: **Edward Sanders** Phone: **(571) 220-7047** Email: **esanders@arlingtonva.us**	**08/2020**	**11/2020** (client added scope and assigned additional time)	**$14,584**	**$20,539** (increase due to client-initiated change orders)	**$20,539**

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.

Fort Myer's responsibilities included underground utility installation including dry utility duct banks for Dominion Energy, Verizon, and COMCAST. Roadway improvements included wider sidewalks, curb and gutter, ADA ramps, new street lights, the replacing and/or modifying and upgrading existing traffic signals, and landscaping. A signal light was placed at the intersection of South Frederick Street and Columbia Pike.

OVERCOMING CHALLENGES: LIMITING IMPACTS TO THE TRAVELING PUBLIC: A significant challenge our team overcame was the installation of duct banks under the roadway without affecting traffic. The work was completed precisely, professionally, and to the satisfaction of the owner. Staff evaluated several alternatives and determined the traffic lane configuration keeping one lane open in each direction was the best choice for minimal community impacts. This included complex MOT and Fort Myer's assistance redesigning MOT to maximize construction activities and minimize inconvenience to the public and bicyclists. We took into account the access necessary for businesses and residential complexes. Our project leaders helped the county with active monitoring of the roadway and made adjustments to improve safety and access including changes in signal timing, additional signage for restrictions and detours, and delineation of travel lanes.

SUCCESSFUL UTILITY RELOCATION & MOT: Even though this was a Design-Bid-Build Project, Fort Myer participated heavily on redesigning of utilities and its easements (including Storm, Dominion Virginia Power, Verizon, Comcast, Washington Gas and Streetlight/ITS) and MOT. Due to Fort Myer's innovative approaches, the county allowed Fort Myer to participate in the redesigning meetings and work sessions. Fort Myer presented concepts, constructability reviews, what-if scenarios, MOT patterns unique to each phase and other important feedback to the owner and its Engineer of Record. Special attention was given to pedestrian and bicyclist traffic during the entire construction period and MOT patterns were designed to accommodate them. The project was completed without any complaints to the county in regards to the revised MOT patterns. Fort Myer led the coordination and partnership efforts with utility owners and parcel owners, and mitigated the schedule and constructability risks for the project. Fort Myer worked out of sequence and on weekends to address stakeholders concerns. At the end, this was project that was completed on time due to great collaboration and partnership efforts by all parties. On-time completion was important for the county to maintain its commitment to its constituents and Fort Myer was pleased to be part of the solution.

Arlington County's project officer especially noted Fort Myer's timeliness and praised the team for our ability to "***continually meet milestones and construction schedules.***"

~ Edward Sanders, Arlington County Government

ON-TIME & WITHIN BUDGET COMPLETION: Despite scope additions from the client and site challenges, Fort Myer delivered this project on-time. Arlington County's Project Officer commended our team for timeliness of performance.

EVIDENCE OF GOOD PERFORMANCE: Fort Myer received high rankings on our project evaluation form upon completion in the following categories: Quality, Timeliness, Stakeholder Coordination and Partnering efforts. Fort Myer has built strong partnerships with local utility owners like Dominion Virginia Power, Verizon, and Comcast.

RELEVANT ELEMENTS

- ✓ Roadway improvements
- ✓ Multiple stakeholders
- ✓ Utility relocation
- ✓ Lighting
- ✓ Arlington County
- ✓ Intelligent Transportation Systems (ITS)
- ✓ Drainage upgrades
- ✓ Critical MOT
- ✓ Coordination with adjacent projects
- ✓ Public outreach

KEY & OTHER PERSONNEL INVOLVEMENT ON THIS PROJECT

- ✓ Sam Patel, PE, *Senior Project Manager*
- ✓ Joao Constantino, *Construction Manager*

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Arlington, Virginia

FIRM ROLE

- ✓ Lead Contractor

3.4.1(b) Lead Designer

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **COURTLAND INTERCHANGE ON ROUTE 58** Location: **Fauquier County, Virginia**	Name: **Curtis Contracting, Inc.**	Name of Client: **VDOT Hampton Roads District** Phone: **(540) 332-9075** Project Manager: **Bruce Duvall, PE** Phone: **(757) 494-5480** Email: **bruce.duvall@vdot.virginia.gov**	**03/2016**	**12/2018**	**$15,000**	**$15,000**	**$2,601**

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.

Route 58 is a four-lane, divided, primary arterial, an east-west highway and a National Highway Safety designated corridor, serving as a primary evacuation route and an economic thoroughfare connecting I-95 and I-85 with the Hampton Roads region. Providing project management and civil, structural, traffic, and hydraulic engineering services, Volkert developed a design that consolidates three intersections and provides a new gateway to Courtland. The design consists of a new 224-foot-long two-span interchange bridge, and ramps; two roundabouts; a new 525-foot-long five-span bridge over wetlands; roadway widening to add an auxiliary lane; constructed wetlands; retaining walls; signs; and pavement markings.

INNOVATIVE DESIGN TECHNIQUES: Through the use of a context sensitive solutions (CSS) and multidisciplinary approach, the design preserves the scenic and environmental resources—wetlands and property owned by the Cheroenhaka Indian Tribal Heritage Foundation—of the area and adds lasting value while achieving VDOT's goal for an operationally efficient and safe interchange. The design of surface-flow constructed wetlands was a cost-effective and innovative way of dealing with high groundwater elevations. The technology used removes pollutants while expanding the natural ecosystem.

REDUCING IMPACTS WITH INNOVATIVE SOLUTIONS: The strategic use of MSE walls and roundabouts reduced the project footprint; widening Route 58 in the median reduced utility relocations and ROW acquisition; and replacement of top-controlled intersections by roundabouts eliminated stops, increased safety, and calmed traffic. Impacts to wetlands were minimized with longer bridge spans, reducing the number of piers supporting the new bridge, and with pile bents to eliminate excavation. Utility relocations and ROW acquisition were reduced by widening Route 58 in the median. Replacement of stop-controlled and signalized intersections with roundabouts eliminated stops, increased safety, and calmed traffic

TRAFFIC ENGINEERING: Volkert conducted traffic data collection and analyses of six intersections. Methodologies presented in the Highway Safety Manual were used to predict crash frequencies with and without the proposed interchange for future years 2017 and 2036. Volkert then conducted traffic and safety analyses of three alternatives and documented the transportation implications related to the build-out of each per VDOT and FHWA requirements (IIM-LD-200.8). The study results demonstrated that the existing at-grade connections cannot accommodate future traffic demands and a grade-separated interchange was recommended to provide unimpeded traffic flow along US 58 and enhance mobility and vehicular safety through the corridor. Although both of the grade-separated interchange alternatives would accommodate future traffic demands, the roundabout interchange was the preferred alternative due to the added capacity and safety inherent to roundabouts. Additionally, the roundabout interchange alternative resulted in lower ROW and environmental impacts and could serve as a gateway into the town of Courtland with aesthetic enhancements.

QA/QC PLAN: As part of Volkert's Corporate QA/QC program, a project specific QA/QC plan was implemented for the Courtland Interchange project that integrated VDOT's internal processes and checklists (e.g. LD-436) along with Volkert's own Quality processes and checklists, peer reviews, and reviews of Subconsultant plans and processes to identify any issues early on, thus avoiding any rework and schedule impacts. This included review and validation of Volkert's IJR to meet FHWA requirements for purpose and need and NEPA documentation.

ON-TIME & WITHIN BUDGET COMPLETION: Volkert met VDOT's design schedule on-time and within budget, providing a cost-effective design that reduced wetlands and ROW impacts, eliminated left turns, improved sight distance, provided safer access, and calmed traffic. Volkert continued to provide construction engineering services through the construction phase.

"…District Project Management Office is very pleased with Volkert's responsiveness, technical and professional guidance, and aggressive design advancement on this project. Another very strong trait that the Volkert team has brought to this project is its thorough knowledge of VDOT's project development process; which, I believe, is invaluable."
~ Bruce Duvall, PE, District Manager, Project Management Office, VDOT Hampton Roads District

RELEVANT ELEMENTS

- ✓ 2.9-miles of roadway designed
- ✓ IJR on an accelerated schedule
- ✓ Two new roundabouts
- ✓ Route 58 roadway widening
- ✓ Safety & operations improvements
- ✓ Drainage and SWM
- ✓ Innovative SWM design included 1.5 acres of surface-flow constructed wetlands
- ✓ Transportation Management Plan
- ✓ Signing & pavement marking
- ✓ MSE retaining walls
- ✓ Minimized ROW acquisition
- ✓ Minimized utility relocation coordination
- ✓ Addressed challenging geotechnical conditions

KEY PERSONNEL INVOLVEMENT ON THIS PROJECT

- ✓ Ty Lee, PE, *Former VDOT Project Manager & Volkert's Construction Phase Services Manager*

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Springfield, Virginia

FIRM ROLE

- ✓ Prime Designer

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **US 15/17/29 WARRENTON SOUTHERN INTERCHANGE** Location: **Fauquier County, Virginia**	Name: **Shirley Contracting Co. of Lorton**	Name of Client: **VDOT Charlottesville Project Office** Phone: **(434) 293-0011** Project Manager: **Harold Jones, Jr., PE** Phone: **(434) 529-6311** Email: **harold.jones@vdot.virginia.gov**	**02/2019 [D-B Contract]**	**11/2020 [D-B Contract]**	**$19,600**	**$ 19,600**	**$1,334**

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.

The US 15 / 17 / 29 / 29 Business (Warrenton Bypass) corridor is a busy commuter route – the convergence of multiple primary arterials carrying approximately 43,500 motorists each day to employment centers in Northern Virginia. With substantial growth in the area, traffic is expected to increase to more than 74,000 by 2040. When the Warrenton Bypass was constructed in the 1980s, VDOT envisioned an interchange at Lord Fairfax Drive. With significant traffic delays and backups at the signalized intersection with Lord Fairfax Drive (Route 880), VDOT moved forward with the project. **In the course of the preliminary design contract, the project was selected for the Alternative Delivery Program.** Volkert supported VDOT with not only finalizing the preliminary design, but also with development of bridging documents and support at the Public Hearing. Volkert is currently providing review of the D-B construction documents.

INNOVATIVE DESIGN TECHNIQUES: Volkert studied solutions for improving traffic operations along the corridor with a focus on safety, efficiency, and economy. The study addressed operational efficiency including impacts to three adjacent intersections, safety, geometric feasibility, environmental impacts, and planning. Both at-grade and grade-separated alternatives were screened and studied and **the tight diamond interchange with roundabout terminal intersections alternative was deemed the optimum configuration.** Volkert's preliminary design incorporated a grade-separated interchange with two innovative roundabout solutions for ramp terminals connecting to existing local, congested urban roadways. Volkert completed the project risk analysis matrix and participated in the risk analysis meeting in support of preparation of D-B documents.

HYDROLOGIC & HYDRAULIC ANALYSIS: Conceptual drainage design including closed storm sewer and roadside ditches were developed as part of the design for the Public Hearing plans. SWM, phased E&SC, and SWPPP concept plans were developed to provide accurate estimates for the proposed ROW associated with the improvements.

DETAILED COST ANALYSIS & ALTERNATIVE EVALUATION: To reduce construction costs as part of the effort to meet the constrained SMARTSCALPE Budget of $26.3M on the project, Volkert provided a meticulous cost estimate utilizing an in-house estimating tool, CoBRA, and was able to design to budget, and eliminate $12.2M from the project while still providing safety and congestion improvements. The savings were realized through the use of a design waiver for the width reduction of the shared-use trail and slope modifications, reducing costs. Ultimately, the estimates were used to evaluate contractor bids. Cost estimates (and work order analyses) generated by CoBRA are highly accurate and an exclusive added value to VDOT.

EXISTING CONDITIONS & OPERATIONAL ANALYSES: The existing conditions analysis involved modeling a one-mile segment of the Warrenton Bypass, using Synchro followed by the development of traffic forecasts for opening year 2020 and design year 2040. Synchro, SimTraffic, Sidra, and HCS were used for operational analyses of the phase-able alternatives for opening year 2020 and design year 2040. The study addressed operational efficiency including impacts to three intersections, safety, geometric feasibility, environmental impacts, cost, and planning. This type of analysis is part of the added-value that Volkert provides. At any point during the design and construction of the project our traffic engineers are available to provide support with the design and MOT plans.

QA/QC PLAN: As part of Volkert's QA/QC program, a project specific QA/QC plan was implemented for the Courtland Interchange project that integrated VDOT's internal processes and checklists (e.g. LD-436) along with Volkert's own Quality processes and checklists, peer reviews, and reviews of Subconsultant plans and processes to identify any issues early on, thus avoiding any rework and schedule impacts. This included review and validation of Volkert's IJR to meet FHWA requirements for purpose and need and NEPA documentation.

DESIGN-BUILD DOCUMENT REVIEW: Based on the support on the support provided during the development of the preliminary design and bridging documents, VDOT asked Volkert to provide post-award D-B document review as a supplementary service, including a constructability review. Volkert continued with scope validation, and construction plan and MOT plan review. RFIs, shop drawing, and Change Order review will follow once construction starts.

ON-TIME & WITHIN BUDGET COMPLETION: Project completed ahead of schedule and within budget.

TRANSITION TO ALTERNATIVE DELIVERY

Volkert developed preliminary design plans for the interchange including roundabouts, ramps, and ancillary roadways, incorporating Lord Fairfax Drive and Route 15/17/29 Business as part of the limited access roadway. A shared-use path was included in the overall design providing safe and effective connections through the interchange, and ultimately providing a connection to the *SE Warrenton Greenway Trail*. Volkert's services included development of bridging documents for D-B procurement.

RELEVANT ELEMENTS

- ✓ D-B Delivery
- ✓ One-mile of roadway designed
- ✓ Roadway improvements
- ✓ Utility relocation
- ✓ Roundabout design
- ✓ Stormwater management
- ✓ E&SC
- ✓ Drainage upgrades
- ✓ Lighting
- ✓ Critical MOT minimizing congestion
- ✓ Detailed cost analysis
- ✓ Coordination with adjacent projects
- ✓ Multiple stakeholders
- ✓ Owner's Rep review of D-B documents
- ✓ Scoping validation
- ✓ Constructability review
- ✓ Public Outreach

KEY PERSONNEL INVOLVEMENT ON THIS PROJECT

- ✓ Ty Lee, PE, *Design Manager*

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Springfield, Virginia
- ✓ Virginia Beach, Virginia

FIRM ROLE

- ✓ Prime Designer

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

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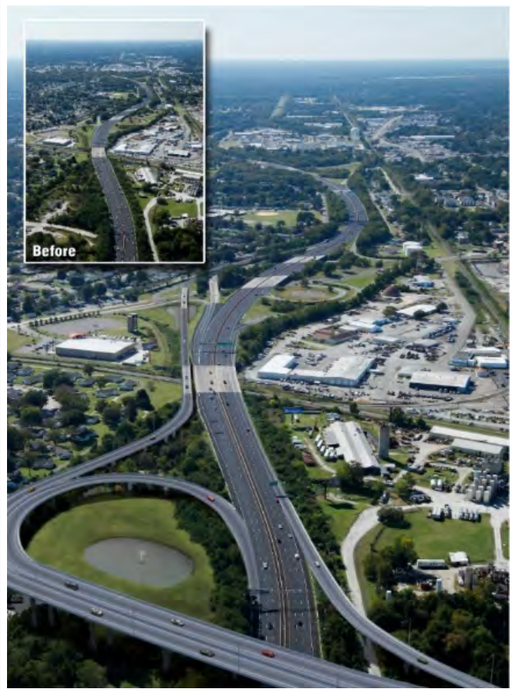
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: **MARTIN LUTHER KING, JR., EXPRESSWAY EXTENSION, ELIZABETH RIVER CROSSING/ MIDTOWN TUNNEL (D-B) P3** Location: **Portsmouth, Virginia**	Name: **SKW Constructors (Skanska, Kiewit, Weeks Marine Joint Venture)**	Name of Client: **Elizabeth River Crossing, LLC & VDOT** Phone: **(757) 932-4400** Project Manager: **Jeff Sullivan** Phone: **(757) 673-9483** Email: **jeff.sullivan@kiewit.com**	**10/2012**	**11/2016**	**$210,000**	**$210,000**	**$11,922**

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.



Volkert managed engineering and design of the Martin Luther King (MLK) Expressway (US 58) Extension a one-mile, four-lane, elevated, limited-access, urban principal arterial, and a significant component of the $2.1B Elizabeth River Crossing PPTA project. In addition, this specific $210M project component included design of two new urban interchanges at I-264 and High Street, modifications to the London Boulevard interchange, an urban plaza, two bridge widenings on I-264, the widening of I-264 to add auxiliary lanes, side road improvements, retaining walls, and new stormwater management facilities. While WSP was the lead designer of the overall P3 project, **Volkert led the multidisciplinary design team on this standalone D-B roadway corridor element directly providing project management; roadway design; traffic, structural, and hydraulic engineering design; landscape architecture design; and construction phase services.** In addition, Volkert developed the design of two new interchanges at I-264 and High Street; two bridge widenings on I-264; the widening of I-264 to add auxiliary lanes; modifications to the London Boulevard interchange; side road improvements; an urban pedestrian plaza; retaining walls; and new stormwater management (SWM) facilities.

INNOVATIVE DESIGN TECHNIQUES: Volkert utilized a context sensitive design approach to minimize impacts to the traveling public and the local historic elements (including a cemetery, Calvary Baptist Church, and the Prentiss Park neighborhood). The design maintained connectivity between neighborhoods with pedestrian friendly amenities; provided streetscape enhancements and an urban plaza on High Street to serve as a gateway into the historic district; and incorporated aesthetic treatments on and under the bridges. Connectivity to the existing pedestrian paths on the north side of the project enhanced the project and improved safety for residents using the improved signalized crossing.

ENVIRONMENTAL COMPLIANCE, SAFETY, QUALITY, WORKMANSHIP: Volkert's design used not only met budget but in some areas was able to result in significant cost savings:

- The use of hybrid plate girders saved approximately $700,000.
- Revision of one span arrangement from a three-span to a two-span unit, and elimination of one line of pre-stressed concrete girders and one pier saved approximately $300,000.
- Fiberglass reinforced plastic deck drainage system reduces the amount and size of equipment needed.
- A segment of the project incorporates 18 EPS and MSE walls as a cost-effective alternative to bridge construction, reduced the project footprint and minimized ROW impacts. In addition, the lightweight EPS retaining walls decrease the load on the highly compressible underlying soils, reducing settlement.

STORMWATER MANAGEMENT: The design of the BMP SWM facilities complied with the performance criteria of the Chesapeake Bay TMDL, and maximized the available space for SWM facilities while minimizing impacts to an aging and over-taxed storm drain system.

TRAFFIC ENGINEERING: This complex project required detours to accommodate long-term partial and full lane and ramp closures at two interchanges along the mainline of I-264. Volkert conducted traffic analyses to determine the impact of the detour on the surrounding roadway network, including analyses of 21 intersections under pre-construction and detour conditions. This involved crash, ramp, LOS, delay and back-of-queue analyses using Synchro as well as signal optimization. The study also evaluated mitigation measures including signal phasing and time optimization to accommodate the impacts. As a result of the study, Volkert developed a Type C TMP including a Temporary Traffic Control Plan and Traffic Operations Plan designed to maintain traffic for the 70,000 vehicles per day along I-264 while meeting the construction schedule.

QA/QC PLAN: The design team developed a project specific quality control plan that was strictly followed during all phases of design. A QA/QC Certification form was signed by the Discipline Manager and the Project Manager for every submittal to validate that the requirements of the plan were met.

CONSTRUCTION PHASE SERVICES: During construction, Volkert assisted the Contractor with resolution of conflicts in the field, conducted 321 shop drawing reviews, and responded to 785 RFIs (addressed within 24 hours of receipt).

ON-TIME & WITHIN BUDGET COMPLETION: The project was designed on an extremely fast-track, progressing from 30% roadway plans to RFC 100% drawings within a span of approximately 10 months.

RELEVANT ELEMENTS

- ✓ 4.9-miles of roadway designed
- ✓ Interchange modifications
- ✓ Interchange ramp modifications
- ✓ Side road improvements
- ✓ Bridge design
- ✓ Landscape architecture design
- ✓ Added auxiliary lane to improve merge area on interstate
- ✓ H&H, SWM, E&SC & drainage improvements
- ✓ Retaining walls
- ✓ Type C TMP
- ✓ MOT
- ✓ Signage & pavement marking
- ✓ Minimized ROW acquisition to 70 properties
- ✓ Urban pedestrian plaza design
- ✓ Context-sensitive solutions
- ✓ High traffic volume successfully maintained throughout the four phases of construction
- ✓ I-264 widening & two bridge widenings

OFFICE LOCATION(S) WHERE WORK PERFORMED

- ✓ Springfield, Virginia

FIRM ROLE

- ✓ Subconsultant, Lead Design

State Project No. 6587-000-R89, P101, R201, C501
Federal Project No. NHPP-5B01 (120)
Contract ID No. C00116394DB109