

Original
February 2017



Virginia Department of Transportation

Statement of Qualifications | Contract ID Number: C00101595DB94

I-95 Southbound CD Lanes – Rappahannock River Crossing

Skanska USA Civil Southeast Inc. in association with Louis Berger

SKANSKA

in association with



Louis Berger

Statement of Qualifications

3.2 Letter of Submittal 1
3.3 Offeror’s Team Structure 2
3.4 Experience of the Offeror’s Team..... 7
3.5 Project Risks 11

Appendices

2.10 Form C-78-RFQ 16
3.1.2 SOQ Checklist 17
3.2.6 List of Affiliated and Subsidiary Companies..... 20
3.2.7 Certification Regarding Debarment Forms 21
 3.2.7(a) Certification Regarding Debarment Form(s)
 Primary Covered Transactions)..... 22
 3.2.7(b) Certification Regarding Debarment Form(s)
 Lower Tiered Covered Transactions 23
3.2.8 Offeror’s VDOT Prequalification Certificate 29
3.2.9 Surety Letter 30
3.2.10 SCC and DPOR Information Tables..... 39
 3.2.10.1 Full Size Copies of SCC Registration 42
 3.2.10.2 Full Size Copies of DPOR Registration
 (Offices) 60
 3.2.10.3 Full Size Copies of DPOR Registration
 (Key Personnel) 76
 3.2.10.4 Full Size Copies of DPOR Registration
 (Non-APELSCVIDLA) 80
3.3.1 Key Personnel Resumes 81
3.4.1 Work History Forms 93
 3.4.1(a) Lead Contractor Work History Forms..... 93
 3.4.1(b) Lead Designer Work History Forms 96

Statement of Qualifications

3.2

Letter of Submittal

February 7, 2017

Mr. Suril R. Shah
Alternative Project Delivery Division
Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219

RE: Request for Qualifications Design-Build Project for I-95 Southbound CD Lanes-Rappahannock River Crossing RFQ No.: C00101595DB94

Dear Mr. Shah,

Skanska USA Civil Southeast Inc. (Skanska) is pleased to share our credentials, experience and ideas on how to work collaboratively with VDOT and the community for a successful I-95 Southbound CD Lanes-Rappahannock River Crossing (Rappahannock Project). As one of the most respected and experienced U.S. design-build contractors, Skanska will specifically address the unique needs of Rappahannock Project. Skanska will be supported in a lead design role by the Richmond, VA offices of Louis Berger. Louis Berger will be supported by the Virginia Beach and Fairfax, VA offices of VHB.

3.2.1: Skanska USA Civil Southeast Inc. is the legal entity that will execute the contract with VDOT. 295 Bendix Road, Suite 400, Virginia Beach, VA 23452

3.2.2: Point of Contact - Mr. Stephen Davis, Vice President of Estimating
295 Bendix Road, Suite 400, Virginia Beach, VA 23452
T: 757-578-4184 / F: 757-420-3551 / E: stephen.davis@skanska.com

3.2.3: Principal Officer Information - Salvatore Taddeo, Chief Operating Officer/Executive Vice President
295 Bendix Road, Suite 400, Virginia Beach, VA 23452
T: 757-578-4162 / F: 757-420-3551 / E: salvatore.taddeo@skanska.com

3.2.4: A single 100% performance bond and single 100% payment bond will be provided for Skanska by our surety. Skanska is registered with the State Corporation Commission (SCC). Our surety letter and SCC certificates are included in the Attachments to this submittal. Skanska USA Civil Southeast Inc. is a corporation duly incorporated under the law of the Commonwealth of Virginia.

3.2.5: Skanska is the Offeror and Lead Contractor. Louis Berger is the Lead Designer.

3.2.6: Please refer to the Attachment 3.2.6 for Skanska's Affiliated/Subsidiary Companies

3.2.7: Please refer to Attachments 3.2.7(a) and 3.2.7(b) for Certification Regarding Debarment Form(s)

3.2.8: Skanska prequalification number T009 is active and in good standing to bid on the Project. Prequalification documents and SCC certifications are located in Attachment 3.2.8

3.2.9: Skanska's surety letter located in Attachment 3.2.9 attests to our ability to obtain Performance and Payment bonds.

3.2.10: Attachment 3.2.10 provides evidence and certifies that Skanska complies with the requirements set forth in RFQ Section 3.2.10 subsections .1 through .4.

3.2.11: Skanska is committed to achieving the 10% DBE participation goal for the Project.

Sincerely,



Stephen Davis
Vice President of Estimating
Skanska USA Civil Southeast Inc.

3.3

Offeror's Team Structure

3.3 Offeror’s Team Structure

Skanska USA Civil Southeast Inc. will be the lead contractor and single point of contact for this bridge project. Based in Virginia Beach, Skanska has been building major bridge structures in the Hampton Roads region, Peninsula and Northern Virginia since 1932. Skanska is very proud of its partnership with VDOT’s Fredericksburg District and the completed successful projects for the District including the U.S. 17 George P. Coleman Bridge Replacement. VDOT implemented a robust public relations and communications program and eliminated the public perception of a massive traffic and commuting issue. VDOT and Skanska received a letter, “House Joint Resolution,” by the Commonwealth of Virginia General Assembly on February 13, 1997 for their work together on the project.

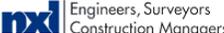
The Skanska Design Management and Construction Management supporting team members, many of whom are locally based with a long history in the area, were carefully selected to assure VDOT of a similar outcome for this I-95 Southbound CD Lanes-Rappahannock Project (Rappahannock Project) project as was achieved on the Coleman Bridge. In working together to develop the Rappahannock Project, we offer an organizational structure with local experience and established internal and external relationships that will serve as the foundation for our work with VDOT. This preparation will help us manage the accelerated schedule from day one.

The Skanska Team

Table 3.3-1 shows the members of the Skanska team. These firms will be retained for this project.

Skanska USA Civil Southeast Inc. (Skanska) is a leading heavy civil and marine construction contractor with an extensive portfolio of providing solutions in bridges and highways, rail, and marine construction. Skanska is in the final stages of the \$2 billion P3 Elizabeth River Tunnel and MLK Blvd. Viaduct project in Portsmouth and Norfolk, VA. Combined with significant work on the Woodrow Wilson Bridge and the Huguenot Bridge, Skanska’s breadth of experience, staff availability and lessons learned will allow us to address the unique aspects of not

Table 3.3-1. *The members and roles of the Skanska team.*

 Skanska USA Civil Southeast, Inc. Offeror and Lead Contractor Vendor No. T009
 Louis Berger Lead Designer
 Vanasse Hangen Brustlin, Inc. Traffic/MOT and Roadway/ Bridge Design Support
 O.R. Colan Associates, LLC Right of Way Design Support
 McDonough Bolyard Peck, Inc. Quality Assurance
 Professional Services Industries Geotechnical Work
 NXL Construction Co. Inc. Surveying

only this Rappahannock Project but any follow-on interchange, bridge and roadway for VDOT.

Louis Berger is an ENR Top 10 transportation services firm that serves a diverse client base with a comprehensive suite of planning, environmental, economic, engineering and CEI services. Since its founding in 1953, the firm has provided design services for thousands of bridges of all sizes and types and has been active in design-build, design-bid-build and P3 project delivery methods.

Louis Berger has been a leader in Virginia’s bridge engineering community for more than 28 years, designing structures ranging from larger, complex river crossings to culverts for VDOT and local transportation authorities. Louis Berger **(and its recently integrated affiliate Ammann & Whitney)** was lead designer for the award-winning 3,000 foot Huguenot Memorial Bridge replacement, built by Skanska, and the Route 58 Bridges over the Middle Fork of the Holston River, both for VDOT. The firm has performed structural feasibility studies for major projects such as the Mayo Bridge in Richmond.

In association with asset management companies, the Virginia staff has completed designs for the rehabilitation or repair of more than 100 of Virginia’s interstate bridges. They have provided construction engineering services for challenging regional projects including the superstructure replacement of I-64 over the ACCA rail yard and the pin and hanger replacement on the Frederick Douglass Bridge in Washington, D.C.

Vanasse Hangen Brustlin, Inc. (VHB) brings more than two decades of experience supporting VDOT and Virginia transportation agencies. As a statewide and regional on-call traffic consultant for VDOT, VHB has demonstrated traffic planning and design expertise through numerous task orders including traffic operational analysis of urban and rural roadway networks, operation analysis to support interchange modification/justification reports, modeling of complex and innovative interchanges, traffic safety evaluations, corridor planning, interstate signing and striping design, signal timing and operational analysis, and over 400 separate signalized intersection designs throughout the Commonwealth. Local to the project, VHB has provided professional transportation planning services along and surrounding the I-95 corridor through the City of Fredericksburg and Stafford, Spotsylvania,

and Caroline counties. VHB has gained a comprehensive and nuanced understanding of the intricate and delicate nature of traffic flow on the corridor and inter-relationship with the adjoining surface transportation network and the ripple effect on those adjacent transportation systems when the I-95 corridor is disrupted or compromised by planned lane closures for construction, roadway incidents, adverse weather, special events, and growth.

O.R. Colan Associates, LLC (ORC) has provided management of land acquisition programs for public agencies since 1969. As a SWaM business certified by the State of Virginia, ORC maintains an office in Chesapeake, VA, with a staff of 155 ROW professionals nationwide. For the last 47 years, ORC has provided ROW services for State departments of transportation, including relevant experience working with VDOT on several projects such as the I-64/I-264 and I-264/Route 190 (Witchduck Road) Interchanges and the Route 60 Widening DB Project.

3.3.1 Key Personnel Qualifications

Our Team has made the individuals in Table 3.3-2 available for the duration of the Rappahannock Project to fill the key roles. Resumes for each individual are located in Attachment 3.3.1.

Table 3.3-2. Skanska Team Key Personnel.

	Qualification Highlights	Relevant Projects
	Brent Hunt, P.E. Design-Build Project Manager / Responsible Charge Engineer VA P.E. No. 038999 <ul style="list-style-type: none"> ▪ Design Build Experience ▪ Complex Interchange ▪ Marine Bridges 	<ul style="list-style-type: none"> ▪ Huguenot Bridge Replacement, Richmond VA ▪ Elizabeth River Tunnels, Portsmouth VA ▪ Pinners Point Interchange, Portsmouth VA
	Duncan Stewart, P.E. Quality Assurance Manager VA P.E. No. 036991 <ul style="list-style-type: none"> ▪ Design Build Experience ▪ Complex Interchanges ▪ QAM experience on VDOT projects 	<ul style="list-style-type: none"> ▪ Huguenot Bridge Replacement, Richmond VA ▪ I-895 Airport Connector Road, Richmond VA ▪ I-64 at Zion Crossroads Interchange, Louisa, VA
	Dean Hatfield, P.E. Design Manger VA P.E. No. 018960 <ul style="list-style-type: none"> ▪ Design Build Experience ▪ Complex Interchange ▪ Interstate Design 	<ul style="list-style-type: none"> ▪ I-77 Manage Lanes DB/P3, Charlotte NC ▪ Cooper River Bridge Design Build, Charleston SC ▪ Telegraph Road, Fairfax County, VA
	Kevin Aeschliman Construction Manager <ul style="list-style-type: none"> ▪ Design Build Experience ▪ Marine Bridges ▪ Complex Interchanges 	<ul style="list-style-type: none"> ▪ Huguenot Bridge Replacement, Richmond VA ▪ Elizabeth River Tunnels, Portsmouth VA ▪ I-10 Escambia Bay Bridge, Pensacola, FL
	Christopher Adams, P.E. Lead Structural Engineer VA P.E. No. 033017 <ul style="list-style-type: none"> ▪ Complex Structural Design ▪ Structural Analysis ▪ Interchanges 	<ul style="list-style-type: none"> ▪ Huguenot Memorial Bridge, Richmond VA ▪ Lorton Road Bridges, Fairfax County VA ▪ DDOT Citywide Bridge Consultant, Washington, D.C.

3.3.2 Organizational Chart Showing the “Chain of Command”

Our organization chart, Figure 3.3-1, shows the “chain of command” which identifies major functions and defines the reporting relationships of personnel responsible for the management of design, construction, and QA/QC activities.

We have organized our lower level supervision and management team to align with the project segments – South Approach, Main Bridge, and North Approach and Route 17 Interchange. The correct experience will be matched with the segment to ensure elements with fast-track schedules, such as the Route 17 Interchange will be completed on-time.

Skanska is building upon the structure and relationships it developed both internally and with stakeholders and our long history in the area to:

- Foster communication, not only within our organization, but with VDOT and involved stakeholders such as the, U.S. Army Corps of Engineers, local businesses, residents, Dominion Virginia Power and other utilities
- Respond to fast-track schedule
- Allocate resources efficiently to respond to project challenges
- Provide independence for quality, safety and environmental personnel

Our proposed team’s Key Personnel are all Virginia based and are full time employees of their respective firms.

Functional Relationship and Communication among Participants

Our Team is optimized to present clear and logical reporting relationships to manage design and construction while maintaining distinct responsibilities and project controls.

Key Personnel

Design-Build Project Manager (DBPM)

Brent Hunt, P.E. will be supported by Bob Rose, Skanska’s Senior Vice President and General Manager. Mr. Hunt will have primary responsibility for execution of design, construction, project management, quality, safety

and customer/stakeholder relations. He is the principal point of contact for communication with VDOT. Mr. Hunt will have five direct reports: the QA Manager, Design Manager, Construction Manager, DB Coordinator, and Safety Manager.

Responsible Charge Engineer (RCE) Brent

Hunt, P.E. Mr. Hunt will also serve as the RCE. He will be responsible for rejecting or approving both engineering and construction work in progress and the final product. He will ensure all engineering services are performed by professionals properly licensed in the Commonwealth of Virginia and plans are signed and sealed by such professionals. Mr. Hunt will communicate regularly with VDOT and will be vested with the authority to act on behalf of Skanska and shut down the project if warranted.

Quality Assurance Manager (QAM) Duncan

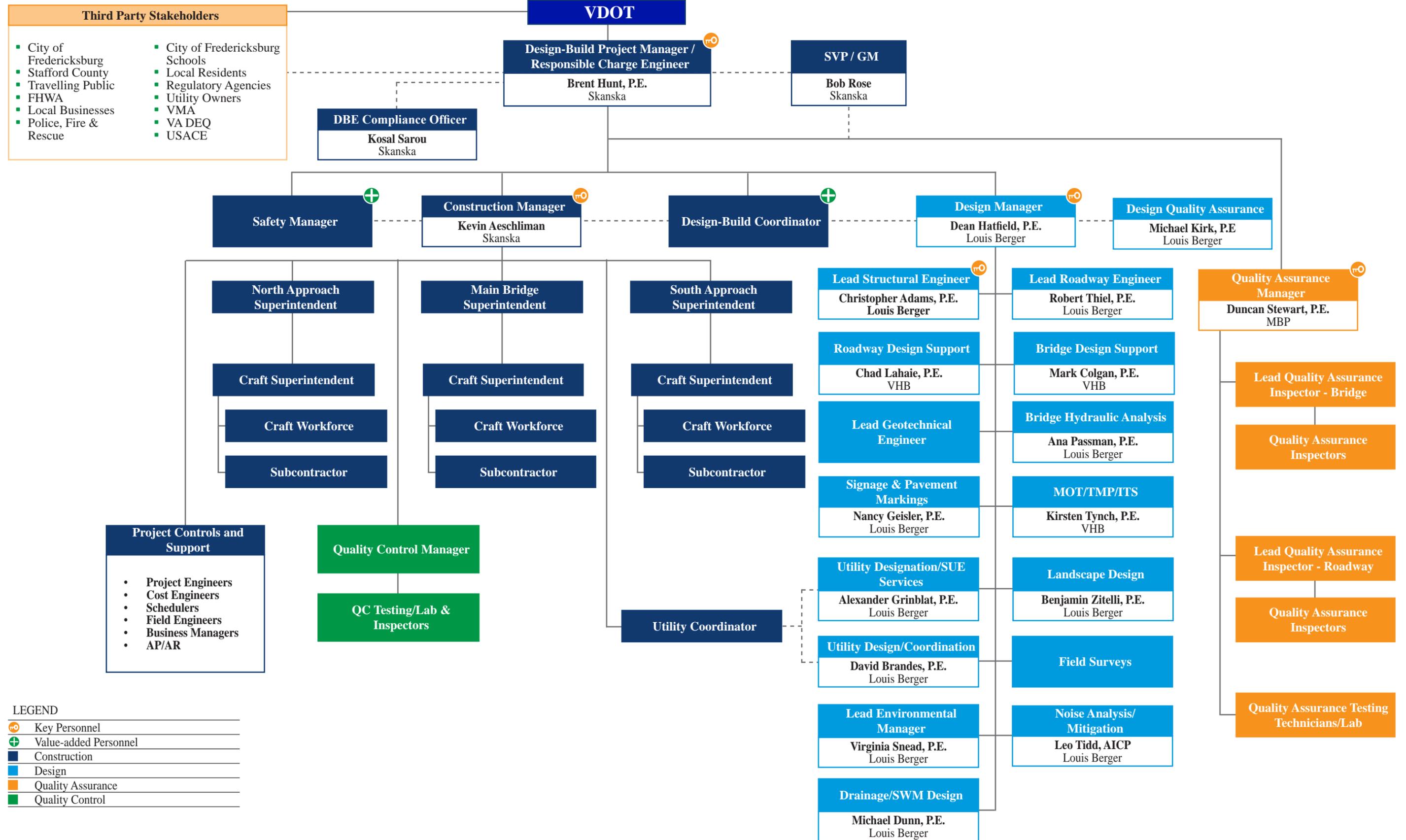
Stewart, P.E., is the independent QAM and will report directly to the DBPM. Direct reports include the two lead bridge and roadway quality assurance inspectors and the off-site materials sampling and testing laboratory. Through the DBPM, the QAM organization will establish communication paths to the construction quality control and construction organization to ensure that Mr. Stewart is apprised of activities and to ensure that corrective activities and remediation are implemented as quickly as possible.

Design Manager (DM) Dean Hatfield, P.E. will report to the DBPM. During the design phase, the design discipline leads, design subconsultants and the environmental team will report to Mr. Hatfield. He will ensure the overall Project design is in conformance with the Contract Documents. Mr. Hatfield will establish the Design QA/QC Program with Design Quality Assurance (DQA) Michael Kirk, P.E which will include review of design, working plans, shop drawings, specifications, and constructability for the Project. Mr. Hatfield will oversee the Program.

Construction Manager (CM) Kevin

Aeschliman will report to the DBPM. Direct Reports include the Construction QC Manager. Mr. Aeschliman will be responsible for managing the construction process, including QC activities.

Figure 3.3-1. Organizational Chart.



- LEGEND
- Key Personnel
 - Value-added Personnel
 - Construction
 - Design
 - Quality Assurance
 - Quality Control

He will also be responsible for responding to all incidents within the project limits and will be the key point of contact for VDOT when incident management issues arise. He will be a Virginia-certified ESCCC and RLD prior to the commencement of construction and will be on the Project site full time during construction.

Lead Structural Engineer (LSE) Christopher Adams, P.E., reports to the DM. He will be responsible for structural design and integration of bridges and retaining walls, review of structural design, verification of modifications to the design, review of structural RFIs and shop drawings and preparation of load ratings for VDOT project acceptance.

Value-Added Personnel

Additionally, we commit two value-added positions that will facilitate constructability and coordination between design and construction and enhance our commitment to both the safety of the traveling public and the construction work force.

Design-Build Coordinator (DBC) will facilitate communication between design, construction and project management. The DBC will report to the DBPM and will actively participate in design meetings, constructability reviews and ensuring the RFC drawings and permits are approved by VDOT to match the field operations.

Safety Manager (SM) will report to the DBPM and will be responsible for all aspects of safety during the life of the project, developing the project-specific safety plan and ensuring that the program is being followed to ensure the safety of workers and the traveling public.

Description of the QA/QC Program and Associated Elements

Skanska will develop and execute the Quality Management System Plans (QMSP) in accordance with VDOT's "Minimum Requirements for QA and QC on DB and PPTA Projects" (January 2012) and will include Design and Construction Quality Management Plans (DQMP and CQMP). The QMSP will be prepared by the on-site quality management team and submitted to VDOT for review and approval.

The QA team will employ two lead QA inspectors: one for the bridge element and one for roadway elements for the project. They will report directly to the QAM as shown on Figure 3.3-1.

Design QA/QC Plan. The DM and DQA will implement a DQMP program consistent with their internal policies to verify that the drawings, specifications and other submittals are prepared in accordance with generally accepted design practices. The DQMP program will include cross-company QA review of all design documents.

Construction QA/QC Plan. The Construction QA/QC Plan will detail our quality oversight including sampling, testing, inspection, document control, and communication.

QA Independent of QC. The QA process will be independent and fully staffed. QA personnel will not be assigned other duties or responsibilities. The QAM will have the authority to suspend field activities in the event QA tasks or issues are not complete or found to be non-conforming.

Ensuring Delivery of a Quality Product

In addition to independent quality organizations, Skanska will emphasize quality:

- All employees will receive quality training as part of daily, weekly and monthly training
- Each construction operation will include a specific quality plan
- Quality reports will be reviewed by the DBPM and the Project Executive
- Superintendent metrics will include quality performance and superintendents will be held responsible for the quality of the work performed under their direction

Our organization's attitude and approach are the most vital aspects in delivering a quality product. Quality is the responsibility of every person on the project, regardless of title and every employee is provided with the tools, knowledge and support they need and are accountable for the quality of their work. To affirm this, each worker has the authority and responsibility to stop any work that does not meet quality standards.

3.4

Experience of the Offeror's Team

3.4 Experience of The Offeror's Team

Skanska in combination with Louis Berger and VHB offer significant experience and capability to deliver this challenging project. We have worked together before. Our approach to business and ethics are the same, and our skills and experience are complementary, making ours a very deep team with a broad range of capability. Each company is accustomed to working in ventures in which a team is formed based on the strengths of individuals, not company association. This leads to a highly effective project team.

Our Team's impressive design-build (DB) successes on similar major transportation projects are described in the Work History Forms, Attachment 3.4.1. We have extensive experience with bridges over rivers and urban interchanges throughout the Mid-Atlantic and Southeast. The Team has designed and constructed projects in highly congested urban areas: Hampton Roads and Richmond, Virginia; Washington, D.C.; and Orlando and Tampa, Florida. The Team's comprehensive project experience with similar design and construction challenges will allow our key staff to apply their lessons learned to the benefit of the I-95 Southbound CD Lanes-Rappahannock River Crossing (Rappahannock Project).

3.4.1 Our Strengths for the Project Virginia Presence and Experience

Skanska, Louis Berger and VHB are all located in Virginia. As shown in the Work History Forms and Table 3.4-1, Skanska has a successful and proven cooperative work history with VHB on the VA Ports APM Terminal Access Road in 2004, one of the first design build projects procured by VDOT. Louis Berger was the Engineer of Record for the successful Huguenot Bridge Replacement project over the James River in Richmond, VA with Skanska as the contractor. Skanska and Louis Berger are working together on the Reconstruction of I-4 (P3) through downtown Orlando, FL.

The Work History Forms show we have the basis to understand the risks associated with geotechnical and environmental factors in the region that will impact project substructure design and approach to construction.



Figure 3.4-1. *The ERT (top image) and the Huguenot Bridge (bottom image) projects has provided regional knowledge and working relationships to benefit the Team's quick start on the Rappahannock Project.*

Our team also has well-established working relationships with regulatory organizations including the USACE, Dominion Virginia Power, USCG, Virginia DEQ, U.S. Fish and Wildlife Service, National Marine Fisheries Service and the EPA from the following projects:

- I-264 Widening/MLK Extension, Portsmouth and Norfolk VA
- Coleman Bridge Project, Yorktown, Virginia
- Huguenot Bridge Replacement, Richmond, Virginia

Table 3.4-1. Skanska Team Experience in addition to the Work History Forms.

Project	Team Members	Design-Build Delivery	Interstate/Urban	Bridges Over Rivers	Environmental Considerations (Wetland Impacts)	Utility Relocations	Multiphase MOT Plan	Noise Mitigation (Walls)	Public Information Program
I-66 P3/DB Outside the Beltway Fairfax, VA \$2.1B VDOT	L	✓	✓	✓	✓	✓	✓	✓	✓
Berkley Bridge Norfolk, VA \$71M VDOT	S		✓	✓	✓	✓	✓	✓	✓
APM Terminal Roadway Portsmouth, VA \$22M VDOT	SV	✓	✓		✓	✓	✓		
Huguenot Bridge Replacement Richmond, VA \$40M VDOT	SL		✓	✓	✓	✓	✓		
Pinners Point Portsmouth, VA \$152M VDOT	S			✓	✓	✓	✓	✓	
Coleman Bridge Yorktown, VA \$73M VDOT	S			✓	✓	✓	✓		
Rt. 33 Pamunkey River Bridge West Point, VA \$90M VDOT	S			✓	✓	✓	✓		
I-295/I-64 Interchange Henrico County, VA \$12M VDOT	S		✓		✓		✓		
Arthur Ravel Jr. Bridge Charleston, SC \$540M SCDOT	S	✓	✓	✓	✓	✓	✓	✓	✓
Three Mile Bridge Pensacola FL \$398M FDOT	S	✓	✓	✓	✓	✓	✓	✓	✓
I-275 Tampa, FL \$225M FDOT	S	✓	✓	✓	✓	✓	✓	✓	✓
I-77 HOT Lanes Charlotte, NC \$655M NCDOT	L	✓	✓	✓	✓	✓	✓	✓	✓
Ultimate I-4 (P3) Orlando, FL \$2.34B FDOT	SL	✓	✓		✓	✓	✓	✓	✓
I-10 Bridges Over Escambia Bay Pensacola, FL \$255M FDOT	S	✓	✓	✓	✓	✓	✓		✓
Route 3 Bridge Bedford, NH, \$12M NHDOT	L	✓	✓		✓	✓	✓	✓	✓
Piscataquis Bridge Replacemen Howland, ME \$12M MaineDOT	L	✓		✓	✓	✓	✓		✓
I-285 / SR 400 Interchange Atlanta, GA \$419M GDOT	L	✓	✓		✓	✓	✓	✓	
Carolina Bays Parkway Myrtle Beach, SC \$250M SCDOT	S	✓		✓	✓	✓	✓		
Choctawhatchee Bay Bridge Walton County, FL \$119M FDPTM	S	✓		✓	✓	✓	✓		
I-295 Commercial St. Connector Portland, ME \$23M MEDOT	L	✓	✓		✓	✓	✓		
North Tarrant Expy. Segment 2W East Dallas, TX \$700M TXDOT	L	✓	✓		✓		✓	✓	
North Tarrant Expy. Segment 3A East Dallas, TX \$500M TXDOT	L	✓	✓		✓		✓	✓	

S - Skanska, L - Louis Berger, V - VHB

Innovative Design Solutions and Construction Techniques

I-10 Bridges over Escambia Bay: The first use and design of 36 inch square prestressed, precast, voided, concrete piles for bridge foundations in Florida.

Coleman Bridge Replacement: The first use of ABC by prefabricating and floating in the entire bridge superstructure in six elements (2,540 feet) over nine days in one shut down.

Design-Build Experience

Four of the six Work History Forms provided are for DB projects and sixteen more are provided in Table 3.4-1.

Interstate Widening

Our team has extensive experience with the design and construction of interstate widening projects, including several in Hampton Roads. The I-264/MLK in Portsmouth part of the ERT Project involves widening of I-264 as well as a new interchange; and the 11th Street project in Washington, D.C. are identical to our approach on the the Rappahannock Project.

Traffic Management and Communication Strategies in Developed Urban Corridors

All Work History Forms provided are for transportation projects requiring major traffic management and extensive communication strategies with business owners and other key stakeholders. Many of the projects in Table 3.4-1 were constructed in urban settings including Ultimate I-4, Orlando, FL;; Route 1/I-495/I-95, Alexandria, VA; and 11th Street Bridges, Washington, D.C. (Figure 3.4-2).



Figure 3.4-2. 11th Street Bridge Project— work in a high volume urban corridor.

Success in Construction of Major Bridges Over Rivers

Successful construction of bridges over rivers are demonstrated by our Work History Forms for 11th Street Bridges and the Elizabeth River Tunnels. Other projects include the Coleman Bridge, Indian River Inlet, Pamunkey River Bridge, I-10 Bridges, and the Arthur Ravel Jr. Bridge, shown in Figure 3.4-3.



Figure 3.4-3. The Arthur Ravel Jr. Bridge was built on budget and one year ahead of schedule.

Delivery of Projects Through Segmentation

As the Rappahannock Project will be segmented to meet schedule, so too were the ERT projects (8 segments), Arthur Ravel Jr. Bridge (5 segments), and the 11th Street Corridor (3 segments).

Previous Success in Taking and Managing Calculated Risk and Realizing Incentive

The following projects all achieved early completion bonuses: FDOT I-10 Bridges over Escambia Bay, I-275, Huguenot Bridge Reconstruction, and the Coleman Bridge project.

Environmental and Geotechnical Risk

As indicated above, the Team has substantial understanding of mitigation measures associated with these local risks. Section 3.5 shows the value of this knowledge as we address our approach to these risks in detail.

Figure 3.4-4 is an example of our construction experience in coastal wetlands. A Skanska joint venture received an ARTBA Globe Award for Environmental Excellence for work on the Arthur Ravel Jr. Bridge in creating a site-specific ISO 14001 compliant program for all operations that could have an environmental impact.



Figure 3.4-4. Award-winning effort to minimize wetland impacts on the Arthur Raveland Jr. Bridge Project.

As part of this program, we held quarterly meetings with Coast Guard to review spill prevention. Less than one acre of wetlands (0.84) was impacted by construction activities and under five acres of wetland were temporarily impacted. The use of a trestle, as shown in the figure, protected the marsh from contamination from construction materials and equipment. We also used containment curtains (silt fence) to localize any effects of excavation. All hydraulic systems operated near water or wetlands used biodegradable hydraulic oil.

DBE Participation

Skanska has a long history of implementing a comprehensive DBE program that has exceeded the DBE goals on DB/P3 projects, such as the ERT project in Portsmouth, VA and on FDOT I-275 in Tampa, FL.

We are exceeding the 12% DBE goal on ERT, a \$1.5-billion project, and we have achieved about 14% to date. On I-275, a \$225-million highway project through downtown Orlando, FL, we exceeded the 8.6% DBE goal and achieved 11.73% at contract completion.

Our comprehensive DBE Program is implemented in two stages, Proposal Stage and Award Stage. During the Proposal Stage, we have an aggressive solicitation process to ensure that every DBE firm is given the opportunity to provide a quote and be a part of our design team. During the Award Stage, we implement our five-part DBE Program that consists of a Proactive DBE Outreach Program Plan, Good Faith Negotiation, Instructional Guidance Training, Collaboration with Stakeholders and Good Faith Effort Documentation.

Past and Ongoing Safety Performance

The Team will continue our outstanding performance and continual commitment to safety on the Rappahanock Project. We are dedicated to the health and safety of everyone contacting the project area and are committed to partnering with VDOT to create a zero accident zone.

We are committed to creating an Injury Free Environment (IFE) on the Project. IFE is the shared corporate and individual belief that safety is a value that is not compromised by cost or schedule. Everyone has the right to go home safely at the end of the day.

Following award, the Safety Manager will prepare the safety plan for the Rappahannock Project. The plan will follow the Skanska Environmental, Health and Safety Manual (EHS Manual), an OHSAS 18001-certified plan, and will include procedures that focus on mitigating site-specific safety issues: working in a marine environment and boater safety; managing heavy traffic; ensuring the safety and security of nearby businesses and residences; and communicating project activities and safety practices to reduce risk of injury to residents, drivers and property.

The safety plan and mandatory training for each separate job operation (Job Hazard Analysis) assures Skanska that each of our employees and subcontractor on the project are qualified to work on specific heavy equipment and each separate construction activity. Figure 3.4-5 is an example of one of many equipment simulators that we use to make our safety program successful.



Figure 3.4-5. Personnel must have proven past experience and pass an equipment simulator training test before they allowed to operate equipment in the field.

3.5

Project Risks

3.5 Project Risks

We have reviewed the available project studies and evaluated potential risks based on our experience with similar projects in the area. With project risk defined as an issue that has the potential to adversely impact the project objective, schedule, budget and/or the traveling public, we evaluated the probability and severity of each potential risk using the “heat map” presented in Figure 3.5-1.



Figure 3.5-1 – Heat Map of Potential Risks

As shown, we have identified the following as the top three critical risks facing the Team:

- Permitting and NEPA Documentation
- Flooding of the Rappahannock River
- MOT During Construction

3.5.1 Permitting and NEPA Documentation

A. Why The Risk Is Critical

Obtaining the environmental approval from numerous agencies in a timely manner is a critical risk to the Project. Failure to do so would result in delays to the project schedule or jeopardize the overall project. Environmental approvals will need to focus on:

- Designation of Rappahannock River as a Scenic River, necessitating architectural reviews.
- Threatened and Endangered species are noted in close proximity to the project, necessitating a thorough investigation to determine if specific species or their habitat exist at the project location.

B. Impact On The Project

Seasonal restrictions due to habitat and weather may impact when certain work can occur within the river, necessitating careful planning to ensure that the overall schedule is not impacted. In addition, environmental approvals and conditions may necessitate additional construction activities to mitigate. Specific items include:

- Designation of Rappahannock River as a Scenic River will impact design and construction methods to ensure that the aesthetic and native features of the river are maintained. This will likely limit the structural options available to ensure that the new bridge has the same spacing and appearance as the existing bridges.
- Threatened and endangered species will likely be present at the project location and will necessitate the seasonal restrictions for activities within the river such as tree removal and soil disturbance.
- In a study performed by VDOT and its consultant, various significant sites with different levels of importance were found within the projects *Area of Potential Effect (APE)*. In addition, the Fredericksburg Battlefield property line extends within the project’s APE. A more detailed site investigation will need to occur within the

footprint where site disturbances can occur. The project could be significantly delayed if any artifacts are discovered.

- Virginia recently (2011) published new Stormwater regulations. This project is not grandfathered under the previous regulations, and will need to address the new requirements. As one of the first VDOT projects regulated by the new rules, a thorough review of the options to provide the necessary stormwater management will be required.

C. Mitigation Strategies

Our team has managed the environmental process for transportation projects such as this (Figure 3.5-2). We will employ a variety of mitigation measures to ensure that the environmental process does not impact the project, while simultaneously ensuring the project does not adversely impact the environment:

- We will hold regular stakeholder coordination meetings to ensure that the appropriate regulators are aware of the project and that their concerns are addressed.
- In conjunction with VDOT, we will hold Public Information Centers to both inform the public of the project and document any concerns the public may have as a part of the environmental process.
- Carefully plan construction activities to minimize impacts to sensitive areas, and ensure that access points and cofferdams are constructed during periods when threatened and endangered species are not present.
- Consider the purchase of Water Quality credits from an approved bank as a mitigation measure, or the construction of off sight stormwater mitigation to achieve the water quality treatment target.
- Consider the use of stormwater BMP's in the recently approved VDOT Annual Standards and Specifications in order to limit the VDEQ review.



Figure 3.5-2. *Obtaining environmental approval from numerous agencies in a timely manner was critical to the success of the Hugeunot Bridge Project, which finished ahead of schedule.*

D. Role Of VDOT and Other Agencies in Mitigation

No additional efforts will be needed by VDOT or other agencies. Numerous agencies will be involved for review and approval of permits, and will include the USCG, Virginia DEQ, and USACE, as well as their consulting agencies such as the US Fish and Wildlife Service, the National Marine Fisheries Service, the EPA and other Virginia resource agencies. We are very familiar with the agencies processes and are committed to engaging both the public and these stakeholders to provide comprehensive applications with sufficient supporting documentation to facilitate timely reviews by these agencies.

3.5.2 Flooding of the Rappahannock River

A. Why The Risk Is Critical

Excess flooding of the Rappahannock River could cause significant damage to the project and the surrounding environment. In addition to mitigation of the damages, the schedule of the project may be delayed significantly. In addition, critical equipment may be damaged as well as the access causeway, which will be constructed directly on the rock river bed. In addition, the shallow embedment of the Cofferdam in the rock riverbed may be impacted.

B. Impact On The Project

Flooding will delay progress on the project until it subsides and may cause additional environmental and construction impacts. Severe flooding in excess of the design storm for the causeway may erode the construction causeway, causing both debris to be distributed downstream and the necessity of reconstructing the causeway. The cofferdam constructed in the shallow bedrock will need to be designed to withstand the flooding, adding cost to the project. However, should the storm exceed its design, costly damage to construction works, requiring remediation or removal and reconstruction may occur.

C. Mitigation Strategies

In order to mitigate the risks associate with river flooding, a variety of approaches will be employed:

- Careful monitoring of the weather forecast within the watershed and current river conditions will occur throughout activity within the river. This monitoring will ensure that critical equipment is removed from the river in sufficient time to avoid environmental or physical damage.
- The causeway will be designed to withstand the design storm and ensure that non-erodible protection is provided. Additional material will be kept on site to ensure that the causeway is maintained and repaired promptly after any events. The causeway will receive constant monitoring and inspection to ensure stability. In the case of a predicted extra-ordinary weather event, care will be taken to further protect or otherwise modify the causeway to minimize damage.
- In addition to employing cofferdam designs appropriate for the bedrock conditions, the design of the foundation and substructure elements will consider the potential for flooding. Where possible, construction techniques that allow the prompt removal or flooding of the cofferdam to prevent damage will be employed. As part of the constant managing of the river work, should

conditions be predicted to exceed the design of the temporary structures, acceleration of the construction or other modifications of the construction methods to protect the cofferdam and foundation will be considered in order to avoid damage and environmental impacts.

D. Role of VDOT in Mitigation

No additional efforts will be needed by VDOT or other agencies. We welcome active engagement with VDOT and stakeholders in review of the mitigation measures to ensure that safe, efficient and river friendly methods are employed.

3.5.3 Risk No.3 MOT During Construction

This project is unique in terms of Interstate capacity adding projects in that the majority of the construction will occur outside of the existing travel lanes without impacting the flow of traffic. However, with significant construction activity planned at both interchanges, as well as the potential replacement of a mainline southbound bridge, additional constraint of traffic through the area will not only disrupt the traveling public, but could also have economic impacts to the commercial areas and surrounding communities.

A. Why the Risk is Critical

The intent of this project is to mitigate an existing bottleneck on I-95 across the Rappahannock River connecting Route 17 and Route 3. The maintenance of traffic through this area is critical to both the through traffic on I-95, and the viability of the commercial areas and communities adjacent Route 3 and Route 17. A failure to maintain traffic flow through the area will impact adjacent communities as well, such as Falmouth, with traffic diverting to the nearest river crossing and impact those communities.

Implementation of work zone traffic controls and changes to traffic patterns have the potential to exacerbate existing travel delay and traffic queues. This could translate into more frequent incidents and additional periods of unstable traffic flow. Construction adjacent to the existing I-95 will be a source of distraction for drivers.

Experience shows that the result of implementation of Maintenance of Traffic (MOT) plans often causes congestion and queuing in places where it previously did not occur, and exacerbation of existing problem areas. MOT during construction is a critical risk since implementation of the work zone will both decrease capacity on I-95 and the ramps connecting it to Route 3 and Route 7.

B. Impact on the Project

Reduced roadway capacity along I-95 and ramps due to implementation of the work zone will:

- Increase traffic queuing
- Change the location of traffic queues
- Increase the potential for incidents both within the work zone and queues approaching the work zone
- Create traffic issues on alternate routes (e.g., Route 1 through Falmouth) due to diverted traffic

Incidents within the work zone can involve both workers and drivers. Incidents, regardless of severity, impede traffic flow and increase congestion and queuing, further increasing the potential for crashes. A comprehensive MOT design will minimize traffic incidents. However, incidents can still occur on the approach to and within the work zone. Each incident, regardless of severity, takes time to clear and for traffic flow to return to normal. During that clean-up time, traffic flow is decreased and queued traffic develops in both directions of travel, especially during peak traffic periods. This often results in secondary incidents, further exacerbating the delays. The longer it takes to clear an incident, the more risk of secondary crashes.

In reviewing the plans provided in the RFQ information package, we noted the following three areas where “traffic safety and construction staging” will be significantly impacted. These will be addressed in our mitigation plan:

- Route 3 Interchange – work with in the ramps and on Route 17 have the potential to create impacts for the local community, and to also introduce queuing on I-95.

- Route 17 Interchange – Significant work on Route 17 will impact access to adjacent businesses and introduce additional queuing to the community.
- I-95 Southbound Bridge replacement. Should the option be exercised to include the southbound bridge replacement over Route 17, significant traffic shifts will need to occur to allow for the replacement, which will add queue and safety concerns.



Figure 3.5-3. Skanska will explore usage of The Halo Light™, a personal active safety system that attaches to any hard hat and produces a ring of light around the wearer, providing active, 360-degree illumination visible up to ¼ mile away. This offers a distinct advantage in being seen by other personnel, motorists, and heavy equipment operators.

C. Mitigation Strategies

Mitigation starts with early planning and scheduling. We will establish a sequence of work for each project segment that allows the concurrent work required to meet the schedule and to minimize the number of traffic shifts during construction. For each construction phase in which there is a traffic shift we will provide MOT drawings defining:

- Staging areas and access points to the construction zones to minimize the impact of construction traffic on I-95 travel lanes – we will utilize access from offsite locations wherever possible
- Work zone barriers
- Temporary traffic-lane configuration delineation and traffic controls
- Work schedule to minimize traffic impacts e.g. off-peak delivery of materials and equipment
- Alternate access to affected businesses and residences

Traffic Management Plan. All the associated drawings and plans will become part of the approved Traffic Management Plan along with Public Communications, Transportation Operations and Incident Management Plans. To minimize traffic impacts, our Incident Management Coordinator (IMC) will monitor the area to quickly recover and store disabled or damaged vehicles.

Incident Management Plan. Recognizing that accidents can occur, our Construction Manager (CM) will lead the preparation of the required Incident Management Plan to be ready for such events. This will be done in coordination with the VDOT Transportation Operations Center (TOC) , and other first responders. The CM will coordinate with the:

- TOC to determine the possibility of adding temporary cameras in the project corridor and its potential in enhancing response times to provide medical support and to clear involved vehicles quickly.
 - We will pursue the potential of using the TOC’s Active Traffic Management system to set variable speed limits through temporary dynamic message signs.
- First Responders in the area to define a workable response plan. Before a traffic switch, the CM will: brief first responders on changes to traffic flow; explain how they can access the corridor; and address any concerns regarding their ability to respond within their service area
 - It is our practice to execute a drill with first responders every six months to help ensure a rapid, efficient response if required.

Community. Cooperation of the community is key to success in an MOT Plan. Experience shows that if the public is warned beforehand and understands the need, activity, duration and impacts, there is less controversy. Before every traffic shift there will be media notices and opportunities for community briefings. To further avoid controversy:

- A hotline will be established for complaints, which will be addressed quickly
- We recommend continuing outreach to foster patience in addressing inconvenience

D. Role Of VDOT in Mitigation

No additional efforts will be needed by VDOT or other agencies. We welcome active engagement with VDOT staff in review and approval of the final TMP and Incident Management Plan. This will confirm the best practices from VDOT experience are included and implemented. We also recognize VDOT’s responsibility for formal review and approval of the MT and TMP, while providing formal notification to first responders and the traveling public of scheduled lane closures and other traffic restrictions.

Appendices

2.10

Form C-78-RFQ

ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

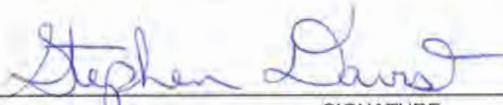
RFQ NO. C00101595DB94
PROJECT NO.: 0095-111-259

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 – November 1, 2016
(Date)
- 2. Cover letter of RFQ Addendum No.1 – December 19, 2016
(Date)
- 3. Cover letter of RFQ Addendum No.2 – January 23, 2017
(Date)


SIGNATURE

02/07/2017
DATE

Stephen Davis
PRINTED NAME

Vice President
TITLE

3.1.2

SOQ Checklist

ATTACHMENT 3.1.2

Project: 0095-111-259

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	17
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	16
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	20
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	21
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	29
Evidence of obtaining bonding	NA	Section 3.2.9	no	30

ATTACHMENT 3.1.2

Project: 0095-111-259

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	39
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	42
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	60
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	76
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	80
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
Offeror's Team Structure				2
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	81
Key Personnel Resume – Responsible Charge Engineer	Attachment 3.3.1	Section 3.3.1.1	no	83
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	85
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	87
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	89
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1	Section 3.3.1.7	no	91
Organizational chart	NA	Section 3.3.2	yes	5

ATTACHMENT 3.1.2

Project: 0095-111-259

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Organizational chart narrative	NA	Section 3.3.2	yes	4
Experience of Offeror's Team				7
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	93
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	96
Project Risk				11
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	11

3.2.6

List of Affiliated and Subsidiary Companies

ATTACHMENT 3.2.6

State Project No. 0095-111-259

Affiliated and Subsidiary Companies of the Offeror

Offerors shall complete the table and include the addresses of affiliates or subsidiary companies as applicable. By completing this table, Offerors certify that all affiliated and subsidiary companies of the Offeror are listed.

<input type="checkbox"/> The Offeror does not have any affiliated or subsidiary companies.
<input checked="" type="checkbox"/> Affiliated and/ or subsidiary companies of the Offeror are listed below.

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Parent	Skanska USA Civil Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil Northeast Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil Midwest Inc.	75-20 Astoria Boulevard, Queens, NY 11370
Affiliate	Skanska USA Civil West Inc.	1995 Agua Mansa Road, Riverside, CA 92509
Affiliate	Skanska Koch Inc.	400 Roosevelt Avenue, Carteret, NJ 07008
Subsidiary	Bayshore Concrete Products Corp.	1134 Bayshore Road, Cape Charles, VA 23310
Subsidiary	TEC Skanska, Inc.	295 Bendix Road, Suite 400, Virginia Beach, VA 23452
Subsidiary	CDK Skanska Inc.	295 Bendix Road, Suite 400, Virginia Beach, VA 23452
Subsidiary	I4 Leasing, LLC	295 Bendix Road, Suite 400, Virginia Beach, VA 23452

3.2.7

Certification Regarding Debarment Forms

This section contains:

- 3.2.7(a) Certification Regarding Debarment Form(s) Primary Covered Transactions
- 3.2.7(b) Certification Regarding Debarment Form(s) Lower Tiered Covered Transactions

3.2.7(a)

Certification Regarding
Debarment Form(s)
Primary Covered
Transactions

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

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

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

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

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

	02/07/2017	Vice President
Signature	Date	Title

Skanska USA Civil Southeast Inc.

Name of Firm

3.2.7 (b)

Certification Regarding
Debarment Form(s)
Lower Tiered Covered
Transactions

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

 2-7-17

Signature Date

President U.S. Transportation Market Sector
Title

Louis Berger U.S., Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

	2/7/17	Regional Manager
Signature	Date	Title

Vanasse Hangen Brustlin, Inc. (VHB)
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

<u><i>Stephen J. Jolly</i></u>	<u>February 7, 2017</u>	<u>Chief Operating Officer</u>
Signature	Date	Title

O. R. Colan Associate, LLC
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

<u>Karl E. [Signature]</u>	<u>2/7/17</u>	<u>CHIEF ENGINEER</u>
Signature	Date	Title
<u>Professional Service Industries, Inc. (PSI)</u>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 066-96A-417

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

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

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

	<u>2/7/2017</u>	<u>Branch Manager</u>
Signature	Date	Title

MBP
Name of Firm

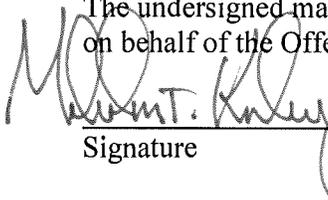
ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

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


Malcolm T. Kerley January 25, 2017
Signature Date

Malcolm T. Kerley, PE, President
Title

NXL Construction Services, Inc
Name of Firm

3.2.8

Offeror's VDOT Prequalification Certificate



Virginia Department of Transportation

Date Printed: 11/10/2016

Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 11/10/2016

12:00 AM

Page 387

- S -

Vendor ID: T009

Vendor Name: SKANSKA USA CIVIL SOUTHEAST INC.

Prequal Exp: 09/30/2017

-- PREQ Address --

295 BENDIX RD., STE. 400
VIRGINIA BEACH, VA 23452-0000
Phone: 757-420-4140
Fax: 757-420-3551

Work Classes (Listed But Not Limited To)

003 - MAJOR STRUCTURES
007 - MINOR STRUCTURES
043 - TUNNELING
080 - DEMOLITION OF STRUCTURES

Bus. Contact: DAVIS, STEPHEN ASHLEY

Email: SOUTHEAST.ESTIMATING@SKANSKA.COM

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A

Vendor ID: S1449

Vendor Name: SLAB MASTERS, INC. DBA HELITECH

Prequal Exp: 09/30/2017

-- PREQ Address --

P.O. BOX 24067
BELLEVILLE, IL 62223
Phone: (618)235-5595
Fax: 618-397-3066

Work Classes (Listed But Not Limited To)

030 - PILE DRIVING AND CAISSONS
082 - SHORING AND SHEETING

Bus. Contact: SHERIDAN, ANGELA

Email: BKERNS@MDTI.NET

-- DBE Information --

DBE Type: N/A

DBE Contact: N/A

3.2.9

Surety Letter

ZURICH AMERICAN INSURANCE COMPANY/FIDELITY AND DEPOSIT COMPANY OF MARYLAND
FEDERAL INSURANCE COMPANY
LIBERTY MUTUAL INSURANCE COMPANY
THE CONTINENTAL INSURANCE COMPANY
BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

January 26, 2017

Mr. Suril R. Shah
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: Skanska USA Civil Southeast Inc.
Request for Qualifications
A Design Build Project – I-95 Southbound CD Lanes – Rappahannock River Crossing From: Exit 130 To: 0.66 Miles
North of Exit 133; Stafford County / City of Fredericksburg, Virginia
State Project No.: 0095-111-259; Federal Project No.: IM-5111(235); Contract ID Number: C00101595DB94
Estimated Contract Value: \$100,000,000 +/-

Dear Mr. Shah,

This letter confirms that Skanska USA Civil Southeast Inc. ("Skanska") a subsidiary of Skanska USA, Inc. is a highly regarded and valued client of Alliant Insurance Services, Inc. ("Alliant") and Zurich American Insurance Company/Fidelity and Deposit Company of Maryland, Liberty Mutual Insurance Company, Federal Insurance Company (Chubb), The Continental Insurance Company (CNA) and Berkshire Hathaway Specialty Insurance Company ("co-surety"). As Skanska's bonding agent and authorized representative of the co-surety, we have always been impressed by our client's diverse capabilities, past project experience, track record of performance and depth of the company's professional staff.

Throughout their relationship, the co-surety has provided all of the surety bonds that Skanska's clients have requested. With respect to Skanska's current bonding requirements, at the present time, the co-surety is pleased to consider bonds for Skanska USA, Inc. and its subsidiaries with an aggregate program of \$10,000,000,000. Skanska USA Civil Southeast Inc. has accessibility to all or part of the bond line provided to of Skanska USA, Inc. with consideration given to single project up to \$350,000,000+. Currently, Skanska has \$6,400,000,000 of capacity available. Skanska USA Civil Southeast Inc. is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided in the Contract Documents on behalf of Skanska, in the event that such firm be the successful bidder and enter into a contract for this Project.

As is customary within the surety industry, the execution of any bonds would be subject to, but not necessarily limited to receipt and favorable review of all contract terms and conditions, bond forms, confirmation of project financing and all current underwriting information needed at the time of the request for bonds is made by Skanska to its co-surety. Please understand that any arrangement for surety bonds is a matter strictly between Skanska and its co-surety. As such, we assume no liability to you or any third party by the issuance of this letter.

Each of the surety companies are fully licensed and authorized to conduct surety business in the Commonwealth of Virginia and each is listed in the US Department of Treasury's listing of Approved Sureties (Department Circular 570). Each surety company has a Company Policyholder rating of 'A' or better by A.M. Best Company, all with a Financial Size Category 'XV' or greater.

Alliant and the co-surety strongly recommend Skanska to you. Please feel free to contact this office should you have any questions regarding the bonding capacity or technical ability of Skanska USA Civil Southeast Inc.

Sincerely,

ZURICH AMERICAN INSURANCE COMPANY/FIDELITY AND DEPOSIT COMPANY OF MARYLAND
FEDERAL INSURANCE COMPANY
LIBERTY MUTUAL INSURANCE COMPANY
THE CONTINENTAL INSURANCE COMPANY
BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY


Nicole Roy, Attorney-in-Fact

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

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **MICHAEL BOND, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Michael J. CUSACK, John J. GAMBINO, Sandra C. LOPES, Nicole ROY, Natalie CONEYS, Donald H. MCCARTER, Jean M. FEENEY, Nicholas LABBE, Laurie ROTHWELL and Sylvanna GEHA**, all of Boston, Massachusetts, **EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York, the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 11th day of November, A.D. 2016.

ATTEST:

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



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

Michael Bond
 Vice President
 Michael Bond

State of Maryland
 County of Baltimore

On this 11th day of November, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **MICHAEL BOND, Vice President, and ERIC D. BARNES, Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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

Maria D. Adamski

Maria D. Adamski, Notary Public
 My Commission Expires: July 8, 2019



EXTRACT FROM BY-LAWS OF THE COMPANIES

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

CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 26th day of January, 2017.



Gerald F. Haley

Gerald F. Haley, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co.
Attn: Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

Attn: Surety Department | 15 Mountain View Road | Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Natalie Coneys, Michael J. Cusack, John DeChiaro, Jean M. Feeney, John J. Gambino, Sylvanna Geha, Nicholas Labbe, Sandra C. Lopes, Donald H. McCarter, Laurie Rothwell and Nicole Roy of Boston, Massachusetts, Kathleen M. Flanagan and Richard A. Leveroni of Farmington, Connecticut

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 13th day of September, 2016.

[Signature of Dawn M. Chloros]
Dawn M. Chloros, Assistant Secretary

[Signature of David B. Norris, Jr.]
David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

County of Somerset

ss.

On this 16th day of September, 2016 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2318685
Commission Expires July 18, 2019

[Signature of Katherine J. Adelaar]
Notary Public

CERTIFICATION

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"Except as otherwise provided in these By-Laws or by law or as otherwise directed by the Board of Directors, the President or any Vice President shall be authorized to execute and deliver, in the name and on behalf of the Corporation, all agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and the seal of the Corporation, if appropriate, shall be affixed thereto by any of such officers or the Secretary or an Assistant Secretary. The Board of Directors, the President or any Vice President designated by the Board of Directors may authorize any other officer, employee or agent to execute and deliver, in the name and on behalf of the Corporation, agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and, if appropriate, to affix the seal of the Corporation thereto. The grant of such authority by the Board or any such officer may be general or confined to specific instances."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

- (i) the foregoing extract of the By-Laws of the Companies is true and correct.
(ii) the signature of any authorized officer executing this Power of Attorney or any certificate relating thereto on behalf of the Companies, and the seal of the Companies, may be affixed to such Power of Attorney or certificate by facsimile and such Power of Attorney or certificate shall be valid and binding upon the Companies, and any such Power of Attorney so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Companies with respect to any bond or undertaking to which it is attached.
(iii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
(iv) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 26th day of January, 2017



[Signature of Dawn M. Chloros]
Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT THE ADDRESS LISTED ABOVE, OR BY: Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7563409

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Donald H. McCarter; Donald L. Goodrich; Jean M. Feeney; John DeChiaro; John J. Gambino; Kathleen M. Flanagan; Laurie Rothwell; Michael J. Cusack; Natalie Coney; Nicholas Labbe; Nicole Roy; Richard A. Leveroni; Sandra C. Lopes; Sylvanna Geha

all of the city of Boston, state of MA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 7th day of December, 2016.



The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 7th day of December, 2016, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 26th day of January, 2017.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That The Continental Insurance Company, a Pennsylvania insurance company, is a duly organized and existing insurance company having its principal office in the City of Chicago, and State of Illinois, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Jean M Feeney, Michael J Cusack, John J Gambino, Richard A Leveroni, Kathleen M Flanagan, Nicole Roy, Sandra C Lopes, Natalie Coneys, Donald H McCarter, Nicholas Labbe, John DeChiaro, Laurie Rothwell, Sylvanna Geha, Individually

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

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

In Witness Whereof, The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 7th day of November, 2016.



The Continental Insurance Company

Paul T. Bruflat
Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 7th day of November, 2016, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; 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 insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires June 23, 2021

J. Mohr
J. Mohr Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of The Continental Insurance Company, a Pennsylvania insurance company, do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance company printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance company this 26th day of January, 2017.



The Continental Insurance Company

D. Bult
D. Bult Assistant Secretary

Authorizing Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF THE CONTINENTAL INSURANCE COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company at a meeting held on May 10, 1995.

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

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

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

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

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



Power Of Attorney

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

Know all men by these presents, that BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 100 Federal Street, 20th Floor, Boston, Massachusetts 02110, NATIONAL INDEMNITY COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131, and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: Michael J. Cusack, Nicole Roy, Nicholas Labbe, Sylvanna Geha, Sandra C. Lopes, Laurie Rothwell, John DeChiaro, Donald H. McCarter, Jean M. Feeney, John J. Gambino, 131 Oliver Street, of the city of Boston, State of Massachusetts, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of November 18, 2014. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY,

[Signature]

By:

David Fields, Executive Vice President



NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

[Signature]

By:

David Fields, Vice President



NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 18th day of November, 2014 before me appeared David Fields, Executive Vice President of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY and Vice President of NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



[Signature]

Notary Public

I, Brennan Neville, the undersigned, Assistant Secretary of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, I have hereunto affixed the seals of said companies this date of January 26, 2017.



[Signature]

Assistant Secretary

To verify the authenticity of this Power of Attorney please contact us at BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, 100 Federal Street, 20th Floor, Boston, MA 02110 | (617) 936-2971 or by email at Courtney.Walker@bhspci.com. THIS POWER OF ATTORNEY IS VOID IF ALTERED. To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claimsnotice@bhspci.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

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

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

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

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

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

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

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

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

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

3.2.10

SCC and DPOR

Information Tables

ATTACHMENT 3.2.10

State Project No. 0095-111-259

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
Skanska USA Civil Southeast Inc.	00382754	Corporation	Active	295 Bendix Road, STE 400, Virginia Beach, VA 23452	CBC, EMC, H/H	2701000041	10-31-2018
Louis Berger U.S., Inc.	F1131780	Foreign Corporation	Active	Boulders III, 1100 Boulders Pkwy, STE 720 Richmond, VA 23225	ENG	0411001319	2-28-2018
Louis Berger U.S., Inc.				1001 Wade Avenue, STE 400 Raleigh, NC 27605	ENG	0411001316	2-28-2018
Louis Berger U.S., Inc.				2401 Walnut St, STE 501, Philadelphia, PA 19103	ENG	0411001334	2-28-2018
Louis Berger U.S., Inc.				412 Mount Kemble Avenue Morristown, NJ 07962	ENG	0407006979	12-31-2017
Louis Berger U.S., Inc.				1250 23rd St NW Washington, D.C. 20037	ENG	0411001317	2-28-2018
Vanasse Hangen Brustlin, Inc.	F1170440	Foreign Corporation	Active	Two Columbus Center Suite 400 Virginia Beach, VA 23462	ENG, LS, LA	0411000348	02-28-2018
Vanasse Hangen Brustlin, Inc.				351 McLaws Circle STE 3 Williamsburg, VA 23185-6316	ENG, LS	0411000235	02-28-2018

ATTACHMENT 3.2.10

State Project No. 0095-111-259

SCC and DPOR Information

Vanasse Hangen Brustlin, Inc.				115 South 15th Street STE 200 Richmond, VA 23219	ENG, LS	0407003225	12-31-2017
Vanasse Hangen Brustlin, Inc.				8300 Boone Boulevard STE 700 Vienna, VA 22182- 2624	ENG	0411000427	02-28-2018
O.R. Colan Associates, LLC.	T0653610	Foreign Limited Liability Company	Active	11121 Carmel Commons Boulevard Suite 200 Charlotte, NC 28226	Real Estate Appraisal Board	4008001545	7-31-2017
Professional Service Industries, Inc.	F0449829	Foreign Corporation	Active	445 Battlefield Blvd N Bldg R Chesapeake, VA 23320	ENG	0411000978	2-28-2018
Professional Service Industries, Inc.				2930 Eskridge Rd Suite A Fairfax, VA 22031	ENG	0411000149	2-28-2018
McDonough Bolyard Peck, Inc.	03518008	Corporation	Active	3040 Williams Dr., STE 300 Fairfax, VA 22031	ENG	0407002955	12-31-2017
NXL Construction Co., Inc.	03497427	Corporation	Active	114 E Cary St., STE 200 Richmond, VA 23219	ENG, LS	0407003031	12-31-2017
NXL Construction Co., Inc.				4515 Daly Drive STE H Chantilly, VA 20151	LS	0411000535	2-28-2018

ATTACHMENT 3.2.10
State Project No. 0095-111-259
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
Skanska USA Civil Southeast Inc.	William Brent Hunt	Virginia Beach, VA	102 Flamingo PL Yorktown, VA 23692	ENG	0402038999	6-30-2018
Louis Berger U.S., Inc.	Christopher Conner Adams	Richmond, VA	5812 Old Richmond Ave. Richmond, VA 23226	ENG	0402033017	1-31-2019
Louis Berger U.S., Inc.	Dean Douglas Hatfield	Raleigh, NC	1509 Oakboro Dr. Raleigh, NC 27614	ENG	0402018960	11-30-2018
McDonough Bolyard Peck, Inc.	Duncan Kenneth Stewart	Fairfax, VA	13318 Railey Hill Drive Midlothian, VA 32114	ENG	0402036991	6-30-2018

3.2.10.1

Full Size Copies of SCC Registration

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Skanska USA Civil Southeast Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is May 9, 1932;

That the period of its duration is perpetual; and

That the corporation is in existence and in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
November 21, 2016*

Joel H. Peck

Joel H. Peck, Clerk of the Commission

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL F CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office we

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Cor



11/21/16

CISM0180

CORPORATE DATA INQUIRY

15:49:02

CORP ID: 0038279 - 4 STATUS: 00 ACTIVE STATUS DATE: 06/22/11
 CORP NAME: Skanska USA Civil Southeast Inc.

DATE OF CERTIFICATE: 05/09/1932 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:
 1111 EAST MAIN STREET
 CITY: RICHMOND STATE : VA ZIP: 23219-0000
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 07/01/14 LOC : 216
 ACCEPTED AR#: 216 07 2757 DATE: 04/25/16 RICHMOND CITY
 CURRENT AR#: 216 07 2757 DATE: 04/25/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
16	1,700.00					1,000,000

(Screen Id:/Corp_Data_Inquiry)



SCC eFile
Business Entity Details



Skanska USA Civil Southeast Inc.

- SCC eFile
- SCC eFile Home Page
- Check Name
- Distinguishability
- Business Entity Search
- Certificate Verification
- FAQs
- Contact Us
- Give Us Feedback
- Business Entities
- UCC or Tax Liens
- Court Services
- Additional Services

General

SCC ID: 00382754
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 5/9/1932
Status: Active
Shares Authorized: 1000000

Select an action

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

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

Principal Office

295 BENDIX RD STE 400
VIRGINIA BEACH VA23452

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
BANK OF AMERICA CENTER, 16TH FLOOR
1111 EAST MAIN STREET
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 7/1/2014

Commonwealth of Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

The foregoing is a true copy of the application for an amended certificate of authority to transact business in Virginia filed in the Clerk's Office of the Commission by Louis Berger U.S., Inc., a New York corporation.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
May 13, 2016*

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



**SCC
Clerk's
Information
System**

CISM0180

CORPORATE DATA INQUIRY

09/06/16

14:02:32

CORP ID: - 0 STATUS: 00 ACTIVE STATUS DATE: 03/10/16

CORP NAME:

DATE OF CERTIFICATE: 02/10/1993 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: NY NEW YORK STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CORPORATION SERVICE COMPANY

STREET: Bank of America Center, 16th Floor AR RTN MAIL:
1111 East Main Street

CITY: RICHMOND STATE : VA ZIP: 23219-0000

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

ACCEPTED AR#: 216 05 3009 DATE: 03/17/16 RICHMOND CITY

CURRENT AR#: 216 05 3009 DATE: 03/17/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
16	100.00	10.00				200



Visit SCCeFile!

CIS has changed to enhance its navigation.
Click on menu items or buttons to select and perform functions. You may also use
function keys as labeled. Function key usage varies depending on the Application Screen.
Please refer to [Function Key Documentation](#) for details.

(ScreenId:Corp_Data_Inquiry)



SCC eFile
Business Entity Details

[Help](#)

Louis Berger U.S., Inc.

SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: F1131780
Entity Type: Foreign Corporation
Jurisdiction of Formation: NY
Date of Formation/Registration: 2/10/1993
Status: Active
Shares Authorized: 200

Select an action

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

[New Search](#)

[Home](#)

Principal Office

412 MOUNT KEMBLE AVENUE
MORRISTOWN NJ07960

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
Bank of America Center, 16th Floor
1111 East Main Street
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 4/29/2011

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond,

March 18, 1994

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

Vanasse Hangen Brustlin, Inc.

a corporation organized under the laws of MASSACHUSETTS
and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.



State Corporation Commission

Attest:

William J. Bridg
Clerk of the Commission



SCC eFile Business Entity Details

[?](#) Help

Vanasse Hangen Brustlin, Inc.

SCC eFile
SCC eFile Home Page
Check Name
Distinguishability
Business Entity Search
Certificate Verification
FAQs
Contact Us
Give Us Feedback
Business Entities
UCC or Tax Liens
Court Services
Additional Services

General

SCC ID: F1170440
 Entity Type: Foreign Corporation
 Jurisdiction of Formation: MA
 Date of Formation/Registration: 3/18/1994
 Status: Active
 Shares Authorized: 15000

Select an action

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

Principal Office

101 WALNUT ST.
 WATERTOWN MA02471

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

Registered Agent/Registered Office

REGISTERED AGENT SOLUTIONS INC
 7288 HANOVER GREEN DR
 MECHANICSVILLE VA 23111
 HANOVER COUNTY 142
 Status: Active
 Effective Date: 12/11/2008

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That O.R. COLAN ASSOCIATES, LLC, a limited liability company organized under the law of Florida, obtained a certificate of registration to transact business in Virginia from the Commission on May 9, 2016; and

That it is registered to transact business in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:
June 3, 2016*

A handwritten signature in cursive script that reads "Joel H. Peck".

Joel H. Peck, Clerk of the Commission





SCC eFile Business Entity Details

[Help](#)

O.R. COLAN ASSOCIATES, LLC

SCC eFile

[SCC eFile Home Page](#)
[Check Name](#)
[Distinguishability](#)
[Business Entity Search](#)
[Certificate Verification](#)
[FAQs](#)
[Contact Us](#)
[Give Us Feedback](#)

Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: T0653610
Entity Type: Foreign Limited Liability Company
Jurisdiction of Formation: FL
Date of Formation/Registration: 5/9/2016
Status: Active

Select an action

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

Principal Office

7005 SHANNON WILLOW RD STE 100
CHARLOTTE NC28226

[New Search](#)

[Home](#)

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
1111 E MAIN ST
BANK OF AMERICA CENTER 16TH FL
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 5/9/2016

Commonwealth of Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That PROFESSIONAL SERVICE INDUSTRIES, INC., a corporation incorporated under the law of Delaware, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on February 23, 1984; and

That the corporation is in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
September 21, 2016*

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

Cases regarding communications and energy matters established after January start with PUR-2017-XXXXX. Prior year, active and closed cases are not affect

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office w

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12/21/16

CISM0180

CORPORATE DATA INQUIRY

08:11:40

CORP ID: F044982 - 9 STATUS: 00 ACTIVE STATUS DATE: 05/16/96
CORP NAME: PROFESSIONAL SERVICE INDUSTRIES, INC.

DATE OF CERTIFICATE: 02/23/1984 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: DE DELAWARE STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CORPORATION SERVICE COMPANY

STREET: BRANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:
1111 EAST MAIN STREET

CITY: RICHMOND STATE : VA ZIP: 23219-0000
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 04/15/16 LOC : 143
ACCEPTED AR#: 216 03 7560 DATE: 02/19/16 HENRICO COUNTY
CURRENT AR#: 216 03 7560 DATE: 02/19/16 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
17 100.00 100.00 100

(Screen Id:/Corp_Data_Inquiry)



SCC eFile
Business Entity Details



PROFESSIONAL SERVICE INDUSTRIES, INC.

SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: F0449829
Entity Type: Foreign Corporation
Jurisdiction of Formation: DE
Date of Formation/Registration: 2/23/1984
Status: Active
Shares Authorized: 100

Select an action

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

[New Search](#)

[Home](#)

Principal Office

1901 S MEYERS RD STE 400
OAKBROOK TERRACE IL60181

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY
BRANK OF AMERICA CENTER, 16TH FLOOR
1111 EAST MAIN STREET
RICHMOND VA 23219
HENRICO COUNTY 143
Status: Active
Effective Date: 4/15/2016

Commonwealth OF Virginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That McDonough Bolyard Peck, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is December 29, 1989;

That the period of its duration is perpetual; and

That the corporation is in existence and in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
October 20, 2016*

Joel H. Peck

Joel H. Peck, Clerk of the Commission



SCC eFile Business Entity Details



McDonough Bolyard Peck, Inc.

SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: 03518008
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 12/29/1989
Status: Active
Shares Authorized: 250000

Principal Office

3040 WILLIAMS DR
SUITE 300
FAIRFAX VA22031

Registered Agent/Registered Office

REES BROOME, PC
1900 GALLOWS RD STE 700
TYSONS CORNER VA 22182
FAIRFAX COUNTY 129
Status: Active
Effective Date: 9/1/2012

Select an action

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

[New Search](#)

[Home](#)

Commonwealth of Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

NXL Construction Co., Inc. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is November 17, 1989.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:
July 10, 2007*



Joel H. Peck

Joel H. Peck, Clerk of the Commission

Commonwealth of Virginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

A duly attested copy of a certificate setting forth that NXL Construction Co., Inc. conducts business in Virginia under the assumed or fictitious name of NXL CONSTRUCTION SERVICES, INC. was filed in the Clerk's Office of the Commission on September 16, 1992.

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:
July 29, 2009*

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



SCC eFile Business Entity Details



NXL Construction Co., Inc.

- SCC eFile
- SCC eFile Home Page
- Check Name
- Distinguishability
- Business Entity Search
- Certificate Verification
- FAQs
- Contact Us
- Give Us Feedback
- Business Entities
- UCC or Tax Liens
- Court Services
- Additional Services

General

SCC ID: 03497427
 Entity Type: Corporation
 Jurisdiction of Formation: VA
 Date of Formation/Registration: 11/17/1989
 Status: Active
 Shares Authorized: 5000

Principal Office

114 E CARY STREET SUITE 200
 RICHMOND VA23219

Registered Agent/Registered Office

NICOMEDES L DE LEON
 9606 GEORGE'S BLUFF RD
 RICHMOND VA 23229
 HENRICO COUNTY 143
 Status: Active
 Effective Date: 10/8/1998

Select an action

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

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

3.2.10.2

Full Size Copies of DPOR
Registration
(Offices)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

10-31-2018

NUMBER

2701000041

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS CBC EMC H/H



SKANSKA USA CIVIL SOUTHEAST INC
295 BENDIX ROAD
STE 400
VIRGINIA BEACH, VA 23452



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)
(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS CBC EMC H/H
NUMBER: 2701000041 EXPIRES: 10-31-2018

SKANSKA USA CIVIL SOUTHEAST INC
295 BENDIX ROAD
STE 400
VIRGINIA BEACH, VA 23452



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411001319

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

PROFESSIONS: ENG



LOUIS BERGER US INC
BOULDERS III
1100 BOULDERS PKWY STE 720
RICHMOND, VA 23225



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

Jan W. DeBoer
Jan W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001319 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
BOULDERS III
1100 BOULDERS PKWY STE 720
RICHMOND, VA 23225



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411001316

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

PROFESSIONS: ENG



LOUIS BERGER US INC
1001 WADE AVE STE 400
RALEIGH, NC 27605



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001316 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
1001 WADE AVE STE 400
RALEIGH, NC 27605



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON
02-28-2018

NUMBER
0411001334

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

PROFESSIONS: ENG



LOUIS BERGER US INC
2401 WALNUT ST STE 501
PHILADELPHIA, PA 19103



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001334 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
2401 WALNUT ST STE 501
PHILADELPHIA, PA 19103



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON
12-31-2017

NUMBER
0407006979

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

PROFESSIONS: ENG



LOUIS BERGER US INC
412 MOUNT KEMBLE AVENUE
MORRISTOWN, NJ 07962



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)
(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407006979 EXPIRES: 12-31-2017
PROFESSIONS: ENG
LOUIS BERGER US INC
412 MOUNT KEMBLE AVENUE
MORRISTOWN, NJ 07962



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411001317

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

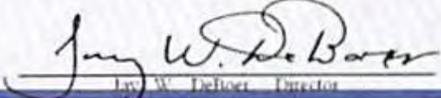
PROFESSIONS: ENG



LOUIS BERGER US INC
1250 23RD ST NW
WASHINGTON, DC 20037



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


Jay W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001317 EXPIRES: 02-28-2018
PROFESSIONS: ENG
LOUIS BERGER US INC
1250 23RD ST NW
WASHINGTON, DC 20037



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON
02-28-2018

NUMBER
0411000348

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

PROFESSIONS: ENG, LS, LA



VANASSE HANGEN BRUSTLIN INC
TWO COLUMBUS CENTER
SUITE 400
VIRGINIA BEACH, VA 23462



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR AP/ELSC/DLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000348 EXPIRES: 02-28-2018
PROFESSIONS: ENG, LS, LA
VANASSE HANGEN BRUSTLIN INC
TWO COLUMBUS CENTER
SUITE 400
VIRGINIA BEACH, VA 23462



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000235

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

PROFESSIONS: ENG, LS



VANASSE HANGEN BRUSTLIN INC
351 MCLAWS CIRCLE STE 3
WILLIAMSBURG, VA 23185-6316



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

 COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000235 EXPIRES: 02-28-2018
PROFESSIONS: ENG, LS
VANASSE HANGEN BRUSTLIN INC
351 MCLAWS CIRCLE STE 3
WILLIAMSBURG, VA 23185-6316



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2017

NUMBER

0407003225

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

PROFESSIONS: ENG, LS



VANASSE HANGEN BRUSTLIN INC
115 SOUTH 15TH STREET
SUITE 200
RICHMOND, VA 23219



Jay W. DeBoer
Jay W. DeBoer, Director

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

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DPOR-LIC (05/2015)

(DETACH HERE)

 COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR AP/ELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003225 EXPIRES: 12-31-2017
PROFESSIONS: ENG, LS
VANASSE HANGEN BRUSTLIN INC
115 SOUTH 15TH STREET
SUITE 200
RICHMOND, VA 23219



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000427

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

PROFESSIONS: ENG



VANASSE HANGEN BRUSTLIN INC

VHB

8300 BOONE BLVD

STE 700

VIENNA, VA 22182-2624



Jay W. DeBoer
Jay W. DeBoer, Director

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

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DPOR-LIC (05/2015)

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA

BUSINESS ENTITY BRANCH OFFICE REGISTRATION

NUMBER: 0411000427 EXPIRES: 02-28-2018

PROFESSIONS: ENG

VANASSE HANGEN BRUSTLIN INC

VHB

8300 BOONE BLVD

STE 700

VIENNA, VA 22182-2624



(FOLD)

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

DPOR-PC (05/2015)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
07-31-2017

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

NUMBER
4008001545

REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION

O R COLAN ASSOCIATES OF FLORIDA LLC
11121 CARMEL COMMONS BOULEVARD
SUITE 200
CHARLOTTE, NC 28226



Jay W. DeBoer
Jay W. DeBoer, Director

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
REAL ESTATE APPRAISER BOARD
APPRAISAL BUSINESS REGISTRATION
NUMBER: 4008001545 EXPIRES: 07-31-2017

O R COLAN ASSOCIATES OF FLORIDA LLC
11121 CARMEL COMMONS BOULEVARD
SUITE 200
CHARLOTTE, NC 28226



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON
02-28-2018

NUMBER
0411000978

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

PROFESSIONS: ENG



PROFESSIONAL SERVICE INDUSTRIES INC
445 BATTLEFIELD BLVD N BLDG R
CHESAPEAKE, VA 23320



Jay W. DeBoer
Jay W. DeBoer, Director

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

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000978 EXPIRES: 02-28-2018
PROFESSIONS: ENG
PROFESSIONAL SERVICE INDUSTRIES INC
445 BATTLEFIELD BLVD N BLDG R
CHESAPEAKE, VA 23320



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON
02-28-2018

NUMBER
0411000149

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

PROFESSIONS: ENG



PROFESSIONAL SERVICE INDUSTRIES INC
2930 ESKRIDGE RD
SUITE A
FAIRFAX, VA 22031



Jay W. DeBoer
Jay W DeBoer Director

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

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DPOR-LIC (05/2015)
(DETACH HERE)



COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000149 EXPIRES: 02-28-2018
PROFESSIONS: ENG
PROFESSIONAL SERVICE INDUSTRIES INC
2930 ESKRIDGE RD
SUITE A
FAIRFAX, VA 22031



(Fold)

DPOR-LIC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2017

NUMBER

0407002955

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

PROFESSIONS: ENG



MCDONOUGH BOLYARD PECK INC
3040 WILLIAMS DR., STE 300
FAIRFAX, VA 22031



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

Jay W. DeBoer
Jay W. DeBoer Director

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COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407002955 EXPIRES: 12-31-2017
PROFESSIONS: ENG
MCDONOUGH BOLYARD PECK INC
3040 WILLIAMS DR., STE 300
FAIRFAX, VA 22031



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

DPOR-FC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2017

NUMBER

0407003031

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

PROFESSIONS: ENG, LS



NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
114 E CARY ST STE 200
RICHMOND, VA 23219



Jan W. DeBoer
Jan W. DeBoer, Director

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

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003031 EXPIRES: 12-31-2017
PROFESSIONS: ENG, LS
NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
114 E CARY ST STE 200
RICHMOND, VA 23219



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-28-2018

NUMBER

0411000535

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

PROFESSIONS: LS



NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
4515 DALY DRIVE STE H
CHANTILLY, VA 20151



Jay W. DeBoer
Jay W. DeBoer, Director

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

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000535 EXPIRES: 02-28-2018
PROFESSIONS: LS
NXL CONSTRUCTION CO INC
NXL CONSTRUCTION SERVICES INC
4515 DALY DRIVE STE H
CHANTILLY, VA 20151



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DPOR-PC (05/2015)

3.2.10.3

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Registration
(Key Personnel)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

06-30-2018

NUMBER

0402038999

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



WILLIAM BRENT HUNT
102 FLAMINGO PL
YORKTOWN, VA 23692



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

Jay W. DeBoer
Jay W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

01-31-2019

NUMBER

0402033017

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



CHRISTOPHER CONNER ADAMS
5812 OLD RICHMOND AVE
RICHMOND, VA 23226



Jay W. DeBoer
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

11-30-2018

NUMBER

0402018960

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



DEAN DOUGLAS HATFIELD
1509 OAKBORO DR
RALEIGH, NC 27614



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


Jay W. DeBoer, Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

06-30-2018

NUMBER

0402036991

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



DUNCAN KENNETH STEWART
13318 RAILEY HILL DRIVE
MIDLOTHIAN, VA 32114



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

Jay W. DeBoer
Jay W. DeBoer Director

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)



COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APESCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402036991 EXPIRES: 06-30-2018

DUNCAN KENNETH STEWART
13318 RAILEY HILL DRIVE
MIDLOTHIAN, VA 32114



(FOLD)

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

DPOR-LIC (05/2015)

3.2.10.4

Full Size Copies of DPOR
Registration
(Non-APELSCVIDLA)

NONE PROVIDED AT THIS TIME

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: Brent Hunt, PE, Project Manager
b. Project Assignment: Design Build Project Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Skanska USA Civil Southeast Inc., (Full Time Employee)
d. Employment History: With this Firm <u>20</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Skanska USA Civil Southeast, Inc., Jul. 1996 to Present. Mr. Brent Hunt has 20 years of experience in the construction industry, including eight years of experience in project management. He has specializations in highway, complex interchange work, construction of bridges in a marine environment, and working with sensitive wetlands during complex civil construction. Mr. Hunt also has extensive experience in managing safety, subcontractors and quality aspects of a job. Mr. Hunt's experience in challenging construction environments has provided him with a diverse skillset in employee and subcontractor management, scheduling, budgeting, customer relations, procurement, reporting, and public relations. Mr. Hunt is a certified Professional Engineer in the Commonwealth of Virginia.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: B.S., Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA, 1996
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer, VA Registration #: 038999
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. Elizabeth River Tunnels PPP, Norfolk, VA – Project Manager/ Design-Build Coordinator, 2013- Present, Skanska USA Civil Southeast Inc. Specific Responsibilities: As a Project Manager, Mr. Hunt manages on-site project progress to ensure that schedule, budget, and quality expectations are being met. He oversees a team of project employees and maintains responsive communication with the customer and community. Mr. Hunt provides leadership and direction to the project team, ensures compliance with safety, quality, and environmental policies, as well as manages cost and schedule. Mr. Hunt currently works with the Martin Luther King segment of the project and manages a large group of subcontractors on-site. During the first year of this project, Mr. Hunt was the Design-Build Coordinator and worked closely with the designers reviewing the plans for constructability issues and potential cost savings.

Skanska, as managing partner of a joint venture, is designing, building, and constructing the \$1.5 billion Elizabeth Rivers Tunnel Project. Construction includes designing, constructing and installing a new two-lane tunnel under the Elizabeth River parallel to the existing Midtown Tunnel; maintenance and safety improvements to the existing Midtown and Downtown Tunnels; and extending the MLK Expressway from London Blvd. to I-264 in Portsmouth. Fabrication of the new tunnel was in Sparrows Point, MD. Tunnel sections were towed down the Chesapeake Bay to their installation point. In addition to the challenges of installing this tunnel, the work did take place in one of the more active port areas on the Eastern Seaboard. The Skanska team is responsible for maintenance of traffic, quality, safety and environmental activities.

2. Huguenot Bridge Replacement, Richmond, VA – Project Manager, 2010-2013, Skanska USA Civil Southeast Inc.

Specific Responsibilities: Mr. Hunt was responsible for all aspects of operations on this \$40 million project to replace the Huguenot Bridge in Richmond, VA. His daily activities included customer relations; supervision of line and supervisory personnel; quality, safety, and environmental oversight; subcontractor oversight; materials procurement; scheduling and budget. Mr. Hunt provided solutions for the project team when flooding of the James River occurred and the team overcame schedule delay. Mr. Hunt gained experience in managing a project with limited access around project perimeter. This project was particularly challenging because the structure crossed over wetlands, a state park, the James River, an archaeological site, CSX railroad, and the Kanawha Canal (which provides the drinking water for the City of Richmond). A 36" water line ran parallel to the east side of the new bridge which limited crane access on that side. Mr. Hunt overcame these challenges to provide success for the Huguenot Bridge project.

The \$35 million bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location as the current bridge. The new structure has one 12 foot lane and one 10 foot shoulder in each direction. The 10 foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. A five foot wide sidewalk on each side for pedestrians was added and the approach roadway was improved as necessary to accommodate the bridge replacement.

3. Bridge of Lions Rehabilitation, St. Augustine, FL – Project Manager, 2005-2009, Skanska USA Civil Southeast Inc.

Specific Responsibilities: As Project Manager for this \$86 million project, Mr. Hunt was responsible for the overall project administration, leadership and technical direction to assure project operations were conducted safely in accordance with contract documents, design, budget, and schedule and to maintain compliance with all federal, state and local laws. He performed a variety of tasks including: coordinating vendors and subcontractors, developing cost information, supervising all onsite staff, and providing direction for the project. Also responsible for construction quality management and contract administration.

Project elements included temporary bridges, bridge reconstruction, roadway surfaces, curbs and gutters, sidewalks, drainage modifications, signage, pavement markings, signalization, lighting, irrigation and hardscapes. Major work activities involved replacement of the superstructure, widening of vehicular lanes of travel, erection of a safety barrier between car lanes and sidewalks, removal and replacement of approach piers, and replacement of elements such as handrails and light fixtures, which were no longer safe.

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

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

Mr. Hunt is currently assigned full-time to the P3 Elizabeth River Tunnels project in Portsmouth, VA as project manager for the MLK Extension portion of the project. While the project is scheduled to complete in 2018, the MLK Extension work is scheduled to be completed in 2017 allowing.

Mr. Hunt will be on-site full-time for the duration of construction.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Brent Hunt, PE, Project Manager
b. Project Assignment: Responsible Charge Engineer
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Skanska USA Civil Southeast Inc. (Full Time Employee)
d. Employment History: With this Firm <u>20</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Skanska USA Civil Southeast, Inc., Jul. 1996 to Present. Mr. Brent Hunt has 20 years of experience in the construction industry, including eight years of experience in project management. He has specializations in highway, complex interchange work, construction of bridges in a marine environment, and working with sensitive wetlands during complex civil construction. Mr. Hunt also has extensive experience in managing safety, subcontractors and quality aspects of a job. Mr. Hunt's experience in challenging construction environments has provided him with a diverse skillset in employee and subcontractor management, scheduling, budgeting, customer relations, procurement, reporting, and public relations. Mr. Hunt is a certified Professional Engineer in the Commonwealth of Virginia.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: B.S., Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA, 1996
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer, VA Registration #: 038999
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. Elizabeth River Tunnels PPP, Norfolk, VA – Project Manager/ Design-Build Coordinator, 2013- Present, Skanska USA Civil Southeast Inc. Specific Responsibilities: As a Project Manager, Mr. Hunt manages on-site project progress to ensure that schedule, budget, and quality expectations are being met. He oversees a team of project employees and maintains responsive communication with the customer and community. Mr. Hunt provides leadership and direction to the project team, ensures compliance with safety, quality, and environmental policies, as well as manages cost and schedule. Mr. Hunt currently works with the Martin Luther King extension and manages a large group of subcontractors on-site. During the first year of this project, Mr. Hunt was the Design-Build Coordinator and worked closely with the designers reviewing the plans for constructability issues and potential cost savings. Skanska, as managing partner of a joint venture, is designing, building, and constructing the \$1.5 billion Elizabeth Rivers Tunnel Project. Construction includes designing, constructing and installing a new two-lane tunnel under

the Elizabeth River parallel to the existing Midtown Tunnel; maintenance and safety improvements to the existing Midtown and Downtown Tunnels; and extending the MLK Expressway from London Blvd. to I-264 in Portsmouth. Fabrication of the new tunnel was in Sparrows Point, MD. Tunnel sections were towed down the Chesapeake Bay to their installation point. In addition to the challenges of installing this tunnel, the work did take place in one of the more active port areas on the Eastern Seaboard. The Skanska team is responsible for maintenance of traffic, quality, safety and environmental activities.

2. Huguenot Bridge Replacement, Richmond, VA – Project Manager, 2010-2013, Skanska USA Civil Southeast Inc.

Specific Responsibilities: Mr. Hunt was responsible for all aspects of operations on this \$40 million project to replace the Huguenot Bridge in Richmond, VA. His daily activities included customer relations; supervision of line and supervisory personnel; quality, safety, and environmental oversight; subcontractor oversight; materials procurement; scheduling and budget. Mr. Hunt provided solutions for the project team when flooding of the James River occurred and the team overcame schedule delay. Mr. Hunt gained experience in managing a project with limited access around project perimeter. This project was particularly challenging because the structure crossed over wetlands, a state park, the James River, an archaeological site, CSX railroad, and the Kanawha Canal (which provides the drinking water for the City of Richmond). A 36” water line ran parallel to the east side of the new bridge which limited crane access on that side. Mr. Hunt overcame these challenges to provide success for the Huguenot Bridge project.

The \$35 million bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location as the current bridge. The new structure has one 12 foot lane and one 10 foot shoulder in each direction. The 10 foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. A five foot wide sidewalk on each side for pedestrians was added and the approach roadway was improved as necessary to accommodate the bridge replacement.

3. Bridge of Lions Rehabilitation, St. Augustine, FL – Project Manager, 2005-2009, Skanska USA Civil Southeast Inc.

Specific Responsibilities: As Project Manager for this \$86 million project, Mr. Hunt was responsible for the overall project administration, leadership and technical direction to assure project operations were conducted safely in accordance with contract documents, design, budget, and schedule and to maintain compliance with all federal, state and local laws. He performed a variety of tasks including: coordinating vendors and subcontractors, developing cost information, supervising all onsite staff, and providing direction for the project. Also responsible for construction quality management and contract administration.

Project elements included temporary bridges, bridge reconstruction, roadway surfaces, curbs and gutters, sidewalks, drainage modifications, signage, pavement markings, signalization, lighting, irrigation and hardscapes. Major work activities involved replacement of the superstructure, widening of vehicular lanes of travel, erection of a safety barrier between car lanes and sidewalks, removal and replacement of approach piers, and replacement of elements such as handrails and light fixtures, which were no longer safe.

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

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

Mr. Hunt is currently assigned full-time to the P3 Elizabeth River Tunnels project in Portsmouth, VA as project manager for the MLK Extension portion of the project. While the project is scheduled to complete in 2018, the MLK Extension work is scheduled to be completed in 2017.

Mr. Hunt will be on-site full-time for the duration of construction.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Duncan Stewart, PE, CCM, PSP
b. Project Assignment: Quality Assurance Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): MBP, Inc. (Full Time Employee)
d. Employment History: With this Firm <u>17</u> Years With Other Firms <u>2</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): MBP Inc., 1999-Present: As an Engineer, Project Manager and MBP's Richmond Branch Operations Manager since 2011, Mr. Stewart has served multiple roles for numerous clients. His experience has been primarily related to quality assurance and project management for VDOT construction. He has served VDOT as part of its consultant CEI staff on multiple high-profile projects in the Richmond District. He has also served VDOT as the Project Manager for MBP's Final Estimate review contract for over seven years. In these roles he has gained expert knowledge of VDOT's inspection and record-keeping requirements, and is often called on by VDOT staff for support and training. Since 2008, Mr. Stewart has served as a Quality Assurance Manager on six VDOT design-build projects, totaling over \$75 million in construction value. He has also supported VDOT in providing IA/IV oversight of design-build projects, as well as project controls support to the Ohio Department of Transportation for its design-build program. VMS Inc., (1997-1999): As a Field Engineer, Mr. Stewart was responsible for maintenance of designated sections of I-95, and providing oversight management of various construction and maintenance projects.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Royal Military College of Canada, Kingston, Ontario, Canada/B.Eng./1997/Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2002 / Professional Engineer / VA Registration #: 036991; 2014 / Certified Construction Manager / CMCI ID: 2423 2015 / Planning & Scheduling Professional / 1490
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. I-895 Airport Connector Road (Design-Build), Richmond, VA – Quality Assurance Manager, 2008-2011, MBP Specific Responsibilities: Mr. Stewart was responsible for developing a QA/QC Plan in accordance with VDOT's requirements, was responsible for delivering these QA services and supporting project documentation for this design-build project. Mr. Stewart supervised a team of up to five QA inspectors and technicians, as well as providing oversight for the contractor's quality control staff and program. Mr. Stewart provided a detailed monthly

report, as well as review and approval of the monthly payment applications. The project construction cost was approximately \$42 million.

2. Huguenot Bridge Replacement, Richmond, VA – Project Controls Engineer, 2010-2014, MBP

Specific Responsibilities: Mr. Stewart was responsible for CPM schedule reviews, time impact analysis, and oversight of project records. The project included the complete phased replacement of the Huguenot Bridge over the James River, as well as significant maintenance of traffic, utility relocation, drainage, retaining walls and new approaches. The project was completed early, for significantly less than the original engineer’s estimate, and was awarded a VTCA Honorable Mention award. The project construction cost was approximately \$40 million.

3. ODOT I-71/670 Interchange (Design-Build), Columbus, OH – Project Manager (Scheduling), 2011-2014, MBP, Inc.

Specific Responsibilities: Mr. Stewart provided oversight, QC and management of the CPM baseline schedule review, including review of comments and narrative reports developed by others, coordination with ODOT for response and resolution of outstanding issues, and attended multiple meetings and conference calls with ODOT and contractor representatives. The design-build project, included phased reconstruction of a major interchange, multiple bridges, retaining walls, and pavement. The project construction cost was approximately \$200 million.

4. VDOT I-64 at Zion Crossroads Interchange (Design-Build), Louisa County, VA – Quality Assurance Manager, 2012-2014, MBP, Inc.

Specific Responsibilities: Mr. Stewart established the QA/QC Plan and was responsible for the successful implementation of this plan. Other responsibilities included the oversight of the QC construction inspection, materials testing, and sampling of work performed by the design-builder’s quality control. Mr. Stewart was responsible for verifying quality compliance and seeing that there were minimal interruptions due to quality issues and that the project was delivered to the contract requirements. He oversaw the entire quality assurance and quality control program, all materials testing, and IA/IV interactions with VDOT and FWHA. He also supervised MBP and subconsultant inspectors and technicians. Mr. Stewart and the Corman Construction team worked extremely well together on this project. The project included complicated Maintenance of Traffic (MOT) considerations, as well as a wide range of construction elements from utility relocations, to signalization and paving. The project construction cost was approximately \$7 million.

5. VDOT Route 35 Darden Bridge Replacement (Design-Build), Courtland, VA –Quality Assurance Manager, 2014-2015, MBP, Inc.

Specific Responsibilities: Mr. Stewart provided independent QA services, including oversight and supervision of the QA inspection, testing of all materials used and the work performed. He also provided monitoring and directed corrective actions as required for the contractor’s QC program. Mr. Stewart ensured that the work was constructed in accordance with the contract documents and that the sampling, testing and inspection was performed in accordance with the approved QA/QC Plan. Mr. Stewart worked in concert with the Design-Build team and VDOT to resolve multiple NCRs and issues. This project was also completed on an extremely accelerated schedule and required substantial QA support and proactive management to avoid and resolve any quality issues. The project construction cost was approximately \$10 million.

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

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

Mr. Stewart is currently not assigned on any projects and will be on-site full-time for the duration of construction. Mr. Stewart will be available on a part-time basis during the duration of design.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Dean D. Hatfield, PE, Vice President, Director of Transportation Engineering
b. Project Assignment: Design Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Louis Berger (Full Time Employee)
d. Employment History: With this Firm <u>12</u> Years With Other Firms <u>23</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): 2004-Present: Louis Berger Director of Transportation Engineering for design and construction. Responsible for total project delivery including management, administration, design development, inspection, construction oversight, schedule, and quality of all transportation projects in the Virginias and Carolinas (Virginia, West Virginia, North Carolina, and South Carolina). 1998-2004: Parsons Brinckerhoff Senior Project Manager for transportation projects in Virginia, North Carolina and South Carolina.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: West Virginia Institute of Technology / MS / 1983 / Civil Engineering West Virginia Institute of Technology / BS / 1981 / Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1986/Professional Engineer/VA #18960
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. I-77 HOT Lanes P3; Mecklenburg and Iredell Counties, NC – Design Consultant Manager, 2012- 2016, Louis Berger Specific Responsibilities: Design Consultant Manager for both the tender and final designs in order to add managed lanes in a 26 mile corridor. The \$655M project is to be delivered in 42 months from financial close. Oversaw the development of project controls for the contract and managed the overall project budget, quality and design compliance requirements. Supported the design task leaders and discipline managers. Directly responsible project standard and directive drawings, design criteria, design reviews, location surveys, geotechnical investigation, right-of-way, and utilities. Interaction with key developer staff, stakeholders, operating railroads, local municipalities, Department of Transportation, and private utility companies was a critical responsibility of the assignment.

Specific Responsibilities: Project manager responsible for construction support services phase, including coordinating and distributing RFIs and Submittals among the team members. Lead structural engineer for the design to replace this 50-year-old structure. The curved steel structure spans the James River, CSX tracks, and a historic barge canal. Project work included design of all concrete elements of the 3,000ft long bridge and managing the production of plan sheets to ensure proper conformity with VDOT standards. Design of concrete elements consisted of the deck, abutments, and piers. The substructure consisted of wall piers that were designed for staged construction and seismic loading. One of the 17-pier foundation was designed with drilled shafts due to scour concerns in the river. The deck was also designed for staged construction.

3. **County of Fairfax Lorton Road Bridges, Fairfax County, VA – Structural Project Manager/ Lead Structural Engineer, 2008-Present, Louis Berger formerly operating as Ammann & Whitney**

Specific Responsibilities: Structural Project Manager and Lead Structural Engineer responsible for final design services for two new structures as part of an innovative road improvement project utilizing Low Impact Design (LID) techniques. The crossing over the creek was originally slated to be replaced with twin bridges, which were to be skewed, simple span steel girders on a curved alignment. Our firm was able to provide a lower cost alternative by developing plans for a prefabricated concrete arch culvert. By utilizing a culvert the County will enjoy considerable cost savings, both in initial cost and maintenance costs. The pedestrian underpass is just west of the new creek crossing and will be a key structure along the pedestrian trail known as the Laurel Hill Greenway. The existing alignment of Lorton Road currently spans the Greenway using a barrel tunnel built in 1911 for the old prison railroad. Because the existing barrel tunnel will remain in place, aesthetics on the new prefabricated structure will be important to the county and surrounding community to make sure there is visual continuity between the structures.

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

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

Mr. Hatfield will be full-time for the duration of design.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Kevin Aeschilman, Superintendent
b. Project Assignment: Project Construction Manager
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Skanska USA Civil Southeast, Inc. (Full Time Employee)
d. Employment History: With this Firm <u>22</u> Years With Other Firms <u>2</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Skanska USA Civil Southeast, Inc., Jul. 1994 to Present. As a Superintendent with Skanska, Mr. Aeschilman has more than 24 years of experience in heavy civil construction including 11 years in managing field operations for complex construction projects and 13 years in field engineering. As superintendent for the Elizabeth River Tunnels project, he provides essential daily supervision of the field labor force. His responsibilities have included managing site logistics, conducting quality and safety inspections, monitoring costs, managing the schedule, and providing oversight for subcontractor operations.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: N/A
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. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. Elizabeth River Tunnels PPP, Norfolk, VA –Project Superintendent, 2013-2016, Skanska USA Civil Southeast Inc. P3 Design Build Specific Responsibilities: Mr. Aeschilman plans and directs daily on-site activities to ensure project progress is in coordination with scheduling and budget. He is responsible for the overall project development and leads the construction team. Mr. Aeschilman’s duties include implementation of contract documents, specifications and scope of work; ensuring compliance with corporate safety, environmental, and quality programs, plans and policies, and training employees. As a Superintendent, Mr. Aeschilman regularly reviews and inspects project activities, provides reports and documentation for identifying, analyzing, mitigating, and managing risk on the project. He is responsible for subcontractor relations and works directly with the project manager. Skanska, as managing partner of a joint venture, is designing, building, and constructing the \$1.5 billion P3 Elizabeth Rivers Tunnel Project. Construction includes designing, constructing and installing a new two-lane tunnel under the Elizabeth River parallel to the existing Midtown Tunnel; maintenance and safety improvements to the existing Midtown and Downtown Tunnels; and extending the MLK Expressway from London Blvd. to I-

264 in Portsmouth. Fabrication of the new tunnel is taking place in Sparrows Point, MD. Tunnel sections will be towed down the Chesapeake Bay to their installation point. In addition to the challenges of installing this tunnel, the work will take place in one of the more active port areas on the Eastern Seaboard. The Skanska team is responsible for maintenance of traffic, quality, safety and environmental activities.

2. Huguenot Bridge Replacement, Richmond, VA – Project Superintendent, 2010-2013, Skanska USA Civil Southeast Inc.

Specific Responsibilities: As Project Superintendent, Mr. Aeschliman supervised on-site construction activities while collaborating with project and construction managers. His attention to detail assured project quality, safety, and environmental practices were properly implemented. Other duties included scheduling, subcontractor management, and inspections.

The \$40M bridge reconstruction project involved replacing the existing structure with a new structure in approximately the same location as the current bridge. The new structure has one 12 foot lane and one 10 foot shoulder in each direction. The 10 foot shoulder functions as both an emergency lane and a lane to allow bicyclists to safely use the bridge. A five-foot-wide sidewalk on each side for pedestrians was added and the approach roadway was improved as necessary to accommodate the bridge replacement.

3. I-10 Escambia Bay Bridge Replacement, Project Superintendent, 2006-2008, Skanska USA Civil Southeast Inc.

Specific Responsibilities: Mr. Aeschliman's Superintendent duties included overall project development, heavy coordination with project managers, critical scheduling, compliance with corporate safety, environmental, and quality programs, leading the construction team through training and managing of field work in accordance with the project budget and deadline. Other duties included construction oversight, safety and quality oversight, and reporting.

The scope of work on this \$255M project was a design-build project that involved the new construction of two parallel bridges and demolition of the existing I-10 bridges crossing the Escambia Bay that were damaged by Hurricane Ivan. The two replacement bridges are approximately 2.5 miles (13,867 feet) long and have three 12-foot travel lanes with 10-foot shoulders. The bridges are founded on 140,000 feet of 36-inch voided square, prestressed concrete piling. The bridges include over 25,000 cubic yards of substructure concrete and 54,000 cubic yards of superstructure concrete. The project was finished ahead of schedule and achieved an early completion bonus.

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

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

Mr. Aeschliman is currently assigned full-time to the Ultimate I-4 (P3 \$2.4B) project in Orlando, FL as a project superintendent. While the project is scheduled to complete in 2021, Kevin will be available full time on this project when construction starts.

Mr. Aeschliman will be on-site full-time for the duration of construction.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Christopher Adams, P.E., Director of Structures, Southeast
b. Project Assignment: Lead Structural Engineer
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): Louis Berger (Full Time Employee)
d. Employment History: With this Firm <u>9</u> Years With Other Firms <u>13</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): 2008 – Present: Louis Berger, U.S., Inc. As director of structures in the southeast US, Mr. Adams oversees and performs bridge/structure design, plan preparation, cost estimating, and construction support as well as inspection and evaluation of existing structures for rehabilitation and repair. This has encompassed bridge maintenance, construction engineering, and new bridge design projects for over 100 bridges in Virginia and the District of Columbia. 2004-2008: Wilbur Smith & Associates, Bridge and Structural Engineering 1997-2003: Gannett Fleming, Inc., Bridge and Structural Engineering 1994-1997: VDOT, Bridge and Structural Engineering
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Princeton University / MEng / 2004 / Civil Engineering University of Virginia / BS / 1994 / Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1999 / Professional Engineer / VA #033017
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (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.) 1. 2013 Citywide Bridge Design Services Consultant, Washington, D.C. – Project Manager, 2013-2016, Louis Berger, U.S., Inc. Specific Responsibilities: Project manager for the detailed load ratings and fatigue analysis for historic and complex bridges. Working directly with DDOT, Louis Berger (formerly operating as Ammann & Whitney) is performing detailed structural analysis on aging and historic structures, including concrete arches, tapered concrete beams, and haunched steel girder bridges, in addition to many other types of structures. Additional work includes emergency bridge repairs, emergency bridge inspection, bridge testing, construction inspection and creation of construction work orders. 2. Huguenot Bridge Replacement, Richmond, VA – Project Manager, 2008 (Design Phase)2010-2013 (Construction Phase), Louis Berger formerly operating as Ammann & Whitney

2. Cooper River Bridges Replacement Design-Build Project, Charleston, SC – Project Engineer, 2001-2005, Parsons Brinckerhoff

Specific Responsibilities: Project Engineer responsible for the development of the roadway and interchange geometry, coordination of surveying and mapping requests, and advancement in the collection the subsurface utility information. Interfaced with the structural layout was necessary due to the fast-track project approach. The project included a new six-lane cable stay bridge with 1,546 feet main span that will replace the existing Pearman and Grace Memorial Bridges that carry U.S. 17 over the Cooper River and Town Creek between Charleston and Mount Pleasant, South Carolina. New bridge also featured a 186 feet vertical navigation clearance between the two towers in the Cooper River. Project also included the design of a four level U.S. 17/I-26 interchange in Charleston and an interchange with U.S. 17/SC 703 in Mt. Pleasant. All roadway design for the project was completed using GEOPAK and MicroStation design software.

3. I-515/US 95/US 93 Freeway Widening (Las Vegas Beltway), Las Vegas, NV – Project Engineer, 2005-2007, Louis Berger

Specific Responsibilities: Project Engineer for the development of preliminary roadway construction plans (30% Plans) to widen I-515/US 95/US 93 from an existing six lane freeway to a 12-lane facility. The purpose of the improvement/widening project is to decrease traffic congestion in the country's fastest growing metropolitan area. The ultimate goal of these improvements is to enhance traffic operations for motorists traveling from the I-15 Spaghetti Bowl Interchange to the I-215 Henderson Spaghetti Bowl Interchange. In conjunction with the additional lanes, improvements to existing ramps for 13 interchanges were re-designed. The design of two new SPUI interchanges was also provided. Careful attention was paid to the maintenance of traffic through this 20-mile congested corridor.

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

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

Mr. Adams will be full-time for the duration of design.

3.4.1

Work History Forms

3.4.1 (a)

Lead Contractor

Work History Forms

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	
11 th Street Corridor, Washington, D.C. Design-Build	Johnson, Mirmiran & Thompson (JMT)	Name of Client/ Owner: District Department of Transportation Phone: 202-671-2700 Project Manager: Ravindra Ganvir, P.E. Phone: 202-671-4689 Email: ravindra.ganvir@dc.gov	7/2009	05/2015*	\$260,000	\$375,079**	\$172,140

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 with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Firms Role Skanska, as managing partner of a joint venture, was awarded a \$260M design-build contract by the District Department of Transportation (DDOT) to reconstruct the 11th Street Corridor in Washington, D.C. The work included design and construction of approximately 16 lane miles of new roadway, three river bridges, and 17 land bridges. The project featured three distinct areas of construction—the eastern interchange and roadway; the western interchange and roadway; and the three-bridge river crossing.

Project Narrative: The work was divided into three segments: eastside interchange and roadway, Westside interchange and roadway, and river bridges, all with an aggressive schedule. Each segment had its own Construction Manager and resources, and was coordinated by the Design Build Project Manager. As needed, resources were allocated to another segment to meet schedule. By implementing our inclement weather plans, we were able to quickly recover from snowstorms and hurricanes. While the project was not designated as a fast-track project, Skanska worked to complete and open project segments ahead of schedule. We opened every ramp early, some by as much as 8-9 months.



Innovative Solutions: Our design partners provided a number of innovative designs, including one that minimized traffic shifts, which was also a major risk factor and DDOT concern for this project. Seventy percent of the construction work was out of traffic and completed with only two major traffic-movements for the project. Our innovation included our approach to ground improvements, where we used techniques such as installing additional wick drains and geofoam blocks to ensure the schedule was maintained. .

Community Interaction: The construction plan included innovative responses to project problems, including designing and scheduling activities that moved a majority of the construction work out of traffic, and minimized traffic shifts and lane closures. Our communications plan kept travelers, local businesses and nearby residents apprised of traffic activities.

Additionally, through meetings with neighborhood associations, the Skanska team solicited input from residents that reduced impacts to the nearby residents through a lowered profile, moving the centerline away from nearby homes, and reducing noise. We planned around local events, such as sporting events and government-related events, to ensure construction did not interfere with travelers to an event.

Annual average daily traffic through the Corridor was 106,000 vehicles. Our strategy to minimize congestion included working out of traffic, minimizing traffic shifts by waiting until new roadways were complete before shifting traffic, and working at times of lighter traffic. We also publicized construction activities to allow drivers to make alternate plans for travel and to make them aware of changes, detours, etc. The team took a big picture view, analyzed where traffic in the work zone was coming from, and looked at an area sometimes as much as five-miles away from the construction zone. We outlined alternate routes that drivers could take, and posted electronic signage informing drivers of faster options. The technique was very effective in eliminating congestion in the construction zone as drivers had useful information in a timely fashion on avoiding delays.

Explanation of *Contract Completion Date and **Contract Value Difference - When Skanska was awarded this project in 2009, DDOT deferred some of the planned work due to a lack of funds. When they secured funding, DDOT and Skanska negotiated a \$90M change order to complete the project as originally planned. In addition to funding, the contract was extended an additional 30 months to November of 2015. The customer has also issued some 30 task orders that have altered the scope of work.

Similar Scope Elements

- | | |
|--|--|
| ✓ Design-build | ✓ Stakeholder coordination |
| ✓ Traffic Control Devices | ✓ Active DBE |
| ✓ Quality assurance and quality control independent of construction | Development program during contract helped exceed goals. |
| ✓ Environmental including permitting | ✓ Demolition of structures |
| ✓ Milling and overlaying existing pavement | ✓ \$90M change order demonstrated customer satisfaction |
| ✓ Transportation management plan for 100,000+ AADT | ✓ Largest contract in DDOT's history |
| ✓ Traffic maintenance and management during all phases of construction | ✓ Sustainability activities promoted reuse of demolished materials on site, reducing transportation costs and congestion |
| ✓ Geotechnical | ✓ Drainage and SWM |

Awards

Over a dozen awards including Roads and Bridges #1 Bridge (2012).

DBE Performance:

The Skanska team met its \$41.9M DBE goal. Throughout the course of the project, we maintained a proactive approach to utilizing DBE firms. Activities included hosting regular job fairs, helping potential DBE firms with the application process, and hosting regular Lunch & Learn sessions for subcontractors discussing industry issues and providing information about best practices. The project had a dedicated DBE Compliance Officer on site to ensure the team activities, practices, and reporting were in compliance with rules and regulations. The Skanska team made a concerted effort to hire qualified local firms and to recruit, hire, and train local worker

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	
Elizabeth River Tunnels, PPP P3 Design-Build	Parsons Brinckerhoff	Name of Client/ Owner: Virginia Department of Transportation Phone: 757-932-4480 Project Manager: Jay Neider, P.E. Phone: 757-932-4480 Email: jay.neider@vdot.virginia.gov	08/2018	12/2017	\$1,460,130	\$1,496,000	\$673,704

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 with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Firms Role: The Elizabeth River Tunnels project, which will deliver a major increase in capacity on the route, is Skanska's first public-private partnership (P3) in the USA. The partnership is between the Virginia Department of Transportation and the Skanska and Macquarie consortium, Elizabeth River Crossings OpCo LLC.

Project Narrative: The route between the cities of Portsmouth and Norfolk via the tunnel under the Elizabeth River in Virginia, USA, is the busiest 2-lane route east of the Mississippi, serving the huge and transient US naval community. Since the tunnel was built 50 years ago, population has increased nearly 70 percent and tunnel usage has gone up by 600 percent. Additional capacity is urgently needed.

The existing single-tube Midtown Tunnel (US 58) is the most heavily traveled two-lane roadway in Virginia. The new parallel tube, comprised of 11 segments of immersed concrete tubes, will double the roadway capacity across the river at the Midtown location and alleviate severe morning and evening congestion. On the Norfolk side, interchange ramps are being configured to the twin tunnel portals. Additional works included major maintenance, new jet fan ventilation, and fire life safety improvements to the existing Midtown Tunnel tube and to the existing two tubes of the Downtown Tunnel (I-264)

The project also consists of the southbound extension of the six-lane Martin Luther King Freeway (mostly on structure), which will connect Western Freeway (VA 164) and US 58 to I-264, with an additional interchange at High Street.



Under a comprehensive agreement, VDOT will maintain ownership of the infrastructure and oversee the project company's activities. The company, Elizabeth River Crossings OpCo, will finance and build the facilities, then operate and maintain them for a 58-year term.

Innovative Solutions. Our team cast the tunnel elements in two groups at a graving dock near Baltimore, MD., and then floated them 220 miles down the Chesapeake Bay to the project site. There, they weighed down each element with tons of concrete and filled huge ballast tanks with river water, making it heavy enough so a special catamaran barge could lower it – with the help of GPS positioning – into a trench they carved below the river's surface. Our team immersed the first element in October 2014, and typically they repeated that process every five weeks. It was risky work, but thanks to extensive planning all 11 immersions went smoothly.

The team worked to develop cost-effective and low risk solutions for ground improvements. Specifically, the Project included the use of lightweight fill, EPS embankments, and surcharging at specific locations to minimize the potential for long-term settlement. The use of EPS embankments involved special details to avoid the placement of drainage collection structures within the EPS embankment material

Traffic Management. Complex construction with tight tolerances in heavily traveled urban and marine environments necessitated creative solutions such as: Permitting an international port location at lay-down yard to accept deliveries; Delivery of large materials (i.e. piles) during off-peak hours to avoid traffic disruption; Performing aspects of work at off-peak / night-time hours to avoid disruption; and Regular interaction with stakeholders and municipalities to solicit input prior to work and feedback during/after major portions of work. Examples include changing DTT Rehabilitation from full weekend closures to night-time only closures and implementing major public input to detour plans.

Community Interaction: Skanska participated in extensive public outreach efforts to keep locals informed of construction impacts, including public information sessions and open houses for specific areas of work. The team also participated in the extensive education and outreach to the public related to all-electronic tolling in the form of: radio, television, and newspaper advertisements; advertising on buses, at gas stations, and billboards; and targeted information sessions with large employers, municipalities, and the military.

Similar Scope Elements

- ✓ Design Build P3
- ✓ Interstate Widening
- ✓ Storm Water Management
- ✓ Work performed in Urban/commercial area
- ✓ Bridge structures over urban street
- ✓ Public involvement/relations
- ✓ ITS, Lighting and Signalization
- ✓ Quality Assurance and Independent Quality Control Program
- ✓ Retaining and Sound Walls
- ✓ Complex, demanding Schedule
- ✓ Traffic Control Devices
- ✓ MOT in congested area
- ✓ NEPA and environmental permitting compliance
- ✓ ROW acquisition services
- ✓ Utility coordination and relocation

Awards

Virginia Governor's Environmental Excellence Award

DBE Performance:

The DBE goal for this project is 12%. Skanska is currently achieving 14.65% utilization (approximately \$131M).

The SWaM goal for this project is 23% (approximately \$202M). Skanska is achieving 22.42% utilization We expect to meet the goal by the end of the project.

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	
Route 1/I-95/I-495 Interchange	HNTB	Name of Client/ Owner: Virginia Department of Transportation Phone: 703-783-8368 Project Manager: Jalal Masumi Phone: 703-259-2215 Email: jalal.masumi@vdot.virginia.gov	01/2005	06/2009	\$146,577	\$189,425	\$101,805

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 with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Firms Role: This \$189M project was the reconstruction of Interstate I-95/495 from Telegraph Road through the interchange of US Route 1 (Jefferson Davis Highway) to the approaches of the Woodrow Wilson Memorial Bridge on I-495. The project included construction of 19 structural steel bridges, expanding 1.6 miles of interstate roadway from 12 to 14 lanes in width, 2 temporary bridges and the demolition of 7 existing bridges. Project challenges included maintenance of traffic, working in limited space in a densely populated urban area, utility coordination, and coordination with contractors working on adjacent parts of the project, community relations, and environmental mitigation for adjacent sensitive wetlands. One key to our success was entering into a partnering relationship with VDOT, which was recognized by a silver medal from the National Partnership for Highway Quality.

Project Narrative: The scope of work for the project included approximately 4,000 concrete and steel piles for foundations, bridge concrete substructures (footings, columns and caps), setting 685 large structural steel bridge girders and 525 concrete girders, placing more than 70,000 cubic yards of concrete, installing steel sheet piles, more than 30,000 square feet of sound walls, and more than 25,000 square feet of MSE walls. Utility upgrades along Route 1 (including jack and bore piping under the existing roadway), asphalt paving with base courses along Route 1 and the Capital Beltway, highway lighting improvements, a SMART traffic communications system, and wetlands area mitigation were completed. Project scope included:

- | | |
|------------------------------------|---------------------------------------|
| ✓ 22 Major Traffic Switches | ✓ Roadway Widening Precast Concrete |
| ✓ 18 Detours | ✓ Cast-in-place Concrete |
| ✓ 15 MSE/Sound/Visual Walls | ✓ Reinforcing Steel |
| ✓ 3,200 Ground Improvement Piles | ✓ Miscellaneous Metals/Steel |
| ✓ Urban Construction | ✓ Specialized Equipment |
| ✓ High level of community interest | ✓ Close Coordination w/Subcontractors |
| ✓ Wetlands area mitigation | |



Delivering multiple projects concurrently on fast track schedule. The Route 1/I-95/I-495 Interchange project was part of the \$2.2B Woodrow Wilson Bridge project. The Route 1 interchange was the first project encountered when coming off the bridge into Virginia. Skanska coordinated with seven other contractors working nearby on other segments of the project. Skanska achieved all six interim milestones and realized incentives totaling \$6.9M. Southbound I-95 traffic shift was achieved four months ahead of schedule in order to synchronize with a similar traffic shift on the adjacent Woodrow Wilson Bridge. Just one week later, Route 1 southbound traffic was placed on the newly constructed Route 1 bridge a week ahead of the maximum incentive milestone date.

Delivering projects in developed urban corridors. The work took place in Alexandria, VA, along a very highly developed urban corridor, with adjacent businesses, residences and industrial facilities. Traffic management for 220,000 AADT was achieved through utilizing phased construction over the project life of 4.5 years. Skanska worked closely with other contractors on the project to synchronize lane shifts and openings, and communicate changes through multiple media outlets and signage on site. Methods for achieving driver safety included clear signage alerting travelers to lane changes, deploying traffic guidance systems, and assisting with accident cleanup. Employees were constantly trained in safe construction practices, with special attention given to the hazards of working in a constricted urban area, and project specific hazards such as high-tension lines traversing the project site.

Limiting impacts to the traveling public and affected business and communities, including commitments to effective strategies to minimize congestion during construction. Most of the work that required deliveries took place at off-peak times, usually weekday nights and some weekends. This work did require temporary lane closures during said off-peak times, but were brought back on line within the timeframe required. Closings were announced through local media, on the VDOT electronic messaging system on the local interstates, on portable electronic messaging signs. Closing announcements included suggestions for alternate routes. Beyond deliveries, the project was constructed through several traffic movements while maintaining the level of service needed for this busy corridor. We were asked to accelerate different movements by VDOT and did so all the while not affecting the traveling public and / or local business and communities.

Use of innovative design solutions and construction techniques. Skanska was able to implement a number of innovative construction techniques while building the Route 1 project. Most notable was the use of geofoam blocks to protect a major water main that ran under the highway. Several areas of the project required specialty geotechnical improvement methods such as ground improvement piles. Further, through a detailed maintenance of traffic plan, Skanska was able to limit impacts to the traveling public and affected businesses in the construction zone. We implemented effective strategies to minimize congestion during construction. Our strategy to minimize congestion included working out of traffic, minimizing traffic shifts by waiting until new roadways were complete before shifting traffic, and working at times of lighter traffic.

Similar Scope Elements

- | | |
|--|---|
| ✓ Traffic management for 220,000 | ✓ MSE and retaining walls |
| ✓ Public involvement and stakeholder Outreach | ✓ Lighting, guardrails, and improved signage |
| ✓ Innovative use of materials to protect utilities | ✓ Achieved 14% DBE goal |
| ✓ Storm drainage and SWM | ✓ Coordination with seven other contractors, including traffic shifts |
| ✓ Environmental/permitting | ✓ Installed SMART traffic communication system |
| ✓ Signs, sign structures, and overhead gantries | ✓ Over 4,000 concrete and steel foundations |
| ✓ Expanded interstate from 12 to 14 lanes | ✓ Wetlands mitigation with replanting native grasses in marsh areas |
| ✓ Partnering relationship with customer | |
| On-site quality management team | |

Awards

Silver Medal winner, Partnership for Highway Quality.

DBE Performance:

The DBE goal for this project was 14%. We exceeded this goal (14.1%).

3.4.1 (b)

Lead Designer

Work History Forms

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)	
Huguenot Memorial Bridge Replacement, Henrico County, VA	Name: Skanska USA Civil Southeast, Inc.	Name of Client.: VDOT Phone: 804.786.2561 Project Manager: Steven McNeely Phone: 804.524.6152 Email: steven.mcneely@vdot.virginia.gov	08/2010	10/2013	\$35,000,000	\$40,000,000	\$4,500 (all subconsultants included) \$2,400 (Louis Berger only)

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

	<p>Firms Role: Louis Berger (formerly operating as Ammann & Whitney) served as the consultant project manager, coordinating and overseeing the work performed by other disciplines, including aerial and ground surveys, traffic data acquisition and analyses, roadway and stormwater management design services, redesign of an interchange along the south bank and initial cultural resource assessment of the site (part of the preliminary study).</p> <p>Louis Berger staff also provided and managed construction support services for the duration of the project. Notable accomplishments during the construction phase included working with the contractor (Skanska) on alternate deck pouring sequences. Working closely with the contractor, we were able to eliminate construction delays due to utility relocation challenges at the start of the project. The project was completed on budget and three months early.</p>	<p>Preliminary and final design and construction support services were provided for the replacement of the Huguenot Memorial Bridge. Built in 1949, the curved steel structure spans the James River, CSX Tracks, James River Parks and the historic Kanawha barge canal.</p> <p>Maintenance of Traffic: In order to minimize disruption to traffic, the new bridge was built in stages along an alignment that was parallel to the existing structure. In developing the span arrangement, the team sought to minimize the number of piers, which in turn minimized the footprint and environmental effects from the new bridge. Due to local ground accelerations, the new bridge was designed to sustain seismic loads. Design for stream forces, wind loads and special military loading were other special structural considerations included in the project. Other work performed included hydraulic, hydrologic and scour analyses; cost estimates; existing bridge evaluation; replacement structures and span optimization design; repair and replacement alternatives evaluations; and public participation.</p>	<p>Similar Scope Elements</p> <ul style="list-style-type: none"> ✓ New Bridge Over River and Interchange ✓ Innovative Structural Design Minimized Traffic and Enviro Impacts ✓ Designed for Variety Dynamic Loads ✓ With Skanska developed Innovative deck Pour Sequence to Avoid Delays ✓ Completed Three Months Ahead of Schedule ✓ Community/Stakeholder Outreach ✓ Utility Coordination/Relocation ✓ ROW Acquisition ✓ Environmental Study/Permitting ✓ Staged Construction/MOT Control ✓ Lighting, Guiderrails ✓ Storm Drainage/SWM ✓ Geotechnical ✓ Surveying
 	<p>Project Narrative: This bridge is a vital transportation link in metropolitan Richmond, so traffic lanes had to remain open during construction. During preliminary design, the team developed preliminary layouts for six alternatives. A staged construction methodology was selected that minimized right-of-way impacts and kept traffic moving on the bridge. By placing Stage I of the new structure close to the existing</p>	<p>Right-of-Way: Right-of-way acquisition was required for this bridge replacement project. As prime for the project our staff oversaw the design of commercial and residential right-of-way acquisitions. Project plans for all relocations and partial property takes were prepared as part of this design-bid-build effort. Our team was responsible for identifying impacts to properties, conducting surveys, and preparing right-of-way maps.</p>	<p>Awards Virginia Transportation Construction Alliance (VTCA), Transportation Engineering Awards 2014 Honorable Mention—Engineering</p> <p>DBE Performance: For the Huguenot Bridge replacement project our team utilized DBE firms for geotechnical and survey services. The firms were VDOT-certified DBEs and our team complied with all agency and project DBE requirements.</p>
<p>structure, we were able to keep at least one sidewalk open during construction at all times.</p> <p>The existing bridge had 41 piers, with six in the river and two in the canal. The new bridge has 17 piers, with five in the river and none in the canal. Pier placement was key to minimizing impacts on stream flow. The new structure incorporates aesthetic elements, including a railing that allows pedestrians and motorists to view the river, along with specially shaped piers and surface staining of many visible concrete elements, reminiscent of the old bridge. A portion of the existing open railing, which was cherished by the community but did not meet crash requirements, was preserved and put on a display in a nearby park.</p>			

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: River Crossing Complex Project—SR 0422, Section 4TR Interchange, Montgomery County, PA	Name: J.D. Eckman, Inc.	Name of Client: Pennsylvania Dept. of Transportation Project Manager: Michael Holva, PE Phone: 610.205.6831 Email: mholva@pa.gov	10/2013	12/2015	\$16,800	\$16,800	\$1,500

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

Firms Role: Louis Berger, formerly operating as Ammann & Whitney and as a subconsultant, was lead designer providing preliminary engineering, final design and construction support services for SR 0422 Section 4TR Trooper Road interchange as part of the River Crossing Complex project.

Project Narrative: Originally built in the 1960s the roadway was not capable of handling today's volume. To meet the objectives of the Section 4TR project—provide local and regional relief to SR 0422 commuter traffic, enhance safety and operational efficiency to/from SR 0422 for the community while minimizing local traffic impacts, and utilize the constrained site to construct the improved interchange within the right-of-way and without disturbing the environmentally sensitive surrounding areas—it was designed and constructed as a full movement interchange.

Traffic Control and Safety: During design an extensive traffic control plan was developed. Throughout the construction the team was able to maintain all lanes of travel along Trooper Road. Lane movements were clearly marked and signs were installed to direct traffic. A pedestrian detour was required. The team provided regular updates to PennDOT who posted construction updates and notifications on their website. The public could check in real time for updates. In order to rebuild and widen Audubon Road the roadway was closed to local traffic for one weekend. Significant coordination with the project stakeholders was required—residences, businesses, the church/school and a bus company. The construction was completed without any incident and to the satisfaction of the community. The project was completed in 897 calendar days without any incidents or accidents. A testament to the team's commitment to safety.



Right-of-Way and Environmentally Sensitive Resources: The single greatest challenge of the project was the physical footprint of the site in which the team had to work. The site, located in the heart of a bustling community, already affected by heavy traffic volume had limited room for expansion. Constrained by the right-of-way and environmentally sensitive resources, the team actively engaged the community and met with all the neighboring property owners to understand their concerns and provide solutions to mitigate them. The interchanges were carefully built into the landscape. Extensive excavation was

required to clear and grade the site from the sound walls down to the roadway to accommodate the ramps and geometry of the loops. From the roadway additional earth was undercut to create new storm water BMPs.

The contractor provided an alternate option during construction, T-walls (a panelized wall system). Additional land required excavation to bury the concrete straps that support the wall panels, then backfilled. The team worked with the contractor to develop a design for the T-walls that would satisfy the project requirements, while working through the construction sequence and staging to keep the project within the right-of-way.

Storm Water BMPs—Bioretention Basins: There was no room for storm water BMPs outside of the roadway and rock was discovered at or near the surface of the proposed BMP locations with no possibility for infiltration. The team utilized two bioretention/rain garden basins. Amended soils were added where needed. The amended soils allows for sediment dropout and filtering through vegetation while also allowing for minor amounts of infiltration. The area has been landscaped with native grasses, trees and shrubs. The site reduces runoff velocities, enhances infiltration and filters runoff. In addition, amended soils (41,000sy accounting for almost 1/8 of the contact totaling \$2M) were used throughout the site to mitigate the volume of water runoff—41,000sy. To maximize the minimal area the team had to treat storm water runoff, amended soils were added to all disturbed areas and some previously untreated areas. The BMPs will maintain and protect existing water quality. Overall, all pollutants except for NO3 were reduce to below their existing levels.

Quality Assurance/Control: A rigid set of check and balances were implemented during the design and construction process. The team established a project specific quality control program for the work. Throughout the design the team completed quality verification forms, which were required for each major submission. In preparation for each of the major deliverable submissions an independent audit was completed by a professional engineer. The team performed constructability reviews to ensure the project could be built as it was designed. They took into account the construction sequencing, staging, material delivery and laydown, site access, etc. With such a constrained site every inch was critical. Design decisions were made not only based on durability, maintenance requirements and cost, but also for ability to be implemented within the site. Quality and constructability reviews were completed before each major submission to PennDOT, who also conducted their own independent review of the documentation. Drawings were 100% complete before they were released for bid.

Work was performed in the Philadelphia office.

Similar Scope Elements

- | | |
|--|--|
| ✓ Designed Full Movement Interchange | ✓ Stakeholder Coordination |
| ✓ Constrained Project Site and Right-of-Way | ✓ Demolition of Structures |
| ✓ Environmental including permitting | ✓ Drainage and SWM—Designed Two Bioretention/Rain Garden Basins |
| ✓ Extensive MOT Plan | ✓ Geotechnical |
| ✓ MSE and Retaining Walls | ✓ Amended Soils—41,000cy |
| ✓ Lighting and Guiderails | ✓ Removed 163,000cy of Earth to Bring Roadway Back 20ft |
| ✓ Signs and Signage | ✓ Detailed Quality Management Plan |
| ✓ Minimal Disruption to Natural Resources | ✓ Project Safety—Completed in 897 Calendar Days Without Any Incidents or Accidents |
| ✓ Landscaped with Native Grasses, Trees and Shrubs | |

DBE Performance:

For the SR0422 4TR project our team utilized DBE firms for geotechnical and survey services. Our 10% DBE goal for the design was successfully met. The firms were PennDOT-certified DBEs and our team complied with all agency and project DBE requirements.

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)	
I-77 HOT Lanes P3, Mecklenburg and Iredell Counties, NC	Name: Ferrovial Agroman/W.C. English (joint venture)	Name of Client: North Carolina Department of Transportation (owner)/ Sugar Creek Construction LLC (client) Phone : 877-368-4968 (NCDOT) Project Manager: Virginia Mabry Phone: 919.707.2904 Email: vmabry@ncdot.gov	05/2016	Estimated Completion Summer 2019	\$655,000	\$735,000*	\$12,500

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

Firms Role: Louis Berger served as lead designer during the tender design phase and was engineer of record through the final design of the I-77 HOT Lanes P3 project. This is the first Public Private Partnership (P3) project to be executed by North Carolina Department of Transportation (NCDOT) and provides the addition of managed lanes along a 26-mile corridor of I-77. The addition of the HOT lanes was accomplished within the existing median with minimal needs for additional right-of-way. HOT lanes are provided in both directions for the project limits in the I-77 corridor. Two HOT lanes in each direction extend from I-277 to Catawba Avenue and then one HOT lane per direction to NC 150. The project stretches through dense populated suburban conditions from I-277 in uptown Charlotte and progresses to the north including major system to system interchanges with I-85 and I-485.



Project Narrative: Louis Berger is the lead designer providing design services and overall design management providing a design compliant with NCDOT needs and consistent with the concession agreement and technical requirements of the concessionaire. The design includes coordination with both Intelligent Transportation Systems (ITS) and electronic collection elements. Design responsibilities included: roadway, hydraulics, structures, traffic control, signing, lighting, signals, markings, ITS civil works, power drops, and permitting. Staff coordinated with other disciplines

including location surveys, geotechnical, environmental documentation, ROW acquisition, utility coordination, identified bonus allocation projects, and power services for all contract electronic devices and evaluation of proposed ITS communications infrastructure.

Proactive Approach and Coordination: Our team provided a pro-active management approach during tender design and carried that forward through the final design effort. During the tender, the project was developed in close coordination with our contract partner to ensure that the bid was compliant with the technical requirements of the concession agreement. During final design a careful approach to design management is being employed to provide a design that meets the requirements of the concessionaire while coordinating with NCDOT as ultimate owner of the roadway. Our team reached out to local communities and City of Charlotte through the project's public involvement program.

Environmental Protection and Permitting: Crossing environmentally sensitive Lake Norman and protecting the project-adjacent residential areas required extensive coordination with the Federal Environmental Regulatory Commission and the USACE Division of Water Quality. Project concerns addressed the Lake's dam and crucial power supply role in the area and the control of potentially contaminated spill from the project site. Our staff prepared the environmental management plan for the project including a storm water pollution prevention plan (SWPPP) and erosion and sediment control and compliance with the requirements of the categorical exclusion.

Maintenance of Traffic: Another key to the success of the project was development of an extensive transportation management plan (TMP). The TMP maintained all existing lanes of traffic during peak hours throughout construction. The TMP incorporated only nighttime and other low volume periods for temporary lane closures through the use of signing barriers, and stripping. Detailed construction staging plans allowed for project flexibility and acceleration while minimizing utility conflicts and relocations. The multi-phase/modal TMP accommodated pedestrians, enhanced motorists' awareness, and protected workers since much of the project work was in urban setting that included multiple utility providers.

Project Controls/Reporting: The team oversaw the establishment of project controls for the contract and managed the overall project design budget, and design and quality compliance requirements including the development of corridor-wide construction standards, specifications, special provisions, directive drawings, design criteria, special specifications and general notes and design review standards. In addition a project-specific detailed design quality management plan (DQMP) was developed for the project. Lead by a dedicated quality manager the DQMP was be updated with every new task order, work order, and scope modification, identifying responsibilities, applicable operating procedures (OPs), and unique requirements.

Fast-track Schedule: Total integration of the project controls process, along with strict adherence to the DQMP, and constant coordination with the construction team, the design team was a major contributor in order to deliver the project in 42 months from financial close.

Design Improvements: Our team worked with the owner, concessionaire, contractor, and the City to revise the southern terminus of the project which allows traffic to better utilize the existing exits on the north side of uptown Charlotte. Originally designed with one flyover, the design team developed a concept to use three flyovers that maintains full access from the HOT lanes to the uptown area. While these flyovers incorporate the existing interchanges on I-277, traffic operation are significantly enhanced. In the design development stage to add addition lanes to the roadway, our team analyzed and refined NCDOT's policy on hydroplaning. Accounting for the speed at which hydroplaning occurs on roadways, our team researched the effects and prepared new standards that are now part of NCDOT's design approach and policy.

The major effort for the design was lead and performed in the Raleigh Office with critical staffing support provided from the offices in Richmond, Columbia, Miami, Dallas, Las Vegas, Needham, Portland, and Morristown.

Explanation of *Contract Value Difference: The construction cost was increased due to owner and stakeholder requests. These changes were the result of stakeholder input on the 277 interchange and municipalities in corridor receiving funds to add bonus allocation projects to the overall effort.

Similar Scope Elements

- | | |
|--|--|
| ✓ First Design Build P3 Project in North Carolina | ✓ Interstate Widening |
| ✓ Traffic Control Devices | ✓ Work Performed in Urban/Commercial area |
| ✓ Detailed Quality Management Plan | ✓ 20 Bridge Rehabilitation Replacement or Widening |
| ✓ Environmental Protection and Permitting | ✓ Public Involvement Participation |
| ✓ Environmental work with FREC and the USACE Division of Water Quality | ✓ ITS, Lighting and Signalization |
| ✓ Geotechnical | ✓ Coordination with 4 Railroad Companies |
| ✓ Key Developer Staff, Local Municipalities and Stakeholder Coordination | ✓ Developed Detailed Project Control Procedures |
| ✓ Drainage and Stormwater Management | ✓ Refined NCDOT's Policy on Hydroplaning |
| ✓ Extensive MOT Plan for 26 Miles | |
| ✓ Utility Coordination | |
| ✓ Fast-track Schedule | |

DBE Performance:

Not applicable



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usa.skanska.com

295 Bendix Rd #400
Virginia Beach, VA 23452
Phone 757.420.4140

SKANSKA

in association with



Louis Berger