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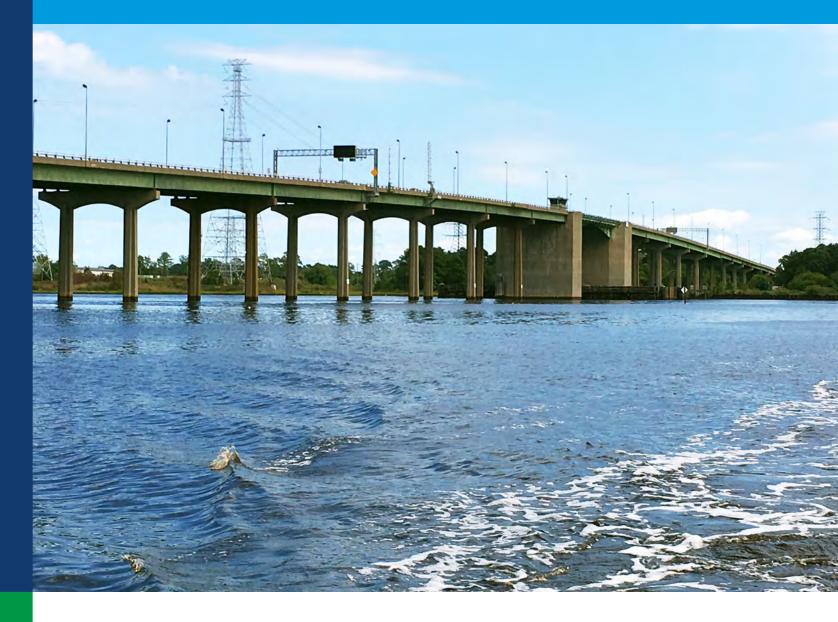
Design-Build Project For I-64 Southside Widening and High Rise Bridge, Phase 1 City of Chesapeake, Virginia

Contract ID Number: C00106692DB93

Statement of Qualifications

October 2016

Skanska-Archer Western 2 Joint Venture











Statement of Qualifications

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Statement of Qualifications







Skanska-Archer Western 2 Joint Venture 295 Bendix Road Suite 400 Virginia Beach, VA 23452

October 13, 2016

Mr. Jeffrey A. Roby Commonwealth of Virginia Department of Transportation (VDOT) Central Office Mail Center Loading Dock Entrance 1401 E. Broad Street Richmond, Virginia 23219

RE: Request for Qualifications Design-Build Project for I-64 Southside Widening and High Rise Bridge, Phase 1 State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

Dear Mr. Roby,

Skanska-Archer Western 2 Joint Venture (SAW2JV) is pleased to share our credentials, experience and ideas on how to work collaboratively with VDOT and the community for a successful I-64 Southside Widening and High Rise Bridge, Phase 1 Project (I64HRB). SAW2JV combines two of the most respected and experienced U.S. design-build (DB) contractors, Skanska USA Civil Southeast Inc. and Archer Western Construction, LLC to specifically address the unique needs of I64HRB. Our long-time partner, Parsons Brinckerhoff, Inc., which has more than 50 years experience in the area working with us and VDOT, is our lead design firm.

Since 1932, Skanska has been in Hampton Roads constructing some of the largest, most challenging projects in the area: the Second Hampton Roads Bridge-Tunnel, the Berkley Bridge, the I-264 and I-64 HOV lanes and, most recently, the Elizabeth River Tunnels (ERT). Our Design-Build Project Manager, Mr. Tom Fulton, and many of the management staff and work force required for the I64HRB will come from the ERT project, which will finish early next year. Our local team's knowledge of suppliers, subcontractors, stakeholders, construction workforce, environmental concerns and geology is critical to successfully delivering the I64HRB. As an added benefit, Bayshore Concrete Products, the largest producer of precast concrete bridge elements on the east coast is a wholly owned subsidiary of Skanska and will deliver the highest-quality bridge components needed for I64HRB on-time.

3.2.1 Offeror: SAW2JV is structured as a "joint-and-several-liability" joint venture between Skanska USA Civil Southeast Inc. and Archer Western Construction, LLC and is the legal entity that will execute the contract with VDOT. SAW2JV will be governed by an Executive Board with members from each of our two companies who will be in place from design through construction.

3.2.2 Point of Contact:

Mr. Stephen Davis Vice President of Estimating Skanska USA Civil Southeast Inc. 295 Bendix Road, Suite 400 Virginia Beach, VA 23452 T 757-578-4184/ F 757-420-3551 stephen.davis@skanska.com

3.2.3 Principal Officer Information:

Mr. Salvatore F. Taddeo Chief Operating Officer/Executive Vice President Skanska USA Civil Southeast Inc. 295 Bendix Road, Suite 400 Virginia Beach, VA 23452 T 757-578-4162/ F757-420-3551 salvatore.taddeo@skanska.com



3.2.4 Offeror's Corporate Structure: SAW2JV is a "joint and several" joint venture. As described in our JV agreement, SAW2JV is an integrated JV. SAW2JV is financially responsible for the referenced Project and does not have any liability limitations. Skanska and Archer Western are joint and severally liable for the performance of the work. A single 100% performance bond and single 100% payment bond will be provided for SAW2JV by our surety. Both Skanska and Archer Western are registered with the State Corporation Commission (SCC). Our surety letter and SCC certificates are included in the Appendices of our original Statement of Qualifications, with copies in the electronic file.

3.2.5 Identity of Lead Contractor and Lead Designer: SAW2JV is the Offeror and Lead Contractor responsible for overall contract execution and construction and will serve as the legal entity who will execute a contract with VDOT. Parsons Brinckerhoff is the Lead Designer responsible for the overall design of the Project, supported by Dewberry Consultants, LLC as a dedicated subconsultant.

3.2.6 Affiliated/Subsidiary Companies: Please refer to the Attachment 3.2.6 to review the list of Skanska's and Archer Western's Affiliated/Subsidiary Companies.

3.2.7 Debarment Forms: Skanska and Archer Western have provided executed Certification Regarding Debarment Forms in Attachment 3.2.7 (a) – Primary Covered Transactions. Subcontractors have provided executed forms in Attachment 3.2.7 (b) – Lower Tier Covered Transactions.

3.2.8 Offeror VDOT Prequalification Forms: SAW2JV's prequalification number JV076 is active and in good standing to bid on the Project. Prequalification documents and SCC certifications for Skanska and Archer Western are located in Attachment 3.2.8.

3.2.9 Bonding. SAW2JV's surety letter located in Attachment 3.2.9 attests to our ability to obtain Performance and Payment bonds.

3.2.10 State Corporation Commission (SCC)/Department of Professional and Occupational Regulations (DPOR) Requirements: Attachment 3.2.10 provides evidence and certifies that SAW2JV complies with the requirements set forth in RFQ Section 3.2.10 subsections .1 through .4.

3.2.11 Disadvantaged Business Enterprise (DBE) and Small, Women-owned, and Minorityowned Business (SWaM) Commitment: SAW2JV is committed to meeting or exceeding the eight percent (8%) DBE participation goal for the Project. Additionally, our Team's formal subcontracting program will ensure maximum use of SWaM firms.

SAW2JV is the right team to deliver the I-64 HRB project! Our local team brings the resources needed to provide you with innovative, cost effective solutions to deliver this project under budget and ahead of schedule, while limiting impacts to the traveling public. Our team combines two of the largest, most experienced design-build contractors in the country, Skanska and Archer Western. With our long-standing design partner, Parsons Brinckerhoff, we create an integrated team that is focused on meeting your primary objective for the project, to increase mobility and safety along the I-64 corridor.

We look forward to working with you on this critical project for the Hampton Roads region and the Commonwealth.

Sincerely,

Stephen Davis Authorized Representative Skanska-Archer Western 2 Joint Venture



3.3 Offeror's Team Structure

The Offeror, Skanska–Archer Western 2

Joint Venture (SAW2JV) brings together two leading Virginia and Southeastern United States construction firms with the resources, experience and capabilities to manage and construct highprofile highway projects in the Hampton Roads area. Supporting team members, many of whom are locally based with a long history in the area, were carefully selected based on previous work relationships and capabilities in providing complementary services and resources in design, quality, and right-of-way acquisition services. In working together to develop the I-64 Southside Widening and High Rise Bridge Phase 1 Project (I64HRB), 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 on the I64HRB. This preparation will help us manage the accelerated schedule from day one.

The SAW2JV Team

Table 3.3-1 shows the members of the SAW2JV team.

Skanska USA Civil Southeast Inc. (Skanska)

headquartered in Virginia Beach, is a leading heavy civil and marine construction contractor with an extensive portfolio of providing solutions in bridges and highways, rail, and marine construction. This breadth of experience allows us to address unique aspects of a project and apply our expertise and lessons-learned on numerous roadway projects in Virginia and the southeastern U.S. Our construction equipment yard, the Southern Branch Yard, (SBY) is located one mile south of the existing bridge on the Southern Branch of the Elizabeth River, providing a ready base of operations to start construction. Our corporate offices have been in the Hampton Roads since 1932, and Skanska has self-performed construction on many of the tunnels, bridges, highways, and marine facilities in the area over the years, working with VDOT.

Table 3.3-1. The members and roles of theSAW2JV team.

The SAW2JV Team



SAW2JV | Offeror and Lead Contractor VDOT Prequalification Joint Venture No. JV076 | Vendor Nos. T009 (Skanska) / A210 (Archer Western Construction)



Parsons Brinckerhoff, Inc. | Lead Designer

Dewberry

Dewberry Consultants LLC | Roadway, Bridge, Survey and Environmental Permitting

τβα

Tuhin Basu and Associates, Inc. | Bridge Design Widenings | DBE/MBE No. 626752



Sabra, Wang & Associates, Inc. | Noise Analysis | DBE/WBE No. 705236

HWR Water Resources Consultants

Hassan Water Resources, PLC | Hydraulics and Drainage | MBE No. DB2010-033702015



Harris Miller Miller & Hanson Inc. | Noise Analysis | DBE/WBE No. 705236



Precision Measurements, Inc. | Survey, SUE | DBE/WBE No. 5346



Cardno Ltd. | SUE Level A Testing Holes



Stantec, Inc. | Quality Assurance Management | ROW Acquisition Services



Archer Western Construction, LLC (AWC).

A general contracting, construction management, and design-build firm, AWC is a part of the Walsh Construction Group, a fourth-generation familyowned business dating back 118 years. This \$4.2 billion per year construction company is ranked as the largest bridge builder, the second largest domestic heavy contractor, and the third largest transportation contractor in the U.S. according to the 2015 Engineering-News Record. AWC has maintained its presence in Virginia since the 1980s, completing projects such as the I-95 Richmond Bridge Replacement and the I-95 Springfield interchange that connects to the Woodrow Wilson Bridge. AWC traditionally selfperforms the majority of scopes on infrastructure projects including demolition, wet utilities, storm drainage, paving, concrete work, earthwork, foundations, bridges, and retaining walls.

Parsons Brinckerhoff, Inc. (PB). The Lead Designer is a global consulting firm assisting public and private clients to plan, develop, design, construct, operate, and maintain thousands of critical global infrastructure projects. With a strong commitment to technical excellence, a diverse workforce, and service to its clients, PB has maintained a Virginia presence since the 1950s, and currently has over 200 employees throughout the state, including a major presence in Southeastern Virginia. In the last 10 years, PB has completed more than 460 projects with 43 active projects in the Virginia Beach area.

Dewberry Consultants, LLC (Dewberry).

This local consultant provides experience in design for highway widening in urban areas, developing innovative ideas working on designbuild projects, and a long history of working with VDOT. They are also known for extensive experience working closely with regulatory agencies to acquire permits expeditiously on I-64 Segment 1.

3.3.1 Identity Of And Information About The Key Personnel

SAW2JV has made the individuals in Table 3.3-2 available for the duration of I64HRB to fill the key roles. Resumes for each invidual are located in Attachment 3.3.1 of the Appendices.

	Qualification Highlights	Relevant Projects					
	Tom Fulton, P.E Design-Build Project Manager / Responsible Charge Engineer - VA P.E. No. 034653						
S	29 years of project management experienceDB experienceFast-track and incentive projects	 ERT, Portsmouth VA Huguenot Bridge, Richmond VA Route1/I-95/I-495 Alexandria VA 					
	Julie Hartman, P.E Quality Assurance Manager - VA P.E. No. 0402044099						
	 QAM experience on a VDOT DB project 17 years of QA/QC experience Construction management experience 	 Middle Ground Boulevard, Newport News VA Ohio River Bridge, Parkersburg WV James Ramsey Bridge Replacement, Sheperdstown, WV 					
	Derek Piper, P.E Design Manger - VA P.E. N	lo. 0402046886					
Y	 31 years of design experience DB and VDOT experience QA/QC design experience 	 MLK Extension, Portsmouth VA ERT, Portsmouth VA Dominion Blvd Widening, Chesapeake VA 					
	David Kampman - Construction Manager						
S.	27 years construction managementDB experienceMarine construction manager	 ERT, Portsmouth VA 11th Street Bridges, Washington DC Cooper River Bridge, Charleston SC 					
	Rex Gilley, P.E Lead Structural Engineer -	VA P.E. No. 04020225213					
S Con	26 years of design experience24 years local design on VDOT projectsLong span bridge design	 Dominion Blvd Widening, Chesapeake VA Route 33 Pamunkey River Bridge, West Point VA Cooper River Bridge, Charleston SC 					
	Joe Morffi - Incident Management Coordina	tor					
E.	 21 years of experience in roadway O&M and emergency response 	I-4 Ultimate PPP, Orlando, FLI-595 Express PPP, Broward County, FL					

Table 3.3-2. SAW2JV Key Personnel.



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 – East Approach, Main Bridge, and Western Approach. Staffing matches the organization to ensure elements with fast-track schedules, such as the Great Bridge Interchange will be completed on-time. SAW2JV is building upon the structure and relationships it developed both internally and with stakeholders for the Elizabeth River Tunnels (ERT) and our long history in the area to:

- Foster communication within our organization, including VDOT and involved stakeholders such as the U.S. Coast Guard, 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 Design-Build Manager, Design Manager, and Construction Manager will transition from ERT.

Functional Relationships

SAW2JV 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)

- Tom Fulton P.E. reports to the SAW2JV Executive Board. Mr. Fulton 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. Fulton will have six direct reports: the QA Manager, Design Manager, Construction Manager, DB Coordinator, Safety Manager and ROW Manager.

Quality Assurance Manager (QAM) - Julie Hartman, P.E. is the independent QAM and will report directly to the DBPM. Direct reports include the two lead 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 the QAM is apprised of activities and to ensure that corrective activities and remediation are implemented as quickly as possible.

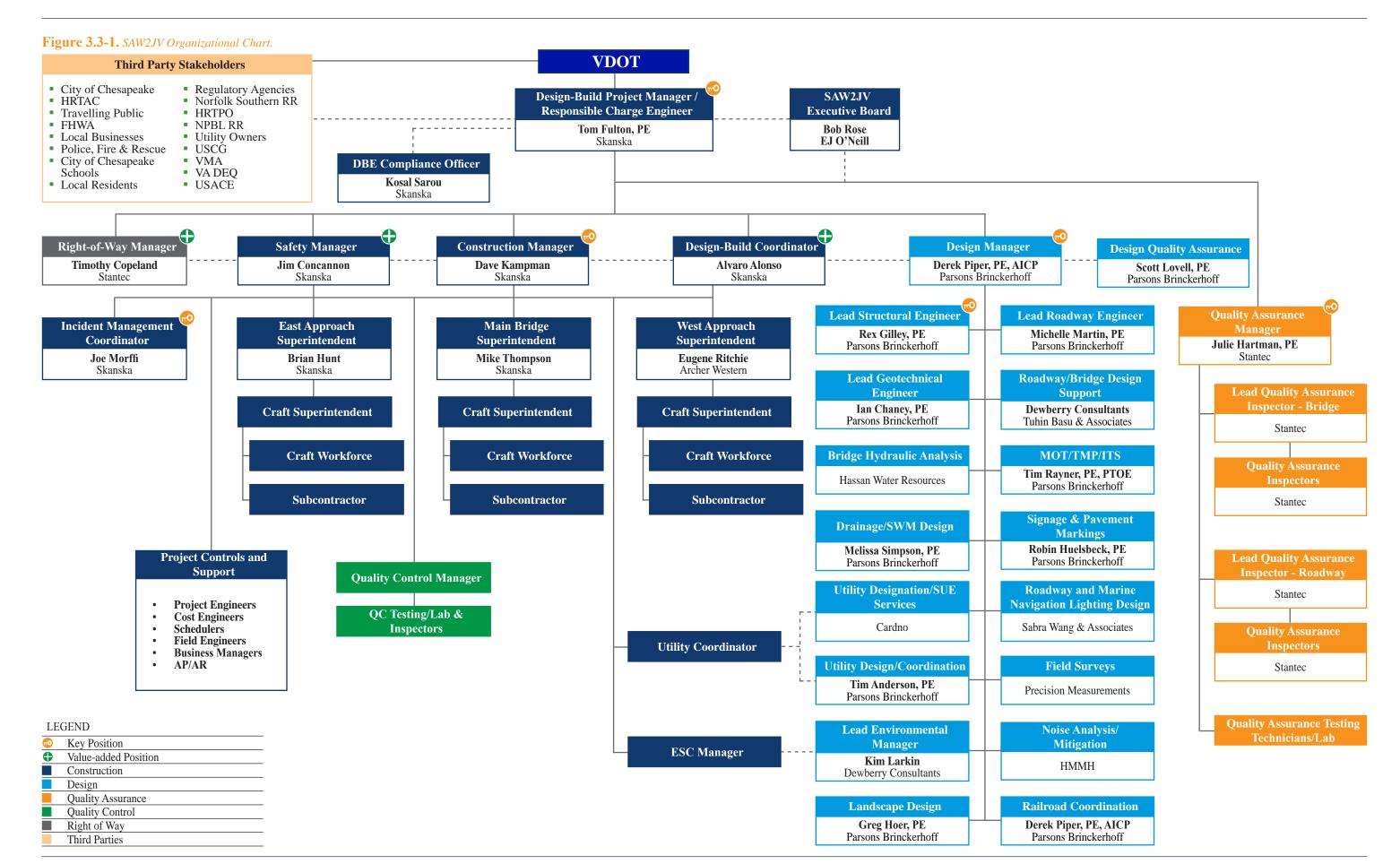
Design Manager (DM) - Derek Piper, P.E. will report to the DBPM. During the design phase of the project, the design discipline leads and design subconsultants will report to Mr. Piper. The environmental team will report to Mr. Piper during the design stage.

Construction Manager (CM) - Dave Kampman will report to the DBPM. He will be responsible for managing the construction process, which includes all QC activities. The Construction QC Manager will report to the CM and will be a Virginia-certified ESCCC and RLD.

Lead Structural Engineer (LSE) - Rex Gilley, P.E. reports to the DM. He is responsible for structural design and integration of bridges and retaining walls. Additional responsibilities include 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.

Responsible Charge Engineer (RCE) - Tom Fulton P.E. 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.







Incident Management Coordinator (IMC) -

Joe Morffi will report to the CM. He is responsible for responding to all incidents within the project limits. He will be the key point of contact for VDOT when issues arise relative to incident management and will be on site full-time for the duration of construction operations.

Joe will complete the FHWA SHRP2 "TIM" Responder Training; FEMA ICS/NIMS 100, 200 and 700; and FEMA/VDEM Hazardous Materials Awareness Classes prior to commencement of construction.

Value-Added Personnel

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

Design-Build Coordinator (DBC) - Alvaro

Alonso will facilitate communication between design, construction and project management. The DBC will report to the DBPM and his duties include actively participating in design meetings, constructability reviews and conveying field information.

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

Right-of-Way Manager - Tim Copeland will report to the DBPM. He will be responsible for all aspects of ROW acquisition, ensuring that the program is being properly followed and protecting the rights of land holders affected by the project.

Communications

Developing and maintaining clear and open lines of communication both within the team, with our customer and with stakeholders is key to providing VDOT with a successful, quality project. In addition to utilizing the reporting lines shown on our organization chart, we will rely upon lessons learned from our most successful DB projects. These include:

Partnering. Formal partnering with VDOT, the GEC and stakeholders is a key component on our projects. By aligning goals and establishing a framework for communications early in the project, we will be better able to respond to concerns in an atmosphere of mutual trust, and to work together to resolve issues before they significantly affect I64HRB. We have found working in a formal partnering process resolves disputes early and mitigates risk to VDOT.

Internal communications. Keys to ensure suitable levels of interaction between design and construction include co-location of design and construction personnel and regularly scheduled weekly meetings of task working groups (TWGs). In addition, we will establish strong communication lines that benefit I64HRB through informal meetings, the DBC, and events such as joint constructability reviews.

Coordination of Design and Construction.

The design team organization for I64HRB will be based on the three operational segments of the construction organization as shown in Figure 3.3-1. The TWGs are the forum in which the engineers and contractors will focus on the operational segments of I64HRB to exchange ideas, coordinate design requirements with means and methods, and develop innovative solutions to specific challenges presented through the design process. As I64HRB progresses, TWGs will include staff from VDOT, GEC and other major stakeholders.

While coordination between VDOT, the contractor and the engineers is essential to the DB process, coordination of various design disciplines is also critically important to ensure the quality and constructability of the design and life-cycle of I64HRB.

Linear projects by nature involve many differing disciplines that must work in concert to provide a quality product. I64HRB involves structural, geotechnical, civil, environmental, and electrical



disciplines as well as safety and quality issues that must all be closely coordinated in the TWGs to minimize the potential for conflicts in the field during construction. SAW2JV has proven this approach on other DB projects and will use this avenue of communication on I64HRB. Figure 3.3-2 illustrates how our design and construction teams integrate throughout the design process.

Outreach – Tom Fulton, our DBPM, will be responsible for ensuring that the team interacts with stakeholders, businesses, and residents. The Team will take part in outreach events.

Description of the QA/QC Program and Associated Elements

SAW2JV 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.

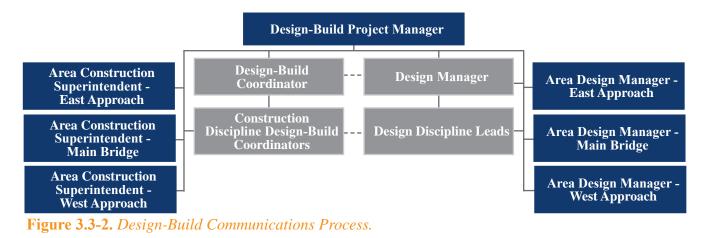
Design QA/QC Plan. PB will implement a DQMP program consistent with ISO 9001 to verify that the drawings, specifications and other submittals are prepared in accordance with generally accepted design practices. The DQMP program will include cross-company QA review of all design documents. **Construction QA/QC Plan.** The SAW2JV 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, SAW2JV will emphasize quality:

- All SAW2JV employees will receive regular quality training as part of daily, weekly and monthly training
- Each project work plan will include a specific quality plan
- Quality reports will be reviewed by the DBPM and the Executive Advisory Board
- Superintendent metrics will include quality performance and superindents will be held responsible for the quality of the work performed under their direction

Our attitude and approach are the most vital aspects in delivering a quality product. We believe that quality is the responsibility of every person in the entire organization, regardless of title. To ensure this, we provide every employee with the tools, knowledge and support they need. We make them responsible for the quality of the work they do. **To affirm this, we give each worker the authority and responsibility to stop any work that does not meet quality standards.**





3.4 Experience of the Offeror's Team

SAW2JV in combination with Parsons Brinckerhoff (PB) 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 integrated joint ventures in which a team is formed based on the strengths of individuals, not company association. **This leads to a highly effective project team.**

These same attributes are the reason why Skanska and Archer Western, through our parent companies Skanska Civil and Walsh, are partners on the largest P3 project in the country - the LaGuardia Airport Central Terminal B project valued at more than \$4 billion. PB is also the Lead Designer on that project.

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 high-level bridges over navigable channels throughout the Mid-Atlantic and Southeast. The Team has designed and constructed projects in highly congested urban areas: Hampton Roads and Richmond, Virginia; Orlando, Florida; Washington DC; and Atlanta, Georgia. 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-64 Southside Widening and High Rise Bridge Phase 1 Project (I64HRB).

Throughout the projects reflected in our Work History Forms, we have worked and built relationships with our entire team of design subconsultants. These experiences will enable us to deliver quality work in record time with little or no learning curve. **The Team has been collaborating on I64HRB since the beginning of the year, to develop a thorough understanding of the project risks and potential mitigations for a quick project start.** Table 3.4-1 demonstrates further SAW2JV project experience beyond the Work History Forms.

Our Strengths For The Project

Virginia Presence and Experience

Skanska, PB and Dewberry are all located in the same commercial complex in Virginia Beach, VA: we are already collocated for efficient communication. As shown in the Work History Forms and Table 3.4-1, Skanska has a successful and proven cooperative work history with PB which spans more than 60 years, starting at the Coleman Bridge and continuing on nine other projects including the largest P3 contract in Virginia, the ERT project (Figure 3.4-1).



Figure 3.4-1. The ERT project has provided regional knowledge and working relationships to benefit the Team's quick start on I64HRB.

The Work History Forms show we have the basis to understand the risks associated with geotechnical and environmental factors in the Hampton Roads region that will impact project substructure design and approach to construction. We also have well-established working relationships with local regulatory organizations from the following projects:

- I-264 Widening/MLK Extension, Portsmouth and Norfolk VA
- US-17 (Dominion Boulevard), Chesapeake, VA
- I-64 Capacity Improvements, Segment 1, Newport News and James City County, VA



Table 3.4-1. SAW2JV Experience in addition to the Work History Forms.

Table 3.4-1. SAW2JV Experience in dadii) me		<i>misio</i>	y F 01	mo.					
Project	Team Members	Design-Build Delivery	Interstate Widening (Urban)	Bridges Over Navigable Water	Environmental Considerations (Wetland Impacts)	ROW Acquisition	Utility Relocations	Work Adjacent to Railroad Coordination Required)	Multiphase MOT Plan	Noise Mitigation (Walls)	Public Information Program
Elizabeth River Tunnels Norfolk, VA \$1.46B (P3) VDOT	S/P	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
I-95/I-495/Telegraph Road Interchange Farifax County, VA \$237M VDOT	D		✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
IH-35E Managed Lanes Carrolton, TX \$1,095M TXDOT	A	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
I-66 Widening Prince William County, VA \$55M VDOT	D	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
I-4 Crosstown Connector Tampa, FL \$389M FDOT	A	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Innerbelt Bridge Replacement Cleveland, OH \$293M ODOT	A	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
I-66/Route 29 Interchange & HOV Widening Prince Wililam County, VA \$81M VDOT	D		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
11th Street Bridges Washington, D.C. \$288M DDOT	S	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	
Three Mile Bridge Pensacola, FL \$398M FDOT	S/P	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark
I-10 Bridges Over Escambia Bay Pensacola, FL \$255M FDOT	S/P	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
Rt. 1/I495/I95 Alexandria, VA \$189 VDOT	S		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	
I-95 Richmond Bridge Replacement Richmond, VA \$70M VDOT	Α		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
I-85 Widening/Reconstruction Newnan, GA \$213M GDOT	Α		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
Allegheny River Bridge Replacement Cheswick, PA \$190 M PennDOT	Α			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
I-75 Widening/Reconstruction Cordele, GA \$145M GDOT	Α		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
Monongahela River Bridge Denbo, PA \$95M PDOT	Α	\checkmark		\checkmark	\checkmark		\checkmark		\checkmark		\checkmark
Rt. 33 Pamunkey River Bridge West Point, VA \$90M VDOT	S/P			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		
US 331 Choctawhatchee Bridge Walton County, FL \$118M FDOT	S/P	\checkmark		\checkmark	\checkmark		\checkmark		\checkmark		
Coleman Bridge Yorktown, VA \$73M VDOT	S/P			\checkmark	\checkmark		\checkmark		\checkmark		
SR 60 Interchange Tampa, FL \$219M FDOT	S				\checkmark		\checkmark		\checkmark	\checkmark	
Indian River Inlet Bridge Sussex County, DE \$150M DelDOT	S	\checkmark			\checkmark				\checkmark		\checkmark
S - Skanska, A - Archer Western, P - Parsons Brin	nckerh	off. D	- Dewl	berrv							

S - Skanska, A - Archer Western, P - Parsons Brinckerhoff, D - Dewberry



Innovative Design Solutions and Construction Techniques

I-10 Bridges over Escambia Bay: An innovative design approach to expedite construction - the first use and design of 36" 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 6 elements (2,540 feet) over 9 days in one shut down.

Design-Build Experience

Seven of the eight Work History Forms provided are for DB projects and 11 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 project involves widening of I-64 as well as a new interchange; and the I-64 Segment 1 project, designed by our subconsultant Dewberry, involves median widening with similar technical solutions identical to our approach on the I64HRB.

Traffic Management in Developed Urban Corridors

All Work History Forms provided are for transportation projects requiring major traffic management. Many of the projects in Table 3.4-1 were constructed in urban settings including Ultimate I-4, Orlando, FL; 11th Street Bridges, Washington, D.C.; I-95 Bridge Replacement, Richmond, VA (shown in Figure 3.4-2); and Route 1/I-495/I95, Alexandria, VA.



Figure 3.4-2. *I-95 Richmond Bridge – work in a high volume urban corridor.*

Success in Construction of Major Bridges over an Active Navigable Channel

Successful bridges over active navigable channels are demonstrated by our Work History Forms for I-10 Bridges, US 90 Bridges, and the Cooper River Bridge (shown in Figure 3.4-3), and other past projects: Coleman Bridge, Indian River Inlet, Monongahela River and Pamunkey River Bridges.



Figure 3.4-3. The Cooper River Bridge was built on budget and one year ahead of schedule.

Delivery of Projects Through Segmentation

As I64HRB will be segmented to meet schedule, so too were the Northwest Corridor Managed Lanes, (6 segments), NC-540 Western Wake Freeway (5 segments), ERT projects (8 segments), Cooper Bridge project (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: I-10 Escambia Bay, I-275, Huguenot Bridge Reconstruction, US-90 St. Louis Bay Bridge 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 3.6 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 Cooper River Bridge Project 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 Cooper River 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 achieved great success in exceeding the DBE goals on design-build/P3 projects, such as the ERT project in Portsmouth, VA and on I-275 in Tampa, FL.

We are exceeding the 12% DBE goal on ERT, a \$1.6-billion project, and we have achieved about 13% to date. On I-275, a \$225-million highway project, 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. **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

Attachment 3.5 provides Skanska and Archer Western safety statistics for the last three years. The Team will continue our outstanding performance and continual commitment to safety on I64HRB. 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 I64HRB. 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 required training encompasses all aspects of the job, from the designers to contractors and subcontractors. Figure 3.4-5 is an example of one of our many training programs that we use to make our safety program successful.



Figure 3.4-5. In addition to in-the-field and classroom training, the SAW2JV team will benefit from training on an equipment simulator, which lessens risk of injury while replicating real-world scenarios, controls, and environments.







We have reviewed the available project information, visited the site during various traffic flow and congestion conditions during AM/ PM peak periods, and evaluated potential risks based on our experience with similar projects in the Hampton Roads area. In completing our risk assessment, we considered numerous potential risks to the project.

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 risks using the "heat map" presented in Figure 3.6-1.

Potential Risks

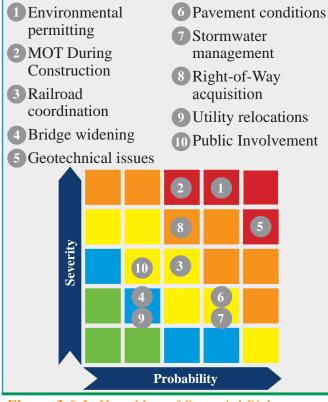


Figure 3.6-1. Heat Map of Potential Risks.

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

Risk No. 1 – Environmental Permitting

Risk No. 2 – Maintenance of Traffic During Construction

Risk No. 3 – Geotechnical Issues



Our risk management strategy is to take ownership of the project risks and minimize the potential impacts to the Project by aggressively implementing mitigation strategies. In the subsections below, we answer the following questions for each risk:

- A. Why is the risk critical?
- B. What is the impact on the I64HRB?
- C. What is the mitigation strategy?
- D. What is the role of VDOT or other agencies in mitigation?

Risk No. 1– Environmental Permitting

A. Why The Risk Is Critical

Obtaining the environmental approvals from the 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 permits will be required for the following aspects and from the following agencies:

- Tidal and non-tidal wetland impacts, requiring Department of Environmental Quality (DEQ) and U.S Army Corps of Engineers (USACE) approval
- A major crossing of a Section 10 navigable water, requiring US Coast Guard (USCG) approval
- A USACE federal navigation channel, requiring Section 408 authorization
- Coastal Zone Management Act (CZMA) consistency determination
- Envrionmental Protection Agency (EPA) superfund site and other documented releases downstream and adjacent to the High Rise Bridge crossing
- Impacts to floodplains, requiring approvals from Federal Emergency Management Agency (FEMA) and VDOT
- Impacts to protected species and fishery populations, potentially resulting in time-of-year restrictions.

Effective management, and a coordinated approach between all design, utility, rightof-way, construction, and environmental personnel will be necessary to ensure permits acquired for the Project are comprehensive and received in a timely manner.

B. Impact On The Project

To complete a project of this magnitude, construction must be underway concurrently in multiple areas to ensure project completion on time and in an efficient manner, with minimal impacts to the traveling public. While the signature feature of I64HRB is the High Rise Bridge over the Southern Branch of the Elizabeth River, environmental permits will be necessary for almost every element of the Project, including the 7-mile widening of I-64 and the associated sound barrier walls, stormwater management and drainage improvements. **Obtaining the multiple necessary permits will be critical to successful and on-time completion of the Project.**

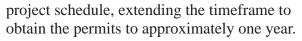
Environmental permits related to potential impacts include:

Section 408 and Coast Guard Permits

Based on the Environmental Assessment (EA) documentation, the Virginia Maritime Association (VMA) and other shipping companies requested a bridge vertical clearance of 135 feet to match that of the Gilmerton Bridge. VDOT and the USCG have met with these owners and the USCG has issued a preliminary determination supporting 100 feet of vertical clearance. Nonetheless, there is a risk that those same owners could protest the issuance of the final regulatory permits, potentially delaying permit approval.

Acquisition of USACE and DEQ Permits

The ability to obtain the necessary USACE and DEQ permits for wetland and stream impacts is also at risk due to concerns for the vertical clearance of the High Rise Bridge. In the event any substantive concerns or protests are raised as part of the public notice process, a full hearing by the State Water Control Board may be necessary, or could even result in USACE legal challenges that could delay the permit issuance. Either of these processes would be detrimental to the



Acquisition of Wetland Mitigation

We reviewed the USACE's Regulatory In-Lieu Fee and Bank Information Tracking System database to determine the availability of wetland bank credits within the project hydrologic unit code. This research shows that, while there is adequate non-tidal wetland mitigation available, there is a shortage of tidal wetland and waters mitigation. Unless adequate mitigation is available for all impact types and permit requirements, issuance of the permit could be delayed.

Virginia Stormwater Management Program (VSMP)

The Project includes a significant increase in impervious area that must be accounted for in development of the stormwater management system. The impacts to stormwater quantity/ quality must be addressed in accordance with the Virginia Stormwater Management Act and the accompanying VSMP Permit Regulations. This is a key risk due to the significant increase in impervious area from the widening of I-64 and limited locations/opportunities for stormwater management facilities, coupled with the flat terrain of the area.

C. Mitigation Strategies

One of the primary advantages of our Team is we have been through all the above processes and recognize not only the process and timelines needed to obtain approvals, but also ways to avoid potential impacts from the outset of design and permitting. We will implement the following strategies to ensure on-time completion:

Section 408 and Coast Guard Permits

At the outset of design, we propose "early coordination" meetings with the VMA, the three shipping interests upstream of the High Rise Bridge, and the new biofuel company southeast of the bridge to understand any outstanding concerns with the proposed vertical clearance. Based on the information obtained from the early coordination meetings, we will initiate a pre-application



meeting during design development with VDOT, USCG, USACE and DEQ to explain the rationale of the preferred alternative and the justification for the 100-foot vertical clearance.

Through this pre-application meeting, we will provide the information and documentation necessary for permitting agencies to provide responses to and address comments that may arise through the public input process, avoiding the need for additional hearings or legal challenges.

Acquisition of USACE and DEQ Permits

By addressing the concerns from adjacent properties, we anticipate obtaining USACE and DEQ permits will be a relatively smooth process.

Developing roadway, bridge, drainage and utility relocation designs prior to submitting a permit application to either agency will be critical to obtaining permits for I64HRB with a single application.

Temporary construction easements that are adequate for all stages of construction, including beam erection for all bridges (not just the High Rise Bridge), will be identified with the original permit application to prevent permit modifications that could delay construction of critical elements.

Additionally, prior to submitting the permit applications, we will hold a pre-application meeting with the USACE and DEQ to identify probable impact, minimization and avoidance efforts that have been incorporated to reduce them. This pre-application meeting will ensure concerns related to the permit, if any, are addressed prior to formal submission.

Acquisition of Wetland Mitigation

VDOT has provided the Preliminary Jurisdictional Determination to define existing wetlands in the project area. To address the lack of sufficient mitigation for waters and wetlands, we will work during design to reduce or avoid tidal wetland impacts to the fullest extent possible. Figure 3.6-2 shows a tidal marsh that could be affected.

We believe avoidance and reductions of impacts will address the bulk of the tidal wetland impact mitigation concerns, but we also plan to utilize the in-lieu fee fund to mitigate for tidal area impacts.



Figure 3.6-2. *Tidal Marsh to be impacted by the Project.*

Finally, after identifying potential areas of impact early in the design process, we will contact our typical wetland banking partners to determine if additional mitigation sites are under development and will be available during later stages of the Project. If so, we may look to phase certain areas of work, and develop plans accordingly, so that acquisition of mitigation is sequenced with the work and will not delay overall construction activities.

Virginia Stormwater Management Program

Mitigation will start with a detailed evaluation of stormwater management requirements during technical proposal development to determine:

- Location and sizing of stormwater facilities
- Development of a drainage collection system that minimizes utility impacts
- Development of stormwater management phasing to coincide with overall Project construction phasing.

Of course, mitigation will include all appropriate erosion control measures, improved stormwater management facilities, specific treatments for stormwater management facilities located in impaired watersheds, to be detailed in a Stormwater Pollution Prevention Plan (SWPPP).



D. Role Of VDOT and Other Agencies in Mitigation

No additional efforts will be needed by VDOT or other agencies. VDOT has already performed a significant amount of work to coordinate with the USCG and receive the Preliminary Navigation Clearance Determination (PNCD). We anticipate that VDOT will provide documents related to the public process completed in advance of this approval so that proper documentation can be provided to the permitting agencies during final design activities. We welcome VDOT to remain actively engaged in all meetings and coordination with the permitting agencies and in obtaining the VSMP permit.

As noted previously, 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 committed to providing comprehensive applications with sufficient supporting documentation to facilitate timely reviews by these agencies.

Risk No. 2 – MOT During Construction

Interstate widening projects, including both high traffic volumes and high-speed traffic immediately adjacent to the work zone, involve a risk in providing a safe work environment and safe movement of traffic through the work zone. The changes in traffic patterns, additional queuing from implementation of the work zone, and access to the work zone in the median area are challenges specifically addressed below.

A. Why The Risk Is Critical

For the most part, I-64 between Bowers Hill and I-464 has minimal left shoulders, a narrow grass median, and two existing travel lanes in each direction, and currently carries approximately 89,000 VPD (2015 data). Unstable flow conditions routinely occur during morning and evening rush hours. Implementation of work zone traffic controls and changes to traffic patterns have the potential to exacerbate existing travel delay and traffic queues. This can translate into more frequent incidents and additional periods of unstable traffic flow.

Construction adjacent to the existing I-64 (in the median and south of the existing High Rise Bridge) will be a source of distraction for drivers. The limited project footprint will necessitate extensive use of precast traffic barrier service to protect the construction workers and drivers on I-64.

However, the use of such barriers:

- Effectively narrows the roadway/recovery area due to additional objects within the clear zone
- Creates a less forgiving environment for through traffic (restricts access to the work zone for construction vehicles)

Experience shows that the result of implementation of Maintenance of Traffic (MOT) plans is often 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-64 and increase the potential for crashes.**

B. Impact On The Project

The reduction in roadway capacity along I-64 due to the implementation of the work zone will:

- Increase traffic queuing
- Change the location of traffic queues
- Increase the potential for crashes both within the work zone and queues approaching the work zone
- Create traffic issues on alternate routes (e.g., I-264 and Military Highway) due to diverted traffic

Crashes 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 will 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 crashes, 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 MOT planning.

Constructing the East End of the New High Rise Bridge

Sheets 29 and 29A of the RFQ plans indicate that the new bridge and abutment extend over existing I-64 WB (i.e., I-64 traveling toward Virginia Beach). Specifically, from the existing east abutment (near Bainbridge Boulevard) to the end of the new bridge, and until the approach roadway comes close to existing ground:

- 1. The new outside lanes would have to be constructed first
- 2. I-64 WB traffic would have to be shifted onto the new bridge
- 3. The inside lanes of the new bridge and approach roadway could be completed

Alternatively, there may be the possibility of using temporary widening to shift existing I-64 to the north in order to accommodate construction of the east end of the new bridge.

Keeping the I-64 WB Exit Ramps Open through Superelevation Corrections

The I-64 WB exit ramps to Great Bridge Boulevard and Route 168 SB are on the outside of curves that are to receive superelevation corrections (see Sheets 2B(1) and 31 in the RFQ plans for the former and Sheets 2B(2) and 32 in the RFQ plans for the latter). As shown on the RFQ profiles (Sheets 31D and 33D), the proposed elevation differences in the vicinity of the ramp gores are substantial. During final design, we will address these areas to ensure that any drop-offs are protected and that proper ramp lane widths are maintained.

Providing a New Closed Drainage System East of I-464

Sheets 35 and 36 of the RFQ plans indicate that a new closed drainage system is proposed along the MB-7D median barrier between the I-64 WB mainline lanes and the CD road. Based on our knowledge of existing conditions, the concrete pavement east of I-464 (approximately Station 1442+00) to Battlefield Boulevard and points further east appears to be in good condition. Open cutting to install a new closed system could require shoulder and/or lane closures, potentially resulting in substantial traffic queuing and delay. During final design, we will evaluate this area in detail to determine the optimal balance of design requirements, preservation of existing assets and minimization of disruptions to the travelling public.

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-64 travel lanes - we will evaluate temporary access to the median work zone from the Rotunda Avenue, Yadkin Road, Shell Road, and/or Military Highway crossings
- 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 routes around the work zones to minimize traffic
- Alternate access to affected businesses and homes

In areas where there is greater congestion and potential for existing infrastructure interference, such as interchanges, 3D design can be used to optimize configuration of temporary works for safety and maximum traffic flow.

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 augment the current Service Safety Patrol to quickly recover and store disabled or damaged vehicles.

Incident Management Plan

Recognizing that accidents can occur, our IMC Joseph Morffi, 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), the Service Safety Patrol, and other first responders. The IMC 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.
- Service Safety Patrol, which already serves the corridor, to define ways to expedite response and clearing of accidents. We plan to define accessible pull-off areas to allow removing vehicles from traffic lanes as soon as possible and to provide on-call towing service.

 First Responders in the area to define a workable response plan. Before a traffic switch, the IMC 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

Figure 3.6-4 is an example of a roadside billboard in Orlando that was successful in decreasing accidents.



Figure 3.6-4. Images encouraging safe habits will be deployed as part of our team's public outreach.



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 that best practices from VDOT experience are included and implemented. We also recognize VDOT's responsibility for formal review and approval of the MOT plan and TMP, while providing formal notification to first responders and the traveling public of scheduled lane-closures or other traffic restrictions.

Risk No. 3 – Geotechnical Issues

A. Why the Risk is Critical

Based on our experience on nearby projects with similar subsurface conditions, such as US 17/ Dominion Boulevard and the MLK Expressway, soft soils above the Yorktown formation pose numerous issues during both construction and post-construction. These must be addressed during design and project development. **Potential adverse impacts include:**

- Schedule delays from continued settlement
- Traffic safety and public perception due to settlement of the existing roadways
- Settlement and damage of adjacent existing structures due to foundation construction.

B. Impact on the Project

Based on our review of the RFP documents, soft and loose soils above the Yorktown formation are present throughout the project site. These soils are prone to surface settlement when loaded and need to be considered in all phases of design and project development. For instance, the areas immediately adjacent to the bridges will typically have the highest embankments, and hence are most susceptible to excessive settlement. Excessive settlement, if not addressed in the design and construction of the Project, could impart negative skin friction (down-drag) on the foundation piles, adversely affecting the construction schedule and cause settlements of the proposed and existing roadway and walls.

C. Mitigation Strategies

We will manage settlement risks at every stage of the project development. At the onset of final design, we will obtain supplementary soil borings augmented with Cone Penetration testing to define the extent of any settlement-prone areas. With this data in hand, we will design and construct the project to address settlement-related risks. Similar to how we addressed poor subsurface conditions on the US 17 (Dominion Boulevard) Project, we will employ mitigation measures to accommodate the specific concerns and expedite the construction schedule at each location.

For instance, in locations where the existing bridges are to be widened to the inside (i.e., I-64 over Military Highway, over Yadkin Road and over Shell Road, as shown in the RFQ plans) and relatively low fill heights are expected, we may be able to accommodate the settlement by:

- Use of Mechanically Stabilized Earth (MSE) walls with slip joints placed at critical locations to allow movement
- Use of lightweight fill
- Use of Extended Polystyrene (EPS) embankments as shown in Figure 3.6-5.

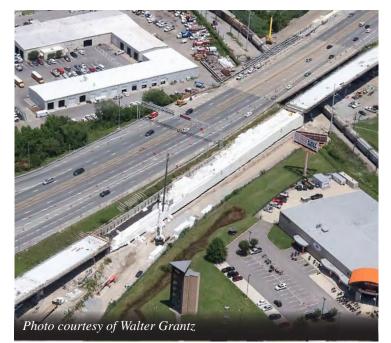


Figure 3.6-5. EPS embankment construction for Ramp EN, adjacent to I-264 (Portsmouth, VA).



In these areas, negative skin friction on proposed and existing bridge piles will also be evaluated.

With the proposed High Rise Bridge being constructed to the south of the existing structure and the relative scale of fill-heights and structuresizes significantly larger for the new bridge, the settlement-related risks, and the means by which they are mitigated, are greater and more open, respectively.

We will evaluate the embankment fill-heights with respect to expected settlements to facilitate final determination of the most-efficient location of the abutments. We will also consider the impact of the proposed embankment on the existing embankment. Settlement of the existing embankment must be mitigated to avoid impacting existing traffic. When the abutment locations are determined, we will investigate various methods to address the expected settlement, including:

- Preloading (surcharge) programs
- Ground improvement schemes
- Use of lightweight fill
- Wick drains
- EPS embankments
- Phased, two-stage MSE walls

Concerning the existing bridges, and most notably, the existing High Rise Bridge, preconstruction surveys will be performed to provide a baseline condition. As the existing structures are relatively aged and close to the proposed construction, the foundations and adjacent construction will be designed and constructed to avoid damage or adverse impact to the existing structures and roadways. During installation of the proposed foundation elements, monitoring of the vibrations and settlement will provide verification that the existing facilities will not be impacted. We will develop foundation layouts for the proposed High Rise Bridge to avoid conflicts with piles from the existing bridge.

D. Role Of VDOT in Mitigation

No additional efforts will be needed by VDOT or other agencies. We recognize that VDOT has already performed a great amount of data collection in an effort to mitigate potential risks associated with unknown subsurface conditions. SAW2JV recognizes VDOT's role in review and final approval of bridge foundation and settlement mitigation strategies. We also recognize that VDOT will implement Independent Assurance testing to confirm SAW2JV QA/QC testing.





Appendices



3.1.2 SOQ Checklist

3.1.2 SOQ Checklist

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

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 20- page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	21
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.11 (Form C-78-RFQ)	Section 2.11	no	25
Letter of Submittal (on Offeror's letterhead)				1
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	26
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	28
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	43
Evidence of obtaining bonding	NA	Section 3.2.9	no	45

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	68
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	68
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	91
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	101
Full size copies of DPOR Registration (Non- APELSCIDLA)	NA	Section 3.2.10.4	no	114
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	2
Offeror's Team Structure				3
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	4
Key Personnel Resume – DBPM	Attachment 3.3.1(a)	Section 3.3.1.1	no	115
Key Personnel Reference – DBPM	Attachment 3.3.1(b)	Section 3.3.1.1	no	117
Key Personnel Resume – RCE	Attachment 3.3.1(a)	Section 3.3.1.2	no	130
Key Personnel Reference – RCE	Attachment 3.3.1(b)	Section 3.3.1.2	no	132
Key Personnel Resume – QAM	Attachment 3.3.1(a)	Section 3.3.1.3	no	118
Key Personnel Reference – QAM	Attachment 3.3.1(b)	Section 3.3.1.3	no	120
Key Personnel Resume – DM	Attachment 3.3.1(a)	Section 3.3.1.4	no	121

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
Key Personnel Reference – DM	Attachment 3.3.1(b)	Section 3.3.1.4	no	123
Key Personnel Resume – CM	Attachment 3.3.1(a)	Section 3.3.1.5	no	124
Key Personnel Reference – CM	Attachment 3.3.1(b)	Section 3.3.1.5	no	126
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1(a)	Section 3.3.1.6	no	127
Key Personnel Reference – Lead Structural Engineer	Attachment 3.3.1(b)	Section 3.3.1.6	no	129
Key Personnel Resume – IMC	Attachment 3.3.1(a)	Section 3.3.1.7	no	133
Key Personnel Reference – IMC	Attachment 3.3.1(b)	Section 3.3.1.7	no	135
Organizational chart	NA	Section 3.3.2	yes	6
Organizational chart narrative	NA	Section 3.3.2	yes	5
Experience of Offeror's Team				9
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	136
Subcontractor Work History Form	Attachment 3.4.1(b)	Section 3.4	no	141
Lead Designer Work History Form	Attachment 3.4.1(c)	Section 3.4	no	142
Subconsultant Work History Form	Attachment 3.4.1(d)	Section 3.4	no	144
Safety				12, 145
Lead Contractor Safety Qualifications Form	Attachment 3.5	Section 3.4	no	145

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
Project Risk				13
Identify and discuss three critical risks for the Project	NA	Section 3.6	yes	13



2.11 Form C-78-RFQ

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

PROJECT: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

Federal Project No. NHPP-064-3(488)

Contract ID Number C00106692DB93

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 - August 16, 2016 (Date)	
2. Cover letter of	RFQ Addendum No. 1 (Date)	09/16/2016
3. Cover letter of	RFQ Addendum No. 2 (Date)	10/04/2016
Stephen Do SIGNATUR	wist	October 13, 2016
Stephen Da	avis	Attorney-in-Fact

PRINTED NAME

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TITLE



3.2.6 List of Affiliated and Subsidiary Companies

3.2.6 List of Affiliated and Subsidiary Companies

I-64 Southside Widening and High Rise Bridge, Phase 1

ATTACHMENT 3.2.6

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Parent	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

ATTACHMENT 3.2.6

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Archer Western Contractors, LLC	2410 Paces Ferry Road, Suite 600, Atlanta, GA 30339
Affiliate	Walsh Construction Company, LLC	929 West Adams, Chicago, IL 60607
Affiliate	Walsh Construction Company of Canada	800 Bay Street, Suite 401, Toronto, ON M5S3A9



3.2.7 Certification Regarding Debarment Forms



3.2.7(a) Certification Regarding Debarment Form(s) Primary Covered Transactions

I-64 Southside Widening and High Rise Bridge, Phase 1

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

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

October 6, 2016 Date

Attorney-in-Fact Title

Skanska-Archer Western 2 Joint Venture

Name of Firm

POWER OF ATTORNEY

Skanska USA Civil Southeast Inc. ("Skanska"), a Virginia corporation and Archer Western Construction, LLC, an Illinois limited liability company (collectively, "Grantors"), are co-venturers in a Joint Venture known as Skanska-Archer Western 2 Joint Venture ("Joint Venture"), and as such are submitting a bid for the <u>I-64 Southside Widening and High Rise</u> <u>Bridge, Phase 1</u> ("Project").

Grantors do hereby make, constitute, and appoint Salvatore Taddeo, Chief Operating Officer and Executive Vice President of Skanska, Bob Rose, Senior Vice President of Skanska, and Stephen Davis, Vice President of Skanska, as their true and lawful Attorneys-in-Fact ("Attorneys-in-Fact") for the Joint Venture. The Attorneys-in-Fact are authorized to and may act individually to do and perform all acts on behalf of the Joint Venture necessary to submit a bid for the Project, including but not limited to, executing the bid forms, proposal and any other documents necessary for the submission of the bid, and to take all other actions to represent the Joint Venture in accordance with the Joint Venture Agreement.

The foregoing appointment of Attorney-in-Fact is hereby specifically made subject to revocation or amendment thereof. This Power of Attorney may be revoked or amended by a written revocation or amendment signed by the Grantors listed herein and signing below. This Power of Attorney shall remain in full force and effect as to all governmental entities, corporations, persons or other organizations which act in reliance thereon prior to receipt of a written revocation authorized by the Grantors. This Power of Attorney shall remain in effect for a period of six (6) years from the issued date unless revoked at an earlier date or superseded by any amendment to the Joint Venture Agreement between the Grantors.

The Grantors contemplate the Attorneys-in-Fact will be executing contracts on behalf of the Joint Venture and the Grantors and shall ratify and confirm all contracts, agreements or other legal obligations undertaken by the Attorneys-in-Fact by virtue of this Power of Attorney.

This Power of Attorney may be signed in counterparts.

SIGNATURES ON FOLLOWING PAGES

SKANSKA USA CIVIL SOUTHEAST INC.

By: Its: Vice President

Witness: Witness:

COMMONWEALTH OF VIRGINIA CITY OF VIRGINIA BEACH

Subscribed and sworn to me this 22nd day of September , 2016, by Vice President , acting in his/her capacity as for and on behalf of Skanska USA Civil Southeast Inc.

CIL

Notary Public

My commission expires: December 31, 2017



ARCHER WESTERN CONSTRUCTION, LLC
By: CAPDE
Its: President
Witness: Jul St Witness: Course Vandellier
winess. Courter Viereccourt
STATE OF Illinois
COUNTY OF Cook
Subscribed and sworn to me this <u>23rd</u> day of <u>September</u> , 2016, by <u>Daniel P. Walsh</u> , acting in his/her capacity as <u>President</u> for and
on behalf of Archer Western Construction, LLC.
Notary Public
My commission expires: $6 \cdot 6 \cdot 17$
"OFFICIAL SEAL"
CHRISTINE SANCHEZ
Notary Public June 08, 2019
Linnen

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CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

October 6, 2016 Date ignature

Vice President Title

Skanska USA Civil Southeast Inc.

Name of Firm

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

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

October 5, 2016 Signature Stephen P. Ca

Senior Vice President Title

Archer Western Construction, LLC Name of Firm



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

I-64 Southside Widening and High Rise Bridge, Phase 1

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

mell 09/30/2016 Signature

Vice President Title

Parsons Brinckerhoff, Inc. Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

Executive Vice President Title 9/16/ Signature LLC msultants Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

no 8 July 9/13/2016 Date Signature

President Title

<u>Precision Measurements, Inc.</u> Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

9/19/16 Signature Date

Asst. Vice President / Principal Title

uit

Cardno, Inc.

Name of Firm

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CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

9/16/16 Signature Date

President & CEO Title

Harris Miller Miller & Hanson Inc. Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

him K- Do	09/13/2016	President
Signature	Date	Title
۲uhin Basu ۵	Associates, Inc.	

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CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

	X	0		
1	$\langle X \rangle$	September 13	, 2016	Principal-In-Charge
1	Signature	Date		Title
6				
	Sabra,	Wang & Associate	s, Inc.	

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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

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

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

Signature Date 9/13/2016 Presidento Title HASSAN WATER RESOURCES, PLC

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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.

9/21/16 Signature Date

Senior Principal

Title

Stantec Consulting Services Inc.

Name of Firm



3.2.8 Offeror's VDOT Prequalification Certificate



Virginia Department of Transportation

Department's List of Prequalified Vendors Includes All Qualified Levels As Of 9/15/2016

 Date Printed:
 09/15/2016

 s
 12:00 AM

 16
 Page 383

- S -

Vendor ID: S1331 Vendor Name: SJW COMMERCIAL CONCRETE, LLC Prequal Exp: 09/30/2017

-- PREQ Address --3002 E. BOUNDRY TERRACE MIDLOTHIAN, VA 23112 Phone: 804-744-1323 Fax: 804-744-1395 Work Classes (Listed But Not Limited To)

006 - PORTLAND CEMENT CONCRETE PAVING 022 - INCIDENTAL CONCRETE 180 - SLIP FORMING 186 - SUBCONTRACTOR ONLY

Bus. Contact:WATERS, SHAWN JOSEPHEmail:SHAWN@SJWCONCRETE.COM

-- DBE Information --

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

Vendor ID:T009Vendor Name:SKANSKA USA CIVIL SOUTHEAST INC.Prequal Exp:11/30/2016

-- 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



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

ARCHER WESTERN CONSTRUCTION, LLC

Vendor Number: A210

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

PREQUALIFIED

Your firm specializes in the noted Classification(s):

GRADING; MAJOR STRUCTURES; PORTLAND CEMENT CONCRETE PAVING; MINOR STRUCTURES

Issue Date: January 31, 2016

This Rating and Classification will Expire: January 31, 2017

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies. Director of Contracts It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.

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3.2.9 Surety Letter

I-64 Southside Widening and High Rise Bridge, Phase 1

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 TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

September 28, 2016

Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219 Attn: Jeffrey Roby

RE: Design-Build Project for I-64 Southside Widening and High Rise Bridge, Phase 1 RFQ NO: C00106692DB93, Federal Project No: NHPP-064-3 (488)

Dear Mr. Roby:

We understand that Skanska-Archer Western 2 Joint Venture will be submitting a proposal on the above captioned project. Fidelity and Deposit Company of Maryland/Zurich American Insurance Company, Liberty Mutual Insurance Company, Federal Insurance Company, The Continental Insurance Company, Berkshire Hathaway Specialty Insurance Company and Travelers Casualty and Surety Company of America, have the pleasure of extending surety credit to the partners of Skanska –Archer Western 2 Joint Venture: Skanska USA Civil Inc. and Archer Western Construction, LLC.

As sureties for Skanska-Archer Western 2 Joint Venture, Fidelity and Deposit Company of Maryland/Zurich American Insurance Company, Federal Insurance Company, Liberty Mutual Insurance Company, The Continental Insurance Company, Berkshire Hathaway Specialty Insurance Company and Travelers Casualty and Surety Company of America hereby confirm that the above named Joint Venture, is capable of obtaining a performance and payment bond in the amount of the anticipated contract value for this project, and said bonds will cover the project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project. The named sureties are prepared to execute the bonds subject to our acceptable review of the final contract terms and conditions, bond forms, appropriate contract funding and any other underwriting considerations at the time of the request.

Please note that any arrangement for surety bonds is a matter strictly between the Contractor and the co-sureties, and the sureties assume no liability to third parties or to you by issuance of the letter. The Zurich American Insurance Company/The Fidelity and Deposit Company of Maryland has an A.M. Best Rating of A+XV, Federal Insurance Company has an A.M. Best Rating of A++XV, Liberty Mutual Insurance Company has an A.M. Best Rating of A XV, The Continental Insurance Company has an A.M. Rating of A XV, Berkshire Hathaway Specialty Insurance Company has an A.M. Best Rating of A ++XV and Travelers Casualty and Surety Company of America has an A.M. Best Rating of A++XV

If we can provide any further assurance or assistance, please do not hesitate to call me at 516-396-4291.

Signed, Sealed and dated this 28th day of September, 2016

Very truly yours,

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 TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

By: Woolford, Attorney-In/

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 GERALD F. HALEY, 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 Nancy SCHNEE, Andrea E. GORBERT, Valorie SPATES, Beverly A. WOOLFORD and Anne POTTER, all of Jericho, New York, 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 20th day of May, A.D. 2016.

ATTEST:

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



Vice President Gerald F. Haley

file D. Barry

Secretary Eric D. Barnes State of Maryland County of Baltimore

On this 20th day of May, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified. GERALD F. HALEY, 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.

Constance a Duran

Constance A. Dunn, Notary Public My Commission Expires: July 9, 2019

EXTRACT FROM BY-LAWS OF THE COMPANIES

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

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Autorney 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.







Michael Bond, Vice President

FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

Statement of Financial Condition

As Of December 31, 2015

ASSETS

Bonds	142,878,497
Stocks	22,315,096
Cash and Short Term Investments	337,835
Reinsurance Recoverable	24,731,651
Other Accounts Receivable	19,935,844
TOTAL ADMITTED ASSETS	210,198,923

Reserve for Taxes and Expenses	\$ 46,436
Ceded Reinsurance Premiums Payable	40 456 300
Securities Lending Collateral Liability	0
TOTAL LIABILITIES	\$ 40,502,745
Capital Stock, Paid Up \$ 5,000,000	10 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
Surplus	
Surplus as regards Policyholders	169,696,178
TOTAL	\$ 210,198,923

Securities carried at \$57,996,983 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2015 would be \$212,137,795 and surplus as regards policyholders \$171,635,049.

I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2015.

Corporate Secretary

State of Illinois City of Schaumburg SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.

DARRYL JOINER OFFICIAL SEAL Notary Public - State of Illinois My Commission Expires February 24, 2018

Dasop Join Notary Public

ZURICH AMERICAN INSURANCE COMPANY COMPARATIVE BALANCE SHEET ONE LIBERTY PLAZA, 165 BROADWAY, 32nd FLOOR, NEW YORK, NY 10096 As of December 31, 2015 and December 31, 2014

Sec	100	12/31/2015	_	12/31/2014
Assets				
Bonds	\$	17,260,128,973	\$	17,933,136,241
Preferred Stock		A		
Common Stock		3,457,354,146		3,213,266,911
Real Estate		743,791,691		
Other Invested Assets		2,048,959,102		2,602,435,930
Short-term Investments		403,620,083		707,396,303
Receivable for securities		86,823,468		20,334,654
Cash and cash equivalents		182.127,374		9,155,828
Securities lending reinvested collateral assets		86,554,110		167,993,212
Employee Trust for Deferred Compensation Plan		153,274,854		140,606,132
Total Cash and Invested Assets	\$	24,422,633,801	\$	24,794,325,211
Premiums Receivable	s	3,598,435,742	S	3,317,513,374
Funds Held with Reinsurers		1,906,522		2,357,701
Reinsurance Recoverable		521,790,582		492,689,841
Accrued Investment Income		123,257,424		116,594,177
Federal Income Tax Recoverable		1,045,367,647		941,023,188
Due from Affiliates		200,022,690		83,375,591
Other Assets		558,041,597		561,819,983
Total Assets	\$	30,471,456,005	\$	30,309,699,066
Liabilities and Policyholders' Surplus				
Loss and LAE Reserves	s	14,173,584,657	s	13,922,765,027
Unearned Premium Reserve		4,463,409,342	3	4,502,895,029
Funds Held with Reinsurers		203,459,214		191,291,330
Loss In Course of Payment		386,200,590		the second second second
Commission Reserve				306,093,345
Federal Income Tax Payable		120,630,088		79,627,248
Remittances and Items Unallocated		93,480,741		115,512,376
Payable to parent, subs and affiliates		178,038,986		123,759,621
Provision for Reinsurance		69,640,403		154,224,298
Ceded Reinsurance Premiums Payable		44,528,436		59,189,897
		939,196,923		721,709,366
Securities Lending Collateral Liability Other Liabilities		86,554,110		167,993,212
Total Liabilities	\$	1,947,276,015	\$	1.949,229,453 22,294,290,202
Dolianthaldard Sumlua		1.0.0.0.000		1.0.0
Policyholders' Surplus:		E 000 000		
Common Capital Stock	\$	5,000,000	S	5,000,000
Paid-In and Contributed Surplus		4,394,131,321		4,394,131,321
Surplus Notes		and a second		Sector 2
Special Surplus Funds		56,772,000		57,824,000
Cumulative Unrealized Gain		430,546,047		572,072,362
Unassigned Surplus	-	2,879,007,132		2,986.381,181
Total Policyholders' Surplus	\$	7,765,456,500	5	8,015,408,864
Total Liabilities and Policyholders' Surplus	S	30,471,456,005	\$	30,309,699,066

I, Dennis F. Kerrigan, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2015, according to the best of my information, knowledge and belief.

State of Illinois County of Cook

L

Corporate Secretary } ss:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.



Notary public

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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 Andrea E. Gorbert, Anne Potter, Nancy Schnee, Valorie Spates and Beverly A. Woolford of Jericho, New York-

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 surely 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 6th day of May, 2016.

loros. Assistant Secretar

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STATE OF NEW JERSEY

County of Somerset

On this 6th day of May, 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 swom, 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. 2316685 Commission Expires July 16, 2019

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 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

SFP 2 8 2016

(iii) 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



Dawn Chloros.

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 ADDRESS LISTED ABOVE, OR BY Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surely@chubb.com

FEDERAL INSURANCE COMPANY

STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

DECEMBER 31, 2015

(in thousands of dollars)

LIABILITIES ASSETS SURPLUS TO POLICYHOLDERS Cash and Short Term Investments...... \$ Outstanding Losses and Loss Expenses \$ 12,174,848 687,917 United States Government, State and Unearned Premiums..... Municipal Bonds 9,544,097 Dividends Payable to Stockholder Other Bonds..... 4,491,238 Ceded Reinsurance Premiums Payable Stocks 692,901 Provision for Reinsurance Other Invested Assets..... 2,187,839 Other Liabilities..... TOTAL INVESTMENTS 17,603,992 TOTAL LIABILITIES Investments in Affiliates: Chubb Investment Holdings, Inc. 3.679.770 Capital Stock Pacific Indemnity Company..... 2,930,246 Paid-In Surplus Executive Risk Indemnity Inc..... 1.267.144 Unassigned Funds Chubb Insurance Investment Holdings Ltd 1,020,650 CC Canada Holdings Ltd..... 590,955 Great Northern Insurance Company 469,230 SURPLUS TO POLICYHOLDERS Chubb Insurance Company of Australia Ltd. 404,845 Vigilant Insurance Company..... 306,232 Chubb European Investment Holdings SLP .. 294,200 Other Affiliates 566,480 Premiums Receivable 1,659,749 Other Assets 1,447,072 TOTAL LIABILITIES AND SURPLUS TOTAL ADMITTED ASSETS \$ 32,240,565 TO POLICYHOLDERS...... \$ 32,240,565 Investments are valued in accordance with requirements of the National Association of Insurance Commissioners, At December 31, 2015, investments with a carrying value of \$546,611,273 were deposited with government authorities as required by law.

State, County & City of New York, - ss:

Dawn M. Chloros, Assistant Secretary

_ of the Federal Insurance Company

Dews m. Chieros

AND

3,726,665

1,400,000

1,295,093

18,961,860

329,694

35,560

20,980

3,106,809

10,150,916

13,278,705

being duly sworn, deposes and says that the foregoing Statement of Assets, Liabilities and Surplus to Policyholders of said Federal Insurance Company on December 31, 2015 is true and correct and is a true abstract of the Annual Statement of said Company as filed with the Secretary of the Treasury of the United States for the 12 months ending December 31, 2015. Subscribed and sworn to before me this March 11, 2016.

Jeanette Shipse

JEANETTE SHIPSEY Notary Public, State of New York No. 02SH5074142 Qualified in Nassau County Commission Expires March 10, 2019

Assistant Secretary

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. 7455407 American Fire and Casualty Company Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company POWER OF ATTORNEY KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations 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 Andrea E. Gorbert; Anne Potter; Beverly A. Woolford; Jennifer L. Jakaitis; Nancy Schnee; Susan A. Welch; Valorie Spates and appoint. all of the city of Jericho state of NY each individually if there be more than one named, its true and lawful altorney-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 17th day of August 2016 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. American Fire and Casualty Company ID CA IN INSU NINSU, The Ohio Casualty Insurance Company Liberty Mutual Insurance Company 1919 1906 1912 1991 West American Insurance Company currency rate, interest rate or residual value guarantees. By: David M. Carey, Assistant Secretary STATE OF PENNSYLVANIA SS COUNTY OF MONTGOMERY On this 17th day of August 2016, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance 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 Plymouth Meeting, Pennsylvania, on the day and year first above written. PAS COMMONWEALTH OF PENNSYLVANIA Notarial Seal Teresa Pastella, Notary Public DF mouth Twp., Montgomery County Teresa Pastella, Notary Public My Commission Expires March 28, 2017 Member, Pennsylvania Association of Notaries ARY PU This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance confirm the validity of this 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-infact 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, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, 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 day of INC NSU



W. Davenport, Assistant Secretary

Gregory

Not valid for mortgage, note, loan, letter of credit,



LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT - DECEMBER 31, 2015

Liabilities

Cash and Bank Deposits	\$753,038,641
*Bonds — U.S Government	1,547,613,446
*Other Bonds	11,088,162,545
*Stocks	9,919,835,033
Real Estate	295,926,247
Agents' Balances or Uncollected Premiums	4,487,501,643
Accrued Interest and Rents	120,872,424
Other Admitted Assets	14,130,266,527

Assets

Liabilities	
Unearned Premiums	\$6,580,520,311
Reserve for Claims and Claims Expense	16,917,138,677
Funds Held Under Reinsurance Treaties	210,794,503
Reserve for Dividends to Policyholders	358,033
Additional Statutory Reserve	29,659,093
Reserve for Commissions, Taxes and	
Other Liabilities	2,789,478,276
Total	526,527,948,893
Special Surplus Funds \$67,890,944	
Capital Stock 10,000,000	
Paid in Surplus 8,829,183,823	
Unassigned Surplus6,908,192,846	
Surplus to Policyholders	15,815,267,613
Total Liabilities and Surplus	<u>\$42,343,216,506</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values. The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2015, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 15th day of March, 2016.

Amerolajewski

Assistant Secretary

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

Nancy Schnee, Valorie Spates, Andrea E Gorbert, Beverly Woolford, Anne Potter, Individually, of Jericho, NY Debra A Deming, Vivian Carti, Evangelina L Dominick, Cynthia Farrell, Sandra Diaz, Edward Reilly, Peter Healy, Susan A Welsh, Individually, of New York, NY

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 26th day of August, 2016.



The Continental Insurance Company

Paul T Bruflat ice President

State of South Dakota, County of Minnehaha, ss:

On this 26th day of August, 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.

J. MOHR NOTARY FUBLIC

My Commission Expires June 23, 2021

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 day of SEP 2 8 2016



The Continental Insurance Company

Assistant Secretary

D. Bult

Form F6850-4/2012

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."

THE CONTINENTAL INSURANCE COMPANY

Radnor, Pennsylvania

Statement of Net Admitted Assets and Liabilities

December 31, 2015

ASSETS

Bonds	5 1,029,630,968
Stocks	154,739,571
Cash and short-term investments	246,391,807
Receivables for securities	18,845
Investment income due and accrued	14,125,269
Amounts recoverable from reinsurers	122,240,351
Funds held by or deposited with reinsured companies	1,850,091
Net deferred tax asset	73,791,202
Premiums and considerations	23.054.396
Other assets	1.019,110
Total Assets	\$ 1,666.861.610

LIABILITIES AND SURPLUS

Losses			\$ 774.879,701
Loss adjustment expense			36,650,259
Other expenses			736,867
Unearned premiums			
Ceded reinsurance premiums payable (net of ceding commissions)			27,199,039
Provision for reinsurance			76,000,000
Other liabilities			(717,874,026)
Total Liabilities			\$ 197,591,840
Surplus Account:			
Capital paid up	S	53,566,360	
Gross paid in and contributed surplus		1,423,436,994	

Gross paid in and contributed surplus	1,423,436,994	
Special Surplus	136,028,695	
Unassigned funds	(143,762,279)	
Surplus as regards policyholders		\$ 1,469,269,770
Total Liabilities and Capital		\$ 1,666,861.610

I, Troy Wray, Assistant Vice President of The Continental Insurance Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2015, as filed with the various Insurance Departments and is a true and correct statement of the condition of The Continental Insurance Company as of that date.

The Continental Insurance Company

Assistant Vice President

an Votary Public

Subscribed and sworn to me this 21st day of March . 2016.

My commission expires:





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: Andrea E. Gorbert, Beverly A. Woolford, Anne Potter, Nancy Schnee, Valorie Spates, 390 North Broadway of the city of Jericho State of New York, 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,

David Fields, Executive Vice President

NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

By:

David Fields, Vice President



NOTARY

By:

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]



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 September 28, 2016.





Bue - 5 Nould

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, 20^m Floor com, via fax to (617) 507-8259, or via **COM THIS POWER OF ATTORNEY IS VOID IF ALTERED** number at (855) 453-9675, via Boston, MA 02110 | (617) 935-2971 or by email at Courtney-Wall our 24-hour toll free contact us on please us of a claim To notify

fiem

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-infact, 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-infact, 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.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102

ADMITTED ASSETS*

		12/31/2015	9/30/2015	12/31/2014
Total invested assets	\$	3,186,498,049	\$ 3,136,760,813	\$ 3,496,596,431
Premium & agent balances (net)		111,888,220	87,914,911	1,575,140
All other assets	-	73,200,653	57,838,968	23,436,525
Total Admitted Assets	\$	3,371,586,922	\$ 3,282,514,692	\$ 3,521,608,096

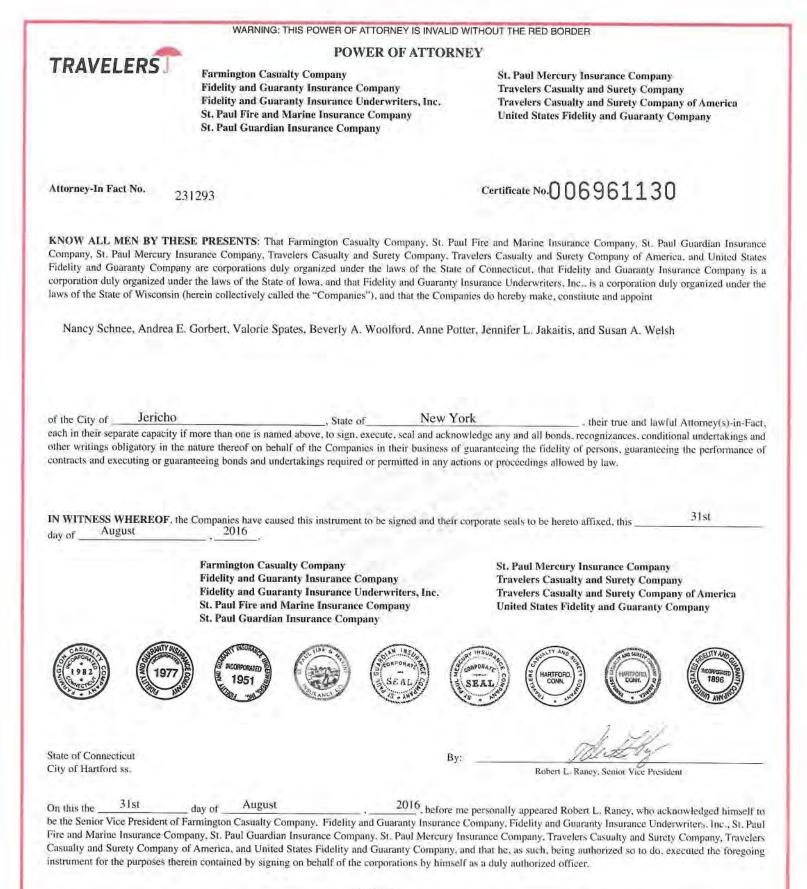
LIABILITIES & SURPLUS*

And a state of the		12/31/2015		9/30/2015		12/31/2014
Loss & loss exp. unpaid	\$	33,586,302	\$	22,748,711	\$	7,856,614
Unearned premiums		62,997,856		33,154,834		454,617
All other liabilities	-	230,891,273		195,785,652		279,153,584
Total Liabilities		327,475,431		251,689,197		287,464,815
Total Policyholders' Surplus		3,044,111,491	-	3,030,825,495	-	3,234,143,281
Total Liabilities & Surplus	\$	3,371,586,922	\$	3,282,514,692	\$	3,521,608,096

 * Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

A.M. Best: A++ Rating

Standard & Poor's: AA+ Rating



In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2021.



Marie C. Tetreault, Notary Public

58440-5-16 Printed in U.S.A.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER.

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty 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 set my hand and affixed the seals of said Companies this

Kevin E. Hughes, Assistant Secretary













To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

t.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2015

CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS				
CASH AND INVESTED CASH BONDS STOCKS INVESTMENT INCOME DUE AND ACCRUED OTHER INVESTED ASSETS PREMIUM BALANCES NET DEFERRED TAX ASSET REINSURANCE RECOVERABLE SECURITIES LENDING REINVESTED COLLATERAL ASSETS RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES OTHER ASSETS	\$ 54,550,861 3,600,572,638 245,901,111 43,905,720 3,580,975 200,990,913 65,751,196 22,532,968 11,772,178 29,659,492 5,685,697	UNEARNED PREMIUMS LOSSES LOSS ADJUSTMENT EXPENSES COMMISSIONS TAXES, LICENSES AND FEES OTHER EXPENSES CURRENT FEDERAL AND FOREIGN INCOME TAXES REMITTANCES AND ITEMS NOT ALLOCATED AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS RETROACTIVE REINSURANCE RESERVE ASSUMED POLICYHOLDER DIVIDENDS PROVISION FOR REINSURANCE ADVANCE PREMIUM PAYABLE FOR SECURITIES PAYABLE FOR SECURITIES PAYABLE FOR SECURITIES ESCHEAT LIABILITY OTHER ACCRUED EXPENSES AND LIABILITIES TOTAL LIABILITIES	\$ 852,633,464 735,725,171 278,900,106 35,398,814 41,351,717 39,466,867 15,158,620 4,995,722 33,959,553 898,144 9,080,181 3,834,904 1,572,635 8,000,000 11,772,178 26,036,328 664,927 1,858,650 \$ 2,081,307,981			
TOTAL ASSETS	\$ 4,184,903,769	PAID IN SURPLUS OTHER SURPLUS TOTAL SURPLUS TO POLICYHOLDERS TOTAL LIABILITIES & SURPLUS	433,803,760 1,663,312,028 \$ 2,103,595,768 \$ 4,184,903,769			

STATE OF CONNECTICUT)
COUNTY OF HARTFORD) \$5.
CITY OF HARTFORD	

MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS SECOND VICE PRESIDENT, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2015.

Desce Mark

O.

SECOND VICE PRESIDE

NOTARY PUBLIC

SUBSCRIBED AND SWORN TO BEFORE ME THIS 18TH DAY OF MARCH, 2016



SUSAN M, WEISSLEDER Notary Public My Commission Expires November 30, 2017



3.2.10 SCC and DPOR Information Tables

3.2.10 SCC and DPOR Information Tables

I-64 Southside Widening and High Rise Bridge, Phase 1

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

	th the requirem	ents set forth in	Section 3.	registration and licensur 2.10 and that all busine R BUSINESSES (RFQ Se	sses and indivi	duals listed are active	
		formation (3.2.1)				rmation (3.2.10.2)	
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Skanska USA Civil Southeast Inc.	0038275-4	Corporation	Active	295 Bendix Road, Suite 400, Virginia Beach, VA 23452	CBC EMC H/H	2701000041	10/31/2016
Archer Western Construction, LLC	T043700-6	Foreign LLC	Active	929 W. Adams St. Chicago, IL 60607	BLD H/H	2705141795	7/31/2017
Parsons Brinckerhoff, Inc.	F0501603	Foreign Corporation	Active	One Penn Plaza, New York, NY 10119	ENG, ARC	0411000137	2/28/2018
Dewberry Consultants, LLC	S0447336	Limited Liability Company	Active	4801 Arlington Blvd. Fairfax, VA 22031	ENG, ARC, LA, LS	0407003966	12/31/2017
Precision Measurements, Inc.	04504361	Corporation	Active	851 Seahawk Circle, Suite 103, Virginia Beach, VA 23452	LS	0407003345	12/31/2017
Cardno, Inc.	F1882150	Foreign Corporation	Active	10004 Park Meadows Dr. Suite 300, Lone Tree, CO 80124	ENG	0411001140	2/28/2018
Harris Miller Miller & Hanson, Inc.	F1451857	Foreign Corporation	Active	77 South Bedford St. Burlington, MA 01803	NA	NA	NA
Tuhin Basu & Associates, Inc	05243340	Corporation	Active	7921 Jones Branch Dr. Suite LL08 Mclean, VA 22102	ENG	0407003991	12/31/2017
Sabra Wang Associates, Inc.	F1343203	Foreign Corporation	Active	101 West Broad Street, Suite 301 Falls Church, VA 22046	ENG	0407005636	12/31/2017
Hassan Water Resources, PLC	S2293282	Limited Liability Company	Active	2255 Parkers Hill Dr. Maidens, VA 23102	ENG	0413000299	12/31/2017

2

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

Stantec Consulting Services, Inc. F1493198 Foreign Corporation	Active	200, 10160 – 112 Street, T5K 2L6 Edmonton AB	ENG	0411000981	2/28/2018
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State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

	DPOF	INFORMATION FOR IN	DIVIDUALS (RFQ Section	ns 3.2.10.3 and	d 3.2.10.4)	
	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.	Tom Fulton	Virginia Beach, VA	295 Bendix Road Suite 400 Virginia Beach, VA 23452	ENG	0402034653	7/31/2017
Stantec Consulting Services, Inc.	Julie Wood Hartman	Virginia Beach, VA	749 Mile Ridge Estates, Strasburg VA 22641	ENG	0402044099	10/31/2017
Parsons Brinckerhoff, Inc.	Derek John Piper	Virginia Beach, VA	PB Americas, Inc. 277Bendix Road, Suite 300 Virginia Beach, VA 23452	ENG	0402046886	12/31/2017
Parsons Brinckerhoff, Inc.	Rex Darren Gilley	Virginia Beach, VA	5377 Blackwater Loop, Virginia Beach, VA 23457	ENG	0402025213	6/30/2018
Parsons Brinckerhoff, Inc.	Scott A. Lovell	Virginia Beach, VA	PB Americas, Inc. 2641 Lower Greens Place, Virginia Beach, VA 23456	ENG	0402023874	1/31/2017
Parsons Brinckerhoff, Inc.	Michelle Lee Martin	Virginia Beach, VA	1773 Seaton Dr. Virginia Beach, VA 23464	ENG	0402042450	06/30/2017
Parsons Brinckerhoff, Inc.	lan James Chaney	Virginia Beach, VA	Parsons Brinkerhoff 4649 Pleasant Avenue, Norfolk, VA 23518	ENG	0402045761	7/31/2017
Parsons Brinckerhoff, Inc.	Timothy Paul Anderson	Virginia Beach, VA	227 43 rd Street, Virginia Beach, VA 23451	ENG	0402040134	6/30/2017
Parsons Brinckerhoff, Inc.	Gregory George Hoer	Virginia Beach, VA	6500 Beverly Rd. Baltimore MD 21239	ENG	0406001737	12/31/2017
Parsons Brinckerhoff, Inc.	Robin Renee Huelsbeck	Virginia Beach, VA	1017Jamie Drive Pensacola, FL 32506	ENG	0402038150	1/31/2018

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

Parsons Brinckerhoff, Inc.	Timothy Raymond Rayner	Virginia Beach, VA	PO Box 55019 Virginia Beach, VA 23471	ENG	0402041012	6/30/2017
Parsons Brinckerhoff, Inc.	Melissa Jean Simpson	Virginia Beach, VA	3052 Bradwell Rd. Richmond, VA 232256	ENG	0402049366	12/31/2017



3.2.10.1 Full Size Copies of SCC Registration

I-64 Southside Widening and High Rise Bridge, Phase 1

Commonwealth F Hirginia



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.

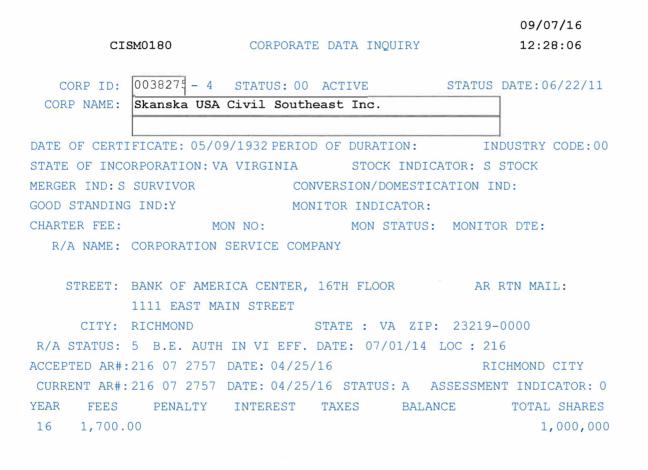


Signed and Sealed at Richmond on this Date: September 14, 2016

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Commonwealth of Virginia State Corporation Commission



(Screen Id:/Corp_Data_Inquiry)

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		Home Site Map About SCC C	Contact SCC Privacy Policy
CC eFile > Entity Search > Entity	y Details		Login Create an Account
SCC eFile	Busine Skanska USA Civil Southeast Inc.	SCC eFile ess Entity Details	Belo
SCC eFile	Skaliska USA Givil Southeast Inc.		
SCC eFile Home Page Check Name Distinguishability Business Entity Search Certificate Verification FAQs 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 Principal Office 295 BENDIX RD STE 400	Select an action File a registered agent File a registered office Resign as registered a File an annual report Pay annual registration Order a certificate of o Submit a PDF for proce View eFile transaction Manage email notificat	address change n fee nood standing essing (What can I submit?) history
	VIRGINIA BEACH VA23452 Registered Agent/Registered Office	New Search Home	
	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		
	Screen ID: e1000 Need additional information? Contact <u>sccinfo@scc.virginia.gov</u> Websi We provide external links through PDF(.pdf) Reader Excel (.xis) Viewer PowerPoli Build #: 1.0.0.306	nout our site. 🔨	rainia.aoy

Please note: The SCC website will be unavailable Thursday, August 18, from 6 p.m. until 10 p.m., for system maintenance. We apologize for the inconvenience and appreciate your patience.

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 Need additional information? Contact: webmaster@scc.virginia.qov

 We provide external links throughout our site.

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AI	ert to corporations regarding	unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office website.
sc	C eFile will be unable to acce	pt transactions requiring payment beginning Thursday, October 6, at 11:45 p.m. through Friday morning, October 7, 2016, at 3:00 a.m., due to payment vendor site maintenance.
		Home Site Map About SCC Contact SCC Privacy Policy
	SCC eFile > Entity Search > Entit	y Details > Certificate of Good Standing Login Create an Account
		SCC eFile
	SCC eFile SCC eFile Home Page Check Name Distinguishability Business Entity Search Certificate Verification FAQS Contact Us Give Us Feedback	Recretificate of good standing may be ordered for corporations only.
	Business Entities	
	UCC or Tax Liens	
	Court Services	
	Additional Services	
		Need additional information? Contact: <u>sccinfo@scc.virginia.gov</u> Website questions? Contact: <u>webmaster@scc.virginia.gov</u> We provide external links throughout our site. PDF(.pdf) Reader Lxcel (.xls) Viewer PowerPoint (.ppt) Viewer W Word (.doc) Viewer Build #: 1.0.0.30644

Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Parsons Brinckerhoff, Inc., a corporation incorporated under the law of New York, 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 11, 1986; 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: March 25, 2013

Business Entities/UCC	Financial Institutions		Securities/Retai	ł Franchising	Utility Regula	ation Utility/Railroad Safety Le	gal Support Admin	Home Site Map About SCC 6	Contact SCC Pri	vacy Policy
SCC eFile > My Services >	Entity Search > Entity De	tails								Go
SCC eFile SCC eFile Home Page Business Entity Search Certificate Verification	Barcons	Princkor	hoff Inc			Welcome to SCC eFile siness Entity Details				Quick Links Division Home Division Contact
Log In FAQs Give Us Feedback Business Entities UCC or Tax Liens Court Services Additional Services	Date	Parsons Brinckerhoff, Inc. SCC ID: F0501603 Business Entity Type: Foreign Corporation Jurisdiction of Formation: NY Date of Formation/Registration: 2/11/1986 Status: Active Shares Authorized: 30000 Principal Office							C E	Laws & Regulations Bulletin Archive External Links
	NEW YO Registe CT CORF 4701 CC GLEN AL	red Agent PORATION S DX RD STE 3		10119 ffice 23060-6	5802	 Conveniently monitor b Perform easy step-by-s such as registered ager Quickly access online fi To view 	usiness entities thr tep online transact nt changes		t	
	Status: Effective	ty's eFile His	Active 1/5/200	4		Order certificate of good s				
					We prov	fo@scc.virginia.gov Website question ride external links throughout our site (.xls) Viewer PowerPoint (.ppt) Vi	9			

Commonwealth Hirginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That Dewberry Consultants LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is January 01, 2000; and

That the limited liability company is in existence in the Commonwealth of Virginia as of the date set forth below.

As of the date below, this certificate of organization is in effect and the company is current in the payment of all annual registration fees assessed against it by the Commission.

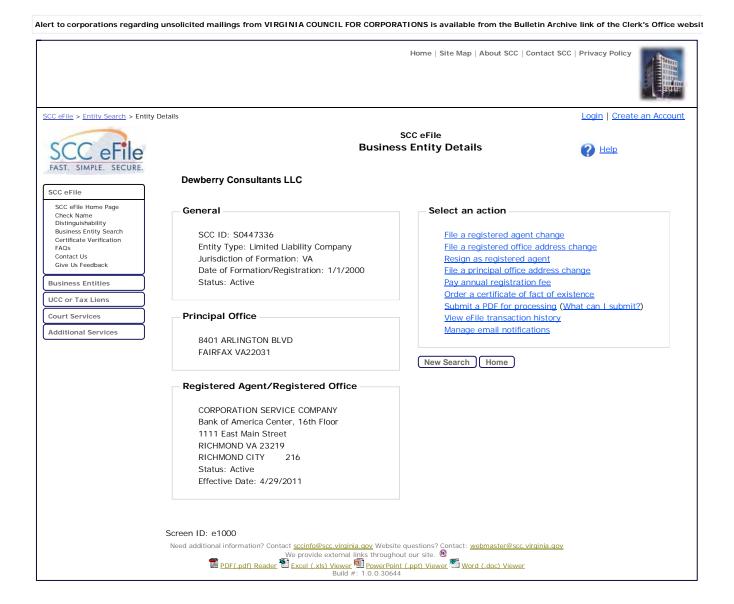
I further certify that the following is a list of all documents relating to the articles of organization filed in the Clerk's Office of the Commission on behalf of Dewberry Consultants LLC.

ARTICLES OF ORGANIZATION ARTICLES OF AMENDMENT January 1, 2000 September 21, 2012

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: August 11, 2016



Commonwealth & Mirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That PRECISION MEASUREMENTS, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is July 24, 1995;

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: May 23, 2014

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Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Cardno, 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 December 13, 2011; 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: March 24, 2016

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STATE CORPORATION COMMISSION

Richmond, December 6, 2000

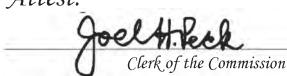
This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

Harris Miller Miller & Hanson 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:



Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office websit Home | Site Map | About SCC | Contact SCC | Privacy Policy Login | Create an Account SCC eFile > Entity Search > Entity Details SCC eFile SCC eFile **Business Entity Details** 🕜 <u>Help</u> FAST. SIMPLE. SECURE Harris Miller Miller & Hanson Inc. SCC eFile SCC eFile Home Page General Select an action Check Name Distinguishability Business Entity Search SCC ID: F1451857 File a registered agent change Certificate Verification Entity Type: Foreign Corporation File a registered office address change FAQs Contact Us Jurisdiction of Formation: MA Resign as registered agent Give Us Feedback Date of Formation/Registration: 12/6/2000 File an annual report Status: Active **Business Entities** Pay annual registration fee Shares Authorized: 300000 Order a certificate of good standing UCC or Tax Liens View eFile transaction history **Court Services** Manage email notifications **Principal Office** Additional Services 77 SOUTH BEDFORD ST New Search Home **BURLINGTON MA01803** Registered Agent/Registered Office C T CORPORATION SYSTEM 4701 COX RD STE 285 GLEN ALLEN VA 23060 HENRICO COUNTY 143 Status: Active Effective Date: 6/12/2015 Screen ID: e1000 Need additional information? Contact <u>sccinfo@scc.virginia.gov</u> Website questions? Contact: <u>webmaster@scc.virginia.gov</u> We provide external links throughout our site. @ <u>PDF(.pdf) Reader</u> <u>Excel (.vls) Viewer</u> <u>PowerPoint (.ppt) Viewer</u> <u>Word (.doc) Viewer</u> Build #: 1.0.0.30644

Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That TUHIN BASU & ASSOCIATES, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is July 16, 1999;

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: June 21, 2016

Please note: The SCC website will be unavailable Thursday, September 15, from 6 p.m. until 10 p.m., for system maintenance. We apologize for the inconvenience ar appreciate your patience.

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	MCLEAN VA22102		
	MCLEAN VAZZIUZ		
	Registered Agent/R egistered Office		
	INCORP SERVICES INC		
	7288 HANOVER GREEN DRIVE		
	MECHANICSVILLE VA 23111		
	HANOVER COUNTY 142		
	Status: Active		
	Effective Date: 6/12/2009		
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	Screen ID: e1000		
	Need additional information? Contact sccinfo@scc.virginia.gov Website	questions? Contact: webmaster@s	se virginia gov

Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That SABRA, WANG & ASSOCIATES, INC., a corporation incorporated under the law of Maryland, 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 June 30, 1998; and

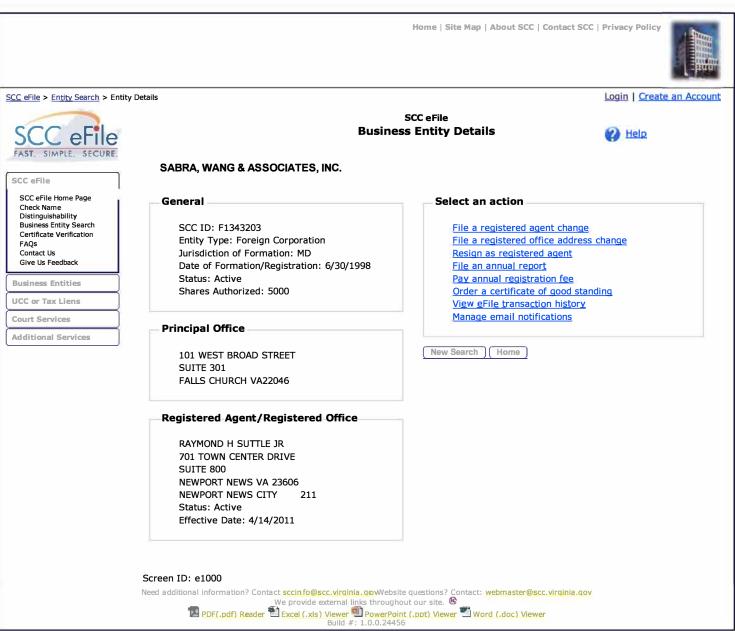
That the corporation is in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: June 6, 2012

An ALERT to Virginia Corporations Regarding Solicitations from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Offi website





STATE CORPORATION COMMISSION

Richmond, July 16, 2007

This is to certify that the certificate of organization of

Hassan Water Resources, PLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: July 16, 2007



State Corporation Commission Attest:

		Home Site Map About SCC Co	ontact SCC Privacy Policy
CC eFile > Entity Search > Entit	y Details		Login Create an Account
SCC eFile		CC eFile Entity Details	() Help
	Hassan Water Resources, PLC		
SCC eFile SCC eFile Home Page Check Name	General	Select an action	
Distinguishability Business Entity Search Certificate Verification FAQs Contact Us Give Us Feedback	SCC ID: S2293282 Entity Type: Limited Liability Company Jurisdiction of Formation: VA Date of Formation/Registration: 7/16/2007	File a registered agent File a registered office Resign as registered ag File a principal office ad	address change gent
Business Entities	Status: Active	Pay annual registration	<u>n fee</u>
JCC or Tax Liens		Order a certificate of fa	act of existence essing (What can I submit?)
court Services	Principal Office	View eFile transaction	•
dditional Services	2255 PARKERS HILL DR MAIDENS VA23102	Manage email notificati	ions
	Registered Agent/Registered Office		
	GAMAL E HASSAN 2255 PARKERS HILL DR MAIDENS VA 23102 GOOCHLAND COUNTY 137 Status: Active Effective Date: 5/4/2010		
	Screen ID: e1000 Need additional information? Contact <u>sccinfo@scc.virginia.gov</u> Website We provide external links throughou		ginia.gov

Commonwealth & Hirginia



State Corporation Commission

I Certify the Following from the Records of the Commission:

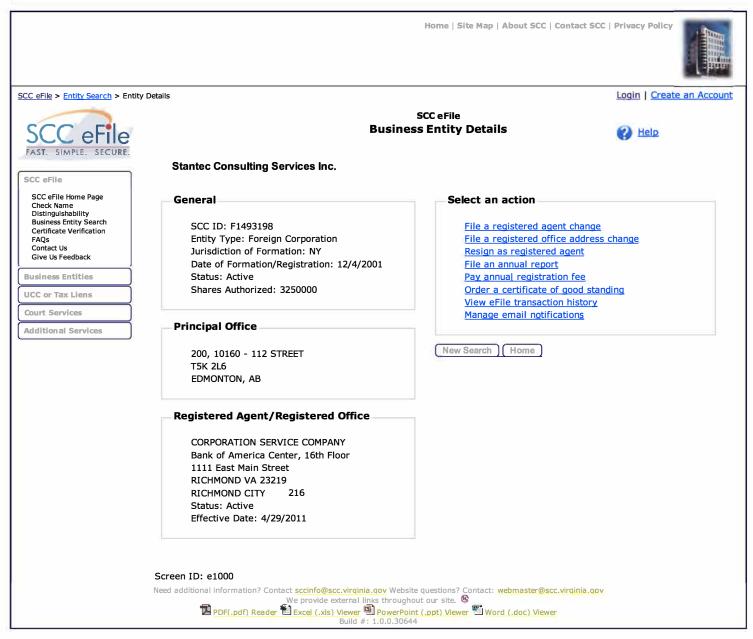
The foregoing is a true copy of an application for an amended certificate of authority to transact business in Virginia filed in this office by Stantec Consulting Services Inc.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: April 19, 2005

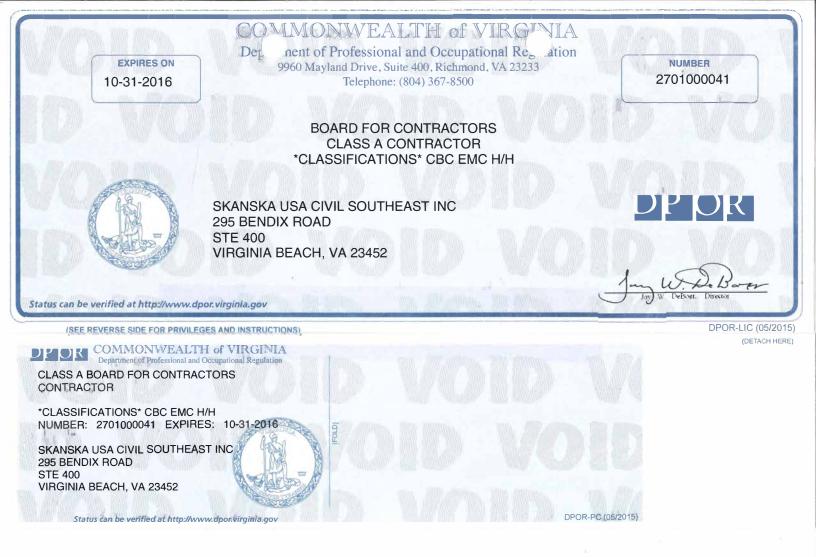
Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office webs





3.2.10.2 Full Size Copies of DPOR Registration (Offices)

I-64 Southside Widening and High Rise Bridge, Phase 1







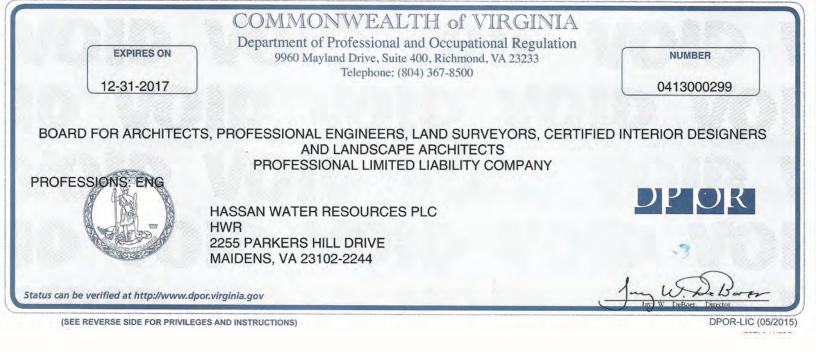


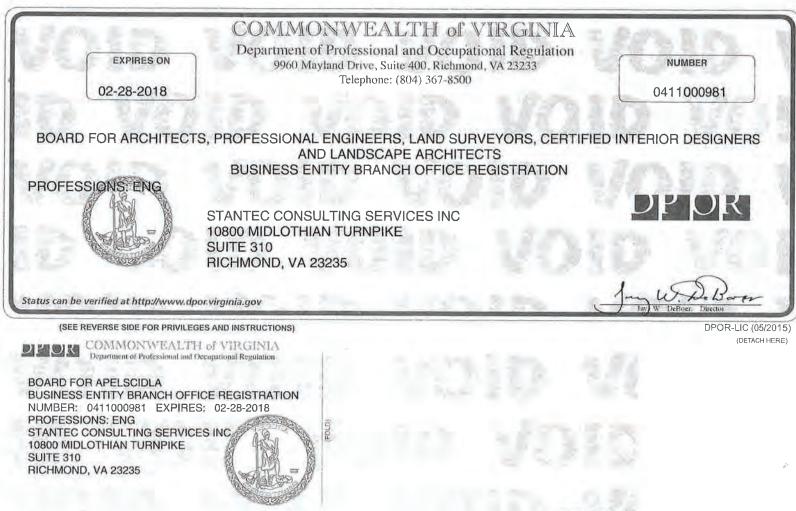










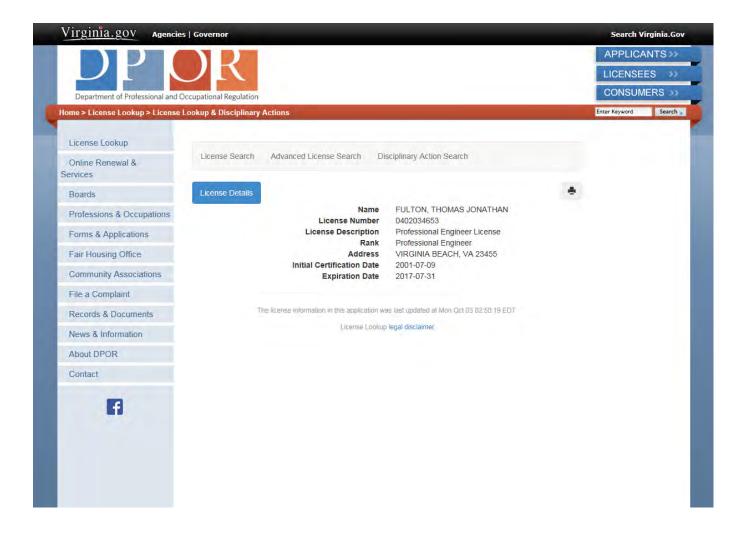


Status can be verified at http://www.dpor.virginia.gov



3.2.10.3 Full Size Copies of DPOR Registration (Key Personnel)

I-64 Southside Widening and High Rise Bridge, Phase 1



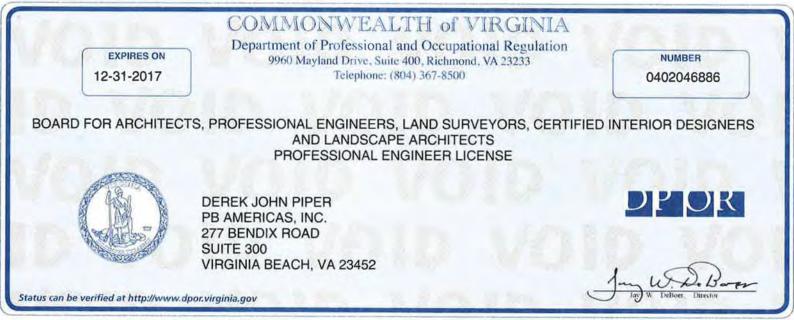
(POCKET CARD) COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA PROFESSIONAL ENGINEER LICENSE NUMBER: 0402034653 EXPIRES: 07-31-2017

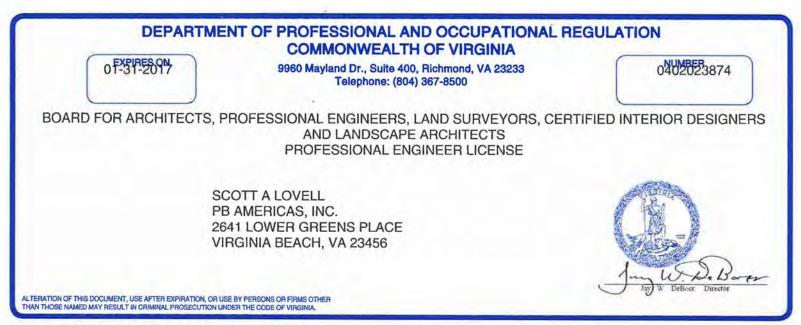
THOMAS JONATHAN FULTON 1717 WESTERFIELD ROAD VIRGINIA BEACH, VA 23455

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRM



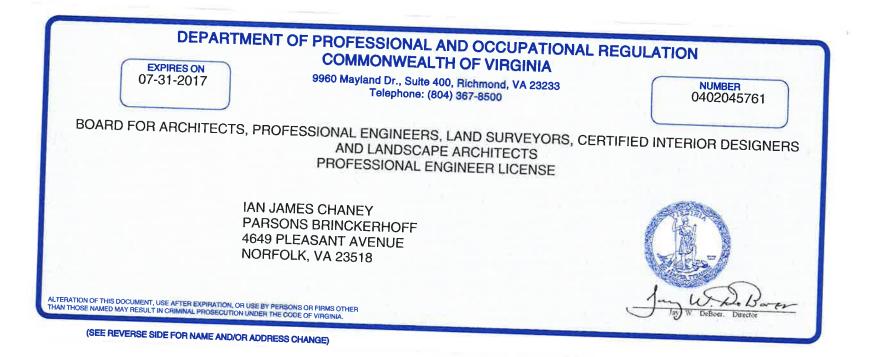


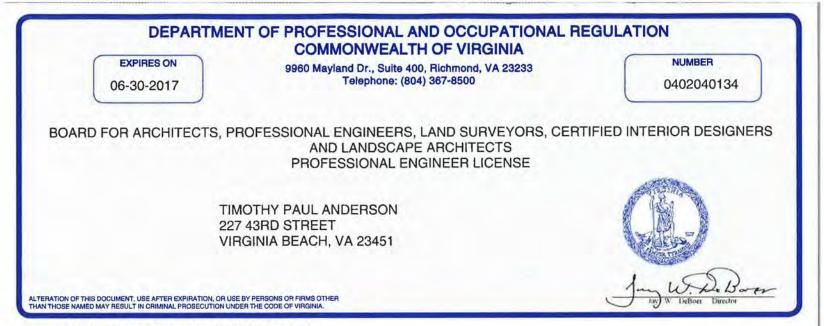




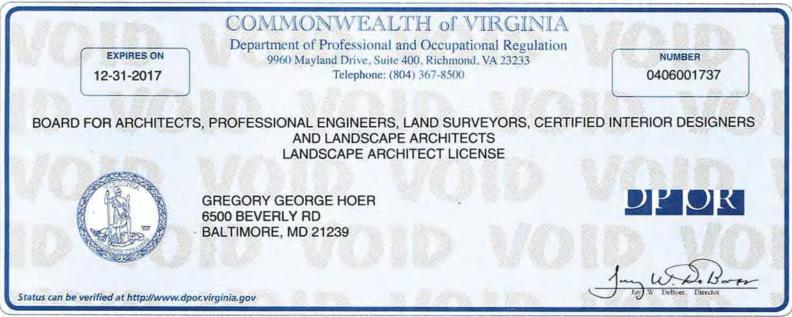
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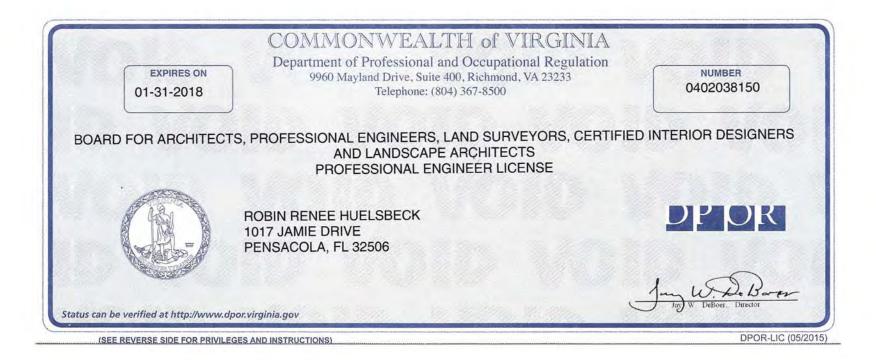


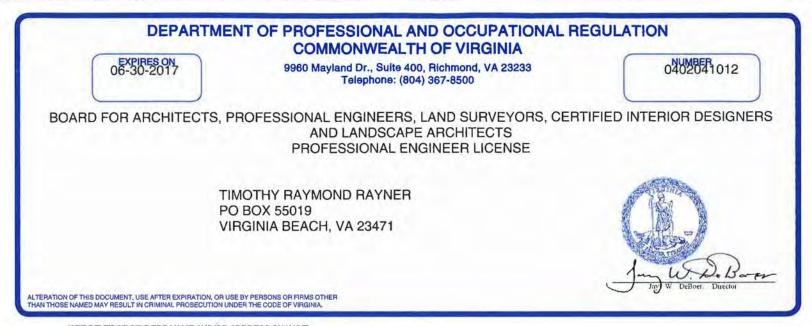




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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)





3.2.10.4 Full Size Copies of DPOR Registration (Non-APELSCVIDLA)

I-64 Southside Widening and High Rise Bridge, Phase 1



NONE PROVIDED AT THIS TIME



3.3.1 Key Personnel Resume and Reference Forms

I-64 Southside Widening and High Rise Bridge, Phase 1

ATTACHMENT 3.3.1(a)

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Thomas Fulton, PE, Vice President Operations

b. Project Assignment: Design-Build Project Manager

c. Name of Firm with which you are now associated: Skanska USA Civil Southeast Inc.

d. Employment History: With this Firm <u>30</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. 1986 to Present. For the past twelve years, Thomas Fulton has been a Project Executive and Project Manager. Prior to that, Mr. Fulton was a Superintendent.

Mr. Fulton is a Vice President of Operations, Project Executive/Project Manager with Skanska:

- As a Project Executive, Mr. Fulton provides corporate oversight and coordination for projects. He actively maintains and improves customer communications and relations, provides project oversight, project strategic direction, and project reporting to senior management. He reviews the safety and quality statistics with the Project Manager and keeps in constant contact with safety/environmental and quality control mangers to ensure the progress, compliance and success of projects. He is also responsible for providing project financial forecasts.
- As a Project Manager, He has been assigned to provide on-site project management for specific projects, where he has direct responsibility for project staffing, schedule, budget and cost control, subcontractor relations, and provides direction and coordination for superintendents and other supervisory staff. Projects where Mr. Fulton assumed project manager duties were high visibility projects with particular needs that matched well with Mr. Fulton's capabilities. Descriptions of three such projects are provided in Block f.
- As a Superintendent, Mr. Fulton provided on-site direction for daily activities for various highway and bridge projects in Virginia. He was responsible for ensuring compliance with corporate quality, safety, and environmental programs; training; leading the construction team; subcontractor management; managing field work; ensuring that required materials, equipment and personnel were available to ensure successful completion of the assigned tasks and to maintain project productivity within schedule and cost constraints. He was responsible for documentation, reporting, and identifying, managing and mitigating risk on the project, as well as working closely with the project manager to ensure work was coordinated with other superintendents.

Many of Mr. Fulton's projects as a superintendent included extensive marine work such as pile driving, substructure and superstructure construction and land tie-ins in sensitive marine environments and often in very congested areas where the team was required to maintain normal operations.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Manchester School of Science and Technology, Manchester England / B.S. /1986 / Building Technology (1st Class)

Active Registration: Year First Registered/ Discipline/VA Registration #: 2001 / Professional Engineer / Commonwealth of Virginia, #034653

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

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

 Elizabeth River Tunnels PPP, Norfolk, VA – Design-Build Project Manager, 2013-2018, Skanska USA Civil Southeast Inc.
 Specific Responsibilities: Mr. Fulton is responsible for managing the approach construction for this \$1.5 billion design-build project. His duties include oversight and reporting of safety and quality on his segment; setting schedules, procurement and budget in consultation with the project director; preparation of project activity plans, including activity hazard analysis plans; subcontractor management; coordinating activities with other segment managers, particularly the segment manager responsible for the submerged tunnels operations; and coordination of utility relocations.
 This work is adjacent to an active maritime channel, and the work is in an environmentally sensitive environment. MOT is a challenge because of high traffic flow - AADT of 99,000 vehicles at the Midtown Tunnel crossing,

MOT is a challenge because of high traffic flow - AADT of 99,000 vehicles at the Midtown Tunnel crossing, Shutdowns are limited to time of low traffic volume, mostly nights and weekends. The work is in older sections of Portsmouth and Norfolk, VA, requiring extensive coordination with local utilities. Community and customer relations are a high priority, especially because of the proximity of the largest hospital in Norfolk, requiring special attention to noise, vibration, and access for emergency vehicles. Special efforts were made to engage and utilize local small business.

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

Specific Responsibilities: Mr. Fulton, as the on-site Project Manager, was responsible for all aspects of project management for this \$37 million project, including customer relations, community relations, quality, safety and environmental oversight, and schedule and cost control. He was also responsible for material equipment and personnel acquisition. As Project Executive, he was responsible for project oversight, project reporting, reviewing safety, schedule, and cost activities; reporting to executive management and ensuring customer satisfaction, and ensuring the project had access to resources to successfully complete the project.

In this project, Mr Fulton's team colocated with VDOT, the client, to strengthen communication and accelerate issue resolution. The project involved a 2,900-foot-long bridge and roadway and utility work on the approaches. Community outreach with stakeholders and neighbors was important in working next to the existing bridge and over railroad tracks as well as working through environmentally sensitive areas and parkland.

3. Route 1/I-95/I-495, Alexandria, VA – *Project Manager, 2005-2009, Skanska USA Civil Southeast Inc.* Specific Responsibilities: Mr. Fulton provided corporate and customer communications and general oversight. He was responsible for on-site administration, leadership and technical direction for this \$189 million project. He had overall responsibility for quality and safety, performance, customer communication and reporting, and maintaining schedule. Mr. Fulton was also responsible for subcontractor relations; documentation and compliance with contract specifications, laws and regulations, As an on-site manager, He was responsible for supervising staff, and ensuring all work plans and documentation complied with Skanska and customer requirements.

This project expanded I95/I495 from 12 lanes to14 lanes. MOT was important in working adjacent to moving traffic (AADT 220,000 vehicles). Communication and coordination was important in working in the corridor with seven other contractors working on adjacent projects. The project included demolishing 7 bridges and building 19, all over traffic. Utilities issues in the corridor and on bridges were resolved without affecting the project schedule

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

g. 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. Fulton is currently assigned full-time to the Elizabeth River Tunnels project in Portsmouth, VA as project manager for the tunnel approaches. While the project is scheduled to complete in 2018, the tunnel approach work is scheduled to be competed in 2016.

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Tom Fulton, DBPM

PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111-222-4444	reference@company.com
Elizabeth River Tunnels PPP	Project Manager	43 Months	James Utterback	Suffolk, VA	Virginia Department of Transportation	District Administrator	Ph: 757-925-2511 Fax: 757-925-1618	james.utterback@vdot.vir ginia.gov
Huguenot Bridge Reconstruction	Project Manager	20 months	Shane Mann	Richmond, VA	Virginia Dept. of Transportation	District Construction Engineer	Ph: 804-720-4229	shane.mann@vdot.virgini a.gov
Route 1/I-95/I- 495	Project Manager	26 months	Jalal Masumi	Arlington, VA	Virginia Dept. of Transportation	Project Manager	Ph: 703-259-2215	jalal.masumi@vdot.virgini a.gov

ATTACHMENT 3.3.1(a)

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Julie W. Hartman, PE, Associate / Senior Engineer
- b. Project Assignment: Quality Assurance Manager
- c. Name of Firm with which you are now associated: Stantec
- d. Employment History: With this Firm 1.75 Years With Other Firms 15.25 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):

Stantec Inc., Nov 2014-Present. Ms. Hartman's work with Stantec has focused on transportation-related construction management, construction inspection, and quality assurance and quality control. She performs contract administration and has served as Quality Assurance Manager (QAM) on various locality projects within the state. As the QAM, she reviews all materials used on the project as well as their applicable QC/QA sampling and testing and certifies conformity to plans and specifications. She manages the QA inspection team and their materials testing activities as well their project documentation.

Volkert Inc., March 2012-Nov 2014. Ms. Hartman served as the Assistant Vice President in Volkert, Inc.'s Virginia Construction Engineering and Inspection (CEI) group. She also served as both a Construction Inspection Coordinator and Quality Assurance Manager on District-wide and design-build contracts with the Virginia Department of Transportation (VDOT).

City of Harrisonburg, VA, June 2007 – March 2012. Ms. Hartman was the Public Works Engineer for the City and as such managed design consultant contracts and provided construction management of their improvement projects. She was responsible for coordination of utility relocations associated with improvement projects and associated Right of Way acquisitions. Some improvement projects were part of VDOT's Local Assistance program so she met often with VDOT and FHWA for oversight and reviews.

West Virginia Division of Highways, Sept 1999 – June 2007. Ms. Hartman was a Highway Engineer/Project Manager for Construction projects in WVDOH's District 5 as well as District 3. She supervised construction inspectors both DOH and consultants as well as provided construction management of various construction projects ranging from \$5 million to \$120 million in construction costs.

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

West Virginia University, Morgantown, WV/ B.S. / 1996 / Civil Engineering

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

2001 / Professional Engineer / WV # 014864 and 2007/Professional Engineer/VA #0402044099

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

1. Middle Ground Boulevard, Newport News, VA – Quality Assurance Manager, Dec 2012 – Nov 2014, Volkert, Inc.

Specific Responsibilities: Ms. Hartman was the Quality Assurance Manager (QAM) during the construction of this \$32-million DB project. Her responsibilities included:

- Providing confirmation that the construction, material testing, and sampling performed by the Design-Build QC inspectors were in accordance with the contract requirements
- ✓ Managed the QA team, materials testing activities, and project documentation
- ✓ Working with the contractor and QC team to resolve nonconforming materials and construction work
- ✓ Preparing noncompliance reports, reviewing recovery plans, and monitoring corrective actions and retests
- Reviewing contractor's pay application and confirming payment of all items

- ✓ Communicating and coordinating with the VDOT project manager and with OIA/OVST inspectors. This project consisted of a new 4-lane roadway, intersection improvements, a bridge over the CSX Railroad, a sidewalk, shared-use path, and enhanced landscaping. The project also included intersection improvements, a bridge over the CSX Railroad, a sidewalk, shared-use path, and enhanced landscaping.
- 2. Blennerhassett Island Bridge or Ohio River Bridge, Parkersburg, WV Highway Engineer, June 2005 June 2007, West Virginia Division of Highways

Specific Responsibilities: Ms. Hartman was the state's Highway Engineer/Project Manager on site and in charge of the construction of this \$120-million bridge project. Her responsibilities included:

- ✓ Provided construction management and supervised construction inspectors, both DOH and consultant staff.
- ✓ Met with utilities, other DOTs, FHWA, US Coast Guard, and other government agencies on regular basis.
- ✓ Reviewed contractor's submitted baseline CPM Schedules and monthly updates.
- ✓ Reviewed inspector's daily reports. Ensured Erosion and Sedimentation inspections were performed.
- Reviewed RFI's submitted by contractor and coordinated their responses. Coordinated and managed shop drawing and submittal process with contractor and design consultant.
- Reviewed and approved contractor's monthly payments. Resolved design conflicts in field and negotiated change orders and prices for additional work.
- Conducted and oversaw monthly progress meetings with contractor, inspectors, and design consultant by preparing agendas, documenting meetings, and distributing meeting minutes.
- ✓ Reviewed material certifications and monitored QC/QA materials testing.

At the time of construction, this project was West Virginia DOH's largest contract ever awarded at \$120 million (construction) and had the longest network tied arch of its kind in the world. The bridge was nationally and internationally recognized and was one of Road and Bridge Magazine's Top Ten Bridges in 2008. The bridge is 4,008 feet in length and 12 spans long. The main span is 878-feet-long and utilized the tied arch to span the main channel of the Ohio River. The other 11 spans consist of structural steel plate girders. Ten of 11 piers were founded utilizing drilled shafts and the remaining pier and abutments were driven pile foundations. MSE walls were utilized at both the WV abutment as well as the Ohio abutment. The bridge spans from West Virginia to Ohio and was funded by FHWA, West Virginia DOH, and Ohio DOT.

3. James Rumsey Bridge Replacement, Shepherdstown, WV– Highway Engineer, Sept 2003 – June 2005, West Virginia Division of Highways

Specific Responsibilities: Ms. Hartman was the state's Highway Engineer/Project Manager on site and in charge of the construction of this \$17-million bridge replacement project. Her responsibilities included:

- ✓ Provided construction management and supervised construction inspectors, both DOH and consultant staff.
- ✓ Met with other DOTs, FHWA, US National Park Services, and other government agencies on regular basis.
- ✓ Reviewed contractor's submitted baseline CPM Schedules and monthly updates.
- ✓ Reviewed inspector's daily reports. Ensured E & S inspections were performed.
- Reviewed RFI's submitted by contractor and coordinated their responses. Coordinated and managed shop drawing and submittal process with contractor and design consultant.
- Reviewed and approved contractor's monthly payments. Resolved design conflicts in field and negotiated change orders and prices for additional work.
- Conducted and oversaw monthly progress meetings with contractor, inspectors, and design consultant by preparing agendas, documenting meetings, and distributing meeting minutes.
- ✓ Reviewed material certifications and monitored QC/QA materials testing.

This replacement project included a 1,085-foot bridge that comprises three spans utilizing structural steel plate girders with a maximum span of 425 feet. This project was \$17 million in construction costs. The project contained 11 different retaining wall systems including the use of MSE walls at the abutments. Pier foundations were spread footer for the one and micropiles for the other. Abutments utilized driven piles for their foundation. The bridge spans the Potomac River and the C&O Canal National Historic Park from West Virginia to Maryland. The project included construction of pedestrian single span bridge for National Park Service to access tow path as well as construction of a parking lot. The project was funded by FHWA, West Virginia DOH, and Maryland State Highway Administration (SHA).

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

Ms. Hartman is assigned to two on-call services contracts that extend through 2020. These can be reassigned and will not limit Ms. Hartman's full-time availability.

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Julie Hartman

PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111- 222-4444	reference@compan y.com
Middle Ground Blvd Newport News, VA	Quality Assurance Manager	23 months	Brad Bushey	Richmond, VA	Allan Myers	Senior Project Engineer	Mobile: 571-437-6163	brad.bushey@allan myers.com
Blennerhassett Island Bridge Parkersburg, WV	Highway Engineer / Project Manager	25 months	Todd Rumbaugh, PE	Charleston, WV	WV Division of Highways	Deputy State Highway Engineer— Construction & Development	Phone: 304-558-6266	stephen.t.rumbaugh @wv.gov
James Rumsey Bridge Replacement Shepherdstown, WV	Highway Engineer / Project Manager	22 months	Todd Rumbaugh, PE	Charleston, WV	WV Division of Highways	Deputy Highway Engineer— Construction & Development State	Phone: 304-558-6266	stephen.t.rumbaugh @wv.gov

ATTACHMENT 3.3.1(a)

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project. Name & Title: Derek J. Piper, PE, AICP, Assistant Vice President, Senior Project Manager Project Assignment: Design Manager Name of Firm with which you are now associated: Parsons Brinckerhoff, Inc. a. Employment History: With this Firm 20 Years With Other Firms 11 Years b. 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 (a) below): Parsons Brinckerhoff, Inc., 1996-Present. Derek Piper has 31 years of progressively responsible engineering experience, including 20 years managing complex highway/roadway/bridge improvement projects for VDOT, PennDOT, SCDOT and numerous local governments. From 1999-2009, Mr. Piper held progressively responsible positions (including Sr. Project Manager, Manager of Engineering & Planning, and Area Manager) for Parsons Brinckerhoff in Columbia, SC. In 2009, Derek relocated to the Virginia Beach office to serve in a design management role on the Elizabeth River Tunnels Project. His technical specialties include program/project management, highway and intersection design, traffic data analysis; stormwater management plan development, environmental permitting, utility coordination, and utility design. His responsibilities as a Design Manager have included coordinating the individual design disciplines, ensuring overall project design is in conformance with contract documents and delivered on time and within budget. He is responsible for conducting quality reviews for all deliverables and ensuring client satisfaction. He has established working relationships with VDOT/FHWA staff, permitting agency staff, regional utility company personnel, the City of Chesapeake, and national/regional rail entities in the Hampton Roads region Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Pittsburgh, C. Pittsburgh, PA / Bachelor of Science / 1985 / Civil Engineering Active Registration: Year First Registered/ Discipline/VA Registration #: d. 2009 / Professional Engineer / VA Registration #0402046886; 2000 / Certified Planner / 017279; 1990 / Professional Engineer / Pennsylvania PE-039967-E Document the extent and depth of your experience and qualifications relevant to the Project. 1. Note your role, responsibility, and specific job duties for each project, not those of the firm. 2. Note whether experience is with current firm or with other firm. 3. Provide beginning and end dates for each project: projects older than fifteen (15) years will not be considered for evaluation. (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b)) 1. VDOT, I-264 Widening and Martin Luther King Highway (MLK) Extension Final Design - Design-Build, Portsmouth, VA – Design Manager, May 2012 – March 2017 (Anticipated), Parsons Brinckerhoff, Inc. Specific Responsibilities: Mr. Piper served as the Design Manager for a Skanska construction joint venture for over \$200M worth of improvements to I-264 and including the MLK Extension in urban Portsmouth, VA during both the final design and continuing into construction. Mr. Piper's responsibilities for this project included: ✓ Managing final roadway, structure and bridge design, TMP and maintenance of traffic plans; water quality and stormwater permitting, aesthetic treatments design, utility coordination and in contract utility relocation design (water and sewer): ✓ Managing a team of 25+ Parsons Brinckerhoff design and 13 subconsultants; Coordinating design and ROW issues with the DB Contractor and VDOT; Ensuring project design in conformance with the contract documents; and

Establishing and overseeing a QA/QC program for the disciplines involved in the design of the project, including review of the design, working plans, shop drawings, specifications, and constructability.

The design for this project is complete. Construction is over 80% complete and scheduled for completion by March 2017. Derek is currently leading Parsons Brinckerhoff's efforts providing design support during construction, including shop drawing reviews, preparing responses to RFIs, and As-Built documentation for the overall Elizabeth River Tunnels Project including the I-264 Widening/MLK Extension. Specific scope elements included: ✓ Widening of I-264 to accommodate the new interchange at MLK Extension; ✓ The design of the MLK Extension including an approximately 3,900-foot multi-lane mainline bridge over urban Portsmouth and CSX's Portsmouth Yard; ✓ Five new bridges carrying I-264 ramps, two I-264 bridge widenings including widening the existing bridge over N&PBL railroad; \checkmark 11 stormwater ponds/basins (including significant aesthetic treatments); ✓ Three sound barrier walls: ✓ Significant overhead guide signage; landscaping and aesthetic treatments; and ✓ Replacement/upgrades to the ITS system along I-264 and new ITS systems along the MLK Extension. 2. VDOT, Downtown Tunnel (DTT), Midtown Tunnel (MTT), and MLK Extension Preliminary Design, Design-Build, Norfolk and Portsmouth, VA – Deputy Design Manager, May 2010 – May 2012, Parsons Brinckerhoff, Inc. **Specific Responsibilities:** Mr. Piper was the Deputy Design Manager for a **Skanska construction joint venture**, for preliminary design development and permitting for the Elizabeth River Tunnels Project. In this role, he: Led roadway design, stormwater management design, utility relocation (in contract water and sewer) design, significant environmental permitting and agency coordination with USACE, USCG, and VDEQ for dredging, dredge material disposal, wetlands impacts, and federal channel impacts during construction, and preparation of a NADR for the overall Elizabeth River Tunnels Project. ✓ Was involved with water quality and stormwater permitting, for 21 acres of impacts to subaqueous river bottom. \checkmark Was responsible for project design in conformance with the contract documents. Established and oversaw a QA/QC program for the disciplines involved in the design of the project including review of the design drawings. The design for this project was completed in June 2011, with permitting continuing through May 2012. Construction is over 80% complete and scheduled for completion by March 2017. Derek is currently leading Parsons Brinckerhoff efforts providing design support during construction, including shop drawing reviews, preparing responses to RFIs, and As-Built documentation for the overall Elizabeth River Tunnels Project including the I-264 Widening/MLK Extension. 3. US 17 (Dominion Boulevard) Widening, Chesapeake, VA – Design QA/QC, July 2009 – January 2014, Parsons Brinckerhoff, Inc. Specific Responsibilities: Mr. Piper performed QA/QC of roadway plans for this \$188M improvement to US 17. In this role, he: Provided formal review of the design plans, including roadway widening, intersections, stormwater management and drainage collection systems, MOT and utility relocations. Coordinated plan reviews with various discipline leads and provided constructability comments to improve traffic control and reduce property impacts. The project involved roadway widening under heavy traffic volumes and converted an existing two-lane suburban roadway into a four-lane controlled access facility. The project design included a phased TMP/MOT plan to construct grade-separated interchanges while maintaining existing traffic flows at the major intersections with US 17. The project included two nearly 6,000 foot long mainline bridge crossing the Elizabeth River, six new stormwater management facilities; modifications to both lengthen and convert an existing twin-cell box culvert to a triple-cell box culvert; stream modifications; 120,000-square-feet of MSE retaining wall at 20 locations; two sound barrier walls; and significant utility relocations. The design for this project is complete. Construction is over 85% complete with completion expected early 2017. * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. NA

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Derek Piper								
PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111-222-4444	reference@company.com
I-264 Widening and the MLK Extension, Final Design - DB	Design Manager	57 months	Bradley Weidenhammer, P.E.	Portsmouth, VA	Virginia Department of Transportation	Megaprojects Engineer	Ph: 757-932-4484	Bradley.Weidenhammer@ vdot.virginia.gov
DTT/MTT/ MLK Extension Preliminary Design - DB	Deputy Design Manager	24 months	Frank Fabian, P.E.	Chesapeake, VA	Virginia Department of Transportation	Project Manager	Ph: 757-494-5477 Cell: 757-272-9203	Frank.Fabian@ vdot.virginia.gov
US 17 (Dominion Blvd.) Widening	Design QA/QC	54 months	Earl Sorey, P.E.	Chesapeake, VA	City of Chesapeake	City Engineer	Ph: 757-382-6290 Cell: 757-297-6998	easorey@cityofchesapeake.net

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: David Kampman, Construction Manager

b. Project Assignment: Construction Manager

c. Name of Firm with which you are now associated: Skanska USA Civil Southeast Inc.

d. Employment History: With this Firm 26 Years With Other Firms 1 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., Construction Manager/Senior Superintendent, 2001-Present. Since 2001, Mr. Kampman has been a Construction Manager and Senior Superintendent for Skanska USA Civil Southeast Inc., Mr. Kampman has over 25 years of construction experience at all levels. As Construction Manager, Mr. Kampman's general duties include preparing work plans, supervision of personnel, subcontractor oversight, scheduling, documentation and reporting, and procurement of equipment and materials. He has responsibility and oversight for quality, safety and environmental practices in his areas of responsibility. On design-build projects, he works with engineers, designers and other project personnel to review drawings and make suggestions for improving the constructability of the design.

Mr. Kampman has extensive experience in constructing complex interchanges and bridge structures, including substructures (foundations, piles) and superstructures, and working with various materials, including concrete and steel. His experience encompasses both marine and land-based structural construction.

Mr. Kampman joined Skanska USA Civil Southeast Inc. as a Field Engineer in 1988 and was later promoted to Superintendent in 1998. His background of alignment calculations, surveying, coordination of craft labor, and quality control make him well-qualified to lay out and supervise bridge and road construction. His expertise and project experience encompass multiple aspects of construction including complex road construction, design-build projects, and industrial complexes, marine construction, and rail construction.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: High School Diploma
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A

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

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

1. VDOT, Elizabeth River Tunnels, Portsmouth and Norfolk, VA – Construction Manager, 2012–2018, Skanska USA Civil Southeast Inc.

Specific Responsibilities: Mr. Kampman, as Construction Manager on the ERT segement of the Martin Luther King Jr. Freeway, plans and directs daily on-site activities to ensure project progress is in coordination with scheduling and budget. Mr. Kampman's duties include knowledge of contract documents, specifications and scope of work; ensuring compliance with corporate safety, environmental, and quality programs; plans and policies; and training employees. Mr. Kampman regularly reviews and inspects project progress, provides reports and documentation for identifying, analyzng, mitigating, and managing risk on the project. He is responsible for subcontractor relations and works directly with the project manager. A main focus is working with key DBE and SWaM subcontractors to ensure they are successful and that commitments to VDOT are met.

2. DDOT, 11th Street Bridge D-B Project, Washington, DC – Construction Manager, 2009-2015, Skanska USA Civil Southeast, Inc.

Specific Responsibilities: Mr. Kampman's responsibilities as Construction Manager included installation of piers and pier caps, structural steel girders, and concrete bridge decks for three 920-ft-long bridges over the Anacostia River. He managed barges with larger crawler cranes and multiple materials barge movements in tight areas. In January 2011, he assumed greater responsibilities including managing construction of six additional structural steel concrete deck bridges, managed fill and mechanically stabilized earth walls and asphalt roads, traffic control, survey crews, and drainage pipe installation. He managed salaried engineers and superintendents, and approximately100 hourly workers.

3. SCDOT Project: Arthur Ravenel Jr. (Cooper River) Bridge, Charleston, SC – Superintendent, 2001-2005, Skanska USA Civil Southeast, Inc.

Specific Responsibilities: Mr. Kampman was the Superintendent responsible for the \$90 million I-26 interchange reconstruction segment for this \$540 million design-build project. His responsibilities included oversight for quality, safety and environmental activities; management of schedule, cost and materials procurement; worker and subcontractor management; reporting and documentation; and coordination with senior project management and other lead superintendents with adjoining segments of the project. The Cooper River Bridge project was broken into five segments, each with its own management and staff, equipment, and schedule, coordinated by senior project management.

* 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. Kampman is currently assigned to the Elizabeth River Tunnels project as a Construction Manager. His part of the project is scheduled for completion in the Fall 2016, freeing him to assume responsibilities on the I64HRB project. He will be 100% committed to the construction phase of the project.

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

David Kampman

PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111-222-4444	reference@company.com
Elizabeth River Tunnels	Construction Manager	38 months	James Utterback	Suffolk, VA	Virginia Department of Transportation	District Administrator	Ph: 757-925-2511	james.utterback@vdot.virginia.gov
11 th Street Corridor	Construction Manager	24 months	Joseph Dorsey, PE	Washington, DC	District Department of Transportation	Project Manager	Ph: 202-210-4542 Fax: 202-671-0650	joseph.dorsey@dc.gov
Cooper River Bridge	Superintendent	42 months	Leland Colvin, PE	Columbia, SC	South Carolina Department of Transportation	Chief Engineer for Operations	Ph: 803-737-5028 Fax: 803-737-2389	colvinld@scdot.org

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Rex Gilley, PE, Structural Engineering Manager

b. Project Assignment: Lead Structural Engineer

c. Name of Firm with which you are now associated: Parsons Brinckerhoff, Inc.

d. Employment History: With this Firm <u>17</u> Years With Other Firms <u>9</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):

Parsons Brinckerhoff, Inc., 1999-Present. Rex has 26 years of progressively responsible engineering design experience, including the last 24 years which have been focused on VDOT projects as well as Locally Administered Projects utilizing VDOT standards. He has served as Lead Structural Engineer on projects as well as Project Manager on VDOT's 2008 Bridge On-call which resulted in 13 bridge replacements. His technical experience includes structural engineering of bridge structures over active navigable channels, major highway structures, retaining walls, overhead sign structures, design of new fender systems, in addition to design of various foundation types for transportation structures. His work includes preliminary and final design of reinforced concrete, prestressed concrete, and structural steel elements on complex, environmentally sensitive, bridge structures in order to improve capacity, enhance safety, and improve ability for emergency/evacuation routes. In addition, he also has construction phase experience which provides valuable insight in producing and coordinating designs that incorporate both owner standards and contractor preferences.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Tennessee, Knoxville, TN / M.S. / 1991 / Civil Engineering; University of Memphis, Memphis, TN /B.S. / 1988 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:1994 / Professional Engineer / VA 04020225213

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

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

1. Route 33 Bridge Replacement, West Point, VA-Lead Structural Engineer February 2002 – May 2008, Parsons Brinckerhoff, Inc.

Specific Responsibilities: Mr. Gilley served as the Lead Structural Engineer for final design and load-rating activities for the replacement of two movable bridges through the town of West Point. Rex was responsible for:

- ✓ Leading all substructure and superstructure design activities related to the fixed spans on three bridges.
- Coordinating bridge elements with geotechnical, roadway, drainage, traffic, MOT, lighting, and architectural disciplines as well as all related plan production activities

The project consisted of:

- 2.39 miles of highway and bridge replacement
- ✓ A 5,354-foot-long, four-lane crossing of Thorofare Creek, Pamunkey River and Norfolk Southern Railroad
- ✓ A movable span to accommodate a 90-foot-wide channel with 55 feet of vertical clearance in the closed position
- ✓ A 3,545-foot-long crossing of the Mattaponi River providing 35 feet of vertical clearance

The superstructures consisted of precast PCBT-45 beams made continuous for live load for the low-level trestle units. Lightweight, precast PCEF 89-95.5-60 beams and lightweight deck were utilized in the high-level approaches as well as the spliced-girder units. Low-level trestles are supported on pile bents utilizing driven 24-inch square precast piles. High-level approach and spliced-girder units are supported on multi-column piers utilizing driven 24-inch-square precast piles. The bascule piers are supported on driven 66-inch-diameter cylinder piles. The pile caps for the multi-column piers and bascule pier were set at an elevation that provides protection of the piles from barge impacts. Rex continued to lead the structural effort through the construction phase providing timely responses that maintained the project schedule.

2. Arthur J. Ravanel Jr. Bridge over the Cooper River, Charleston, SC – Lead Structural Engineer, March 2002 – November 2012, Parsons Brinckerhoff, Inc.

Specific Responsibilities: Rex was Lead Structural Engineer for the following ramp structures located on the Charleston Interchange end of this cable-stayed river crossing carrying US 17 over the Cooper River: Line 1C (647 feet), Line 4C (271 feet), Line 5 (1066 feet), Line 6 (563 feet) and Line 15 (798 feet). He was responsible for:

- Design coordination and plan preparation for ramps consisting of 79-inch, bulb-tee prestressed precast concrete beams on single column/drilled shaft hammerhead piers located in the Charleston Low Level Approaches.
- Coordinating modifications to accommodate contractor formwork requirements for the multi-column piers for the US 17 Mainline Low Level Approach Section which utilized post-tensioned pier caps.

The span range of the 79-inch, Modified Bulb-T beams is 120 feet to 148 feet with a typical spacing of 10 feet 9 inches. All structures were designed to resist 500-year and 2500-year return-period earthquakes to Seismic Performance Category D levels, which resulted in unique bearing details to accommodate significant movement under seismic loads. Rex worked closely with the contractor regarding plan revisions, field issues, load ratings, and record drawings.

3. US 17 (Dominion Boulevard) Widening, Chesapeake, VA – Design QA/QC, April 2004 – Present, Parsons Brinckerhoff, Inc.

Specific Responsibilities: Mr. Gilley served as lead structural engineer in the early phases of this contract and also performed QA/QC and oversight of preparation of final bridge plans for this \$188M improvement to US 17. He provided formal review of the design for 9 bridges, including the two main line bridges carrying US 17 (Dominion Boulevard) over the Southern Branch of the Elizabeth River. The project involved roadway widening under heavy traffic volumes and converted an existing two-lane suburban roadway into a four-lane controlled access facility. The project design included plans for constructing grade separated interchanges while maintaining existing traffic flows at the major intersections with US 17. The project included two mainline bridges crossing the Elizabeth River (5,262 feet and 5,982 feet in length) that provide 125 feet of horizontal clearance and 95 feet of vertical clearance at the channel; modifications to both lengthen and convert an existing twin-cell box culvert to a triple-cell box culvert; 120,000-square-feet of MSE retaining wall at 20 locations. **The design for this project is complete.** Construction is over 85% complete with expected completion early 2017. Rex's involvement in the construction phase has helped keep the construction on schedule.

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
 h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. N/A

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Rex Gilley								
PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITIO N	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111-222-4444	reference@company.com
Route 33 Bridge Replacement	Lead Structural Engineer	42 months	Annette Adams, P.E.	Fredericksburg, VA	VDOT	District Bridge Engineer	Ph: 540-372-3583 Cell: 540-273-1008	Annette.Adams@VDOT.Virginia .gov
Arthur J. Ravanel Jr. Bridge over the Cooper River	Senior Structural Engineer	140 months	Leland Colvin, P.E.	Columbia, SC	SCDOT	Deputy Secretary of Transportation	Ph: 803-737-7900 Cell: 803-429-3352	colvinld@scdot.org
US 17 Widening	Lead Structural Engineer	137 Months	Earl Sorey, P.E.	Chesapeake, VA	City of Chesapeake	City Engineer	Ph: 757-382-6290 Cell: 757-297-6998	easorey@cityofchesapeake.net

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title:
Thomas Fulton, P.E. Vice President of Operations
b. Project Assignment:
Responsible Charge Engineer
c. Name of Firm with which you are now associated: Skanska USA Civil Southeast Inc.
 d. Employment History: With this Firm <u>30</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., July 1986 - Present. For the past twelve years, Thomas Fulton has been a Project Executive and Project Manager. Prior to that, Mr. Fulton was a Superintendent.
As a Project Manager and Project Executive, Tom has repeatedly demonstrated the ability to supervise and control design and construction activities for projects of the size and complexity of this project. This is clearly established in the project descriptions below. His success is based on comprehensive involvement in a project. As a project manager, he is expected to shut down a project when warranted. He also has the authority to commit company resources to a project to ensure successful completion.
Mr. Fulton is a Vice President of Operations, Project Executive/Project Manager with Skanska:
 As a Project Executive, Mr. Fulton provides corporate oversight and coordination for projects. He actively maintains and improves customer communications and relations, provides project oversight, project strategic direction, and project reporting to senior management. He reviews the safety and quality statistics with the Project Manager and keeps in constant contact with safety/environmental and quality control mangers to ensure the progress, compliance and success of this project. He is also responsible for providing project financial forecasts. As a Project Manager, He has been assigned to provide on-site project management for specific projects, where he has direct responsibility for project staffing, schedule, budget and cost control, subcontractor relations, and provides and provides and provides are provided by the provided of the two project staffing.
direction and coordination for superintendents and other supervisory staff. Projects where Mr. Fulton assumed project manager duties were high visibility projects with particular needs that matched well with Mr. Fulton's capabilities. Descriptions of three such projects are provided in Block f.
• As a Superintendent, Mr. Fulton provided on-site direction for daily activities for various highway and bridge projects in Virginia. He was responsible for ensuring compliance with corporate quality, safety, and environmental programs; training; leading the construction team; subcontractor management; managing field work; ensuring that required materials, equipment and personnel were available to ensure successful completion of the assigned tasks and to maintain project productivity within schedule and cost constraints. He was responsible for documentation, reporting, and identifying, managing and mitigating risk on the project, as well as working closely with the project manager to ensure work was coordinated with other superintendents.
Many of Mr. Fulton's projects as a superintendent included extensive marine work such as pile driving, substructure and superstructure construction and land tie-ins in sensitive marine environments and often in very congested areas where the team was required to maintain normal operations.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Manchester School of Science and Technology, Manchester, England / B.S. / 1986 / Building Technology (1st Class)
 f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2001 / Professional Engineer / Commonwealth of Virginia, #034653

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

1. VDOT, Elizabeth River Tunnels, Norfolk, VA – Project Manager, 2013- 2018, Skanska USA Civil Southeast, Inc.

Specific Responsibilities: Mr. Fulton is responsible for managing the approach work (construction) for this \$1.5 billion design-build project. His duties include oversight and reporting of safety and quality on his segment; setting schedules, procurement and budget in consultation with the project director; preparation of project activity plans, including activity hazard analysis plans; subcontractor management; coordinating activities with other segment managers, particularly the segment manager responsible for the submerged tunnels operations; and coordination of utility relocations.

Mr. Fulton is managing the construction of the approaches to the Elizabeth River Tunnels, a design-build project. This work is adjacent to an active maritime channel, and the work is in an environmentally sensitive environment. MOT is a challenge because of high traffic flow - AADT of 99,000 vehicles at the Midtown Tunnel crossing, Shutdowns are limited to time of low traffic volume, mostly nights and weekends. The work is in older sections of Portsmouth and Norfolk, VA, requiring extensive coordination with local utilities. Community and customer relations are a high priority, especially because of the proximity of the largest hospital in Norfolk, requiring special attention to noise, vibration, and access for emergency vehicles. Special efforts were made to engage and utilize local small business.

2. VDOT, Route 1/I-95/I-495, Alexandria, VA – Project Manager, 2005- 2009, Skanska USA Civil Southeast, Inc. Specific Responsibilities: Mr. Fulton, as on-site Project Manager, was responsible for all aspects of project management for this \$37 million project, including customer relations, community relations, quality, safety and environmental oversight, and schedule and cost control. He was also responsible for material equipment and personnel acquisition. He was responsible for project oversight, project reporting, reviewing safety, schedule, and cost activities; reporting to executive management and ensuring customer satisfaction, and ensuring the project had access to resources to successfully complete the project.

In this project, Mr Fulton's team colocated with VDOT, the client, to strengthen communication and accelerate issue resolution. The project involved a 2,900-foot-long bridge and roadway and utility work on the approaches. Community outreach with stakeholders and neighbors was important in working next to the existing bridge and over railroad tracks as well as working through environmentally sensitive areas and parkland.

3. VDOT, Pamunkey River Bridge, West Point, VA – Superintendent, 2004-2007, Skanska USA Civil Southeast, Inc.

Specific Responsibilities: Skanska constructed a \$90-million double-leaf bascule bridge over the Pamunkey River. Other work included roadway, drainage, utility and signal improvements, and demolition of the existing bridge. The 5,354-foot-long Pamunkey River Bridge spans an operating pulp mill as well as the small town of West Point in New Kent County. The project site is surrounded by several historic communities and sensitive wetlands. About 3,000 linear-feet of the bridge was built from a temporary access trestle over the wetlands. The new bridge includes four lanes and a separate outside shoulder for bicycle traffic and a double-leaf bascule span over the 100-foot-wide navigation channel of the Pamunkey River. The vertical clearance at high tide is 55 feet. Skanska performed approach realignment work to accommodate the longer length of the new bridge.

* 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. Fulton is currently assigned full-time to the Elizabeth River Tunnels project in Portsmouth, VA as a project manager for construction of the tunnel approaches. While the project is scheduled to complete in 2018, the tunnel approach work is scheduled to be competed in 2016.

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Tom Fulton, I	RCE							
PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111- 222-4444	reference@company.com
Elizabeth River Tunnels	Project Manager	43 months	James Utterback	Suffolk, VA	Virginia Department of Transportation	District Administrator	Ph: 757-925-2511 Fax: 757-925-1618	james.utterback@vdot.virginia.gov
Route 1/I- 95/I-495	Project Manager	26 months	Jalal Masumi	Arlington, VA	Virginia Department of Transportation	Deputy Project Manager	Ph: 703-259-2215	jalal.masumi@vdot.virginia.gov
Pamunkey River Bridge	Project Manager	36 months	Marcie Parker, P.E.	Fredericksburg, VA	Virginia Department of Transportation	District Maintenance Engineer	Ph: 540-899-4233	marcie.parker@vdot.virginia.gov

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Joseph Morffi, O&M Manager

b. Project Assignment: Incident Management Coordinator

c. Name of Firm with which you are now associated: Skanska USA Civil Southeast Inc.

d. Employment History: With this Firm <u>2</u> Years With Other Firms <u>20</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., O&M Manager, 2014-Present. Joe is responsible for O&M and Incident Management Coordination functions within the construction zone of Skanska projects.

ACS, O&M Manager, 2010-2014. As O&M Manager, Joe was responsible for the operations and maintenance functions of the project. He provided oversight of periodic and routine maintenance work activities during the operations and maintenance phase of the project, as well as, during the initial construction phase. He was responsible for developing the annual maintenance work program and budget, as well as, coordinating and organizing the maintenance work and defining how and when the work should be done, for both reactive and proactive maintenance activities, while ensuring that all maintenance activities be performed in a safe and efficient manner that complies with FDOT standards. As the O&M Manager he provided oversight of the coordination effort between the TMC, O&M Crews and subcontractors to respond to accidents, incidents and debris removal. He also assisted in identifying safety training needs with the Safety Officer or other Outside Source. Additionally, he assisted in designing and implementing a Maintenance Management System that allows for effective planning, organizing, coordination and control of the budgeted resources to carry out activities required to meet the continuing maintenance needs of the project

City of Miami, Construction Manager, 2008-2010. Responsible for the oversight of four high profile construction projects, while working for the Capital Improvement Program (CIP), In Belle Meade, Downtown, and Overtown. The scope of work includes the installation of an underground pump station in Belle Meade, Streetscaping or Beautification in Downtown and a community revitalization project on Overtown.

GBF Engineering, Project Administrator, 2003-2008. Project Administrator for several projects for Broward County Transit related to the Construction of ADA code compliant bus stops. Managed Construction and Maintenance Contracts for the City of Miami, as well as, Managed Hurricane Restoration efforts for FDOT District 4 and the City of Miami.

Florida Department of Transportation, Area Manager, 1993-2005. As Area Manager for the Florida Department of Transportation in Fort Lauderdale, FL, Joe was responsible for routine roadway maintenance, signage maintenance and repair, and managing inspection teams.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Miami, Coral Gables, FL / B.S / 1994 / Civil Engineering

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

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

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

(List only three (3) relevant projects^{*} for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

Mr. Morffi will complete the FHWA SHRP2 "TIM" Responder Training; FEMA ICS/NIMS 100, 200 and 700; and FEMA/VDEM Hazardous Materials Awareness Classes prior to commencement of construction.

1. FDOT, I-4 Ultimate PPP, Orlando, FL – O&M Manager, Sep 2014-Mar 2021(anticipated), Skanska USA Civil Southeast, Inc. Specific Responsibilities: Joe has responsibility for all aspects of day-to-day operations and maintenance of a construction zone encompassing 21 miles of interstate highway, interchanges, and associated connecting roads for this \$2.3 billion project in Orlando, FL. Activities include traffic incident response and management, organizing and coordinating operations and maintenance activities, scheduling, ensuring safe practices for O&M workers and travelers in the work zone. He provides documentation and regular reports to the concessionaire and senior management. Specifically, he: Manages the day-to-day operation of the road, within the project limits, responding to incidents in an efficient manner and ensuring the safety of the workers and the motorists during the initial construction phase Oversees coordination with the traffic management coordinator (TMC), O&M Crews and subcontractors to respond to accidents, incidents and debris removal ✓ Is responsible for developing the annual maintenance work program and budget, as well as coordinating and organizing maintenance work Defines how and when the work should be done, for both reactive and proactive maintenance activities, while ensuring that all maintenance activities will be performed in a safe and efficient manner that complies with FDOT standards without conflicting with construction He assists in identifying safety training needs with the Safety Office, and serves as the performance ✓ noncompliance coordinator and coordinates conflict resolution and field Issues related to performance measures with Area teams. FDOT, I-595 Express PPP Project, Broward County, FL – O&M Manager, Mar 2010 – Feb 2014, ACS 2. **Specific Responsibilities:** Joe's specific duties for this \$1.8 billion public private partnership. included: Coordinate response to accidents, incidents and debris removal ✓ Oversight of maintenance activities in the construction zone, ✓ Utility coordination development of in-house performance and quality standards ✓ Citizen and FDOT complaints resolution ✓ Review and analysis of planned versus actual accomplishments \checkmark MMS standards within construction work zone, \checkmark Collection of data on status of work, Ouality assurance of O&M Work effort \checkmark Coordinate and plan permit work for third party permits Prepare monthly O&M Report \checkmark Oversight of the monthly and annual maintenance \checkmark 3. Broward County Transit, Construction and Design Contract, Broward County, FL - Project Administrator, Mar 2005 – Oct 2008, GBF Engineering, Inc. Specific Responsibilities: As Project Administrator, Joe worked with various cities throughout Broward County to coordinate the construction of ADA code compliant bus stops, while managing several contractors and assisting County personnel in overseeing the administration of contract dollars and invoicing. Additionally, supported ongoing

* 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.

utility coordination efforts on all projects.

Mr. Morffi is currently assigned as O&M Manager on the I-4 Ultimate project. Mr. Morffi will be able to join the High Rise Bridge team at the start of construction.

ATTACHMENT 3.3.1(b)

KEY PERSONNEL REFERENCE FORM

Joseph Morffi

PROJECT NAME	POSITION HELD ON THE PROJECT	DURATION IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
495 Express Lanes	Design Manager	12 Months as Design Manager	John Doe	Fairfax, VA	ABC Engineering Inc.	Vice President	Ph: (203) 111- 222-3333 Fax: (203) 111-222-4444	reference@company.com
I-4 Ultimate PPP	O&M Manager	24 months	Loreen Bobo, P.E.	Orlando, FL	Florida Department of Transportation	I-4 Ultimate Construction Program Manager	Ph: 407-670-2341 Cell: 386-956-4193	loreen.bobo@dot.state.fl.us
I-595 Express PPP Project	O&M Manager	42 months	Paul Lampley, P.E.,	Fort Lauderdale, FL	Florida Department of Transportation	I-595 Construction Project Manager	Ph: 954-845-9552	Paul.lampley@dot.state.fl.us
Broward County Transit Construction and Design Contract	Project Administra tor	22 months	Enrique Tamayo, P.E.	Ft. Lauderdale, FL	Broward and Dade County (on contract)	GBF Supervisor	Ph: 786-999-9671	enriquet@tamayoengineering .com



3.4.1 Work History Forms

I-64 Southside Widening and High Rise Bridge, Phase 1



3.4.1(a) Lead Contractor Work History Forms

I-64 Southside Widening and High Rise Bridge, Phase 1

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Va	lue (in thousands)	g. Dollar Value of Work Performed
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original	Final or Estimated	by the Firm identified as the Lead
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Contract Value	Contract Value	Contractor for this procurement.(in
			(Original)	or Estimated)			thousands)
NC-540 Western Wake Expressway, Raleigh, NC Roadway Project Design-Build	Michael Baker, Jr. (Formerly LPA Group)	Name of Client/ Owner: NCDOT Phone: (919) 707-2400 Project Manager: Ron Hancock Phone: (919) 707-2400 Email: rhancock@ncdot.com	07/2013	07/2013	\$446,460	\$468,830	\$337,557

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.

Firm's Role: Archer Western was the majority partner (60%) in the Raleigh Durham Roadbuilders Joint Venture as the Design-builder and Prime Contractor of this new toll road.



Project Narrative: The NC-540 Western Wake Expressway is a new 12.6-mile, six-lane, mediandivided, toll road in Raleigh, NC. The project scope included design, permitting, and construction through 72 environmentally sensitive wetland areas. The roadway scope included the 6-lane mainline, 14 crossroads, ramps, loops, auxiliary lanes, collector-distributors, and service roads. The services scope included ROW acquisition services, environmental permitting through multiple agencies, and utility relocations with multiple companies. The project featured 34 new bridges at 24 different sites, three major interchanges, and the construction of a new CSX railroad bridge.

Use of Innovative Solutions: This project included NCDOT's first widespread use of the Alternative Technical Concept (ATC). Examples of accepted ATCs included incorporation of concrete girder shapes from Florida, use of manufactured screenings for MSE wall backfill and an alternate concrete pavement section.

Design-Build Experience: This was NCDOT largest contract using the design-build delivery method

Limiting Impacts to Traffic: While this was a greenfield project several of the new interchanges tied into existing roads. Multi-phase MOT plans were developed, short-term detours and offpeak-hour construction were all examples of techniques used to minimize impacts to the public.

Meeting or Exceeding DBE Program Commitments: A robust outreach program was used during the pursuit and design phases of the project to generate interest and share information with the DBE contracting community. The challenging goal was achieved through the use of over 45 different DBE firms.

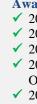
Dealing with Environmental Sensitivity and Permits: The project crossed several wetlands. The use of temporary access bridges (trestles) was a key factor in reducing impacts and enhancing the schedule.

AWC partnered with the North Carolina Department of Environmental and Natural Resources (NCDENR) and the NCDOT Roadside Environmental Unit, to review the erosion control plan and approach, and as a result this project implemented new policies and procedures that have subsequently been installed as statewide standards and the model for large project construction.

Working over Railroads: In addition to bridges constructed over existing CSX railroad lines, a new CSX railroad bridge was constructed. Coordination efforts with CSX began early in the project with the intent of keeping that work off of the critical path.

Right-of-Way: The project involved acquisition of 229 parcels (full and partial takes) as well as permanent easement acquisition. R.O.W. acquisition services were a part of the design-build contract. The parcels we categorized based on acquisition duration during the design phase with longer duration parcels having priority. This minimized impact on the project schedule.

Project Segmentation to Meet Schedule: The project was divided into 5 segments with concurrent construction which ultimately led to the project opening 6 months ahead of schedule.



Similar Scope Elements

- ✓ Design-build
- ✓ Interstate design and
- construction
- ✓ Stormwater management
- ✓ Significant utility relocations,
- Environmental permits
- ✓ ROW acquisition service performed,
- ✓ Multiple stakeholders
- ✓ Public involvement/ relations
- ✓ Multi-phase MOT at the
- interchanges

- ✓ New location elevated expressway over active rail lines (CSX)
- ✓ Sound barrier walls ✓ Work in and around
- environmentally sensitive areas
- ✓ Similar construction techniques (concrete girder bridges, concrete pavement, asphalt pavement)

Awards:

✓ 2014 Carolinas AGC Pinnacle Award ✓ 2013 ACEC Excellence Award ✓ 2014 ACPA Excellence in Concrete Paving, Gold Award ✓ 2012 Southeastern Association of State Highway and Transportation Officials Award for the "On Time" category ✓ 2012 Carolinas AGC Pinnacle Award for Best Highway Project ✓ NCDOL GOLD award for safety

DBE Performance:

Goal 14.00% / Actual 14.17%

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract e. Contract		f. Contract Val	ue (in thousands)	g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Northwest Corridor Managed Lanes Project, Marietta, GA Roadway Project Design-Build	Parsons Transportation Group	Name of Client/ Owner: GDOT Phone: (404) 631-1300 Project Manager: John Hancock Phone: (404) 631-1315 Email: jhancock@dot.ga.gov	12/2018	12/2018 Estimated	\$598,533	\$601,555 Estimated	\$383,061

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 SOO may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

Roadbuilders Joint Venture as the Design-builder and Prime Contractor of this managed lane with MSE panels reducing excavation, ROW needs, and, in 2 locations, utility relocations. road project.



Project Narrative: This 29.7-mile design-build-finance project involves the addition of reversible managed lanes along I-75 and I-575 in Atlanta, Georgia. The proposed improvements extend the existing High Occupancy Vehicle lanes from the current terminus at Akers Mill Road northward along I-75 and I-575. Scope of work includes design, permitting, and construction of all infrastructure including open-road tolling. The project includes 39 bridges mostly precast concrete girders. There are 4 bridges made of curved steel plate girders. Also included are over 650,000 sf of MSE walls, 1.4 million sf of noise walls, 313,000 sy of concrete paving, and 1.6 million cy of earthwork.

Firm's Role: Archer Western is the majority partner (60%) in the Northwest Express Use of Innovative Solutions: This project included GDOT's first time use of soil nail walls faced

Previous Design-Build Experience: This is GDOT's largest contract using the design-build delivery method

Limiting Impacts to the Traveling Public: Through minor re-alignment of the new managed lanes, we were able to reduce the number of traffic shifts from 3 to 2 along the I-75 portion of the project. Bridge piers were located such that traffic did not have to be shifted for construction. At the new interchanges (access locations) multi-phase MOT plans were developed, short-term detours, and off peak hour construction were all examples of techniques used to minimize impacts to the public.

Meeting or Exceeding DBE Program commitments: A robust outreach program was used during the pursuit and design phases of the project to generate interest and share information with the DBE contracting community. The challenging goal was achieved through the use of over 30 different DBE firms.

Dealing With Environmental Sensitivity and Permits: Minor alignment changes and use of bridges instead of culverts were the reasons that our design was able to reduce the stream impact by over 10% from the concept plans provided by GDOT. There were no wetland impacts associated with the project. Additionally, we completed the fill operations of open water areas from the upland side of the impact. This confines all proposed impacts to the footprint of the permanent impacts. Eliminating the need for temporary impacts associated with placement of fill in the open water areas.

Working Over Railroads: The project includes the construction of a bridge over an existing railroad spur that is privately owned. Our team worked closely with the railroad and manufacturing facility it serves to temporarily close the spur, construct our bridge, then reconstruct the spur to new standards

Right-of-Way: The project involved acquisition of 57 parcels (full and partial takes) as well as permanent easement acquisition. R.O.W. acquisition services were a part of the design-build contract. The parcels we categorized based on acquisition duration during the design phase with longer duration parcels having priority. This minimized impact on the project schedule.

Project Segmentation to Meet Schedule: The project was divided into 6 segments with concurrent construction along the 29 mile corridor to meet the aggressive 3 year construction schedule.

Similar Scope Elements

- ✓ Design-build
- \checkmark Interstate design and construction
- ✓ Stormwater management ✓ Significant utility
- relocations,
- Extensive coordination with Environmental permitting agencies
- ✓ Railroad Coordination
- ✓ Urban project with high traffic volumes
- ✓ ROW Acquisition Services performed,
- ✓ Multiple stakeholders

- ✓ Public involvement/ relations
- ✓ New location elevated expressway over active rail lines (CSX)
- ✓ Sound barrier walls
- ✓ Multi-phase MOT
- ✓ Similar construction techniques (concrete girder bridges, concrete pavement, asphalt pavement)
- ✓ Work in and around environmentally sensitive areas

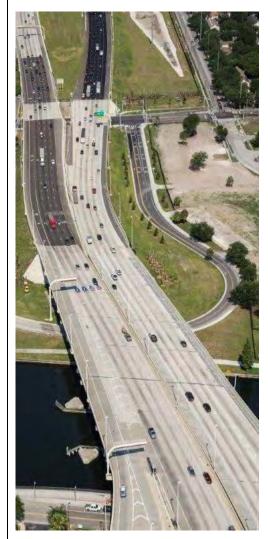
DBE Performance: Goal 14.00% / Actual 14.04%

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Val	ue (in thousands)	g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
I-275 Reconstruction, Tampa, FL		Name of Client/ Owner: Florida Dept. of Transportation D7					
	Parsons Brinckerhoff	Phone: 800-226-7220	10/2016	07/15/2016	\$215,500	\$223,055	\$118,500
Roadway Project Design-Build		Project Manager: William Jones, PE	10/2010	07/10/2010	φ 210,000	\$223,055	¢110,000
		Phone: 813-975-6294					
		Email: William.jones@dot.state.fl.us					

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 <u>this</u> 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, element, and/or contract listed will be evaluated.



Firms Role: Skanska-led joint venture (70/30) to increase capacity, modernize the traffic management systems, increase the road's integrity and plan for future growth, for reconstruction of four miles of urban interstate, including replacing the 6 lanes with 8 lanes of concrete pavement and wider shoulders.

Project Narrative: I-275 is a major interstate highway, with an annual average daily traffic count of 200,000 through the corridor. This highway is a backbone for commerce, linking Tampa, St. Petersburg and Clearwater into a unified economic region. The design allows for a future six-lane roadway and a 64-foot median that can accommodate multimodal facilities. The design-build team replaced or widened 21 bridges, added lanes to a bridge over the Hillsborough River, and improved operations at interchanges by adding intelligent transportation systems (ITS). Improvements included the reconstruction of five interchanges and their associated cross roads.

Project Scope Included:

- Reconstruction of 4 miles of urban interstate to replace
 3 lanes with 4 lanes of concrete pavement
- ✓ Construction of four new collector distributor lanes
- ✓ Reconstruction of 5 Interchanges
- ✓ 21 bridges replaced or widened
- ✓ Aesthetic enhancements, sound barrier walls
- ✓ A six-lane future roadway and 64-foot median that allows for multimodal transportation facilities to be added later (the "Ultimate" configuration)
- ✓ Storm-water management facilities, including 500 drainage structures with 5 ponds
- ✓ Utility relocations
- Complex ITS to improve operations
- ✓ Lighting, signage, barriers, and other appurtenances
- ✓ Stakeholder relations

Integrated Team: The project was led by an integrated JV team, who cooperated fully on the project. The team also worked closely with the designer, actively participating during the design phase on constructability reviews of the design. The FDOT customer was also very active during design and construction of the project. Parsons Brinckerhoff served as the lead design firm

Innovative Solutions. Partnering with FDOT the team used electronic billboards in the corridor to promote drive awareness and coming measures to reduce accidents and protect construction workers.

Traffic Management. The project is similar to the I-64 Southside Widening and High Rise Bridge Phase 1 Project in that it had a similar scope and complexity, was constructed in an urban environment, with high AADT requiring extensive maintenance of traffic. Maintenance of traffic efforts communicated as part of the public relations and community outreach efforts included:

- ✓ Making provisions for football games and other sporting events in nearby stadiums.
- Ensuring the city was engaged and informed about proposed design changes
- ✓ Upcoming traffic shifts

Community Interaction: Coordination involved working with other road operators and public agencies affected by the project. Most of the interchanges connect to streets owned and maintained by the City of Tampa, and where the project crosses the Hillsborough River is over the proposed Tampa Riverwalk, one of the most significant public projects the City has undertaken in 25 years and what will be a signature feature of downtown Tampa.

Aesthetics: Landscaping and aesthetic features were included where right-of-way allowed. Architectural features were incorporated into the walls and the bridge structures with emphasis being placed on areas of high visibility. Aesthetic enhancements such as specialty lighting, fencing, and paving were also included in the project. Sound barrier walls were also constructed in areas where they have been determined to be warranted

Similar Scope Elements

- ✓ Design-build
- Interstate widening
- Stormwater management
- Utility relocations
- Environmental permits
- ✓ Interstate lighting
- ✓ Signalization
- ✓ MOT/phasing
- ✓ Multiple stakeholders
- Work performed in urban/ commercial area

- Bridge structures over urban streets
- ✓ Sound barrier walls
- ✓ ROW
- ITS
- New interstate guide signage
- Public involvement/ relations
- Constrained site conditions

Awards

Skanska recently won an award from the Florida Department of Environmental Protection for a recycling rate of 98.7 percent on this project. The project team recycled more than 10 tons of typical office materials and more than 96,000 tons of construction material.

DBE Performance: Goal 14.00% / Actual 14.04%

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Valu	ie (in thousands)	g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual	Value	Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
Cooper River Bridge, Charleston, SC		Name of Client/ Owner: South Carolina Department of Transportation Phone: 855-467-2368					
Bridge Project Design-Build	Parsons Brinckerhoff, Inc.	Project Manager: Leland Colvin Phone: 803-737-5028 Email: colvinld@scdot.org	7/2001	07/2005	\$531,000	\$541,000	\$324,600

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects 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.

Firm's Role: A Skanska-led consortium (60/40) was awarded a design-build contract to construct a 2.5mile bridge over the Cooper River from I-26 in Charleston to Coleman Boulevard in Mount Pleasant. Lead designer, Parsons Brinckerhoff, prepared the Environmental Impact Statement (EIS), developed the preliminary and final designs, and provided support services during the project's construction.



Project Narrative: The project, completed one year ahead of schedule, was a fast tracked with a total duration of 48 months for design and construction. The new bridge is eight lanes wide with a 12-foot-wide bicycle/pedestrian lane. The 1,546-foot main span, which is 186 feet above the river, is one of the longest cable-stayed spans in North America providing for eight lanes of traffic. The bridge was designed to meet stringent standards –category 5 hurricanes, earthquakes measuring up to 7.3, and impacts from some of the largest freighters in the world. The bridge greatly enhances shipping accessibility to the Port, provides economic development to the entire area and serves as a stunning visual landmark. The bridge has won multiple awards for design, construction, and environmental responsibility.

Use of Innovative Solutions: In order to expedite construction of the mega-structure, the joint venture uproject approach that separated the project into five distinct segments with activities occurring simultaneous on all segments. Each segment had its own field management team, budget, schedule, manpower and equipment resources, allowing the project to finish one year ahead of schedule.

The project included many innovative structural engineering solutions including: offset stay cable anchor reduce main span tower moments; very long continuous approach spans, a 4,351-foot-long west approach a 2,090-foot-long east approach, that minimized the number of bearings and joints; and elimination of all all footings by using large diameter drilled shafts that framed directly into the pier columns.

Limiting Impacts to Traffic: Skanska managed traffic using permanent detours, temporary lane closure traffic pattern shifts. When the new bridge approaches crossed the alignment of the existing approaches, Skanska established nightly closures. Prior to the closures, Skanska made improvements to the detour rou and proactively publicized the closures.

Major Bridges over Navigable Channel: The main span of bridge is 186 feet above the river (rising in center to 200 feet), and with a 1,000 foot wide navigation channel. The 572-foot-high diamond-shaped to of the bridge are founded on 22 drilled shafts, each 10 feet in diameter and up to 230 feet deep.

Dealing With Environmental Sensitivity and Permits: 75% of the project was over, in or adjacent to sensitive wetland areas. Protection of the fragile low country environment was given a high priority. Port of the bridge and approaches were constructed within environmentally sensitive wetlands.

Community Interaction: The team kept the waterway below the structures open to marine vehicles duri construction. Parsons Brinckerhoff and Skanska developed a design that staged construction with minima shipping traffic disturbance. A schedule was created that met the client and outside stakeholders' expecta while minimizing community and businesses impact.

Skanska's employee-development program earned national recognition by training 64 unemployed and minority individuals from the local community to attain journeyman proficiency in their crafts.

Keeping the community and tourists informed concerning all road closures, lane relocations and alternate routes was a critical element in an area where traffic congestion is commonplace hurricane evacuation ro is paramount.

used a eously ors to ch and lmost	 Similar Scope Elements: ✓ Design-build ✓ Bridge replacement ✓ Elevated bridges ✓ Bridges over waterways ✓ Significant utility relocations ✓ Multiple stakeholders 	 Traffic management Sensitive wetlands MOT phasing Active navigation route ROW acquisition services Public involvement 						
es, and	Awards:							
oute	✓ 2007, National Achieveme (NPHQ)	ent Award – South Carolina						
n the towers	 ✓ 2007, Best Bridge with Spans Greater Than 150 Feet (Co-Winner), Precast Design (PCI) ✓ 2005, Globe Award for Environmental Excellence 							
rtions	 (ARTBA) ✓ 2005, National Award (Na ✓ 2005, Best Transportation Construction Magazine) 	Project (Southeast						
ring nal	 Early completion bonus fo year ahead of schedule 	r finishing the project one						
ations,	DBE Performance: Goal 8% / Actual 10.28%							
te outes	 Proposed SAW2JV Personn ✓ David Kampman: Construct ✓ Rex Gilley, PE: Lead Struct 	ction Manager						

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Value	(in thousands)	g. Dollar Value of Work
	consulting firm responsible for the	Owner and their Project Manager who	Completion	Completion	Original Contract Value	Final or Estimated	Performed by the Firm identified
	overall project design.	can verify Firm's responsibilities.	Date	Date (Actual		Contract Value	as the Lead Contractor for this
			(Original)	or Estimated)			procurement.(in thousands)
US 90 St. Louis Bay Bridge,		Name of Client/ Owner: MSDOT					
Pass Christian, MS		Phone: (601) 359-7001	10/0005	12/2005	\$2 <i>CC</i> 220	¢204.420	¢110.415
Bridge Project	HNTB Corporation	Project Manager: Harry Lee James, P.E. Phone: (601) 359-7004	12/2007	12/2007	\$266,800	\$284,420	\$113,417
Design-Build		Email: hjames@mdot.state.ms.us					

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.

Firm's Role: Archer Western was the majority partner in the Archer Western/Granite Construction Joint Venture which served as the Design-builder and Prime Contractor of bridge reconstruction.



Project Narrative: Six months after the US 90 Bridge over St. Louis Bay was destroyed by Hurricane Katrina, forcing traffic to be diverted for more than 40 miles, Archer Western was awarded the State's first ever Design-Build contract by the Mississippi DOT to replace the bridge. The contract also included removal of the remnants of the original 11,000 foot hurricane destroyed structure.

The new concrete bridge has four, 12-foot travel lanes with shoulders separated by a concrete median barrier. It is 1.9-miles-long and includes a 12-foot pedestrian and bicycle lane on its south side. The new structure is founded on 36" square concrete piles and has a navigation channel of 250 feet with a vertical clearance of 95 feet.

Use of Innovative Solutions: As schedule was the overall critical aspect of the project, measures were implemented to aid, maintain, and accelerate the project schedule. Use of precast items (piles, beams, caps, railing) were maximized. To overcome a unsuitable soil challenge at the abutments the use of surcharge with wick drains was implemented to accelerate our ground improvements.

Design-Build Experience: This was an emergency design-build project (MSDOT's first) to replace the existing bridge destroyed by Hurricane Katrina.

Limiting Impacts to Traffic: As the traveling public was severely impacted by the destruction of the existing bridge, our project contained an interim milestone for the opening of a lane in each direction . AWC met that milestone.

Major Bridge Over a Navigable Channel: The new concrete bridge is 1.9-miles-long. The structure has a 250 foot wide navigation channel with a vertical clearance of 95 feet. The work required an extensive fleet of barge-mounted cranes, material barges, and marine-support tugs and crew boats.

Meeting or exceeding DBE Program commitments: A robust outreach program was used during the pursuit and design phases of the project to generate interest and share information to the DBE contracting community. The challenging goal was achieved through the use of 12 different DBE firms.

Dealing with Environmental Sensitivity and Permits: This project included environmental compliance and control that respected the unique and sensitive marine environment. Through a joint effort between the joint venture (JV) team, USACE, MDOT, and state and local agencies, the project management team developed and implemented an environmental compliance plan and crews were trained in work methods that minimized disturbance to the bay's habitat and wildlife.

Schedule Award: The project had two milestones - interim completion of one lane of traffic in each direction by May 2007 (#1) and completion of the entire project by December of 2007 (roughly 23 months after notice to proceed) (#2). All dates were met, and a \$5,000,000 bonus was paid for the attainment of the first milestone.

Awards:

Similar Scope Elements

- ✓ Design-build
- ✓ Bridge demolition
- ✓ Significant utility relocations,
- ✓ Bridge project over navigable
- water requiring marine
- construction techniques
- ✓ Stormwater management
- Extensive coordination with
- Environmental permitting agencies
- Environmental Compliance and reporting required
- ✓ Multiple stakeholders
- Coordination with local
- communities extensive public outreach

- \checkmark New location elevated expressway over active rail lines (CSX)
- \checkmark Located in a tidally influenced zone
- \checkmark Work in and around environmentally sensitive areas
- \checkmark Similar construction techniques (concrete girder bridges, concrete pavement, asphalt pavement)

- ✓ AASHTO 2008 People's Choice Award Winner in the Category of Schedule
 - Incentive award for on-time attainment of Milestone #1

DBE Performance:

Goal 8.00% / Actual 8.13%



3.4.1(b) Subcontractor Work History Forms

I-64 Southside Widening and High Rise Bridge, Phase 1



NONE PROVIDED AT THIS TIME



3.4.1(C) Lead Designer Work History Forms

I-64 Southside Widening and High Rise Bridge, Phase 1

<u>ATTACHMENT 3.4.1(c)</u> <u>LEAD DESIGNER - WORK HISTORY FORM</u> (LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Val	ue (in thousands)	g. Design Fee for the Work Performed by
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	Construction	the Firm identified as the Lead Designer
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	Contract Value	for this procurement.(in thousands)
				Date (Actual	(Original)	(Actual or	
				or Estimated)		Estimated)	
I-264 Widening/MLK Extension		Name of Client: VDOT					
Portsmouth and Norfolk, VA		Project Manager: Brad Weidenhammer,					
	SKW Constructors (A Skanska led joint-	P.E.	01/2012	03/2017	\$250,000	\$250,000	\$12,000
Roadway Project	venture)	Phone: (757) 396-6581			. ,	(estimated)	
Design-Build		Email:					
		bradley.weidenhammer@vdot.virginia.gov					

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 contract listed will be evaluated.

Firms Role: PB delivered final construction plans for the widening and modifications to I-264 and the MLK Extension (a new one mile elevated freeway) over urban Portsmouth, Virginia. PB was the Lead Designer on a Design-Build team lead by SKW Constructors (a Skanska lead construction joint venture).



Project Narrative: Specific scope elements of the overall Project included:

- ✓ Widening of I-264 for auxiliary lanesEight new/widened bridges including new bridges over CSX rail lines and new & widened bridges over N&PBL
- ✓ 11 stormwater ponds/basins (including significant aesthetic treatments to two)
- Preparation of the Noise Abatement Design Report (NADR)
- for three new noise barriers
- ✓ 18 retaining walls
- ✓ Significant overhead guide signage
- Transportation Management Plan (TMP) developed for phased MOT
- ✓ ITS system replacement/upgrades along I-264
- PB is currently providing design support during construction, including shop drawing reviews, preparing responses to RFIs, and As-Built documentation.

Use of Innovative Solutions: PB worked closely with SKW 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 project also included architectural panels, obelisks, and aesthetic stormwater pond treatments (requested by the City of Portsmouth). The use of EPS embankments involved special details to avoid the placement of drainage collection structures within the EPS embankment material.

Limiting Impacts to Traffic: PB developed a Transportation Management Plan (TMP) as a "living document" for this multi-phased project. As such, components of the TMP were released in advance specific construction components, to facilitate the overall project schedule. Disruptions to I-264 traf generally limited to temporary closures for placing superstructure elements over the existing roadwa During construction, MOT and detours were closely coordinated with the City of Portsmouth and VI minimize impacts.

Design-Build Experience: PB was the lead designer for a Skanska led JV. This project is part of the DB project in the history of the Commonwealth of Virginia.

Right-of-Way: PB worked closely with SKW and the Right-of-Way (ROW) acquisition consultant facilitate ROW acquisition. On several occasions, plan changes were incorporated to either eliminat reduce right-of-way impacts, which reduced VDOT's acquisition cost and facilitated owner approval acquisition. ROW acquisition was completed in accordance with VDOT's ROW Manual and all approxate and federal laws and regulations

Community Interaction: The project traverses above/through a developed area of Portsmouth, require close coordination with the City to relocate local utilities, close and relocate local streets, maintain a properties along the project route, and coordinate with both CSXT and N&PBL for bridge crossings.

Geotechnical: The project included significant geotechnical investigations and alternatives analysis soil conditions, resulting in the use of EPS (Extended Polystyrene) embankment, the use of light-we and surcharging. The 20-foot-high EPS embankments eliminated potential risks associated with lon settlement of bridge approach embankments for the subsurface problem soils of the I-264 corridor.

Sound Barrier Walls: The Project included preparation of a formal Noise Abatement Design Repopublic surveys for three sound barrier walls along the I-264 corridor. PB prepared the NADR and coordinated the review and approval by VDOT.

DBE Program Commitments: As the Lead Designer, PB met DBE and SWaM value goals as requ the Design-Builder, SKW Constructors. PB subcontracted design work to 6 DBE firms and 6 SWaM as part of the overall project.

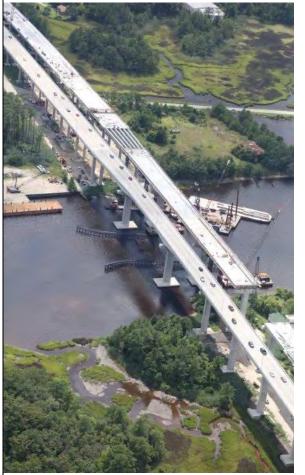
g affic were vay. VDOT to ne largest nt to ate or val of the oplicable quiring	 Similar Scope Elements Design-build Interstate widening Widening of the I-264 bridge over N&PBL railroad Stormwater management Utility relocations Environmental permits Interstate lighting Signalization MOT/phasing Multiple stakeholders Work performed in urban/ commercial area New location elevated expressway over active rail lines (CSX) Bridge structures over urban streets Sound barrier walls ROW ITS new interstate guide signage Public involvement/ relations Constrained site conditions 	
access to s. s for poor eight fill, ng-term	Proposed Personnel Involved	
ort and	 Scott Lovell, PE: Design QA Derek Piper, PE: Design Manager Rex Gilley, PE: Lead Structural Engineer Ian Chaney, PE: Lead Geotechnical Engineer 	
uired by M firms	 Melissa Simpson, PE: Drainage/SWM Design Tim Anderson, PE: Utility Design/Coordination Phil Lohr, PE, PTOE: Lead Roadway Engineer Tim Rayner, PE, PTO: MOT/TMP/ITS Robin Huelsbeck, PE: Signage & Pavement Markings Ray Magsanoc: Noise Analysis 	

<u>ATTACHMENT 3.4.1(c)</u> <u>LEAD DESIGNER - WORK HISTORY FORM</u> <u>(LIMIT 1 PAGE PER PROJECT)</u>

a. Project Name & Location	b. Name of the prime/	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract	Value (in thousands)	g. Design Fee for the Work
	general contractor	their Project Manager who can verify	Contract Start	Contract Completion	Construction	Construction Contract	Performed by the Firm identified
	responsible for overall	Firm's responsibilities.	Date	Date (Actual or	Contract Value	Value (Actual or	as the Lead Designer for this
	construction of the project.			Estimated)	(Original)	Estimated)	procurement.(in thousands)
US 17 (Dominion Boulevard) Widening, Chesapeake, VA	Dominion Boulevard Constructors, LLC	Name of Client: City Of Chesapeake Project Manager: Earl Sorey Phone: (757) 382-6513 Email: easorey@cityofchesapeake.net	01/2012 (design is complete)	02/2017 (estimated)	\$188,000	\$194,000	\$12,604
Bridge Project							

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 of 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 shall not be evaluated.

Firms Role: Parsons Brinckerhoff prepared preliminary and final design, and construction documents, for widening and improvements to US 17 (Dominion Boulevard) from Interstate 64 to south of Cedar Road, a distance of approximately 4 miles. The project included widening of the existing two lane roadway into a four-lane divided freeway that includes a new high level fixed bridge (95' vertical clearance) over the Southern Branch of the Elizabeth River, just upstream of the High Rise Bridge, and three interchanges. Parsons Brinckerhoff is currently providing design support during construction, including shop drawing reviews, site visits, preparing responses to RFIs, and As-Built documentation.



Project Narrative: As the Lead Designer, Parsons Brinckerhoff self-performed the majority of the design effort including: roadway widening and bridge design (including 7 interchange bridges); geotechnical analysis and design; TMP/MOT plans; stormwater management design; utility coordination and relocation design; signing & pavement marking plans; drainage design, including design of a major triple-cell box culvert under US 17; 120,000-square-feet of MSE wall at 20 locations; preparation of the Noise Abatement Design Report (NADR) and design of sound barrier walls; ITS design; and preparation of permit applications, including a US Coast Guard permit for construction over a navigable channel; and design of a wetland mitigation site.

The project also involved development of specifications for an "open-road" toll collection system, and coordination of the design for all associated civil element (overhead gantries, conduits, equipment housing).

Use of Innovative Solutions: Parsons Brinckerhoff utilized an innovative "risk based" approach to addressing settlement issues associated with the soft subsurface soils prevalent throughout the project area, in particular in areas near the bridge abutments. PB evaluated the critical path for the project and determined that the settlement "wait times" associated with a traditional wick drain and surcharge approach would unnecessarily extend the construction schedule. As a result, a combination of pile-supported embankments in areas where construction activities were on the critical path, and wick drain and surcharge in areas where the settlement wait times did not impact the overall schedule, was utilized. This resulted in significant project cost savings while eliminating adverse post-construction settlements.

Limiting Impacts to Traffic: The project design involved development of roadway plans that included a detailed and specific construction sequence and maintenance of traffic plans in order to maintain traffic on existing US 17 and crossing roadways, such as Great Bridge Boulevard, during construction. The northbound lanes were constructed as the initial phase and carried bi-directional mainline US 17 traffic while the new, fixed span, southbound bridge and roadway widening was constructed on existing alignment. The plan included several stages of construction involving maintenance of roadway traffic as well as marine traffic on the Atlantic Intracoastal Waterway (AIW) through coordination with the United States Coast Guard.

Major Bridge Over a Navigable Channel: The project includes two major bridges over the Southern Branch of the Elizabeth River, located approximately one mile upstream of the High Rise Bridge. The new bridges provide 95' of vertical and 125' of horizontal clearance at the main channel span. The northbound and southbound structures are 5,262 feet and 5,982-feet in length, respectively. Similar to the phasing plan for the new High Rise Bridge, the northbound bridge was constructed adjacent to a double leaf bascule bridge that remained in service during construction of the first crossing. Both bridges consist of low level trestle, mid-level approaches and concrete spliced girder river-span units. To provide a cost effective design, costs were developed to consider superstructure and substructure costs for the different bridge heights in order to determine optimal span lengths for each type of unit. This same methodology will be key to providing a cost-effective design for the new I-64 High Rise Bridge.

ROW Acquisition. The project involved acquisition of 167 parcels (full and partial takes) as well as permanent easement acquisition. Parsons Brinckerhoff worked closely with the City of Chesapeake's right-of-way consultant, Stantec, the city's legal staff, and private utility companies to identify right-of-way and easement limits and to prepare acquisition plats. Acquisitions by the City were conducted in accordance with VDOT's Right of Way Manual and all applicable state and federal laws and regulations. Parsons Brinckerhoff design staff provided assistance to the city through numerous plan changes to either eliminate or reduce right-of-way impacts, resulting in project cost savings.

Meeting or Exceeding DBE Program Commitments: PB met DBE and SWaM value goals as required by the City of Chesapeake. PB subcontracted design work to 6 DBE firms and 6 SWaM firms as part of the overall project

Similar Scope Elements ✓ High Level fixed bridge (95') over the Atlantic Intracoastal Waterway	 Construction adjacent to an active existing double leaf bascule bridge
 ✓ Coordination with the City of Chesapeake, VDOT and FHWA 	 Geotechnical investigation and design Sound barrier walls DOW completing
✓ US Coast Guard Permit acquisition	 ✓ ROW acquisition ✓ ITS ✓ New interstate guide
 ✓ Roadway widening to interstate standards ✓ Extensive MOT and 	signage ✓ Public involvement/ relations
phased construction ✓ Stormwater management	✓ Constrained site conditions
✓ Environmental documentation (EA) and permitting	 ✓ Utility coordination & relocation design ✓ Signalization
✓ Environmental mitigation ✓ Open Road Tolling	✓ Multiple stakeholders
Proposed SAW2JV Personn	el Involved:

- Derek Piper, PE: Design Manager
- Rex Gilley, PE: Lead Structural Engineer
- ✓ Scott Lovell, PE: Design QA/QC
- ✓ Ian Chaney, PE: Lead Geotechnical Engineer
- ✓ Melissa Simpson, PE: Drainage/SWM Design
- Tim Anderson, PE: Utility Design/Coordination
- ✓ Phil Lohr, PE, PTOE: Lead Roadway Engineer
- ✓ Tim Rayner, PE, PTO: MOT/TMP/ITS
- Robin Huelsbeck, PE: Signage & Pavement Markings
- Ray Magsanoc: Noise Analysis



3.4.1(d) Subconsultant Work History Forms

I-64 Southside Widening and High Rise Bridge, Phase 1

SUBCONSULTANT - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Value	e (in thousands)	g. Design Fee for the Work
	general contractor	their Project Manager who can verify	Contract Start	Contract	Construction Contract	Construction	Performed by the Firm
	responsible for overall	Firm's responsibilities.	Date	Completion Date	Value (Original)	Contract Value	identified as the Subconsultant
	construction of the			(Actual or		(Actual or	for this procurement.(in
	project.			Estimated)		Estimated)	thousands)
I-64 Capacity Improvements –		Name of Client: VDOT					
Segment I, Newport News, VA	Shirley Contracting	Project Manager: Janet M. Hedrick, PE					
	Company, LLC	Phone: 757-494-5478	March 2015	December 2017	\$84,879	\$96,221	\$6,024
Roadway Project		Email: Janet.Hedrick@vdot.virginia.gov					
Design-Build							

h. Narrative describing the Work Performed by the Firm identified as the Subconsultant 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.



Firm's Role: In 2015, Dewberry, as part of the Shirley-Dewberry design-build Team, was awarded the contract to widen I-64 in Newport News from 4-lanes to 6-lanes for a distance of approximately 5 miles.

Project Narrative: Widening was completed through construction of a single additional lane in each direction in the median, and either a raised or depressed median was incorporated to maintain drainage depending on the remaining median width. Originally identified as an option to the contract, the auxiliary lanes at the Fort Eustis Boulevard Interchange were also lengthened to improve capacity and safety. Four existing bridges on I-64 were widened to accommodate the 6-lane section (2 over the Lee Hall Reservoir and 2 over Fort Eustis

Boulevard), and the 2 existing bridges over Industrial Park Drive and CSX Railroad were completely demolished and replaced. Additional project elements included approximately 12,500 lf of sound barrier walls, stormwater management facilities, drainage improvements, geotechnical ground improvements for soft and unsuitable soils, concrete pavement patching and repair, and asphalt pavement overlay.

During design, VDOT issued a contract modification to strengthen the outside shoulders between the Fort Eustis Boulevard Interchange and the eastern project limit to allow operation of a 4^{th} thru lane in each direction in the future. Shoulder strengthening was incorporated by removal of the existing shoulder pavement and partial subbase removal, and replacement with a full-depth pavement section.

In addition to all engineering services, Dewberry also completed all design field surveys, environmental permitting and documentation, and quality control (QC) during construction. Dewberry also oversaw sub-consultant services to complete updated aerial mapping, utility designations and test pits, geotechnical investigations and recommendations, noise analysis, and pipe video inspections.

Dealing with Environmental Sensitivity and Permitting: Dewberry obtained Section 404/401 Individual Permits from the US Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (DEQ) and a Virginia Marine Resource Commission individual permit for unavoidable impacts to jurisdictional waters of the US. An integral part of the permitting process was to coordinate the proposed project with the DEQ Office of Environmental Impact Review for Coastal Zone Management Act (CZMA) Consistency. The Corps cannot issue their individual permit without a CZMA consistency determination.

This process typically takes 3 months to complete; however, through our proactive approach to coordination, especially with the Virginia Department of Game and Inland Fisheries on th protection of two state threatened and endangered species, we were able to obtain the consistency determination in just over one month. During the permitting process, we discovered the federally endangered Indiana Bat was present at the western termini of the project. Leveraging our current relationships with the Corps, DEQ, and the US Fish and Wildlife Service, we were able to develop a plan to save as many potential roosting trees as possible and to ensure the bat was protected during construction while minimizing changes t the design. By utilizing our existing relationships and establishing new relationships with th regulatory agencies, we were able to seamlessly integrate design and permitting and obtain a of the clearances required for the project well in advance of construction and without schedu impacts or delays.

Use of Innovative Solution: Recognizing the poor condition of the existing I-64 bridges ov Industrial Park Drive and CSX Railroad, Dewberry developed designs for complete bridge replacements instead of the repairs and widening which was required by the contract. By replacing the structures, foundation elements were moved further away from the railroad, and the span configuration was revised from 4-spans to 2-spans. Also, through enhancements to drainage and stormwater management layouts, impacts to all private properties were eliminated during final design, requiring right-of-way and easement acquisition from only three City properties.

Limiting Impacts to Traffic: Dewberry developed and received approval on an advance temporary traffic control plan set which allowed for advance night-time operations to remove and strengthen the existing outside shoulders to facilitate the necessary traffic switch to complete the median widening. Median barrier placement was coordinated with construction access points, and long construction acceleration areas were incorporated to reduce speed differentials between left lane traffic and construction vehicles entering and exiting the work zone.

DBE Performance: While the 12% DBE goal was not separated between design and construction, Dewberry achieved approximately 23% for DBE design sub-consultant service. The DBE goal for the overall project is also being achieved.

Bridges over Waterways: Widening and repairs for the parallel bridges over the Lee Hall Reservoir were designed such that a 15' wide channel width was maintained for boats at all times and through all phases of construction. Cofferdams were utilized for construction of the center pier, which was located in the middle of the bridge crossing of the reservoir.

h	Similar Scope Elements	
he to he all ule ver	 Design-Build Delivery Median Widening of Interstate Roadway Design Interstate Bridge Widening and Repairs Bridges over Waterways Hydraulic and Stormwater Management Design 	 Sound barrier walls Complete Project Field Surveys Complex Geotechnical Challenges and Solutions Environmental Permitting Temporary Traffic Control and TMP Quality Assurance / Quality Control
nd o ve	✓ Kim Larkin: Environmen	Lead Structural Engineer
on		
k		
es.		
the		



3.5 Lead Contractor Safety Qualifications Forms

I-64 Southside Widening and High Rise Bridge, Phase 1

ATTACHMENT 3.5

(Addendum No. 1 Form 3.5)

LEAD CONTRACTOR SAFETY QUALIFICATIONS FORM

The following information will be used to understand and evaluate the Offeror's past performance on safety in accordance with RFQ Section 3.5.

	kanska USA Civil South nc.	east,	Date:	10/06/2016
Number of Employee	^{s:} 435			
-	ensation Experience Modification and/or Experience Modification	2013	2014	2015
calculated by National C	ny's Worker's Compensation EMR/EMF Council on Compensation Insurance, Inc. y organization or rating bureau for the	0.58	0.58	0.59
Α	ccident and Illness	2013	2014	2015
3.5.1.2 List your comprate for the past	any's recordable injuries and illnesses 3 years.	2.07	1.59	1.76
3.5.1.3 List your com incident rate for	pany's days away from work injury the past 3 years.	0.59	0.32	0
-	leted Occupational Safety and Health Ary of Work-Related Injuries and Illness			

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employées former employées, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Record/seeping rule, for further details on the access provisions for these forms.

deaths 0	Total number of cases with days away from work 2	Total number of cases with job transfer or restriction 3	Total number of other recordable cases 2
(G)	(H)	(1)	(J)
Number of Days			
Total number of days away from work		Total number of days of job transfer or restriction	
163		227	
(K)		(L)	
njury and Illness T	ypes		
Total number of (M)			
1) Injury	7	(4) Poisoning	0
2) Skin Disorder	0	(5) Hearing Loss	0
 Respiratory Condition 	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of Information is estimated to average 58 minutes per response, including time to review the instruction, search and gather time data needed, and complete and review the collection of Information. Persons are not required to respond to the collection of Information unless it displays a currently valid DMB control number. If you have any comments about these estimates or any aspects of this data collection, contact. US Department of Labor, DSHA Office of Statistics, Room N-3644, 200 Constitution Ave NW. Weshington, DC 20210, Do not short the considered forms to this office.



U.S. Department of Labor Occupational Safety and Health Administration

Form approved ONB no. 1218-0176

Your establishment name S	Skanska Civil USA Southeast, Inc.		
Street 295 Bendix Road			
City Virginia Beach	State	Virginia	Zip23452
Industry description (e.g., Man Civil Construction	ufacture of motor truck trailers)		2.23
Standard Industrial Classificati	ion (SIC), if known (e.g., SIC 3715	5)	
R North American Industrial Clas	silication (NAICS), if known (e.g.,	336212)	
2 3 7	<u>3 1 0</u>	000212)	
ployment information			
ipicyment internation			
Annual average number of em	ployees325		
Total hours worked by all empl	oyees last		
year	676.689		
1			
in here			
Knowingly falsifying this doc	ument may result in a fine.		
San State Same Same			
I certify that I have examined th complete.	ns document and that to the best o	of my knowledge the entries an	e true, accurate, and
Bob Rose			SVP
Company exect	utive		Title
757-420-414	10		17-Jan-14

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in is entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths 0	Total number of cases with days away from work	Total number of cases with job transfer or restriction 1	Total number of other recordable cases 3
(G)	(H)	(1)	(J)
Number of Days			
Total number of days away from work		Total number of days of job transfer or restriction	
3		199	
(K)		(L)	
Injury and Illness	Types		
Total number of (M)			
(1) Injury	5	(4) Poisoning	0
(2) Skin Disorder(3) Respiratory	0	(5) Hearing Loss	0
Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 58 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, not its office.



U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

ablishment information	-		
Your establishment name	Skanska Civil USA Southeast	Inc	
Street 295 Bendix Road			
City Virginia Beach	State _	Virginia	Zip23452
Industry description (e.g., N Civil Construction	anufacture of motor truck traile	rs)	
Standard Industrial Classifi	cation (SIC), if known (e.g., SIC	3715)	
North American Industrial C	lassification (NAICS), if known	(e.g., 336212)	
2 3			
ployment information			
Annual average number of	employees 300		
Total hours worked by all e	mployees last 629.52		
year	010.01		
R-	-		
in here			
Knowingly falsifying this	document may result in a fin	e,	
I certify that I have examin complete.	ed this document and that to th	e best of my knowledge the entries	are true, accurate, and
Bob	Pose		SVP
Company	executive		Title
757-42	0-4140		26-Jan-15
Pho			Dale

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or linesses occurred during the year. Remember to review the Log to verify that the entries are complete:

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirely. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Record keeping rule, for further data is on the access provisions for these forms.

Number of Cases-Total number of Total number of cases Total number of Total number of other recordable cases with days with job transfer or deaths away from work restriction cases 0 5 0 0 (J) (G) (H) (1) Number of Days Total number of days of Total number of job transfer or restriction days away from work (1.) (K) Injury and Illness Types Total number of. (M) (4) Poisoning (1) Injury (5) Hearing Loss (2) Skin Disorder (3) Respiratory Condition (6) All Other Illnesses

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is eatimated to average 58 minutes per response, including time to review the instruction, search and getter the data needed, and complexe and review the obtection of information. Persons are not required to respond to the collection of information unless if displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of link data collection, contract. US Department of Labor, OSHA Omite of Statistics. Room N-3644, 200 Constitution Ave. NW. Washington, DC 20210. Do not send the completed forms to this office.



stablishment information			
Your establishment name Skar	ska Civil USA Southeast, Inc		
Street 295 Bendix Road			
City Virginia Beach	State	Virginia	Zip 23452
Industry description (e.g., Manufa Civil Construction	clure of motor truck trailers)		
Standard Industrial Classification	(SIC), if known (e.g., SIC 3715)		
North American Industrial Classifi	cation (NAICS), if known (e.g.,	336212)	
2 3 7			
nployment information			
and the second se			
Annual average number of emplo	270		
Total hours worked by all employ			
Year	568,167		
V.	2		
ign here	m		
Knowingly falsifying this docu	ment may result in a fine.		
Knowingly raisitying this sour			
	and the second second	of an languages the entries :	te loue acoutale and
I certify that I have examined the complete.	document and that to the best	or my knowledge the antida i	no noe, neceletat ana
Bob Rose			SVP Tille
Company execu	tive		Tue.
757-420-414	0		15-Jan-16
Phone			Date

ATTACHMENT 3.5

(Addendum No. 1 Form 3.5)

LEAD CONTRACTOR SAFETY QUALIFICATIONS FORM

The following information will be used to understand and evaluate the Offeror's past performance on safety in accordance with RFQ Section 3.5.

Company Name: Archer Western Constru	ction, LLC	Date:	October 5, 2016
Number of Employees: 2,985			
Workers' Compensation Experience Modification Ratio (EMR) and/or Experience Modification Factor (EMF)	2013	2014	2015
3.5.1.1 List your company's Worker's Compensation EMR/EMF calculated by National Council on Compensation Insurance, Inc. or other similar advisory organization or rating bureau for the past 3years.	.72	.62	.63
Accident and Illness	2013	2014	2015
3.5.1.2 List your company's recordable injuries and illnesses rate for the past 3 years.	1.29	1.42	1.01
3.5.1.3 List your company's days away from work injury incident rate for the past 3 years.	.32	.61	.48
3.5.1.4 Submit a completed Occupational Safety and Health Summary of Work-Related Injuries and Illnesses, for		,	rm 300A,



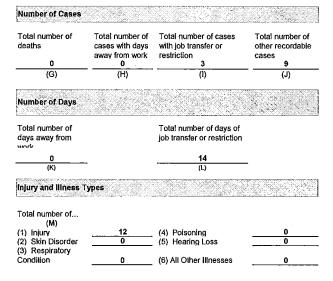
U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write *0,*

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Establi	shment information			
	Your establishment name Archer Western Construction			
	Street		<u> </u>	
	City Various	State	Various	Zip
	Industry description (e.g., Manufacture of motor	ruck trailers) General Constr	uction	
	Standard Industrial Classification (SIC), if known 1 5 4 1 & 1		2	
OR	<u>1 5 4 1 & 1</u> North American Industrial Classification (NAICS)		-	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0		
Employ	ment information			
Sign he		891 1,852,262		
	Knowingly falsifying this document may resu I certify that I have examined this document and		wedge the entries are true,	accurate, and complete.
	Jack Brazil Company execulive			Corporate Safety Director Tille
	312-492-1540 Phone			<u>12/31/2013</u> Date



Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

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Number of Cases			
Total number of deaths 0 (G)	Total number of cases with days away from work 0 (H)	Total number of cases with job transfer or restriction 9 (I)	Total number of other recordable cases <u>11</u> (J)
Number of Days			
Total number of days away from		Total number of days of job transfer or restriction	
 (К)	-	167 (L)	
Injury and Illness T	ypes		
Total number of (M) (1) Injury (2) Skin Disorder	<u></u> 0	(4) Poisoning(5) Hearing Loss	0

0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

0

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(6) All Other Illnesses

Establ	ishment information			
	Your establishment name	Arc	her Western Constructio	n
	Street			
	City Various	State	Various	Zip
	Industry description (e.g., Manufacture of		Construction	
OR	Standard Industrial Classification (SIC), ii <u>1 5 4 1 8</u> North American Industrial Classification (<u>2 3 6 2</u>	1 5 4 NAICS), if known (e.g., 33	<u>2</u> 6212)	
Emplo	yment information			
	Annual average number of employees Total hours worked by all employees last year	<u>1411</u> 2935290		
Sign h	ere			
	Knowingly falsifying this document m	ay result in a fine.		
	I certify that I have examined this docum	ent and that to the best of	my knowledge the entries a	are true, accurate, and complete.
	Jack Brazil Company executive			Corporate Safety Director Title
	972-457-8500			01.05.2015
	Phone			Date

(3) Respiratory

Condition



U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

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Number of Cases			
Total number of deaths 0 (G)	Total number of cases with days away from work 5 (H)	Total number of cases with job transfer or restriction 2 (I)	Total number o other recordabl cases 10 (J)
Number of Days			
Total number of days away from		Total number of days of job transfer or restriction	
397 (K)	-	78 (L)	
Injury and Illness	Гуреs		
Total number of (M)			

(IVI) (1) Iniury	17	(4) Poisoning	0
(2) Skin Disorder	0	(1) Hearing Loss	0
(3) Respiratory			
Condition	0	(6) All Other Illnesses	0

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Establ	ishment information			
	Your establishment name	А	rcher Western Construc	tion
	Street	307 \$	S. Sangamon	
	City Chicago	State	IL	Zip 60607
	Industry description (e.g., Manufacture o		al Construction	
OR	Standard Industrial Classification (SIC), <u>1 5 4 18</u> North American Industrial Classification <u>2 3 6 2</u>	1 5 4 (NAICS), if known (e.g.,		
Emplo	yment information			
	Annual average number of employees	1,615		
	Total hours worked by all employees las year	st3,360,216		
Sign h	ere			
	Knowingly falsifying this document r	nay result in a fine.		
	I certify that I have examined this docur	nent and that to the best	of my knowledge the entr	ies are true, accurate, and complete.
	Jack Brazil Company executive			Corporate Safety Directo Title
	972/457/8500			1/5/2016
	972/457/8500 Phone	<u> </u>		Date



Skanska-Archer Western 2 Joint Venture 295 Bendix Road Suite 400 Virginia Beach, VA 23452





