

>>ORIGINAL

Statement of Qualifications

# I-64 Widening Exit 200 to 205 From Interstate 295 to Exit 205 (Bottom's Bridge)

State Project No.: 0064-043-602

Federal Project No.: NHPP-064-3 (499)

Contract ID Number: C00107458DB95



**LANE**



submitted to:

**Virginia Department of Transportation**

submitted by:

**The Lane Construction Corporation**

in association with:

**WSP | Parsons Brinckerhoff**

submittal date:

**December 15, 2016**





December 15, 2016

Mr. Joseph A. Clarke, PE  
Alternative Project Delivery Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219

**RE: I-64 Widening Exit 200-205 From: Interstate 295 To: Exit 205 (Bottom Bridge)**  
State Project No.: 0064-043-602  
Federal Project No.: NHPP-064-3 (499)  
Contract ID Number: C00107458DB95

Dear Mr. Clarke:

The Lane Construction Corporation (LANE) is pleased to present this Statement of Qualifications for the above referenced project to the Virginia Department of Transportation (VDOT). LANE is nationally ranked as the #1 Highway Contractor by *Engineering News-Record (ENR)* and specializes in high quality roadway and bridge construction. LANE has a long and successful history of project completion in Virginia having completed nearly 150 projects worth over \$2.4B in the Commonwealth alone.

As a leader in the Design-Build project delivery (nationally ranked as the 55<sup>th</sup> Top Design-Build Firm by *ENR*), LANE has constructed more than 70 design-build projects worth more than \$3B during the last decade. LANE's teaming and leadership experience enables us to deliver the innovative and technically sound results that VDOT and Virginia residents expect and deserve.

LANE is the Offeror and will be the overall authority on the project as well as the Lead Contractor. We have teamed with Parsons Brinckerhoff as the Lead Designer. Together, we provide VDOT with an exceptional team that has completed projects of this size and scope on time and on budget as evidenced in our collective project experiences.

LANE and Parsons Brinckerhoff, Inc., in conjunction with strategically hand-selected specialty firms, are experienced with VDOT processes and procedures and will provide design and construction for the I-64 Widening Exit 200-205 project. We are confident in our team structure and experience, and have elaborated on our distinctive qualifications in the subsequent sections. The LANE Team has assembled committed personnel, with proven delivery of VDOT's requirements to meet the quality, safety, and schedule demands of this Project.

**3.2.2 Offeror's Point of Contact Information:** Mr. John P. Havel Jr., PE is the authorized representative and Point of Contact for the LANE Team for all matters associated with this qualifications submittal.

John P. Havel Jr., PE, Pursuit Manager  
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Chantilly, VA 20151  
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**The Lane Construction Corporation**

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**3.2.3 Offeror's Principal Officer Information:** Mr. Richard A. McDonough is a Principal Officer of The Lane Construction Corporation.

Richard A. McDonough, Senior District Manager  
14500 Avion Parkway, Suite 200  
Chantilly, VA 20151  
Tel: (703) 222-5670 Fax: (703) 222-5960  
Email: RAMcdonough@laneconstruct.com

**3.2.4 Offeror's Corporate Structure:** LANE was founded in 1890 and was incorporated in the State of Connecticut on April 5, 1902. LANE will undertake the financial responsibility for the Project and has no known liability limitations. LANE's pre-qualification status/capabilities with VDOT are well in excess of the requirements of this project. The co-sureties will furnish a single 100% performance bond and a single 100% payment bond.

**3.2.5 Lead Contractor and Lead Designer:** The full legal name of the Offeror is: **The Lane Construction Corporation**. LANE will serve as the prime/general contractor responsible for overall construction of the project and will serve as the legal entity with whom VDOT will execute the contract. The full legal name of the Lead Designer is: **Parsons Brinckerhoff, Inc.** Parsons Brinckerhoff, Inc. will serve as the lead design firm responsible for the overall design of this Project under contract to LANE.

**3.2.6 Affiliated/Subsidiary Companies:** A complete list of affiliates and subsidiary companies may be found in the Appendix.

**3.2.7 Debarment Forms:** Certifications for Debarment for both Primary and Lower Tier Covered Transactions have been completed and executed for the Offeror and all subconsultants, subcontractors, and other entities identified as members of the LANE team and may be found in the Appendix.

**3.2.8 Offeror's VDOT Prequalification Evidence:** Evidence of LANE's VDOT Prequalification (L002/Active) is included in the Appendix and verifies that LANE is prequalified for this SOQ submission.

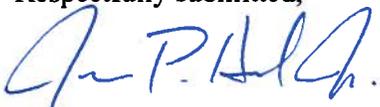
**3.2.9 Letter of Surety:** A surety letter from the bonding companies is included in the Appendix, confirming their willingness to provide any and all bonds for this project.

**3.2.10 SCC/DPOR Information and Evidence:** The matrix in the Appendix delineates the respective state registrations and licensures of the LANE Team. The Offeror and all team members are eligible at the time of the SOQ submittal, under the law and relevant regulations, to offer and to provide any services proposed or related to the project. Respective copies of licenses may be found in the Appendix.

**3.2.11 DBE Statement:** LANE supports the Disadvantaged Business Enterprise (DBE) program and is committed to meeting the 10% goal for the design and construction of this project utilizing Virginia certified DBE companies.

Through our proven performance, our Team will deliver this project safely, on time and within budget. We appreciate the opportunity to present our qualifications and look forward to working with VDOT on this important project.

Respectfully submitted,



John P. Havel Jr., PE  
Pursuit Manager  
The Lane Construction Corporation



### 3.3 | OFFEROR'S TEAM STRUCTURE

**LANE** The Lane Construction Corporation (LANE) will serve as the Lead Contractor of the D-B team for the I-64 Widening Exit 200-205 (I-64 Widening) project and will be responsible for managing the project, supervising construction, and self-performing the major work elements. LANE was named one of the 2016 Top Contractors by *ENR MidAtlantic* and is nationally ranked as 55th in Top Design-Build Firms by *ENR*. Our proven heavy civil experience in bridge and roadway construction and more than 70 D-B projects ranging in scope and value from \$13M to \$2.3B demonstrates LANE's ability to deliver the region's most challenging infrastructure projects.

 **Parsons Brinckerhoff, Inc. (PB)**, is an industry leader in infrastructure development and transportation engineering, and will serve as the Lead Designer for this project. For over 50 years in the Commonwealth of Virginia, PB has successfully completed roadway designs, maintenance of traffic plans, and all types of civil-related support for VDOT and other transportation agencies. Under various contracts, we have provided VDOT with design and engineering services for a wide range of roadway, bridge, and tunnel projects for new and existing facilities. In 2015 PB was recognized by *Roads & Bridges Magazine* Go-To List as the #1 Road and Highway Design Firm, #3 in Bridge Design, and #3 in Design-Build. Additionally, *ENR* ranks PB #2 in Transportation.

#### Construction Subconsultants

Additionally, under subcontract to LANE are the following highly qualified subconsultants:

- Quinn Consulting Services (QAM)
- Specialized Engineering Inc. (QA Lab)
- OR Colan (ROW)
- GET Solutions, Inc. (QC Lab)
- Seventh Point (Public Relations)

#### Design Subconsultants

Under subcontract to PB are the following highly qualified subconsultants:

- H&B Surveying and Mapping LLC (Survey)
- Harris Miller Miller & Hanson Inc. (Noise Abatement)
- EEE Consulting, Inc. (Environmental)
- CES Consulting, Inc. (Utility Coordination)
- Rhodeside & Harwell, Inc. (Landscape)

LANE and PB have previously teamed together on important D-B projects in the Commonwealth such as Route 234 Widening in Prince William County and the Dulles Greenway Widening in Loudoun County. We also have a long history of working together throughout the US. Projects include SR 408 Widening Conway Road to Oxalis Drive and SR 408 Widening Rosalind Avenue to Crystal Creek Drive in Orlando, FL. LANE and PB are working on adjoining projects on the I-85 corridor in North Carolina where our Team has been collaborating on a regular basis on design, construction, and MOT related activities.

#### 3.3.1 Qualifications of Key Personnel

All of the proposed Key Personnel have noteworthy experience on transportation projects similar to the roles they will serve on the I-64 Widening project. Information regarding their experience can be found in Attachment 3.3.1 in the Appendix. The Key Personnel listed below will remain on the LANE Team throughout the duration of procurement and construction.

Name	Position	Company
Ryan Terry	Design-Build Project Manager	LANE
Anthony Kondysar, PE	Quality Assurance Manager	Quinn
Chris Moore, PE	Design Manager	PB
Troy Corey	Construction Manager	LANE



## Reporting Relationships of Key Personnel

**Design-Build Project Manager (DBPM), Ryan Terry (LANE)** will report to VDOT and serves as VDOT's central point of contact. He will facilitate communication among team partners and monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and allocate resources to deliver the project on time. It will be his responsibility to work with the Team to ensure that the design complies with the owner's specifications. Mr. Terry's management from design through construction will include weekly design and construction meetings to implement the project delivery plan. Additionally, he is responsible for construction quality management and contract administration. Mr. Terry will also coordinate any required public outreach and public meetings.

**✓ Added Value:** Mr. Terry has more than a decade of experience in the construction industry in construction management and specializes in bridges and highways, among other disciplines. Additionally, Mr. Terry is currently the Project Manager on a \$90M project in the Hampton Roads area.

**Quality Assurance Manager (QAM), Mr. Anthony Kondysar, PE (Quinn)** will report directly to the DBPM on all quality issues. Any item of work failing to meet minimum standards will be rejected and corrected immediately. Construction personnel have no authority over QA inspection staff, and issues raised by construction personnel will be resolved by Mr. Kondysar and the DBPM. Mr. Kondysar will keep VDOT informed on the status of quality of construction and issues/resolutions/solutions through weekly reports and progress meetings. As QAM, Mr. Kondysar holds the authority to shut down the job if quality issues warrant. **Quality Assurance Inspector, Mr. Noah Pate (Quinn)**, will report directly to the QAM, and will be assigned to the project on a full-time basis for the duration of the project. **Specialized Engineering, the independent AMRL Certified QA Lab**, will report to Mr. Kondysar and will perform QA testing. Mr. Kondysar is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

**✓ Added Value:** Mr. Kondysar has been providing quality assurance and quality control services on a variety of D-B transportation projects in the Commonwealth including the I-64 Segment II project. Mr. Kondysar's detailed checks of calculations, drawings, specifications, and other applicable work products will be an asset to the project.

**Design Manager (DM), Mr. Chris Moore, PE (PB)** will report directly to the DBPM and will maintain close communication with the DBPM and CM. He is responsible for coordinating all design disciplines and ensuring the overall project design is in conformance with the Contract documents. All design disciplines report directly to Mr. Moore. He will provide VDOT with design plans for review and approval to confirm that the design work is constructable and complies with the requirements of the contract documents. Mr. Moore is also responsible for establishing and overseeing the design QA/QC program for each design discipline of the project. He will be assisted by Derek Piper, PE, AICP, DBIA who will provide an independent design QA audit. The design QC will be coordinated by Phil Lohr, PE, PTOE and will be performed at the office where the work is conducted by a qualified staff member who is independent of the D-B Team. Mr. Moore is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

**✓ Added Value:** Mr. Moore has been delivering D-B projects for VDOT the past five years. Prior to coming back home to Virginia, Chris served as Design Manger for 25-miles of interstate median widening for I-10 in Arizona. His most recent accomplishment is serving as Deputy Design Manager for the Award Winning Route 60 Widening Project, Chesterfield County's first locally administered D-B project in Virginia.

**Construction Manager (CM), Mr. Troy Corey (LANE)** will report directly to the DBPM and will be on the Project site for the duration of construction operations. His daily duties include: safety, coordination of all project personnel including subcontractors, and execution of the construction QC program. He will coordinate daily meetings with the QAM, QC Manager, and QA Lead Inspector to discuss all ongoing construction activities. He will also review all QC reports and laboratory test results. Anything that is not meeting standards will be addressed immediately with corrective actions mandated that same day. Mr. Corey is currently working on the VDOT I-581 Valley View project and will be available prior to the start of the I-64 Widening construction. Mr. Corey holds a Virginia Department of Environmental Quality (DEQ) Responsible Land

Disturber (RLD) Certification and will hold a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) prior to the commencement of construction.

**✓ Added Value:** Mr. Corey brings over 15 years of construction experience. Mr. Corey has served and worked with VDOT on numerous roadway widening projects in Virginia. He has extensive experience in the Richmond area and has strong relationships with the local resources and subcontractors.

### Other Functional Relationships

The LANE Team also includes the following recognized specialists whom we deem critical to this Project, albeit non-key personnel as defined by the RFQ; their relevant qualifications are summarized below.

Name/Position	Yrs Exp	D-B	Interstate Widening	Worked in Richmond District	Complex MOT	Bridge Widening	Worked with VDOT
<i>Other pertinent design disciplines that will report directly to Mr. Moore, PE (DM) include:</i>							
<b>David Barnes, PE/Roadway and Interstate Widening</b>	20	✓	✓	✓	✓	✓	✓
<b>Rex Gilley, PE/Structures</b>	26	✓	✓	✓	✓	✓	✓
<b>Melissa Simpson, PE, ENV SP/Stormwater</b>	10	✓	✓	✓		✓	✓
<b>Susan Mathai, PE, PTOE/Traffic</b>	20	✓	✓	✓	✓	✓	✓
<b>Timothy Rayner, PE, PTOE/TMP/MOT</b>	19	✓	✓	✓	✓	✓	✓
<b>Ian Chaney, PE Geotechnical</b>	14	✓	✓	✓	✓	✓	✓
<b>Leslie Burnside, LS Survey</b>	30	✓	✓	✓	✓	✓	✓
<b>Ray Magsanoc, Noise Analysis</b>	18	✓	✓	✓	✓	✓	✓
<b>Doug Fraser, Environmental</b>	35	✓	✓	✓	✓	✓	✓
<b>Matt MacLaughlin, PE Utilities</b>	30	✓	✓	✓	✓	✓	✓

Name/Position	Yrs Exp	D-B	Interstate Widening	Complex MOT	Bridge Widening	Worked with VDOT
<i>Other pertinent construction disciplines that will report directly to Mr. Corey (CM) include:</i>						
<b>Mike Russo/Utility Manager</b>	6	✓	✓	✓	✓	✓
<b>Paul Bacon/MOT Superintendent</b>	9	✓	✓	✓	✓	✓
<b>Shaun High/QC Manager</b>	9	✓	✓	✓	✓	✓
<b>Ryan Snitker/Project Engineer</b>	11	✓	✓	✓	✓	✓
<b>Rene Lopez/Structures Superintendent</b>	14	✓	✓	✓	✓	✓
<b>Chris Monahan/Environmental</b>	15	✓	✓	✓	✓	✓

### Design and Construction Team Integration

The LANE Team ascribes to the DBIA paradigm that “integrated development of the design and construction program is the cornerstone of D-B delivery and this methodology optimizes opportunities for collective excellence.” Put into practice, our design team will interface with our construction team and vice versa throughout the life of the contract.

The DBPM will be involved in all project development and construction processes to ensure overall quality management, adherence to the contract, and to allocate appropriate resources to meet the project schedule. Furthermore, the DBPM will guide the team in important public outreach efforts that will be critical in mitigating citizen concerns on a project of this magnitude.

The LANE Team's extensive D-B experience has clearly demonstrated that regularly scheduled discipline coordination meetings throughout project execution are critical to ensuring a successful project. These discipline-focused meetings, led by the DBPM, serve as a conduit for disseminating project-critical information and are the central point of decision-making and communication among all involved in the project. These regular, open forums of discussion among team members (both design and construction) and VDOT to address respective project elements serve to clearly define project criteria, ensure VDOT's intentions are being met, address corridor-wide safety and constructability issues, and provide consistency in design before issues become schedule-critical.

Through this approach, we create strong relationships that set the foundation to interact and partner with VDOT and third-party stakeholders, streamline reviews, eliminate potential construction field issues, and deliver the project safely, as early as possible.

**Construction Support During Design.** *Construction staff are engaged to ensure designs are constructable and tailored to support the most efficient execution strategy.*

Construction Support During Design	Benefit
Critical input in development of work packaging and D-B strategy	Incorporates construction expertise to develop most efficient construction sequence and schedule logic
Advising design team on self-performance vs. subcontracting of specific construction elements	Enables tailoring of design/ construction documentation to construction delivery
Providing input on construction means and methods to design packages	Ensures practical designs that support planned construction approaches
Constructability, operability and pricing reviews of design documents	Ensures design documents are implementable and will achieve intended purpose

**Design Support During Construction.** *Engineering staff continue to support construction to ensure design intent is achieved.*

Design Support During Construction	Benefit
Preparation of subcontractor scope of work	Ensures translation of design requirements into subcontractor scope of work
Assignment of design engineer(s) on-site, as required	Provides assistance in interpretation of design requirements and responding to field changes
Providing support due to field changes requiring design changes	Ensures consistency of design changes with intent of original design
Providing and verifying final as-built drawings	Provides correlation between original design, design changes, and as-built construction



3.4 Experience of the Offeror's Team

### 3.4 | EXPERIENCE OF OFFEROR'S TEAM

As previously mentioned, both LANE and PB are among the nation's top ranked firms in their respective disciplines. Together and individually, we have designed, built and maintained some of our country's most important infrastructure. Each firm has achieved a widely recognized level of success by paying specific attention to detail in controlling, managing, and executing their work. Bringing this team together for the I-64 Widening project unifies the abilities of each to perform in a complimentary manner based on our past performance together. The blend of similar projects that we have worked on individually and/or collectively in the region and with the agencies involved confirms our qualifications to successfully deliver all elements of the I-64 Widening project.

Our Team's impressive D-B success on similar, major transportation projects are described in the Work History Forms in Attachment 3.4.1. We have interstate widening experience in Virginia and throughout the Southeast. The Team has designed and constructed projects in highly-congested urban areas: Richmond and Hampton Roads, Virginia; Charlotte and Raleigh North Carolina; and Orlando, Florida. The Team's comprehensive project experience with similar design and construction challenges will allow our key staff to apply their lessons learned to benefit the I-64 Widening Project.

Our Work History Forms demonstrate that we have the experience to understand the traffic, environmental, and stormwater factors associated with interstate widening projects. We also have a well-established working relationship with local regulatory organizations from our local experience. The table below illustrates additional Team experience on several projects with elements similar to the I-64 Widening Project.

Project	Contract Value (\$M)	Interstate Widening	Design-Build	Traffic Management in an Urban Corridor with an ADT > 60K	Phased Construction	Environmental Permitting	Innovative SWM / ROW Minimization
I-495 Express Lanes, Fairfax County, VA (VDOT)*	\$1400	✓	✓	✓	✓	✓	✓
I-95 Express Lanes, Fairfax to Stafford, VA (VDOT)*	\$726	✓	✓	✓	✓	✓	✓
I-85 Widening, Cabarrus County, NC (NCDOT)*	\$145	✓	✓	✓	✓	✓	✓
I-264 /MLK Expressway Extension Portsmouth, VA (VDOT)*	\$200	✓	✓	✓	✓	✓	✓
I-10 Val Vista Road Widening Casa Grande, AZ (ADOT)*	\$32	✓		✓	✓	✓	✓
I-85 Widening, Cabarrus County, NC (NCDOT)*	\$187	✓	✓	✓	✓	✓	✓
I-295 at Meadowville Road Widening, Chesterfield County, VA (VDOT)	\$11.8	✓	✓	✓	✓	✓	✓
I-85 Reconstruction Davidson County, NC (NCDOT)	\$66	✓	✓	✓	✓	✓	✓
I-275 Reconstruction from SR 60 to Hillsborough River, FL (FDOT)	\$218	✓	✓	✓	✓	✓	✓
I-4 Ultimate Widening, FL (FDOT)	\$2300	✓	✓	✓	✓	✓	✓
I-40 Widening, Raleigh, NC (NCDOT)	\$39	✓	✓	✓	✓	✓	✓

(\*denotes projects included in the Work Histories)

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## Local Experience

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Our Team has extensive experience with the design and construction of interstate widening projects, including several in the Richmond Area. LANE and PB have recent and relevant awarded winning experience with D-B Projects in the VDOT Richmond District. This includes the the award winning design of the widening of Meadowville Road and I-295 in Chesterfield County that was recognized with a Merit Award at the 2013 DBIA National Conference. The project included 1.1 miles of widening, intersection improvements with the addition of turn lanes, and two signalized intersections. PB was also responsible for the design of roadway, drainage, erosion and sediment control, utility coordination, design management, traffic control plans and structures.

LANE is currently constructing the \$47M D-B Bus Rapid Transit (BRT) system in the City of Richmond. The 7.6-mile corridor begins on Broad Street near Willow Lawn Drive in Henrico County and extends east to 14th Street in the City of Richmond. Similar to the I-64 Widening project, the BRT project includes extensive coordination with local utilities, complex MOT, and pavement reconstruction.

For the Route 60 Widening (Midlothian Turnpike) Design-Build project, PB provided a full range of engineering design services for the widening of a 1.27 mile section of urban arterial from four lanes to six lanes. The project also included adding additional turn lanes, signal modifications at two existing intersections, bridge widening, scour analysis, new storm drain, landscaping, and environmental permitting. A key component of the project was to accelerate the design deliverables to allow the design-builder to meet aggressive project milestones. Signalization, drainage, right-of-way, and utility packages were advanced and approved for construction within 4-months. Coordinating the design to minimize utility impacts was also vital to maintain the project schedule and budget. This project was recently recognized with a Honorable Mention by the 2016 VTCA Transportation Engineering-Awards for Design-Build.

Additionally, PB has been working with the VDOT Richmond District through tasks under PB's Statewide On-Call Contract for New Bridge Design, the Meadowville Interchange Project, and the Midlothian Turnpike Design-Build Project. Over 23 tasks have been completed including Route 654 over Swift Creek, Route 651 over Crump Creek, and Route 617 over Saylers Creek in the Richmond District. These projects have allowed our staff to develop a working relationship with VDOT staff in the Richmond District.

### 3.4.1 Work History Forms

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Work History Forms (Attachments 3.4.1(a) and (b)) as required for LANE (Lead Contractor) and PB (Lead Designer) are included in the Appendix.



## 3.5 | PROJECT RISKS

The LANE Team has carefully considered the critical elements of work for the I-64 Widening project to determine the three most critical project risks. During our evaluation of potential risks, we considered numerous risks including: bridge widening and rehabilitation, maintenance of traffic, existing pavement conditions, public relations, geotechnical, stormwater management, environmental permitting, right of way acquisition, and agency coordination. We concluded that **Maintenance of Traffic, Environmental Permitting, and Stormwater Management** are the three most critical risks that must be properly mitigated to ensure the success of the project.

### Risk No. 1 – Maintenance of Traffic

**Risk Identification:** The LANE Team considers Maintenance of Traffic (MOT) the most critical risk associated with the construction of the I-64 Widening project. The majority of the project length, I-64 has a minimal left shoulder, a forested median, and two travel lanes in each direction. This congested project corridor has an annual average daily traffic (2015 AADT) volume of 71,000 vehicles, a high percentage of commercial truck traffic at 9%, and is a busy commuter and tourist route. The congestion currently experienced in the corridor is compounded by the traffic diverges/merges associated with the adjacent systems interchange at I-295/I-64 as well as the truck weigh stations located within the project limits. Work zones and changing traffic patterns create a high potential for incidents if MOT is not properly planned and implemented. In addition, these work zones create an added risk due to the ingress/egress of personnel and equipment to/from the left travel lanes.

**Why Maintenance of Traffic is a Critical Risk and Impacts to the Project:** The I-64 Widening Project will have high volumes of traffic operating immediately adjacent to the work zone. This poses a significant risk to the Project Team. Changes in the traffic patterns along I-64 increase the potential for additional queuing along the interstate and adjacent interchanges. Additionally, implementation of the work zone, and access to the median work zone are all challenges that must be addressed in the MOT plans. **MOT during construction is a critical risk since implementation of the work zone will both decrease functional capacity on I-64 and increase the potential for accidents.**

Construction adjacent to I-64 in the median will be a source of distraction for drivers. The limited project footprint will necessitate extensive use of precast traffic concrete barrier to protect the construction workers and motorists. The use of concrete barrier will narrow the roadway recovery area and create a less forgiving environment for traffic due to additional objects in the clear zone. Experience shows that the implementation of the MOT plan often results in congestion and queueing in places where it did not previously occur, exacerbating existing problem areas.

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

- Create additional issues at already congested systems interchange at I-64/I-295 and at the weigh stations located within the project corridor.
- Increase traffic queuing
- Change the location of traffic queues
- Increase the potential for crashes

In reviewing the plans provided in the RFQ, construction in the median, bridge widening, and providing access to the weigh station are critical elements that must be included in the implementation of a MOT plan.

The nature of a median work zone isolated between interstate traffic with construction activity that will require large volumes of materials to be trucked in/out of the work zone. The existing median is heavily vegetated with trees in excess of 18-inches in diameter and will also require more than six feet of excavation to accommodate the widening. The clearing of these trees will likely require night-time lane closures. Ingress/Egress of truck traffic will require safe access into and out of the work zone.

Access to the median work zone from I-64 will require that adequate acceleration and deceleration lengths be provided along I-64. This will result in trucks exiting and entering the left lanes of I-64 thus impacting traffic

flow. These access lanes will need to be separated by barrier to prevent drivers from entering the work area. The barrier will require that traffic be shifted onto the strengthened outside shoulder, reducing shoulder widths.

The RFQ plan indicates that bridge B-624 and B-625 that span approximately 262' over the Chickahominy River will be widened and rehabilitated to accommodate widening of I-64. These bridges were built in 1966 using the 4' wide shoulder that was the design standard for that time. Today, widening and rehabbing bridges built in the 1960's offers challenges for maintaining traffic. Traffic will need to be shifted onto the narrow 4' outside shoulder. Roadway barriers on both sides of traffic along with heavy bridge construction immediately adjacent to traffic is an area of the project with a higher potential for incidents.

Maintaining access to the weigh stations located within the project corridor will require careful consideration and coordination during construction. Weigh stations present the following issues that will affect traffic operations in the corridor during construction;

- Heavy vehicles merging into a congested work zone
- Maintaining operation of the ITS equipment and infrastructure associated with the weigh station
- Modifications to the acceleration/deceleration areas for the weigh stations
- Modifications to the existing pedestrian tunnel to accommodate median widening

The weigh stations will require coordination with the Department of Motor Vehicles (DMV) during all phases of construction.

**Risk Mitigation Strategy:** Our Team will implement multiple MOT strategies that we have successfully utilized on previous interstate widening projects to mitigate the impact of construction activities on traffic safety and congestion. Our number one goal is to use our proven strategies to provide access to the median work zone that will minimize the interface between construction traffic and the traveling public. In addition, we will develop an outreach and communication plan with the public, implement appropriate MOT devices, and dedicate a MOT maintenance crew to maintain all MOT measures and assist with incidents that may occur. We will leverage these and other strategies that our team has learned from our collective experience in similar congested interstate corridors and apply those innovations as appropriate.

An innovative work zone traffic control access plan is critical on this project due to the high traffic volumes on I-64 within the project corridor and especially during peak tourism periods. Safe and efficient access to the median work zone is critical to advancing the construction activities and maintaining the project schedule, while not further reducing the level of service for motorists. In order to provide a concrete barrier protected construction zone in the median and maintain two lanes of traffic in each direction, we will need to strengthen the outside shoulder to shift traffic to the outside.

The work zone access component of this risk results from high speed traffic interfacing with lower speed construction traffic as it enters and exits the work zone. LANE has successfully mitigated this risk in a number of ways. For example, on the LANE I-85 Widening Project, we developed an innovative and award winning MOT plan that created a temporary bridge over the interstate travel lanes to provide direct access for construction traffic into the median. This approach totally eliminated conflicts with the traveling public. The project has won multiple awards including the TransOvation Award from the American Road and Transportation Builders Association (ARTBA).



For this I-64 Widening project, the LANE Team has already investigated a plan to access the work zone by means other than through the mainline travel lanes. This plan will bring the same high-level safety and congestion mitigation to this project as was implemented on the I-85 project. Sight distance, merging conditions at nearby ramps and truck weigh stations will be analyzed in determining all ingress/egress locations. We will

also work with VDOT and the State Police for incident management purposes to determine the required number and location of crossovers needed for first responders. Although our primary mitigation measure will be to minimize ingress/egress to the work zone from the mainline, there may be localized areas where access may be required from the mainline travel lanes. On similar projects we have mitigated this issue by “pre-constructing” sections of the inside widening to use as acceleration/deceleration lanes for construction vehicles rather than turning directly from the mainline lanes.

We have investigated a number of other innovative approaches for addressing the challenges associated with MOT and work zone access that will be developed further and discussed with VDOT during the technical proposal phase. Once vetted, these approaches will be detailed in the Transportation Management Plan (TMP) to be developed prior to initiation of construction activities. The TMP and MOT plans will consider elements including appropriate lane widths, speed limits, signage, pavement markings, tapers, barrier type and placement. As part of this effort, we will also consider existing I-64 traffic patterns, high crash locations, and peak travel times to develop emergency and incident contingency plans.

After initial development of the TMP and MOT plans, the LANE Team will continually evaluate and update these plans as the project conditions warrant. The TMP will be developed as a living document, initially describing the MOT Design, and documenting the effectiveness of measures taken and identifying potential issues and methods of improvements.

A critical part of our TMP is including extensive communications with the traveling public. An effective Public Communications Plan and a strong public outreach effort will help keep motorists and stakeholders informed of construction progress as well as upcoming changes to traffic patterns. On the Midtown Tunnel Project, PB successfully coordinated the relocation of the truck inspection station adjacent to the tunnel. Our MOT plan designed the temporary relocation of the building and communications infrastructure while our TMP outlined the third party coordination required for the contractor during the implementation.

The LANE Team is committed to mitigating the Maintenance of Traffic risk on this project using our experienced design and construction professionals who all have recent and relevant work experience. Our focus will be to maximize both safety and mobility throughout the project corridor throughout the construction period.

**Role of VDOT and Other Agencies:** We do not anticipate any additional effort for VDOT or other agencies beyond providing typical plan reviews and approvals, and public notification of lane restrictions and changes in traffic patterns. We will also request that appropriate DMV personnel attend regular stakeholder meetings to support coordination efforts with the truck weigh station. In addition, the Team will work with New Kent County and Henrico County officials as needs arise, and coordinate our work closely with the Virginia State Police.

## Risk No. 2 – Environmental Permitting

**Risk Identification:** There are multiple natural and human resources environmental factors in the project area including wetlands, streams, battlefields, archeology sites, and threatened and endangered species within or proximal to the I-64 Widening project corridor. Successful navigation and resolution of the regulatory requirements for these resources during project design and construction are critical to the project budget and schedule.

**Why Environmental Permitting is a Critical Risk and the Impacts to the Project:** Based on the information provided in the Final Environmental Impact Statement (FEIS), VDOT’s Record of Decision (ROD) request, and a field review of the RFQ conceptual design plans, the project may impact up to 6.75 acres of jurisdictional wetlands and up to 2,155 linear feet of stream channel. Our analysis of the RFQ plan sheets (which depict unverified surface waters resources within the project area) show that the majority of these potential impacts can be avoided. All unavoidable impacts to Waters of the US including wetlands will require a Clean Water Act Section 404 permit from the US Army Corps of Engineers (USACE), a Section 401 permit from Virginia Water Protection (VWP) Permit from the Virginia Department of Environmental Quality (VDEQ), and a Subaqueous Bottomlands Permit from the Virginia Marine Resource Commission (VMRC). Obtaining these permits is a critical risk both from a project schedule standpoint and minimizing the cost of compensation/mitigation.

The presence of any threatened or endangered (T&E) species in the vicinity of the corridor requires close coordination with natural resource agencies. The EIS and the ROD request documents indicate that swamp pink (*Helonias bullata*) and the northern long-eared bat (*Myotis septentrionalis*) may occur along the corridor. Coordination with US Fish & Wildlife Service (USFWS) will be required to determine if these species are present and if they could be impacted by the project. A habitat study conducted by our Team’s qualified surveyors may be required for the swamp pink. The LANE Team anticipates that a “may affect, not likely to adversely affect” determination for proposed/listed species without conservation measures will be obtained from the USFWS. Therefore, we do not anticipate any adverse impacts to project design, construction, or schedule from T&E species. The LANE team has great working relationships with key agency personnel involving T&E project deliverables, success outcomes, and extensive hands-on agency coordination experience. Our Team personnel are well-trained, seasoned senior staff intimately familiar with the project area, its T&E resources, and how they affect the permitting process and environmental commitments.

Savage’s Station Battlefield and Cold Harbor Battlefield occupy much of the property surrounding the proposed section. The Virginia Department of Historic Resources (DHR) has concurred that there would be no adverse effect to these resources. DHR also concurred with the potential *de minimis* finding under Section 4(f). The FEIS also identified six archaeological sites within or adjacent to the proposed section. DHR concurred that these properties were either not eligible or potentially eligible for listing in the National Register of Historic Places. These sites would be addressed through the commitments made in the Programmatic Agreement (PA), included in the FEIS, prior to construction. We understand that many of the PA requirements have been addressed and that VDOT is completing additional archeological investigations of the project area.

The LANE Team does not anticipate significant changes to the project limits of disturbance shown on the concept plans; therefore, there should be no significant effects on cultural or 4(f) resources. However, should the situation arise, the LANE Team will have a qualified archeologist on-call to assist in the event new archeological resources are discovered during project construction.

**Risk Mitigation Strategy:** The LANE Team has an exemplary track record in successful planning, permitting, and completion of environmentally-sensitive transportation projects for FHWA, VDOT and others throughout the Commonwealth. This has been achieved through (1) inter-disciplinary review teams to ensure management effectiveness using tight quality controls and rapid response to evolving project challenges; (2) implementation of a proven and efficient permitting process, incorporating increased agency coordination to reduce project “drag”; (3) immediate analyses of potential critical issues (e.g., threatened and endangered species; cultural resources; fisheries, time of year restrictions, surveys and monitoring plans, noise abatement) to eliminate/reduce project impacts and early planning of mitigation measures; (4) incorporation of compliance reporting and documentation schedules/requirements using project-specific formwork to streamline the entire range of the permitting process; and (5) special attention to the project environmental commitments through step-wise milestone reviews and technical submissions to/from transportation and resource agencies, and involved third-party interests.

The LANE Team is committed to avoiding and minimizing impacts to aquatic resources and will fully evaluate the following avoidance and minimization opportunities in an effort to reduce impacts below the threshold limits from a VWP-3 and a State Programmatic General Permit (SPGP):

- Construction within median
- Minimizing the number of stormwater management (SWM) facilities and locating the SWM facilities outside of jurisdictional areas
- Minimizing impacts from SWM outfalls
- Retrofitting/rehabilitating existing culverts to maintain connectivity and hydrologic function, and to avoid culvert replacements and the associated impacts.
- Strategic use of retaining and MSE walls, and guard rails to reduce fill slopes

On the MLK Extension project PB and EEE worked closely together to successfully mitigate environmental permitting challenges that were similar to those found on the I-64 Project. The proximity of 4(f) properties as well as properties with historic significance, which included a pauper’s cemetery and the Historic Calvary

Baptist Church required documentation and monitoring during construction that was successfully navigated by our team.

It is noted that USACE is considering raising the impact threshold for SPGP. Reducing the impacts to qualify for a VWP-3 and SPGP would reduce the water resource permitting critical pathway schedule by more than 50%. As part of this permitting process, a Coastal Zone Management Area Program consistency determination will be obtained. Compensatory mitigation will be obtained from an approved mitigation bank in the approved service area.

The LANE Team has specific experience with wetland delineation and permitting in the I-64 corridor. Our environmental permitting specialist, 3e completed wetland delineations and threatened and endangered species studies as part of the FEIA. In addition, 3e completed all water resource delineation and permitting for the I-64 Segment II project (Williamsburg to Newport News). On the I-64 Segment II project, 3e was able to obtain a jurisdictional determination within a few weeks and Individual Section 401 and 404 permits from the VDEQ and USACE within approximately two months. The LANE Team will utilize our relationships with the permitting and resource agencies to initiate early coordination in order to identify specific areas of agency concern and to develop reasonable solutions to permitting completion. The Joint Permit Application (including permit sketches) will be developed during the earliest stages of the project design for timely agency review and coordination submittals.

As part of the permitting process, the LANE Team will work closely with the natural resource agencies to determine the requirements for all relevant species and will develop measures to avoid potential impacts as necessary.

**Role of VDOT and Other Agencies:** The LANE Team will coordinate with VDOT District Environmental staff to ensure that the commitments in the FEIS and ROD are followed and the appropriate documentation is provided. We plan to initiate an early coordination meeting with VDOT, USACE, and VDEQ to establish a specific plan and schedule to meet the project requirements early in the design process. We will also complete an ESA Section 7 consultation with the USFWS and Virginia Department of Game and Inland Fisheries early in the design phase to resolve any issues including the time of year restriction for threatened & endangered species. The LANE Team will maintain regular communication with all the agencies to ensure any issues are addressed as quickly as possible.

### Risk No. 3 – Stormwater Management

**Risk Identification:** The I-64 Widening project is located in the Chickahominy River Higgins Swamp watershed (Hydrological Unit Code JL20) with crossings over both the Chickahominy River and Boar Swamp. Potential issues associated with stormwater management and drainage include; additional right of way impacts for stormwater management facilities and outfalls, offsite impacts due to increased head and tailwater elevations, and unforeseen conditions of existing box culverts/pipes to be extended and/or retained.

#### Why Stormwater Management is a Critical Risk and Impacts to the Project:

Stormwater management and drainage are a critical risk to the project due to the additional right of way impacts caused if requirements for stormwater management compliance cannot be completely achieved in the areas proposed in the preliminary design provided with the RFQ documents. Requirements of stormwater management facilities provide specific size requirements as well as limit the amount of contributing drainage area that each facility can treat. Also, navigating the review and approval process to obtain a Virginia Pollutant Discharge Elimination System (VPDES) General Construction Permit for Discharges of Stormwater from Construction Activities could delay construction. The design of stormwater management facilities poses a risk to the project from a permitting standpoint as this land disturbing activity must comply with Virginia Stormwater Management Program (VSMP) regulations (VDEQ 9VAC25-870). Per these regulations and VDOT IIM-LD-242.5, this construction project will require an approved Stormwater Pollution Prevention Plan (SWPPP) package which includes an approved stormwater management plan, approved erosion and sediment control plan

**PB designed the stormwater management in the median for Dominion Boulevard Improvements, Chesapeake, VA**



and a pollution prevention plan to obtain the VPDES Construction permit. Based off the preliminary design, approximately 40 acres of land will be disturbed during construction. It's anticipated that the project will be grandfathered and therefore need to comply with Technical Criteria IIC of the stormwater management regulations for water quality as well as meet the Energy Balance Equation for water quantity. The risk associated with this is if the construction is not complete by June 30, 2019, any portion of the project not constructed would have to be redesigned to Technical Criteria IIB of the regulations. This could cause additional costs and schedule delay for the project.

Meeting the Energy Balance Equation requirement could be a potential risk because when the additional lane and shoulder is widened into the median, the width of the existing median may be reduced to a width that will not feasibly house the approved stormwater management facilities. In addition, it is anticipated that some areas within the proposed median will have high groundwater elevations based on the amount of wetlands identified in the preliminary plans. High groundwater limits the type of linear stormwater management facility that can be used and eliminates opportunity for runoff volume reduction. If the review agency does not approve the stormwater management facilities proposed for the project, there is a risk that new locations for stormwater will adversely impact right of way. Acquisition of additional right of way or easements could delay the project schedule and construction activities.

**Risk Mitigation Strategy:** For this risk, the project team will identify potential stormwater management facility locations within the median, upstream from existing outfalls, which utilize check dams to achieve water quantity requirements. Additional locations outside the median or adjacent to existing interchange ramps within VDOT's right-of-way will be identified. Identifying feasible stormwater facility locations will be the first critical step in the design in order to determine where to obtain infiltration rates and water table elevations from early geotechnical investigations. By considering more practical linear options such as grass channels and wet swales our team will be able begin design of stormwater facilities early in the design phase. Our Team has recent experience with achieving stormwater management compliance within road right of way by using linear stormwater management facilities in the median on the Dominion Boulevard Improvements project in Chesapeake, Virginia. Compliance was met using grass channels with check dams in the median and wet swales with check dams along the outside shoulder of this 2.2-mile roadway widening project.

Another mitigation strategy is to develop a hierarchy of stormwater facility alternatives that have been approved by VDOT, non-proprietary and proprietary, for use on linear transportation projects. On previous design-build projects, the approval agency has approved stormwater management and erosion and sediment control design packages ahead of final roadway plans and issue a permit; however, their current practice is to require that all design packages be submitted in order for a permit to be issued. Therefore, while the stormwater management design will begin early in the process, the design must be flexible to accommodate design changes that may include the need for soundwalls or the weigh station ramps both located outside the median. The stormwater facility hierarchy will allow stormwater management designs to be modified to meet VSMP requirements without impacting the schedule. In addition, by choosing approved stormwater facilities our team will be able to provide the required reduction without the need for exceptions or waivers.

Our last mitigation strategy will be to identify offsite stormwater management compliance options with the understanding that 75% of the water quality requirements must be met onsite. Both the I-295 and Bottoms Bridge intersections are located in the same HUC as the project. These interchanges will be analyzed to determine potential stormwater management facility locations, for example around the perimeter of the cell phone tower site as well as locations identified between the ramps on Sheet 3 of the preliminary design, to meet compliance. These potential areas will avoid forested areas and instead focus on existing managed turf areas to increase the amount of pollutant removal.

**Role of VDOT and Other Agencies:** If all land disturbance and stormwater compliance remains within VDOT right of way and/or easement, VDOT will be the review and approval agency. Our Team will facilitate early coordination with VDOT regarding stormwater management compliance and mitigation strategies to avoid redesign and keep the project on schedule. We will also look to VDOT for available inspection reports for existing drainage systems to determine if the systems are reusable to minimize lane closures and avoid impacts to traffic during construction.





**ATTACHMENT 3.1.2**

**Project: 0081-095-038, Contract ID#: C00107116DB85**

**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.

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
<b>Statement of Qualifications Checklist and Contents</b>	Attachment 3.1.2	Section 3.1.2	no	Appendix Attachment 3.1.2
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix Attachment 2.10
<b>Letter of Submittal (on Offeror's letterhead)</b>				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 2
Offeror's Point of Contact information	NA	Section 3.2.2	yes	Page 1
Principal Officer information	NA	Section 3.2.3	yes	Page 2
Offeror's corporate structure	NA	Section 3.2.4	yes	Page 2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix Attachment 3.2.6
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix Attachment 3.2.7(a) & 3.2.7(b)

**ATTACHMENT 3.1.2**

**Project: 0081-095-038, Contract ID#: C00107116DB85**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Page 2 & Appendix
Evidence of obtaining bonding	NA	Section 3.2.9	no	Page 2

<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	Appendix
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	NA
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
<b>Offeror's Team Structure</b>				
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix Attachment 3.3.1
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix Attachment 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix

**ATTACHMENT 3.1.2**

**Project: 0081-095-038, Contract ID#: C00107116DB85**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<b>Statement of Qualifications Component</b>	<b>Form (if any)</b>	<b>RFQ Cross reference</b>	<b>Included within 15-page limit?</b>	<b>SOQ Page Reference</b>
				Attachment 3.3.1
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix Attachment 3.3.1
Organizational chart	NA	Section 3.3.2	yes	Page 4
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 4-7
<b>Experience of Offeror's Team</b>				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix Attachment 3.4.1(a)
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix Attachment 3.4.1(b)
<b>Project Risk</b>				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 10-15



**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

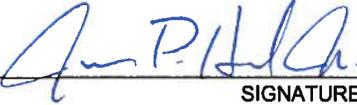
RFQ NO. C00107458DB95  
PROJECT NO.: 0064-043-602

**ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA**

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

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

1. Cover letter of RFQ – November 3, 2016  
(Date)
2. Cover letter of RFQ Addendum No. 1 – November 30, 2016  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

 _____ SIGNATURE	<u>12-15-16</u> _____ DATE
<u>JOHN P. HAVEL JR.</u> _____ PRINTED NAME	<u>PURSUIT MANAGER</u> _____ TITLE



Affiliated and Subsidiary Companies

## ATTACHMENT 3.2.6

**State Project No. 0064-043-602, C00107458DB95**

### **Affiliated and Subsidiary Companies of the Offeror**

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

<input type="checkbox"/> <b>The Offeror does not have any affiliated or subsidiary companies.</b>		
<input checked="" type="checkbox"/> <b>Affiliated and/ or subsidiary companies of the Offeror are listed below.</b>		
<hr/>		
Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
ULTIMATE PARENT COMPANY	Salini Impregilo, S.p.A.	Via dei Missaglia, 97 – 20142 Milan, Italy
GRANDPARENT	Salini-Impregilo US Holdings, Inc.	2711 Centerville, Suite 400 Wilmington, DE 19808
PARENT COMPANY	Lane Industries Incorporated	90 Fieldstone Court Cheshire CT 06410
AFFILIATE	Lane Worldwide Infrastructure, Inc.	90 Fieldstone Court Cheshire CT 06410
AFFILIATE	Lane Infrastructure. Inc.	90 Fieldstone Court Cheshire, CT 06410
AFFILIATE	Lane International, B.V.	Prins Bernhardplein 200 1097 JB Amsterdam, the Netherlands
AFFILIATE	Lane Mideast Contracting, LLC	P.O. Box 35243 Abu Dhabi, UAE Makeen Tower Corner of 9th and 10th Streets
AFFILIATE	Lane Mideast, Qatar, LLC	Grand Hamad Street Bin Al Sheikh Bldg., 3rd Floor Doha, Qatar
SUBSIDIARY	S.A. Healy Company	901 N. Green Valley Parkway, Suite 260 Henderson, NV 89074

## **ATTACHMENT 3.2.6**

### **State Project No. 0064-043-602, C00107458DB95**

#### **Affiliated and Subsidiary Companies of the Offeror**

JOINT VENTURE (30% PARTNER)	Skanska-Granite-Lane	295 Bendix Road, Suite 400 Virginia Beach, VA 23452
JOINT VENTURE (30% PARTNER)	I4 Leasing, LLC	295 Bendix Road, Suite 400 Virginia Beach, VA 23452
JOINT VENTURE (35% PARTNER)	Fluor-Lane 95, LLC	6700 Las Colinas Blvd. Irving, TX 75039
JOINT VENTURE (20% PARTNER)	AGL Constructors	929 West Adams Street Chicago, IL 60607
JOINT VENTURE (25% PARTNER)	Gemma-Lane Liberty Partners	769 Hebron Avenue Glastonbury, CT 06033
JOINT VENTURE (25% PARTNER)	Gemma-Lane Patriot Partners	769 Hebron Avenue Glastonbury, CT 06033
JOINT VENTURE (51% MANAGING PARTNER)	Lane-Abrams Joint Venture	3001 Meacham Boulevard, Suite 215 Fort Worth, TX 76137
JOINT VENTURE (60% MANAGING PARTNER)	Lane-Corman, A Joint Venture	90 Fieldstone Court Cheshire, CT 06410
JOINT VENTURE (30% PARTNER)	Purple Line Transit Constructors, LLC (PTLC)	6811 Kenilworth Avenue East Riverdale, MD 20737
JOINT VENTURE (45% PARTNER)	Fluor-Lane South Carolina	100 Fluor Daniel Drive Greenville, SC 29607
TRADE NAME	Civil Wall Solutions, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Cold River Materials, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Lane Concrete Frames, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410

**ATTACHMENT 3.2.6**

**State Project No. 0064-043-602, C00107458DB95**

**Affiliated and Subsidiary Companies of the Offeror**

TRADE NAME	Prestress of the Carolinas, A Division of the Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Senate Asphalt, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Virginia Paving Company, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Virginia Sign and Lighting Company, Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410



**ATTACHMENT NO. 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**

**Project No.: 0064-043-602**

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.

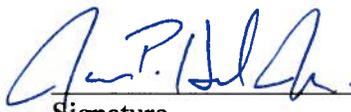
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under 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.



Signature

December 15, 2016

Date

Pursuit Manager

Title

The Lane Construction Corporation

Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

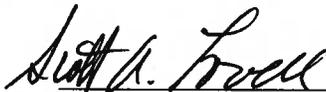
**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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.

 12/02/2016  
\_\_\_\_\_  
Signature Date

Vice President  
\_\_\_\_\_  
Title

Parsons Brinckerhoff, Inc.  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**

**Project No.: 0064-043-602**

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.

gn. Kowalko      12/8/16      PRINCIPAL  
Signature                      Date                      Title

CES CONSULTING LLC  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

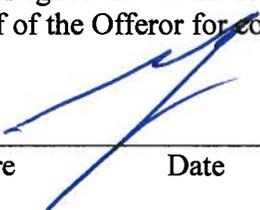
**Project: I-64 Widening Exit 200 to 205**

**Project No.: 0064-043-602**

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.

	12/8/16	VP of Business Development
_____ Signature	_____ Date	_____ Title

DIW Group, Inc. t/a Specialized Engineering  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**

**Project No.: 0064-043-602**

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.

*Shawn Ward Hanks*

11/29/2016

Sr. Vice President

Signature

Date

Title

EEE Consulting, Inc.

Name of Firm

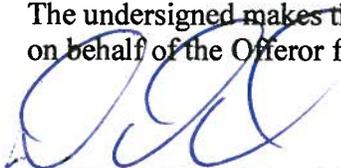
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

- 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.

	12/9/16	
Signature	Date	Vice President
		Title

Geotechnical Engineering and Testing Solutions, Inc., dba GET Solutions, Inc.  
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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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

November 22, 2016

Date

Vice President

Title

H&B Surveying and Mapping, LLC  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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- 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.

	11/23/16	President & CEO
Signature	Date	Title

Harris Miller Miller & Hanson Inc.  
Name of Firm

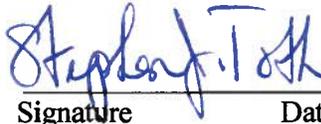
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

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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.



December 8, 2016

Chief Operating Officer

Signature

Date

Title

O. R. Colan Associates, LLC  
Name of Firm

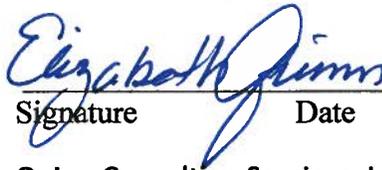
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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- 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.

	November 22, 2016	President
Signature	Date	Title
Quinn Consulting Services, Inc.		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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

      12/7/2016      MANAGING PRINCIPAL  
Signature                      Date                      Title

RHODESIDE & HARWELL, INCORPORATED  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Widening Exit 200 to 205**  
**Project No.: 0064-043-602**

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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.

Wendy Campbell      11/29/16  
Signature                      Date

Public Relations Specialist  
Title

Seventh Point Transportation PR  
Name of Firm



Offeror's Prequalification Certificate



COMMONWEALTH OF VIRGINIA



## CERTIFICATE OF QUALIFICATION

### THE LANE CONSTRUCTION CORPORATION

Vendor Number: **L002**

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; UNDERGROUND UTILITIES; ASPHALT CONCRETE PAVING

Issue Date: June 30, 2016

This Rating and Classification will Expire: June 30, 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.



**Zurich American Insurance Company  
Fidelity and Deposit Company of Maryland  
Liberty Mutual Insurance Company**

December 7, 2016

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

**RE: The Lane Construction Corporation  
Request for Qualifications  
I-64 Widening Exit 200 to 205 From: Interstate 295 To: Exit 205 (Bottom Bridge), Henrico and New Kent  
Counties, Virginia; State Project No.:0064-043-602; Federal Project No.: NHPP-064-3 (499)  
Contract ID Number: C00107458DB95  
Estimated Contract Price: \$55,000,000.00**

To Whom It May Concern:

This letter will serve to confirm that The Lane Construction Corporation is a highly regarded and valued client of the sureties, Zurich American Insurance Company (A.M. Best Financial Strength Rating of A+/Superior and Financial Size Category XV), Fidelity and Deposit Company of Maryland (A.M. Best Financial Strength Rating of A+/Superior and Financial Size Category XV) and Liberty Mutual Insurance Company (A.M. Best Financial Strength Rating of A/Excellent and Financial Size Category XV), the 'co-sureties'. Each surety company is licensed to conduct surety business in the Commonwealth of Virginia, and each surety company holds a Certificate of Authority as listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) dated July 1, 2016.

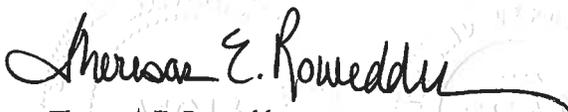
As the sureties for The Lane Construction Corporation, we advise that The Lane Construction Corporation is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided 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.

Naturally, as is customary within the surety industry, the issuance of any bonds is contingent upon a favorable underwriting review of project specifics including, but not limited to, the contract terms, conditions, documents, bond forms and confirmation of complete project financing by both The Lane Construction Corporation and its co-sureties at the time a request for bonds is made. We assume no liability to third parties or to you by issuance of this letter, should bid or final bonds not be issued.

Should you need additional assurance regarding the technical ability or bonding capacity of The Lane Construction Corporation, please do not hesitate to contact this office.

Sincerely,

Zurich American Insurance Company  
Fidelity and Deposit Company of Maryland  
Liberty Mutual Insurance Company



Theresa E. Rowedder  
Attorney-in-Fact

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

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **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 **Kevin A. WHITE, Mark P. HERENDEEN, Jean CORREIA, Maria CHAVES, Theresan E. ROWEDDER, Bryan HUFT and Jane GILSON, all of Boston, Massachusetts, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 21st day of July, A.D. 2016.

ATTEST:

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



By: *Eric D. Barnes*

*Gerald F. Haley*

*Secretary  
Eric D. Barnes*

*Vice President  
Gerald F. Haley*

State of Maryland  
County of Baltimore

On this 21st day of July, 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, deposed and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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

*Maria D. Adamski*



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

**EXTRACT FROM BY-LAWS OF THE COMPANIES**

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

**CERTIFICATE**

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 14 day of DECEMBER, 2016.



Michael Bond, Vice President

**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. 7425121

American Fire and Casualty Company  
The Ohio Casualty Insurance Company

Liberty Mutual 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 and appoint, Brian Driscoll; Bryan Huft; Gregory J. Steele; Jane Gilson; Jean Correia; Jeffrey Hendricks; Kevin A. White; Maria Chaves; Mark P. Herendeen; Therasan E. Rowedder

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 19th day of July, 2016.



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

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

STATE OF PENNSYLVANIA ss  
COUNTY OF MONTGOMERY

On this 19th day of July, 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.



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

By: Teresa Pastella  
Teresa Pastella, Notary Public

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

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

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

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

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

I, 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 17th day of DECEMBER, 2016.



By: Gregory W. Davenport  
Gregory W. Davenport, Assistant Secretary

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

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



## ATTACHMENT 3.2.10

### State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634

#### SCC and DPOR Information

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

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
<b>Business Name</b>	<b>SCC Information (3.2.10.1)</b>			<b>DPOR Information (3.2.10.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
<b>The Lane Construction Corporation</b>	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Contractor Class A	2701011871	2018-01-31
<b>The Lane Construction Corporation</b>	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Business Entity Registration	0407002174	2017-12-31
<b>The Lane Construction Corporation</b>	F0254476	Foreign Corporation	Active	14500 Avion Parkway, Suite 200 Chantilly, VA 20151	Business Entity Branch Office Registration	0411000988	2018-02-28
<b>Parsons Brinckerhoff, Inc.</b>	F0501603	Foreign Corporation	Active	277 Bendix Rd. Suite 300 Virginia Beach, VA 23452	Business Entity Branch Office Registration	0411000137	02-28-2018
<b>CES Consulting, LLC</b>	S3416007	Limited Liability Company	Active	23475 Rock Haven Way Suite 255 Dulles, VA 20166	Business Entity Registration	0407005783	12-31-2017
<b>DIW Group, Inc. (dba Specialized Engineering)</b>	F1281908	Foreign Corporation	Active	4845 International Blvd Suite 104, Frederick, MD 21703	Business Entity Registration	0407004748	12-31-2017
<b>EEE Consulting, Inc.</b>	05049416	Corporation	Active	201 Church St. Blacksburg, VA 24060	Business Entity Branch Office Registration	0411000435	02-28-2018
<b>EEE Consulting, Inc.</b>	05049416	Corporation	Active	8525 Bell Creek Rd. Mechanicsville, VA 23111	Business Entity Registration	0407003798	12-31-2017
<b>Geotechnical Environmental Testing Solutions, Inc.</b>	05418470	Corporation	Active	1592 Penniman Rd. Suite E Williamsburg, VA 23185	Business Entity Branch Office Registration	0411000366	02-28-2018
<b>H&amp;B Surveying and Mapping LLC</b>	S2905604	Limited Liability Company	Active	612 Hull Street Suite 101B Richmond, VA 23224	Business Entity Registration	0407005432	12-31-2017
<b>Harris Miller Miller &amp; Hanson Inc.</b>	F1451857	Foreign Corporation	Active	N/A	N/A	N/A	N/A

**ATTACHMENT 3.2.10**

**State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634**

**SCC and DPOR Information**

<b>O.R. Colan Associates of Florida, LLC</b>	T00309270	Foreign Limited Liability Company	Active	11121 Carmel Commons Boulevard Suite 200 Charlotte, NC 28226	Appraisal Business Registration	4008001545	07-31-2017
<b>Quinn Consulting Services, Inc.</b>	04925517	Corporation	Active	14160 Newbrook Dr. Suite 220, Chantilly, VA 20151	Business Entity Registration	0407003733	12-31-2017
<b>Rhodeside &amp; Harwell, Inc.</b>	02783561	Corporation	Active	510 King Street Suite 300, Alexandria, VA 22314	Business Entity Registration	0407004045	12-31-2017
<b>Seventh Point, Inc.</b>	02675411	Corporation	Active	N/A	N/A	N/A	N/A





Full Size SCC and DPOR Registrations



#### SCC eFile

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

#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## THE LANE CONSTRUCTION CORPORATION

### General

SCC ID: F0254476  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: CT  
Date of Formation/Registration: 7/24/1972  
Status: Active  
Shares Authorized: 11700

### Principal Office

90 FIELDSTONE COURT  
CHESHIRE CT06410



#### SCC eFile

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[FAQs](#)  
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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## Parsons Brinckerhoff, Inc.

### General

SCC ID: F0501603  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: NY  
Date of Formation/Registration: 2/11/1986  
Status: Active  
Shares Authorized: 30000

### Principal Office

ONE PENN PLAZA  
NEW YORK NY10119



#### SCC eFile

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[Business Entity Search](#)  
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[FAQs](#)  
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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## CES Consulting, LLC

### General

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

### Principal Office

23475 ROCK HAVEN WAY  
SUITE 255  
DULLES VA20166



#### SCC eFile

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[Check Name](#)  
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[Business Entity Search](#)  
[Certificate Verification](#)  
[FAQs](#)  
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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## DIW GROUP, INC.

### General

SCC ID: F1281908  
Entity Type: Foreign Corporation  
Jurisdiction of Formation: MD  
Date of Formation/Registration: 1/30/1997  
Status: Active  
Shares Authorized: 2000000

### Principal Office



#### SCC eFile

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[Distinguishability](#)  
[Business Entity Search](#)  
[Certificate Verification](#)  
[FAQs](#)  
[Contact Us](#)  
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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## EEE Consulting, Inc.

### General

SCC ID: 05049416  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 6/23/1998  
Status: Active  
Shares Authorized: 333000

### Principal Office

8525 BELL CREEK RD  
MECHANICSVILLE VA23116



#### SCC eFile

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[Business Entity Search](#)  
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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## Geotechnical Environmental and Testing Solutions, Inc.

### General

SCC ID: 05418470  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 6/16/2000  
Status: Active  
Shares Authorized: 5000

### Principal Office

204 GRAYSON ROAD  
VIRGINIA BEACH VA23462





#### SCC eFile

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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## H & B Surveying and Mapping, LLC

### General

SCC ID: S2905604  
Entity Type: Limited Liability Company  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 4/27/2009  
Status: Active

### Principal Office

612 HULL STREET STE 101B  
RICHMOND VA23224



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#### Business Entities

#### UCC or Tax Liens

#### Court Services

#### Additional Services

## Harris Miller Miller & Hanson Inc.

### General

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

### Principal Office

77 SOUTH BEDFORD ST  
BURLINGTON MA01803



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[Court Services](#)

[Additional Services](#)

## O.R. Colan Associates of Florida, LLC

### General

SCC ID: T0309270  
Entity Type: Foreign Limited Liability Company  
Jurisdiction of Formation: FL  
Date of Formation/Registration: 6/2/2006  
Status: Active

### Principal Office

439 NE 7TH AVE  
FT LAUDERDALE FL33301



#### SCC eFile

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[UCC or Tax Liens](#)

[Court Services](#)

[Additional Services](#)

## QUINN CONSULTING SERVICES INCORPORATED

### General

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

### Principal Office



## RHODESIDE & HARWELL, INCORPORATED

### SCC eFile

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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

#### General

SCC ID: 02783561  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 11/14/1985  
Status: Active  
Shares Authorized: 10000

#### Principal Office

510 KING STREET SUITE 300  
ALEXANDRIA VA22314



## Seventh Point, Inc.

### SCC eFile

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### Business Entities

### UCC or Tax Liens

### Court Services

### Additional Services

#### General

SCC ID: 02675411  
Entity Type: Corporation  
Jurisdiction of Formation: VA  
Date of Formation/Registration: 3/4/1985  
Status: Active  
Shares Authorized: 3000

#### Principal Office

## DPOR License Lookup License Number 2701011871

### License Details

<b>Name</b>	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
<b>DBA Name</b>	VA PAVING COMPANY / VA SIGN AND LIGHTING COMPANY
<b>License Number</b>	2701011871
<b>License Description</b>	Contractor
<b>Firm Type</b>	Corporation
<b>Rank <sup>1</sup></b>	Class A
<b>Address</b>	90 FIELDSTONE COURT, CHESHIRE, CT 06410
<b>Specialties<sup>2</sup></b>	Commercial Building (CBC) Highway / Heavy (H/H) Residential Building (RBC)
<b>Initial Certification Date</b>	1972-10-12
<b>Expiration Date</b>	2018-01-31

## DPOR License Lookup License Number 0407002174

### License Details

<b>Name</b>	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
<b>License Number</b>	0407002174
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	Corporation
<b>Rank</b>	Business Entity
<b>Address</b>	90 FIELDSTONE COURT, CHESHIRE, CT 06410
<b>Initial Certification Date</b>	1985-09-30
<b>Expiration Date</b>	2017-12-31

## DPOR License Lookup License Number 0411000988

### License Details

<b>Name</b>	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
<b>License Number</b>	0411000988
<b>License Description</b>	Business Entity Branch Office Registration
<b>Business Type</b>	Corporation
<b>Rank</b>	Business Entity Branch Office
<b>Address</b>	14500 AVION PKWY SUITE 200, CHANTILLY, VA 20151
<b>Initial Certification Date</b>	2013-04-18
<b>Expiration Date</b>	2018-02-28

## DPOR License Lookup License Number 0411000137

### License Details

<b>Name</b>	PARSONS BRINCKERHOFF INC
<b>License Number</b>	0411000137
<b>License Description</b>	Business Entity Branch Office Registration
<b>Business Type</b>	Corporation
<b>Rank</b>	Business Entity Branch Office
<b>Address</b>	277 BENDIX ROAD SUITE 300, VIRGINIA BEACH, VA 23452
<b>Initial Certification Date</b>	1997-02-10
<b>Expiration Date</b>	2018-02-28

## DPOR License Lookup License Number 0407005783

### License Details

<b>Name</b>	CES CONSULTING LLC
<b>License Number</b>	0407005783
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	LLC - Limited Liability Company
<b>Rank</b>	Business Entity
<b>Address</b>	23475 ROCK HAVEN WAY SUITE 255, DULLES, VA 20166
<b>Initial Certification Date</b>	2010-11-05
<b>Expiration Date</b>	2017-12-31

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## DPOR License Lookup License Number 0407004748

### License Details

<b>Name</b>	DIW GROUP INC
<b>DBA Name</b>	SPECIALIZED ENGINEERING
<b>License Number</b>	0407004748
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	Corporation
<b>Rank</b>	Business Entity
<b>Address</b>	4845 INTERNATIONAL BLVD #104, FREDERICK, MD 21703
<b>Initial Certification Date</b>	2005-11-01
<b>Expiration Date</b>	2017-12-31

## DPOR License Lookup License Number 0411000435

### License Details

<b>Name</b>	EEE CONSULTING INC
<b>License Number</b>	0411000435
<b>License Description</b>	Business Entity Branch Office Registration
<b>Business Type</b>	Corporation
<b>Rank</b>	Business Entity Branch Office
<b>Address</b>	201 CHURCH ST, BLACKSBURG, VA 24060
<b>Initial Certification Date</b>	2006-02-09
<b>Expiration Date</b>	2018-02-28

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## DPOR License Lookup License Number 0407003798

### License Details

<b>Name</b>	EEE CONSULTING INC
<b>License Number</b>	0407003798
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	Corporation
<b>Rank</b>	Business Entity
<b>Address</b>	8525 BELL CREEK RD, MECHANICSVILLE, VA 23111
<b>Initial Certification Date</b>	1998-08-24
<b>Expiration Date</b>	2017-12-31

Geotechnical Environmental and Testing Solutions, Incorporated

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## DPOR License Lookup License Number 0411000366

### License Details

<b>Name</b>	GEOTECHNICAL ENVIRONMENTAL TESTING SOLUTIONS INC
<b>License Number</b>	0411000366
<b>License Description</b>	Business Entity Branch Office Registration
<b>Rank</b>	Business Entity Branch Office
<b>Address</b>	1592 PENNIMAN RD STE E, WILLIAMSBURG, VA 23185
<b>Initial Certification Date</b>	2004-07-16
<b>Expiration Date</b>	2018-02-28

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H & B Surveying & Mapping, LLC

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## DPOR License Lookup License Number 0407005432

### License Details

<b>Name</b>	H & B SURVEYING & MAPPING LLC
<b>License Number</b>	0407005432
<b>License Description</b>	Business Entity Registration
<b>Rank</b>	Business Entity
<b>Address</b>	612 HULL ST SUITE 101B, RICHMOND, VA 23224
<b>Initial Certification Date</b>	2009-05-05
<b>Expiration Date</b>	2017-12-31

Harris Miller Miller & Hanson, Incorporated

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N/A

O.R. Colan Associates, LLC

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## DPOR License Lookup License Number 4008001545

### License Details

<b>Name</b>	O R COLAN ASSOCIATES OF FLORIDA LLC
<b>License Number</b>	4008001545
<b>License Description</b>	Appraisal Business Registration
<b>Firm Type</b>	LLC - Limited Liability Company
<b>Rank</b>	Business Entity
<b>Address</b>	11121 CARMEL COMMONS BOULEVARD SUITE 200, CHARLOTTE, NC 28226
<b>Initial Certification Date</b>	2009-07-22
<b>Expiration Date</b>	2017-07-31

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## DPOR License Lookup License Number 0407003733

### License Details

<b>Name</b>	QUINN CONSULTING SERVICES INCORPORATED
<b>License Number</b>	0407003733
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	Corporation
<b>Rank</b>	Business Entity
<b>Address</b>	14160 NEWBROOK DR STE 220, CHANTILLY, VA 20151
<b>Initial Certification Date</b>	1998-03-05
<b>Expiration Date</b>	2017-12-31

## DPOR License Lookup License Number 0407004045

### License Details

<b>Name</b>	RHODESIDE & HARWELL, INCORPORATED
<b>License Number</b>	0407004045
<b>License Description</b>	Business Entity Registration
<b>Firm Type</b>	Corporation
<b>Rank</b>	Business Entity
<b>Address</b>	510 KING STREET STE # 300, ALEXANDRIA, VA 22314
<b>Initial Certification Date</b>	2000-12-21
<b>Expiration Date</b>	2017-12-31

KEY PERSONNEL DPOR

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Christopher Moore, PE

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**DPOR License Lookup** License Number 0402051492

**License Details**

<b>Name</b>	MOORE, CHRISTOPHER CRAIG
<b>License Number</b>	0402051492
<b>License Description</b>	Professional Engineer License
<b>Rank</b>	Professional Engineer
<b>Address</b>	CHESAPEAKE, VA 23322
<b>Initial Certification Date</b>	2013-02-12
<b>Expiration Date</b>	2017-02-28

Anthony Kondysar, PE

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**DPOR License Lookup** License Number 0402021246

**License Details**

<b>Name</b>	KONDYSAR, ANTHONY J
<b>License Number</b>	0402021246
<b>License Description</b>	Professional Engineer License
<b>Rank</b>	Professional Engineer
<b>Address</b>	WILLIAMSBURG, VA 23185
<b>Initial Certification Date</b>	1990-07-16
<b>Expiration Date</b>	2018-07-31



**ATTACHMENT 3.3.1(a)**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>RYAN TERRY, PROJECT MANAGER</b>	
b. Project Assignment: <b>DESIGN-BUILD PROJECT MANAGER</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): <b>THE LANE CONSTRUCTION CORPORATION (Full Time)</b>	
<p>d. Employment History: With this Firm <u>&gt;2</u> Years With Other Firms <u>12</u> Years</p> <p>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):</p> <p>Mr. Terry has more than a decade of experience managing heavy civil projects and will be the driving force of the I-64 Widening project. He is well-versed in the construction industry and has served on several award winning, high profile projects.</p> <p><b><u>The Lane Construction Corporation, Project Manager, 2015 – Present:</u></b> Responsible for overall construction, quality and safety programs, ensuring all requirements and specifications are delivered, contract administration, directing and managing project development, constructability reviews with the designers, defining project scope, goals and deliverables, collaborating with senior management and stakeholders, public outreach and public meetings, estimating resources, supervising the procurement and furnishing of all materials, equipment, services and labor necessary for project completion, scheduling project timelines and milestones, supervising team members, and developing best practices and tools for project execution and management.</p> <p><b><u>Kiewit, Various Positions, 2004 – 2015:</u></b> <i>Construction Manager:</i> Responsible for construction operations of personnel and subcontractors, scheduling of work crews and subcontractors, safety and quality programs and construction plans. Oversaw the on-site safety, quality and production. Assisted and trained Engineers with quantities and productions, coordinating equipment and crews and other job related activities, attending status meetings to discuss progress and public impact. <i>General Superintendent:</i> Supervised the construction operations which included installation of storm pipes, embankment filling and grading, stone and asphalt placement. Communicated effectively with quality control for inspections and tracking daily quantities and production, scheduling crews, and maintaining cost effectiveness. Responsible for on-site safety. <i>Field Engineer:</i> Duties included reviewing plans and specifications, take-off quantities, recording quantities and preparing pay applications to review with client, coordination with MOT foreman for traffic switches and lane closures, and coordination with concrete plant on nightly basis for delivery and quantity.</p>	
<p>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</p> <p><b>University of Missouri, Columbia, MO / Bachelor of Science in Civil Engineering/ 2003</b>  <b>Moberly Area Community College, Moberly, MO / Associates of Science/ 2000</b></p>	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> <li>1. Note your role, responsibility, and specific job duties for each project, not those of the firm.</li> <li>2. Note whether experience is with current firm or with other firm.</li> <li>3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</li> </ol> <p><b>(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.)</b></p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>	
<b>NAVFAC, Oceana Runway &amp; Lighting Repairs, Virginia Beach, VA</b>	
<b>Name of Firm:</b>	The Lane Construction Corporation
<b>Project Role:</b>	Project Manager
<b>Beginning Date:</b>	7/2015
<b>End Date:</b>	9/2017
<p><b><i>Specific Responsibilities:</i></b> As the Project Manager on this project, Mr. Terry is responsible and accountable for overseeing the project team members, supervising engineering, survey, QA &amp; QC staff, safety program, project schedule, keeping close attention to contracts administration, ensuring the timely delivery of all services in addition to materials and equipment.</p> <p><b><i>Project Relevance:</i></b> This \$92 million project consists of the replacement of Runway 14L-32R and associated electrical airfield lighting as well as 66,000 feet of 4-foot-wide taxiway shoulders constructed where new taxiway edge lights are installed. The new shoulders will be constructed in PCC and asphalt concrete. LANE will replace a portion of the Hold Apron pavement at the Runway 14L and the Hold Apron at the Runway 32R end to meet revised Runway 14L/32R grading. LANE will also replace the arresting</p>	

gear pavement protection system, and rehabilitate and widen the asphalt concrete overrun pavement. The electrical airfield lighting for runway 14L-32R will be demolished and replaced with LED-based light fixtures. The lighting upgrades will include new concrete foundations, light base cans, conduit and wire.

**MWAA, Dulles Corridor Metrorail Project Phase 2, Dulles, VA (DESIGN-BUILD)**

<b>Name of Firm:</b> Kiewit	<b>Project Role:</b> General Superintendent
<b>Beginning Date:</b> 6/2014	<b>End Date:</b> 5/2015

**Specific Responsibilities:** Mr. Terry was responsible for construction of the 4.2-mile aerial guideway structure and 3 line bridges for this \$1.2 billion project in Dulles, VA. Responsibilities included: safety, quality, planning, schedule development and analysis, cost control, hiring, and equipment/material selection.

**Project Relevance:** The Phase 2 of this project will continue 11 miles from Wiehle Avenue to eastern Loudoun County. This phase will add six stations, and the construction of a new rail yard on Dulles Airport property and procurement of 128 railcars. The scope of work is broken down into five major components, including civil, structures, facilities, rail, and systems. 40 ft. Shafts were drilled for aerial guideway, tree removal from site has been removed and utilities relocation. The bridges crossed multiple roadways and waterways including the Dulles Toll Road (Route 267).

**VivaNext D1, York Region, Greater Toronto Area, Canada (DESIGN-BUILD)**

<b>Name of Firm:</b> Kiewit	<b>Project Role:</b> Construction Manager
<b>Beginning Date:</b> 3/2012	<b>End Date:</b> 7/2013

**Specific Responsibilities:** Mr. Terry provided overall project management that included strategic planning and execution for the civil portion of the \$143M vivaNext project in the Greater Toronto area in Ontario Canada. This project included the widening of existing streets in an urban downtown setting. He worked with the design and construction teams on innovative techniques and means and methods to execute the work, organized and assigned equipment and personnel resources to execute project, led and implemented safety initiatives, established project objectives, policies, procedures and performance standards, set and monitored budget, close supervision of the contracts administration department and procurement.

**Project Relevance:** This project consisted of over 2 miles of road widening in downtown Newmarket, Markham and Vaughan Ontario. Design included traffic signal optimization controls and significant streetscape design to transform the corridor into an urban roadway. Major work included utility relocations and outages in sensitive areas (Southlake Hospital) requiring weekly coordination meetings and emergency preparedness drills, widening of existing bridges and culverts in heavily developed areas, paving and MOT schemes to work within the heavily congested city streets, extensive streetscape to beautify the corridors, dealing with multiple stakeholders in different cities and municipalities including obtaining construction permits, community outreach, and relocation and protection of existing historical structures.

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(a)**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>
a. Name & Title: <b>ANTHONY KONDYSAR, QUALITY ASSURANCE MANAGER</b>
b. Project Assignment: <b>QUALITY ASSURANCE MANAGER</b>
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): <b>QUINN CONSULTING SERVICES, INC. (Full Time)</b>
d. Employment History: With this Firm <b>1 Year</b> With Other Firms <b>30 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 (g) below): <b>Quinn Consulting Services, Inc., Quality Assurance Manager - 10/2015 – Present:</b> Mr. Kondysar is a registered professional civil engineer in Virginia. His professional record includes 30 years of experience in design and engineering, quality assurance, and quality control with a heavy emphasis in the transportation, transit and rail, facilities, marine, and utility improvement disciplines. His Design-Build experience includes Quality Assurance Management on the VDOT I-64 Segment I widening in Newport News, and both the construction and design phases of the VDOT/VPA I-164 Safety Improvements in Portsmouth, VA and the I-564 Project in Norfolk, VA. Mr. Kondysar has provided professional services on both Design-Build and Design-Bid-Build transit and transportation projects where he has held the positions of Quality Assurance Manager (QAM), Design Engineer, Construction Manager, and Project Manager. His responsibilities as Quality Assurance Manager have included the supervision of Quality Assurance inspection staff and supervision of design engineering staff that includes structural, architectural, and coordination of design elements. His responsibilities also include the Quality Assurance and oversight of the construction operations, including the QA testing technicians; he checked test reports, daily reports, safety reports, and environmental reports; he determined and certified to VDOT whether the materials and work complied with the Contract Documents; he conducted preparatory inspection meetings prior to the start of any new work; provided oversight and directed the independent quality assurance testing and inspections; and compared the QA and QC tests to ensure that they were within the tolerances established by VDOT's Minimum QA/QC Requirements Manual. <b>Virginia Port Authority (VPA), Construction Manager – 07/2007 to 09/2015:</b> Mr. Kondysar was Project Manager for multiple capital improvement projects including rail, roadway, building, waterfront, pavement and utility upgrades on Port Authority owned facilities in Norfolk, Portsmouth and Newport News, VA. He was involved in State Agency reporting to the Secretary of Transportation requiring full conformance to the Virginia Port Authority Capital Outlay Manual for all infrastructure improvements and investments. His responsibilities consisted of project design and construction compliance with the Virginia Department of Transportation Road and Bridge Specifications, including several projects requiring conformance to the Virginia Department of Transportation Locally Administered Project (LAP) guidelines for Materials, Quality Control and Quality Assurance documentation standards. <b>Alpha Corporation, Quality Assurance Manager and Construction Manager – 02/2004 to 07/2007:</b> As Quality Assurance Manager (QAM) and Construction Manager for multiple projects in the Norfolk, VA area, Mr. Kondysar was responsible for contractor oversight and quality assurance for multiple projects which included demolition, pile foundations, cast-in-place concrete, railway, industrial roadways, drainage and utility upgrades. He managed performance and record keeping for quality control and quality assurance programs. <b>Environmental Management Group, Project Manager – 1997 to 2004:</b> As Project Manager in Hunt Valley, MD, Anthony performed over 500 comprehensive surveys to identify financial concerns for government, retail, office, multi-family, industrial, educational and nursing properties throughout the United States. He developed long-term budgets for maintenance, repair and renovation necessary to retain value.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Polytechnic Institute, Blacksburg, VA/BS/1985/Civil Engineering/Minor in Engineering Mechanics</b>
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <b>1990/Professional Engineer/040201246</b>
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(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.)</b>

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.			
<b>I-64 Capacity Improvements – Segment I, Newport News, VA</b>		<b>(DESIGN-BUILD)</b>	
<b>Name of Firm:</b>	Quinn Consulting Services, Inc.	<b>Project Role:</b>	Quality Assurance Manager
<b>Beginning Date:</b>	9/2015	<b>End Date:</b>	Present
<p><b>Specific Responsibilities:</b> As the Quality Assurance Manager (QAM) some of his responsibilities are to maintain the project’s material records, provide oversight of a team of independent Quality Assurance inspectors and monitor the Contractor’s Quality Control team for compliance with both VDOT’s Minimum Standards on Design-Build projects and the project specific QA/QC Plan.</p> <p><b>Project Relevance:</b> This \$122M project includes three bridges; soil cement stabilization; cement treated aggregate; asphalt pavement and concrete pavement repair as well as drainage improvements; stormwater facilities; sound walls and wetland construction. This is an operationally independent segment of the widening of Interstate 64 (I-64). The purpose and need of this widening project was to provide immediate congestion relief to the roadway corridor. The improvements included the addition of one 12-foot wide travel lane and one 12-foot wide shoulder in each direction to widen this four-lane section of I-64 to a six-lane section using the median of the existing interstate in order to limit the amount of right of way required to construct the project.</p>			
<b>Commonwealth Railway Mainline Safety Relocation Project, Norfolk, VA</b>		<b>(DESIGN-BUILD)</b>	
<b>Name of Firm:</b>	Virginia Port Authority	<b>Project Role:</b>	Construction Manager
<b>Beginning Date:</b>	7/2007	<b>End Date:</b>	12/2009
<p><b>Specific Responsibilities:</b> Mr. Kondysar managed the Quality Control and Quality Assurance inspection and documentation as needed for VDOT Hampton Roads District Office, FHWA, City and Railroad project stakeholders. Responsibilities included managing the design build construction team and quality control personnel for compliance with the VDOT Locally Administered Project Manual. He performed site inspections of all field construction and verified conformance of all plant fabricated elements to include piles, precast beams, MSE wall panels and sound walls panels. He maintained compliance with the Virginia Manual for Uniform Traffic Control Devices and Erosion and Sediment Control Guidelines throughout construction. An additional \$9M project improvement through the American Recovery and Reinvestment Act (ARRA) included construction management, grant administration and quality control documentation in accordance all VDOT and FHWA requirements.</p> <p><b>Project Relevance:</b> Project details included a \$56M, 5.6 mile, rail, and roadway design-build project in Portsmouth, VA. The project was constructed on VDOT Right-of-Way in the median of I-164 and included earthwork; drainage; rail; (1) new roadway and bridge overpass construction to eliminate 14 at grade rail crossings; MSE walls; utility relocation and installation; pile foundations; bridge structure; retaining walls; and pump station subject to conformance with the Virginia Department of Transportation Road and Bridge Specifications.</p>			
<b>APM Terminals, Portsmouth, VA</b>		<b>(DESIGN-BUILD)</b>	
<b>Name of Firm:</b>	Alpha Corporation	<b>Project Role:</b>	Quality Control Manager
<b>Beginning Date:</b>	2/2005	<b>End Date:</b>	7/2007
<p><b>Specific Responsibilities:</b> Mr. Kondysar managed the Quality Control and Quality Assurance inspection and documentation to ensure materials and workmanship were in accordance with the project design. He worked with design team, construction contractors and owner’s representative to maintain project schedule, budget and field concerns for the wharf, yard and rail contractors. He reported directly to the owner.</p> <p><b>Project Relevance:</b> The project consisted of a \$400M commercial shipping facility located along the Elizabeth River in Portsmouth, VA. This project used the Design-Build project delivery system model in private industry. In 2010 this facility was leased to the Virginia Port Authority for 20 years. In 2014 the facility was renamed to Virginia International Gateway. Construction specifics included wharf construction, container yard, support buildings, rail siding and VDOT highway interchange. Construction specifics included earthwork, bulkhead construction, dredging, pile driving, structural precast, concrete and asphalt pavement, utilities and wetland restoration for previously undeveloped 400+ acre site.</p>			
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(a)**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>CHRISTOPHER MOORE, PE</b>	
b. Project Assignment: <b>DESIGN MANAGER</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): <b>WSP   PARSONS BRINCKERHOFF (FULL TIME)</b>	
d. Employment History: With this Firm <u>&lt; 11 Years</u> With Other Firms <u>6</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <b>WSP   Parsons Brinckerhoff, Project Manager (2005-Present):</b> Mr. Moore is a Senior Project Manager and Senior Civil Engineer with over 17 years of experience in delivering transportation projects, including design-build projects. As a Project Manager, Chris has been responsible for managing a wide range of transportation projects from interstate widening to complex urban roadway widening projects. Chris has proven his ability to bring a project team together with a diverse range of skills to successfully deliver multifaceted transportation projects. His design experience includes drainage design, highway engineering, construction phasing, MOT design, right-of-way coordination, environmental permitting, and utility coordination. His project management responsibilities include supervising roadway geometrics, MOT, drainage analysis and design, quality control; progress reporting; and preparing final contract documents and construction cost estimates. He is also experienced in directing utility coordination and has worked with utility representatives in the Richmond District to develop designs that minimize utility impacts. Mr. Moore has recent experience overseeing permits for wetlands, <i>de minimis</i> findings under Section 4(f), and threatened and endangered species. He has been responsible for obtaining utility agreements and clearance letters and leading utility coordination efforts for interstate widening and urban arterial projects. He has prepared contract documents ensuring that all design review comments have been addressed and has worked directly with VDOT reviewers to resolve their comments. He has extensive experience providing construction services that include documenting RFIs, shop drawing reviews, design changes, and addendums while ensuring environmental commitments are met. <b>Arizona Department of Transportation, (1999-2005).</b> Mr. Moore served as a Lead Roadway Engineer responsible for coordination of design disciplines including traffic, drainage, utilities, landscape, and structures. He was responsible for developing roadway designs including acceleration/deceleration lane tapers, superelevation layout, median transitions, and construction phasing plans including detour design, and median cross over design... He worked with utility representatives to minimize utility impacts and coordinated right-of-way acquisition needs with the Department. He was also responsible for drainage analysis and design.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>B.S.C.E., Arizona State University, 1999; Engineer Officer Basic Course, U.S. Army Engineer School, 1992; B.A., Economics, Clemson University, 1991</b>	
Active Registration: Year First Registered/ Discipline/VA Registration #: Arizona, 2004 (#41953), Virginia, 2013 (#051492)	
f. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(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.)</b>	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
<b>I-264 Widening and Martin Luther King Highway (MLK) Extension Final Design, Portsmouth, VA (DESIGN-BUILD)</b>	
<b>Name of Firm:</b> WSP   Parsons Brinckerhoff	<b>Project Role:</b> Lead Roadway Engineer
<b>Beginning Date:</b> 10/2012	<b>End Date:</b> 10/2016
<b>Specific Responsibilities:</b> Mr. Moore served as Lead Roadway Engineer responsible for overseeing the design of the roadway approaches to the new Midtown Tunnel, including a new extension of the MLK Expressway. He was responsible for the design of temporary truck inspection stations on the tunnel approaches. A key element of the design was to provide adequate sight distance and acceleration/deceleration lanes to reduce queuing during construction. Mr. Moore worked to coordinate RFI responses, shop drawing reviews and verified design changes based upon field conditions or owner directed changes during construction. He also met with representatives in the field to ensure that environmental commitments were met to protect a historical church and subaqueous wetlands.	

**Project Relevance:** WSP | Parsons Brinckerhoff was responsible for design services for the widening and modifications to I-264 for a new interchange at the MLK Extension, design of the MLK Extension (1-mile of new location elevated freeway), and eliminating existing interchange ramps (as part of the Elizabeth River Tunnels D-B project). The MLK Expressway is a north-south, 4-lane facility that provides access from the City of Portsmouth to the City of Norfolk both via the Midtown Tunnel, and via I-264 to the Downtown Tunnel. In the City of Portsmouth, a direct, limited-access connection did exist between the MLK Freeway and I-264, forcing drivers to use routes through local city streets and neighborhoods. The MLK Expressway extended the freeway south from London Boulevard, with a new interchange at I-264 to provide a direct connection from I-264 to the Midtown Tunnel. WSP | Parsons Brinckerhoff was responsible for the design of roadway, drainage, erosion and sediment control, structures, utility coordination, traffic control plans, and design management. A key design element at the Norfolk approach to the Midtown Tunnel included the temporary truck inspections stations required for the tunnel approaches that included evaluation of acceleration/deceleration lanes in addition to providing temporary facilities for inspectors with safe all weather access.

**I-10 Widening, Val Vista Road, Casa Grande, AZ**

<b>Name of Firm:</b> WSP   Parsons Brinckerhoff	<b>Project Role:</b> Deputy Design Manager/Lead Roadway Engineer
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<b>Beginning Date:</b> 9/2009	<b>End Date:</b> 3/2012
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**Specific Responsibilities:** Mr. Moore served as the Deputy Design Manager and Lead Roadway Engineer for this 9.5-mile main line widening segment of I-10 located in Casa Grande, AZ. He was responsible for coordinating all design disciplines to include roadway, traffic, stormwater/ drainage, utilities, landscape, and structures. Mr. Moore supervised the design for acceleration/deceleration lane tapers, superelevation layout, median transitions, median cross over design, barrier length of need to minimize the number of end terminals, and met with state police to coordinate median cross over design elements. As Utility Coordinator he worked with utility representatives to develop designs that avoided utility impacts, these included a notch in the ADOT standard noise wall to avoid a water line, protective concrete slabs over gas distribution lines that were designed to accommodate construction equipment, and the use of shallow drainage inlets to avoid buried conduits. He supervised the preparation of contract documents (plans, specifications & estimate) ensuring all design comments were addressed in the contract documents. Mr. Moore worked directly with ADOT reviewers to resolve comments that impacted multiple disciplines and ensured that established QA/QC procedures were followed and properly documented. He worked with District ADOT staff worked to develop special provisions for salvaged materials, the use of precast box culverts, and the location of ITS devices. He also ensured that environmental commitments in the EA were included in the contract documents and implemented. During construction services he was responsible for documenting and coordinating all RFIs, shop drawing reviews, approving design changes due to filed changes, and supervising precast box culvert installation.

**Project Relevance:** This project consisted of a continuous 2.6-mile section in which the widening only occurred within the median in order to avoid impacting three existing overpasses. Stormwater and drainage design, median crossovers, box culvert extensions, FEMA floodplain analysis, soundwall analysis and design, as well as interchange ramp improvements to include acceleration/deceleration lanes were key design elements similar to the I-64 widening project. WSP | Parsons Brinckerhoff was responsible for design in addition to utility coordination, development of MOT designs that limited traffic shifts, strengthened the existing shoulder, and maintained the existing two lanes of traffic, while maintaining traffic on the existing interstate ramps.

**Route 60 Widening (Midlothian Turnpike) Chesterfield County, Virginia (DESIGN-BUILD)**

<b>Name of Firm:</b> WSP   Parsons Brinckerhoff	<b>Project Role:</b> Deputy Design Manger/Lead Roadway Engineer
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<b>Beginning Date:</b> 2/2015	<b>End Date:</b> 7/2016
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**Specific Responsibilities:** Deputy Design Manager/Lead Roadway Engineer responsible for managing this Design-Build project that widened a 1.27-mile section of urban divided arterial from four lanes to six lanes. Mr. Moore was responsible for coordinating the design disciplines, ensuring environmental commitments were implemented, and working with the Construction Manager to develop MOT plans that mitigated safety risks associated with median access for construction vehicles while maintaining two lanes of traffic in each direction during daytime hours. He worked to identify a required bridge widening traffic shift that was accomplished using horizontal curves with a design based upon the existing roadway cross slope in order to provide a safer transition that met driver expectations.

**Project Relevance:** The project included providing MOT plans for construction access to the median of a highly traveled divided roadway, bridge widening, scour analysis, new storm drainage/stormwater management, landscaping, and environmental permitting. We worked with the Richmond District to develop innovative designs for the bridge widening that resulted in improved barrier systems, utility conflict mitigation and cost savings. Verification of the approved NADR findings was required as the roadway profile was altered to meet MOT requirements. Another key component of the project was to accelerate the design deliverables to allow the Design-Builder to meet aggressive project milestones. Signal, drainage, right-of-way, and utility packages were advanced and approved for construction within 4-months. Coordinating the design to minimize utility impacts was also vital to maintain the project schedule and budget. The project was locally administered by Chesterfield County for VDOT and the project utilized federal funds

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. N/A, Mr. Moore is not required to be onsite fulltime.

**ATTACHMENT 3.3.1(a)**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>TROY C. COREY, CONSTRUCTION MANAGER</b>	
b. Project Assignment: <b>CONSTRUCTION MANAGER</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQ's. In addition, please denote the type of employment (Full time/Part time): <b>THE LANE CONSTRUCTION CORPORATION (FULL TIME)</b>	
d. Employment History: With this Firm <b>1 Year</b> With Other Firms <b>14 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 (g) below): <b>The Lane Construction Corporation, 02/2016 – Present:</b> Currently serving as Construction Manager, Mr. Corey has over fifteen years of experience in the construction industry. He is responsible for estimating, project scheduling, submittals, personnel and equipment scheduling, environmental compliance and installation, project coordination, MOT, contract administration, budget management, and project management. He leads and implements safety initiatives, establishes project objectives, policies, procedures and performance standards, and assures that a quality management system is in place. <b>Oscar Renda Contracting, 2014 – 2016:</b> As Project Manager, Mr. Corey was responsible for all subcontract and materials procurement, prepared and maintained project schedules, purchased and maintained equipment within region of projects. He oversaw the hiring of project staff and field employees, held coordination meetings, established and monitored budgets, managed risk and opportunities, reviewed submittals, coordinated with subcontractors, project forecasting, overall P&L for the projects and management, and development of regional employee base. <b>Allan Myers, 2010 – 2013:</b> As Project Manager, Mr. Corey's duties included subcontract and materials procurement, preparing and maintaining P6 schedules, coordinating equipment and personnel, overseeing project staff, holding coordination meetings, establishing and monitoring budgets, managing risk and opportunities, reviewing submittals, coordinating subcontractors, project forecasting, overall P&L for \$10-20 million a year worth of work, utility coordination, and resolving client disputes and problems. <b>Sargent Corporation, 2003 – 2010:</b> As a Project Coordinator Mr. Corey oversaw airport, landfill, residential and commercial site construction, and roadway construction in Delaware, Maryland, North Carolina, and Virginia. As Project Manager, his responsibilities included subcontract and materials procurement, updating schedules, coordinating equipment and personnel, preparing monthly invoices, attending monthly meetings, preparing change orders, reviewing submittals, coordinating subcontractors, ordering materials and resolving client disputes and problems. <b>Structural Preservation Systems, Inc., 2001 – 2003:</b> As Project Engineer Mr. Corey's duties included subcontract and materials procurement, report schedule updates to Project Manager, advise Project Manager on monthly invoices, attended project meetings, prepared change orders, reviewed and submitted submittals, coordinated with subcontractors, ordered materials, and acted as the on-site representative for the company.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Husson University, Bangor, ME/ Bachelor of Science/2001/Business Management and Financial Management</b>	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <b>N/A</b>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(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.)</b>	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
<b>VDOT I-581 Valley View, Roanoke, VA (DESIGN-BUILD)</b>	
<b>Name of Firm:</b> The Lane Construction Corporation	<b>Project Role:</b> Construction Manager
<b>Beginning Date:</b> 2016	<b>End Date:</b> Present
<b>Specific Responsibilities:</b> As Project Manager for this project, some of Mr. Corey's responsibilities include subcontract and materials procurement, preparing and maintaining P6 schedules, coordinating equipment and personnel, overseeing project staff, holding coordination meetings, establishing and monitoring budgets, managing risk and opportunities, reviewing submittals, coordinating subcontractors, and resolving client disputes and problems. He is responsible for the implementation and execution of the MOT, safety, and quality control plans on the project.	

**Project Relevance:** This \$38.5 million design-build project consists of completing the existing partial interchange of Valley View with I-581/U.S. Route 220 through the design and construction of a diverging diamond interchange. The project also includes the partial demolition of the existing structure; widening and repair of the existing bridge substructure and superstructure; construction of retaining and mechanically stabilized earth (MSE) walls required for the bridge structure, ramps, auxiliary lanes, and Valley View Boulevard widening; acquisition of right-of-way and limited access line revisions; utility relocations; milling and repaving of the existing pavement; installation of two new traffic signals and reconstruction of the existing traffic signals; roadway lighting replacement; complete interchange lighting including the underbridge; installation of new and revised signs and pavement markings along I-581, Valley View Boulevard, and the ramps; installation and extension of the drainage system and ditches; ESS control; stormwater management; installation of a new pedestrian bridge along I-581.

**VDOT 4B1 Route 60 & German School Road, Richmond, VA (BID-BUILD)**

<b>Name of Firm:</b> Allan Myers	<b>Project Role:</b> Sr. Project Engineer
<b>Beginning Date:</b> 2010	<b>End Date:</b> 2012

**Specific Responsibilities:** Mr. Corey was responsible for the coordination of relocation and installation of utilities. This included working with VDOT's Utility Coordinator/Dominion Power/Verizon/AT&T/Richmond gas, water, and electric and he participated in utility coordination meetings. Additionally, he monitored and updated budgets, work plans and packages, made crew assignments, evaluated risks and mitigation measures, provided oversight of project engineers, coordinated work with the designer, managed material subcontractors and scheduling, and oversaw the safety and quality control programs.

**Project Relevance:** This \$40 million project reconstructed and widened approximately 3.5 miles of Midlothian Turnpike (Route 60) and German School Road. The project included excavation to offsite, fill placement, water main, gas main, sanitary sewer, storm drain, double barrel box culvert installation, roadway stone, curb and gutter, sidewalk, landscaping, street lighting, irrigation, traffic signalization, and asphalt paving.

**Lakeside to Strawberry Hill SPS Pipeline Equalization, Henrico, VA (DESIGN-BUILD)**

<b>Name of Firm:</b> Oscar Renda Construction	<b>Project Role:</b> Project Manager
<b>Beginning Date:</b> 2014	<b>End Date:</b> 2016

**Specific Responsibilities:** Mr. Corey was responsible for the overall project design and construction. He supervised and managed all aspects of the project including the procurement and timely delivery of all materials, equipment, services and labor. Mr. Corey was responsible for directing and managing the project management team, coordinating with and monitoring contract progress with the Owner and subcontractors and overseeing the overall safety and QC programs.

**Project Relevance:** This \$23 million project included construction of 2.5 miles of 110" FRP, five cast in place concrete control chambers, 2.5 miles of HDPE electrical conduit, pump station modifications, odor control unit, installation of pipeline through highly sensitive wetland areas, SCADA system, 500 feet of 12' diameter tunnels and associated 30-foot-deep shafts, and restoration.

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. **Current Assignment:** VDOT I-581 Valley View **Role:** Project Manager **Duration of Assignment:** Estimated completion date is 01/2017. Mr. Corey will be available onsite-full-time at the start of construction for the I-64 Widening project.



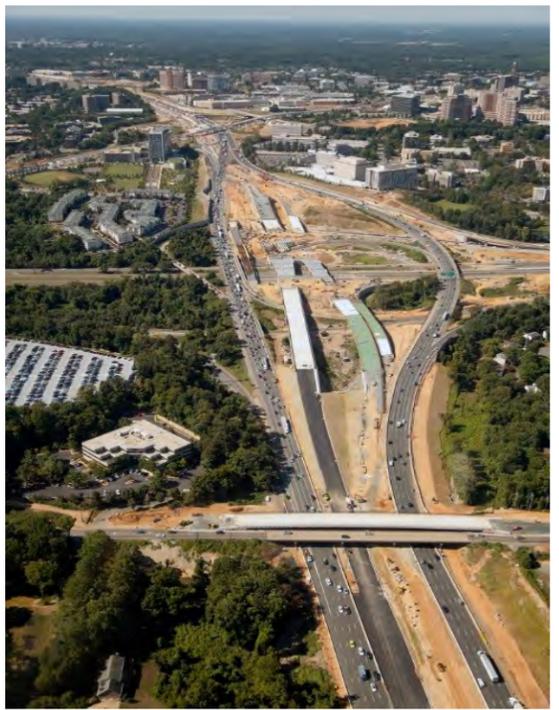
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
<b>I-495 EXPRESS LANES Fairfax County, VA  DESIGN-BUILD</b>	<b>HNTB</b>	Name of Client./ Owner: <b>VDOT</b> Phone: <b>540.829.7500</b> Project Manager: <b>John Lynch, PE</b> Phone: <b>540.829.7512</b> Email: <b>john.lynch@VDOT.Virginia.gov</b>	<b>12/2012</b>	<b>11/2012</b>	<b>\$1,346,560</b>	<b>\$1,481,670</b>	<b>\$642,000</b>

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.

<b>Similar Scope of Work:</b>	<b>PROJECT SCOPE</b>	
<ul style="list-style-type: none"> <li>Design-Build</li> <li>Roadways</li> <li>Bridges and Structures</li> <li>Environmental</li> <li>Geotechnical</li> <li>Right-of-Way</li> <li>Hydraulics</li> <li>Intelligent Transportation Systems</li> <li>Transportation Management Plan</li> <li>Utilities</li> <li>Stakeholder Coordination</li> <li>Public Involvement/Relations</li> <li>QA/QC</li> <li>Survey</li> <li>Guardrail</li> <li>Construction Engineering and Inspection</li> <li>Overall Project Management</li> </ul>	<b>RELEVANT PROJECT ELEMENTS TO I-64 WIDENING</b>	
<b>Personnel on Project:</b>		

**Scope of work** included the reconstruction of ramps, heavy maintenance of traffic effort, shoulder reconstructions, interchanges, frontage roads, bridge over and underpasses and bridge widenings, and pedestrian crossings. The Project encompassed the replacement of more than \$260M of aging infrastructure, including 12 interchanges and 58 bridges. Construction of the Project required close coordination with VDOT, MWAA, WMATA, local jurisdictions, businesses, community associations, and the traveling public. Although only a 35% CJV member, LANE provided nearly all of the project supervision and workforce, plus all asphalt paving.

**Interstate Widening:** The I-495 Express Lanes project is one of the largest roadway projects constructed in the Commonwealth. Similar to the I-64 Widening project, the I-495 Express Lanes project widened the existing roadway to the median and involved replacement and widening of numerous structures.. The Express Lanes project has similar scope elements including, roadway widening, box culvert extensions, ITS, incident response management, ramp extensions, public outreach, shoulder strengthening, work in high volume ADT's, sound barriers, complex MOT schemes and bridge widenings. The team constructed three new access points and upgraded 12 key interchanges that increased capacity and mobility, improved driver safety and removed operational deficiencies, with minimal impact to the traveling public, residences, and businesses.

**Median Construction:** The I-495 Express Lanes project widened the existing roadway by constructing two new lanes in each direction on a 14-mile stretch from the Springfield Interchange to just north of the Dulles Toll Road (approximately 56 lane miles). Construction of four new managed/HOV traffic lanes (two in each direction) in the median of the existing lanes on the Capital Beltway.

**MOT Design Solutions/Construction Techniques:** A key challenge on the I-495 Express Lanes project was accommodating extreme volumes (over 200,000 VPD) of commuter, residential, and commercial vehicular traffic. The contract required the project to maintain the existing traffic during construction; affecting every phase of the planning, design, and construction. By conducting extensive traffic studies and through close coordination with VDOT and the local jurisdictions, our Team produced a number of innovative designs, work zone access methods, carefully planned lane shifts, and construction phasing sequences that helped to minimize disruption during construction. Numerous ATCs, combined with reduction in the originally approved Record of Decision regarding ROW and length of the project, **saved VDOT over \$500 million in overall project cost.**

**Bridges and Structures:** Our Team widened and/or replaced 58 bridges on this project adjacent to high ADT count/live traffic.

**Public Outreach/Involvement:** More than 1,000 public outreach meetings were conducted and, in coordination with VDOT, the team kept the public involved through various media methods: project website, routine newsletters, and brochure mailings to residents and business.

**SWM/Drainage:** LANE installed a total of 143,358 LF of drainage pipe, 15 SWM structures, and a total of 1,444 drainage structures along the entire project.

**Utility Coordination:** There were significant utility coordination effort, both in relocation of existing utilities and installation of new services for lighting and toll facilities. Two high voltage transmission lines ran in a corridor parallel to the main alignment of the project, crossing several arterial roads that were associated with the project. At one arterial, there was insufficient clearance between the transmission line sag and the road surface. The line had to be raised by installing an insert in one supporting tower. In total, over 175 utility conflicts were resolved requiring coordination with 13 different utility owners.

**Right of Way:** ROW acquisition services were performed for 65 properties, including 26 business related partial acquisitions. 108 easements were acquired, 35 of which were business owned.

**Schedule:** This project was completed ahead of schedule. At the time of award, the date of substantial completion was December 20, 2012, with substantial penalties for late commencement of revenue service. Revenue service began almost five weeks early – November 16, 2012.

**Safety:** The I-495 Express Lanes project has been the recipient of numerous awards including a safety award for more than 5,000,000 manhours without a lost time incident in September 2012. Despite working alongside traffic in a limited area, with many key activities like bridge demolition and steel erection occurring at night, the construction team achieved a Total Recordable Incident Rate (TRIR) of 0.69, which ranks the project among the best heavy civil projects in the nation.

**Environmental:** The project alignment traversed multiple wetlands, wooded areas, and state and county park lands, which required identification and protection of specimen trees on the project perimeter as well as wetland delineation, protection and conversion.

**EVIDENCE OF PERFORMANCE**

“A solid experienced company that has built to standard and worked well under difficult traffic and space constraints to minimize impact on travel.” - *Garrett Moore, P.E., VDOT Chief Engineer*

“Project was built over four years under traffic as high as 200,000 vpd and achieved 5 million safe work hours as of September 2012 without a lost time incident, making it among the safest heavy civil projects ever built in the U.S.” - *Public Works Financing Newsletter, 12/2012*

“As the primary self-perform entity in the Flour-Lane Joint Venture, Lane has demonstrated outstanding ability to complete construction on time under these heavy traffic conditions,” wrote Tim Steinhilber (General Manager, Capital Beltway Express, LLC) .

**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
<b>I-95 EXPRESS LANES Fairfax, Prince William and Stafford Counties, VA  DESIGN-BUILD</b>	<b>HDR/HNTB</b>	Name of Client./ Owner: <b>VDOT</b> Phone: <b>571.483.2651</b> Project Manager: <b>Charlie Warraich, PE</b> Phone: <b>571.273.8229</b> Email: <b>H.S.Warraich@VDOT.Virginia.gov</b>	<b>12/2014</b>	<b>12/2014</b>	<b>\$691,000</b>	<b>\$726,000</b>	<b>\$327,000</b>

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.

<b>Similar Scope of Work:</b>	<b>PROJECT SCOPE</b>	
<ul style="list-style-type: none"> <li>• Design Build</li> <li>• Roadways</li> <li>• Traffic Maintenance and Management</li> <li>• Shoulder Strengthening</li> <li>• Bridge Widening Adjacent to Interstate Traffic</li> <li>• Survey</li> <li>• Environmental</li> <li>• Geotechnical</li> <li>• Hydraulics</li> <li>• Intelligent Transportation Systems</li> <li>• Traffic Control Devices</li> <li>• Transportation Management Plan</li> <li>• Right-of-Way</li> <li>• Utilities</li> <li>• Public Involvement/Relations</li> <li>• QA/QC</li> <li>• Construction Engineering and Inspection</li> <li>• Overall Project Management</li> </ul>	<b>RELEVANT PROJECT ELEMENTS TO I-64 WIDENING</b>	
<b>Personnel on Project:</b>	<p><b>LANE</b>, as a Construction Joint Venture (CJV) member, shared responsibility for the design and construction of the \$726M I-95 Express Lanes project. The project created approximately 29 miles of Express Lanes in the median of I-95 from Alexandria to Stafford. The scope of work included a 9-mile roadway extension that consisted of maintenance of traffic, poor soils mitigations, shoulder reconstruction, asphalt mill and overlay, structural bridge work, major clearing and earthwork, drainage, an extensive ITS and signing system, and sound walls. Although only a 35% CJV member, LANE provided nearly all of the project supervision and workforce for the work; plus, all of the asphalt paving, soundwall construction and a significant portion of the roadway signage.</p> <p><b>Interstate Widening:</b> Similar to the I-64 Widening project, LANE performed pavement widenings as well as new pavement in the median of an existing high ADT count Virginia interstate. Additionally, LANE performed shoulder strengthening operations on existing shoulders adjacent to this traffic. Extensive asphalt mill and overlays were also executed. As lane closures were needed for various reasons including overhead steel erection, the LANE Team devised many innovative ways to keep traffic flowing on existing roadways as well as temporary pavements, some of which were on poor soils that required amendments. This new construction in the median of the roadway provides new access points to serve Virginia-based destinations, including Tysons Corner, City of Alexandria, Arlington County, and major military sites.</p> <p><b>Median Construction:</b> Performed horizontal and vertical alignment optimization for reversible lanes within interstate median; balanced earthwork; and avoided archeological sites. Unimpeded access to the existing median was necessary to improve safety, minimize impacts to traffic, reduce stress on existing infrastructure, and accelerate the project schedule.</p> <p><b>MOT Design Solutions/Construction Techniques:</b> The I-95 Express Lanes project presented numerous work zone ingress/egress challenges and very tight work areas due to the heavy traffic and median work zone conditions. The I-95 project corridor carries an ADT of nearly 250,000 vehicles per day. The LANE Team mitigated this challenge by working with construction and engineering personnel to devise the best MOT schemes and develop efficiencies; over 1,000 MOT plan sheets were developed and approved. The need for an innovative work zone traffic control and access plan was particularly critical on this project due to the severe deterioration of some of the mainline and surrounding road pavements.</p> <p><b>Bridges and Structures:</b> LANE widened and/or rehabilitated 29 bridges. All of these involved keeping existing traffic moving while performing the work (Reroute flip flop). Nine (9) new bridges were constructed along the project corridor. The new bridges included: two curved steel girders, two double span flyovers, three single span bridges with steel girders, one two-span concrete girder bridge and a two-span steel girder bridge.</p> <p><b>Public Outreach/Involvement:</b> A dynamic public information program was implemented which provided advance information notifications to VDOT and the public. This has been facilitated through meetings, website access, email blasts, flyers, and door to door calls promoting awareness of construction operations and lane closures in order to provide better travel planning through the corridor. The team held over 415 public meetings and the project site had visits from former Governor McDonnell and VDOT Secretary of Transportation Aubrey Layne as well as accolades from current Governor Terry McAuliffe.</p> <p><b>SWM/Drainage:</b> More than 4.5 miles of new storm drainage pipe, 15 stormwater management ponds and surface drainage system for 9 miles of new roadway.</p> <p><b>Utility Coordination:</b> Responsible for the utility relocation design and coordination for all four segments of the 29-mile corridor. The project includes the review of design concepts against existing utilities (Pavement, Structures, Signs); determination of mitigation measures; and ongoing coordination with utility companies. This project involves an expedited design and construction schedule.</p> <p><b>Schedule:</b> The Team had 1,009 days to design and construct this fast track D-B project. The team received NTP on March 27, 2012 and it was imperative that construction start in the first season in order to finish by December 31, 2014. Our Team was able to deliver 123 design packages by implementing over-the-shoulder reviews to help get early approval were able to begin construction within 4 months of NTP. We were able to complete the project 1 month early.</p> <p><b>Safety:</b> The project recorded nearly 4,000,000 man hours worked with 0 Lost Time Accidents. The project OSHA Recordable Incident Rate was 0.44, well below the industry average of 3.6.</p> <p><b>Environmental:</b> The project team implemented a stream and tree restoration effort in Prince William County. The team restored Swan's Creek - a tributary to the Potomac River and Chesapeake Bay - by installing erosion and sediment controls, placing stone along the creek bed, and micro-grading to allow for habitats and improvements to the overall water quality. In addition, nearly 7,500 new trees and shrubs were planted near Swan's Creek as part of the restoration effort. This restoration project was funded and implemented as part of the environmental permit commitments and a ribbon-cutting ceremony was hosted by VA Governor Bob McDonnell.</p>	
<b>EVIDENCE OF PERFORMANCE</b>		
<p>"The progress on the 95 Express Lanes project is a visible reminder of the congestion relief and new travel choices that Virginians will have available to them in less than a year." - Governor Terry McAuliffe.</p> <p>"The 95 Express Lanes combined with the completed 495 Express Lanes will bring a transportation network that manages congestion efficiently, saving time and better connecting commuters with some of Virginia's most important employment centers and military sites." - Sean T. Connaughton, [former] Virginia Secretary of Transportation.</p>		

**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
<b>I-85 WIDENING Cabarrus County, NC  DESIGN-BUILD</b>	<b>HDR</b>	Name of Client./ Owner: <b>NCDOT</b> Phone: <b>704.983.4171</b> Project Manager: <b>Davis Diggs, PE</b> Phone: <b>704.983.4171</b> Email: <b>DDiggs@ncdot.gov</b>	<b>10/2014</b>	<b>10/2014</b>	<b>\$125,000</b>	<b>\$145,000</b>	<b>\$145,000</b>

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.

<p align="center"><b>Similar Scope of Work:</b></p> <ul style="list-style-type: none"> <li>• Design-Build</li> <li>• Roadways</li> <li>• Survey</li> <li>• Structures and Bridges</li> <li>• Environmental</li> <li>• Geotechnical</li> <li>• Hydraulics</li> <li>• Stormdrain and SWM</li> <li>• Guardrail</li> <li>• Traffic Control Devices</li> <li>• Intelligent Transportation Systems</li> <li>• Signs, Sign Structures, and Foundations</li> <li>• Transportation Management Plan</li> <li>• Traffic Maintenance and Management</li> <li>• Right-of-Way</li> <li>• Utilities</li> <li>• Stakeholder Coordination</li> <li>• Relations/Public Involvement</li> <li>• QA/QC</li> <li>• Construction Engineering and Inspection</li> <li>• Overall Project Management</li> </ul>	<p align="center"><b>PROJECT SCOPE</b></p> <p>The widening of the heavily traveled Interstate 85 (I-85) was needed to accommodate additional traffic and reduce congestion. This \$145 million DB project included the widening of approximately seven miles of I-85 from four to eight lanes starting south of Bruton Smith Boulevard/Concord Mills Boulevard to north of NC 73. LANE (as Lead Contractor) removed the existing deteriorated pavement and replaced it with eight lanes of new concrete pavement. Improvements to area roads and interchanges were also performed, including two diverging diamond intersections and a super street. This I-85 project included many tourist attractions including the popular Charlotte Motor Speedway and Concord Mills Mall ( North Carolina's No. 1 visitor attraction) which are both accessed by this route Specific project related elements included; major interstate corridor widening in the median of existing high traffic volumes, shoulder strengthening, structures, MOT, ITS, drainage/ hydraulics/SWM, geotechnical (poor soils mitigations), earthwork, permitting, demolition, noise walls and pavement markings/signage.</p> <p align="center"><b>RELEVANT PROJECT ELEMENTS TO I-64 WIDENING</b></p> <p><b>Interstate Widening:</b> The project includes the widening of approximately seven miles of I-85 from four to eight lanes.  <b>Median Construction:</b> A temporary access bridge with an access ramp was constructed, construction vehicles can access the median areas by traversing this ramp, eliminating any conflict with the normal flow of traffic on these heavily traveled interstate highways. Upon completion of the work, the ramps are removed and existing facilities restored to their original condition or better. The Lane team owns all necessary structural components to build this bridge. The project won multiple awards for this innovative access concept.  <b>MOT Design Solutions/Construction Techniques:</b> Our Team's ability to collaborate and devise innovations was exemplified on this project in a major way. The majority of the new roadway capacity was constructed in the existing 70-foot median, which had the potential to create difficult access for construction equipment and personnel. The need for an innovative work zone traffic control and access plan was particularly critical due to the severe state of deterioration of existing facilities and a high Average Daily Traffic count of 118,000 vehicles. Unimpeded access to the existing median was critical to improve safety, minimize impacts to traffic, reduce stress on existing infrastructure, accelerate the project schedule, and save costs. Lane staff determined that the construction of a temporary bridge with direct median access would solve their needs for unimpeded access. This concept was developed by LANE on previous D-B projects utilizing an existing bridge and a temporary access ramp – LANE used a temporary ramp off an existing bridge for direct median access on the I-95 Widening at Dumfries, VA for VDOT that greatly increased safety, schedule and other impacts. <i><b>LANE was able to accelerate the schedule during the proposal phase by 11 months ahead of the owner's schedule.</b></i> The I-85 temporary bridge was the first time a dedicated temporary bridge was constructed along with temporary access ramps. The safety improvements resulting from this concept were significant. The need to haul 40,000 loads of material across interstate traffic into the median was completely eliminated. Thousands of trips by construction and NCDOT inspection staff were also made safely and without entering traffic.  <b>Bridges and Structures:</b> Six existing bridges were replaced with new structures, two major interchanges were replaced with DDIs, and another major interchange was improved. The project also included the improvement of several miles of crossing streets with a superstreet arrangement.</p> <p><b>Public Outreach/Involvement:</b> LANE coordinated with several stakeholders including two (2) municipalities, over 60 business owners, six (6) utility owners, and multiple local residential communities.  <b>Utility Coordination:</b> The LANE Team's responsibilities included coordinating the relocation of multiple major utilities. These included power distribution (two separate owners), natural gas transmission and distribution, water, sanitary sewer, and extensive communication utilities. To successfully resolve the utility conflicts, the team assigned a LANE engineer to that task exclusively as well as a utility coordination subconsultant.  <b>Right of Way:</b> The D-B team was responsible for acquiring the right of way necessary to construct the project and relocate utilities. Both scopes were very extensive, requiring 96 acquisitions.  <b>Schedule:</b> By leveraging the efficiency afforded by the access bridge and ramp system, LANE provided the NCDOT and FHWA with a very aggressive schedule and highly competitive cost proposal. Utilizing this concept, LANE was able to submit a project completion date 11 months earlier than the required final completion and a bid price \$8.5 million below the engineers' estimate at bid time. To our knowledge, this was only the fourth time a temporary median access ramp has been implemented in the US, <i>all implemented by LANE.</i>  <b>Safety:</b> The safety improvements resulting from this concept are significant. The need to haul 40,000 loads of material across interstate traffic into the median has been completely eliminated and, while hauling is critical, thousands of trips by construction and NCDOT inspection staff have also been made safely and without entering traffic.  <b>Environmental:</b> This project involved 2,000 feet of street and wetland impacts. The permit modification application was completed ahead of schedule and subsequently approved by the USACE.</p> <p align="center"><b>EVIDENCE OF PERFORMANCE</b></p> <p>project won the 2012 "TransOvation" Award and "Roadway Work Zone Safety Awareness" award from the American Road &amp; Transportation Builders Association (ARTBA). Lane also received, an award for "Asphalt Operations Safety Innovation" in 2012 from The National Asphalt Pavement Association (NAPA); in addition to the "Top Ten Project" award given by the Roads and Bridges Magazine in 2014.</p>	
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**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
<b>I-264 WIDENING AND MARTIN LUTHER KING EXPRESSWAY EXTENSION Portsmouth, VA DESIGN-BUILD</b>	<b>SKW Constructors, Inc. (an incorporated Joint Venture of Skanska Civil Southeast, Inc.; Kiewit Construction; and Weeks Marine, Inc.)</b>	Name of Client/Owner: <b>SKW Constructors</b> Phone: <b>(757) 673-9487</b> Project Manager: <b>Wade Watson</b> Phone: <b>(757) 673-9487</b> Email: <b>wade.watson@skanska.com</b>	<b>12/2011</b>	<b>10/2017</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$12,000</b>

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

<b>Similar Scope of Work:</b>	<b>PROJECT SCOPE</b>	
<ul style="list-style-type: none"> <li>• Design-build</li> <li>• Interstate widening</li> <li>• Stormwater management</li> <li>• Survey</li> <li>• Utility Coordination</li> <li>• Environmental permits</li> <li>• Geotechnical</li> <li>• MOT/traffic control/TMP</li> <li>• Erosion and sediment control</li> <li>• Bridge widening and soundwalls</li> <li>• Right-of-way</li> <li>• QA/QC</li> <li>• Intelligent Transportation Systems</li> <li>• Interstate signage</li> <li>• Public involvement/ stakeholders</li> </ul>	<b>RELEVANT PROJECT ELEMENTS TO I-64 WIDENING</b>	
<b>Proposed Personnel on Project:</b>	<p><b>As the Lead Designer for this D-B project, WSP   Parsons Brinckerhoff (PB) was responsible for design services for the widening and modifications to I-264 for a new interchange at the MLK Extension, design of the MLK Extension (1-mile of new location elevated freeway), and eliminating existing interchange ramps (as part of the Elizabeth River Tunnels D-B project). The MLK Expressway is a north-south, 4-lane facility that provides access from the City of Portsmouth to the City of Norfolk both via the Midtown Tunnel, and via I-264 to the Downtown Tunnel. In the City of Portsmouth, a direct, limited-access connection did not exist between the MLK Freeway and I-264, forcing drivers to use routes through local city streets and neighborhoods. The MLK Expressway extension project consisted of extending the freeway south from London Boulevard, with a new interchange at I-264 to provide a direct connection from I-264 to the Midtown Tunnel. WSP   Parsons Brinckerhoff was responsible for the design of roadway, drainage, erosion and sediment control, structures, utility coordination, traffic control plans, and design management. Design work was managed and completed in WSP   Parsons Brinckerhoff's Virginia Beach, VA office with support from other regional offices.</b></p> <p><b>Interstate Widening:</b> Roadway improvements include the widening of I-264 for 1.5 miles of auxiliary lanes along I-264, modifications to I-264 for a new trumpet-style interchange that connects to the MLK Expressway, bridge widening along I-264 at Des Moines Avenue and NPL Railroad, over a thousand feet of soundwall, and accommodations for the truck inspection station along the corridor.</p> <p><b>MOT Design Solutions:</b> 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 of specific construction components, to facilitate the overall project schedule. Disruptions to I-264 traffic were generally limited to temporary closures for placing superstructure elements over the existing roadway. During construction, MOT and detours were closely coordinated with the City of Portsmouth and VDOT to minimize impacts. The MOT and TMP was designed to accommodate the operations of the truck inspection station in the project corridor. The design team worked closely with VDOT and local staff to analyze current as well as phased construction traffic to develop a safe and effective TMP plan. PB understands how early, frequent communication with VDOT (and local partners) accelerates plan submittal approvals and is essential for a seamless construction phase.</p> <p><b>Bridges and Structures:</b> This project required the widening of I-264; the design of the MLK Extension including, two I-264 bridge widenings including widening the existing bridge over N&amp;PBL railroad, three noise barriers; significant overhead guide signage; ITS system replacement/upgrades along I-264; and new ITS systems along the MLK Extension.</p> <p><b>Public Outreach/Involvement:</b> The project traverses above/through a developed area of Portsmouth, requiring close coordination with the City to relocate local utilities, close and relocate local streets, maintain access to properties along the project route, and coordinate with both N&amp;PBL for bridge crossings.</p> <p><b>SWM/Drainage:</b> Design included 11 stormwater ponds/basins (including significant landscaping and aesthetic treatments);</p> <p><b>Utility Coordination:</b> As part of the utility design, WSP   Parsons Brinckerhoff was responsible for the water supply for fire suppression associated with the tunnel, including 8,000 feet of 16-inch water line (Portsmouth side), two jack and bore crossings under rail road tracks. The effort required extensive coordination with utility owners.</p> <p><b>Right-of-way:</b> WSP   Parsons Brinckerhoff worked closely with SKW and the Right-of-Way (ROW) acquisition consultant to facilitate ROW acquisition for 75 parcels. On several occasions, plan changes were incorporated to either eliminate or reduce right-of-way impacts, which reduced VDOT's acquisition cost and facilitated owner approval of the acquisition. ROW acquisition was completed in accordance with VDOT's ROW Manual and all applicable state and federal laws and regulations.</p> <p><b>Environmental:</b> Environmental work addressed all items necessary for the acquisition of water quality permits, including key permits from the United States Army Corps of Engineers (USACE), performed through the Joint Permit Application submitted to USACE, Virginia Department of Environmental Quality (VDEQ), and Virginia Marine Resource Commission. Parsons Brinckerhoff lead environmental permitting and preparation of a NADR for the overall project. Permanent noise mitigation was provided in compliance with the Virginia State Noise Abatement Policy and the Highway Traffic Noise Impact Analysis Guidance Manual for the three new sound barrier walls. A Noise Abatement Design Report was also furnished by WSP   Parsons Brinckerhoff.</p>	
<b>EVIDENCE OF PERFORMANCE</b>		
<ul style="list-style-type: none"> <li>➤Design-Build Institute of America Project of the Year Award 2016</li> <li>➤ACEC Grand Award 2016</li> </ul>		

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
<b>I-10 (VAL VISTA ROAD) WIDENING Casa Grande, AZ</b>	<b>The Ashton Company, Inc.</b>	Name of Client./ Owner: <b>Arizona Dept. of Transportation (ADOT)</b> Phone: <b>(520) 209-4521</b> Project Manager: <b>Steve Wilson (formerly with ADOT)</b> Phone: <b>(520) 724-5912</b> Email: <b>Stephen.wilson@pima.gov</b>	<b>9/2010</b>	<b>10/2013</b>	<b>\$32,000</b>	<b>\$32,000</b>	<b>\$2,200</b>

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

<b>Similar Scope of Work:</b>	<b>PROJECT SCOPE</b>
<ul style="list-style-type: none"> <li>• Interstate widening</li> <li>• Existing interchange ramp improvements</li> <li>• Survey</li> <li>• Box culvert extensions and soundwalls</li> <li>• Environmental permits</li> <li>• Geotechnical</li> <li>• Stormwater Management</li> <li>• Median crossovers</li> <li>• MOT/ traffic control/TMP</li> <li>• Erosion control and sediment control</li> <li>• Intelligent Transportation Systems</li> <li>• Interstate signage</li> <li>• Utility coordination</li> <li>• Public Involvement/ stakeholders</li> <li>• QA/QC</li> <li>• Construction Engineering and Inspection</li> </ul>	<p>WSP   Parsons Brinckerhoff served as Lead Designer and completed design services required to widen 11 miles of I-10 from a 4-lane to a 6-lane facility with 12-foot shoulders and reconstructed existing interchange ramps as part of the project. PB developed a median/outside widening strategy that minimized impacts outside of the I-10 footprint, avoided five (5) existing bridge crossings, re-built the McCartney Road interchange ramps. The project included maintaining the existing 4-lanes of traffic during construction; the extension of twenty-four (24) concrete box culverts using precast elements; aesthetic treatments that included landform graphics with slope flattening, two (2) noise barriers, twenty (20) pipe extensions, twenty-seven (27) median inlet adjustments, and significant overhead highway signage. Median crossover locations were coordinated with District maintenance staff and the Department of Public Safety to locate median barrier openings near existing interchanges and minimize the number of end terminals. The utility coordination effort included working with two petroleum pipeline owners to design and construct protective reinforced concrete slabs over five (5) separate shallow pipeline crossings ranging in size from 10-inches to 36-inches.</p>
<b>Proposed Personnel on Project:</b>	<b>RELEVANT PROJECT ELEMENTS TO I 64-WIDENING</b>
Christopher Moore (PB)	<p><b>Interstate Widening:</b> I-10 serves as the main link between Tucson and Phoenix carrying over 50,000 vehicles per day with a high percentage of trucks. ADOT implemented an interim widening program to improve capacity and safety within the corridor by improving the existing 4-lane interstate to a six-lane facility with 12-foot shoulders and upgraded interchange ramps. The design effort included 9.5-miles of roadway design with upgrades to the existing McCartney Road interchange that improved the geometry of the ramps and provided acceleration/deceleration lanes.</p> <p><b>MOT Design Solutions:</b> The project included maintaining the existing 4-lanes of traffic during construction in addition to all interchange ramps. A key design component was to reduce “throw away” during the ultimate widening from 6-lanes to 8-lanes in the future. The noise walls were located outside of the future I-10 footprint and revised interchange ramp geometry considered the ultimate interchange configuration and potential construction sequencing that would facilitate MOT. The existing shoulders were strengthened to accommodate traffic shifts and remove the rumble strip.</p> <p><b>Median Design:</b> The design specified the use of precast concrete barriers that were pinned to the thinner shoulder pavement layers to allow for potential reuse during the ultimate widening. Additional median drainage inlets were designed and connected to existing cross culverts to provide adequate drainage. There were 44 drainage structures that were extended in addition to the adjustment of existing median inlets, many of which used precast elements to reduce construction durations. The project included; the extension of twenty-four (24) concrete box culverts using precast elements; aesthetic treatments that included landform graphics with slope flattening, two (2) noise barriers, twenty (20) pipe extensions, twenty-seven (27) median inlet adjustments, and significant overhead highway signage. Median crossover locations were coordinated with District maintenance staff and the Department of Public Safety to locate median barrier openings near existing interchanges and minimize the number of end terminals.</p> <p><b>Bridges and Structures:</b> The five existing structures crossing I-10 each have four spans with piers located at the shoulders and in the median. The widening was transitioned from the outside lanes to the median at each crossing to avoid impacting the structures. A 2.6 mile section was widened only towards the median to eliminate tapered traffic shifts and avoid the bridge piers.</p> <p><b>Public Outreach/Involvement:</b> The design team participated in two public meetings and provided ADOT with graphics and design information that was placed on ADOT’s project website. Regular construction updates and traffic control changes were communicated weekly to the public through local media and project email list.</p> <p><b>SWM/Drainage:</b> The capacity of all 44 existing drainage structures was analyzed to verify that additional structures were not required. The design specified the use of precast box culvert extensions to reduce the overall construction duration.</p> <p><b>Utility Coordination:</b> The utility coordination effort included coordinating with two petroleum pipeline owners to relocate, adjust, design, and construct protective reinforced concrete slabs over five (5) separate shallow gas pipeline crossings ranging in size from 10-inches to 36-inches.</p> <p><b>Schedule:</b> The design of this project was accelerated to be completed in 9-months in order to take advantage of surplus funding available at the end of the fiscal year. Parsons Brinckerhoff applied lessons learned on past interstate projects to provide cost saving designs that delivered the project 5 months ahead of schedule and within budget.</p> <p><b>Environmental:</b> Since the project crossed a FEMA floodplain, a complete hydrologic and hydraulic analysis was completed to verify the capacity of the existing structures and ensure that the widening did not adversely impact the floodplain or the adjacent stormwater basins. A noise analysis requested during a public determined that soundwalls were reasonable and feasible and were included with the project.</p>



**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
<b>I-85 WIDENING Cabarrus County, NC  DESIGN-BUILD</b>	<b>Blythe Construction, Inc.</b>	Name of Client./ Owner: <b>NCDOT</b> Phone: <b>919-212-3256</b> Project Manager: <b>Khaled Al-Akhdar</b> Phone: <b>919-707-6612</b> Email: <b>kalakhdar@ncdot.gov</b>	<b>04/2015</b>	<b>12/2017</b>	<b>\$187,000</b>	<b>\$187,000</b>	<b>\$12,000</b>

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

<b>Similar Scope of Work:</b>	<b>PROJECT SCOPE</b>	
<ul style="list-style-type: none"> <li>• Design-build</li> <li>• Interstate widening</li> <li>• Accelerated schedule</li> <li>• Utility coordination</li> <li>• Stormwater management</li> <li>• Construction phasing that focuses on increased safety and improved traffic operations</li> <li>• Erosion and sediment control</li> <li>• Interstate signage</li> <li>• MOT/traffic control/TMP</li> <li>• QA/QC</li> <li>• Right-of-way</li> </ul>	<p>WSP   Parsons Brinckerhoff (PB) is the lead design engineer for this \$187-million D-B project in Cabarrus County, North Carolina. The project includes the design and construction of an eight-mile segment of I-85 that will include widening the roadway from four to eight lanes. The project also involves, the reconstruction and reconfiguration of three interchanges, reconstruction of 17 bridges, and 1-mile of railroad track relocation. The project will reduce congestion, improve safety, and enhance connectivity to surrounding neighborhoods and businesses in this highly trafficked corridor.</p>	
<b>Proposed Personnel on Project:</b>	<b>RELEVANT PROJECT ELEMENTS TO I-64 WIDENING</b>	
David B. Gourley, PE (PB) Daniel Bridges, PE (PB) Chris Davis, PE (PB)	<p><b>Interstate Widening:</b> Widening eight miles of I-85 from four lanes to eight lanes from north of NC 73 to Lane Street. Since the project also involved reconstruction of the existing lanes the project was designed to limit outside widening to reduce impacts to existing streams and wetlands. Reinforced slopes and lowering the I-85 profile was utilized to reduce sliver fills.</p> <p><b>Median Design:</b> The I-85 median will be 22' wide with variable height median barrier. During design northbound and southbound profiles were reviewed to reduce the amount of variable height median barrier throughout the corridor.</p> <p><b>MOT Design Solutions:</b> The project involved widening the interstate from 4 to 8-lanes and reconstruction of the existing pavement. The project was phased to complete construction of the inside lanes, and then shift traffic onto the new lanes while reconstructing the existing pavement. In order to prevent construction traffic from accessing the median from the interstate, a temporary median access ramp, from Ridge Avenue, was proposed for construction traffic to access the median.</p> <p><b>Bridges and Structures:</b> There are 17 bridges being replaced as part of the reconstruction of I-85, two of the bridge structures support railroad loading and the remaining bridges support highway traffic loading. The structure types include cast-in-place concrete culvert, prestressed concrete girders, steel plate girder and curved steel plate girder.</p> <p><b>Public Outreach/Involvement:</b> The public involvement program included a project website (maintained by NCDOT), project visualizations, newsletters and handouts, public workshops and small group meetings. In addition, PB utilized CommentSense, its proprietary web-based comment tracking software tool, to manage public comments.</p>	
<p><b>SWM/Drainage:</b> Erosion was controlled with geometric design, proper drainage channels, and landscape development including protective ground covers and plantings, dikes, berms, flat side slopes that are rounded and blended with natural terrain, and facilities for ground water interception. This erosion and sediment control plan prevented impacts during construction such as safety hazards, expensive maintenance problems, slope instability, and disruption of ecosystems. The plan was designed to state policy and all of the necessary permitting requirements. WSP  Parsons Brinckerhoff's proposed design <b>reduced stream and wetland impacts by nearly 30 percent.</b></p> <p><b>Right-of-way:</b> The team performed extensive due diligence with utility companies to identify ROW requirements early in the design process. The team's design eliminated approximately 40 right-of-way impacts and <b>provided significant savings to NCDOT, approximately \$3 million).</b></p> <p><b>Schedule:</b> An accelerated schedule was developed to complete the project <b>six months ahead of NCDOT's schedule.</b></p> <p><b>Environmental:</b> The design team developed and evaluated innovative design solutions that reduced environmental impacts to stream and wetlands by nearly 30%.</p> <p><b>Innovative Design Solutions/Construction Techniques:</b> There were several alternative technical concepts (ATCs) approved as part of this project. Through these ATCs the team was able to reduce impacts to utilities and right-of-way, reduce impacts wetlands and streams, and improve traffic operations. In addition, these approved ATCs provided an <b>estimated cost savings to NCDOT of \$12.1 million.</b></p>		



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