

STATEMENT OF QUALIFICATIONS

I-95 SOUTHBOUND CD LANES – RAPPAHANNOCK RIVER CROSSING

STAFFORD COUNTY / CITY OF FREDERICKSBURG, VIRGINIA

STATE PROJECT NO.: 0095-11-259
FEDERAL PROJECT NO.: IM-5111(235)
CONTRACT ID NUMBER: C00101595DB94



FEBRUARY 7, 2017



February 7, 2017

Mr. Suril R. Shah
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

RE: I-95 Southbound CD Lanes – Rappahannock River Crossing From: Exit 130 To: 0.66 Miles North of Exit 133
State Project Nos.: 0095-111-259 | Federal Project Nos.: IM-5111(235)
Contract ID Number: C00101595DB94

Dear Mr. Shah:

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)*, specializing in high quality roadway and bridge construction. LANE has a long and successful history of project delivery in Virginia, having completed nearly 150 projects worth over \$2.4B in the Commonwealth alone.

As a leader in the Design-Build (D-B) method (nationally ranked as the 55th Top Design-Build Firm by *ENR*) LANE has constructed more than 75 projects worth over \$3B in D-B projects 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 are teamed with KCI Technologies (KCI) as the Lead Designer and Rinker Design Associates (RDA) as a major subconsultant to KCI. LANE, KCI, and RDA have an extensive and successful history of teaming together. LANE and KCI are currently working together on the \$220M SCDOT Port Access Interchange and Viaduct Bridge Design-Build Project in Charleston, SC along with numerous D-B pursuits in VA, SC, NC, and TX. KCI and RDA are teamed together on VDOT's I-64 Segment II D-B project while LANE and RDA are delivering VDOT the I-66/Route 15 Interchange Reconstruction in Prince William County along with the Route 29 Solutions D-B in Albemarle County. Together, we provide VDOT with a reputable team that has completed projects of this size and scope on time and within budget as evidenced in our collective project experiences.

LANE and KCI, in conjunction with additional hand-selected design and construction specialty firms, are highly experienced with VDOT processes and procedures and will provide design and construction for the I-95 Southbound CD Lanes – Rappahannock River Crossing project. We are confident in our team structure and experience, and have elaborated on our distinctive qualifications in the subsequent sections.

3.2.2 Offeror's Point of Contact Information: Mr. Donald E. Bryson, Jr. is the point of contact and authorized representative for the LANE Team for all matters associated with this qualifications submittal.

Donald E. Bryson Jr., Pursuit Manager
14500 Avion Parkway, Suite 200, Chantilly, VA 20151
Tel: (703) 222-5670 Fax: (703) 222-5960
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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 the 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 who will execute the contract with VDOT. The full legal name of the Lead Designer is: KCI Technologies, Inc. (KCI). KCI 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 as identified as members of the LANE Team and may be found in the Appendix.

3.2.8 Offeror's VDOT Prequalification Evidence: Evidence from VDOT's online Prequalified List (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 Professional Services 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,



Donald E. Bryson, Jr.
Pursuit Manager
The Lane Construction Corporation

3.3 OFFEROR'S TEAM STRUCTURE

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-95 Southbound CD Lanes – Rappahannock River Crossing (I-95/ Rappahannock River) project and will be responsible for managing the project, supervising construction, and self-performing the major work elements. LANE was named the 2015 Top Contractor by *ENR Mid-Atlantic* and is the #1 Highway Contractor by *ENR*. Our proven heavy civil experience in bridge and roadway construction and more than 75 D-B projects ranging in scope and value from \$13M to \$2.3B demonstrates LANE's ability to tackle the region's most challenging infrastructure projects.



KCI Technologies, Inc. (KCI), as the Lead Designer, will provide structure design, river hydraulics, and overall design project management. KCI (formerly Triplett-King & Associates, Inc.) is an employee-owned, full service engineering firm employing approximately 1,300 people in more than 36 offices, including Richmond, VA. KCI was established in 1955 and has consistently been placed among ENR's top 100 engineering firms in the country. KCI has excelled in providing management and design services for fast track, D-B projects; this experience includes 35 major transportation D-B projects. KCI's value engineering and innovative designs have saved DOT clients over \$18M in the last 16 years. KCI also specializes in construction engineering and has a client list of over 60 highway/heavy contractors throughout the Southeast, which provides KCI's staff a competitive edge for constructability and efficient designs.



Rinker Design Associates, PC (RDA), as the subconsultant to the Lead Designer, will provide roadway design and other support services for the project. RDA is a Virginia-based firm with over 120 employees with offices in Manassas, Fredericksburg, and Richmond. They are an award-winning Virginia-Certified Small Business (DSBSD Certification #652784) and, in the last decade, have served as the Lead Designer on 13 D-B projects while supporting an additional five.

Additional Subconsultants

The LANE Team also includes the following highly qualified subconsultants:

- CES (QAM)
- The Albrite Group (Public Relations)
- EEE (Environmental)
- InfraMap (SUE)
- F&R (Geotechnical & QC Lab)
- Dulles Geotechnical & Material Testing Services, Inc. (QA Lab)

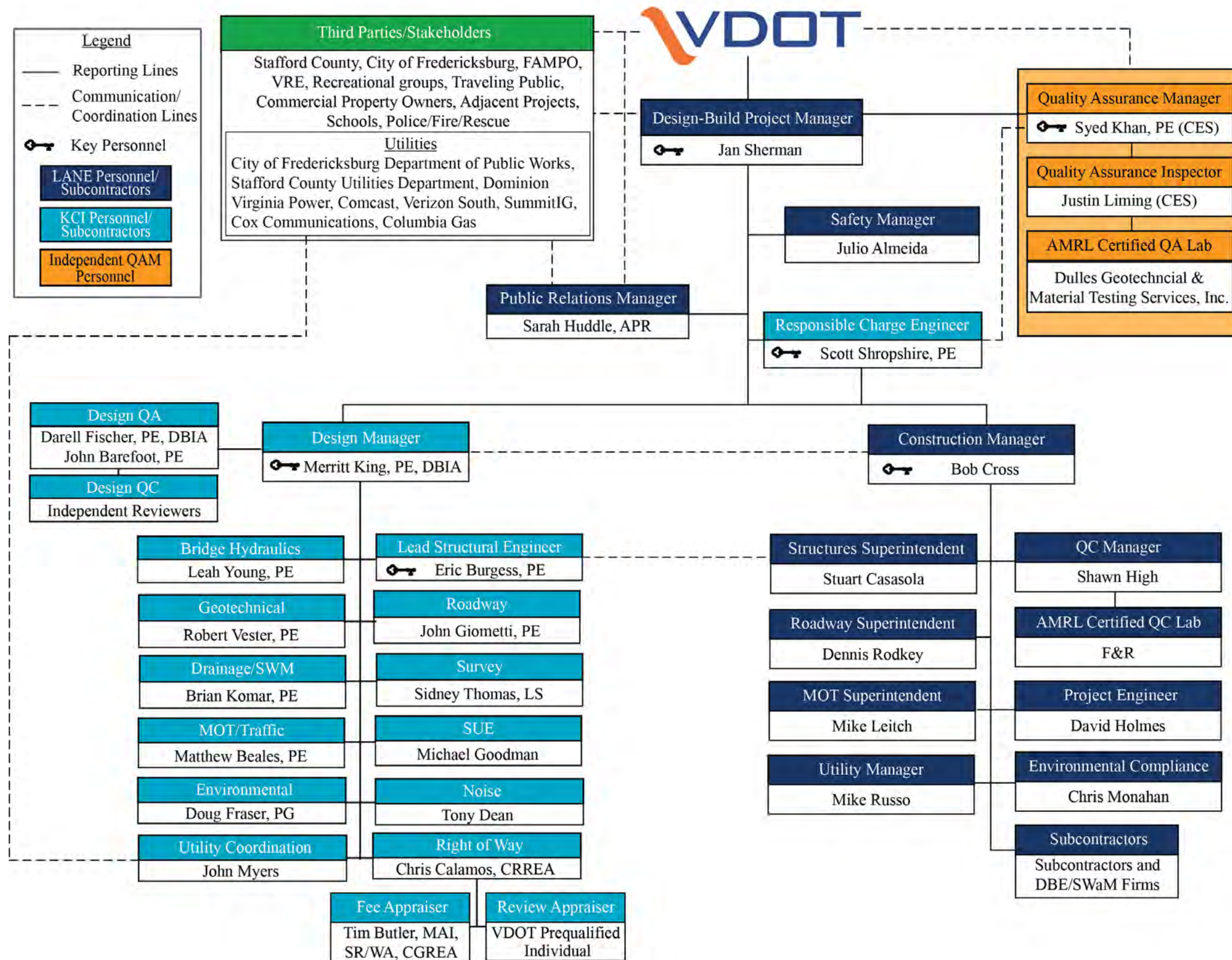
LANE and KCI have an extensive and successful history working together. KCI (and our Design Manager, Merritt King, PE) first started working with LANE over 25 years ago on a multitude of SC and NC bridge projects. Since that time, KCI has continued to provide construction engineering, value engineering, and D-B services for LANE. LANE and KCI are currently working together on the Port Access D-B project for SCDOT. As further evidence of our Team's collaborative working relationships, LANE and RDA also have a long history of teaming together on important D-B projects in the Commonwealth. Two recent projects in which LANE is the Lead Contractor and RDA is a Lead Designer include the I-66/Route 15 Interchange Reconstruction D-B project in Prince William County and Route 29 Solutions D-B project where RDA was the Lead Designer for the Route 29 Widening segment. Additionally, KCI and RDA are currently teamed together on the I-64 Capacity Improvements – Segment II D-B and the Route 46 Nottaway River Bridge projects for VDOT. The longstanding and integrated LANE Team will use the knowledge and experience gained through previous D-B projects to successfully deliver the I-95/ Rappahannock River project to VDOT.

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-95 Rappahannock River project. They are assigned and dedicated for the duration of the project. Information regarding their experience can be found in Attachment 3.3.1 in the Appendix.

3.3.2 Organizational Chart

The LANE Team organization has a straight-forward chain of command, with individual tasks, responsibilities, and functional relationships clearly identified. The following Organizational Chart depicts VDOT, third party stakeholders, key personnel, and their respective relationships and functions.



Reporting Relationships of Key Personnel

D-B Project Manager (DBPM), Mr. Jan Sherman (LANE) will report to VDOT and serve as VDOT's central point of contact. He facilitates communication among VDOT, team partners and adjacent projects, monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and delegate resources to deliver the project on time. It is his responsibility to work with the Team to ensure that the design complies with the owner's specifications. Mr. Sherman's management from design through construction includes weekly design and construction meetings to discuss how the Team will construct the project. Additionally, he is responsible for construction quality management, contract administration, and coordination of public outreach and public meetings.

☑ Added Value: Mr. Sherman is currently the DBPM on the I-66/Route 15 Interchange Reconstruction project (with RDA as Lead Designer). Additionally, Mr. Sherman was Project Manager on the \$1.5B I-495 Express Lanes project (*included in Work Histories*) which included major interstate roadway widening and bridges/structures in one of the most congested regions in the country.

Responsible Charge Engineer (RCE), Mr. Scott Shropshire, PE (RDA) reports to the DBPM, communicates regularly with VDOT, the DM and CM, and supervises, directs, and controls both design and construction teams. He is integrated among the project team and will accept full professional responsibility for engineering decisions relating to the final product. Mr. Shropshire answers questions/inquiries relevant to engineering decisions relating to design and/or construction and has authority to shut down the project if warranted. Mr. Shropshire is a registered Professional Engineer in Virginia.

☑ Added Value: Mr. Shropshire has completed numerous projects in Stafford County and has extensive experience in the corridor coupled with strong, professional knowledge of the project area and longstanding professional relationships with the Fredericksburg District and Stafford County. In his tenure at VDOT, Mr. Shropshire was the Area Construction Engineer (ACE) for over 120 contracts in the Fredericksburg District.

Quality Assurance Manager (QAM), Mr. Syed Khan, PE (CES) reports directly to the DBPM on all quality issues. Any item of work failing to meet minimum standards is rejected and corrected immediately. Construction personnel have no authority over QA inspection staff. Mr. Khan keeps VDOT informed on the status of quality of construction and issues/resolutions/solutions through weekly reports and progress meetings. As QAM, Mr. Khan holds the authority to shut down the job if quality issues warrant. **Quality Assurance Inspector, Mr. Justin Liming (CES)**, reports directly to the QAM, and is assigned to the project on a full-time basis for the duration of the project. The AMRL Certified QA laboratory reports to Mr. Khan.

☑ Added Value: Mr. Khan has been providing quality assurance and quality control services on a variety of D-B and D-B-B projects ranging from \$1M to \$5B. He has extensive experience working on complex bridge and roadway widening projects and has worked on VDOT projects for over 20 years.

Design Manager (DM), Mr. Merritt King, PE, DBIA (KCI) reports directly to the DBPM. Mr. King, a Virginia PE, maintains close communication with the RCE and CM; and ensures the overall project design is completed in accordance with the requirements of the Contract Documents. All design, ROW, and permitting disciplines report directly to Mr. King. He provides VDOT with design plans for review and approval. Mr. King is also responsible for establishing oversight of the QA/QC program for all design disciplines of the project which are performed by qualified, independent staff personnel.

☑ Added Value: Mr. King has designed or managed 23 major D-B highway projects for DOT clients, including the Route 288 PPTA, Route 288/I-64 Interchange D-B in Richmond, VA and the I-520 Palmetto Parkway D-B, Phase I and II in Aiken County, SC. Mr. King has worked with LANE on six major transportation projects and has managed numerous construction engineering projects for LANE since 1989. Similar project experience with LANE includes the I-77 Dual Bridge Widening over Catawba River, York, SC; US 176 Bridge Replacement over Broad River, Richland County, SC; and US 21 Bridge Replacement over Catawba River, York County, SC.

Construction Manager, Mr. Bob Cross (LANE) reports directly to the DBPM and is on-site full-time for the duration of the project. His daily duties include: safety, coordination of all project personnel including subcontractors, and execution of the construction QC program. He holds ultimate responsibility for managing the construction schedule with his staff engineers and coordinating regularly with adjacent projects underway. He coordinates daily meetings with the QA Lead Inspector, and QC Manager to discuss all ongoing construction activities. He also reviews all construction QC reports and lab results. Mr. Cross is currently working on the I-66/Route 15 Interchange Reconstruction project and will be available prior to the start of I-95/Rappahannock River construction. Mr. Cross currently holds a DEQ RLD Certification and will hold a VDOT ESCCC as required.

Added Value: Mr. Cross served as a Construction Manager on numerous roadway widening and intersection projects in Virginia. He is currently the Construction Manager working with proposed DBPM, Mr. Sherman and RDA staff on the I-66/Route 15 Interchange Reconstruction project in this identical role. Mr. Cross was also a Construction Manager on the I-495 Express Lanes project (*included in Work Histories*).

Lead Structural Engineer, Mr. Eric Burgess, PE (KCI) reports directly to the DM. Mr. Burgess is responsible for structural design of the bridges and retaining walls. He reviews, verifies, and modifies designs, if necessary, based on field conditions and construction activities related to dismantling and removing portions of existing structures, installing foundation structures, handling and erecting bridge girders, and making superstructure and substructure repairs. Mr. Burgess is a registered, licensed, Professional Engineer in the Commonwealth of Virginia.

Added Value: Mr. Burgess provides VDOT with over 14 years of D-B and highway bridge and structure design knowledge and experience. He has been involved with over 50 DOT bridge replacement projects for multiple DOTs, including VDOT on such projects as I-64 Segment II D-B, Route 288 PPTA, Region II D-B Bridge Replacements, and Route 46 Bridge Replacement over Nottoway River. Mr. Burgess is also currently working with LANE on the Port Access D-B project, where he is serving as the seismic engineer for the D-B team.

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	Bridge Exp.	Complex MOT	VDOT Exp.
<i>Other pertinent design disciplines that will report directly to Mr. King, PE (DM) include:</i>						
Darell Fischer, PE, DBIA/Design QA	30	✓	✓	✓	✓	✓
John Barefoot, PE/Design QA	21	✓	✓	✓	✓	✓
Leah Young, PE/Bridge Hydraulics	13	✓	✓	✓		✓
John Giometti, PE /Roadway	28	✓	✓	✓	✓	✓
Doug Fraser, PG/Environmental	36	✓	✓	✓	✓	✓
Robert Vester, PE/Geotechnical	17	✓	✓	✓		✓

Name/Position	Yrs Exp	D-B	Interstate Widening	Bridge Exp.	Complex MOT	VDOT Exp.
<i>Other pertinent construction disciplines that will report directly to Mr. Cross (CM) include:</i>						
Mike Russo/Utility Manager	6	✓	✓	✓	✓	✓
Karla Mejia /MOT Superintendent	14	✓	✓	✓	✓	✓
Stu Casasola/Structures Superintendent	14	✓	✓	✓	✓	✓
George Hansbrough/Roadway Superintendent	21	✓	✓	✓	✓	✓
Chris Monahan/Environmental	15	✓	✓	✓	✓	✓

Design and Construction Team Interaction

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.

To ensure a successful project, the LANE Team’s extensive D-B experience has shown that weekly scheduled discipline coordination meetings throughout project execution are critical. These focused meetings, which are led by the RCE and coordinated through 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 the LANE Team to address plan elements serve to clearly define project criteria. VDOT will be invited on a regular basis for over the shoulder reviews and coordination to ensure VDOT’s intentions are being met, address corridor-wide safety and constructability issues, and provide consistency in design before becoming 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 constructible 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 contractor expertise to develop the most efficient construction sequence and schedule logic
Advising design team on specific construction elements required for the project	Enables tailoring of design / construction documentation to construction delivery method
Providing input on construction means and methods to design packages	Ensures practical designs that support planned construction approaches in a safe and economical manner
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 statements of work	Ensures that design requirements and intent are integrated into the subcontractor’s work package
Assignment of design engineer(s) on-site, as needed	Provides assistance in interpretation of design requirements and responding to field changes
Providing support to review and implement field changes requiring design revisions	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 OFFEROR'S TEAM

3.4 | EXPERIENCE OF OFFEROR'S TEAM

Both LANE and KCI are among the nation's top-ranked firms in their respective specialties. We have designed and built some of our country's most important infrastructure. Each firm has earned industry-wide recognition for their success in controlling, managing, and executing work. The blend of similar projects that we each have and are working on in the region, and with the agencies involved confirms our qualifications to successfully deliver all elements of this project. Supported by RDA, who has extensive D-B experience in Virginia, LANE has assembled a Team built for success.

Bridge/Structures Experience. LANE and KCI have both developed a niche for designing and constructing major bridges over rivers similar to the I-95 Rappahannock River project, such as:

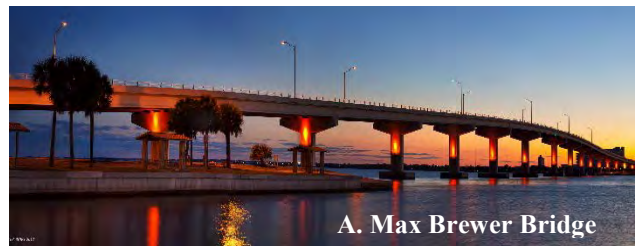
- South Norfolk Jordan Bridge, Norfolk, VA \$76.5M (LANE)
- I-77 Bridges over Catawba River, York County SC (\$7.4M) (KCI)
- A. Max Brewer Bridge, Titusville, FL \$45M (LANE)
- I-85 Bridge Replacements over South Tyger River, Spartanburg County, SC (\$8.4M) (KCI)
- US 21 Bridge Replacement over Catawba River, York County, SC (\$18.7M) (KCI)
- I-85 Yadkin River Bridge, Salisbury, NC (\$144M) (LANE)
- US 1 Bridge Replacements over Great Pee Dee River, Chesterfield County, SC (Construction Pending) (KCI)
- SC 41 Bridge Replacement over the Wando River, Charleston, SC (\$29.6M) (KCI)
- I-35 Improvements Brazos Bridge, McLennan County, TX \$214M (LANE)
- US 176 Bridge Replacement over Broad River, Columbia, SC (\$24.5M) (KCI)
- 29 Solutions, Charlottesville, VA \$116M (LANE/RDA)
- US 17 Bridge Replacements over Combahee River, Hampton County, SC (Construction pending) (KCI)
- I-520 Bridge over Savannah River, Aiken County, SC/August, GA (\$43.9M) (KCI)

Interstate D-B Experience. LANE excels in complex interstate construction and has successfully completed a wide variety of interstate D-B projects for VDOT including the highly acclaimed 95 and 495 Express Lanes projects. Other relevant D-B interstate projects include: \$145M I-85 Widening, Cabarrus County, NC; \$212M I-35 Improvements, McLennan County, TX; and \$2.3B I-4 Ultimate P3, Orange County, FL.

KCI is a leader in Design-Build and many projects involved interstates, including new facilities, widenings and/or rehabilitations. KCI has extensive experience in the Mid-Atlantic and Southeast with major interstate projects as the lead engineer or serving as a subconsultant. Design tasks include roadway design, traffic and



South Norfolk Jordan Bridge



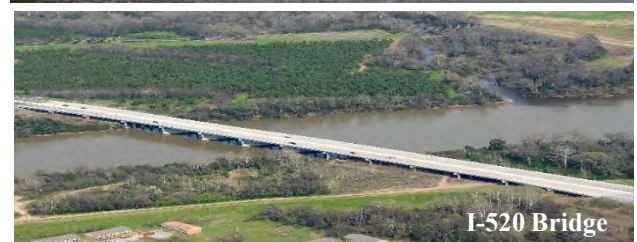
A. Max Brewer Bridge



I-85 Yadkin River Bridge



US 1 Bridge Replacement



I-520 Bridge

MOT, bridge and structure design, bridge rehabilitation, cross slope corrections, alignment changes, drainage and signing/signals. Project experience includes I-95/I-495/MD210 Interchange Reconstruction, Prince Georges Co., MD; I-195 Interstate Access Road/BWI Airport, Linthicum Heights, MD; I-520 Palmetto Parkway Phases I & II, Aiken Co., SC; I-64 Widening and Rehabilitation - Segment 2, Newport News, VA; I-95 Widening and Rehabilitation, Florence Co., SC; I-77 Widening & Rehabilitation, Columbia, SC.

RDA's extensive VDOT D-B interstate experience includes the I-64 Capacity Improvements – Segment II (teamed with KCI), I-581/Elm Avenue Interchange Improvements, I-95 at Temple Avenue Interchange Improvements, and I-66/Route 15 Interchange Reconstruction (teamed with LANE). Furthermore, RDA supported LANE's design team on the I-95 Express Lanes project to the north of this project.

3.4.1 Work History Forms

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

3.5 | PROJECT RISKS

The LANE Team has carefully considered the key elements of work for the I-95 Rappahannock River project to determine the three most relevant and critical Project Risks *for our Team to mitigate* for the success of this Project. In making our assessment, we considered numerous potential risks to the project including: geotechnical conditions, utility relocations, Time of Year Restrictions, Transportation Management Plan, agency/stakeholder coordination, public relations, permitting, Stormwater Management, Proximity of the Central Park Property Owners Association Impoundment, and ROW acquisitions. Each of these risk items will have a major impact on the project if not properly assessed and mitigated. We have concluded that **Transportation Management Plan, Utility Relocations, and Proximity of the Central Park Property Owners Association Impoundment** are the three most critical risks to the success of this Project.

RISK NO. 1 – TRANSPORTATION MANAGEMENT PLAN

Risk Identification: Transportation Management Plan (TMP) at the Safety Rest Area/Welcome Center located on the west side of the I-95 Southbound Lanes at the 131 Mile Marker.

Why the TMP Risk is Critical and the Impacts to the Project: The TMP for the project is critical due to its relevance during construction operations. Specifically, a unique, singular risk of the project is maintaining the capacity and functionality of the Fredericksburg Safety Rest Area/Welcome Center during construction. Based on review of the 2013 Visitation Data for the VDOT Statewide Safety Rest Area/Welcome Center Program, the impacted Safety Rest Area/Welcome Center ranks 4th out of 43, and received approximately 4,050 visitors per day (1,478,300 visitors per year) in 2013. Additionally, the Fredericksburg Safety Rest Area/Welcome Center experienced a 3.1% increase in visitation comparing 2012 and 2013.

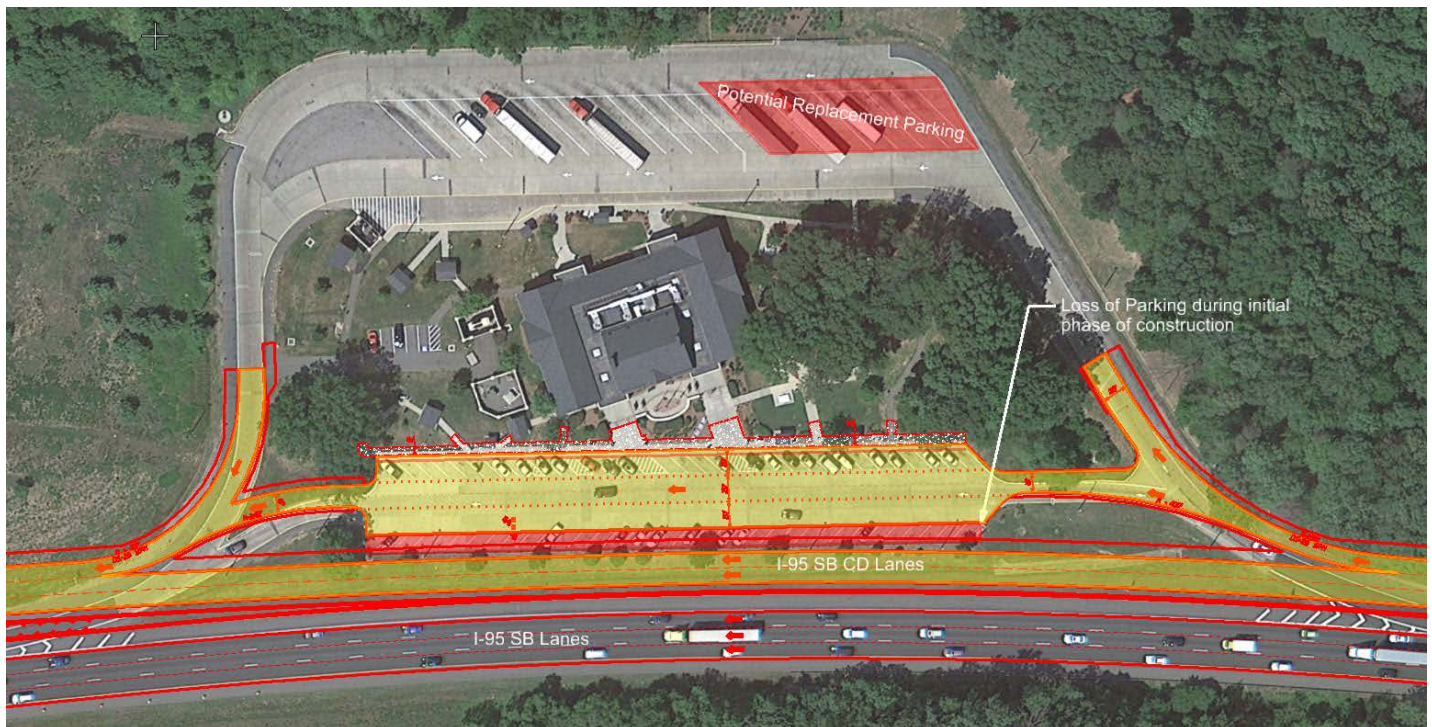
The LANE Team has identified the following impacts of the TMP risk as related to the capacity and functionality of the Fredericksburg Safety Rest Area/Welcome Center assuming the facility is to remain open, fully accessible, and operate at full capacity:

- Maintaining an effective and efficient ingress/egress of vehicles utilizing the facility throughout each identified TMP/MOT Phase of construction
- Potential contractual impacts with respect to the Sponsorship, Advertising & Vending Enhancement (SAVE) program. Based on review of the SAVE program, the contract contains an Annual Rights Fee paid by the successful bidder of just over \$2,000,000.00. Additionally, the successful bidder provides payment to VDOT, Virginia Department for the Blind and Visually Impaired (DBVI), and Virginia Tourism Corporation (VTC) on a sliding scale based upon its annual gross revenue through a 12-month period. Based on 2013 projections, VDOT's annual share of revenue associated with this contract is approximately \$800,000.00, DBVI's annual share is approximately \$770,000.00, and VTC's share is approximately \$395,000.00. The potential for loss of revenue will not only affect the statewide vendor but will also impact revenues of these three state agencies.
- Reduction in car parking capacity – 34 spaces potentially affected by construction (east side of the car parking area).

Risk Mitigation Strategy: The LANE Team will develop and implement an effective, efficient, and safe TMP, coupled with open communication between the public, third party stakeholders, and our construction staff to voice concerns and resolve any issues immediately.

- The LANE Team will initiate formal partnering with VDOT, Stafford County, and the City of Fredericksburg to review the TMP, construction schedules, and incident response plans, if required, before implementation. During construction, meetings will be held prior to major changes in traffic patterns. Partnering will minimize negative perceptions to impacted stakeholders by communicating construction impacts.

- Coordinate with the respective SAVE sponsor and vendor to obtain their input for the development of a TMP in order to mitigate negative impacts to their operations at the Fredericksburg Safety Rest Area/Welcome Center.
- After compiling input from respective stakeholders, the LANE Team will develop and consider various alternatives to maintain access, capacity, and functionality of the Fredericksburg Safety Rest Area/Welcome Center to accommodate driver convenience, expectation, and safety. Moreover, allowing for the promotion of Virginia tourism by maintaining access to the dedicated travel research area. The intent will be to develop and implement a TMP associated with the safety rest area/welcome center mitigating negative impacts to access, capacity, functionality, and operations.
- LANE's MOT Coordinator will consult with the TMP design lead to build constructability into the design, ensure proposed TMP is implemented per plan, and make adjustments as necessary to account for congestion/demand. This integrated approach of providing a single person responsible throughout all TMP aspects of the project will provide continuity and accountability.
- With respect to the potential impact to car parking space capacity, the LANE Team will investigate alternatives to maintain capacity. However, in the event capacity cannot be maintained, alternate considerations will be analyzed and an acceptable resolution reached to address capacity for the various vehicle types.
 - Minor encroachment of the car parking spaces may be resolved with an insignificant, internal shift of the car parking spaces
 - Under a temporary condition during construction operations, reduce the number of Truck/Bus parking spaces to accommodate the number of impacted car parking spaces.
 - As a worst case scenario, allow parking for buses and cars only at the Fredericksburg Safety Rest Area/Welcome Center, and move the truck parking to the Ladysmith Safety Rest Area located at the 107 Mile Marker.



- To communicate with the project stakeholders, and traveling public, a comprehensive public outreach plan will be developed by the LANE Team. This public outreach plan will:
 - Hold a Citizen Information Meeting prior to implementing the TMP to share our construction schedule, design concept, and communication plan

- Provide a voice for the traveling public by providing signs with the number of our project hotline
- Inform all project stakeholders about construction progress and how they will be impacted
- Keep local commuters/residents informed about how the project will impact their travel via the Free-Lance Star newspaper and local radio stations (WFLS and WBQB).
- Regular coordination with adjacent projects
- Ensure maximum use of work zone related resources
 - Portable Changeable Message Signs (PCMS)
 - Overhead Message Signs (OMS)
- Advance signage for notification of the upcoming Safety Rest Area/Welcome Center may have to be placed beyond the prescribed project limits due to advancement upstream of the egress point for the CD Lanes. In order to mitigate the potential for exceeding the project limits, the LANE Team will consider various signing scenarios to adequately notify the traveling public of the approaching safety rest area/welcome center. The scenarios may include ground mounted, overhead, or a combination thereof to ensure adequate advance notice to safely navigate to the appropriate egress point for accessing the Fredericksburg Safety Rest Area/Welcome Center.

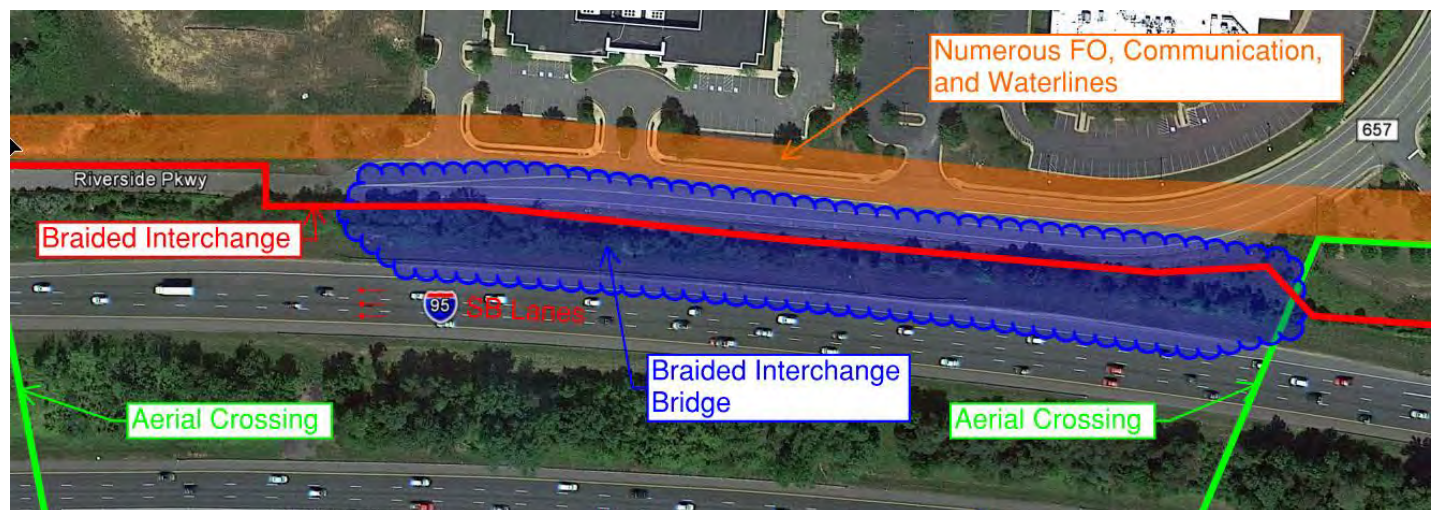
Role of VDOT and other Agencies: The integration of the LANE Team and our successful collaboration efforts will minimize construction and maintenance of traffic issues. In a collaborative effort, the LANE Team will work with VDOT, DBVI, and VTC to successfully resolve impacts to parking capacity and vending operations at the Fredericksburg Safety Rest Area/ Welcome Center. Our proposed public outreach, communication plan, and partnering initiatives will assist stakeholders, and the traveling public identify the LANE Team as their point of contact should issues arise. These strategies will minimize the need for additional effort by VDOT, DBVI, VTC, Stafford County, and City of Fredericksburg, reducing their role to one of situational awareness with the potential for decision-making should the parking capacity require more detailed analysis and consideration for resolution.

RISK NO. 2 – UTILITY RELOCATIONS

Risk Identification: Utility Relocations for several large utilities adjacent to over a highly congested interstate.

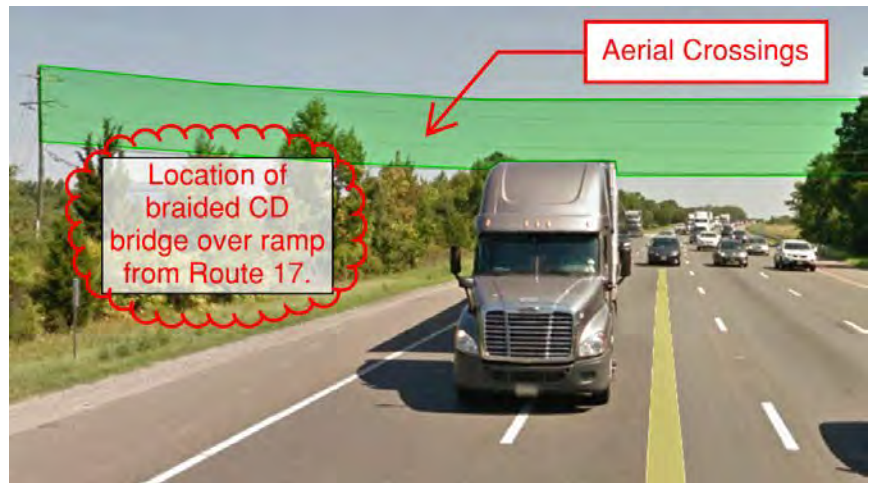
Why the Utility Risk is Critical and the Impacts to the Project: Utilities are always a risk to projects as they involve depending on a third party to perform work that the project has no control over the schedule or production on. However, on this project there are several, specific utilities that pose a collective risk to schedule and cost.

Sanitary sewer lines shown on the RFQ Conceptual Plans are in conflict and will have to be relocated into easements where there is already a congested collection of various utilities. Specifically, the 12” Sanitary Force Main (SFM) on Sheets 12 thru 14 (see graphic below) will be difficult to relocate to an area not already encumbered by another utility or infrastructure features. Relocation of this SFM with minimal shutdown (if even allowed) will be costly and will require significant schedule resources.



Additionally, there are two smaller SFM along Route 17 which do not appear to be in direct conflict but may be susceptible to vibrations from pile driving associated with the new bridge over Route 17 and the replacement bridge for the mainline. If the age or condition of these lines are questionable, there may be cost and schedule impacts as they would be considered in conflict.

Aerial power, phone and CATV lines cross the project in multiple places and will either be impacted by the construction itself or have clearance issues with the proposed retaining walls and the braided interchange. Relocation of long-spanning facilities can take nine months or more to relocate after four to six months of design. To further impact schedule, it appears that these poles are shared poles where each impacted company will relocate in sequence not simultaneously. If one



company struggles, the other companies are delayed. It is also likely that in order to make vertical adjustments needed to clear the project (i.e. the braided interchange portion), multiple poles will have to be added or relocated to make the adjustment gradual instead of abrupt. This will add time and cost to the project.

Like the smaller sewer lines discussed above, the existing waterline may also be impacted by vibrations associated with pile driving. Given that public utilities are at project cost, relocation of the line will have a financial impact for a utility that is not physically impacted. However, of greater concern will be the 24” water main that crosses I-95 approximately 500’ south of Fall Hill Avenue. The designation ends prior to leaving the right-of-way which complicates evaluation of potential conflicts. However, it appears that the proposed retaining wall may be in conflict and require a new bore to relocate under I-95.

Verizon is in conflict with several features of this project. This includes one fiber crossing of the project – aerially – that is in conflict along with other utilities discussed above. Other underground locations in conflict are in areas where retaining walls and bridge structures are proposed near the existing rest stop and along Riverside Parkway. Verizon is historically a very long schedule item and will be in danger of affecting project schedule. This problem has worsened with the recent downsizing of the Verizon engineering group.

Lastly, there is a fiber marker along the edge of the right of way at approximate Station 5452+00. This line does not appear on the designation but either crosses or runs parallel and is in conflict regardless of direction.

Risk Mitigation Strategy: An overall mitigation strategy is early and continued communication and coordination with the utility owners is paramount. Our utility coordination team member, RDA, has great relationships with all of the utility companies potentially impacted by this project. Furthermore, they have staff engineers that previously worked for some of these same utility owners which provides added insight. Key success measures include making the utilities an invested partner in the project and making them feel as if they are part of the project team. As a result, our experience shows that they are more willing to help in delivering the project successfully. Additionally, they have excellent relationships with several subsurface utility exploration (SUE) firms that they will partner with to designate and research ownership on the existing facilities immediately following NTP allowing our team the maximum amount of time to react to the findings and resolve any unknown conflicts.

On the 95 Express Lanes project, RDA coordinated with over 20 different utility owners regarding over 200 utility crossings. Of the 200 potential conflicts, only 12 required relocation or adjustment by the utility owners.

To specifically mitigate the 12” SFM, our team will develop a test hole program along Riverside Parkway that exceeds that which is required for determining impacts. This program will canvas all utilities to see where the SFM can be relocated (both horizontally and vertically) within a corridor that is heavily cluttered with various

utilities. A possible solution may be establishment of utility ductbanks to facilitate a uniform and organized relocation of many of the utilities along Riverside which may be impacted by secondary construction activities.

The aerial crossing of I-95 near Fall Hill Avenue appears to have two sets of guys to support the pole in conflict. The pole is shown to be directly behind a proposed retaining wall. Through support of excavation and coordination with the utilities, we believe that the pole and conflict may be avoided. We will work with the utility owner to ensure that a new guy system can be established that will secure the pole and allow it to stay in close proximity to the proposed retaining wall.

To address the vibration concerns, especially as it relates to the waterlines, the LANE Team will investigate the use of vibration monitoring to show to determine if there is an issue or not. Our team will also look at vibration dampening approaches that may include sheetpile or dampening blankets to mitigate vibrations if monitoring shows that there is a real concern. Furthermore, we will investigate sleeving the 24" waterline through the proposed retaining wall to avoid boring a new line under the interstate.

RDA successfully partnered with eight different utility owners on the Route 7 D-B project to coordinate relocation of two ductbanks owned by Fiberlight and Zayo (one each) who sublet to the other utility companies

Role of VDOT and other Agencies: The role of VDOT will include minimal oversight, review, and participation in the Utility Field Inspection. Overall, the project is responsible for coordination with the utility companies involved. VDOT will only be asked to assist if/when a utility company refuses to cooperate or excessively delays their work thereby jeopardizing the project schedule.

RISK NO. 3 – PROXIMITY OF THE CENTRAL PARK PROPERTY OWNERS ASSOCIATION IMPOUNDMENT

Risk Identification: Proximity of the Central Park Property Owners Association (POA) Impoundment

Why the Proximity of the Central Park POA Impoundment Risk is Critical and the Impacts to the Project: The RFP Plans depict the lowering of the new Southbound CD lanes to obtain proper clearances under the existing Cowan Blvd. Bridge. The result of lowering the CD lanes and widening to the west is the need to purchase additional ROW owned by Property Owner #007 (The Central Park POA, Inc.) between stations 5457+41.35 and 5466+38 and the advancement of construction activities adjacent to and potentially into the functional area of the impoundment which both present risks to the Department. The impoundment (runoff detention basin) adjacent to I-95 at this location was once associated with a golf course located where Central Park Mall is now and was later expanded by excavation to function as an impoundment for the development. The water is retained in the impoundment by a dam embankment along its east side and overflows via a pipe and weir in the NE corner of the impoundment near the junction of the Cowan Boulevard and existing I-95 rights-of-way. When needed, the overflow drains north passing under the Cowan overpass and under I-95. Right of Way (ROW) is currently needed in this area to accommodate roadway widening and a 2:1 cut slope which extends into the existing earthen dam embankment.

Elevations in the area: Based on existing plans, the baseline of the Southbound CD lanes at Station 5464+00 is at elevation 232.5' which results in the ditch being at an elevation of approximately 229.6'. The water in the impoundment appears to be at an elevation of approximately 224' based on our research. The top of the dam embankment appears to be approximately 22 feet inside of existing ROW while the construction limits appear to be about 13 feet beyond the existing ROW line at an elevation of roughly 235'.

Constructing the new lanes will reduce the berm that exists between the highway and the pond. Additionally, the Proposed ROW acquires to the top of bank (Elevation 230). Although these elevations seem to be sufficient to allow the pond to function, a detailed analysis will be required to evaluate overtopping elevations. The bigger concern is that it appears that VDOT would be taking ownership and liability of a large portion of the existing dam embankment structure. This ownership could lead to VDOT being responsible for providing maintenance to the earthen structure or being held liable for the performance of this facility which is used by a multitude of

current businesses. This liability is further increased by the project's current plans to cut into the existing dam embankment presenting several unknown associated risks:

How was the dam constructed? It is unknown as to whether the dam has a clay core. Construction into which may weaken or undermine the core if one exists.

- What type of soils are in the dam and the adjacent areas? Geological maps currently show that Potomac clays may exist in this area, leading to shallower cut slopes (6:1, instead of 2:1) which may require additional ROW (further exposing VDOT's liability).

Risk Mitigation Strategy: The LANE Team will attempt to mitigate this risk through the following investigative means:

- **Survey:** gather additional survey information (if not already available) and stake the proposed ROW lines, cut limits, and ditch locations to better define the extents of the impacts to the dam embankment in the field,
- **Design Study:** develop cross sections through the area with existing and shallow slopes to determine the full extents of the impacts (vertical and horizontal) and investigate raising the profile of the Southbound CD lanes as much as possible while maintaining required vertical clearance under Cowan Boulevard to reduce cuts into the dam embankment,
- **Geotechnical Study:** the LANE Team will develop an exploration program as a subset of our overall geotechnical study to evaluate the composition of the existing earthen berm and location of groundwater influence to ensure that structural measures are not impacted and that groundwater won't weaken the remaining berm section due to proposed cuts.
- **Dam Breach Analysis:** based on research of the impoundment and the results of geotechnical studies, our team is prepared to develop a Dam Breach Analysis to ensure that the impacts resulting from the roadway construction are fully documented and that the roadway can resist against the potential of a dam failure.

If it is determined through investigation that the risk still exists and is not manageable, the LANE Team would recommend that an additional wall be constructed between Station 5460+40 and Station 5465+40. This will require only the purchase of ROW in this area where the section is in fill or the cuts are significantly higher than the overflow elevation; therefore, ROW would be needed up to Station 5460+50 and from Station 5465+30 to Station 5466+38. Although adding this 500' wall would add cost to the project, it would eliminate the long term risks potentially associated with this property and the problems that might arise from cutting into the existing dam embankment.

Role of VDOT and other Agencies: Once all existing information is obtained to fully understand the nature of the embankment, our Team would meet with the Department to discuss options and obtain their input. We would then set up a meeting with Central Park to which we would request VDOT's attendance and participation.



ATTACHMENT 3.1.2
SOQ CHECKLIST

ATTACHMENT 3.1.2

Project: 0095-111-259

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix Attachment 3.1.2
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix Attachment 2.10
Letter of Submittal (on Offeror's letterhead)				
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: 0095-111-259

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
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
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Attachment 3.2.10 & 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
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Page 3 & Appendix Attachment 3.3.1
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix Attachment 3.3.1
Key Personnel Resume – Responsible Charge Engineer	Attachment 3.3.1	Section 3.3.1.1	no	Appendix Attachment 3.3.1

ATTACHMENT 3.1.2

Project: 0095-111-259

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
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 3.3.1
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix Attachment 3.3.1
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1	Section 3.3.1.7	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
Experience of Offeror's Team				
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)
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 10-15

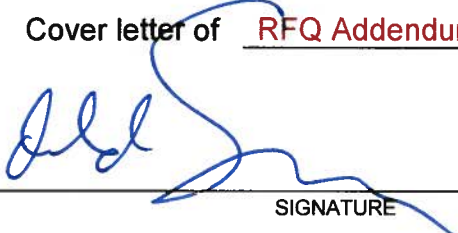
ATTACHMENT 2.10
FORM C-78-RFQ

ATTACHMENT 2.10**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**RFQ NO. C00101595DB94PROJECT NO.: 0095-111-259**ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA**

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

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

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

 <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">SIGNATURE</p>	<p style="text-align: center; margin: 0;"><u>February 7, 2017</u></p> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">DATE</p>
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">Donald E. Bryson</p> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">PRINTED NAME</p>	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">Pursuit Manager</p> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center; margin: 0;">TITLE</p>

**ATTACHMENT 3.2.6
AFFILIATED AND SUBSIDIARY COMPANIES
OF THE OFFEROR**

ATTACHMENT 3.2.6

State Project No. 0095-111-259

Affiliated and Subsidiary Companies of the Offeror

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

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

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

SUBSIDIARY	S.A. Healy Company	901 N. Green Valley Parkway, Suite 260 Henderson, NV 89074
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 (PLTC)	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
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 3.2.7(a)
DEBARMENT FORM- PRIMARY COVERED
TRANSACTIONS

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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


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

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

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

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

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


Signature _____ Date February 7, 2017 Title Pursuit Manager

The Lane Construction Corporation
Name of Firm

ATTACHMENT 3.2.7(b)
DEBARMENT FORM- LOWER TIER COVERED
TRANSACTIONS

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

W. Mark K. 01/25/17
Signature Date

Vice President
Title

KCI Technologies, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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



Signature

12/20/2016

Date

Exec. Dir. of DB Services/Gen. Mgr./Principal

Title

Rinker Design Associates, P.C.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

[Signature] 01-24-2017 PRINCIPAL
Signature Date Title

DULLES GEOTECHNICAL & MATERIAL TESTING SERVICES, INC.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

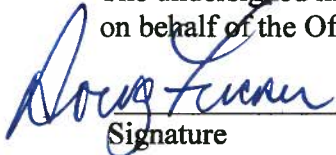
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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



January 26, 2017

Vice President

Signature

Date

Title

EEE Consulting, Inc.

Name of Firm

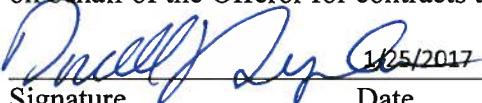
ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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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.


Signature _____

1/25/2017
Date _____

President
Title _____

Froehling & Robertson, Inc.

Name of Firm

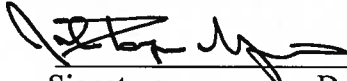
ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

	<u>1/26/2017</u>	<u>Vice President Business Development</u>
Signature	Date	Title

InfraMap Corp.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-111-259

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

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

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

Sarah Huddle 1/24/17 President
Signature Date Title
Albright Group Strategic Communications
Name of Firm

**ATTACHMENT 3.2.8
OFFEROR'S VDOT 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

A handwritten signature in blue ink, appearing to read "Suzanne FR Lucas".

Suzanne FR Lucas, State Prequalification Officer

A handwritten signature in blue ink, appearing to read "Don E. Silies".

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.

**ATTACHMENT 3.2.9
SURETY LETTER**

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

December 29, 2016

Alternate Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: **The Lane Construction Corporation**
Request for Qualifications
DESIGN-BUILD PROJECT FOR I-95 Southbound CD Lanes – Rappahannock River Crossing
From: Exit 130 to: 0.66 Miles North of Exit 133
Stafford County/City of Fredericksburg, Virginia; Contract ID Number: C00101595DB94
Estimated Contract Price: \$100,000,000.00

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



Theresan 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, Jeffrey HENDRICKS 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 26th day of April, 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
State of Maryland
County of Baltimore

Vice President
Gerald F. Haley

On this 26th day of April, 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, depose 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 27th day of December, 2016.



Michael Bond

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. 7425112

American Fire and Casualty Company
The Ohio Casualty Insurance Company

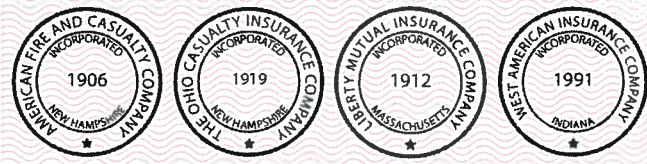
Liberty Mutual Insurance Company
West American Insurance Company

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; Theresan 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 29th 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
SCC AND DPOR INFORMATION TABLES

ATTACHMENT 3.2.10

State Project No. 0095-111-259

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Contractor Class A	2701011871	2018-01-31
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Business Entity Registration	0407002174	2017-12-31
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	14500 Avion Parkway, Suite 200 Chantilly, VA 20151	Business Entity Branch Office Registration	0411000988	2018-02-28
KCI Technologies Inc.	F0598690	Foreign Corporation	Active	936 Ridgebrook Road Sparks, MD 21152	Business Entity Registration	0407003113	2017-12-31
KCI Technologies Inc.	F0598690	Foreign Corporation	Active	6802 Paragon Place, Suite 410 Richmond, VA 23230	Business Entity Branch Office Registration	0411000938	2018-02-28
KCI Technologies Inc.	F0598690	Foreign Corporation	Active	3014 Southcross Blvd. Rock Hill, SC 29730	Business Entity Branch Office Registration	0411000956	2018-02-28
Rinker Design Associates, P.C.	02270627	Corporation	Active	9385 Discovery Boulevard, Suite 200 Manassas, VA 20109	Professional Corporation Registration	0405000502	2017-12-31
Rinker Design Associates, P.C.	02270627	Corporation	Active	4301 Dominion Boulevard, Suite 100 Glen Allen, VA 23060	Professional Corporation Branch Office Registration	0410000220	2018-02-28

ATTACHMENT 3.2.10

State Project No. 0095-111-259

SCC and DPOR Information

Rinker Design Associates, P.C.	02270627	Corporation	Active	927 Maple Grove Drive, Suite 105 Fredericksburg, VA 22407	Professional Corporation Branch Office Registration	0410000156	2018-02-28
CES Consulting, LLC	S3416007	Limited Liability Company	Active	23475 Rock Haven Way Suite 255 Dulles, VA 20166	Business Entity Registration	0407005783	2017-12-31
Dulles Geotechnical and Material Testing Services, Inc.	07582323	Corporation	Active	14119 Sullyfield Circle, Suite H, Chantilly, VA 20151	Business Entity Registration	0407006236	2017-12-31
EEE Consulting, Inc.	05049416	Corporation	Active	8525 Bell Creek Road Mechanicsville, VA 23111	Business Entity Registration	0407003798	2017-12-31
EEE Consulting, Inc.	05049416	Corporation	Active	201 Church Street Blacksburg, VA 24060	Business Entity Branch Office Registration	0411000435	2018-02-28
Froehling & Robertson, Incorporated	00272112	Corporation	Active	3015 Dumbarton Road Richmond, VA 23228	Business Entity Registration	0407000098	2017-12-31
InfraMap Corp.	F1055252	Foreign Corporation	Active	10365 Cedar Lane Glen Allen, VA 23059	Business Entity Registration	0407003343	2017-12-31
The Albright Group, LLC	S4682250	Limited Liability Company	Active	1011 East Main St, Suite 310, Richmond, VA 23219	N/A	N/A	N/A

ATTACHMENT 3.2.10

State Project No. 0095-111-259

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
KCI Technologies, Inc.	Robert Eric Burgess, P.E.	Rock Hill, SC	3014 Southcross Blvd. Rock Hill, SC 29730	Professional Engineer	0402048509	2017-02-28
KCI Technologies, Inc.	William Merritt King, P.E.	Rock Hill, SC	3014 Southcross Blvd. Rock Hill, SC 29730	Professional Engineer	0402035924	2017-04-30
Rinker Design Associates, P.C.	Steven Scott Shropshire, P.E.	Fredericksburg, VA	5203 Yellow Birch Dr, Fredericksburg, VA 22407	Professional Engineer	0402035812	2017-06-30
CES Consulting, LLC	Syed R. Khan, P.E.	Dulles, VA	43744 Paramount Pl. Chantilly, VA 20152	Professional Engineer	0402031057	2017-07-31

ATTACHMENT 3.2.10.1
SCC SUPPORTING DOCUMENTATION



THE LANE CONSTRUCTION CORPORATION

SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: 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



KCI Technologies, Inc.

SCC eFile

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

UCC or Tax Liens

General

SCC ID: F0598690
Entity Type: Foreign Corporation
Jurisdiction of Formation: DE
Date of Formation/Registration: 12/19/1988
Status: Active
Shares Authorized: 1000



SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

Rinker Design Associates, P.C.

General

SCC ID: 02270627
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/24/1982
Status: Active
Shares Authorized: 20000

Principal Office

9385 DISCOVERY BOULEVARD
SUITE 200
MANASSAS VA20109



SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

Additional Services

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



Bus

Dulles Geotechnical and Material Testing Services, Inc.

SCC eFile

[SCC eFile Home Page](#)
[Check Name](#)
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Business Entities

UCC or Tax Liens

Court Services

Additional Services

General

SCC ID: 07582323
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 11/26/2012
Status: Active
Shares Authorized: 1000

Principal Office

14119 SULLYFIELD CIRCLE
SUITE H
CHANTILLY VA20151

Ne



EEE Consulting, Inc.

SCC eFile

[SCC eFile Home Page](#)
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Business Entities

UCC or Tax Liens

General

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



FROEHLING & ROBERTSON, INCORPORATED

SCC eFile

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

Business Entities

UCC or Tax Liens

General

SCC ID: 00272112
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 10/11/1924
Status: Active
Shares Authorized: 1100000



InfraMap Corp.

SCC eFile

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

Business Entities

UCC or Tax Liens

General

SCC ID: F1055252
Entity Type: Foreign Corporation
Jurisdiction of Formation: DE
Date of Formation/Registration: 10/22/1990
Status: Active
Shares Authorized: 1500



The Albright Group, LLC

SCC eFile

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

Business Entities

UCC or Tax Liens

Court Services

General

SCC ID: S4682250
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 8/31/2013
Status: Active

Principal Office

ATTACHMENT 3.2.10.2
DPOR SUPPORTING DOCUMENTATION
FOR EACH OFFICE

DPOR License Lookup License Number 2701011871

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
DBA Name	VA PAVING COMPANY / VA SIGN AND LIGHTING COMPANY
License Number	2701011871
License Description	Contractor
Firm Type	Corporation
Rank ¹	Class A
Address	90 FIELDSTONE COURT, CHESHIRE, CT 06410
Specialties²	Commercial Building (CBC) Highway / Heavy (H/H) Residential Building (RBC)
Initial Certification Date	1972-10-12
Expiration Date	2018-01-31

DPOR License Lookup License Number 0407002174

License Details

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

DPOR License Lookup License Number 0411000988

License Details

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

DPOR License Lookup License Number 0407003113

License Details

Name	KCI TECHNOLOGIES INC
License Number	0407003113
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	936 RIDGEBROOK ROAD, SPARKS, MD 21152
Initial Certification Date	1992-08-06
Expiration Date	2017-12-31

DPOR License Lookup License Number 0411000938

License Details

Name	KCI TECHNOLOGIES INC
License Number	0411000938
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	6802 PARAGON PLACE SUITE 410, RICHMOND, VA 23230
Initial Certification Date	2012-06-27
Expiration Date	2018-02-28

DPOR License Lookup License Number 0411000956

License Details

Name	KCI TECHNOLOGIES INC
License Number	0411000956
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	3014 SOUTHCROSS BLVD, ROCK HILL, SC 29730
Initial Certification Date	2012-11-13
Expiration Date	2018-02-28

DPOR License Lookup License Number 0405000502

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0405000502
License Description	Professional Corporation Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation
Address	9385 DISCOVERY BOULEVARD, STE 200, MANASSAS, VA 20109
Initial Certification Date	1986-07-16
Expiration Date	2017-12-31

DPOR License Lookup License Number 0410000220

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000220
License Description	Professional Corporation Branch Office Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation Branch Office
Address	4301 DOMINION BOULEVARD, SUITE 100, GLEN ALLEN, VA 23060
Initial Certification Date	2011-03-17
Expiration Date	2018-02-28

DPOR License Lookup License Number 0410000156

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000156
License Description	Professional Corporation Branch Office Registration
Rank	Professional Corporation Branch Office
Address	927 MAPLE GROVE DR STE 105, FREDERICKSBURG, VA 22407
Initial Certification Date	2005-12-27
Expiration Date	2018-02-28

DPOR License Lookup License Number 0407005783

License Details

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

Dulles Geotechnical and Material Testing Services, Inc.

DPOR License Lookup License Number 0407006236

License Details

Name	DULLES GEOTECHNICAL AND MATERIAL TESTING SERVICES, INC
License Number	0407006236
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	14119 SULLYFIELD CIR STE H, CHANTILLY, VA 20151
Initial Certification Date	2013-02-15
Expiration Date	2017-12-31

EEE Consulting, Inc.

DPOR License Lookup License Number 0407003798

License Details

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

DPOR License Lookup License Number 0411000435

License Details

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

Froehling & Robertson, Inc.

DPOR License Lookup License Number 0407000098

License Details

Name	FROEHLING & ROBERTSON, INC
License Number	0407000098
License Description	Business Entity Registration
Rank	Business Entity
Address	3015 DUMBARTON ROAD, RICHMOND, VA 23228
Initial Certification Date	1982-08-05
Expiration Date	2017-12-31

InfraMap, Corp.

DPOR License Lookup License Number 0407003343

License Details

Name	INFRAMAP CORP
License Number	0407003343
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	10365 CEDAR LANE, GLEN ALLEN, VA 23059
Initial Certification Date	1995-10-10
Expiration Date	2017-12-31

The Albright Group, LLC

N/A

**ATTACHMENT 3.2.10.3
DPOR SUPPORTING DOCUMENTATION
FOR KEY PERSONNEL**

KEY PERSONNEL DPOR

Robert E. Burgess, P.E.

DPOR License Lookup License Number 0402048509	
License Details	
Name	BURGESS, ROBERT ERIC
License Number	0402048509
License Description	Professional Engineer License
Rank	Professional Engineer
Address	ROCK HILL, SC 29730
Initial Certification Date	2011-02-01
Expiration Date	2017-02-28

William M. King, P.E.

DPOR License Lookup License Number 0402035924	
License Details	
Name	KING, WILLIAM MERRITT
License Number	0402035924
License Description	Professional Engineer License
Rank	Professional Engineer
Address	ROCK HILL, SC 29730
Initial Certification Date	2001-04-11
Expiration Date	2017-04-30

Steven S. Shropshire, P.E.

DPOR License Lookup License Number 0402035812	
License Details	
Name	SHROPSHIRE, STEVEN SCOTT
License Number	0402035812
License Description	Professional Engineer License
Rank	Professional Engineer
Address	FREDERICKSBURG, VA 22407
Initial Certification Date	2005-06-10
Expiration Date	2017-06-30

Syed R. Khan, P.E.

DPOR License Lookup License Number 0402031057	
License Details	
Name	KHAN, SYED R
License Number	0402031057
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CHANTILLY, VA 20152
Initial Certification Date	1997-05-01
Expiration Date	2017-07-31

ATTACHMENT 3.3.1
KEY PERSONNEL RESUMES

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: JAN SHERMAN, DISTRICT MANAGER	
b. Project Assignment: DESIGN-BUILD PROJECT MANAGER	
c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time): THE LANE CONSTRUCTION CORPORATION (FULL TIME)	
<p>d. Employment History: With this Firm 18 Years With Other Firms 0 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>The Lane Construction Corporation, 2002-Present: Mr. Jan Sherman has been working for LANE for over 18 years. His construction experience consists of a wide assortment of projects ranging in value from several thousand to over \$200M. The scopes of his projects have included bridge replacement, roadway widening and rehabilitation, dirt and rock excavation, blasting, excavation support, micro-piles, caissons, underground utilities, storm drainage, reinforced structural concrete, architectural concrete, concrete pavement, asphalt pavement, milling, traffic control, site electrical, interior electrical, mechanical, plumbing, terrazzo, precast concrete, elevators, escalators, moving walkways and various finishes. Throughout his career with LANE, Mr. Sherman has performed as an Estimator, Foreman, QC Technician, QC Manager, Project Engineer, Project Manager, and currently District Manager. He is also the Division Manager for Virginia Sign & Lighting (VS&L) and Civil Walls Solutions (CWS), both divisions of LANE. His responsibilities have included the management of office & field personnel, adherence to corporate safety policies, contract administration, submittals, requests for information, payment requisitions, project scheduling, procurement, change order negotiations, management of resources and costs, and subcontractor coordination.</p> <ul style="list-style-type: none"> • VDOT I-66/Route 15 Interchange Reconstruction, Prince William County, VA – 2014-Present – Design-Build Project Manager • VDOT Richmond GRTC BRT, Richmond, VA – 2016-Present – VS&L Division Manager • VDOT Military Highway, Norfolk, VA – 2016-Present – VS&L Division Manager • VDOT I-581 Valley View Interchange Phase II, Roanoke, VA – 2013-2017 – Design-Build Project Manager • VDOT I-66 Spot 2 Improvements, Arlington, VA – 2013-2016 – Assistant District Manager • VDOT I-95 Express Lanes, Fairfax, Prince William and Stafford Counties, VA – 2013-2014 – CWS Division Manager • VDOT I-495 Express Lanes, Fairfax County, VA – 2010-2012 – Construction Manager • VDOT Route 29 Solutions, Albemarle County, VA – 2015-Present – VS&L Division Manager • Ronald Reagan Washington National Airport Runway 15-33 Overlay and Taxiways Rehabilitation, Crystal City, VA – 2009-2010 – Project Manager • MWAA APM Package 6 – Dulles International Airport, Dulles, VA – 2007-2009 – Assistant Project Manager • Stafford Regional Airport Phase IV, Stafford VA – 2002 – Project Engineer/Quality Control Manager • Airport Access Road Phase I, Stafford VA – 2002 – Project Engineer/Quality Control Manager 	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Clarkson University, Potsdam, NY/ B.S./1998/ Civil Engineering	
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"> 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> <p>(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.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>	
VDOT, I-495 Express Lanes, Fairfax County, VA (DESIGN-BUILD)	
Name of Firm: The Lane Construction Corporation	Project Role: Area Project Manager
Beginning Date: 2010	End Date: 2012
Specific Responsibilities: As the Area Project Manager on this D-B project, Mr. Sherman was responsible and accountable for oversight of construction activities, assisting in estimating quantities, reviewing construction plans and general conduct of the project in Area 2. In addition, he assisted with the maintenance and updating of the project CPM schedule using Primavera Scheduling software as well as scheduling and assuring continued inspection of all materials and construction for conformance to the contract plans and specifications. Mr. Sherman worked with proposed CM, Bob Cross on this project.	

Project Relevance: This \$1.5B D-B project involved two new lanes which were constructed in each direction on a 14-mile stretch of I-495 from the Springfield Interchange to just north of the Dulles Toll Road. Area 2 of the Express Lanes encompasses the I-495 interchange at I-66, new ramp access at Route 29, W&OD Trail and overpasses south of Route 7 interchange. Construction of the new interchanges in Area 2 required close coordination with homeowners, WMATA, NVRPA and both vehicular & pedestrian foot traffic through the work areas. Unique to Area 2, an active HOV ramp from I-66 to the beltway was maintained throughout the majority of the project, requiring innovative traffic management and alternate means of construction to build the entire interchange. As one of the more congested interchanges along the beltway, construction was performed in a manner to minimize impacts to the traveling public. The project encompassed the replacement of more than \$260 million of aging infrastructure, including more than 50 bridges and overpasses. Similar to the proposed I-95/Rappahannock River Crossing project included MOT, bridge/structure replacement, roadway widening, survey, QA/QC, hydraulics, and public involvement/relations and all associated project management functions.

VDOT, I-581 Valley View Interchange Phase II, Roanoke, VA (DESIGN-BUILD)

Name of Firm: The Lane Construction Corporation	Project Role: Design-Build Project Manager
Beginning Date: 2013	End Date: 2/2017 (est)

Specific Responsibilities: As DBPM on this project, Mr. Sherman is responsible for overall construction, quality and safety programs, ensured all requirements and specifications were delivered, contract administration, directed and managed project development and constructability reviews with the designers, defining project scope, goals and deliverables, collaborated with senior management and stakeholders, public outreach and public meetings, estimating resources, supervised the procurement and furnishing of all materials, equipment, services and labor necessary for project completion, scheduled project timelines and milestones, supervised team members, and developed best practices and tools for project execution and management.



Project Relevance: Similar to the I-95 Rappahannock River Crossing project, this \$39 million D-B project includes the partial demolition of the existing structure; widening and repair of the existing bridge substructure and superstructure; maintenance of traffic; 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; extensive utility relocations; geotechnical; environmental; QA/QC; survey; hydraulics; 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. The project also includes the construction of a new DDI at I-581 and Valley View Boulevard. This will be accomplished by the addition of the southbound exit and northbound entry ramps serving I-581/U.S. Route 220 north of the interchange and accompanying auxiliary lanes along I-581/U.S. Route 220 to the Hershberger Road interchange. The existing southbound entry and northbound exit ramps will be adjusted and lengthened to facilitate the other improvements. Valley View Boulevard and the bridge over I-581/U.S. Route 220 will be widened to provide two through lanes in each direction, dual left turn lanes for both the northbound and southbound movements to I-581 through the interchange and a right turn lane onto the northbound I-581/U.S. Route 220 entry ramp.

VDOT, I-66/Route 15 Interchange Reconstruction, Prince William County, VA (DESIGN-BUILD)

Name of Firm: The Lane Construction Corporation	Project Role: Design-Build Project Manager
Beginning Date: 2014	End Date: 7/2017 (est)

Specific Responsibilities: As DBPM for this \$36M project, Mr. Sherman is responsible for the overall project design and construction. He supervises and manages the design, construction, quality management, contract administration and other services required by the contract, including the procurement and timely delivery of all materials, equipment, services and labor. Mr. Sherman ensures all contract obligations are met and successfully avoids and/or resolves disputes in accordance with contract documents. He is responsible for overseeing the construction and field personnel as well as permitting, erosion control, lighting, signing and pavement marking, traffic control, right-of-way and utility relocation. Mr. Sherman also coordinates public outreach and public meetings.



Project Relevance: Similar to the proposed I-95 Rappahannock River Crossing project this project includes: roadway widening, utility relocation, right-of-way acquisition, environmental, sign structures, public involvement, QA/QC, overall project management, transportation management plan, construction of a new service road, and replacement of northbound and southbound bridges carrying Route 15 over I-66. The I-66/Route 15 Interchange Reconstruction project also involves reconstructing the interchange of Route 15 over I-66. **Mr. Sherman worked with proposed CM, Bob Cross on this project.**

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **N/A. Mr. Sherman is not required on-site full-time.**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: S. SCOTT SHROPSHIRE, P.E. / DIRECTOR OF CONSTRUCTION – SOUTHERN REGION	
b. Project Assignment: RESPONSIBLE CHARGE ENGINEER	
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): RINKER DESIGN ASSOCIATES, P.C. (FULL TIME)	
<p>d. Employment History: With this Firm ≥1 Years with Other Firms 18 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><u>Rinker Design Associates, P.C., Director of Construction – Southern Region (2015-Present):</u> Mr. Shropshire is responsible for overseeing and managing all elements of construction engineering and providing overall direction of RDA's Construction Services Division in the Fredericksburg and Richmond offices. His duties include active contract management, monitoring field inspections/testing, strong emphasis on and enforcing quality assurance/quality control specifications, providing accurate project documentation/records, and determining construction solutions to design and unforeseen field conditions. Serves as Responsible Charge Engineer and QA/QC Manager in the field for traditional Design-Bid-Build and Design-Build contract work.</p> <ul style="list-style-type: none"> • Truslow Road – 2015-2016 – QCM – Design-Build <p><u>A. Morton Thomas & Associates, Inc. – Associate – Quality Control Manager (2014-2015):</u> As Quality Control Manager (QCM) worked exclusively on Design-Build projects as lead QC. Responsible for the QC documentation related to inspection, reporting and testing of all materials used and work performed, in addition to establishing and maintaining the Materials Register on the projects.</p> <ul style="list-style-type: none"> • US Rt. 1/Jefferson Davis Hwy Widening – 2014-2015 – QCM <p><u>Virginia Department of Transportation, Fredericksburg District Area Construction Engineer (2004-2014):</u> Mr. Shropshire functioned as the Responsible Charge Engineer for construction contract work, and was responsible for providing leadership and technical guidance for inspectors, construction managers, contract administration, and consultant staff in the delivery of the six-year highway construction program via traditional Design-Bid-Build and Design-Build procurements.</p> <ul style="list-style-type: none"> • VA Rt. 639/Fall Hill Ave Widening – 2013-2014 – ACE • VA Rt.3/Piankatank River Bridge Rehab – 2012-2014 – ACE • US Rt. 301 Bridge Rehab over Rappahannock River – 2012-2013 – ACE • I-95/VA Rt. 207 Interchange – 2009-2010 – ACE • VA Rt. 639/Bragg Rd Widening – 2008-2010 – ACE • VA Rt. 610/Garrisonville Rd Widening – 2006-2009 – ACE • VA Rt. 630/Courthouse Rd Improvements – 2006-2008 – ACE <p><u>Johnson Mirmiran & Thompson, Inc., Traffic Engineer (2002-2004):</u> Served as Project Engineer/Manager providing roadway/traffic engineering services on a variety of transportation engineering projects to multiple clients.</p>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Military Institute, Lexington, VA / B.S. / 1996 / Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2005/ Professional Engineer/ 035812	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(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.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>	
US Route 1/ Jefferson Davis Highway Improvements at Ft. Belvoir, Fairfax County, VA (DESIGN-BUILD)	
Name of Firm: A. Morton Thomas & Associates, Inc.	Project Role: Quality Control Manager (QCM)
Beginning Date: 03/2014	End Date: 04/2015
Specific Responsibilities: This FHWA – EFLHD project involves 3.66 miles of roadway widening from 4-lanes to 6-lanes along US Route 1/Jefferson-Davis Highway under urban conditions. The scope of work included roadway excavation, embankment, subgrade and drainage improvements, twin bridges over Accotink Creek, paving, and sound walls. As QCM, Mr. Shropshire was responsible for QC inspection and testing, establishing and maintaining the Materials Register, as well as, coordinating and	

addressing RFIs and Shop Drawing Reviews with design staff for the widening of US Route 1. His role also included establishing and maintaining the SWPPP, coordination of all applicable permits, reviewing and maintaining project diaries and daily work reports, generating and compiling weekly work reports for the QAM. Additional project responsibilities included construction oversight of TMP, bridge demolition/replacement, pile driving, and drilled in caissons. He was responsible for coordinating with the contractor (during design and construction), FHWA-EFLHD, VDOT, Ft. Belvoir, Fairfax County, and utility companies to ensure that the design/construction requirements of the contract were met and to expedite the concurrence for associated services. Mr. Shropshire provided field engineering decisions to address geotechnical issues, storm sewer issues, and TMP conflicts, as well as, provided guidance on how to correct non-conforming construction work.

Project Relevance: Similar to the I-95/Rappahannock River project, this \$75M D-B project consisted of the design and construction of roadway improvements along a congested corridor with extensive earthwork, embankments, and bridge work over a sizeable stream. As anticipated on the RRC project, TMP complexity on this project required significant integration of the roadway designers during implementation. Another similar component is the geotechnical issues/concerns (i.e. unsuitable material, Potomac Clay, and acidic soils). The extensive coordination with multiple stakeholders (e.g. FHWA-EFLHD, Army Corps of Engineers, Fort Belvoir, VDOT, Fairfax County, and adjacent property owners) for this project provides a direct correlation and understanding of the communication emphasis we anticipate on the RRC project to implement our effective and efficient TMP design through coordination with VDOT, Stafford County, City of Fredericksburg, commercial property owners, and commuter traffic.

VA Route 3 / Piankatank River Bridge, Matthews/Middlesex Counties, VA

Name of Firm: Virginia Department of Transportation	Project Role: Area Construction Engineer
Beginning Date: 10/2012	End Date: 04/2014

Specific Responsibilities: As the Area Construction Engineer, Mr. Shropshire monitored, supervised, and provided technical expertise in the replacement of the existing superstructure, coupled with major rehabilitation of the substructure for the two lane, 30 span, 2,100 linear foot river crossing. In his role for this project, he was fully integrated with the project team, and possessed supervisory direction and control authority for making and approving engineering decisions during construction. His role also included coordination of bridge design revisions, construction implementation, survey, right of way evaluation, and utility coordination. Additional project responsibilities included construction oversight of TMP, utility relocations, formwork, reinforced steel, hydraulic cement operations, sign structures, and traffic engineering elements. During construction, he was responsible for coordination with the contractor, VDOT, local government, utility companies, and adjacent property owners to ensure that requirements of the contract were met. Additionally, Mr. Shropshire monitored the construction QC program by reviewing inspection and test reports from his QA inspection staff. In addition to actively monitoring the inspection staff, he performed periodic evaluations of the project records at regular intervals. This review included, but was not limited to, the Materials Notebook, Project Daily Work Reports, Force Accounts/Work Orders, and testing reports. Pay requests were processed by Mr. Shropshire. Mr. Shropshire provided field engineering decisions address differing conditions, as well as, how to correct non-conforming construction elements. Through his efforts, three (3) pending Notices of Intent to File Claim were resolved.

Project Relevance: Similar to the I-95/Rappahannock River project, this project consisted of the design and construction of a significant bridge involving a major river crossing. TMP complexity and existing structural conditions on this project required significant integration of the roadway and bridge design staff during construction which was managed and coordinated by Mr. Shropshire. The extensive coordination with the multiple stakeholders (e.g. VDOT – District and Residency, US Coast Guard, Matthews County, Middlesex County, and adjacent property owners) provides further insight on challenges and strategies that can be explored to engage and guide the stakeholders on the RRC project.

I-95 / VA Route 207 Interchange Improvements, Caroline County, VA

Name of Firm: Virginia Department of Transportation	Project Role: Area Construction Engineer
Beginning Date: 06/2009	End Date: 11/2010

Specific Responsibilities: As the Area Construction Engineer for this Federal Oversight project, Mr. Shropshire was responsible for the contract administration, construction, and quality assurance inspections/testing, as well as addressing RFIs and Shop Drawing Reviews for the I-95/VA Route 207 Interchange Improvements. His role also included coordination of roadway design revisions, construction implementation, surveys, right of way acquisition, and utility coordination. Additional project responsibilities included construction oversight of TMP, utility relocations, earthwork, subgrade and drainage improvements, paving, sign structures, and traffic engineering elements. During construction, he was responsible for coordinating with the contractor, FHWA, VDOT, Caroline County, utility companies, and adjacent business owners to ensure that the construction requirements of the contract were met and to provide updates to the FHWA Area Engineer. Additionally, Mr. Shropshire monitored the contractor’s and subcontractor’s QC program while overseeing the quality assurance inspection staff. Additionally, he periodically performed independent evaluations of the project records (i.e. Materials Notebook, Project Daily Work Reports, Force Accounts/Work Orders, density reports) at random intervals. Mr. Shropshire provided field engineering decisions to assist the contractor in addressing differing conditions, as well as, guidance on how to correct non-conforming construction elements.

Project Relevance: Similar to the I-95/Rappahannock River project, this project consisted of new alignment construction, coupled with roadway widening along a congested corridor involving on- and off- ramps to an interstate. The TMP complexity on this project required significant integration of the roadway designers, under Scott’s direction, to evaluate interchange operation / LOS, adjacent roadways, and business entrances (similar to those along Riverside Parkway near the Route 17 interchange on the RRC project) which resulted in TMP implementation revisions.

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: SYED KHAN PE, CCM, DBIA, QUALITY ASSURANCE MANAGER
b. Project Assignment: QUALITY ASSURANCE MANAGER
c. Name of all Firms with which you are currently employed at the time of SOQ submittal. In addition, please denote the type of employment (Full Time/ Part Time): CES CONSULTING LLC (FULL TIME)
d. Employment History: With this Firm <u>4 Years</u> with Other Firms <u>31 Years</u> 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): <u>CES Consulting LLC, Quality Assurance Manager, 2013-Present:</u> Mr. Khan is a Licensed Professional Engineer and a Certified Design Build Professional (DBIA) who has more than 35 years of professional experience in managing Design Build and Traditional transportation projects. He has used his extensive Quality Assurance (QA) and Quality Control (QC) Management experience for successful completion of I66 Spot 2 Widening in Fairfax/Arlington County, I95 HOV widening in Fairfax/Prince William County, I395 reconstruction in Washington DC, Local Roads and a Ten Lane Five Mile Freeway (ten lanes) for an overseas project. Mr. Khan has managed Highways and Bridge construction projects in various capacities from developing Project QA and QC plans, developing standardized documents to maintain auditable testing records, developing audit criteria and frequencies, creating ties between project schedule activities and quality documents, establishing logs to track and monitor testing requirements and directing the staff in pursuing QA and/or QC duties. <u>Area Manager/QC Manager for Parsons Brinkerhoff, Qatar Local Roads and Drainage Program, 2011 – 2013:</u> Mr. Khan was responsible for overseeing Quality Assurance Management as well as coordinating the design management, construction contract procurement, construction management, handing over and overseeing the defect liability period and final handing over of roads and drainage projects. He led all coordination efforts with other functional groups in the program management organization such as design specialists, project controls, contract management, claims specialists, construction supervision staff and the client for delivering the projects. The program required coordination with various other major programs and government agencies such as Ministry of Municipal Affairs, Ministry of Environment, President’s Executive Office and Central Planning Office of Qatar. The construction value of the projects supervised by him was approximately \$500 Million. <u>Deputy Director for Yas Island (Quality Control) 2007 – 2011:</u> Responsible for the development of Infrastructure projects at Yas Island, Mr. Khan was directly responsible for the design, procurement, and Quality Control Management of the following transportation and utilities projects on Yas Island: A 15 mile, 10- lane freeway with several interchanges, roads and waterway crossings connecting Yas Island to Mina Zayed via Saadiyat Island, Design & Construction of an underwater tunnel (0.8 miles long) connecting Yas Island to Raha Beach; and construction of all internal roads, surface parking lots, and multilevel parking structures. The total value of the projects supervised by Mr. Khan was approximately \$1 Billion. <u>Senior Construction Manager, Parsons Transportation Group, Transportation Improvement Program, 2002 – 2007:</u> The projects under the program included construction of highways, interchanges, new bridges, widening of existing bridges, roadway widening, and installation of drainage pipes, extensive ITS/TMS work and overhead signs. In addition, from 2005 to 2007, he worked on the construction of Terminal Building at Abu Dhabi Airport which was a Design-Build project. Mr. Khan managed CEI Staff, for the oversight of all testing, documentation and payment of work on site, working with FHWA/Design Engineer/Contractor to resolve field construction issues. He enforced specifications/standards and ensured that all Non- Conforming Work was properly documented through NCR and remediated and closed out. As RE, Mr. Khan also ensured that all work orders, pay estimates & project closeouts are done as per Quality Control and Quality Assurance procedures. The total value of projects managed under the program is approximately \$400 Million.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: State University of New York at Buffalo/ MS/ 1989/ Construction Management NED University of Engineering & Technology, Pakistan/ BS/ 1981/ Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Professional Engineer/1995/VA #31057 Certified Construction Manager, CCM; PMP; DBIA; VDOT Certifications: Pavement Marking (2018); Asphalt Field Levels I & II (2018); Others: DCR/DEQ Erosion & Sediment Control (2017); Intermediate Work Zone Traffic Control (2017); Nuclear Gauge Safety (2016); ACI Concrete Field (2018); OSHA 10-hour
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i>

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

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

VDOT, I-66 Spot 2 Improvements, Fairfax County, VA

Name of Firm: CES Consulting LLC	Project Role: Senior Construction Manager
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Beginning Date: 2013	End Date: 2016
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Specific Responsibilities: As Senior Construction Manager for this \$33 Million project, Mr. Khan was responsible for overseeing all of the office engineering and inspection efforts to assure Quality Assurance compliance with contract requirements. Mr. Khan was managing the Project Quality Management Team, VDOT and Consultant Staff. He was responsible for the oversight of all testing, documentation and payment of work on site, working with FHWA/Design Engineer/Contractor to resolve field construction issues. Additionally, he enforced VDOT specifications/standards and ensured that all non-conforming work was properly documented, remediated and closed-out.

Project Relevance: The Project entailed Roadway and Bridge widening, Storm drainage, Sound walls, In-plan utility relocations, Overhead sign installation, and pavement construction. Extensive MOT work through multiple phased construction, Interstate corridor lighting, ITS communication equipment/duct bank installation and relocation, variable message boards and closely coordinated work with WMATA representatives for compliance with their Manual.

Transurban, 395 Express Lanes, Fairfax & Arlington Counties, and City of Alexandria, VA (DESIGN-BUILD)

Name of Firm: CES Consulting LLC	Project Role: Program Management
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Beginning Date: 9/2016	End Date: Present
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Specific Responsibilities: Mr. Khan was hired for this GEC Contract to assist in all Program Management activities. He is involved in Program Management activities that include: developing procurement schedule, developing design build procurement documents such as RFQ and RFP, developing P3 procurement documents such as RFQ and RFP (part of alternate procurement plan), assisting in budget development, writing technical references for both Design Build and P3 procurement, participating in Risk Management exercises and development of Risk Register, and liaison with various VDOT Specialty Groups.

Project Relevance: The scope of this \$300M project includes: interstate widening, improvements to interchange ramps, bridge rehabilitation, parking improvements, utilities, ROW, installation of TMS, and ITS components. The 395 Project also includes the design and construction of required sound barriers along the I-395 corridor (and connecting roadways, where applicable), as well as roadway, traffic signal, TTMS, and parking lot improvements on the Pentagon reservation.

Qatar Local Roads and Drainage Program, Qatar, UAE (DESIGN-BUILD)

Name of Firm: Parsons Transportation Group	Project Role: Area Manager
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Beginning Date: 2011	End Date: 2013
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Specific Responsibilities: As Area Manager/Quality Control Manager, Mr. Khan was responsible for managing and overseeing Quality Assurance Management. He led all coordination efforts with other functional groups in the program such as design specialists, project controls, contract management, claims specialists, construction supervision staff and the client for delivering the projects. Mr. Khan supervised the development of Quality Assurance Program that included a detailed narrative, record keeping documents for Quality Assurance Tests, Recording and Closing out of all Non-Conformance Items and generating NCR Reports. He worked with multiple contractors to ensure that the quality of work was uniform across all contracts, specifications/standards were followed across all contracts, and payments were made as per contract terms and conditions.

Project Relevance: This \$500 Million project included construction of roads and drainage works using multiple contractors. The project scope varied from construction of new roads, new storm water drainage system, widening and upgrading of the existing roadway and drainage system, construction of new highways, bridges and interchanges. The project also included public outreach, traffic maintenance and management, extensive stake holder coordination, pedestrian and bike access, environmental compliance, extensive landscaping of public areas along the roads and highways.

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. Mr. Khan is not required on-site full-time.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: MERRITT KING, PE, DBIA, SOUTHEAST REGIONAL STRUCTURES PRACTICE LEADER	
b. Project Assignment: DESIGN MANAGER	
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): KCI TECHNOLOGIES, INC. (FULL TIME)	
d. Employment History: With this Firm <u>4</u> Years With Other Firms <u>24</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): KCI Technologies, Inc., Vice President, Southeast Regional Practice Leader, (2012-Present). As Southeast Regional Practice Leader, Mr. King manages the Transportation Structures Design groups for Virginia, North Carolina, South Carolina, Georgia and Florida. He manages the design and pre-construction activities for design-build projects. His duties include proposal pursuits, teaming, contracts and agreements, project management, design management and coordination for design-build projects. Mr. King has been the design manager for 23 design-build projects ranging from \$12 million to \$487 million. Triplett-King & Associates, Inc., President, (2002-2012). Prior to merging his firm with KCI Technologies in 2012, Mr. King was founder and managing partner of Triplett-King & Associates, Inc. (TKA), where he grew the firm from one employee to a staff of 40 with specialized services in bridge design, CEI, design-build, value engineering, structural design and construction engineering. For over 16 years, Mr. King managed the firm's major projects, operations, design staff, CEI staff, human resources, financial and business operations, marketing, proposal and client development and quality control in design and inspection.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of North Carolina at Charlotte/B.S./1989/Civil Engineering Technology	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2001/Professional Engineer/0402035924	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
I-520 Palmetto Parkway Design-Build, Phase I, Aiken County, SC/Augusta, GA (DESIGN-BUILD)	
Name of Firm: KCI Technologies, Inc.	Project Role: Design Manager
Beginning Date: 06/2002	End Date: 06/2004
Specific Responsibilities: Mr. King oversaw project management, design management and coordination for the design team and all subconsultants. He prepared all subconsultant agreements and contracts, managed the pre bid fee estimates, served as project manager for all design activities and managed the design staff for preparing estimated quantities for pre-bid award. He also served as quality control engineer for the design and plans to satisfy GDOT requirements for the bridge crossing the Savannah River. In this capacity, he performed quality control of the bridge design and drawings and also reviewed the design for the interior bents consisting of drilled shaft foundations and concrete columns and bent caps. He reviewed the bridge bearings, typical section and span details for spans G-M, standard notes and detail sheets and designed the expansion strip joint seals for the expansion bents. Project Relevance: This \$43M, major design-build project consisted of connecting US 1 to I-520 Bobby Jones Expressway and included the design and construction plan details for the bridge over the Savannah River. This four-lane divided interstate facility on new alignment is controlled access and includes two major interchanges, 2.5 miles of interstate and five bridges. The bridge over the Savannah River is a 14-span, 1,900' bridge consisting of 74" prestressed concrete bulb-tee beams with spans up to 139'. The bridge superstructure is supported by 20" diameter pipe piles at the end bents and 72" diameter drilled shaft piers with crash wall struts in the navigable channel as required by the vessel impact loading study. The bridge geometry includes two tapers on the bridge deck for acceleration and deceleration lanes in combination with horizontal and vertical curve alignments, all of which added complexity to the seismic design and detailing requirements of the SCDOT's Seismic Design Specifications for Highway Bridges, 2001. The project also included roadway improvements various secondary and local roads.	

US 21 Bridge over Catawba River, York County, SC			
Name of Firm:	KCI Technologies, Inc.	Project Role:	Design Project Manager
Beginning Date:	01/2008	End Date:	06/2013
<p>Specific Responsibilities: Mr. King performed the project management and contract administration for the replacement of the existing structural steel girder bridge over the Catawba River. He led the team for investigating several alternates and alignments for the replacement of the existing bridge. He also assisted in the preparation of the Alternate Alignment Study Report delivered to the client (SCDOT). Mr. King developed the scope of services for the firm and all sub-consultants including surveying, geotechnical, environmental, roadway, hydrology, subsurface utility exploration and utility coordination. He prepared engineering fee estimates for bridge design and project management and provided quality control of subconsultant fees for their various items of service. He coordinated monthly design meetings, approved invoices and pay estimates, managed staff for bridge design services for preliminary and final design phases and provided coordination with the client, regulatory agencies, property owners and other project stakeholders.</p> <p>Project Relevance: The project consisted of two miles of widening from a two-lane roadway to a five-lane curb and gutter section sidewalks and a 1,000' eight-span, pre-stressed concrete beam bridge supported on drilled shaft foundations. The new bridge utilizes 74" pre-stressed concrete, bulb-tee beams supported on concrete drilled shaft and rock socket foundations to replace the existing structural steel bridge and includes bicycle lanes, sidewalks and aesthetic features with barrier walls and lighting. The project also included a corridor analysis and bridge alignment alternate for cost comparison and potential conflicts with ROW, environmental issues and utilities. KCI performed the study for architectural features for the new bridge including concrete arches over the river, architectural railings with rock and brick facades, decorative light pedestals and lighting schemes. KCI managed all subconsultants for bridge hydrology/hydraulic design, roadway design, environmental documents and permitting, surveying, geotechnical exploration, and utility coordination. As part of the scope of services for the conceptual and preliminary design phase, KCI performed an alternate alignment and bridge type study to provide SCDOT a matrix and cost comparisons of each alternate while defining: ROW impacts/relocations, traffic staging, utility conflicts, environmental issues, geometric alignments and constructability. Based on the alternate study, KCI recommended building the bridge on new alignment upstream and maintaining traffic on existing bridge instead of scoping the project as originally planned by DOT for staged construction method. The new alignment alternate showed a savings of \$1.5M to the DOT. Special design considerations and issues included: extensive environmental studies in sensitive environmental and cultural areas; coordination with regulatory agencies and the Catawba Indian Nation; heavy public information and public hearing involvement; coordination with SCDOT, FHWA, York County, City of Rock Hill, and Town of Fort Mill; complex utility design and coordination, including several major utility relocations; completed services within schedule and budget.</p>			
Route 288 PPTA, Route 288/I-64 Interchange Design-Build, Richmond, VA			(DESIGN-BUILD)
Name of Firm:	KCI Technologies, Inc.	Project Role:	Design Manager
Beginning Date:	01/2001	End Date:	01/2003
<p>Specific Responsibilities: Mr. King performed design and plan reviews for the two flyover ramp bridges. He signed and sealed the construction drawings for the interchange bridges that were reviewed and approved by the lead consultant, CH2MHILL and Virginia Department of Transportation.</p> <p>Project Relevance: The KCI team was responsible for the design of Ramps G and H and design management for Ramp E, all of which are multi-span, horizontally curved, and continuous for live load bridges at the interchange of Route 288 and I-64. The Route 288/I-64 Interchange is part of the \$236 million design-build project in Richmond, VA funded through the Public-Private Transportation Act of 1995 (PPTA). The superstructures for the ramps consist of curved structural steel plate girders with spans that range from 211 feet to 246 feet. The superstructures for Ramps G and H are supported by hammer-head piers and MSE high wall abutments. The begin bridge ends for Ramps G and H are supported by a single, shared MSE wall system with the highest portions of the MSE wall system being 70-foot-tall, currently the tallest MSE walls in the Commonwealth of Virginia. Since the project was constructed in the design-build format, two submittals for each structure were required to facilitate construction of the substructures. The separate submittals enabled construction of the substructure components to take place while the final design, plan details, and fabrication for the superstructure components were completed. With an accelerated schedule, the ramps were designed in 10 months and were constructed in 20 months.</p>			
<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</p>			

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: BOB CROSS, CONSTRUCTION MANAGER	
b. Project Assignment: CONSTRUCTION MANAGER	
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): THE LANE CONSTRUCTION CORPORATION (FULL TIME)	
d. Employment History: With this Firm < 9 Years With Other Firms 30 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): The Lane Construction Corporation, 2006-Present: Mr. Cross is a Construction Manager with nearly 40 years of experience in the heavy construction industry including both roadway and site development construction. He performs constructability reviews of design drawings; develops and maintains project schedule, and coordinates contractor/ subcontractor activities. Oversees all Quality Control activities on the project site to include both materials used and work performed and ensures that these meet contract requirements and the "approved for construction" plans and specifications. Moore Brothers, 2005-2006: Mr. Cross was General Superintendent on the I-66 HOV project between Route 234 and the Prince William Parkway interchanges. Supervised all aspects of construction including highway widening, geotechnical work, hydraulics, hydrology and erosion control, permitting, and utility coordination. Additionally, he performed quality control activities to ensure contract requirements were met and that approved for construction plans and specifications were met. Archer Western Contractors, 2003-2005: Mr. Cross was General Superintendent on the Springfield Interchange Project, Phases VI & VII. He performed constructability reviews of design drawings; developed and maintained project schedule; coordinated contractor and subcontractors' activities. He supervised all aspects of construction including quality control assessments and measures. Shirley Contracting Company, LLC, 2002-2003: Mr. Cross was General Superintendent on the Springfield Interchange Project Phase II and III. He implemented and enforced corporate safety policies; performed constructability reviews of design drawings; developed and maintained project schedule; coordinated with contractor and subcontractor activities.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Northern Virginia Community College, Annandale, VA / Coursework Langley High School, McLean, VA / 1972	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A Virginia DEQ RLD Certification, Expiration: 1/11/2019	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
VDOT, 95 Express Lanes, Fairfax, Prince William & Stafford Counties, VA (DESIGN-BUILD)	
Name of Firm: The Lane Construction Corporation	Project Role: Construction Manager
Beginning Date: 2012	End Date: 2014
Specific Responsibilities: Mr. Cross' role as Construction Manager for the proposed I-95 Rappahannock River Crossing project is similar to the role he held on the I-95 Express Lanes DB project. Mr. Cross was responsible for the management of the construction process which included the QC program, project schedules, cost control, subcontractor coordination, work plans, and specific means/methods for carrying out the work. He was responsible for ensuring the materials used and work performed met contract requirements and the "approved for construction" plans and specifications. Mr. Cross had extensive involvement with the complex MOT plans and implementation, relocation, adjustments, and coordination of utilities, and helped address environmental concerns.	
Project Relevance: Similar to the I-95 Rappahannock River Crossing project, this project consisted of an extensive structures and bridge work, utility relocation, MOT, environmental, public involvement, coordination with multiple stakeholders and VDOT,	

QA/QC, roadway and interstate widening, and a 8.3 mile roadway extension that consisted of major clearing, earthwork, and bridge flyovers. This project also involved comprehensive public relations with over 365 outreach meetings. This \$722 million D-B project created approximately 29 miles of Express Lanes on I-95 from Alexandria to Stafford, VA. This project also added capacity to the existing HOV Lanes from the Prince William Parkway to the vicinity of Edsall Road; improved the existing two HOV lanes for six miles from Route 234 to the Prince William Parkway. A 9-mile reversible two-lane extension of the existing HOV lanes from Dumfries to Garrisonville Road in Stafford County helped to alleviate the worst traffic bottleneck in the region.

VDOT, I-495 Express Lanes, Fairfax County, VA (DESIGN-BUILD)

Name of Firm: The Lane Construction Corporation	Project Role: Construction Manager/Superintendent
Beginning Date: 2009	End Date: 2012

Specific Responsibilities: As the Construction Manager/Superintendent on this project, Mr. Cross was responsible and accountable for coordinating with design team members, supervising engineering, survey, and QC staff, developing and maintaining the project schedule, tracking and evaluating the project schedule and cost, scheduling subcontractors’ activities and on-site engineering calculations and drawings. He devised and implemented hazard analysis and safety procedures for crews and equipment, provided training for job engineers assigned as subordinates, and worked with the designer and owner to ensure materials used and work performed met contract requirements, design plans, and specifications. **Mr. Cross worked with proposed DBPM, Jan Sherman, on this project.**

Project Relevance: Similar to the proposed I-95 Rappahannock River Crossing project the I-495 Express Lanes project included MOT, bridge/structure replacement, environmental, geotechnical, utilities, roadway and interstate widening, hydraulics, transportation management plan, survey, QA/QC, ITS, safety and public involvement/relations. Additionally, the project included the installation of a large storm-water management wet pond with an earthen dam above the Chain Bridge Road interchange also similar to the proposed project. Mr. Cross was responsible for the roadway construction and elements of the 495 Interstate widening and improvements as part of this \$1.5 billion PPTA project. Two new lanes were constructed in each direction on a 14-mile stretch outside the existing lanes of I-495, from the Springfield Interchange to just north of the Dulles Toll Road. The project encompassed the replacement of more than \$260 million of aging infrastructure, including more than 50 bridges and overpasses.

VDOT, I-66 Route 15 Interchange Reconstruction, Prince William County, VA (DESIGN-BUILD)

Name of Firm: The Lane Construction Corporation	Project Role: Construction Manager
Beginning Date: 2014	End Date: 7/2017 (est)

Specific Responsibilities: As Construction Manager on this \$39M project, Mr. Cross is responsible for managing the entire construction process. He coordinates subcontractors’ schedules, creates progress schedules to maintain cost-effectiveness, and communicates effectively with quality control for inspections and daily routines. He is responsible and accountable for planning, scheduling, cost, D-B conformance and quality control (QC). He coordinates with and monitors contract progress with VDOT and subcontractors (including adherence to contractual requirements and specifications), and oversees the overall safety and quality control programs. **Mr. Cross is currently working with proposed DBPM, Jan Sherman, on this project.**



Project Relevance: The I-66/Route 15 Interchange Reconstruction project (the first DDI in Northern Virginia) involves reconstructing the interchange of U.S. Route 15 (James Madison Highway) over Interstate 66 (I-66). Similar to the proposed I-95 Rappahannock River Crossing project this project includes: roadway widening, utility relocation, right-of-way acquisition, sign structures, public involvement, QA/QC, overall project management, construction of a new service road, and replacement of northbound and southbound bridges.

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: I-66/Route15 Interchange Reconstruction **Role:** Construction Manager. **Duration of Assignment:** Mr. Cross will be available on-site full-time at the start of construction for the I-95 Rappahannock River project. Mr. Cross will be committed 100% to the construction phases of the Project.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: ERIC BURGESS, PE, TRANSPORTATION STRUCTURES PRACTICE LEADER	
b. Project Assignment: LEAD STRUCTURAL ENGINEER	
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): KCI TECHNOLOGIES, INC. (FULL TIME)	
d. Employment History: With this Firm <u>17</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <u>KCI Technologies, Inc., Transportation Structures Practice Leader, (2002-Present).</u> Responsible for design and design management of transportation structures projects for state departments of transportation, municipalities and private developers. Mr. Burgess has served as project engineer, project manager, vice president of design services and now, transportation structures practice leader for KCI Technologies. As a practice leader, his duties include contract executions, business development, marketing and managing a team of structural engineers and technicians within the design team. He has served as a lead design engineer and lead structures engineer for fast-paced value engineering and design-build projects for bridge contractors in multiple states. He has served in various capacities for over 50 DOT bridge replacements for multiple DOT's including VDOT on such projects as I-64 Segment II D-B, Route 288 PPTA, Region II D-B Bridge Replacements, and Route 46 Bridge Replacement over Nottoway River.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Clemson University/B.S./1997/Civil Engineering Clemson University/M.E.1999/Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2011/Professional Engineer/0402048509	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)	
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
I-520 Palmetto Parkway Design-Build, Phase I , Aiken County, SC/Augusta, GA (DESIGN-BUILD)	
Name of Firm: KCI Technologies, Inc.	Project Role: Structure Design Manager
Beginning Date: 06/2002	End Date: 06/2004
<i>Specific Responsibilities:</i> Mr. Burgess managed all aspects of design and was responsible for the coordination between all of the subconsultants for geotechnical, hydrology and bridge design and with the SCDOT Project Manager for submittals and approvals. Under Mr. Burgess's management, KCI was able to provide final design and plan details for the bridge over the Savannah River in only five months and provided responsive contractor support during construction to ensure that the project was completed ahead of schedule.	
<i>Project Relevance:</i> This \$43M, major design-build project consisted of connecting US 1to I-520 Bobby Jones Expressway and included the design and construction plan details for the bridge over the Savannah River. This four-lane divided interstate facility on new alignment is controlled access and includes two major interchanges, 2.5 miles of interstate and five bridges. The bridge over the Savannah River is a 14-span, 1,900' bridge consisting of 74" prestressed concrete bulb-tee beams with spans up to 139'. The bridge superstructure is supported by 20" diameter pipe piles at the end bents and 72" diameter drilled shaft piers with crash wall struts in the navigable channel as required by the vessel impact loading study. The bridge geometry includes two tapers on the bridge deck for acceleration and deceleration lanes in combination with horizontal and vertical curve alignments, all of which added complexity to the seismic design and detailing requirements of the SCDOT's Seismic Design Specifications for Highway Bridges, 2001.	
US 21 Bridge over Catawba River, York County, SC	
Name of Firm: KCI Technologies, Inc.	Project Role: Structure Design Manager
Beginning Date: 01/2008	End Date: 06/2013
<i>Specific Responsibilities:</i> Mr. Burgess worked closely with the SCDOT and subconsultants to complete the design of the project. He and his squad of engineers developed an alternate study to design the most efficient and cost effective alternate while defining ROW impacts, traffic staging, utility conflicts, environmental issues, geometric alignments and constructability.	

Project Relevance: The project consisted of two miles of widening from a two-lane roadway to a five-lane curb and gutter section sidewalks and a 1,000' eight-span, pre-stressed concrete beam bridge supported on drilled shaft foundations. The new bridge utilizes 74" pre-stressed concrete, bulb-tee beams supported on concrete drilled shaft and rock socket foundations to replace the existing structural steel bridge and includes bicycle lanes, sidewalks and aesthetic features with barrier walls and lighting. The project also included a corridor analysis and bridge alignment alternate for cost comparison and potential conflicts with ROW, environmental issues and utilities. KCI performed the study for architectural features for the new bridge including concrete arches over the river, architectural railings with rock and brick facades, decorative light pedestals and lighting schemes. KCI managed all subconsultants for bridge hydrology/hydraulic design, roadway design, environmental documents and permitting, surveying, geotechnical exploration, and utility coordination. As part of the scope of services for the conceptual and preliminary design phase, KCI performed an alternate alignment and bridge type study to provide SCDOT a matrix and cost comparisons of each alternate while defining: ROW impacts/relocations, traffic staging, utility conflicts, environmental issues, geometric alignments and constructability. Based on the alternate study, KCI recommended building the bridge on new alignment upstream and maintaining traffic on existing bridge instead of scoping the project as originally planned by DOT for staged construction method. The new alignment alternate showed a savings of \$1.5M to the DOT. Special design considerations and issues included: extensive environmental studies in sensitive environmental and cultural areas; coordination with regulatory agencies and the Catawba Indian Nation; heavy public information and public hearing involvement; coordination with SCDOT, FHWA, York County, City of Rock Hill, and Town of Fort Mill; complex utility design and coordination, including several major utility relocations; completed services within schedule and budget.

US 1/SC 9 over Great Pee Dee River, Chesterfield/Marlboro Counties, SC

Name of Firm: KCI Technologies, Inc.	Project Role: Lead Structural Engineer
Beginning Date: 06/2009	End Date: 05/2010

Specific Responsibilities: Mr. Burgess served as the lead structural engineer overseeing the structural design and project coordination with the project owner, local municipalities and the subconsultant team. He was heavily involved with the bridge type and span layouts to determine the most economical bridge replacement while spanning wetlands, utilities, parallel streams and existing bridge piers within the river. This set the stage for final design and plan development that Mr. Burgess oversaw as the engineer of record for the main river bridge. He was also involved with quality control oversight of the other bridge sites performed by sub consultants. He was instrumental in the conceptual design of those sites as well.



Project Relevance: KCI performed the bridge design for the replacement of the US 1/SC 9 bridge over the Great Pee Dee River and managed all subconsultants for bridge hydrology/hydraulic design, environmental documents and permitting, geotechnical exploration, utility coordination and for the design of the overflow bridges. The new river bridge will consist of a 1,950-foot-long, 13-span, 74-inch bulb-tee prestressed concrete beam superstructure supported on drilled shaft foundations. Each span is 150-foot-long. A detailed seismic analysis and design was completed for this bridge. This bridge will be constructed in stages in order to maintain traffic flow.

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 3.4.1(a)
LEAD CONTRACTOR WORK HISTORY FORMS

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
I-95 EXPRESS LANES Fairfax County, VA DESIGN BUILD	HNTB/HDR	Name of Client./ Owner: VDOT Phone: 571.483.2651 Project Manager: Charlie Warraich, PE Phone: 571.273.8229 Email: H.S.Warraich@vdot.virginia.gov	08/2012	12/2014	\$691,147	\$726,194	\$326,850

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">Similar Scope of Work:</p> <ul style="list-style-type: none"> Design-Build Roadways Bridges and Structures Extensive MOT Environmental Geotechnical Right-of-Way Hydraulics Stormdrain and SWM Asphalt Milling and Resurfacing ITS Traffic Control Devices Sign Structures Transportation Management Plan Utilities Stakeholder Coordination Public Involvement/Communications QA/QC Survey Construction Engineering and Inspection Overall Project Management 	<p align="center">PROJECT SCOPE</p> <p>LANE, as a Construction Joint Venture (CJV) member, shared responsibility for the design and construction of the \$726 million I-95 Express Lanes project. The project creates approximately 29 miles of Express Lanes on I-95 from Alexandria, VA at the northern terminus to Route 610, Stafford, VA at the southern terminus. The scope of work included a 9-mile roadway extension beginning at the southern end of the existing HOV lanes, consisting of major clearing and earthwork, an extensive ITS and signing system, sound walls, asphalt mill and overlay, shoulder reconstruction, and, additionally, structural bridge work (29 bridges and rehabilitated flyovers including 9 new structures). Although only a 35% Fluor-Lane 95, LLC CJV member, LANE provided nearly all of the project supervision and workforce for the CJV performed bridgework and 20 miles of existing HOV lane renovation and widening; plus, all of the asphalt paving, soundwall construction and some roadway signage. <i>Only LANE of Fluor-Lane LLC will be a team member on the I-95 Rappahannock River project.</i></p>								
<p align="center">Proposed Personnel on Project:</p> <table border="0" style="width: 100%; font-size: small;"> <tr> <td>Jan Sherman (LANE)</td> <td>Bob Cross (LANE)</td> </tr> <tr> <td>Chris Monahan (LANE)</td> <td>John Myers (RDA)</td> </tr> <tr> <td>Brian Komar, PE (RDA)</td> <td>Chris Calamos (RDA)</td> </tr> <tr> <td>Sidney Thomas (RDA)</td> <td></td> </tr> </table>	Jan Sherman (LANE)		Bob Cross (LANE)	Chris Monahan (LANE)	John Myers (RDA)	Brian Komar, PE (RDA)	Chris Calamos (RDA)	Sidney Thomas (RDA)	
Jan Sherman (LANE)	Bob Cross (LANE)								
Chris Monahan (LANE)	John Myers (RDA)								
Brian Komar, PE (RDA)	Chris Calamos (RDA)								
Sidney Thomas (RDA)									
<p align="center">EVIDENCE OF PERFORMANCE</p> <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 nearly 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	
I-495 EXPRESS LANES Fairfax County, VA DESIGN BUILD	HNTB/HDR	Name of Client./ Owner: VDOT Phone: 540.829.7500 Project Manager: John Lynch, P.E. Phone: 540.829.7512 Email: John.Lynch@vdot.virginia.gov	12/2012	11/2012	\$1,346,560	\$1,481,670	\$642,000

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.

Similar Scope of Work:
<ul style="list-style-type: none"> • Design-Build • Roadways • Bridges and Structures • Extensive MOT • Environmental • Geotechnical • Right-of-Way • Hydraulics • Stormdrain and SWM • Asphalt Milling and Resurfacing • Traffic Control Devices • Sign Structures • Transportation Management Plan • Utilities • Stakeholder Coordination • Public Involvement/Communications • QA/QC • ITS • Survey • Construction Engineering and Inspection • Overall Project Management
Proposed Personnel on Project:
Jan Sherman (LANE) Bob Cross (LANE) Chris Monahan (LANE)

PROJECT SCOPE
Construction of four new managed/HOV traffic lanes (two in each direction) in the median of the existing lanes on the Capital Beltway. Work included the reconstruction of ramps, heavy maintenance of traffic effort, shoulder reconstructions, interchanges, frontage roads, Both overpasses and underpasses as well as bridge widening's. The Project encompassed the replacement of more than \$260M of aging infrastructure, including 58 bridges, 9 miles of roadway and 12 interchanges. 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, all of the MOT plus all asphalt paving.

RELEVANT PROJECT ELEMENTS
Roadway: The I-495 Express Lanes project is one of the largest roadway projects constructed in the Commonwealth. The I-495 Express Lanes project widened the existing roadway to the median and involved replacement and widening of numerous structures. 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.
Bridge and Structures: Our Team widened and/or replaced 58 bridges on this project adjacent to high ADT count/live traffic. LANE devised an innovative phasing and design for the widening/replacement of the Rt. 7 Bridge over 495; the original plan consisted of building a temporary bridge to maintain traffic, however, our team decided that phased construction of the permanent bridge improved MOT and was more cost-effective. The original concept called for three-stage replacement of the bridges over the Beltway, but we were able to plan and execute ALL bridge replacements in two stages except for the Rt. 7 Bridge.
Maintenance of Traffic: 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. Additionally, the alignment of many of the existing bridges over the Beltway could not be shifted so new replacement bridges were built on the same footprint as the old structures. One of the significant challenges for this project was not starting daytime lane closures until after 9:30 am and having all four lanes of traffic open again at 3:30 pm. Overnight closures were similarly restricted and exceptions were rare – primarily for steel erection, where short-duration total closures were permitted. LANE fulfilled this requirement by not reducing traffic capacity during construction.
Utilities: 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.
Public Outreach/Involvement: More than 2,000 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.
Railroad Coordination: The project also included interfacing and crossing over existing WMATA Metro (Dulles Corridor Metrorail Project Phase 1) and Norfolk Southern



tracks.
Safety/Limiting Impacts to the Traveling Public: 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.
Innovative Design Solutions/Construction Techniques: 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.*
DBE Goals: Our team subcontracted over 40% of the project to DBE and SWaM firms (more than 280), totaling nearly \$550M. LANE received the *2013 Prime Contractor of the Year* Award from VDOT for outstanding performance and participation in the DBE Program.

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	
I-85 over YADKIN RIVER Salisbury, NC DESIGN-BUILD	STV Incorporated	Name of Client./ Owner: NCDOT Phone: 919.707.2900 Project Manager: Rodger Rochelle, P.E. Phone: 919.707.2900 Email: rdrochelle@ncdot.gov	05/15/2013	04/30/2014*	\$136,019	\$144,000	\$93,600

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated

<p align="center">Similar Scope of Work:</p> <ul style="list-style-type: none"> • Design-Build • Roadways • Bridges/Structures • Environmental • Geotechnical • Right-of-Way • Hydraulics • Stormdrain and SWM • Retaining Walls • Maintenance of Traffic • Sign Structures • Transportation Management Plan • Traffic Maintenance and Management • Utilities • Stakeholder Coordination • Railroad Coordination • Public Involvement/Communications • QA/QC • Survey • Construction Engineering and Inspection 	<p align="center">PROJECT SCOPE</p> <p>The I-85/Yadkin River Bridge is one of the most well-known highway structures in the state of North Carolina. By replacing a severely deteriorated, 60-year old bridge, 8 months ahead of schedule and \$44M below the owner's budget, our design and construction team was able to satisfy the NCDOT's lofty project goals, achieving completion of a mega-D-B project with many complexities. The existing I-85/Yadkin River Bridge was built in the 1950's and had become one of the most notorious bridge crossings in all of North Carolina. Besides being narrow and unsafe, the condition of the existing bridge had become severely deteriorated. Originally designed to carry 10,000 vehicles per day, the bridge was subjected to 80,000 vpd – including heavy tractor-trailer traffic. A cost-effective solution was in dire need. NCDOT chose to accelerate the project via a design-build procurement using a “best-value” selection process.</p> <p align="center">RELEVANT PROJECT ELEMENTS</p> <p>Roadway: The I-85 Yadkin River project reconstructed approximately 7 miles of I-85. In addition to widening the roadway, realignment of the interstate occurred to eliminate sharp curves and improved the interchange to NC 150. The work included earthwork, concrete paving, and drainage.</p> <p>Bridge and Structures: Our team relocated the southbound lane of I-85 and replaced two deficient 2-lane bridges over the Yadkin River with dual 4-lane structures that were approximately 2,700 LF long. The completed structures met the 70 mph speed for a rolling urban freeway and interstate standards. Additionally, the bridge on the US29/70 over the Yadkin River was replaced. In total, there were 6 new bridges constructed and 5 were demolished. Of the 6 new bridges, 3 crossed the Yadkin River. We used a “single work” bridge concept to address the complexity of rapid construction in the environmentally sensitive Yadkin River basin, while providing the contractors with safe, proximate access to the work site (away from normal vehicular traffic).</p> <p>Environmental: The project's environmental plan protected 13 environmentally sensitive wetland/streams and performed 1.5 acres of wetland mitigation. The protection of sensitive wetlands occurred by using a temporary access work bridge across the river, which avoided disturbing the wetlands. Constructing a 3000-foot bridge through environmentally sensitive areas without disturbing the wetlands was a major challenge. One of the ways we mitigated environmental impacts was through the use of a single trestle work bridge instead of two trestles. The planning document and RFP for the project envisioned a 46-foot median and separate temporary work bridges for the dual (NB and SB) Yadkin River bridges. Our team saw that by slightly widening the median to 70 feet, we could construct a SINGLE work bridge in the center median (instead of two separate bridges), reducing the cost, timeframe, and environmental impacts all at once.</p> <p>Maintenance of Traffic: Our MOT plan enabled us to achieve substantial completion eight (8) months early. We accomplished this by accelerating an intermediate milestone to open the northbound mainline bridge and shift all NB and SB traffic onto the new NB Bridge to temporarily carry all Interstate 85 traffic. We were able to safely sequence several phases of work, and when major traffic shifts occurred, we were able to achieve those dangerous shifts without incident.</p> <p>Utilities: The project involved a number of public and private utilities, the most complex of which was the work adjacent to Duke Energy's main transmission line across the Yadkin River. By conducting “partnering” sessions with the utility owners, we succeeded in managing the utility coordination for this and other lines which were in conflict with the new construction. 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.</p> <p>Partnering: By virtue of the design-build delivery method, we were able to engage the client/owner in every phase of the project. NCDOT participated in our bi-weekly construction meetings and participated in “partnering” to achieve the desired end product. We worked with both the local (Division 9) and Central offices of NCDOT as well as the FHWA. And we successfully managed over 100 design-plan submittals (on an aggressive schedule) which included DOT reviews on a fast-paced routine. In conclusion, the I-85/Yadkin River Bridge was built successfully – ahead of schedule, well under budget, of supreme quality, and safely. We met the goals of the NCDOT for this very high-profile project.</p> <p>Rail/Railroad Coordination: Extensive coordination occurred with the Norfolk Southern railroad during the replacement of the structurally deficient Yadkin Bridge along with making rail improvements. The DOT and Norfolk Southern were disputing for almost two years, and we facilitated talks to resolve the dispute so the project could commence. Originally another bridge was taken out of the project scope, but the railroad bridge was put back in, and the project contract date was extended by a year and the contract amount was increased.</p> <p>*The project achieved substantial completion 8 months ahead of schedule and the interstate was open to traffic at that time. The contract date was extended a year to accommodate added scope which included the construction of the new railroad bridge.</p>	
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EVIDENCE OF PERFORMANCE
 2014 Design-Build Institute of America (DBIA) National Award of Merit for Transportation and 2012 – 3rd Top Project, Roads and Bridges Magazine

ATTACHMENT 3.4.1(b)
LEAD DESIGNER WORK HISTORY FORMS

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
I-520 Palmetto Parkway & Bridge over Savannah River, Phase I Aiken County, SC/Augusta, GA DESIGN-BUILD	United Contractors, LLC	Name of Client./ Owner: SCDOT Phone: 803-737-2314 Project Manager: Claude Ipock, PE Phone: 803-737-4202 Email: ipockcr@scdot.org	06/2002	06/2004	\$42,000	\$43,961	\$2,400

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

<p align="center">Similar Scope of Work:</p> <ul style="list-style-type: none"> Design-build New alignment & structures Environmentally sensitive area Complicated project with aggressive schedule Acceleration & deceleration lanes/ramps New major route & traffic congestion Roadway & traffic improvements New major river bridge Extensive MOT Environmental & permitting Geotechnical Bridge hydraulics Storm drainage and SWM Demolition of structures Traffic control devices Signs, sign structures, and foundations Transportation management plan Extensive utilities & coordination Major stakeholder coordination Public involvement/communications Design QA/QC Surveys Construction engineering and inspection 	<p align="center">PROJECT SCOPE</p> <p>The Palmetto Parkway Phase I project was the first ever, hybrid design-build project in South Carolina, providing the much awaited link between South Carolina and Georgia. The project consisted of the design and construction of 2.5 miles of new mainline interstate facility on I-520 from Sandbar Ferry Road in Augusta, Georgia to US 1 (Jefferson Davis Highway) near North Augusta, South Carolina, and five major bridge structures. This project provided the citizens and communities a link outside of Augusta and reduced travel time and relieved congestion in the area. The corridor also opened up valuable land for industrial and economic development in the region. This modified design-build project was bid as a "A+B" project (pricing & time to construct) with all roadway plans completed by the Department with unit rate prices and all bridges let as design-build with lump sum pricing. This fast track project featured over two million cubic yards of earthwork with two interchanges and phased design and construction to accommodate access to a major industrial plant along Dittman Court Road. Bridge structures were required for the Savannah River site, dual bridges over Savannah River swamp and overflow, bridge over Norfolk Southern Railroad, Dittman Court Road bridge over I-520 and dual US 1 bridges over I-520. KCI served as the prime designer for the contractor and work was performed in the Rock Hill, SC office. KCI provided overall design project management and structure design for the Savannah River. As the design project management entity for the team, KCI was responsible for the management and coordination between all of the subconsultants for geotechnical, bridge hydrology and bridge design and with the SCDOT Project Manager for submittals and approvals. The project was designed and constructed within the budget and schedule bid. The actual construction costs varied from the initial bid costs due to the SCDOT adding scope to two of the bridge sites with additional acceleration/deceleration lanes and extending one bridge for future use.</p>	
<p align="center">Proposed Personnel on Project:</p> <p>Merritt King, PE (KCI) Eric Burgess, PE (KCI)</p>	<p align="center">RELEVANT PROJECT ELEMENTS</p> <p>Interstate Roadways: The project consisted of 2.5 miles of new, four-lane divided, limited access interstate facility connecting the Bobby Jones Expressway in Georgia to US 1 in Aiken County, SC. Also, improvements to side roads, signalization, turning lanes and intersection improvements were improved for the existing local connecting roads.</p> <p>Bridges and Structures: The main bridge over the Savannah River, which is a 14-span, 1,900' bridge consisting of 74" pre-stressed concrete bulb-tee beams with spans up to 139'. The bridge superstructure is supported by 20" diameter pipe piles at the end bents and 72" diameter drilled shaft piers with crash wall struts in the navigable channel as required by the vessel impact loading study. The bridge geometry includes two tapers on the bridge deck for acceleration and deceleration lanes in combination with horizontal and vertical curve alignments, all of which added complexity to the seismic design and detailing requirements of the SCDOT's Seismic Design Specifications for Highway Bridges, 2001. The design of the structures was on the critical path of the design-build project and therefore required an accelerated schedule of completion in order to meet the construction deadlines. In order to facilitate construction of the bridge over the Savannah River, the substructure plans were developed and approved by the SCDOT to permit drilled shaft installation prior to completion of the final plans. Under the accelerated schedule demands, KCI was able to provide final design and plan details for this site in only five months and provided responsive contractor support during construction to ensure that the project was completed ahead of schedule. Other bridges on the project included 600' bridge over Savannah River swamp overflow, using AASHTO Type III beams and pre-stressed concrete piling for foundations; 150' single span bridge over Norfolk Southern Railroad with structural steel girders and MSE wall abutments supported on steel pipe piles; 205' two-span bridge on Dittman Court Road over I-520 consisting of BT-63" bulb tee pre-stressed concrete beams supported on spread footings in the interior bent and steel pipe pile abutments; 161' single span bridge over US 1 with structural steel beams supported on MSE wall abutments and steel pipe piles.</p> <p>Environmental: The project was successfully constructed across the environmentally sensitive Savannah River and its floodplain, which includes a pristine wetlands caused by a breach in the aquifer with no impact to water quality. Construction techniques were used to minimize the chance for pollution or siltation to enter these bodies of water. Less intrusive drilled shafts were designed instead of cofferdams for the river site and driven concrete piles for the overflow bridge. Stone fill and turbidity curtains were used to cross the aquifer to minimize siltation. Gabion rip rap was used in the area of the Savannah River bank and levy for protection.</p> <p>Safety/Limiting Impacts to Traveling Public: Phased construction of roadway and underpass was required to provide continuous access to a major industrial plant. Bridge beams over traffic at US 1/I-520 were erected at night with lane closures to reduce impacts to traffic during peak hours.</p>	

Stakeholder Communication: Extensive coordination with stakeholders included two DOTs (SCDOT and GDOT), two cities, two counties, resource agencies, community groups, local businesses/residents, and major utility companies.

Innovative Design Solutions/Construction Techniques: Innovative top-down construction techniques to build overflow bridge over a pristine cypress swamp formed by a freshwater aquifer. With regard to construction access, the team was required to obtain permission from private land owners for access between the Savannah River bridge and wetlands overflow bridge; also had to obtain a private easement with Norfolk Southern railroad to cross tracks for access. Innovative embankment settlement techniques, such as wick drains and undercut/stone backfill instead of stone columns; this VE savings was shared with SCDOT. Challenging access issues to each site along the project, which included over one million CY of borrow material. Use of long span, 74" bulb tee pre-stressed concrete beams for the Savannah River bridge to maximize spans and eliminate piers in the waterway. Drilled shafts in the river for improved seismic response and eliminate costly cofferdams. Submerged crash wall formwork design for river piers saved time and costs on vessel impact design of main river piers. Innovative use of 20" steel pipe piles saved costs and eased construction. Innovative design at the Dittman Court site by moving the new alignment of I-520 under Dittman Court Road, rather than over Dittman, allowed the use of the existing bridge for access to the industrial park.

EVIDENCE OF PERFORMANCE

2006 ACEC-SC Engineering Excellence Award. No environmental impacts or citations. Over 650,000 man hours worked with no lost time injuries. Completed design and construction on schedule after major changes to scope and changes to structures and also seven months ahead of the next low bidder. "KCI has made customer service and partnering hallmarks of this project. They have met the challenging commitments of bringing value to the SCDOT through efficient designs and construction methods while meeting the requirements of quality and schedule."

- Danny Shealy (SCDOT Director of Construction, retired)

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
I-520 Palmetto Parkway, Phase II Aiken County, SC DESIGN-BUILD	United Contractors, LLC	Name of Client./ Owner: SCDOT Phone: 803-737-2314 Project Manager: Claude Ipock, PE Phone: 803-737-4202 Email: ipockcr@scdot.org	02/2007	12/2009	\$152,485	\$152,485	\$3,628

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

<p align="center">Similar Scope of Work:</p> <ul style="list-style-type: none"> Complex interchanges and MOT Environmentally sensitive area Aggressive schedule to complete project Interstate facility w/ local road improvements Major route & traffic congestion Roadway & traffic improvements Major river bridge and retaining walls Extensive MOT Environmental & permitting Geotechnical Bridge hydraulics Storm drainage and SWM Demolition of structures Traffic control devices Signs, sign structures, and foundations Transportation management plan Extensive utilities & coordination Major stakeholder coordination Public involvement/communications Design QA/QC Surveys Construction engineering and inspection Aggressive schedule to complete project 	<p align="center">PROJECT SCOPE</p> <p>The Palmetto Parkway Phase II was a major design-build project consisted of connecting I-20 in North Augusta, SC to I-520 Bobby Jones Expressway in Augusta, GA. This four-lane divided interstate facility on new alignment is controlled access and includes 11 major interchanges, 6.5 miles of interstate, and 12 bridges and several major culverts. The project also included roadway improvements to US Route 25, SC 126 (Clearwater Road), S-33 (Ascauga Lake Road) and various secondary and local roads. KCI served as the prime designer and work was performed in our Rock Hill, SC office. KCI served as the lead engineering firm and provided the pre-construction management, bridge design, and construction quality control. As the design management entity for the team, KCI was responsible for the coordination between all of the sub-consultants for geotechnical, hydrology, roadway, utility coordination, bridge design support, public relations and involvement, and with the SCDOT Project Manager, Resident Engineer and design staff for submittals and approvals. After the contract was awarded, and through-out the design phase, several items were added to the project by the SCDOT, including the addition of US-25 widening, improvements and bridge replacement. Also added was the widening of Clearwater Road from three to five lanes. Substantial design and construction had been completed when the SCDOT requested that the roadway section be increased to a five-lane section. Lastly, the addition of the multi-use path along the corridor was added. It was decided in the plan development stage to include the multi-use path in the roadway design which was omitted from the original contract. Although these additional items presented challenges to the design team, close coordination with the Contractor and the SCDOT permitted these design changes to be accomplished with minimal impact on the original schedule. The project was designed and constructed within the budget and the aggressive schedule set by the contractor to complete all bridge plans in record time in order to bid such an aggressive schedule to help secure the bid for our team.</p>	
<p align="center">Proposed Personnel on Project:</p> <p>Merritt King, PE (KCI) Eric Burgess, PE (KCI)</p>	<p align="center">RELEVANT PROJECT ELEMENTS</p> <p>Interstate Roadways: The project consisted of 6.5 miles of new, four-lane divided, limited access interstate facility connecting the I-520 Palmetto Parkway the interchange of US 1/I-520 to connect to I-20. The project has 11 interchanges with major interchanges at I-520 and US 25 Connector and the I-520/I-20 interchange with four ramp and flyover bridges. Also, improvements to side roads, signalization, turning lanes and intersection improvements were improved for the existing local connecting roads.</p> <p>Bridges and Structures: The project has 12 bridge sites with a combination of structural steel and pre-stressed concrete AASHTO beams or bulb tees and drilled shafts and steel pipe pile foundations, as well as multiple culverts. Complex curved structural steel was used at the major interchanges to maximize spans and eliminate piers where needed. KCI was responsible for producing the design and construction plan details for eight of the 12 bridge sites and seven culverts. The complexity and challenges for the project were de-fined by the magnitude of the project and the contractor's demand for an aggressive design schedule. The entire 6.5 miles of interstate facility on new alignment with 12 bridge sites, multiple culverts, and improvements to side roads were to be designed within 12 months. The additional bridge replacement required interchange reconfiguration and ramp geometry that had already been established. The replacement of the existing bridge was added and had to be designed on an accelerated schedule to keep this structure off of the critical path.</p> <p>Environmental: Innovative interchange design at Clearwater Road resulted in significant reduction of impacts to wetlands, ponds and streams. Clearing was completed by mulching and used for temporary erosion control in most parts of the project.</p> <p>Utilities: Complex utility design and coordination, including several major utility relocations. The utilities affected by the project included water and sewer relocations and designs, natural gas relocations, City of North Augusta, telephone, cable, fiber and multiple locations of power distribution.</p> <p>Safety/Limiting Impacts to Traveling Public: Use of local, onsite detour alignments at two sites to maintain traffic to local roads during construction. Over four miles of multi-use paths for pedestrian use in the community.</p> <p>Innovative Design Solutions/Construction Techniques: Innovative use of 74" bulb tee, pre-stressed concrete beams for longer spans and eliminating piers. Innovative use of driven, 36" steel pipe piles for interior bents at four of the bridge sites. Innovative design of Clearwater Road interchange resulted in significant reduction of environmental impacts to wetlands, ponds, and streams (6.4 acres to 2.7 acres of pond impacts and 2,110 LF to 1,337 LF of stream impacts). Aggressive schedule to completed the design of 6.5 miles of interstate, 12 bridge sites, multiple culverts, and improvements to side roads in just 12 months. Use of MSE walls shortened bridges, culverts and side slopes needed for the multi-use paths to save costs. Use of short, local detour alignments for construction of Old Bradleyville Road and Ascauga Lake Road to maintain traffic during construction and saved months of construction time for staging.</p> <p>Stakeholder Communication: Coordination with stakeholders included DOT, Aiken County, two cities, resource agencies, community groups, local businesses and residents along with major utility companies.</p> <p>DBE Program Commitments: All DBE committals were met for the goal set by SCDOT in the contract.</p>	
<p align="center">EVIDENCE OF PERFORMANCE</p> <p>2010 ACEC-SC Engineering Excellence Award & 2010 ACEC-SC Small Firm Award. Original and additional scope items completed in original aggressive schedule.</p> <p>"KCI's involvement in the Palmetto Parkway Phase II project has brought a new dimension to the design-build effort and the engineer's role. KCI coordinated with the DOT and managed the design staff in order to complete all of the structures at the twelve bridge sites in record time to supply the contractor with plans and to meet the aggressive construction schedule." – Claude Ipock, PE, Resident Construction Engineer</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)	
US 21 Bridge Replacement over the Catawba River and Roadway Improvements York County, SC	The Lane Construction Corporation	Name of Client./ Owner: SCDOT Phone: 803-737-2314 Project Manager: Brian Klauk, PE Phone: 803-737-5051 Email: klaukbd@scdot.org	11/2010	06/2013	\$18,700	\$18,700	\$1,700

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

<p align="center">Similar Scope of Work:</p> <ul style="list-style-type: none"> • Major route & traffic congestion • Roadway & traffic improvements • Major river bridge and retaining walls • Extensive MOT • Environmental & permitting • Geotechnical • Bridge hydraulics • Storm drainage and SWM • Demolition of structures • Traffic control devices • Sign structures • Transportation management plan • Extensive utilities & coordination • Major stakeholder coordination • Public involvement/communications • Design QA/QC • Surveys • Construction engineering and inspection • Aggressive schedule to complete project 	<p align="center">PROJECT SCOPE</p> <p>KCI performed the alternative analysis, conceptual plans, preliminary and final design, final construction plans and construction phase services this \$18.7M bridge replacement and roadway improvement project. The project consisted of two miles of widening from a two-lane roadway to a five-lane curb and gutter section, sidewalks, bicycle lanes and a new, 1,000' long bridge replacement carrying US 21 over the Catawba River in York County, SC. The improvements of the widening project were from Celriver Road and a major interchange at I-77/SC 161 to Sutton Road, serving many businesses and the new, 1,000-acre master-planned, mixed-use Riverwalk development. This stretch of heavily traveled US 21 carries 41,000 VPD and serves as a lifeline connecting Rock Hill to Fort Mill, SC and Charlotte, NC. This segment of US 21 also serves as an alternate and emergency route to I-77 and is seldom used for traffic due to congestion and accidents on I-77. KCI was selected as the prime design firm and performed all design tasks from the Rock Hill, SC office location. As the lead firm, KCI performed alternative analysis, bridge design, public hearings, public relations, construction services, construction inspection and provided overall project management for all subconsultants for bridge hydrology/hydraulic design, roadway design, environmental documents and permitting, surveying, geotechnical exploration, and utility coordination. Project was completed on the original design schedule per the design contract and bids for the project were \$6.5M below the engineers estimate.</p>	
<p align="center">Proposed Personnel on Project:</p> <p>Merritt King, PE (KCI) Eric Burgess, PE (KCI)</p>	<p align="center">RELEVANT PROJECT ELEMENTS</p> <p>Roadways: Two-mile widening of the bridge approaches from an existing two-lane road, to a five-lane section with curb and gutter, sidewalks and bicycle lanes. Several side roads required signalization along with turn lanes for local businesses.</p> <p>Bridges and Structures: Eight-span, 1000'-long pre-stressed concrete beam bridge supported on drilled shaft foundations. The new bridge utilizes 74" pre-stressed concrete, bulb-tee beams supported on concrete drilled shaft and rock socket foundations to replace the existing structural steel bridge and includes bicycle lanes, sidewalks and aesthetic features with barrier walls and lighting. Retaining walls were also utilized near transmission lines to eliminate the need to relocate expensive utilities where needed</p> <p>Maintenance Of Traffic: Several alignment alternates were evaluated, and the project was designed off alignment of the existing bridge, therefore traffic was maintained on existing two-lane alignment and shifted to new five-lane section after construction of the new bridge and roadway approaches.</p> <p>Utilities: Complex utility design and coordination, including several major relocations. The design included provisions for a natural gas line to be suspended from the deck of the bridge to provide a cost effective crossing of the utility to reduce user fees associated with a more expensive alternative such as boring through bed rock under the Catawba River. Extensive coordination from the design team provided timely preparations and relocations to occur prior to the bid letting keeping this project on schedule. Utility owners included gas, telephone, cable, fiber and power.</p> <p>Environmental: Included extensive environmental studies in sensitive environmental and cultural areas, including historic properties, Native American cultural sites, threatened and endangered species, including a bald eagle nesting located downstream and a FERC regulated river downstream from the Duke Energy nuclear station.</p> <p>Safety/Limiting Impacts to Traveling Public: Sidewalks and a separate dedicated bike lane on both sides of the bridge and roadway increase accessibility and promote pedestrian and biker safety. Aesthetic details including bridge lighting, upgraded finish coating on the superstructure and the substructure concrete components, and barrier wall detailing were required for this economically developing corridor due to the prominence of this bridge.</p>	
<p>Stakeholder Communication: Coordination with regulatory agencies and the Catawba Indian Nation; heavy public information and public hearing involvement; coordination with SCDOT, FHWA, York County, City of Rock Hill, Town of Fort Mill, and utility companies. The project also required heavy coordination with the local businesses, property owners and the new 1,000-acre Riverwalk development under design at the time of our improvements to US 21.</p> <p>Innovative Design Solutions/Construction Techniques: The project also included a corridor analysis and bridge alignment alternate for cost comparison and potential conflicts with ROW, environmental issues and utilities. As part of the scope of services for the conceptual and preliminary design phase, KCI performed an alternate alignment and bridge type study to provide SCDOT a matrix and cost comparisons of each alternate while defining: ROW impacts/relocations, traffic staging, utility conflicts, environmental issues, geometric alignments and constructability. Based on the alternate study, KCI recommended building the bridge on new alignment upstream and maintaining traffic on existing bridge instead of scoping the project as originally planned by DOT for staged construction method. The new alignment alternate showed a savings of \$1.5M to the DOT. KCI also performed the study for architectural features for the new bridge including concrete arches over the river, architectural railings with rock and brick facades, decorative light pedestals and lighting schemes.</p> <p>DBE Program Commitments: KCI had high DBE participation for the design of this project, including all project surveying and extensive utility coordination. The DBE utilization amounted to 16% of the total design contract value billed to the client. This completed value exceeded the initial proposed participation percentage of 10%.</p>		
<p align="center">EVIDENCE OF PERFORMANCE</p> <p>This design project received the 2013 ACEC-SC Engineering Excellence Award and was completed within schedule and well under the SCDOT's budget. Our innovative design and alternate study recommendation saved the SCDOT over \$1.5M in cost savings. "KCI has met the challenging commitments of bringing value to SCDOT through efficient designs and innovative construction methods while meeting the requirements of quality and schedule. Additionally, KCI has been very responsive to the dynamic conditions that evolved during the project development and construction" – Brian Klauk, PE (SCDOT Program Manager)</p>		

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