STATEMENT OF QUALIFICATIONS
I-66 WIDENING

State Project No.: 0066-076-003, P101, R201, C501, B674, B675
Federal Project No.: NH-5A01(194)
Contract ID Number: C00093577DB48

February 13, 2012

Submitted by:
Archer Western  PARSONS

Submitted to:
VDOT
Virginia Department of Transportation

ELECTRONIC COPY
1. Letter of Submittal
February 13, 2012

Commonwealth of Virginia
Department of Transportation
Central Office Mail Center
Loading Dock Entrance
1401 E. Broad Street
Richmond, Virginia 23219
Attention: Brenda L. Williams

SUBJECT: Statement of Qualifications – I-66 Widening
Project No.: 0066-076-003, P101, R201, C501, B674, B675
Contract ID Number: C00093577DB48

Dear Ms. Williams:

The design-build team of Archer Western Construction, LLC (Archer Western), and Parsons Transportation Group Inc. of Virginia (Parsons) is pleased to submit this Statement of Qualifications for the I-66 Widening project in Prince William County, Virginia. Archer Western and Parsons bring an established working relationship to the project, including currently working together in a design-build capacity on the $168 million SunRail Commuter Rail, in Florida. In addition, our firms have been working together on the year-long, $1 billion West by Northwest Highway Public-Private Partnership pursuit, in Georgia. Together, we are committed to delivering a successful design-build project to the Virginia Department of Transportation (VDOT).

Archer Western is a general contracting, construction management, and design-build firm organized in the state of Illinois. Headquartered in Atlanta, Archer Western is the largest subsidiary of the Walsh Group, a firm ranked by Engineering News-Record (ENR) in 2011 as the 2nd largest heavy contractor, 3rd largest highway contractor, 5th largest bridge contractor, and 19th largest design-builder in the United States. Established to address the varied labor agreements that exist across the country, Archer Western typically works in open-shop regions across the South and Southeast. Archer Western has maintained a continuous presence in Virginia, including work on such prominent projects as the 1999 reconstruction of the I-95 James River Bridge. The firm’s union counterpart, Walsh Construction, focuses on work in the North and Northeast. Archer Western and Walsh Construction operate under the same senior management in the Walsh Group, a family-owned company that has been in business for 114 years. Archer Western brings the experience and resources of our national practice, as well as the experience and resources of one of our prominent project managers, to VDOT for this project.

With more than 32 years of construction experience, our team’s Design-Build Project Manager, Brian Quinlan, PE, offers proven design-build experience to the project, having successfully managed four design-build projects valued in excess of $190 million. Brian recently oversaw the successful completion of two interstate projects in Maryland, the I-895/Moravia Road and I-495/Branch Avenue projects, both of which
were completed ahead of schedule and under budget. Brian is also a licensed professional engineer in Virginia, an important consideration in ensuring complete oversight of the project’s design.

Over the last 25 years, Parsons has been preparing design plans for transportation projects throughout the commonwealth. During that time, Parsons has been pleased to provide professional services to many of VDOT’s divisions and districts, most notably the Northern Virginia District, where Parsons has served as the district’s on-call consultant for quality plan reviews. In addition, Parsons has provided similar services for other local transportation clients, including the Federal Highway Administration Eastern Federal Lands Highway Division, Fairfax County, and Prince William County. Parsons has enjoyed successful repeat relationships with all of these clients. Through these assignments, Parsons’ local staff have become aware of and have come to understand the variety of challenges facing VDOT and transportation projects in Northern Virginia.

Parsons is consistently ranked by ENR as one of the top 10 transportation design firms in the country. Parsons maintains ISO 9001:2008 certification and brings to the team one of the largest and most experienced transportation engineering groups in the industry. In the past 10 years, Parsons has been the lead designer or joint venture partner on more than 35 design-build transportation projects and is the prime design firm for one of the marquee design-build projects in the metropolitan D.C. area, the Intercounty Connector (Contracts A and B).

Parsons’ extensive resources are important for this VDOT project, employing more than 2,100 personnel in the mid-Atlantic region, primarily located in the Fairfax, Virginia, and Washington, D.C., offices. This staff, along with Parsons’ deep pool of national resources, will be available to this project. Parsons’ local staff has provided design services for every interstate in Northern Virginia (I-95, I-395, I-495 and I-66), including the ongoing I-66 Tier 1 Environmental Impact Statement (EIS). Parsons has a proven history of providing complete transportation engineering services nationally and has brought this expertise for transportation across Virginia. The firm has demonstrated its commitment and capabilities to VDOT through participation in some of its largest and most important projects in Northern Virginia, including the Woodrow Wilson Bridge and Springfield Interchange. Our proposed Design Manager, Josh Wade, PE, served in the same capacity on the recently completed, $560 million Intercounty Connector Design-Build (Contract B) project. On this project, Parsons designed and met stringent environmental requirements for wetlands, floodplains, wildlife, and the nearby communities and developed several innovative designs to reduce and minimize impacts to the surrounding environment. Parsons’ key staff will bring their personal experience and the important lessons learned from that successful project to the I-66 Widening project.

3.2.1 **Offeror’s Official Representative Information:** As prime contractor and design-builder, the official representative for the I-66 Widening project will be as follows:

*Offeror’s Primary Contact:* Brian Quinlan, PE, Senior Project Manager  
*Address:* 4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815  
*Phone:* 404-926-0726 (Mobile: 443-744-2066)  
*Fax:* 404-495-8701  
*Email:* bquinlan@walshgroup.com

3.2.2 **Principal Officer Information:** The name, address, and telephone number for the principal officer of Archer Western, as “Offeror,” is as follows:

*Offeror’s Principal Officer:* David B. Casey, Vice President  
*Address:* 2410 Paces Ferry Road, Suite 600, Atlanta, GA 30339  
*Phone:* 404-495-8700
3.2.3 **STRUCTURE OF OFFEROR:** The legal structure of the team is organized such that Archer Western will be the signatory to the design-build contract with VDOT as a limited liability company with all financial responsibility. Additionally, Archer Western will provide all performance and payment bonds for the project. Parsons will be a subcontractor, serving as the lead design consultant. Additional team members include Continental Field Service (SWaM); Endesco, Inc. (DBE/SWaM); Rice Associates (SWaM); RJM Engineering, Inc. (DBE/SWaM); Schnabel Engineering; and T3 Design Corporation (DBE/SWaM). Each of these firms will work as a subconsultant to Parsons. NXL Construction Company, Inc. (DBE/SWaM), will contract directly with Archer Western for quality assurance.

3.2.4 **AFFILIATES & SUBSIDIARIES:** Below is a listing, by company, of all affiliates and subsidiaries and their addresses.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Affiliate/Subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archer Western Construction, LLC (A subsidiary of the Walsh Group)</td>
<td>Archer Western Contractors, LLC (Aff) 2410 Paces Ferry Road, Suite 600 Atlanta, GA 30339 Walsh Construction (Aff) 929 West Adams Chicago, IL 60607 Walsh Construction II (Aff) 929 West Adams Chicago, IL 60607 Walsh Construction Company of Canada (Aff) 800 Bay Street, Suite 401 Toronto, ON M5S 3A9 RL Brosamer, Inc. (Aff) 1777 Oakland Blvd Walnut Creek, CA 94596</td>
</tr>
</tbody>
</table>

3.2.5 **DEBARMENT FORMS:** Please refer to Appendix E for executed debarment forms 3.2.5 (a) and 3.2.5 (b) from all team members.

3.2.6 **VDOT PREQUALIFICATION CERTIFICATE:** Please refer to Appendix F for Archer Western’s VDOT prequalification information.

3.2.7 **EVIDENCE OF BONDING:** The evidence of bonding letter from Archer Western’s surety, indicating our ability to obtain performance and payment bonds for the full contract amount, is on page 6.

3.2.8 **PROFESSIONAL SERVICES VERIFICATION:** In Appendix G, we have attached copies of all Department of Professional and Occupational Regulation (DPOR) and State Corporation Commission (SCC) registrations for all team members who will be providing professional services. As required in the Request for Qualifications, below is a list of SCC and DPOR information, in tabular form.

<table>
<thead>
<tr>
<th>Firm</th>
<th>3.2.8-1: SCC</th>
<th>3.2.8-2 &amp; -3: DPOR Firm and Staff Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archer Western</td>
<td>T043700-6 Inc./Active</td>
<td>N/A</td>
</tr>
<tr>
<td>Parsons Transportation</td>
<td>0162617-5 Inc./Active</td>
<td><strong>Firm:</strong> 100 M Street, SE, Washington, D.C. 20003; Eng.; 0410000214; 02/29/12; 3926 Pender Drive, Fairfax, VA 22030; Eng.; 0405001589;</td>
</tr>
<tr>
<td>Company Name</td>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>2/31/13, Staff (all based out of D.C. address)</td>
<td>438 N. Frederick Avenue, Ste. 455, Gaithersburg, MD 20877;</td>
<td></td>
</tr>
<tr>
<td>Endesco, Inc.</td>
<td>Eng.: 407005431; 12/31/2013</td>
<td></td>
</tr>
<tr>
<td>Continental Field Service</td>
<td>F133736-1 Inc./Active</td>
<td></td>
</tr>
<tr>
<td>NXL Construction Company, Inc.</td>
<td>F1674896 Foreign/Active</td>
<td></td>
</tr>
<tr>
<td>Rice Associates</td>
<td>F13316627 Inc./Active</td>
<td></td>
</tr>
<tr>
<td>RJM Engineering, Inc.</td>
<td>F129602-1 Inc./Active</td>
<td></td>
</tr>
<tr>
<td>Schnabel Engineering</td>
<td>7126741 Inc./Active</td>
<td></td>
</tr>
<tr>
<td>T3 Design Corporation</td>
<td>0658539-2 Inc./Active</td>
<td></td>
</tr>
</tbody>
</table>

Staff (based out of address above):

- Endesco, Inc.: Michael Saunders; Eng.: 0402041295; 12/31/13
- NXL Construction Company, Inc.: Michael Saunders; Eng.: 0407003031; 12/31/13
- Rice Associates: Michael Saunders; Eng.: 0402041295; 12/31/13
- RJM Engineering, Inc.: Michael Saunders; Eng.: 0407003031; 12/31/13
- Schnabel Engineering: Patricia Timbrook-McMullan; Eng.: 0402037795; 6/30/13
- T3 Design Corporation: Patricia Timbrook-McMullan; Eng.: 0402037795; 6/30/13

3.2.9 DISADVANTAGED BUSINESS ENTERPRISE (DBE): Archer Western is committed to achieving the 13 percent DBE participation goal. In fact, Archer Western and Parsons have a successful history of meeting and exceeding our project DBE goals. For this project, we will reach or surpass the established DBE goal by using services from DBE team members such as NXL Construction Company, Inc.; Endesco, Inc.; RJM Engineering, Inc.; and T3 Design Corporation. Archer Western and Parsons have extensive prior experience working with these firms and their staff, which provides us with confidence in and knowledge of their capabilities and staffing, allowing us to successfully integrate them into the team and maximize their utilization on this project.

Our team consists of partners who offer demonstrated design-build experience across North America, extensive local knowledge and expertise gained from working on projects for VDOT, and a proven record of delivering high-quality projects that exceed owner expectations. We will deliver success on the I-66 Widening project through the following actions:

- **Minimizing inconvenience to the public and maximizing safety to workers and the traveling public.**
  
  Our team’s design staff includes professionals certified as traffic control design specialists by VDOT and the American Traffic Safety Services Association (ATSSA), including the proposed highway discipline lead, Bob Reed. Bob, who will lead the efforts in developing the maintenance-of-traffic (MOT) plans and our transportation management plan (TMP), and our key supporting staff provide 70 years of combined experience. More specifically, we have prepared MOT plans and TMPs for several VDOT projects, including several complex projects designated as Type C projects (significant projects – project management Category V). Safety is a key element of MOT and TMPs. Safety is also one of our team’s core values and the first priority on every project we work on. We will aggressively apply this philosophy to implement a functional MOT plan that will maximize capacity and maintain regional mobility by minimizing travel delays and impacts to the public. On a similar interstate project, Archer Western implemented an effective TMP on the $159 million I-10/I-95 “Big I” interchange project, in Florida. This project transformed Jacksonville’s downtown transportation system by providing congestion relief and additional road capacity for approximately 172,000 vehicles daily. This responsive TMP was cited as a
major reason for the project winning the 2011 America’s Transportation Award in the on-time, medium project category by the American Association of State Highway and Transportation Officials. Similarly, for the $420 million I-64 Design-Build project, in Missouri, Parsons developed an innovative MOT approach that drastically reduced the impact to regional traffic during the life of the project as compared to other, less-effective MOT schemes proposed by the city, county, and other bidders. This innovation contributed to the success of completing this award-winning project on budget and within schedule.

- **Maximizing scope and improvements within the project schedule.** Our goal is to maximize improvements along I-66 to provide the best-value solution for VDOT, while maintaining or beating the proposed project schedule. We have the expertise and experience to recognize and manage the potential impacts caused by right-of-way acquisition, utility clearances, permitting, and environmental compliance. On the I-10/I-95 Interchange Design-Build project, Archer Western applied its proven approaches to successfully deliver the award-winning project six months ahead of schedule. On the Intercounty Connector Design-Build Contract B, Design Manager Josh Wade led a team that completed the 7.2-mile, six-lane design in just 12 months. Similarly, on a $159 million project for Hartsfield Airport, Archer Western worked with airport management and the Georgia Department of Transportation to completely redesign a runway bridge spanning I-285 — a design-build success that saved $70 million.

- **Effectively coordinating with adjacent projects.** We realize that early and ongoing communication with personnel from the adjacent contracts, such as the I-66 ATM project; the I-66/U.S. Route 15 Interchange project; and the other planning, design, and construction projects occurring in the I-66 corridor, is critical to the success of the project. Our team’s experience in the corridor, including Parsons’ current assignment on the I-66 Tier 1 EIS, affords us continued contact with these projects and the myriad stakeholders involved. Our team will partner with VDOT and concurrent contracts by coordinating our work operations with the other project teams and stakeholders. This approach proved very successful for the Intercounty Connector Design-Build Contract B. On the project, Parsons coordinated design activities with the team responsible for constructing the adjacent third segment, as well as several environmental mitigation and local county projects within the project corridor. The base design effort was completed in 12 months, and the project was ready for the official opening ahead of schedule. Our team more than exceeds VDOT’s requested qualifications for this project. If selected, we will provide our experience and proven capabilities to successfully design and build this exciting project.

We appreciate the opportunity to submit our qualifications for the design and construction of this exciting project, and we are confident that our team has the professional and financial resources that are required to make the widening of I-66 a success.

Very truly yours,

Archer Western Construction, LLC

David B. Casey
Vice President
February 1, 2012

RE: Virginia Department of Transportation
REQUEST FOR QUALIFICATIONS
A DESIGN-BUILD PROJECT
Interstate 66 Widening
From: Approximately 1.2 miles west of U.S. Route 15
(James Madison Hwy.)
To: Approximately 0.2 miles west of U.S. Route 29
(Lee Hwy.)

To Whom It May Concern:

As surety for Archer Western Construction, LLC, Travelers Casualty and Surety Company of America with A.M. Best Financial Strength Rating A+ and Financial Size Category XIV 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.

Travelers Casualty and Surety Company of America’s commitment to provide bonds is subject to our review and approval of acceptable contract terms, conditions and bond forms.

Yours truly,
Travelers Casualty and Surety Company of America

Kerry Pecora, Attorney-in-fact
2. Offeror’s Team Structure
2. OFFEROR’S TEAM STRUCTURE

The Archer Western Team

A successful design-build project requires that the design team works seamlessly with the construction team, integrating constructability concerns with the design, planning the job from the perspective of building it, and optimizing the overall project outcome. In accordance with this design-build concept, we will take positive steps to ensure that our team will work together toward a common goal. For example, during the design phase, Archer Western, will place its Construction Manager as Design Coordinator in Parsons’ design office in Washington, D.C. This will facilitate communication, accelerate coordination, and enhance reviews to ensure successful project delivery under our aggressive schedule. From a broader perspective, Design-Build Project Manager Brian Quinlan, PE, will work actively and closely with key design and construction personnel to optimize the design based on planned construction means and methods.

We have assembled an experienced team of professionals to effectively manage the project and its risks. The table below highlights the expertise of our proposed key personnel. Following the matrix is detailed information regarding our proposed key personnel and team member firms. As requested in the request for qualifications (RFQ), key personnel forms are included in Appendix A.

<table>
<thead>
<tr>
<th>KEY PERSONNEL</th>
<th>YRS. EXP.</th>
<th>DB EXP.</th>
<th>VDOT EXP.</th>
<th>EXPERIENCE HIGHLIGHTS</th>
</tr>
</thead>
</table>
| Brian Quinlan, PE, Design-Build Project Manager | 32 | ✔️ | ✔️ | • Successfully managed four design-build projects valued in excess of $190 million, which includes the Route 895 Bridge in Richmond  
• Recently oversaw Maryland Transportation Authority (MdTA) I-895/Moravia Road and Maryland State Highway Administration (MSHA) I-495/Branch Avenue projects, which finished ahead of schedule and under budget  
• Licensed Virginia professional engineer, which will facilitate oversight of the design team |
| Michael Saunders, PE, CCM, Quality Assurance Manager | 8 | ✔️ | ✔️ | • Former VDOT Area Construction Engineer  
• Experience on multiple design-build projects, including VDOT’s Route 36 Improvements, in both Quality Assurance Manager and Quality Control Manager roles  
• Served as a VDOT Project Manager for the Region 4 Design-Build Structures project |
| Josh Wade, PE, Design Manager | 17 | ✔️ | ✔️ | • Design Manager for the $560 million Intercounty Connector (ICC) Design-Build project, Contract B  
• More than 17 years of experience working for VDOT  
• Experience managing more than 100 engineers concurrently during the ICC project  
• Experience with VDOT, and specifically, in the I-66 corridor, including work leading the Manassas Nation |
DESIGN TEAM
We have brought together highly qualified and experienced individuals and organized them into what we believe is the perfect structure for this project. Moreover, although our task leaders and technical staff have well-defined primary responsibilities for items such as design, environmental aspects, public involvement, or construction activities, we will also foster an environment where every team member has a personal commitment to the success of all aspects of the I-66 Widening project.

This high standard of responsibility begins with a successful Design Manager. For this role, we have selected Josh Wade, PE. Josh has 17 years of civil engineering design and management experience. Currently, he is completing his service as the Design Manager of the $560 million ICC Design-Build project, Contract B, which consists of more than 7 miles of new roadway and the design and construction of two interchanges with existing cross roads. Josh is responsible for the overall management of the design activities, coordination with environmental and construction groups, and successful completion of the design activities. Josh also brings relevant VDOT experience, having provided design services for the widening of a nearly 6-mile, limited-access section of U.S. Route 58.

We have selected experienced individuals to fill the key roles identified in the RFQ, plus those that we see as necessary for the day-to-day management of the project and its associated risks. These key individuals are highlighted below.

Alan Kite, PE, who will serve as the Lead Structural Engineer. Alan has more than 34 years of experience leading structural design efforts for...
V DOT projects. He led the design of nine grade separation bridges and approximately 2,200 feet of retaining walls for the V DOT I-64 High-Occupancy Vehicle Reversible Roadway project, in Norfolk. His also served as the Lead Structural Engineer for both of the ICC Design-Build projects, Contracts A ($478 million) and B ($560 million), as well as the Woodrow Wilson Bridge project. His design-build experience also encompasses leading the local structural design efforts on the $347 million John James Audubon Bridge Design-Build project, in Louisiana.

Patricia Timbrook, PE, PTOE, will serve as Lead Traffic/ITS Designer. She has more than 30 years of traffic engineering, transportation planning, and ITS engineering experience. Patricia has provided both technical expertise and project management in the application of system engineering principles to feasibility studies and master plans for transportation management systems. She has also provided the integration, implementation, and testing of advanced transportation management systems and components; the management and integration of a statewide transportation management center; and the evaluation of the benefits of these systems. Patricia is currently serving as Lead Traffic/ITS Engineer for VDOT’s I-95/395 High-Occupancy Vehicle/High-Occupancy Toll/Bus Lanes project, Principal-in-Charge for the VDOT Limited Services Design and Study, and Project Manager for the VDOT Statewide On-Call ITS/Safety/Operations contract.

The Archer Western team stresses the value and importance of a well-developed, experienced Quality Control (QC) team. The QC staff will be responsible for all aspects of QC for the project. The design QC efforts will be led by Design Quality Manager Greg Anderson. Greg has more than 25 years of experience in QC, and he will ensure that Parsons’ QC procedures are followed by reviewing the QC documents for each submittal and tracking their progress. Greg recently served as Design Quality Control Manager, responsible for audits and the quality assurance/quality control (QA/QC) compliance of documents for the ICC Design-Build projects, Contracts A ($478 million) and B ($560 million).

In addition to the key personnel listed above, we have supplemented the design team with the following subconsultants: Endesco, Inc.; Continental Field Service; Rice Associates; RJM Engineering, Inc.; Schnabel Engineering; and T3 Design Corporation.

Endesco, Inc. (Endesco), is a Virginia Department of Minority Business Enterprise (VDMBE)-certified disadvantaged business enterprises (DBE) and small, women, and minority (SWaM)-certified firm. Endesco was founded in 1997 as a professional consultancy organization located in Gaithersburg, Maryland, and will handle drainage engineering on this project. Endesco is a multidisciplinary engineering design, planning, and consulting firm. The firm is managed by a team of professionals with varied and extensive experience in civil engineering. It offers a wide range of services in the areas of civil engineering; highways and drainage; transportation and traffic; water supply and sanitary engineering; and infrastructure development projects, including project management. Endesco has developed, designed, and managed engineering projects from conception to completion — including planning, feasibility studies, preliminary designs, environmental impact analyses, detailed engineering design, the preparation of contract documents, contract negotiations, and contract administration and management. Some recent notable projects by Endesco, as a subconsultant to Parsons, include the following:
ICC Design-Build Project Contract A, MdTA/SHA, Montgomery County, MD
ICC Design-Build Project Contract B, MdTA/SHA, Montgomery County, MD

Continental Field Service (CFS), a Division of Continental Acquisition Services, Inc., has acted as a general consultant to government agencies in the management and conduct of right of way (ROW) acquisition and relocation programs since its founding in 1966. In this capacity, the firm has developed and implemented property acquisition and relocation policies and procedures on behalf of its clients, and has developed a number of scheduling and control systems to track individual parcel activities and costs. As a full-service organization, CFS is able to provide clients with the required technical expertise to successfully complete complex assignments. As one of the nation’s oldest and largest ROW services firms, CFS has been active throughout the United States. The company has provided ROW acquisition and relocation services in Virginia for more than 16 years. CFS maintains a local office in Springfield, Virginia, which is managed by Paul Schray, ROW Coordination Lead. Some projects on which CFS has served as a subconsultant to Parsons are as follows:

- VDOT Downtown/Midtown Tunnel/Martin Luther King (MLK) Freeway, Norfolk, VA
- FHWA Base Realignment and Closure Commission (BRAC) Defense Access Road (DAR) I-95 Fort Belvoir Ramp, Fairfax County, VA

To support CFS in the ROW effort, the Archer Western team will include a VDOT prequalified Fee Appraiser and a VDOT prequalified Review Appraiser. All ROW acquisitions and relocations will be performed in accordance with the VDOT ROW Manual and all applicable state and federal laws and regulations.

Rice Associates (Rice) is a SWaM-certified firm that maintains a full-time staff of licensed surveyors and technicians who specialize in boundary, cadastral, control, construction stakeout, hydrography, and topography surveys. The firm has worked for VDOT on a continuous basis as a prime consultant since 1998 on projects such as the Statewide Surveying, Photogrammetry and Subsurface Utility Designation and Location contract, which the firm has won two consecutive times. Rice has also worked on VDOT’s Northern Virginia Regional Surveying and Northern Virginia District Area One Surveying and Photogrammetry contracts. Rice is an experienced surveying firm with local knowledge; in fact, the firm has already provided the base mapping for a major portion of the project corridor. The firm brings a wealth of project experience along the I-66 corridor, including surveying services from the I-66/Route 50 crossing to the I-495/I-66 interchange and of I-66 westbound between the Rosslyn Tunnel and the Dulles Airport Access Road. The firm performs more than 150 significant survey projects on an annual basis, with more than 90 percent of this work performed within Virginia. Rice is an innovative firm that helped pioneer the use of global positioning in Virginia. Today, the firm continues to operate at the leading edge of technology, with, for example, its Leica Scan Station 2, a ground-based light detection and ranging (LIDAR) system. Some notable projects by Rice, as a subconsultant to Parsons, include the following:

- VDOT Northern Virginia Region 1 Limited Services Design Contract
- U.S. Route 50 and Waples Mill Road, Fairfax County, VA

RJM Engineering, Inc. (RJM), is VDMBE-certified DBE and SWaM-certified firm specializing in civil and structural design and inspection, utility coordination, and ROW identification. The firm’s expertise also includes civil site design, structural design, geotechnical engineering, water resources, traffic engineering, and construction-phase services. The firm recently worked on VDOT’s Route 3 Widening project, in Culpeper County. Some of RJM’s recent Virginia and design-build projects include the following:

- VDOT I-64/I-264 Interchange Improvements Project, Virginia Beach, VA
- VDOT Route 3 Widening Project, Culpeper County, VA
- MD 237 Design-Build Project, St. Mary’s County, MD
Schnabel Engineering (Schnabel) was founded in 1956 by Jim Schnabel. Richmond-based Schnabel is an employee-owned company offering highly specialized services in geotechnical engineering, geostuctural design, dam engineering, tunnel and underground engineering, environmental, geophysical and geosciences, construction monitoring, and resident engineering from 18 locations throughout the United States. Some projects where Schnabel supported Parsons include the following:

- ICC Design-Build Project Contract A, MdTA/SHA, Montgomery County, MD
- ICC Design-Build Project Contract B, MdTA/SHA, Montgomery County, MD

T3 Design Corporation (formerly T3 Design, P.C.) is a VDBME-certified DBE and SWaM-certified firm that specializes in traffic and ITS, planning, engineering, and design. The firm currently maintains a staff of 15 transportation professionals, the majority of whom are registered professional engineers, professional traffic operations engineers, and engineers in training. T3 provides traffic engineering, transportation planning, and ITS services to agencies throughout Virginia and Maryland, including VDOT. Some notable projects that T3 and Parsons have worked together on include the following:

- VDOT NOVA On-call Design Task Orders, VA
- VDOT Route 29 Corridor Study, VA
- Fairfax County Transportation Design On-Call, VA

CONSTRUCTION TEAM

Archer Western is a merit-shop general contractor based in Atlanta, typically operating south of the Mason-Dixon Line. Archer Western provides a full range of construction services, with a notable preference for high-profile, technically challenging, heavy-highway projects. As the largest subsidiary of the Walsh Group, Archer Western has been a major contributor to the growth and success of this 114-year-old, family-owned business. And those contributions have played a key role in the development of the Walsh Group from a small, local contractor headquartered at the corner of Archer and Western avenues in Chicago to a renowned national contractor that was recently recognized by Engineering News-Record as the second largest domestic heavy contractor and the third largest U.S. highway builder. Archer Western brings one of its best design-build project managers to the I-66 Widening project.

Brian Quinlan, PE, our Design-Build Project Manager, has a unique blend of national experience and local roots. During his 32 years in the industry, he has worked on heavy-highway programs along the Eastern Seaboard, including the Central Artery, in Boston; the Vine Street Expressway, in Philadelphia; the express toll lanes, in Baltimore; the VDOT I-95 Bridges, in Richmond; and the Dolphin Expressway, in Miami. Brian’s extensive experience covers multiple project types, typically with complex and demanding requirements for maintenance of traffic (MOT) and coordination with adjacent contractors.

| Brian’s career includes design-build road projects in D.C., Richmond, and Miami, as well as major freeway projects in the D.C. metro area, Baltimore, Philadelphia, Boston, and Miami, and currently, in Richmond. |

Scott Wilson, our Construction Manager, has spent his entire career ensuring the successful delivery of complex infrastructure projects in Maryland and Virginia. Scott has completed projects for DC Water, MWAA, and VDOT. His transportation experience includes projects with challenging MOT requirements, aggressive schedules, and the coordination of multiple entities. Scott’s VDOT experience and the fact that he is a DCR Responsible Land Disturber, and holds the E&SC Control Contractor certification, will prove invaluable to the Department.

Michael Saunders, PE, CCM, our Quality Assurance Manager, has more than seven years of experience as a professional engineer in the commonwealth. Michael previously worked for VDOT as an Area Construction Engineer, Project Controls Engineer, and Project Manager on various projects, including the Region 4 Design-Build Structures and VDOT I-295/Meadowville Interchange. His responsibilities at NXL Construction Company, Inc. (NXL), include project management and QA management of design-build contracts. He is
experienced with serving as an Independent Quality Assurance Manager for joint design-build projects, ensuring all contract requirements and specifications are appropriately administered and applied, that all required QC testing and independent QA is carried out in accordance with applicable requirements, and that construction quality standards are met and payments appropriately processed. Michael is currently serving as the Quality Assurance Manager for the VDOT Route 36 Improvements Design-Build.

Due to the importance of the public relations and ROW challenges on this project, we have proposed two of the best in the commonwealth to handle these sensitive issues: Steve Walter, of Parsons, and Paul Schray, of CFS.

Steve Walter, our Public Relations/Agency Coordinator, has served as project manager for the planning and environmental studies for some of VDOT’s largest and most complex projects in Northern Virginia, including the Woodrow Wilson Bridge, Springfield Interchange, and Capital Beltway. He is currently serving in this same role for the Tier 1 Environmental Impact Statement (EIS) for I-66 between Route 15 and the Capital Beltway. For each of these projects, Steve also led the extensive public outreach and agency coordination programs. As such, he has worked firsthand with the myriad stakeholders involved in these projects, including elected officials; federal, state, and local agencies; and wide reaches of the general public. For example, on the Woodrow Wilson Bridge project, Steve coordinated the project with more than 70 agencies during the National Environmental Policy Act (NEPA) phase of the project, and then, during the design phase, ensured that all environmental commitments were incorporated into the project designs. Today, he is coordinating the I-66 EIS with each of the 13 other VDOT planning, design, and construction projects in the corridor, ensuring a consistent, integrated program of improvements.

Paul Schray, our ROW Coordination Lead, has 28 years of experience in the acquisition of property for public transportation/transit and private development projects, with more than 12 years as a consultant for various projects for VDOT. His experience includes the management of all acquisition, relocation, and appraisal functions; title research; ROW design review; acquisition negotiations; relocation assistance; administrative value determinations; ROW cost estimates; appraisal technical review; and condemnation trial preparation and testimony.

To support Paul and CFS in the ROW effort, the Archer Western team will include a VDOT prequalified Fee Appraiser and a VDOT prequalified Review Appraiser. All ROW acquisitions and relocations will be performed in accordance with the VDOT ROW Manual and all applicable state and federal laws and regulations.

The construction team will be supported by NXL Construction Company, Inc. (NXL), a VDMBE-certified DBE and SWaM-certified firm. The firm provides surveying/mapping services and construction management for transportation and engineering design projects. Offering flexible solutions, NXL operates in a variety of platforms, including AutoCAD and MicroStation. NXL has worked with both Archer Western and Parsons on several Virginia projects. NXL’s relevant experience with Parsons includes the following projects: VDOT Hillsville-Gardner Stream Restoration in Carroll County; VDOT Pine Run Stream Restoration, in Pulaski County, and VDOT Straightstone Creek Stream Restoration in Pittsylvania County. The firm is currently working with Archer Western on ongoing projects in Richmond and at Reagan National Airport.

Organizational Chart Narrative
The key structural components of the organization chart are discussed below.

Design-Build Project Manager Brian Quinlan, PE, has full authority of design and construction for the Archer Western team. He will manage the project from start to finish, will be VDOT’s primary point of contact, and will be responsible for contract management. Brian will coordinate, integrate, and direct the design-build team, including design, construction, QA, environmental compliance, safety, ROW, and utilities. He will supervise the design, construction, and QA managers; provide constructability reviews; promote safety; oversee the
quality management program, preconstruction efforts, design, and construction; and play an essential role in public outreach and third-party communication.

Quality Assurance Manager Michael Saunders, PE, CCM, from NXL, will report directly to Project Executive David Casey and interact with Design-Build Project Manager Brian Quinlan, PE, on a daily basis to avoid conflicts of interest with other team members, and he will have direct access to VDOT. He will ensure work is per the contract and approved-for-construction plans/specifications. He will be responsible for developing and adhering to the QA/QC plan and the QA inspection and testing of all materials used and work performed, including monitoring the overall QC program. He has the authority to stop construction, enforce specification compliance, and issue/require the resolution of all nonconformance reports. He will manage the QA program, including the QA inspector, independent QA testing firm, and testing technicians. The QA team will conduct separate and concurrent tests and analysis of the work with the construction QC team. Michael will also maintain project quality records and approve/submit pay estimates.

Design Manager Josh Wade, PE, will report to Brian Quinlan and will be responsible for providing a quality product and schedule input, meeting design milestones, and interfacing with Design Quality Manager Greg Anderson. He will manage designs, including roadway, structural, hydraulic, environmental, permitting, traffic, ROW, and geotechnical, and ensure they are in accordance with current policies, procedures, and guidelines. He will oversee design subconsultants; coordinate design and review schedules; develop/implement corrective measures, if needed; integrate environmental compliance measures into the design; and assign resources as needed. He will stay involved once construction begins to oversee plan modifications and review construction with the Construction Manager as work progresses. Josh will manage the permit process and fulfill all commitments included in the NEPA document and acquisition of all water quality permits and/or permit modifications, which were the design-build team’s responsibility.

Construction Manager Scott Wilson, who will report to Brian Quinlan, will supervise/manage construction and QC and maintain the schedule. He will be on-site full time throughout construction and will play a vital role in design development and constructability reviews. He will coordinate with the Design Quality Manager, Greg Anderson; Construction Quality Manager, Stefan Pustam; project engineers; and Superintendent to ensure all materials and work are per the contract and approved plans. He will coordinate plan revisions and construction reviews with Josh during construction.

Lead Structural Engineer Alan Kite, PE, will report to Josh Wade and will oversee all of the structural design efforts for the project. This includes the bridge overpass and retaining wall engineering. He will also be involved in the interdisciplinary reviews throughout the project.

Lead Traffic/ITS Designer Patricia Timbrook, PE, PTOE, will report to Josh Wade and will oversee all of the traffic and ITS engineering elements, including review and coordination with the adjoining contracts traffic and ITS designs, specifically the ITS designs determined through the I-66 Active Traffic Management project.

Utility Coordinator Tom Medeiros will work with Utilities Discipline Lead Prakash Patel, PE, to develop utility relocations, interface with utility representatives, and coordinate with ROW Coordination Lead Paul Schray to prioritize and schedule acquisitions. Tom and the Prakash will coordinate with the utility owners.

Public Relations/Agency Coordinator Steve Walter will report to Brian and work with Josh and Scott Wilson as the project progresses. Steve will act as liaison between the Archer Western team, third-party stakeholders, media and general public to facilitate communication regarding traffic movements throughout the project during construction.

ROW Coordination Lead Paul Schray, of CFS, will report to Brian Quinlan and will lead ROW acquisition during preconstruction. Paul will also have daily interaction with Josh Wade as the designs
are developed to assist in the minimization of ROW acquisition impacts. Balancing preconstruction activities, such as clearing parcels, is vital to the maintenance of the schedule. Proactively working with property owners in partnership with our design team promotes fair, equitable, and constructive negotiations.

Construction Quality Manager Stefan Pustam, reporting directly to Brian Quinlan, will manage/coordinate QC activities separate from the QA team. He will coordinate the third-party QC testing lab and testing technicians. Stefan will attend weekly two-week look-ahead meetings and keep abreast of the project schedule for the accurate scheduling of inspection staff.

Safety Manager Jose Cortez will report to Brian Quinlan and will oversee plans and field activities to provide VDOT, construction workers, and motorists a safe environment. Jose will supply the safety training and aid in developing a job-specific safety plan in order to address unique hazards that enhance standard Archer Western policies, including subcontractor protocols. Jose has the authority to stop work.

INTEGRATED TEAM APPROACH
We will facilitate a true partnering atmosphere that instills a team mindset of design-building this project together, eliminating the unknown, and acting proactively in designing and building a quality project on time and within budget.

- Co-locating our Design-Build Project Manager with the design team to ensure that as potential challenges arise they are dealt with in a timely manner.
- Setting up a collaborative website for document management and project coordination using Microsoft’s SharePoint software platform. The Archer Western team has developed a customized Microsoft SharePoint site to facilitate document control and collaboration between team member firms. SharePoint is a web-based collaboration site that team members can access using Internet Explorer.
- Partnering and the use of task-force teams made up of representatives from Archer Western, Parsons, VDOT, and third parties to expedite the resolution of issues, enhance plan development, and improve coordination. These task forces are designed to focus individuals with specific experience on those particular aspects of the project.
- The use of our zipper strategy, which pairs designers with their construction personnel counterparts. This pairing creates personal relationships that benefit both parties, and ultimately, VDOT. The designers gain valuable insight into construction techniques, and the construction personnel help shape the design.
- Pre-task planning and activity work plan development will involve the design team as well as the construction staff. These planning activities are interactive and serve to confirm decisions that were made by the task forces during the design/constructability review process.

Our team will implement a task-force approach for the I-66 Widening project. This highly effective approach will integrate the designer, contractor, and owner teams together to proactively resolve issues and achieve a high-quality design. Archer Western and Parsons are currently using a task-force approach for the $168 SunRail Commuter Rail Design-Build project, in Florida.

The importance of contractor-engineer-owner interfacing cannot be overemphasized in the design-build setting and was one of the major keys to success on the recently completed ICC projects. We realize this, and therefore will take proactive measures, such as the following:

The task-force approach used on Archer Western’s $69 million I-70 Design-Build project, in Indiana, contributed to completing the 3.75-mile highway widening project on schedule and within budget.
3. Experience of Offeror’s Team
3. EXPERIENCE OF OFFEROR’S TEAM

The I-66 Widening project is located in Prince William County, Virginia, and primarily involves the widening of I-66 from a four-lane divided freeway to an eight-lane divided freeway. The widening includes one high-occupancy vehicle (HOV) lane and one general-purpose lane in each direction. The project also includes mill and overlay of the existing mainline pavement, retaining walls, sound barriers, signs, lighting, modifications to existing stormwater management facilities and new stormwater management facilities, and intelligent transportation system (ITS)/active traffic management components.

In addition, the overpasses at Old Carolina Road/Jefferson Street and at Catharpin Road will be replaced with two-span bridges, each carrying two travel lanes and a 10-foot shared-use path. These structures cannot be replaced concurrently, and one northbound lane of Old Carolina Road must be maintained throughout construction.

The execution of the project will also require the design-builder to coordinate and cooperate with the many other design consultants and contractors working in the same corridor.

Archer Western’s team experience demonstrates our proven abilities to meet project goals through teamwork, innovation, schedule management, and cost control. The following table highlights our team’s recent experience on similar projects. Please refer to the Work History Forms in Appendix B for more information.

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>CONST. COST</th>
<th>DESIGN-BUILD</th>
<th>INTERSTATE WIDENING</th>
<th>HOV LANE</th>
<th>STRUCTURES</th>
<th>TRAFFIC MGMT.</th>
<th>ITS</th>
<th>QA/QC</th>
<th>ENV. COMPLIANCE</th>
<th>COMPLIANCE</th>
<th>CORRIDOR COORD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-70 Part C, IN</td>
<td>$69M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-85 Coweta, GA</td>
<td>$218M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 400 Widening, GA</td>
<td>$47M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-64 ACCA Yard Bridge, VA</td>
<td>$24M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-85 Vance Cty. Widening, NC</td>
<td>$26M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-95 Blue Heron Widening, FL</td>
<td>$75M</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-285 Bridges, Atlanta, GA</td>
<td>$125M</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Wake Freeway, NC</td>
<td>$450M</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-70 Part B, IN</td>
<td>$33M</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICC, Contracts A &amp; B, MD</td>
<td>$1B</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VDOT I-81 Truck Lanes, VA</td>
<td>$2M*</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The New I-64, MO</td>
<td>$420M</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wards 3 and 4, Roadways, DC</td>
<td>$37M</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VDOT I-95/I-395/I-495 Interchange, VA</td>
<td>$4M*</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VDOT Rte. 7/15 Widening, VA</td>
<td>$3M*</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodrow Wilson Memorial Bridge, VA and MD</td>
<td>$42M*</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Design Fee
4. Project Risks
4. PROJECT RISKS

Risk #1: Maintenance of Traffic

Why Risk is Critical: Due to the direct interaction and interconnection of projects in the corridor, coordination with other projects is critical in order to ensure that they all work together seamlessly to avoid any unneeded interruptions and safety hazards.

Impact of Risk on Project: The impact of the coordination risk is twofold and runs throughout the term of the project. Poorly developed and coordinated maintenance-of-traffic (MOT) plans, traffic management plans (TMPs), and construction phasing can result in impacts to traffic and access, in addition to safety concerns for both the traveling public and those working on the project.

Mitigation Strategies: Adjacent contracts must develop coordinated MOT plans, TMPs, and construction phasing to minimize disruptions to traffic and the surrounding residents and businesses. This effort must also ensure the safety of the traveling public and those involved in the construction of the project, a goal which aligns perfectly with both an Archer Western and Parsons core value. For Archer Western, one expected outcome will be a continuation of our historical excellence in safety performance. More specifically, we expect to continue to improve on our 0.75 experience modification rating, a qualitative measurement that goes hand in hand with our 1.7 incidence rate, 0.56 frequency rate, and 13.1 severity rate. (Bureau of Labor Statistics averages are 8.3, 4.1, and 148.1, respectively.)

Complementing this construction emphasis on safety, Parsons’ staff includes professionals certified as traffic control design specialists by the Virginia Department of Transportation (VDOT) and the American Traffic Safety Services Association (ATSSA). The traffic professionals that will be developing the MOT plans include Bob Reed, PE, who has 39 years of design experience, and Laura Wilton, who has 23 years of experience. Both are ATSSA certified and, with the help of others on our design team, have completed the MOT plans and TMPs for the following Type C projects (significant projects – project management category V):

- Route 27/244 (Washington Boulevard and Columbia Pike)
- I-95 DAR Ramp to Fort Belvoir’s North Area

Parsons’ staff are also currently preparing TMP and MOT plans for two other VDOT projects: Route 7/15/Sycolin Road Interchange and the Sycolin Road Bridge Overpass at the Route 7/15 Bypass.

Below is our approach to the mitigation and management of this risk.

- During the design phase of the project, our team will work with VDOT, the I-66 Active Traffic Management (ATM) design-build team, and the U.S. 29/Linton Hall construction team to ensure that our design meets VDOT’s goals for the corridor. We will also work with these project teams to guarantee that work done as part of the adjoining projects becomes an integral part of our project and is incorporated into our design. In addition, our team will proactively reach out to and work with the future I-66/Route 15 interchange design-build team to guarantee that corridor construction moves in the direction that VDOT has envisioned.

- We will design and execute a comprehensive MOT plan that will emphasize the safety of the traveling public as well as those working on the improvements while minimizing construction impacts on through traffic. As part of this effort, we will strive to minimize major traffic shifts while providing positive protection for work zones.

- As our project moves into the construction phase, our construction management team will hold regular meetings with VDOT personnel and management from the surrounding projects to coordinate key activities and traffic pattern changes and to confirm that all involved parties understand what the other is trying to accomplish, thereby fostering a teamwork atmosphere throughout the project corridor.

- We will use off-peak hours for critical construction activities, such as bridge beam placement. This will allow for temporary lane closures, providing a safe work zone while minimizing impacts to the traveling public. Archer Western has successfully used this technique on a wide array of interstate projects, including the Jacksonville I-95/I-10
Interchange and the Richmond I-64 ACCA Yard Bridge projects.

- We will ensure continuous communication between the design-build team, local residents, and business owners by providing timely information on key construction activities. By holding regular informational meetings with impacted parties and providing a single point of project information, the Archer Western team will be proactive in handling all community-relations issues.

- We will provide MOT personnel that are certified by VDOT in Work Zone Traffic Control or by the ATSSA as a Traffic Control Supervisor, at all levels of project management, to ensure compliance with MOT requirements from planning through execution of the work. The certified jobsite staff personnel will include the Construction Manager, the Site Safety Officer, the Project Superintendent, the Superintendent responsible for MOT, and several crew supervisors. And finally, Archer Western will also provide certified flaggers for all flagging operations.

**VDOT’s Role:** Partner with contractors throughout the corridor and assist in coordination efforts so that all projects can be constructed and completed in the most logical, cost-effective, and timely manner. In addition, provide timely reviews of the MOT plans, TMP, and construction phasing, along with field changes, to improve conditions on the spot, as needed.

---

**Risk #2 – Project Schedule**

**Why Risk is Critical:** Several aspects of a design-build process can greatly affect the overall project schedule. These include right of way (ROW) acquisition, permitting, geotechnical exploration, utility relocations, design reviews, and weather, which can independently or collectively extend the project completion date, thereby adding cost.

**Impact of Risk on Project:** Failure to properly plan for or to proactively deal with scheduling issues, such as interface with outside agencies, has the possibility of delaying the project completion date. Such delays also impact the traveling public as well as local businesses and residents.

**Mitigation Strategies:** Below are examples of our mitigation strategies for minimizing these risks:

- We will expedite design activities that impact permitting or are linked to long-lead items (bridge beam fabrication, for example). This could include an early package detailing the information for the beams and other long-lead items far enough in advance for shop drawings to be generated and the procurement process to begin. One other potential long-lead item is the acquisition of needed ROW. This is particularly deserving of early attention due to the changing real estate values in the area and the time required for acquisition. We will initially mitigate this potential schedule impact by minimizing the ROW needed through effective designs. For those areas where we cannot eliminate the need for additional ROW, we will use appraisals based on market prices for equivalent sales that have not been influenced by the proposed project — a challenge that is always difficult. Certainly the change in land values, as a result of knowledge of the proposed project, can result in disagreements when offers are presented, and the ensuing fallout may result in a number of the property owners who will refuse the offered amount or respond with unreasonable counteroffers. If negotiations fail to resolve differences between property owners and the agent, as a last resort, the use of eminent domain by VDOT will be required. Throughout this process, the experience of Paul

---

*Parsons served as lead designer for the $420 million New I-64 Design-Build project in Missouri, which included widening and reconstructing 10 interstate miles. The project team implemented a creative MOT plan that enabled half of the corridor to be closed to traffic at one time and constructed in one construction season, reducing regional cumulative traffic delays as compared to options under live traffic. This effective MOT plan contributed to the success of the project opening to traffic three weeks ahead of schedule.*
Schray and his staff will limit or eliminate any potential impacts to the project schedule.

- Steve Walter, Prakash Patel, and the team will take a proactive approach to managing the permitting and utility relocation process. This includes preapplication meetings with permitting agencies and utility companies to bring them up to date with the project and to secure their active cooperation in planning and scheduling the project. Follow-up meetings will track progress and identify critical items that warrant special attention. Commitments from the National Environmental Policy Act documents and all environmental permits will be addressed early in the design phase.

- We will use Primavera Project Planner (P6) to develop an integrated resource-loaded critical path method (CPM) schedule that will include both design and construction activities. This will allow for all team members to view the end results of delays or changes to critical path items and final completion dates. As an example of the benefits of our comprehensive approach to scheduling, the CPM schedule will clearly show the sequencing of construction for the Old Carolina Road and Catharpin Road bridges. In developing the sequence, particular attention will be given to expediting the construction of the new overpasses to minimize the inconvenience to local traffic by maintaining the flow of north-south traffic and to shortening the overall period of construction. As part of this effort, one idea worth investigating is building the eastern half of Catharpin Road first, and configuring it to accommodate both northbound and southbound traffic. That would presumably allow construction of the western half of Catharpin Road to be concurrent with the total replacement of Old Carolina Road, thereby eliminating an entire phase in the reconstruction of these overpasses while satisfying access requirements.

**VDOT’s Role:** Review and approve the initial baseline schedule along with any changes throughout the project. In addition, VDOT will be asked to assist with permitting agency and utility meetings; assign required resources for design reviews to achieve allowed review durations; and in the specific case of the scheme for expediting overpass construction, concur that providing two-lane traffic on the eastern half of the new Catharpin Road bridge satisfies project MOT criteria.

![In 2007, Archer Western replaced the I-64 Bridges over the CSX ACCA Yard in Richmond. The success of this $25 million widening project depended in large part on successful construction engineering efforts to redesign the bridge foundations in the rail yard and to develop safe and efficient means and methods for the structural steel demolition and erection. The latter effort is particularly noteworthy, for while the structural steel erection was done conventionally by crane, Archer Western developed an innovative approach to the demolition work that utilized multiple pipelaying machines to lift out the existing beams. These pipelayers were significantly lighter than conventional cranes, allowing them to traverse the existing deck. This creative approach to removal of the existing structural steel beams enhanced operational safety by eliminating troublesome multi-crane picks, and it had a collateral positive impact on the project schedule because of shortened railroad demolition-plan reviews and greater flexibility in execution.](image-url)
activities. Recognizing the implications of these current projects, plus those in the planning pipeline, is critical to the integrated solution necessary for this project. Close coordination is essential to ensure that no one project interrupts or precludes other improvements.

Impact of Risk on Project: If the coordination between these concurrent projects is insufficient, some or all of the projects could experience schedule delays, additional costs, and unsafe conditions. In addition, the cumulative effect on the traveling public could be confusing, unsafe traffic patterns that lead to massive, repetitive delays.

Mitigation Strategies: The Archer Western team has extensive experience with coordination between multiple projects, including our work on the Woodrow Wilson Bridge, the Intercounty Connector, Georgia 400, and the Springfield Interchange. Below are techniques we used in coordinating these projects.

- The first step is to develop a list of contacts for all of the projects and ensure each project contact has the list. This list should include the client project managers as well as the contracting team project managers. The composition of such a list has already been prepared, in large part, by Parsons as part of the work it is performing for the I-66 Tier 1 Environmental Impact Statement (EIS). As part of the integrated corridor concepts being developed for the EIS, Parsons has reached out to other project teams and stakeholders to ensure complete coordination among the various projects.

- Once the list has been developed, coordination between the projects can be organized and would include periodic meetings and/or phone calls. Coordination efforts, which have begun as part of the EIS project, will seamlessly continue with the design phase for this project, and then intensify during heavy construction activity. The immediate emphasis will be on avoiding conflicting traffic patterns that unnecessarily disrupt traffic or create unsafe situations. The long-term emphasis will be for consistency among all planned improvements.

- As issues arise, the contact list can be used to initiate impromptu contact to address overlapping issues, such as MOT changes needed in the field and other potential hazards that are discovered.

- At the project level, Archer Western will reach out to adjoining projects to share MOT planning and scheduling. This will include formal and routine meetings to review MOT issues and ensure coordinated planning.

VDOT’s Role: VDOT will be asked to assist in the coordination efforts by helping to create and maintain the contact list and to prioritize construction requirements.

The Intercounty Connector is one of the marquee design-build projects in the Washington, D.C., metropolitan area. The successful project owes a lot to the coordination efforts between the various projects throughout the corridor, including the multiple segments of the roadway and environmental mitigation projects, and local and utility projects.
Appendices
APPENDIX A
KEY PERSONNEL RESUME FORMS
## KEY PERSONNEL RESUME FORM

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: <strong>Brian Quinlan, PE, Senior Project Manager</strong></td>
</tr>
<tr>
<td>b. Project Assignment: <strong>Design-Build Project Manager</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: <strong>Archer Western Construction, LLC</strong></td>
</tr>
</tbody>
</table>
| d. Years experience: With this Firm: **3 Years**  With Other Firms: **29 Years**  
Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):  
Senior Project Manager, Heavy Civil Construction, Archer Western, 2009 to Present  
Vice President of Operations, Heavy Civil Construction, Cherry Hill, 2006 to 2008  
Vice President of Operations/Project Manager, Heavy Civil Construction, Condotte America, 1998 to 2005  
Project Manager, Heavy Civil Construction, Perini, 1995 to 1997 |
| e. Education: Name & Location of Institution/Degree(s)/Year/Specialization:  
BS, Civil Engineering, Georgia Tech, 1978  
MBA, University of Maryland, 2006 |
| f. Active Registration: Year First Registered/Discipline/VA Registration #:  
Professional Engineer VA: 1999/ Civil/ 0402033291 |
| g. Document the extent and depth of your experience and qualifications relevant to the Project.  
1. Note your specific responsibilities and authorities for each assignment, not those of the firm.  
2. Note whether experience is with current firm or with other firm.  
3. Provide beginning and end dates for each assignment.  
(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)  

**MDSHA I-95/I-895 INTERCHANGE RECONSTRUCTION, BALTIMORE, MD** –  
Contract Value: **$54M**  
Project Role/Responsibilities: Vice President of Operations  
1. Brian’s specific responsibilities and authorities included oversight of the entire project and direct supervision of the project manager and safety manager. His specific tasks included the coordination and management of subcontract and supplier solicitation, negotiation, and award; the selection of salaried staff; the selection of the means and methods for self-performed work; cost control for self-performed work; the development of the project schedule; and problem-resolution with the Maryland Transportation Authority Project Manager and general engineering consultant partners’ Construction Manager. The specific features of work included interstate and local maintenance of traffic (MOT), utility relocation, bridge demolition, bridge construction, roadway construction, retaining walls, pile-driving, sound walls, and landscaping.  
2. Experience was with Cherry Hill (Prime Contractor)  
3. From 2006 to 2008

**MDX DESIGN-BUILD DOLPHIN EXPRESSWAY AND FLORIDA TURNPIKE INTERCHANGE RECONSTRUCTION, MIAMI, FL** –  
Contract Value: **$36M**  
Project Role/Responsibilities: Vice President of Operations  
1. Brian’s specific responsibilities and authorities included oversight of the entire project and direct supervision of the Project Manager and Safety Manager. His specific tasks included the development of bid and construction design concepts; the oversight of design for construction; the coordination and management of subcontract and supplier solicitation, negotiation, and award; the selection of salaried staff; the selection of the means and methods for self-performed work; cost control for self-performed work; the development of the project schedule; and problem-resolution with the MDX Program Manager. The specific features of the work included interstate and local MOT, utility relocation, bridge demolition, bridge construction, roadway construction, pile-driving, retaining walls, post-tensioned substructure, and landscaping.  
2. Experience was with Condotte America (Prime Contractor)  
3. From 2003 to 2005 |
VDOT DESIGN-BUILD I-95/ROUTE 150/ROUTE 895 INTERCHANGE RECONSTRUCTION, RICHMOND, VA – Contract Value: $115M

Project Role/Responsibilities: Design-Build Project Manager

1. As Design-Build Project Manager, Brian’s specific responsibilities and authorities included the day-to-day direction of on-site construction activities through the supervision of the General Superintendent, Site Safety Officer, and engineering staff. His specific tasks included the coordination of segmental bridge design; the coordination and management of construction engineering for segmental operations; the coordination and management of subcontractor and supplier solicitation, negotiation, award, and contract administration; the selection of the means and methods for self-performed work; cost control for self-performed and subcontracted work; the development and maintenance of the critical path method schedule; equipment procurement; material procurement; and daily interaction with the Fluor Daniel/Morrison Knudsen project manager. The specific features of work included interstate MOT, bridge construction, drilled shafts, post-tensioned superstructure, cast-in-place segmental superstructure, precast segmental superstructure, and casting yard.

2. Experience was with Condotte America (Subcontractor to joint venture of Fluor Daniel and Morris Knudsen)

3. From 1999 to 2002
### Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title</th>
<th>Michael Saunders, PE, CCM, Project Manager/Quality Assurance Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment</td>
<td>Quality Assurance Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated</td>
<td>NXL Construction Company, Inc.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm</td>
<td>&lt;1 Years With Other Firms 7 Years</td>
</tr>
<tr>
<td></td>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td></td>
<td><strong>Project Manager/Quality Assurance Manager, NXL Construction Company, Inc., 2011 to Present</strong></td>
</tr>
<tr>
<td></td>
<td>Michael is an Independent Quality Assurance Manager for design-build projects, and as such, he ensures all contract requirements and specifications are appropriately administered and applied and that all required quality control testing and independent quality assurance is carried out in accordance with applicable requirements, ensuring construction quality standards are met and that payments are appropriately processed.</td>
</tr>
<tr>
<td></td>
<td><strong>Project Control Engineer/Area Construction Engineer for Design-Build and Locally Administered Projects, VDOT, Richmond District, 5/2011 to 11/2011</strong></td>
</tr>
<tr>
<td></td>
<td>Michael provided quality assurance and coordinated constructability reviews developing pre-advertisement schedules, sequence of construction, post-award schedule reviews, districtwide notices of intent (NOIs), and claims analysis. As Project Manager for design-build projects in the Richmond district, his responsibilities included serving on a selection panel and serving as the project manager of the construction phase. He attended weekly progress and design meetings, and ultimately, served as the responsible-charge engineer. Michael ensured independent assurance/independent verification (IA/IV) was performed for design-build projects, that all contract requirements and specifications were met, that all required quality control testing and independent quality assurance was carried out in accordance with requirements, and that payments were processed. Projects: Route 36 BRAC Design-Build, I-295 Meadowville Interchange, Fort Lee/Jefferson Park Road Roundabout Design-Build.</td>
</tr>
<tr>
<td></td>
<td><strong>Area Construction Engineer, VDOT, Richmond District, Southern Area Construction, 1/2007 to 5/2011</strong></td>
</tr>
<tr>
<td></td>
<td>Michael executed a six-year program to manage all aspects of construction/maintenance contracts safely, with quality, on time, and within budget. He provided supervision and technical guidance to construction managers and inspectors during project delivery for design-build and design-bid-build projects. He used Primavera for manpower planning and schedule reviews/approvals and coordinated with project controls staff in the preparation and review of work orders, NOIs, and claims to validate the necessity of work and level of federal participation. His duties on no-plan, minimum-plan and full-plan projects were of varying complexities.</td>
</tr>
<tr>
<td></td>
<td><strong>Construction Project Manager, VDOT, Salem District, Southern Area Construction, 11/2005 to 1/2007</strong></td>
</tr>
<tr>
<td></td>
<td>Michael supervised multi-operational roadway and structural projects to ensure work was performed according to project plans, specifications, and the special provisions. He supervised the work and career development of construction inspectors and resolved contractual disputes with contractors. He prepared/presented project showings and preconstruction conferences, prepared/submitted work orders, and tracked project costs to maintain the budget. Michael also mitigated NOIs and prepared reports, correspondence, and documents.</td>
</tr>
<tr>
<td></td>
<td><strong>Permits/Subdivision Supervisor, VDOT, Christiansburg Residency, 4/2005 to 10/2005</strong></td>
</tr>
<tr>
<td></td>
<td>Michael supervised and administered subdivision, rural streets, and land use permits programs. He networked with government officials, developers, engineers, and the Virginia Department of Transportation (VDOT) to discuss the engineering impacts of land development projects. He was responsible for land development in Residency, to include utilities, commercial and subdivision streets, private entrances, land use permits, commercial development projects, etc., impacting transportation networks maintained by the state.</td>
</tr>
<tr>
<td></td>
<td>Michael assisted in land development and maintenance program operations for Salem Residency. He performed site plan reviews and provided comments to designers, was involved in the inspection and acceptance of additions to a secondary street system, and worked with the maintenance manager to set the budget for the upcoming fiscal year for area headquarters.</td>
</tr>
<tr>
<td></td>
<td><strong>Transportation Engineer Associate, VDOT, Salem District, 6/2011 to 2/2004</strong></td>
</tr>
<tr>
<td></td>
<td>Completed Assoc. Engineers Program at Christiansburg Residency in Salem District. Rotated through various sections of VDOT: construction management, maintenance operations, district divisions, contract administration, and residency operations.</td>
</tr>
<tr>
<td>e. Education: Name and Location of Institution/Degree(s)/Year/Specialization:</td>
<td>BS, Civil Engineering, Virginia Tech, 2001</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/Discipline/VA Registration #:</td>
<td>Professional Engineer VA: 2005/0402041295</td>
</tr>
</tbody>
</table>
g. Document the extent and depth of your experience and qualifications relevant to the Project.
   1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
   2. Note whether experience is with current firm or with other firm.
   3. Provide beginning and end dates for each assignment.

(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

**VDOT Rt. 36 Improvements Design-Build, Richmond District, VA**

**Project Role/Responsibilities:** Quality Assurance Manager

1. The project is a VDOT/American Recovery and Reinvestment Act (ARRA) design-build that involves the construction of improvements to Route 36 and Route 144 near Fort Lee’s Sisisky Gate, in Prince George County. The project includes an improvement to approximately 0.9 miles of Route 36 and approximately 0.5 miles of Route 144. There will be approximately 20 calendar months of construction-related activities requiring quality assurance inspection and testing for the Abernathy team. Michael serves as the project’s quality assurance manager, where he prepares the project’s quality assurance and quality control plan; oversees quality assurance procedures and the plan; performs quality assurance testing and inspection in accordance with VDOT guidelines; monitors the contractor’s quality control program; approves quality control inspection staff assignments to the project and the quality control frequency testing plan before its submission to VDOT; prepares, maintains, and submits associated documentation, including diaries, equal employment opportunity, ARRA, materials notebook/documentation, as-built sketches, and monthly pay documents, including verifying and approving monthly pay packages; and prepares and submits final records.

2. Experience is with NXL

3. 2011 to Present

**VDOT I-295/Meadowville Interchange, Richmond District, VA**

**Project Role/Responsibilities:** Quality Control Manager

1. As the Quality Control Manager, Michael represented the contractor on the project site and acted as a function of the construction manager while reporting all sampling, testing, visual inspections, certifications, and daily diaries directly to the quality assurance manager. He led the team’s quality control function and directed the activities of project-level quality control inspection staff. His other duties included attending all preparatory inspection meetings; reporting any quality deficiencies to the construction manager, quality assurance manager, and project manager; coordinating with the construction manager and quality assurance manager to monitor the installation and maintenance of erosion and sediment controls and other permit requirements with daily inspections and after each storm event; coordinated with the construction manager to monitor work zone safety and traffic management plans; and disseminated information to the quality control team.

2. Experience is with NXL


**VDOT Region 4 Design-Build Structures Project, Various Counties, VA**

**Project Role/Responsibilities:** Project Manager

1. Michael served as VDOT’s Project Manager during the construction of various bridge superstructure replacements throughout the Richmond district. He made responsible-charge decisions, attended regular progress meetings, reviewed documentation for compliance with the contract, coordinated IA/IV testing, and handled public/stakeholder communication for the duration of the project.

2. Experience is with VDOT


**VDOT I-295/Meadowville Interchange, Chesterfield, VA**

**Project Role/Responsibilities:** Project Manager

1. Michael served as VDOT’s Project Manager during the final design and construction of phase one, a diamond of what will ultimately be a cloverleaf. He attended regular progress meetings, reviewed documentation for compliance with the contract, coordinated IA/IV testing, and handled public/stakeholder communication for the duration of the project.

2. Experience is with VDOT


**VDOT Route 10 Widening, Chesterfield, VA**

**Project Role/Responsibilities:** Area Construction Engineer

1. Michael oversaw the construction of the project, which included coordination with Chesterfield Co., contractor, Dominion Virginia Power, CSX, and the Federal Highway Administration. His major duties included the following: acting on behalf of VDOT during negotiations and problem-resolution meetings, reviewing and approving monthly payment applications, and ensuring project testing and documentation was kept in accordance with contract and VDOT requirements.

2. Experience is with VDOT

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: Josh Wade, PE, Project Manager/Design Director</td>
</tr>
<tr>
<td>b. Project Assignment: Design Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: Parsons Transportation Group Inc.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm 17 Years With Other Firms 0 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td>Project Manager/Design Director, Parsons Transportation Group Inc., 1994 to Present</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>BS, Civil Engineering, University of Maryland-College Park, 1993</td>
</tr>
<tr>
<td>MBA, Business Administration, University of Maryland University College (UMUC), 2009</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Professional Engineer VA: 1999/Civil/0402 032924</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
</tbody>
</table>

**INTERCOUNTY CONNECTOR DESIGN-BUILD CONTRACT B, MONTGOMERY COUNTY, MD – Construction Value: $560M**

**Project Role/Responsibilities:** Design Manager

1. As the Design Manager, Josh is responsible for the design efforts of the large design-build project. The project consists of approximately 7 miles of new, controlled access, six-lane tolled roadway and two interchanges: ICC/MD 182 and ICC/MD 650. The construction of Contract B is in some of the most sensitive environmental areas along the complete ICC alignment. The work also includes mainline, ramps, cross roads, and pavement design; utility relocations; bridges; retaining walls; noise walls; earth berms; drainage facilities; landscaping; signing, signals, lighting, and pavement markings; tolling infrastructure; maintenance of traffic; ITS devices; public relations support; and environmental compliance.

Josh took a hands-on approach to the project, getting involved and overseeing every aspect of the design of the project. He assisted in the development of the overall project schedule, reviewed day-to-day progress, and ensured the successful completion of the project, on time and under budget. His hands-on, team-building approach to the project management ensured full involvement, from the client to each of the disciplines, including roadway and structures, environmental, construction, and all third parties, and it resulted in a team atmosphere, where all voices and ideas were heard and respected. This team process, whereby all voices were heard and all viewpoints involved in early planning and design reviews, meant that, at the end of the process, all designs were the best they possibly could be, reducing impacts and maintaining the schedule and budget, all while producing a superior product.

At the peak of the project, Josh was managing more than 100 engineers on-site from Parsons and the many subconsultants, including dozens working remotely. The success of such a complex project also relied on the use of several tools and lessons learned, including the following:

- **Discipline and/or challenge-specific task forces** – Where representatives from each group (client, third parties, design disciplines, construction, and environmental) would come together on a weekly basis to work through issues on the project in an open, respectful atmosphere.

- **Electronic document and file control, along with ProjectWise for design file management** – These tools allowed for the full management of all documentation and design development throughout the project and eliminated waste and errors caused by emailing or sending of files via other methods. This not only eliminated errors by allowing users to check out and have access to design changes instantly but it also eliminated any lost time spent sending CDs or record sets through the mail.

- **Interdisciplinary, constructability, and environment reviews** – Early and frequent reviews of the challenges and designs by each of the engineering disciplines, construction staff, and environmental personnel drastically reduced the number of field changes and issues encountered in the field later in the project.
These reviews, along with the reviews of the client and third parties, helped to anticipate problems and improve the overall designs. Electronic file control, including the use of ProjectWise, assisted greatly with these reviews.

- Phased construction – The use of phased construction is one of the largest benefits of the design-build process. This allows the design-build team to get construction teams rolling sooner (as opposed to developing full plan sets prior to starting construction) and allows for adjustments to be made according to conditions in the field more fully. It also allows for a greater ability to handle critical path elements by allowing the contractor to work around long-lead items or to innovate on means or methods, reducing costs or improving schedule times.
- Integrated schedule – An integrated schedule helps to show the impact on delays or changes to design or other elements of the project. Changes to the design schedule immediately show the impact to the construction schedule and can be used to determine staffing needs well in advance. The integrated schedule also allows you to see what the critical path is for the overall schedule (not just construction) and allows the design-build team to maximize its planning efforts, saving time and money.

2. Experience is with the current firm, Parsons
3. From 2008 to Present

**FHWA EASTERN FEDERAL LANDS SERVICES ON-CALL, NORTHERN REGION – Contract Value: $1M/year**

**Project Role/Responsibilities:** Program Manager

The assignments include roadway and bridge designs, environmental studies, traffic engineering and transportation planning, hydraulics and hydrology, value engineering/value analyses, geotechnical investigations, and surveying and mapping. Josh’s responsibilities included overall program management, as well as individual project management for several tasks. Included in the tasks Josh participated on for this contract are: The I-95 Ramp From Fort Belvoir North Area (FBNA), Manassas National Battlefield Bypass, and Fairfax County Parkway Right of Way and Utilities.

2. Experience is with the current firm, Parsons

**VDOT U.S. ROUTE 58 DESIGN, PATRICK, FLOYD, AND CARROLL COUNTIES, VA – Contract Value: $3M**

**Project Role/Responsibilities:** Project Engineer

As Project Engineer, Josh developed construction plans for this nearly 6-mile, limited-access section of Route 58, including the design of alignment, grading, drainage, stormwater management, erosion, and sediment control plans. Work that provided design plans for the new bridge for the Blue Ridge Parkway over Route 58 was coordinated with the Federal Highway Administration.

2. Experience is with the current firm, Parsons

**DDOT UNION STATION BICYCLE TRANSIT CENTER, WASHINGTON, D.C. – Contract Value: $4M**

**Project Role/Responsibilities:** Project Manager

The bike station project, the first of its kind on the East Coast, consisted of the planning, design, and construction management of a 1,700-square-foot structure meant to house 150 bicycles and add to the multimodal options at the historic Union Station. Josh provided overall project management, including oversight of roadway, structural, systems, architecture, and construction management. This included coordination with the National Park Service, Architect of the Capital, Amtrak, Washington Metropolitan Area Transit Authority, and Union Station Redevelopment Corporation. The project received the 2010 ACEC (American Council of Engineering Companies) National Engineering Excellence Honor Award. As stated by U.S. Secretary of Transportation Ray LaHood on his weekly blog, “This is a smart investment in truly multi-modal commuting. It is attractive; it is green; it provides what bicycling commuters need. And it is a model of the sustainable, livable mobility this nation needs now.”

2. Experience is with the current firm, Parsons
3. From 8/2005 to 8/2008
## Brief Resume of Key Personnel anticipated for the Project.

### a. Name & Title: Scott David Wilson, Project Manager

### b. Project Assignment: Construction Manager

### c. Name of Firm with which you are now associated: Archer Western Construction, LLC

### d. Years experience: With this Firm 1 Years With Other Firms 12 Years

Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

**Project Manager, Heavy Civil Construction, Archer Western, 2011 to Present**
- Senior Project Manager, Chief Estimator Heavy Civil & Base Building Construction, Corinthian Contractors, 2008 to 2011
- Senior Project Manager, Heavy Civil Construction, Clark Construction Group, 2005 to 2008
- Project Engineer/Project Manager, Heavy Civil Construction, Cherry Hill Construction, 2000 to 2005

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

- BS, Geology, University of Rhode Island, 1998

### f. Active Registration: Year First Registered/Discipline/VA Registration #: Erosion and Sediment Control Responsible Land Disturber VA: 2012/ 36959

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

**DC WATER POTOMAC INTERCEPTOR LONG-TERM ODOR ABATEMENT PROGRAM, WASHINGTON, D.C. – Contract Value: $10M**

**Project Role/Responsibilities:** Senior Project Manager

1. Scott’s specific responsibilities and authorities included estimating the project, subcontract buyout, permitting, scheduling, subcontractor management, claims resolution, change orders, and mechanical/electrical plumbing/systems coordination. The project included four building sites along the Chesapeake and Ohio Canal in Montgomery County, Maryland, and Washington, D.C., including total site work package and concrete foundations. The buildings are designed to draw odorous sewer gas from a 96-inch sewer, filter it through activated carbon, and exhaust it to the atmosphere. Each building was uniquely designed to fit into its parkland surroundings. Complex permitting and interaction with multiple agencies was required. Stakeholders included the National Park Service, Pepco, the Washington Suburban Sanitary Commission, the U.S. Army Corps of Engineers, and the general public. There were multiple design changes and owner-caused delays on this project.

2. Experience is with Corinthian Contractors

3. From 2009 to 2011

**MWAA EAST AUTOMATED PEOPLE MOVER TUNNELS AND STATIONS, DULLES, VA – Contract Value: $240M**

**Project Role/Responsibilities:** Senior Project Manager

1. Scott’s specific responsibilities and authorities included the planning and coordination of a large tunneling and building project consisting of 5,000 feet of cut-and-cover tunnel, 6,000 feet of tunnel boring machine (TBM) tunnel, and 850 feet of New Austrian Tunneling Method (NATM) tunnel. Structural concrete on this project totaled more than 300,000 cubic yards for all the tunnels and two train stations. The project also included extensive, complex utility work carried out on a constricted, active airfield within a secure perimeter. Also included were concrete paving and architectural finishes. The management of subcontractors and scheduling to meet multiple interim milestones was a significant component of this project.

2. Experience is with Clark Construction Group

3. From 2005 to 2008

**VDOT SMITHSONIAN AT DULLES CENTER, CHANTILLY, VA – Contract Value: $9M**

**Project Role/Responsibilities:** Project Engineer

1. Scott’s specific responsibilities and authorities included subcontract buyout, scheduling, document control, submittals, quantity tracking, invoicing, cost tracking, reporting, engineering, and project closeout. The project involved 95 acres of clearing and grubbing; extensive blasting for mass and trench excavation; 500,000 cubic meters of cut-to-fill excavation; and 8,200 meters of drainage pipe, water main, and sanitary sewer. It also involved stone subbase and asphalt paving, electrical duct bank, fencing, and seeding.

2. Experience is with Cherry Hill Construction

3. From 2000 to 2002
<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title: <strong>Alan Kite, PE, Senior Project Manager/Principal Structural Engineer</strong></td>
</tr>
<tr>
<td>b. Project Assignment: <strong>Lead Structural Engineer</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: <strong>Parsons Transportation Group Inc.</strong></td>
</tr>
<tr>
<td>d. Years experience: With this Firm 27 Years With Other Firms 7 Years</td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td><strong>Senior Project Manager/Principal Structural Engineer, Parsons Transportation Group Inc., 1983 to Present</strong></td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution/Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>MEng, Civil Engineering, University Of Virginia, 1982</td>
</tr>
<tr>
<td>BEng, Civil Engineering, Virginia Polytechnic Institute &amp; State University (VA TECH), 1976</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/Discipline/VA Registration #:</td>
</tr>
<tr>
<td>Professional Engineer VA: 1981/Civil/0402012306</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
<tr>
<td><strong>MDSHA INTERCOUNTY CONNECTOR, CONTRACT B, DESIGN-BUILD, MONTGOMERY COUNTY, MD – Construction Value: $560M</strong></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Lead Structural Engineer</td>
</tr>
<tr>
<td>1. Alan was responsible for leading the structural design effort for the project. The project consisted of approximately 7 miles of new, controlled access, six-lane tolled roadway; two interchanges; and 15 bridges. Alan led the design of the new bridges, more than 3,100 linear feet of retaining walls, more than 38,000 linear feet of noise walls, 12 culverts, and 40 sign structures. He organized the work and schedule, reviewed design drawings, ensuring that the work met Maryland State Highway Administration (MDSHA) design criteria and standards. Alan also coordinated the design with the general engineering consultant (GEC), contractor, and client and responded to construction-related questions.</td>
</tr>
<tr>
<td>2. Experience is with the current firm, Parsons</td>
</tr>
<tr>
<td>3. From 2008 to 2010</td>
</tr>
<tr>
<td><strong>MDSHA INTERCOUNTY CONNECTOR, CONTRACT A, DESIGN-BUILD, MONTGOMERY COUNTY, MD – Construction Value: $478M</strong></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Lead Structural Engineer</td>
</tr>
<tr>
<td>1. Alan was responsible for leading the structural design effort for the project. The 7.2-mile project involved widening six lanes; designing three new interchanges; and designing 23 bridges, including 10 new bridges. Alan led the design of 23 bridges in accordance with MDSHA criteria, more than 20,000 linear feet of noise walls, and 9 culverts. He organized the work and schedule, reviewed and checked design drawings, and coordinated the design with the GEC and client. Alan also responded to construction-related questions.</td>
</tr>
<tr>
<td>2. Experience is with the current firm, Parsons</td>
</tr>
<tr>
<td>3. From 2007 to 2008</td>
</tr>
<tr>
<td><strong>LA DOT JOHN JAMES AUDUBON BRIDGE, DESIGN-BUILD, ST. FRANCISVILLE, LA – Construction Value: $347M</strong></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Lead Structural Engineer</td>
</tr>
<tr>
<td>1. Alan was responsible for leading the structural design effort for the longest cable-stayed bridge in North and South America (upon its completion) for Parsons’ Baltimore office. The bridge has a main span of 1,583 feet, including the 8,823 linear feet of main-span approach structures. The work included prestressed concrete girders and piers with caisson and pile foundations, designed in conformance with American Association of State Highway and Transportation Officials load and resistance factor design bridge design specifications. He organized the work effort, checked design drawings, and developed new details.</td>
</tr>
</tbody>
</table>

Appendix A: Page 8
2. Experience was with the current firm, Parsons
3. From 2007 to 2008

**MDSHA WOODROW WILSON MEMORIAL BRIDGE, CONCEPTUAL AND FINAL DESIGN, VA AND MD – Construction Value: $680M**

**Project Role/Responsibilities:** Lead Structural Engineer

1. Alan was responsible for leading the structural design effort for Parsons’ Baltimore office for the approximately 6,000-foot-long, new, 234-foot-wide bridge with 34 fixed spans, divided into two independent structures, and a 260-foot-long, eight-leaf bascule span. Alan developed design details, checking calculations and contract drawings and coordinating design work with the staff and client.

2. Experience is with the current firm, Parsons
3. From 1999 to 2007

**VDOT I-95/I-395/I-495 INTERCHANGE, SPRINGFIELD, VA – Contract Value: $3.7K**

**Project Role/Responsibilities:** Project Engineer

1. Alan provided design services for the retaining walls of Phase I of this massive interchange project. More than 6 kilometers of walls were designed using IGrds for profiles and alignments. Alan closely coordinated all locations with other members of the interchange design team and utilities, including storm sewers and major culverts.

2. Experience is with the current firm, Parsons
3. From 1997 to 1999
**ATTACHMENT 3.3.1**  
**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel anticipated for the Project.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Name &amp; Title:</strong> Patricia Timbrook, PE, PTOE</td>
<td></td>
</tr>
<tr>
<td><strong>b. Project Assignment:</strong> Lead Traffic/ITS Designer</td>
<td></td>
</tr>
<tr>
<td><strong>c. Name of Firm with which you are now associated:</strong> T3 Design Corporation</td>
<td></td>
</tr>
<tr>
<td><strong>d. Years experience:</strong> With this Firm 5.5 Years With Other Firms 33.5 Years</td>
<td></td>
</tr>
<tr>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
<td></td>
</tr>
<tr>
<td><strong>Owner/Principal ITS Engineer, T3 Design Corporation, 2006 to Present</strong></td>
<td></td>
</tr>
<tr>
<td>Patricia is responsible for the provision of traffic engineering and intelligent transportation system (ITS) services throughout the mid-Atlantic region.</td>
<td></td>
</tr>
<tr>
<td><strong>Vice President/Director of Virginia Operations, StreetSmarts, Inc., 2000 to 2006</strong></td>
<td></td>
</tr>
<tr>
<td>Patricia served as the ITS project manager for numerous projects for the Virginia Department of Transportation (VDOT), the Federal Highway Administration (FHWA), and the Maryland Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td><strong>Director of ITS Systems, Frederic R. Harris, 1987 to 2000</strong></td>
<td></td>
</tr>
<tr>
<td>Patricia served as project manager for numerous ITS projects involving implementation, upgrades, system replacements, and traffic management systems.</td>
<td></td>
</tr>
<tr>
<td><strong>Education:</strong> Name &amp; Location of Institution/Degree(s)/Year/Specialization:</td>
<td></td>
</tr>
<tr>
<td>BS, Mathematics, Juniata College, 1973</td>
<td></td>
</tr>
<tr>
<td><strong>Active Registration:</strong> Year First Registered/Discipline/VA Registration #:</td>
<td></td>
</tr>
<tr>
<td>Professional Engineer VA: 2003/0402037795; Professional Traffic Operations Engineer</td>
<td></td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
<td></td>
</tr>
<tr>
<td>1. <strong>Note your specific responsibilities and authorities for each assignment, not those of the firm.</strong></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Note whether experience is with current firm or with other firm.</strong></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Provide beginning and end dates for each assignment.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VDOT MEGAPROJECT, NORTHERN VA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Lead Traffic/ITS Engineer</td>
<td></td>
</tr>
<tr>
<td>1. As Lead Traffic/ITS Engineer for the I-95/395 high-occupancy vehicle/high-occupancy toll/bus lanes project, Patricia’s responsibilities include managing the traffic engineering review of all preliminary engineering and design associated with the project, including the interchange justification report, which will be presented to the FHWA to request additional access and access modification at 15 locations along the project.</td>
<td></td>
</tr>
<tr>
<td>2. Experience is with T3</td>
<td></td>
</tr>
<tr>
<td>3. 2008 to Present</td>
<td></td>
</tr>
<tr>
<td><strong>VDOT STATEWIDE ON-CALL ITS/SAFETY/OPERATIONS CONTRACT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Project Manager</td>
<td></td>
</tr>
<tr>
<td>1. Patricia was the Project Manager for a fast-track task in support of the Northern Virginia District. As a subconsultant to the prime firm, Patricia’s responsibilities included assessing the current traffic management system, analyzing alternates, and providing recommendations for a traffic management system that would support the vision of the Northern Virginia District’s Operations Division. Patricia worked as part of a management team that was responsible for providing a foundation for effectively managing traffic operations and facilitating the communications and coordination of transportation information in the national capital region. In conjunction with the alternative analysis, she also assisted in the update of the Northern Virginia Smart Travel Program Plan and the Northern Virginia ITS Architecture.</td>
<td></td>
</tr>
<tr>
<td>2. Experience is with T3</td>
<td></td>
</tr>
<tr>
<td>3. From 2006 to Present</td>
<td></td>
</tr>
<tr>
<td><strong>VDOT LIMITED SERVICES DESIGN AND STUDY, NORTHERN VIRGINIA DISTRICT TRAFFIC ENGINEERING SECTION</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Project Role/Responsibilities:</strong> Principal-in-Charge</td>
<td></td>
</tr>
<tr>
<td>1. As subconsultant to the prime firm, Patricia was the principal-in-charge on a task-order contract to provide the design of traffic control devices (traffic signals, flashers, signs, and pavement markings/markers), traffic engineering studies (signal, sign, safety, general and cut-through traffic), and traffic engineering analyses. Current task orders include traffic signal designs in Fairfax, Loudoun, and Prince William counties.</td>
<td></td>
</tr>
<tr>
<td>2. Experience is with T3</td>
<td></td>
</tr>
<tr>
<td>3. From 2006 to Present</td>
<td></td>
</tr>
</tbody>
</table>
**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
</tr>
</thead>
</table>
| (1) I-70 Design-Build Indianapolis, IN | See below. | INDOT 100 North Senate Avenue
Room 855
Indianapolis, IN 46204
Walter Land
Ph: (317) 233-3699 | November 2007 | November 2007 | $69,488 |

**Firm’s Role:** Archer Western (Walsh Group) was the prime contractor on this design-build project.

**Project Narrative:** The work on this project consisted of the reconstruction and widening of 3.75 miles of I-70 west of the I-70/I-465 interchange on the east side of Indianapolis.

Additional work included the removal and replacement of pavement, widening and increasing the vertical clearances of 12 bridges, the reconstruction of ramps, and the removal/replacement of existing pipe and drainage structures.

**Lead Designer:** Janssen & Spaans Engineering

**Relevance to I-66 Widening Project:**

♦ Interstate widening project with multiphase maintenance-of-traffic plan
♦ Design-build project that used task teams for design reviews and constructability reviews
♦ Urban interstate highway with large traffic volumes
♦ Included the reconstruction of several bridges
♦ Completed the project on time and within budget

**Lessons Learned:**

♦ Weekly team meetings were used to work through issues on the project in an open partnering atmosphere.
♦ Electronic document and file control for design file management allowed for full control of design development and eliminated waste and errors.
♦ Early and frequent interdisciplinary, constructability, and environment reviews of the designs drastically reduced the number of field changes and field issues.
♦ An integrated schedule helped show the impact on delays or changes to design or other elements of the project.
<table>
<thead>
<tr>
<th>(2)</th>
<th>1-85 Widening Coweta County, GA</th>
<th>See below.</th>
<th>GDOT 600 West Peachtree Street, NW Atlanta, GA 30308 Thomas Howell Ph: (404) 631-1970</th>
<th>December 2010</th>
<th>December 2010</th>
<th>$218,000</th>
<th>$218,000</th>
<th>$218,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Project Name &amp; Location</td>
<td>b. Narrative describing nature of Firm’s Responsibilities</td>
<td>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</td>
<td>d. Contract Completion Date (Original)</td>
<td>e. Contract Completion Date (Actual or Estimated)</td>
<td>f. Estimated Value (in Thousands)</td>
<td>Original Contract Value</td>
<td>Final or Estimated Contract Value</td>
<td>Dollar Value of Work for Which Firm Was/Is Responsible</td>
</tr>
<tr>
<td>I-85 Widening Coweta County, GA</td>
<td>See below.</td>
<td>GDOT 600 West Peachtree Street, NW Atlanta, GA 30308 Thomas Howell Ph: (404) 631-1970</td>
<td>December 2010</td>
<td>December 2010</td>
<td>$218,000</td>
<td>$218,000</td>
<td>$218,000</td>
<td></td>
</tr>
</tbody>
</table>

**Firm’s Role:** Archer Western (Walsh Group) was the prime contractor on this 14.3-mile-long widening project.

**Project Narrative:** The project involved placing asphalt and continuously reinforced concrete (CRC) pavement over the existing concrete pavement and widening for a total of 1,436,640 square yards of 10- to 12-inch concrete paving. The project included the removal and replacement of two overpasses; the construction of a new ramp bridge over SR 34; jacking and substructure modifications to three bridges; and the partial removal, bridge jacking, widening, and superstructure reconstruction of 12 mainline bridges. The project also included 42,610 linear feet of concrete barrier wall and 61,931 linear feet of storm drain. To date, this is the largest single contract in the Georgia Department of Transportation’s (GDOT) history.

**Relevance to I-66 Project:**
- Interstate widening project with multiphase maintenance-of-traffic (MOT) plan
- Interstate highway with large traffic volumes
- Project included multiple structure (bridge) reconstruction
- Constructed several miles of new concrete barrier wall
- Coordinated with multiple agencies and municipalities regarding schedule and work hours
- Developed a disabled vehicle plan for traffic accidents and vehicles that broke down in the construction zone
- Project was completed on time and on budget

**Lessons Learned:**
- Improved MOT plans were developed by working closely with GDOT, with the focus on improving the flow of through traffic by better alignments and positive work zone protection.
- The schedule was improved by finding a well-draining embankment material that could be placed in winter months. This was also environmentally friendly, as the material used was a previously unused waste byproduct of a quarry operation.
- Schedule control is enhanced by self-performing difficult or critical tasks, a finding that is consistent with the overall Archer Western philosophy of maximizing self-performed work.
- Difficult disadvantaged business enterprise (DBE) goals can be met by actively mentoring motivated DBE subconsultants. In this case, we worked with our minority rebar installer to help him develop the capability to install CRC rebar in concrete paving, an expertise for which he is now noted throughout Georgia.
**Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
<th>Original Contract Value</th>
<th>Final or Estimated Contract Value</th>
<th>Dollar Value of Work for Which Firm Was/Is Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) GA 400 PCC Widening &amp; Sound Walls Atlanta, GA</td>
<td>See below.</td>
<td>GDOT 600 West Peachtree Street, NW Atlanta, GA 30308 Thomas Howell Ph: (404) 631-1970</td>
<td>August 2007</td>
<td>February 2008</td>
<td>$47,000</td>
<td>$52,000</td>
<td>$52,000</td>
<td>$30,000 self-performed</td>
</tr>
</tbody>
</table>

**Firm’s Role:** Archer Western (Walsh Group) was the prime contractor for this 9-mile widening project on one of the busiest expressways in Georgia.

**Project Narrative:** Construction included the widening of GA SR 400 for additional lanes (322,000 square yards) from McFarland Road to Exit 7, a distance of 8.5 miles.

Major scopes of work included the following: the reconstruction of the southbound Exit 7 ramp to Holcomb Bridge Drive, the construction of additional lanes in the median from Holcomb Bridge Road to McFarland Road, and the construction of new traffic barrier throughout the project. Additional work included the installation of center drainage in the median and 157,000 square feet of noise wall at select interchanges.

**Relevance to I-66 Project:**
- Limited-access-facility widening project with multiphase maintenance-of-traffic plan
- Urban highway with large traffic volumes
- Project included the coordination and expansion of the existing intelligent transportation system, a change order that accounted for much of the increased scope and duration
- Included installation of noise wall along several sensitive areas
- Completed project on time and within budget
- Coordinated with multiple agencies and municipalities regarding the schedule and work hours

**Lessons Learned:**
- Weekly team meetings were used to work through issues on the project in an open partnering atmosphere.
- Detailed work plans for construction activities were developed and included input from the Georgia Department of Transportation.
- A safety committee was tasked with monthly jobsite inspections. The committee included craftsman and subcontractors. This process reduced the overall incident rate.
- It is not wise to skimp on work zone size, because doing so can increase the need for lane closures.
ATTACHMENT 3.4.1(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.

<table>
<thead>
<tr>
<th>Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
<th>Final or Estimated Contract Value</th>
<th>Dollar Value of Work for Which Firm Was/Is Responsible</th>
</tr>
</thead>
</table>

Contract A: Parsons was responsible for the overall design of this toll road, including mainline, ramps and cross roads pavement, utility relocations, bridges, retaining walls, noise walls, earth berms, drainage facilities, landscaping, signage, signals, lighting, pavement markings, maintenance of traffic intelligent transportation devices, public relations support, and environmental compliance.

Contract A: Parsons was responsible for the first two major segments, contracts A and B, of the Intercounty Connector (ICC). Both were performed on an accelerated schedule through a design-build delivery process.

Contract B: Parsons was responsible for the overall design of this toll road, including intelligent transportation systems (ITS), electronic toll collection (ETC), traffic signals, signing and pavement marking, more than 80 acres of reforestation, miles of hiker and biker trails and the relocation of six side roads.

Project Narrative: Contract A: The 7.2-mile project consisted of a six-lane, controlled-access toll road, including a diamond interchange, a single-point interchange, and 10 new bridges. Other project features included traffic signals, signing and pavement marking, stream restoration, more than 80 acres of reforestation, miles of hiker and biker trails along the roadway, and the relocation of six side roads.

The project also included extensive ITS and ETC components. The ITS elements included integration with the existing administration's Authority Operations Center (AOC) and Coordinated Highways Action Response Team (CHART) program. These elements also consisted of closed-circuit television (CCTV), dynamic message signs (DMSs), highway advisory radio (HAR), road weather information system (RWIS), fiber-optic communications, telephone communications, electrical services, and other improvements, to provide a fully functioning ITS.

This portion of the toll road is through a sensitive environmental area of the county and crosses through two important watersheds. The project requirements called for numerous environmental protections, mitigations, and construction methods. As the lead designer, Parsons designed and met these stringent environmental requirements and developed several innovative designs to minimize impacts to the surrounding environment. What resulted from the work of more than 150 designers is a successful and environmentally friendly roadway project that was designed under challenging conditions, within a condensed schedule.

Through its experience gained with Contract A, Parsons garnered a comprehensive understanding of the communities, businesses, and traveling public that were impacted along the ICC corridor. To alleviate public concerns, Parsons and the entire design-build team prepared a work plan that included a well-defined approach to the public outreach and community relations efforts. Parsons’ proactive public involvement approach ensured streamlined communication with the affected public early and often.

Lead Contractor: Contract A: Granite, Corman and Wagman | Contract B: Kiewit, Corman and Wagman

Relevance to I-66 Widening Project:
- I-66 proposed key and important staff served in the same roles: Design Manager Josh Wade, Structural Lead Alan Kite, Design Quality Assurance/Quality Control Greg Anderson.
- Many of the proposed design subconsultants served in the same roles.
- Included the construction of five overpasses while under construction, including New Hampshire Boulevard, which was built in halves to eliminate the need for a temporary crossing and impacts to the many utilities in the area.
- Extensive coordination with the adjacent contracts, including the third segment of the corridor, environmental mitigation projects, and several local and utility projects in the area.
- Widening and other improvements to interstates.
- Use of collaboration and document control tools.
- Right of way acquisition was a necessary element of the project and was navigated through successfully during construction.

Lessons Learned:
- Weekly discipline and/or challenge-specific task forces were used to work through issues on the project in an open, respectful atmosphere.
- Electronic document and file control for design file management allowed for full control of design development and eliminated waste and errors.
- Early, frequent interdisciplinary, constructability, and environment reviews of the designs drastically reduced the number of field changes and field issues.
- Phased construction allowed construction to start sooner and for necessary adjustments in the field to be implemented faster. It also resulted in greater ability to handle critical-path elements by enabling the contractor to work around long-lead items or to innovate on means or methods, reducing costs or improving schedule times.
- An integrated schedule helped show the impact on delays or changes to design or other elements of the project.
**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

(LIMIT 1 PAGE PER PROJECT)

Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Narrative describing nature of Firm’s Responsibilities</th>
<th>c. Client/Owner/Project Manager who can verify Firm’s responsibilities. Include address and current phone number.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Estimated Value (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-81 Truck-Climbing Lane, Christiansburg, VA</td>
<td>See below.</td>
<td>VDOT – Salem District Location &amp; Design P.O. Box 3071 Salem, VA 24153-3071 Brian Becker Ph: (540) 378-5049</td>
<td>August 2010</td>
<td>August 2010</td>
<td>$2,170</td>
</tr>
</tbody>
</table>

**Firm’s Role:** Parsons was the lead designer, responsible for preliminary components of drainage design, bridge and structural design, roadway design, geotechnical investigations, and the development of a traffic management plan and other related work. Parsons prepared 30 percent plans in advance of a public hearing with the expectation that a design-build contract would be advertised.

**Project Narrative:** This project was designed to add a 12-foot continuous truck-climbing lane to southbound I-81 from mile marker 119 to mile marker 128 in Montgomery County, Virginia. The project also included upgrades to median and outside shoulders to meet current interstate standards. Southbound I-81 crosses over Route 641 (Den Hill Road) and the Norfolk Southern Railroad south of mile marker 121. The existing southbound bridge was designed to incorporate an additional lane and increase the shoulder width to meet current criteria. Route 636 (Seneca Hollow Road and Friendship Road) are two-lane roadways that cross I-81 twice, once at mile marker 123 and once at mile marker 124.9. These two bridges were designed to be reconstructed to allow for the widening of the interstate. Parsons provided maintenance-of-traffic (MOT) plans that considered complex phasing with heavy truck volumes.

Future widening was also considered when determining grading limits and right of way requirements.

**Design Innovations:**
- Deep rock cuts and high fills required extensive geotechnical analyses, including the use of helicopter-delivered drill rigs and rock mapping using rapping and photogrammetric methods.
- Drainage, stormwater management, and erosion and sediment control were key issues in the design process given the steep terrain of the surrounding areas.
- Slope analysis was performed for cut-and-fill slopes to minimize the impacts to existing right of way.

**Relevance to I-66 Widening Project:**
- Interstate widening
- Multiple MOT phases
- Reconstruction of two bridges
- Completed project on time and within budget
- Complex modifications to drainage elements, including stormwater management and erosion and sediment control

**Lessons Learned:**
- Interstate MOT for continuous-flow traffic was achieved through adding a narrow strip of full-depth pavement in the shoulder to allow space for traffic to safely shift and for a safety barrier to separate traffic from the work zone.
- Innovative methods for environmental and geotechnical access included the use of helicopters.
- Innovative methods for stormwater management were needed, including the use of shoulders and rock benches for stormwater management.
- Most early interstates do not meet the current criteria for superelevation rates and transitions. To correct this, Parsons designed profiles that would upgrade the supertransitions using asphalt wedging installed in lifts, like an overlay, without major impacts to traffic. Some areas were raised up to 2 feet without closing the roadway.
- Excess capacity for future communication lines was incorporated.
Firm's Role: Parsons served as lead designer for the first Missouri Department of Transportation (MoDOT) project to use the design-build delivery method. As lead designer, Parsons provided design management, roadway design, quality assurance and quality control, structural design, intelligent transportation system, environmental compliance, utility relocation and design, and post-design services.

Project Narrative: The project reconstructed 10 miles of I-64 through St. Louis and six other cities, widened and reconstructed the entire roadway, rebuilt 38 bridges, improved 11 interchanges, and constructed extensive retaining and sound walls. A major project feature is the reconstruction of the I-64/I-170 interchange to a high-speed, fully directional facility.

A primary reason MoDOT chose Gateway Constructors was due to the team's aggressive construction schedule and maintenance-of-traffic (MOT) approach. The MOT plan included three phases: planning and preparation, construction of the west segment, and construction of the east segment. Parsons' staff worked with Gateway's construction staff to develop an approach that closed two segments of the existing freeway, each more than 4 miles long, to all traffic during each construction stage. The result is an approach with the least impact to regional traffic during the life of the project as compared to other MOT schemes proposed by the city, county, and other bidders.

This project is now being used as an example for similar projects across the state of Missouri. MoDOT Director Pete Rahn indicated the design-build process allowed constructors to complete the project on budget and ahead of schedule. Work on the project in 2010 did not affect I-64 traffic. Highlights of the project include the following:

- Rebuilding and upgrading all pavement, bridges, and interchanges between Spoede Road in St. Louis County and Kings Highway Boulevard in St. Louis City.
- Developing a new, high-quality, interstate-to-interstate connection between I-64 and I-170.
- Adding one lane in each direction between Spoede Road and I-170.
- Increasing traffic flow through better design, including the elimination of short, tight entrance and exit ramps and merges and the addition of dedicated exit lanes.
- Adding more than 60 owner-initiated changes with no impact to the promised design or construction schedule. Parsons mobilized a dedicated team of more than 100 design professionals within the first 30 days of notice to proceed.
- Completing quality audits on all design deliverables at each design stage. This resulted in zero design nonconformances at design completion.

Lead Contractor: Gateway Constructors (a joint venture of Granite Construction Co., Fred Weber Inc., and Millstone Bangert Inc.)

This project is the winner of more than 22 awards, including the following:
- 2011 Gold Level Award from National Partnership for Highway Quality
- 2011 Grand Award, Engineering Excellence Competition, from American Council of Engineering Companies of Missouri
- 2010 Project of the Year, Mega Project Category, from Design-Build Institute of America Mid-America Region
- 2010 America's Transportation Awards Grand Prize winner from American Association of State Highway and Transportation Officials

Relevance to I-66 Widening Project:
- Design-build project that involved interstate widening and the reconstruction of more than 10 miles
- An aggressive MOT plan resulted in the least amount of impacts to regional traffic
- Co-located staff

Lessons Learned:
- Implementing a creative MOT concept enabled half of the corridor to be closed to traffic at one time and constructed in one construction season, thereby reducing regional cumulative traffic delays as compared to options under live traffic.
- Parsons-led task forces resulted in quick responses to comments from the client and joint venture construction engineers.
- Preparing a detailed design quality management plan, developed over years of design-build experience, with detailed design checklists to ensure that technical requirements were incorporated, resulted in a streamlined design acceptance. This effort resulted in the owner's design acceptance immediately after completion of the design effort.
- Enhancing safety with wider shoulders and improved geometrics.
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Qualifications Checklist and Contents</td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>Appendix C, Pg. 1</td>
</tr>
<tr>
<td>Acknowledgement of RFQ, Revision and/or Addenda</td>
<td>Attachment 2.10</td>
<td>Section 2.10</td>
<td>no</td>
<td>Appendix D, Pg. 1</td>
</tr>
<tr>
<td>Acknowledgement of RFQ, Revision and/or Addenda (Form C-78-RFQ)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letter of Submittal (on Offeror's letterhead)</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>Pg. 1</td>
</tr>
<tr>
<td>Offeror’s point of contact information</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>Pg. 1</td>
</tr>
<tr>
<td>Authorized Representative’s signature</td>
<td>NA</td>
<td>Section 3.2.1</td>
<td>yes</td>
<td>Pg. 5</td>
</tr>
<tr>
<td>Principal officer information</td>
<td>NA</td>
<td>Section 3.2.2</td>
<td>yes</td>
<td>Pg. 2</td>
</tr>
<tr>
<td>Offeror’s Corporate Structure</td>
<td>NA</td>
<td>Section 3.2.3</td>
<td>yes</td>
<td>Pg. 3</td>
</tr>
<tr>
<td>Affiliated/subsidiary companies</td>
<td>NA</td>
<td>Section 3.2.4</td>
<td>yes</td>
<td>Pg. 3</td>
</tr>
<tr>
<td>Debarment forms</td>
<td>Attachment 3.2.5(a)</td>
<td>Section 3.2.5</td>
<td>no</td>
<td>Appendix E, Pg. 1</td>
</tr>
<tr>
<td>Offeror’s VDOT prequalification evidence</td>
<td>NA</td>
<td>Section 3.2.6</td>
<td>no</td>
<td>Appendix F, Pg. 1</td>
</tr>
<tr>
<td>Evidence of obtaining bonding</td>
<td>NA</td>
<td>Section 3.2.7</td>
<td>yes</td>
<td>Pg. 6</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.1.2
**0066-076-003, P101, R201, C501, B674, B675**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Services Evidence</td>
<td></td>
<td></td>
<td></td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td>Full size copies of SCC and DPOR registration documentation (appendix)</td>
<td>NA</td>
<td>Section 3.2.8</td>
<td>no</td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td>SCC Registration</td>
<td>NA</td>
<td>Section 3.2.8.1</td>
<td>yes</td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td>DPOR Registration (Offices)</td>
<td>NA</td>
<td>Section 3.2.8.2</td>
<td>yes</td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td>DPOR Registration (Key Personnel)</td>
<td>NA</td>
<td>Section 3.2.8.3</td>
<td>yes</td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td>DPOR Registration (Non-APELSCIDLA)</td>
<td>NA</td>
<td>Section 3.2.8.4</td>
<td>yes</td>
<td>Appendix G, Pg. 1</td>
</tr>
<tr>
<td><strong>DBE statement within Letter of Submittal</strong> confirming Offeror is committed to achieving the required DBE goal</td>
<td>NA</td>
<td>Section 3.2.9</td>
<td>yes</td>
<td>Pg. 4</td>
</tr>
<tr>
<td>Offeror’s Team Structure</td>
<td></td>
<td></td>
<td></td>
<td>Pg. 7</td>
</tr>
<tr>
<td>Identity of and qualifications of Key Personnel</td>
<td>NA</td>
<td>Section 3.3.1</td>
<td>yes</td>
<td>Pg. 7</td>
</tr>
<tr>
<td>Key Personnel Resume – DB Project Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.1</td>
<td>no</td>
<td>Appendix A, Pg. 1</td>
</tr>
<tr>
<td>Key Personnel Resume – Quality Assurance Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.2</td>
<td>no</td>
<td>Appendix A, Pg. 2</td>
</tr>
<tr>
<td>Key Personnel Resume – Design Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.3</td>
<td>no</td>
<td>Appendix A,</td>
</tr>
</tbody>
</table>
### Statement of Qualifications Checklist and Contents

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Personnel Resume – Construction Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.4</td>
<td>no</td>
<td>Appendix A, Pg. 3</td>
</tr>
<tr>
<td>Key Personnel Resume – Lead Structural Engineer</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.5</td>
<td>no</td>
<td>Appendix A, Pg. 4</td>
</tr>
<tr>
<td>Key Personnel Resume – Lead Traffic/ITS Designer</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.6</td>
<td>no</td>
<td>Appendix A, Pg. 5</td>
</tr>
<tr>
<td>Organizational chart</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>Pg. 15</td>
</tr>
<tr>
<td>Organizational chart narrative</td>
<td>NA</td>
<td>Section 3.3.2</td>
<td>yes</td>
<td>Pg. 12</td>
</tr>
</tbody>
</table>

#### Experience of Offeror’s Team

| Experience of Offeror’s Team | | | | Pg. 16 |
|-----------------------------|---------------|---------------------|------|
| Lead Contractor Work History Form | Attachment 3.4.1(a) | Section 3.4 | no | Appendix B, Pg. 1 |
| Lead Designer Work History Form | Attachment 3.4.1(b) | Section 3.4 | no | Appendix B, Pg. 4 |

#### Project Risk

<table>
<thead>
<tr>
<th>Project Risk</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 20-page limit?</th>
<th>SOQ Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and discuss three critical risks for the Project</td>
<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>Pg. 17</td>
</tr>
</tbody>
</table>
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO.  C00093577DB48
PROJECT NO.:  0066-076-003, P101, R201, C501, B674, B675

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  December 20, 2011
   (Date)
2. Cover letter of
   (Date)
3. Cover letter of
   (Date)

David B. Casey, Vice President

SIGNATURE

February 13th, 2012
DATE
ATTACHMENT NO. 3.2.5(a)

CERTIFICATION REGARDING DEBARMED PRIMARY COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

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

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

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

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

Signature: ___________________________  Date: 2/13/2013  
Vice President: ________________________  
David B. Casey  
Archer Western Construction, LLC  
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

[Signature] 02/13/12  [Vice President]
Signature  Date  Title

[Company Name] of Virginia
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

__________________________  January 24, 2012  President
Signature                        Date          Title

Endesco, Inc.
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

[Signature]
Signature

[Jan. 25, 2012]
Date

[Paul Adams]
Manager

[Right of Way Program Title]
Title

Continental Acquisition Services, Inc., dba Continental Field Service
Name of Firm
ATTACHMENT NO. 3.2.5(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

Signature Date President Title

February 10, 2012

NXL Construction Company, Inc. (d/b/a NXL Construction Services, Inc.)
Name of Firm

Appendix E: Page 5
ATTACHMENT NO. 3.2.5(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

Signature: _______________________________  Date: January 23, 2012  President

Rice Associates, Inc.
Name of Firm

Title
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

[Signature]

Date

January 24, 2012

Vice President

Title

RJM Engineering, Inc.

Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

__________________________ February 9, 2012 ______________________
Signature                  Date                  Principal
__________________________                                      Title
Schnabel Engineering Consultants, Inc.
Name of Firm
ATTACHMENT NO. 3.2.5(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0066-076-003, P101, R201, C501, B674, B675

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

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

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

[Signature] 2-8-12 [Title]

[T3 DESIGN]

Name of Firm
ARChER WESTERN CONSTRUCTIoN, LLC
EMPLOYER ID: 27-0887868
PREQ. EXP : 01/31/2013

--PREQ ADDRESS ----------- -- WORK CLASSES ----------------------
2410 PACES FERRY ROAD  002 - GRADING
SUITE 600             003 - MAJOR STRUCTURES
ATLANTA, GA 30339      006 - PORTLAND CEMENT CONCRETE PAVING
PHONE : 404-495-8700   007 - MINOR STRUCTURES
FAX   : 404-495-8701

BUSINESS CONTACT: GILLIS, DONALD ALAN
EMAIL: DGILLIS@WALSHGROUP.COM

------DBE INFORMATION------
DBE TYPE : N/A
DBE CONTACT: N/A
DBE/WBE EXP: N/A
### Archer Western Construction, LLC

**SCC ID:** T0437006  
**Business Entity Type:** Foreign Limited Liability Company  
**Jurisdiction of Formation:** IL  
**Date of Formation/Registration:** 6/30/2010  
**Status:** Active

<table>
<thead>
<tr>
<th>Principal Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>929 W ADAMS ST</td>
</tr>
</tbody>
</table>
| CHICAGO          | 60607-0000  

**Registered Agent/Registered Office**  
CORPORATION SERVICE COMPANY  
Bank of America Center, 16th Floor  
1111 East Main Street  
RICHMOND, VA 23219-0000  
RICHMOND CITY 216  
Status: Active  
Effective Date: 4/29/2011

Users are encouraged to create an SCC eFile account to:

- Conveniently monitor business entities through the use of a “Favo”
- Perform easy step-by-step online transactions for certain types of such as registered agent changes
- Quickly access online filing history

To view our Privacy Policy, click [here](#).
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

PARSONS TRANSPORTATION GROUP INC. OF VIRGINIA is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is November 07, 1975.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
March 18, 2010

Joel H. Peck, Clerk of the Commission

CIS0357

Appendix G: Page 2
Richmond, July 14, 2006

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

Continental Acquisition Services, Inc.

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

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
Welcome to SCC eFile
Business Entity Details

Continental Acquisition Services, Inc.

SCC ID: FL074896

Business Entity Type: Foreign Corporation
Jurisdiction of Formation: WA
Date of Formation/Registration: 7/14/2005
Status: Active
Shares Authorized: 200

Principal Office

PO BOX 845

BEDFORD NY 10506

Registered Agent/Registered Office

NATIONAL REGISTERED AGENTS INC
4001 Ninth Ninth Street, Suite 227

ARLINGTON VA 22203

ARLINGTON COUNTY 105
Status: Active
Effective Date: 12/30/2010

Users are encouraged to create an SCC eFile account to:

- Conveniently monitor business entities through the use of a "Fast Lane"
- Perform easy step-by-step online transactions for certain types of such as registered agent changes
- Quickly access online filing history

To view our Privacy Policy, click here

Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, May 7, 1992

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

ENESCO, INC.

a corporation organized under the laws of MARYLAND

and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission

Attest:

William J. Bridge

Chair of the Commission
Commonwealth of Virginia
State Corporation Commission

I Certify the Following from the Records of the Commission:

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

The date of incorporation is November 17, 1989.

Nothing more is hereby certified.

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

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

State Corporation Commission

I Certify the Following from the Records of the Commission:

RICE ASSOCIATES, INC. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is December 15, 1988.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
February 9, 2010

[Signature]
Joel H. Peck, Clerk of the Commission
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, July 10, 2009

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

RJM ENGINEERING, INC.
Date of qualification: February 16, 2001

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

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 12, 2009

This is to certify that the certificate of incorporation of

Schnabel Consultants, Inc.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: August 12, 2009

State Corporation Commission
Attest:

Clerk of the Commission
Welcome to SCC eFile

Business Entity Details

T3 Design Corporation

SCC ID: 06585392
Business Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 5/18/2006
Status: Active
Shares Authorized: 5000

Principal Office
3927 OLD LEE HIGHWAY STE 101C
FAIRFAX VA 22030-2422

Registered Agent/Registered Office
REESE BROOME PC
8133 LEESBURG PIKE 9TH FL
VIENNA VA 22182-2706
Status: Active
Effective Date: 5/1/2007

Users are encouraged to create an SCC eFile account to:
- Conveniently monitor business entities through the use of a "Favorites" list
- Perform easy step-by-step online transactions for certain types of filings, such as registered agent changes
- Quickly access online filing history

To view our Privacy Policy, click here

Appendix G: Page 10
Parsons Transportation Group Inc. of Virginia

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRES ON
12-31-2013

9860 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0405001589

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

PROFESSIONS: ENG

PARSONS TRANSPORTATION GROUP INC OF VIRGINIA
3926 PENDER DR STE 100
FAIRFAX, VA 22030

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

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPRES ON
02-29-2012

9860 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0410000214

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

PROFESSIONS: ENG

PARSONS TRANSPORTATION GROUP INC OF VIRGINIA
100 M STREET SE
WASHINGTON, DC 20003

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Rice Associates
NXL Construction Company, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

NUMBER
0407009031

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

PROFESSIONS: ENG, LS

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

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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
RJM Engineering, Inc.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON: 02-29-2012
NUMBER: 0411000614

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

PROFESSION: ENG

RJM ENGINEERING INC
700 PRINCESS ST. STE 207
ALEXANDRIA, VA 22314

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

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON: 12-31-2013
NUMBER: 0407005491

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

PROFESSION: ENG

RJM ENGINEERING INC
6021 UNIVERSITY BLVD
SUITE 530
ELLIOT CITY, MD 21043

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Design-Build Project Manager - Brian Quinlan, PE

Quality Assurance Manager - Michael Saunders, PE, CCM
Design Manager - Josh Wade, PE

Lead Structural Engineer - Alan Kite, PE