Submittal of Qualifications

A DESIGN-BUILD PROJECT

I-95 at Temple Avenue Interchange Improvements

From: 0.041 Mi. West of Hamilton Avenue
To: 0.069 Miles East of Existing I-95 Ramp

Colonial Heights, Virginia

State Project No.: 0095-106-122
Federal Project No.: NH-095-1 (328)
Contract ID No.: C0085623DB74
Date: November 25, 2013
Attachment 3.1.2
SOQ Checklist
Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
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<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
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## ATTACHMENT 3.1.2

### Project: 0095-106-122

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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Attachment 2.10
Form C-78-RFP
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00085623DB74
PROJECT NO.: 0095-106-122

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 10/15/2013 (Date)

2. Cover letter of Addendum #1 11/12/2013 (Date)

3. Cover letter of (Date)

Signature: [Signature]
Date: 11/25/13
3.2 Letter of Submittal
November 25, 2013

Bill Arel, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Dear Mr. Arel:

American Infrastructure is presenting an experienced and integrated team to the Virginia Department of Transportation (VDOT) for the I-95 at Temple Avenue Interchange Improvements project in Colonial Heights, VA (the Project).

All transportation improvement projects are inherent with risk for the public. However, the I-95 at Temple Avenue Interchange Improvements project presents another contributor to Public Safety, a paradigm shift in the motoring public’s thought process. Motorists will not only inconveniently during construction, but will face an added layer of turmoil by changing an existing intersection into a roundabout. As the Design-Builder, American Infrastructure will, with input from VDOT, propose and manage a proactive Public Outreach program that will educate the public and other stakeholders on roundabouts prior to implementation of construction.

Established in 1939, American Infrastructure (AI) has been providing construction services in the Commonwealth of Virginia since 1967. To date, AI has been awarded over $625M of design-build (D/B) projects in the Mid-Atlantic Region, including $479M for VDOT in the past five years. Each of our D/B projects has been delivered ahead of schedule, within budget, and without any claims. This includes the Richmond Airport Connector Road and VDOT’s Route 29 Bridge over Tye River projects which were completed two months and eleven months ahead of schedule, respectively.

AI’s experience constructing roundabouts in the Commonwealth includes the Saintsbury Drive and Vienna Metro Improvements project in Fairfax County and the Watkins Center Parkway at Westchester Commons project in Midlothian. To minimize the impacts of construction for the motoring public, AI will utilize off-peak hours for asphalt paving work for the ramps off of I-95 at the Temple Avenue intersection. This will be supported by our asphalt plant in Powhatan, which is located approximately 35 miles from the Project.

Lead Designer for the AI Team, Rinker Design Associates, P.C. (RDA) is a Virginia-based firm and design-build innovator. RDA has been the lead designer for eight D/B projects and is currently serving as AI’s lead designer on two VDOT D/B projects. AI and RDA are working together on the $32.5M Middle Ground Boulevard and the $20.4M I-581/Elm Avenue Interchange Improvements D/B projects for VDOT. Our proposed DBPM and DM are working together on these two projects.

RDA will be supported by Wallace Montgomery (WM) for traffic engineering. WM’s experience designing roundabouts and other innovative geometric designs will ensure an effective TMP is developed to minimize construction impacts of the Project in an already congested area. This experience includes traffic engineering services for seven roundabouts and participation in VDOT’s Zion Crossroads DDI project in Culpeper as a consultant for the design-build team. In addition, AI and WM worked together as the design-build team for the I-95 at Contee Road Interchange D/B project for Maryland State Highway Administration (MD SHA) which is scheduled to complete construction in August 2014.
Volkert Inc. (Volkert) will oversee Quality Assurance and has worked with VDOT on two VDOT D/B projects. Volkert’s proposed QAM for the Project is working with the AI/RDA D/B Team on the Middle Ground Boulevard Extension project. Geotechnical Engineering and Construction Quality Control will be provided by DMY Engineering Consultants, Inc. (DMY). Materials testing for Quality Assurance and Quality Control will be provided by Zannino Engineering, Inc. (Zannino) and Schnabel Engineering Consultants, Inc. (Schnabel), respectively.

**Submittal Requirements**

The AI Team submits the information below as detailed in Section 3.2 of the Request for Qualifications:

3.2.1 The full legal name and address of American Infrastructure – VA, Inc. (AI-VA) is as follows: **American Infrastructure – VA, Inc., 301 Concourse Boulevard, Suite 300, Glen Allen, VA 23059**

3.2.2 The contact information for John Hellman (DBPM) who is responsible for the oversight of the entire AI Team and will be the primary point of contact with VDOT is as follows: **John Hellman, PM 804.290.8528 (Telephone) 301 Concourse Boulevard – Suite 300 484.993.6650 (Fax) Glen Allen, VA 23059 john.hellman@americaninfrastructure.com**

3.2.3 The principal officer of AI-VA with whom a D/B contract with VDOT would be written is: **Aaron Myers, VP/GM 804.290.8500 (Telephone) 301 Concourse Boulevard – Suite 300 804.418.7935 (Fax) Glen Allen, VA 23059 aaron.myers@americaninfrastructure.com**

3.2.4 AI-VA is a registered Corporation in the Commonwealth of Virginia and will take financial responsibility for the Project.

3.2.5 American Infrastructure – VA, Inc. will be the lead contractor and Rinker Design Associates, PC will be the Lead Designer for the Project.

3.2.6 All affiliated and subsidiary companies are identified on Attachment 3.2.6 in **APPENDIX 3.2.6.**

3.2.7 Executed Certification Regarding Debarment Forms are included in **APPENDIX 3.2.7.**

3.2.8 AI-VA is active, in good standing and prequalified to bid on the Project. AI-VA’s prequalification number is G303 and evidence of prequalification is included in **APPENDIX 3.2.8.**

3.2.9 AI-VA has the capability to obtain a performance and payment bond for the $12M estimated contract value of the Project as exhibited by the letter of surety in **APPENDIX 3.2.9.**

3.2.10 The summary of professional licenses, Attachment 3.2.10, as well as full size copies of individual licenses for the AI Team business entities and Key Personnel are included in **APPENDIX 3.2.10.**

3.2.11 AI is committed to achieving the 12% DBE participation goal for the Project. AI consistently meets DBE goals and has met the goal on each of our completed D/B projects in Virginia.

The AI Team’s qualifications for this Project are evidenced by our successful work history on projects with similar challenges, work history with each member of the AI Team, and experienced key personnel. We look to a partnering relationship with VDOT and all stakeholders to deliver the Project safely, ahead of schedule, and within VDOT’s budget.

Respectfully,

Aaron T. Myers, VP/GM
American Infrastructure – VA, Inc.

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3.2 Letter of Submittal
3.3 Team Structure
3.3.1 Key Personnel

3.3.1.1 Design-Build Project Manager (DBPM): John Hellman has been selected as DBPM for the Project. He will serve as the primary point of contact for VDOT and will manage resources for the entire team. Mr. Hellman will provide oversight throughout the duration of design and construction of the Project. Mr. Hellman has 25 years of construction experience, and has worked on 5 design-build projects. His projects include the I-95 Bridge Expansion and Road Rehabilitation at Turtle River project in GA ($198M) and the Florida Rock Industries D/B project ($100M). Since joining AI, Mr. Hellman has provided oversight on VDOT’s Middle Ground Boulevard and I-581/Elm Avenue Interchange Improvements D/B projects.

3.3.1.2 Quality Assurance Manager (QAM): Volkert’s Bill McDowall, P.E. has over 33 years of experience and will serve as the QAM for the Project. Mr. McDowall reports directly to the DBPM and will have direct, independent access to VDOT. He has directed QAM services for 5 VDOT design-build projects, including working with AI on the Middle Ground Boulevard Extension and Route 29 Bridge over Tye River D/B projects. Mr. McDowall was also involved in several high-profile projects including the Woodrow Wilson Bridge Replacement and Springfield Interchange during his 11 year career with VDOT.

3.3.1.3 Design Manager (DM): RDA has selected Darell Fischer, P.E., DBIA to serve as DM for the Project. Mr. Fischer has 27 years of transportation design experience and has worked as the DM on 5 D/B projects in Virginia. He has worked with AI as DM on the I-581/Elm Avenue Interchange Improvements and Middle Ground Boulevard Extension D/B projects. On Elm Avenue, as well as the Route 36 Improvements D/B project, Mr. Fischer led the design team in development of a complex TMP that required phased construction to safely maintain traffic flow during construction.

3.3.1.4 Construction Manager (CM): The AI Team’s CM, David Passmore, has 18 years of experience and has served as CM on numerous projects involving phased construction to accommodate high volumes of traffic. His experience includes VDOT’s B26 Hampton Boulevard Grade Separation and Middle Ground Boulevard Extension projects. Mr. Passmore will be onsite for the duration of construction operations and will manage the construction process and ensure that the work and materials conform to the “approved for construction” plans and specifications. He holds VDOT ESCCC Certification and will obtain Virginia DEQ RLD certification prior to the commencement of construction.

Figure 3.3.2: AI Team Key Personnel
AI and RDA are experienced working together on VDOT D/B projects. Our team is strengthened by design support and key subconsultants with specific expertise and previous teaming experience with AI and RDA.

- **Wallace Montgomery (WM)** brings traffic engineering expertise that includes numerous roundabouts and other innovative geometric designs.
- **Volkert Inc. (V)** has supported AI and RDA on two D/B projects providing familiarity and confidence in quality and capability.
- **DMY Engineering Consultants, Inc. (DMY)** has teamed with AI and RDA on several pursuits and is currently working for RDA on a design project in Manassas.
- **Zannino Engineering, Inc. (Z)** will provide QA testing from their lab in Glen Allen.
- **Schnabel Engineering Consultants, Inc. (S)** will provide QC testing from their lab in Richmond.

### 3.3.2 ORGANIZATIONAL CHART AND NARRATIVE

The AI Team organizational chart shows the chain of command and identifies major functions to be performed for design and construction of the Project. This structure is similar to the model used by AI and RDA on VDOT’s Middle Ground Boulevard and I-581/Elm Ave Interchange Improvements D/B projects.
VDOT – The Department will coordinate directly with our DBPM as the primary contact for all aspects of design and construction oversight of the Project. Open lines of communication between the QAM and VDOT will assist with monitoring quality assurance oversight. The AI Team will establish a partnering process that integrates all project stakeholders, including the City of Colonial Heights.

Design-Build Project Management – Our DBPM will serve as VDOT’s primary point of contact for the Project. Reporting to the DBPM are four managers; the QAM, DM, CM, and Public Relations Manager. This structure, combined with our DBPM’s maintenance of an action item log for potential project issues and three-month look-ahead schedule will ensure the Project meets VDOT’s schedule and commitments.

Quality Assurance – The QAM will report directly to the DBPM with concurrent reporting to VDOT. The QAM will be responsible for QA inspection and testing of all materials used and work performed on the Project. He will also monitor the construction QC program and ensure conformance with the “approved for construction” plans and specifications. Volkert’s QA inspectors will report to the QAM. QA materials testing will be provided by Zannino Engineering and will be overseen by Volkert’s QA Inspectors.

Design – The DM will report to our DBPM and will lead the design team to ensure the overall design conforms to the contract documents. Pertinent design disciplines that will report to the DM include Traffic Engineering and TMP, Structures, Roadway, Drainage, Environmental Compliance, Geotechnical, ROW, and Utilities. WM will develop the TMP and DMY will provide geotechnical support. The individual leads for these disciplines will be integrated into the design process. The Design QA/QC Manager will report to the DM and establish and oversee the design QA/QC program. The DM will also coordinate directly with the CM throughout design and construction.

Construction – The CM will report to the DBPM and will communicate directly with the DM to ensure construction is consistent with the project design. He will work with the PR Manager to keep project stakeholders informed about construction progress. The Project Manager and Superintendent will report to the CM and oversee construction operations. The Safety Manager will report to the CM and participate in pre-traffic switch planning meetings, as with all pre-planning meetings. DMY’s QC Manager will report to the CM and ensure compliance with the approved for construction plans and specifications. QC materials testing will be provided by Schnabel and will be overseen by DMY’s QC Inspectors.

Public Relations – The Public Relations Manager (PRM) will report to the DBPM and work hand-in-hand with the DM, CM, and VDOT to facilitate public workshops and assist with educating the public about navigating roundabouts.

TEAM COORDINATION – Continuous coordination and open communication within the design-build team and with VDOT and key stakeholders will ensure commitments are met and progression is transparent.

- Design – Design coordination will include constructability reviews, design disciplinary reviews, over the shoulder reviews, and comment resolution meetings with stakeholders.
- Progress Meetings – Project progress meetings will discuss design and construction status, project schedule, ROW, contract administration, safety, and public relations.
- Public Outreach – Public workshops and Roundabout Clinics will address public concerns regarding the Roundabout. “Pardon our Dust” meetings will allow the public to view plans and discuss concerns throughout construction of the Project.
- Schedule – Daily coordination between the CM, senior inspectors, and VDOT’s onsite representative will maintain open communication. Weekly schedule meetings will include the QA and QC team, design team members, and VDOT representatives as necessary.
- Safety – Before and after each shift, field supervisors will review safety issues and successes with their crews. Prior to traffic switches, and on a monthly basis, all project staff will meet to review changing traffic configurations, safety performance, and address any issues or challenges in the upcoming work.
3.4 Experience of Team
The previous teaming experience of AI, RDA, Wallace Montgomery, and our subconsultants provides VDOT with an integrated design-build team for the Project. AI and RDA are the design-build team for the I-581/Elm Avenue Interchange Improvements and Middle Ground Boulevard Extension projects. AI and WM are the design-build team for the I-95 at Contee Road Interchange project. The solutions provided by the AI led teams on these three projects provided the following cost and schedule savings to VDOT and MD SHA.

- **Middle Ground Boulevard** – The bridge over CSXT rail was changed from a three-span to a two-span bridge which reduces the overall project schedule by more than a month. AI’s bid provided a cost savings of $6M to VDOT.
- **I-581/Elm Avenue** – Changing a soil nail wall to a RW-3 will reduce the overall project schedule by approximately two months. AI’s bid provided a cost savings of $6M to VDOT.
- **I-95 at Contee Road** – The bridge over I-95 was shortened by 82 feet which provided a cost savings of $600K. The bridge was completed four weeks ahead of schedule.

### Firm Overviews

**American Infrastructure (AI)** is a heavy civil contractor and material supplier that has provided quality construction services in the Mid-Atlantic region since 1939 and in the Commonwealth of Virginia since 1967. In Virginia, AI has a regional workforce of more than 310 employees and 240 pieces of heavy equipment/rolling stock, which is supported by the total fleet of over 1300 pieces of heavy equipment/rolling stock and over 1600 employees. AI maintains an industry-excellent safety program and culture, which is evidenced by our OSHA recordable incident rate of 0.66, which is more than five times better than the Bureau of Labor Statistics industry average.

**Rinker Design Associates, PC (RDA)** will be the lead designer for the Project and provide roadway, utility, and drainage design. RDA is a mid-sized firm of over 100 employees with locations in Manassas, Fredericksburg, and Glen Allen. RDA has been providing professional services throughout Virginia for over 30 years. RDA is a Virginia-Certified Small Business and a leading provider of professional civil engineering, transportation engineering, environmental, surveying, right-of-way acquisition, utility design and coordination, and permitting services. RDA consistently receives “exceeds expectations” on their consultant performance reports from the Department, including scores ranging from 3.76 to 4.0 on the Stringfellow Road project.

**Wallace Montgomery (WM)** is a multi-disciplined firm that provides a full-range of transportation engineering services. WM is a Virginia Certified Small Business and recently opened an office in Tysons Corner, VA. Founded in 1975, WM has a current staff of 140 engineers, designers, and technicians. WM has developed the TMP for a number of innovative geometric designs across the country, including roundabouts. Recent work includes a multi-lane roundabout in Georgia, evaluating the traffic and safety operations for all users. In Maryland, WM has completed 6 roundabout designs. In Virginia, the firm consulted with the design-build team for the Zion Crossroads DDI in VDOT’s Culpeper District.

### Design-Build Experience and Approach

AI has been awarded over $650M of D/B projects in the Mid-Atlantic region to date, including $479M for VDOT projects in the past five years. This design-build project experience includes:

- Route 29 Bridge over Tye River
- Richmond Airport Connector Road
- I-95 at Contee Road Interchange
- I-581 Elm Avenue Interchange Improvements
- Middle Ground Boulevard Extension
- Route 460 Corridor Improvements
- SR 476, Section RDC
- US 40 Interchange at MD 715
- I-695 from I-97 to MD-10
Over the past seven years, RDA has been awarded $200M (construction value) on 10 DB/PPTA projects, which includes four completed D/B projects in Virginia. This design-build project experience includes:

- I-581 Elm Avenue Interchange Improvements
- Middle Ground Boulevard Extension
- Sudley Manor Drive PPTA
- James Madison Highway (US Route 15) Widening PPTA
- Crosspointe Centre Roadway Improvements
- Route 36 Improvements
- Prince William Parkway
- GMU West Campus Drive
- Route 460 Corridor Improvements (Program Management)
- Heritage Center Parkway

**DESIGN-BUILD APPROACH** – AI and RDA have a structured approach to the D/B process, which evolved from working together on VDOT’s Middle Ground Boulevard Extension and the I-581/Elm Avenue Interchange Improvements D/B projects and other recent pursuits. Through continuous refinement of our process, the AI Team developed the following methodology to D/B projects:

- Analyze and mitigate risks during the proposal and design phases.
- Utilize innovative designs to provide efficient and cost-effective project solutions.
- Complete detailed construction planning during the RFP process that is incorporated into the design.
- Coordinate over-the-shoulder reviews to include the Department’s feedback in our design solutions.
- Dedicate a construction engineer to the design process to minimize construction cost and schedule.
- Implement lessons learned from previous project’s design efforts and construction challenges.

**SHARED WORK HISTORY OF TEAM MEMBERS**

An integrated design-build team exhibits previous work experience with all team members. AI and RDA have previous work experience with each firm on our team as demonstrated in Figure 3.4.1.

*Figure 3.4.1 Shared Work History of Team Members*
WORK HISTORY FORMS (APPENDIX 3.4.1)

AI and RDA have chosen the following projects to best demonstrate our individual qualifications.

**AI WORK HISTORY AS LEAD CONTRACTOR**
- Middle Ground Boulevard Extension D/B
- Saintsbury Drive and Vienna Metro Improvements
- Richmond Airport Connector Road D/B

**RDA WORK HISTORY AS LEAD DESIGNER**
- I-581/Elm Ave Interchange Improvements D/B
- Route 36 Improvements D/B
- Stringfellow Road Widening (Route 645)

ADDITIONAL RELEVANT WORK EXPERIENCE

In addition to the Work History forms provided, other recent and relevant work history of our team members are overviewed in the following narrative. This additional information should provide VDOT a more complete understanding of our relevant qualifications for the Project.

**I-95 AT CONTEE ROAD INTERCHANGE D/B**

The AI and WM design-build team is responsible for the design and construction of a completely new interchange along I-95, just north of the newly completed I-95/ICC Interchange. The existing Contee Road overpass over I-95 was removed and replaced with a new bridge and associated access ramps. Construction of this bridge and interchange on I-95 between MD198 and the Inter-County Connector is scheduled for completion in August 2014.

The multi-phase MOT plans maintained traffic on the original bridge while the new bridge and approach roadways were being constructed, and transitioned traffic in phases to the new bridge. WM completed a comprehensive TMP in accordance with Maryland and FHWA guidelines. Successful implementation of a well-developed TMP has resulted in no traffic incidents since construction began in May 2012.

*Traffic Engineering Services provided by WM Include:*
- TMP Development
- MOT Design
- Signing Design
- Lighting Design
- ITS Design (DMS)
- Pavement Marking Design
- Signal Design

**WATKINS CENTER PARKWAY AT WESTCHESTER COMMONS**

AI was contracted for site development of a 140-acre retail and commercial complex for West Chester Commons and the construction of a multi-lane access road to the retail center. The roadway improvements constructed two interchanges for Route 288.

This roadway features a fully controlled intersection at Route 60 and four roundabouts to facilitate access into the mall and adjacent businesses. Route 60 was widened from two to six lanes and was a total of 12 lanes wide at the intersection.
MD 2 at MD 261 Roundabout
A design-build project where WM designed a multi-lane roundabout at an existing at-grade intersection, along a high volume arterial roadway.

Development of phase-specific MOT plans proved to be a critical component of the project to ensure that traffic volumes were being maintained at all times. Although a formal TMP was not completed for this project, multiple TMP-related services were provided, including conducting Public Meetings, completing operational analyses of specific MOT phases, and development of an accident mitigation plan. WM supported MD SHA in the Public Meetings which included educating the public, both local and commuters, on how to safely maneuver the roundabout configuration.

Traffic Engineering Services provided by WM Include:
- MOT Design
- Signing Design
- Lighting Design
- Advance Warning Beacon Design
- Pavement Marking Design

US 301 at MD 304 Interchange
WM is actively designing a completely new interchange along US 301 to replace the high-accident at-grade intersection with MD 304. The ramp configuration for this Project has similar characteristics to the I-95 at Temple Avenue ramp configuration. The proposed design includes single lane roundabouts at the ramp intersections with MD 304. WM is placing the final touches on a comprehensive TMP in accordance with Maryland and FHWA guidelines.

Traffic Engineering Services provided by WM Include:
- Lighting Design (LED roadway lighting)
- ITS Design (solar powered ATR)
- Pavement Marking Design

I-64 at US 15 (Zion Crossroads) Interchange
WM is a subconsultant on the design-build Team that is actively constructing the new Diverging Diamond Interchange (DDI) along I-64 at US 15. WM completed the TMP for this project, and compiled preliminary MOT Plans. The development of the sequence of construction was deemed critical by the client to ensure that US 15 traffic was being maintained at all times, especially during the implementation of the DDI traffic switch.

Traffic Engineering Services provided by WM Include:
- TMP Development
- Preliminary MOT Design
3.5 Project Risks
The AI Team has identified the following success factors to develop our approach to the Project.

**SUCCESS FACTORS FOR THE PROJECT**

- **Safety** – Our commitment to the safety of the public and construction work force will include planning safety into every work operation from the design phase through to final completion.
- **Quality** – Quality will be ensured by building constructability into the design, integrating QC into work operation planning, and providing QA through independent verification.
- **Cost** – Costs will be controlled by developing a safe, efficient, and economical design and effectively managing project risks.
- **Schedule** – Schedule milestones will be met and early completion will be evaluated through innovative approaches to design and construction, aggressive schedule management, and continuous collaboration with VDOT, the public, and project stakeholders.
- **Environmental** – Impacts to the environment will be minimized by designing, implementing, and maintaining stringent controls and best practices.

Our understanding of these success factors guided our selection of three critical risks which are identified as **Public Safety**, **Maintenance of Traffic**, and **Deep Fills at the Existing Bridges**. Since the purpose of the Project is identified by VDOT as Safety Improvements to improve traffic flow and decrease the accident rate within the project limits, we selected these risks because each has identified Safety as a primary impact. Our approach to the mitigation of each risk includes detailed planning to minimize construction impacts which is enable by our experience managing similar risks on previous projects.

### PUBLIC SAFETY

**WHY THE RISK IS CRITICAL**

It is our understanding that the community is 100% behind improvements and upgrades to the I-95 at Temple Avenue Interchange. However, we also understand that many of the interested stakeholders are apprehensive about the introduction of a roundabout design due to the age of surrounding community and the unfamiliarity with roundabouts. Furthermore, the Laurel Hill community, accessed by Ridge Road to the north from Temple Avenue is impacted by the alteration of their entrance location. Finally, the potential for a commercial development in the southwest quadrant of the proposed roundabout may cause added traffic and safety concerns, design changes, and public concern.

**THE IMPACT THE RISK WILL HAVE ON THE PROJECT**

These interrelated elements will impact public safety, costs, and require increased involvement by VDOT.

- **Safety** – The primary risk is that of safety. Unfamiliarity can cause erratic driving which will pose serious safety concerns through tight work zones. Additionally, the phasing required to build a roundabout at the same location as two bridges is unique. This impact is thoroughly discussed in the following risk – Maintenance of Traffic. Finally, added traffic due to adjacent, proposed development will create added stress to drivers and impact safety.
- **Cost** – Cost impacts will be incurred if additional design studies or MOT measures are required above and beyond those necessary to maintain and manage the traffic in accordance with MUTCD and the Virginia WAPM.
- **VDOT Involvement** – If the safety of the public is in question due to poor implementation of traffic patterns or lack of the appropriate public outreach, this will result in additional effort to respond to public concerns and improve the traffic conditions.

**MITIGATION STRATEGIES THAT MAY BE IMPLEMENTED**

A proven approach to public outreach and education about roundabouts led by the AI Team will minimize the safety risk associated with the Project.
PUBLIC OUTREACH APPROACH

A “Project Information Campaign” will be utilized to share information with the public about the Project and will begin at NTP and extend through the life of the Project. Our campaign will include public meetings, project brochures, newsletters, and a webpage. Public meetings, held in conjunction with VDOT, may include workshops, one-on-one meetings, and progress meetings. Advanced notice will be provided about meeting times, dates, and locations and we will develop agendas and brochures depending on the type and focus of the meeting. Meeting types will include “Roundabout Clinics” and “Pardon Our Dust”.

**Roundabout Clinics and Pardon Our Dust Meetings** – Safety concerns can be mitigated by educating the public on “how” to drive a roundabout. As a result, our public outreach will include Roundabout Clinics. These clinics will educate drivers on the topics included in Figure 3.5.1. The goal of this program will be to remove the fear that drivers have related to their unfamiliarity with roundabouts. This program will start early in the design process and progress through and be incorporated with the construction public outreach. Incorporation into our Pardon Our Dust program will allow our Team to continue to interact with the public as the construction implements the design and traffic patterns evolve. Educated drivers are safe drivers. The success of this program will minimize cost and schedule impacts associated with public safety while driving through the construction zone.

**Figure 3.5.1 Roundabout Clinics Topics**

<table>
<thead>
<tr>
<th>Roundabout Clinics will systematically show drivers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- How roundabouts function;</td>
</tr>
<tr>
<td>- Why roundabouts are safer than signalized intersections;</td>
</tr>
<tr>
<td>- What lane to be in depending on where you want to go;</td>
</tr>
<tr>
<td>- Who has the “right of way” in and out of the roundabout; and</td>
</tr>
<tr>
<td>- What signing and pavement markings to expect and what they mean.</td>
</tr>
</tbody>
</table>

**Webpage** – As a supportive means of maintaining communication, our team will develop and update a project webpage. This webpage will post upcoming meeting dates, agendas, and meeting minutes as well as construction activity updates, upcoming lane closures, and traffic pattern changes. It is our goal to provide an interactive means of actively communicating with the public. A first step in achieving this goal will be to post a single point of contact for comments or questions during construction.

**PUBLIC OUTREACH EXPERTISE** – PR Manager Shannon Moody has 15 years of experience in transportation project communications. She is managing PR on the Route 460 Corridor Improvements Project and actively participates in the development and execution of the strategic integrated public relations plan which involves grassroots community outreach, media relations, communications, and stakeholder/advocacy programs. Ms. Moody was previously the Director of Communications for the NC State Ports Authority and spent 11 years of her career as Manager of Corporate Communications with Transfield Services in Richmond, VA where she was responsible for promoting Virginia’s first PPTA project.

**ROLE OF VDOT AND OTHER AGENCIES IN ADDRESSING THE RISK**

VDOT’s review and input into our “Public Information Campaign” will ensure responsiveness to the public’s concerns. VDOT’s participation in educating the public through clinics and public meetings will be welcomed. However, our Team is prepared and capable of handing the details based on our experience with roundabout design, construction, and public education with respect to navigating roundabouts. The City of Colonial heights will be included as a partner in this process to address their concerns and ensure all stakeholders are included in our public outreach efforts.
MAINTENANCE OF TRAFFIC

From a Maintenance of Traffic (MOT) perspective, the project raises several risk concerns for VDOT, specifically pertaining to the construction of the roundabout.

Phased construction will transition traffic to partially completed portions of the roundabout. Thus, motorists will need to maneuver through a section of Temple Avenue that has a series of consecutive reverse curves (See Figure 3.5.2). These geometrics will require a reduced travel speed to maneuver through the partially completed roundabout.

In addition, our approach to the Project includes phased base widening and wedge/leveling overlay construction of the new I-95 Exit Ramps in the areas that are adjacent to or through the existing I-95 ramps. This will require traffic during construction along the existing I-95 Exit Ramps, and in particular the Southbound Exit Ramp, to transition through potentially awkward temporary grade break roll-overs as the base widening and overlay operations are completed and ultimately traffic is switched over to the new approach to the roundabout intersection. These geometrics and cross-sectional transitions between the old and new exit ramps may require reduced travel speeds; and, if not for certain, advance warnings along I-95 for the exiting traffic to the ramps.

Since peak period traffic volumes along Temple Avenue are significant, we do not believe VDOT will approve peak-period lane closures. We assume, however, that off-peak lane closures will be required during certain stages of construction to facilitate construction operations. The delays and queues that could result from these off-peak closures could present project risk.

WHY THE RISK IS CRITICAL

- **Existing LOS and Safety Issues** – The existing Temple Avenue and the I-95 Exit Ramps intersection is already experiencing level of service (LOS) and safety issues. The intersection experiences high delay along the northbound right-turn, eastbound through and westbound left-turn movements during both peak periods with significant volumes to and from I-95 and along Temple Avenue west of I-95. During the anticipated construction period of the new roundabout intersection, the existing intersection will operate at LOS of E and F during the AM and PM peak hours, respectively. In addition, recent crash data indicated a significant number of angle collisions with the westbound left-turn and eastbound through movements and rear-end collisions along the eastbound and westbound approaches.

- **Potential Construction Impacts** – Not providing clear guidance about temporary traffic patterns through the Project would cause motorist confusion and result in accidents. Conveying the temporary traffic patterns to the public clearly will be critical to the safety of motorists. Crashes occurring in an already constrained construction work zone can cause a significant delay and reduce the speed at which emergency personnel will be able to clear the accident scene. Off-peak lane closures could cause queues and delays to the motoring public, not only along Temple Avenue, but also the I-95 ramp.

THE IMPACT THE RISK WILL HAVE ON THE PROJECT

- Delays to motorists during construction;
- Increased potential for crashes;
- Negative press from safety concerns and from increased delays; and
- Impacts to the project schedule.
**Mitigation Strategies That May Be Implemented**

**TMP Approach** – The TMP risk is mitigated by understanding the existing traffic challenges, developing a context sensitive design that incorporates changing traffic patterns, and effectively communicating changes with the public.

- **TMP Analyses** – The TMP will include operational analyses of all stages of construction, including day-time, off-peak lane closures, to quantify queue lengths to determine if queues will extend onto I-95 mainline. If the analyses in the TMP show substantial impacts from the proposed lane closures, then the mitigation measure would be to modify the sequence of construction to minimize/reduce traffic impacts.

- **Lessons Learned** – Implementing lessons learned from the public outreach meetings and roundabout clinics to improve construction phasing, signing, and communication to the motoring public.

- **Reduce Speeds** – The reverse curves along Temple Avenue during construction require speed warning and/or speed reduction.

- **Inform the Public** – The TMP will cover strategies to properly inform motorists of traffic patterns and stage changes.

- **Construction Signage** – These strategies include the implementation of a clear sign/messaging program along the Temple Avenue approaches to convey downstream traffic patterns. Standard and custom signing will convey the messages, as well as portable variable message signs installed prior to the work zone to convey critical traffic pattern changes to motorists.

- **Field Changes** – Any field conditions that warrant changes to the approved plans will be reviewed and approved by Traffic Engineering and TMP/MOT Lead Matt Allen, P.E., PTOE.

**TMP Expertise** – Our approach is supported by the expertise of our design and construction staff working in the development and implementation of TMP’s for challenging and innovative projects. Our team’s collective experience includes design and/or construction of 11 roundabouts.

<table>
<thead>
<tr>
<th>Matt Allen, P.E., PTOE (Traffic Engineering and TMP/MOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience</strong></td>
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<td><strong>Lesson Learned</strong></td>
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<table>
<thead>
<tr>
<th>Ivan Saer (Project Manager)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience</strong></td>
</tr>
<tr>
<td><strong>Lesson Learned</strong></td>
</tr>
</tbody>
</table>

**Role of VDOT and Other Agencies in Addressing the Risk**

VDOT’s role includes approving the speed limit reduction during MOT, over the shoulder reviews, and approval of permanent and temporary signage for implementation of the roundabout. The City of Colonial Heights will be included in design development and over the shoulder reviews to ensure any concerns are adequately addressed.
**DEEP FILLS AT THE EXISTING BRIDGES**

The conceptual design indicates deep fills to construct the roundabout at the existing Temple Avenue bridges that span the abandoned railroad. Fills are anticipated between 15 and 30 feet on Temple Avenue from Station 200+00 to 206+00 and I-95 Southbound Exit Ramp from Station 114+00 to 117+00.

**WHY THE RISK IS CRITICAL** – To maintain traffic on Temple Avenue during construction, a significant amount of fill will be placed in multiple stages while the adjacent bridges remain in service. Placement of fill prior to removal of the bridge requires protection of the existing piers and superstructure from construction activities. This must be accomplished while ensuring proper compaction of the newly-placed fills. Since traffic will be maintained on the existing bridge during placement of the fill a safety risk arises both from having construction activity in close proximity to the bridge and the effects of the weight of the fill on the pier foundations.

*Figure 3.5.2 Cross Section Showing Fill adjacent to the Existing Bridge*

**THE IMPACT THE RISK WILL HAVE ON THE PROJECT** – The risk associated with placement of deep fills at the existing bridges will impact safety, schedule, and quality.
- Maintaining traffic on the existing bridge during placement of the fill presents a safety risk from the construction activity in close proximity to the bridge and the weight of the fill on the pier foundations.
- Schedule that incorporates settlement for the embankment (soft, possibly compressible soils) before pavement construction; and
- Quality of the embankment to obtain proper compaction and allow the necessary settlement periods.

**MITIGATION STRATEGIES THAT MAY BE IMPLEMENTED**
The mitigation strategies that may be implemented include:
- Protect the existing piers and bridge beams during construction and sequence construction to ensure global stability of the pier foundations during construction;
- Incorporate settlement into the project schedule; and
- Complete additional geotechnical investigation and monitor settlement.

**SEQUENCE OF CONSTRUCTION** – When construction of temporary pavement through the roundabout in the vicinity of the existing eastbound bridge is complete, westbound traffic will be shifted to the new road and the westbound bridge will be removed. Once the westbound bridge is removed, the westbound lanes of the roundabout will be constructed, traffic will be shifted to the proposed east and westbound lanes of the proposed design and the remainder of the roundabout features will be built.
Protection of the Bridge Piers and Beams – When placing fill for the shifted eastbound lanes, the piers and beams of the existing bridge will be protected to maintain structural integrity.

- To protect the existing piers, the fill placement will be evaluated by our Structural Engineering Lead, Keith Weakley, P.E. Potential considerations include:
  - Completing analysis of the eastbound bridge for initial construction;
  - Developing a sequence of fill placement that protects the existing pier foundations;
  - Evaluating the foundations for each stage of placement to ensure global stability;
  - Utilizing SOE to support the fill placed adjacent to the existing bridge; and
  - Placing a protective stone envelope around the existing piers during construction.

- To prevent damage to the existing beams during fill placement, a defined clearance will be maintained between construction equipment and the bridge.

Schedule – Where embankment fill heights are greater than 15 feet, consolidation tests will be conducted to evaluate the settlement characteristics of the subgrade soils and accurately estimate the magnitude and time rate of settlement. Surcharge or other settlement measures will be considered if necessary to meet schedule.

Quality – Additional geotechnical investigation will be completed to properly characterize the subsurface conditions and a settlement monitoring program will be implemented in high fill areas. This will determine the completion of fill settlement, which will potentially reduce the settlement waiting period as well as ensure the future performance of the pavement.

ROLE OF VDOT AND OTHER AGENCIES IN ADDRESSING THE RISK – VDOT’s geotechnical and materials engineers will be engaged in discussions with our geotechnical engineer in the early stages of design process to address all concerns and reach consensus on geotechnical recommendations. AI will incorporate the agreed upon means and methods into construction operation planning and notify VDOT if any challenges are encountered during construction.
Appendix 3.2.6
Affiliated/Subsidiary Companies
Offerors shall complete the table and include the addresses of affiliates or subsidiary companies as applicable. By completing this table, Offerors certify that all affiliated and subsidiary companies of the Offeror are listed.

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

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate</td>
<td>American Infrastructure, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>Myers Aviation Company, LLC</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>American Infrastructure-MD, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>Allan A. Myers, Inc.</td>
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</tr>
<tr>
<td>Affiliate</td>
<td>Allan A. Myers, Co.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>Allan A. Myers, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>American Infrastructure Investments, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>Devault Partners, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>Devault Crushed Stone Partners, Inc.</td>
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<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>AI Transport Co</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>Independence Construction Materials, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>ICM of Maryland, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>ICM of Pennsylvania, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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</table>
## Affiliated and Subsidiary Companies of the Offeror

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<tr>
<th>Affiliate</th>
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<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate</td>
<td>ICM of Delaware, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>D. M. Stoltzfus &amp; Son, Inc.</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Affiliate</td>
<td>Elk Mills Partners, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<td>Affiliate</td>
<td>Cedar Hill Quarry Partners, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>Talmage Partners, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>440 Twin Oaks Drive, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
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<tr>
<td>Affiliate</td>
<td>Jessup Asphalt Partners, LP</td>
<td>1805 Berks Road, P.O. Box 98, Worcester, PA 19490</td>
</tr>
<tr>
<td>Subsidiary</td>
<td>US 460 Mobility Partners, LLC</td>
<td>301 Concourse Blvd, Suite 300, Glen Allen, VA 23059</td>
</tr>
</tbody>
</table>
Appendix 3.2.7
Debarment Forms
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0095-106-122

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

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

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

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

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

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

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

Signature: [Signature] Date: 11/16/13 VP/GM: [Title]

American Infrastructure-VA, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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

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

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

Rinker Design Associates, P.C.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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

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

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

Signature __________________________ Date November 11, 2013

Antonio A. Mawry, PE, Partner
Title

Wallace, Montgomery & Associates, LLP
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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.

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

Signature       Nov. 14, 2013       Senior Vice President

Date           Title

Volkert, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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Signature 11/21/2013 President and CEO Date Title

DMY Engineering Consultants, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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Signature Date Title

Zannino Engineering, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-106-122

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Edward C. Dreher  11-20-13  SENIOR VICE PRESIDENT
Signature  Date  Title

SCHNAABEL ENGINEERING CONSULTANTS, INC.
Name of Firm
Appendix 3.2.8
VDOT Prequalification Evidence
A1065
AMERICAN DRAINAGE SYSTEMS, INC.
PREQ. EXP : 01/31/2014

--PREQ ADDRESS ------------------ WORK CLASSES (LISTED BUT NOT LIMITED TO)
6415 ROBINSON RD 173 - WICK DRAINS
WAXHAW, NC 28173-0000
PHONE : 704-843-5985
FAX : 704-843-1834

BUSINESS CONTACT: CASE, JOHN EDWARD
EMAIL: JCASE@WICKDRAINS.COM

------DBE INFORMATION------
DBE TYPE : N/A
DBE CONTACT: N/A

G303
AMERICAN INFRASTRUCTURE-VA, INC.
PREQ. EXP : 01/31/2014

--PREQ ADDRESS ------------------ WORK CLASSES (LISTED BUT NOT LIMITED TO)
301 CONCOURSE BLVD 002 - GRADING
SUITE 300 003 - MAJOR STRUCTURES
GLEN ALLEN, VA 23059 004 - ASPHALT CONCRETE PAVING
PHONE : 804-290-8500 007 - MINOR STRUCTURES
FAX : 804-418-7935 013 - ROADWAY MILLING
171 - SURFACE TREATMENT

BUSINESS CONTACT: THURSTON, GINA
EMAIL: GINA.THURSTON@AMERICANINFRASTRUCTURE.COM

------DBE INFORMATION------
DBE TYPE : N/A
DBE CONTACT: N/A
Appendix 3.2.9
Evidence of Obtaining Bonding
November 25, 2013

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

Re: American Infrastructure-VA, Inc.
Contract ID Number: C00085623DB74; Federal Project No.: NH-095-1(328); State Project No.: 0095-106-122 - I-95 at Temple Avenue Interchange Improvements From: 0.041 Mi. West of Hamilton Avenue To: 0.069 Miles East of Existing I-95 Ramp

To Whom It May Concern:

American Infrastructure-VA, Inc., a subsidiary of American Infrastructure, is a highly regarded and valued client of Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company. Fidelity and Deposit Company of Maryland is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Zurich American Insurance Company is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Arch Insurance Company is rated A+ XV in the Best's Key Rating Guide, listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) and licensed to transact business in the Commonwealth of Virginia. Fidelity and Deposit Company of Maryland, Zurich and Arch have expressed to them their willingness to provide bonding to support on individual projects in the amount of $250,000,000.00 and aggregate of $600,000,000.00. As surety for American Infrastructure-VA, Inc., Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch, with A.M. Best Financial Ratings as stated above, is capable of obtaining a 100% Performance Bond and a 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 on behalf of the Contractor, in the event that American Infrastructure-VA, Inc. be the successful bidder and enter into a contract for this project.

In accordance with the normal practice, the willingness of Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company to extend suretyship will be based on their underwriting of the account at the time the bonds are requested. This letter shall be valid for a period of 180 days from the date of this letter.

In addition, we would expect that the execution of any final bonds would be subject to a review of the contract documents by American Infrastructure-VA, Inc., Fidelity and Deposit Company of Maryland, Zurich American Insurance Company and Arch Insurance Company as well as satisfactory evidence of financing for the project.

If we can provide any further assistance, please do not hesitate to call upon us.

Sincerely,

Rosenberg & Parker, Inc.

[Signature]

Harry C. Rosenberg
Chairman

HCR/jfb

cc: Mr. John Souder, Fidelity and Deposit Company of Maryland and Zurich American Insurance Company and Mr. Joe Crawford, Arch Insurance Company

455 SOUTH GULF ROAD • SUITE 400 • KING OF PRUSSIA, PENNSYLVANIA 19406
p 610.668.9100 • p 800.394.9200 • f 610.667.5200
info@suretybond.com • suretybond.com
Appendix 3.2.10
SCC and DPOR
Registration Documentation
ATTACHMENT 3.2.10

State Project No. 0095-106-122

SCC and DPOR Information

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

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>SCC Information (3.2.10.1)</th>
<th>DPOR Information (3.2.10.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Infrastructure-VA, Inc</td>
<td>01137801</td>
<td>Corporation</td>
<td>Active</td>
<td>44209 Wade Dr Chantilly, VA 20152</td>
<td>Class A Contractor 2701009872 12-31-2014</td>
</tr>
<tr>
<td>Rinker Design Associates, P.C.</td>
<td>02270627</td>
<td>Corporation</td>
<td>Active</td>
<td>927 Maple Grove Dr Suite 105 Fredericksburg, VA 22407</td>
<td>ENG, LS 0410000156 02-28-2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9300 W Courthouse Rd Suite 300 Manassas, VA 22110</td>
<td>ENG, LS 0405000502 12-31-2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>301 Concourse Blvd Suite 120 Glen Allen, VA 23059</td>
<td>ENG 0410000220 02-28-2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9300 W Courthouse Rd Suite 300 Manassas, VA 22110</td>
<td>RE 4008 001684 02-28-2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>927 Maple Grove Dr Suite 105 Fredericksburg, VA 22407</td>
<td>RE 4008 001739 04-30-2014</td>
</tr>
<tr>
<td>Wallace, Montgomery &amp; Associates, LLP</td>
<td>K000734-6</td>
<td>LLP</td>
<td>Active</td>
<td>110 West Rd Suite 300 Towson, MD 21204</td>
<td>ENG 0407005814 12-31-2013</td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10
### State Project No. 0095-106-122
#### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual’s Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual’s DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volkert, Inc</td>
<td>William Douglas McDowall II</td>
<td>Alexandria, VA</td>
<td>2701 Frankie Lane Hopewell, VA 23860-7777</td>
<td>Professional Engineer</td>
<td>0402018236</td>
<td>10-31-2014</td>
</tr>
<tr>
<td>DMY Engineering Consultants, Inc.</td>
<td>Darell Lee Fischer</td>
<td>Glen Allen, VA</td>
<td>14101 Spring Gate Terrace Midlothian, VA 23112</td>
<td>Professional Engineer</td>
<td>0402023296</td>
<td>06-30-2014</td>
</tr>
<tr>
<td>Zannino Engineering, Inc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schnabel Engineering Consultants, Inc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
American Infrastructure-VA, Inc.

General

SCC ID: 01137801
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 10/6/1967
Status: Active
Shares Authorized: 100000

Principal Office

301 CONCOURSE BLVD
STE 300
GLEN ALLEN VA 23059

Registered Agent/Registered Office

CT CORPORATION SYSTEM
4701 COX ROAD, SUITE 285
GLEN ALLEN VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 10/4/2013

Select an action

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

Screen ID: e1000

Need additional information? Contact sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov

We provide external links throughout our site.
NUMBER: 270105872

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
"CLASSIFICATIONS" H/H

AMERICAN INFRASTRUCTURE VA INC
44209 WADE DRIVE
CHANTILLY, VA 20152

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
12-31-2014

ALTERATION OF THIS DOCUMENT IS FORFEITURE OF LICENSE UNDER THE CODE OF VIRGINIA.
Please note: The SCC website will be unavailable Thursday, November 21, from 6-10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.
CISA321  CIS  07/22/13
1  39  GP3220  GENERAL PARTNERSHIP DATA INQUIRY  14:26:15
   GP ID: K000734  - 6  STATUS: 50  LLP STATUS ONLY  STATUS DATE: 10/13/10
   GP NAME: Wallace, Montgomery & Associates, LLP

DATE OF FILING:  GP EXPIRATION DATE:  INDUSTRY CODE:
STATE OF FILING: MD MARYLAND  MERGER INDICATOR:
PRINCIPAL OFFICE ADDRESS
STREET: 110 WEST RD STE 300
CITY: TOWSON  STATE: MD  ZIP: 21204-0000
LLP EFF DTE: 10/13/2010  LLP CONT DTE: 05/28/2013  LLP EXP DTE: 07/01/2014
   LLP STATUS: Y
REGISTERED AGENT INFORMATION
R/A NAME: NATIONAL REGISTERED AGENTS INC
STREET: 4001 North Ninth Street, Suite 227
CITY: ARLINGTON  STATE: VA  ZIP: 22203-0000
R/A STATUS: 6 CORP/LLC/RLLP  R EFF DATE: 12/30/10  LOC: 106  ARLINGTON COUNTY

Date: 07-22-2013  Time: 14:26:07.71
Please note: The SCC website will be unavailable Thursday, November 21, from 6-10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
5950 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

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

WILLIAM DOUGLAS MCDOWALL II
2701 FRANKIE LN
HOPEWELL, VA 23866-7777

[Signature]
Director of Licensing

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Please note: The SCC website will be unavailable Thursday, November 21, from 6-10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.
Please note: The SCC website will be unavailable Thursday, November 21, from 6-10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

ZANNINO ENGINEERING, INC.

General
SCC ID: 04387064
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 12/22/1994
Status: Active
Shares Authorized: 5000

Principal Office
9915 GREENWOOD RD
GLEN ALLEN VA23060

Registered Agent/Registered Office
RICHARD F GONET
5211 W BROAD ST STE 100
RICHMOND VA 23230
HENRICO COUNTY 143
Status: Active
Effective Date: 1/29/2008

Screen ID: e1000
Need additional information? Contact sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov
We provide external links throughout our site. 
PDF (.pdf) Reader Excel (.xls) Viewer PowerPoint (.ppt) Viewer Word (.doc) Viewer
Build #: Y.7.2.0298.18

https://sccefile.scc.virginia.gov/Business/0438706

11/18/2013
Please note: The SCC website will be unavailable Thursday, November 21, from 6-10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

Schnabel Engineering Consultants, Inc.

**General**

- **SCC ID:** 07126741
- **Entity Type:** Corporation
- **Jurisdiction of Formation:** VA
- **Date of Formation/Registration:** 8/12/2009
- **Status:** Active
- **Shares Authorized:** 10000

**Principal Office**

- **1654 TECHNOLOGY PARK DR**
- **GLEN ALLEN VA 23059**

**Registered Agent/Registered Office**

- **CT CORPORATION SYSTEM**
- **4701 COX ROAD, SUITE 285**
- **GLEN ALLEN VA 23060**
- **HENRICO COUNTY 143**
- **Status:** Active
- **Effective Date:** 10/4/2013

Screen ID: e1000

Need additional information? Contact sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov

We provide external links throughout our site.
SCHNABEL ENGINEERING CONSULTANTS, INC
ONE CARY STREET
RICHMOND, VA 23220
Appendix 3.3.1
Key Personnel
Resumes
AT​TACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

### Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>JOHN HELLMAN, DESIGN-BUILD PROJECT MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>DESIGN-BUILD PROJECT MANAGER</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>AMERICAN INFRASTRUCTURE</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>1 Year with this Firm, 24 Years with other firms</td>
</tr>
</tbody>
</table>

- **American Infrastructure, Design-Build Project Manager; 2013 - Present:** Mr. Hellman is responsible for overall management of the design-build process, including managing the project design, construction quality, management, and contract administration. He manages all coordination with owners (including VDOT) and other stakeholders and is responsible for customer satisfaction. Mr. Hellman oversees project planning and scheduling work activities, submittals, pay estimates, and safety for all phases of construction. His responsibilities include overall management of the design and construction process, including all Quality Control (QC) activities to ensure the materials used and work performed meet contract requirements and the “approved for construction” plans and specifications.

- **Sundt Construction Inc., Area Manager; 2010 - 2012:** Mr. Hellman was responsible for the management of multiple $30+ million projects. He identified potential new work, developed relationships with Clients, Subcontractors, and Suppliers, and managed the estimating processes. When awarded a project, Mr. Hellman assured that the projects met their schedule requirements, the quality control programs were effective, and company requirements and were being adhered to. He assured all the work was being performed safely and within the budgets set forth.

- **Skanska USA Civil Southeast, Project Executive; 2002 - 2010:** Mr. Hellman was responsible for completing and managing multiple projects in the Atlanta area. Each Project completed either on-time or ahead of schedule with clients that were extremely satisfied with the projects and the execution thereof. During his time with Skanska Mr. Hellman also held the title of Operations Manager. As Operations Manager he assumed the responsibility of management and completion of existing projects and worked on developing a team culture in the Operations group that focused on safety, quality, schedule, budget, and company development.

- **ESI Inc., of Tennessee, Project Manager; 2001 - 2002:** Mr. Hellman managed a multi-million dollar design-build project in Myrtle Beach, SC. His duties included estimating, construction and delivery of this design-build project.

### SUMMARY OF RELEVANT EXPERIENCE

- 25 Years of Experience
- Resource Management
- Customer Satisfaction
- Design Oversight
- Stakeholder Coordination

| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: |
|--------------------------|-------------------------|
| Colorado State/Bachelor of Science in Construction Management/1988 |

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

<table>
<thead>
<tr>
<th>g. Document the extent and depth of your experience and qualifications relevant to the Project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Note your specific responsibilities and authorities for each assignment, not those of the firm.</strong></td>
</tr>
<tr>
<td>2. <strong>Note whether experience is with current firm or with other firm.</strong></td>
</tr>
<tr>
<td>3. <strong>Provide beginning and end dates for each assignment; projects shall have been completed within the past fifteen (15) years.</strong></td>
</tr>
</tbody>
</table>

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

*Projects listed, which were not completed within the past fifteen years, will not be considered for evaluation.

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

Appendix 3.3.1
Key Personnel Resumes
I-95 BRIDGE EXPANSION AND ROAD REHABILITATION AT TURTLE RIVER PROJECT, BRUNSWICK, GA ($198M)

1. Mr. Hellman was responsible for overall management of all construction activities including, construction quality control, contract administration, schedule development, safety, maintenance, and start up. He was responsible for assignment of personnel and changes to the project staff, as necessary. The I-95 Bridge Expansion and Road Rehabilitation project included widening the existing four-lane roadway and five bridges over two rivers. The scope of work included jacking an existing bridge over I-95, installation of a sound wall system, and stormwater management controls.

Relevance to the Project
- Roadway rehabilitation
- Contract administration
- Resource management

2. Skanska USA Civil Southeast; Project Manager/ Contract Administrator

SHANDS HOSPITAL TUNNEL DESIGN-BUILD PROJECT, GAINESVILLE, FL ($9.9M)

1. Mr. Hellman was responsible for overall management of all construction activities including construction quality control, contract administration, schedule development, safety, maintenance, and start up. This project constructed a tunnel between the existing Shands hospital and a new wing being built on the other side of Archer road. The excavation was over 30 feet deep next to an existing hospital that required continuous access. The project required management of all the storm water on-site and tie-in to existing storm sewer systems which was over 18 feet deep while maintaining access to the existing hospital.

Relevance to the Project
- Design-Build
- Design management
- Public relations
- Stakeholder coordination

2. Atlantic-Skanska, Inc.; Operations Manager

FLORIDA ROCK INDUSTRIES CEMENT PLANT DESIGN-BUILD PROJECT, NEWBERRY, FL ($100M)

1. Mr. Hellman managed the overall civil design for this project as the liaison for the joint venture engineering partnership and field project management staff from conceptual design to detailed construction drawings. He was also responsible for all concrete and structural steel work, management of subcontractors, development of the project schedule and monthly updates, and negotiating subcontractors. His responsibilities for the civil work on this project included construction quality control, material selection and procurement, subcontractor selection and management, and contract administration. The project designed and constructed a cement manufacturing plant. The scope of work included roadway and site development, heavy mechanical processes, and signal and controls.

Relevance to the Project
- Design-Build
- Design management
- Construction quality control

2. The Hardaway Co.; Project Engineer

VDOT MIDDLE GROUND BOULEVARD EXTENSION DESIGN-BUILD PROJECT, NEWPORT NEWS, VA ($39M)

1. Mr. Hellman assembled the construction team and worked with the design engineer and VDOT to ensure the project was designed and constructed in accordance with the contract and that all work adhered to the highest safety levels. Mr. Hellman was responsible for staffing the project and removing any “road blocks”, resolving any potential conflicts with the various stakeholders. The project extends Middle Ground Boulevard from its current termini at Route 143 approximately 1.2 miles to Route 60. The scope of work includes road widening, intersection improvements, construction of a bridge over CSXT Railroad, and utility coordination and relocation. Two major intersections were reworked and two others were modified. Access is being maintained to private and commercial properties during reconstruction of entrances through continuous coordination with the City, Hampton Road Sanitary District, and multiple utility companies. Completion is anticipated three months ahead of schedule.

Relevance to the Project
- VDOT D/B project with RDA
- Intersection modifications
- Geotechnical challenges
- Complex TMP/MOT
- Stakeholder coordination

2. American Infrastructure; Project Manager/ Contract Administrator

VDOT I-581/ELM AVENUE INTERCHANGE IMPROVEMENTS DESIGN-BUILD PROJECT, ROANOKE, VA ($20.4M)

1. Mr. Hellman assembled the construction team and worked with the design engineer and VDOT during the project start up. Mr. Hellman has facilitated design and constructability reviews to ensure adherence to the approved specifications; manage the project schedule, and uphold Al’s stringent safety requirements. He is responsible for managing compliance with the construction quality control program. The I-581/Elm Ave project scope includes widening of two bridges, roadway widening, reconstruction of four ramps, and an 84” jack and bore under the existing road. The complex traffic control required for this project includes phased construction in a high volume of traffic on the main interstate for the City, maintaining access to the regional hospital, and maintaining local access during construction.

Relevance to the Project
- VDOT D/B project with RDA
- Interchange improvements
- Phased construction
- Complex TMP/MOT
- Retaining wall construction

2. American Infrastructure; Project Manager/Contract Administrator
## ATACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>William McDowall, PE</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>Volkert, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 12 Years With Other Firms 21 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 the experience for those years you have worked.):</td>
<td></td>
</tr>
<tr>
<td>Volkert, Inc., Chief Construction Manager; 2002–2013:</td>
<td>Mr. McDowall is responsible for management of the construction engineering staff, contract management, quality control and field inspection/review. On projects where he serves as the Quality Assurance Manager, Mr. McDowall is responsible for management of construction inspection projects including the supervision of inspection personnel, QA activities including preparatory inspection meetings, and resolution of nonconformance issues to assure compliance with VDOT standards and client satisfaction.</td>
</tr>
<tr>
<td>VDOT, Asst. State Construction Engineer; 1996–2001:</td>
<td>Accountable for the delivery of a ~$650 million highway construction program involving 130 roadway and bridge construction projects in VDOT’s Northern Virginia, Fredericksburg, and Culpeper Districts. Duties included constructability reviews, claims avoidance and mitigation, Quality control/assurance peer reviews and mitigation of issues associated with project construction.</td>
</tr>
<tr>
<td>SUMMARY OF RELEVANT EXPERIENCE</td>
<td></td>
</tr>
<tr>
<td>▪ 33 Yrs of Specific Experience</td>
<td>▪ QA Services for 5 VDOT DB Projects</td>
</tr>
<tr>
<td>▪ Construction QC Oversight</td>
<td>▪ QA Services on 2 AI DB Projects</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
<td>North Carolina State University, Raleigh, NC/B.S./1980/Civil Engineering - Construction Management</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
<td>1988/Professional Engineer/Virginia #018236</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
<td>1. <strong>Note your specific responsibilities and authorities for each assignment, not those of the firm.</strong></td>
</tr>
<tr>
<td></td>
<td>2. <strong>Note whether experience is with current firm or with other firm.</strong></td>
</tr>
<tr>
<td></td>
<td>3. <strong>Provide beginning and end dates for each assignment; projects shall have been completed within the past fifteen (15) years.</strong>*</td>
</tr>
<tr>
<td><em>(List at least three (3), but no more than five (5) relevant projects</em>* for which you have performed a similar function.)*</td>
<td></td>
</tr>
<tr>
<td>*Projects listed, which were not completed within the past fifteen years, will not be considered for evaluation. <strong>On call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</strong></td>
<td></td>
</tr>
<tr>
<td>VDOT Route 60 over Route 288 Design-Build Project, Chesterfield County, VA, ($3.5M)</td>
<td></td>
</tr>
<tr>
<td>1. Mr. McDowall managed quality assurance to verify that construction of this bridge widening (from 3 to 4 lanes with a full shoulder) project complied with contract documents. The new bridge included a reinforced concrete deck; steel plate girders; elastomeric bearings; piers; end bents; MSE walls; and seismic design and included the 1,500-2,000 feet of roadway approaches. Mr. McDowall prepared QA test plans with testing types and frequencies. He managed inspection and testing personnel and conducted preparatory inspection meetings. Mr. McDowall oversaw materials testing including density, moisture, slump, and air content of concrete, concrete compressive strength testing, and used one-point proctors on soils. He addressed nonconformance issues regarding concrete quality and failed subgrades, reviewed the contractor’s recovery plan, monitored corrective actions, and maintained the nonconformance log. Mr. McDowall monitored schedule, budget, and compliance with work zone safety, environmental, and EEO/DBE regulations. He oversaw document control procedures and quality including the materials book, reviewed daily work reports, and submitted materials test reports, non-conformance reports, and progress reports to VDOT. Mr. McDowall developed a punchlist and conducted punchlist inspection. He was responsible for progress payment certification and conducted constructability reviews during design. <strong>Relevance to the Project</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

**Appendix 3.3.1**

**Key Personnel Resumes**

**Volkert; Quality Assurance Manager**
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Relevance to the Project</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDOT I-66 Pavement Rehabilitation Design-Build Project, Fairfax, VA, ($43M)</td>
<td>✓ QAM for VDOT D/B project  ✓ Interstate Construction  ✓ Urban Area  ✓ Complex MOT</td>
<td>December 2012 – Anticipated May 2014</td>
<td></td>
</tr>
<tr>
<td>VDOT Route 29 Bridge over Tye River Design-Build Project, Nelson County, VA, ($6.6M)</td>
<td>✓ VDOT Design-Build  ✓ AI project  ✓ Bridge Demolition</td>
<td>February 2011 – June 2013</td>
<td></td>
</tr>
<tr>
<td>VDOT Middle Ground Boulevard Extension Design-Build, Newport News, VA, ($39M)</td>
<td>✓ VDOT Design-Build  ✓ AI project  ✓ Complex MOT  ✓ Urban Area</td>
<td>August 2012– Anticipated September 2014</td>
<td></td>
</tr>
<tr>
<td>VDOT Replacement of Rte. 61 over the New River Design-Build Project, Narrows, VA, ($22M)</td>
<td>✓ VDOT Design-Build  ✓ Bridge Demolition  ✓ MSE &amp; Retaining Wall Construction</td>
<td>December 2012 – Anticipated May 2014</td>
<td></td>
</tr>
</tbody>
</table>

1. Mr. McDowall managed the quality assurance including preparation and implementation of the QA/QC plan and monitoring of compliance throughout design and construction. A key challenge was coordination of an effective but complex sequencing plan and TMP maintained high volumes of traffic on I-66. Mr. McDowall managed QA inspection, prepared the QA testing plan, reviewed and approved the QC testing plan, supervised QA testing, and prepared deficiency and nonconformance reports. He led preparatory and intermediate inspection meetings and prepared construction inspection checklists and coordinated with VDOT’s OA/OVST Inspectors. Mr. McDowall reviewed and approved non-conformance recovery plans, and monitored corrective actions.

2. Volkert; Quality Assurance Manager

3. February 2011 – June 2013

1. Mr. McDowall was responsible for the oversight of quality assurance services during the design and construction of a new, 2,112-foot long, 2-lane, prestressed concrete girder bridge to replace a structurally deficient steel-girder bridge on the northbound lanes of Route 29 and to raise the roadway profile to match the profile of the southbound bridge. The project included the reconstruction of roadway approaches. Mr. McDowall reviewed plans and the QA/QC plan, monitored schedule and budget, conducted quality checks of documents, provided technical guidance, evaluated performance of inspectors, and prepared invoices.

2. Volkert; Chief Construction Manager

3. February 2010 – December 2012

1. Mr. McDowall is responsible for the oversight of QA services to confirm compliance with VDOT’s design-build procedures and requirements and ensure satisfaction with QA management and performance. The project includes a new four-lane roadway, a bridge over the CSX Railroad, a turn lane and signal modifications, and traffic control installation. Mr. McDowall reviewed the QA/QC plan. He meets weekly with the QA manager and inspectors, monitors budgets and schedule, reviews documentation to confirm accuracy and completeness, and provides technical guidance. Mr. McDowall reviewed the piling for baring, length, and center of gravity and made recommendations for adjustments. He reviewed and verified QC on asphalt placement. He also reviewed the CPM schedule for completeness.

2. Volkert; Chief Construction Manager

3. August 2012– Anticipated September 2014

1. Mr. McDowall was responsible for the oversight of QA services for the $22 million construction of a new, 2-lane, prestressed-concrete beam, bulb-t bridge (1,131 feet in length) to replace a structurally deficient bridge. The project included the construction of 5,970 lf of MSE wall and 174 lf of other retaining wall, roadway approaches, storm drainage system, bike lanes, sidewalks, and utilities. Mr. McDowall reviewed the plans and the QA/QC plan, met regularly with the QA manager and inspector, monitored budget and schedule, evaluated and confirmed compliance of QA services with the VDOT Minimum Requirements for QA/QC on Design-Build and PPTA Projects and Volkert’s quality standards. Mr. McDowall reviewed documentation to confirm accuracy and completeness, verified VDOT’s and contractor’s satisfaction with Volkert’s services, and provided technical guidance regarding matters such as installation of drilled shafts and form work for bridge piers.

2. Volkert; Chief Construction Manager

3. December 2012– Anticipated May 2014
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>DARELL L. FISCHER, P.E., DBIA, PRINCIPAL/GENERAL MANAGER (RICHMOND OFFICE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>DESIGN MANAGER (DM)</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>RINKER DESIGN ASSOCIATES, P.C.</td>
</tr>
<tr>
<td>d. Years experience: With this Firm</td>
<td>6 Years With Other Firms</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 the experience for those years you have worked.):</td>
<td></td>
</tr>
<tr>
<td>RINKER DESIGN ASSOCIATES, P. C., GENERAL MANAGER/PRINCIPAL; 2011 – PRESENT:</td>
<td>Mr. Fischer is responsible for allocating, overseeing and managing all designs performed in the Richmond Office or by another office for a project managed by the Richmond Office including roadway design, hydrology/hydraulic analysis, traffic analysis and design, construction plan preparation, R/W acquisition, utility coordination/design, environmental permitting, and environmental compliance. His duties include QA/QC, oversight of all subconsultant work and coordination with clients to ensure their satisfaction and product quality. Mr. Fischer is responsible for staffing projects; hiring subconsultants; negotiating contracts with clients, contractors, and subconsultants; and project scheduling to ensure on-time/on-budget performance.</td>
</tr>
<tr>
<td>RINKER DESIGN ASSOCIATES, P. C., DIRECTOR OF TRANSPORTATION; 2007 - 2010:</td>
<td>Mr. Fischer was responsible for overseeing and managing all design elements associated with roadway design, hydrology/hydraulic analysis, traffic analysis and design, and construction plan preparation. His duties include Quality Assurance and Quality Control (QA/QC) for services provided out of the Fredericksburg Office, oversight of all subconsultant work and coordination with clients to ensure client satisfaction and product quality.</td>
</tr>
<tr>
<td>JOHNSON, MIRMIRAN &amp; THOMPSON, INC, VICE PRESIDENT/BRANCH MANAGER; 2000-2007:</td>
<td>Mr. Fischer was responsible for obtaining the work, executing the work and ensuring the quality of all work produced by the Richmond Office of JMT, oversight of all disciplines of work to include: roadway, drainage, structures, survey, construction inspection and environmental. He was responsible for contractual obligations with clients and subconsultants as well as project management on many key projects. Additional responsibilities for the daily office operations included: hiring, firing, raises, evaluations, dispute resolution, resource allocation, manpower projections and marketing.</td>
</tr>
<tr>
<td>CARTER &amp; BURGESS, INC., SENIOR PROJECT MANAGER; 1998-2000:</td>
<td>Mr. Fischer was responsible for the design and management of projects associated with roadway and H&amp;HA designs. His duties included daily coordination with design staff, coordination with subconsultants and coordination with clients. Mr. Fischer’s duties also included providing design changes during construction due to changed field conditions.</td>
</tr>
<tr>
<td>SUMMARY OF RELEVANT EXPERIENCE</td>
<td></td>
</tr>
<tr>
<td>n. 27 years of Transportation Design</td>
<td>DM on 5 D/B projects</td>
</tr>
<tr>
<td>20 years of Design Management</td>
<td>Registered licensed PE in VA</td>
</tr>
<tr>
<td>Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
<td>Virginia Polytechnic Institute and State University, Blacksburg, VA/BS/1986/Civil</td>
</tr>
<tr>
<td>Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
<td>1992/Professional Engineer/Virginia #023296</td>
</tr>
<tr>
<td>Document the extent and depth of your experience and qualifications relevant to the Project.</td>
<td></td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
<td></td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
<td></td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment; projects shall have been completed within the past fifteen (15) years.*</td>
<td></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>
<td></td>
</tr>
</tbody>
</table>

* Projects listed, which were not completed within the past fifteen years, will not be considered for evaluation. ** On call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
### VDOT I-581/ELM AVENUE INTERCHANGE IMPROVEMENTS DESIGN-BUILD PROJECT, ROANOKE, VA ($20.4M)

1. Mr. Fischer was responsible for design management and design QA/QC for complete construction plans. The project scope includes the development of roadway widening along Elm Avenue, on and off-ramps for I-581/Route 220 and shoulder improvement along I-581/Route 220 approach. Mr. Fischer’s project responsibilities include the design oversight for the roadway, TMP, utility coordination/design, bridge reconstruction/widening, and geotechnical analysis. He is responsible for coordinating with AI, VDOT, the City of Roanoke, and utility companies to ensure that the design requirements of the contract are being met and the design and associated services are expedited. The TMP on this project requires significant integration of the roadway and bridge designers as it encompasses both bridge widening and the adjacent roadway work. In order to accommodate adequate taper lengths, the project design reconstructs medians and roadway beyond the project limits to simplify the construction sequencing.

2. **Rinker Design Associates, P.C.; Design Manager**  
   - **August 2012 – Design Completed September 2013**

<table>
<thead>
<tr>
<th>Relevance to the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ VDOT D/B project with AI</td>
</tr>
<tr>
<td>✓ Interchange improvements</td>
</tr>
<tr>
<td>✓ Phased construction</td>
</tr>
<tr>
<td>✓ Complex TMP/MOT</td>
</tr>
<tr>
<td>✓ Retaining walls</td>
</tr>
</tbody>
</table>

### VDOT MIDDLE GROUND BOULEVARD EXTENSION DESIGN-BUILD, NEWPORT NEWS, VA ($39M)

1. Mr. Fischer is responsible for design management and design QA/QC for complete construction plans. The project scope includes the development of roadway design on new alignment and widening of highly congested, urban roadways. Additional scope of work includes utility coordination and design; TMP, E&S and environmental permitting; oversight of bridge design; and oversight of geotechnical analysis. The plans are being developed in work packages so that AI can initiate construction prior to final approval providing schedule flexibility. The TMP design along the congested roadways presented unique challenges to ensure driver and construction personnel safety. Collaboration with AI’s construction staff for the TMP design has included specific sequencing needs in the design to address means and methods of construction. Environmental permitting was accelerated and acquired in five months to begin construction ahead of schedule.

2. **Rinker Design Associates, P.C.; Design Manager**  
   - **June 2011 – Design Completed January 2013**

### VDOT ROUTE 36 IMPROVEMENTS DESIGN-BUILD PROJECT, PRINCE GEORGE COUNTY, VA ($8.2M)

1. Mr. Fischer was responsible for design management and design QA/QC for complete construction plans. The project scope included the road widening and new alignment roadways, drainage design, SWM, TMP, utility coordination/design, and environmental compliance. Mr. Fischer was responsible for coordinating with the contractor, VDOT and each utility company to ensure the design requirements of the contract were met and the schedule was expedited. Environmental compliance included reanalysis and testing of the potential for naturally occurring hazard materials and VOC’s, reevaluation of drainage outfalls, and creative solutions to mitigate both issues. Additionally, the TMP design required construction team coordination to implement an approach that worked with the means, methods and sequencing.

2. **Rinker Design Associates, P.C.; Design Manager**  
   - **November 2008 – December 2012**

### JAMES MADISON HIGHWAY (ROUTE 15) PPTA PROJECT, PRINCE WILLIAM COUNTY, VA ($56.4M)

1. Mr. Fischer was responsible for independent reviews of the plans and computations at each design schedule milestone. QC reviews included plan quality, content and constructability. Project responsibilities included development of TMP/MOT for approximately five miles of roadway widening. TMP/MOT design for this project was one of the first to follow the more stringent TMP requirements and was successfully implemented.

2. **Rinker Design Associates, P.C.; Quality Control Manager**  
   - **February 2007 – December 2009**

### VDOT STRINGFELLOW ROAD (ROUTE 645) WIDENING, FAIRFAX COUNTY, VA ($22.3M)

1. Mr. Fischer was responsible for the design of the Transportation Management Plan (TMP). The TMP design was complex in phasing for both traffic and pedestrian movements. Design responsibilities included temporary drainage to accommodate traffic phasing and assisting in public outreach/public involvement presentations and meetings.

2. **Rinker Design Associates, P.C.; Project Engineer**  
   - **October 2005 – December 2012**

<table>
<thead>
<tr>
<th>Relevance to the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ VDOT Design</td>
</tr>
<tr>
<td>✓ Complex TMP</td>
</tr>
<tr>
<td>✓ Phased Construction</td>
</tr>
<tr>
<td>✓ Stakeholder coordination</td>
</tr>
<tr>
<td>✓ Utility coordination</td>
</tr>
</tbody>
</table>

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**DM Resume**  
**Appendix 3.3.1**  
**Key Personnel Resumes**  
**Page 2 of 2**
## ATTACHMENT 3.3.1

**KEY PERSONNEL RESUME FORM**

### Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title: <strong>DAVID C. PASSMORE, CONSTRUCTION MANAGER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment: <strong>CONSTRUCTION MANAGER</strong></td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated: <strong>AMERICAN INFRASTRUCTURE</strong></td>
</tr>
<tr>
<td>d. Years experience: With this Firm - 5  Years With Other Firms - 13  Years</td>
</tr>
</tbody>
</table>

**AMERICAN INFRASTRUCTURE, CONSTRUCTION MANAGER; 2008–PRESENT**

Mr. Passmore oversees all construction activities to ensure project delivery that meets or exceeds all expectations of quality, timeliness, and budget. His responsibilities include managing the managing quality control, erosion and sediment control, the project schedule, planning and scheduling work activities, coordinating submittals, preparing pay estimates, and estimating and negotiating changes to the scope of work. Mr. Passmore is also responsible for coordination with the owner, design consultants, private utility owners, and the public and other stakeholders for his projects. His expertise includes bridge construction, utility coordination, and maintenance of traffic in congested areas. Mr. Passmore’s experience constructing projects with multiple stakeholders includes VDOT’s B26 Hampton Boulevard Project which involved VDOT, the Navy, Virginia Port Authority, the city of Norfolk, and Norfolk Southern Railroad.

**CD HALL CONSTRUCTION, INC., SENIOR PM/LEAD ESTIMATOR; 2006–2008**

Mr. Passmore was the Senior Project Manager and Lead Estimator for CD Hall Construction Inc., a civil/utility contractor in Central Virginia. He was directly responsible for all aspects of construction operations including quality control, the development and establishment of management systems, supervision of projects in process, specifically road construction and deep sewer projects. Mr. Passmore was the Project Manager on the Bow Tie Cinema project located in downtown Richmond that included 10 acres of parking and streetscape. The project was notable for the massive amount of unknown utilities, contaminated soil, and unknown obstructions that the new utilities had to be placed through. Mr. Passmore also led a new road project that included 3000 lf of 35’ deep 21” sanitary sewer with rock blasting.

**VRANA CONSTRUCTION COMPANY, INC., SENIOR PM; 1998–2006**

As Senior Project Manager for the heavy civil division of Vrana Construction, a leader in heavy civil construction in the Mid-West, Mr. Passmore was responsible for numerous roadway bridge projects. Mr. Passmore had complete fiscal responsibility for every aspect of the projects, including signing authority for all change orders, force accounts, negotiated subcontractor work order and value engineered proposals. He partnered with the Nebraska Department of Transportation, the City of Omaha, Douglas County Public Works, and multiple private agencies. Contract negotiations on the projects with the teamsters, operators, carpenters and labor unions were also part of his tasks. Safety was a strong point of Vrana Construction and Mr. Passmore developed and instituted numerous new safety initiatives’. Mr. Passmore’s projects ranged from roadway widening to multiple bridge interstate cloverleaf projects.

### SUMMARY OF RELEVANT EXPERIENCE

- 18 yrs of experience
- VDOT D/B experience
- 14 transportation projects
- Interchange construction
- ESCCC Certified
- Complex MOT

<table>
<thead>
<tr>
<th>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Citadel - The Military College of South Carolina, Charleston, South Carolina/BS/1994/Civil Engineering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erosion and Sediment Control Contractor Certification/ #4973C</td>
</tr>
<tr>
<td>DEQ Responsible Land Disturber certification will be obtained prior to commencement of construction.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g. Document the extent and depth of your experience and qualifications relevant to the Project.</th>
</tr>
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<tbody>
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<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; projects shall have been completed within the past fifteen (15) years.*</td>
</tr>
</tbody>
</table>

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

* Projects listed, which were not completed within the past fifteen years, will not be considered for evaluation.

** On call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
1. This project widened I-680 interstate, constructed a cloverleaf interchange, and a bridge over Sprague Street that was offsite but connected to the project. Mr. Passmore oversaw construction activities that included 2 bridges, both of which were 250’ long x 138’ wide; 16,000 lf of pipe pile; and 26 girders. The project consisted of 190,000 SY of doweled concrete interstate paving; 190,000 SY of stabilized fly ash subgrade; 240,000 CY of excavation; 71,500 SY of crushed concrete; and 60,000 LF of concrete protection barrier. Because of the nature of the project, Mr. Passmore coordinated numerous independent utility contractors. Weekly meetings held between the utility contractors, the State, Power Company, and the City of Omaha for the total relocation of high tension wire structure and many underground utilities resulted in a “non-delay” outcome. With 6-lanes of traffic, a $500 per lane per minute penalty was implemented for any lane restriction after the specified time limit. Under Mr. Passmore’s oversight, all traffic switches, shutdowns, and lane closures were designed and implemented without penalty.


HIGHWAY 31, “Q” STREET TO DODGE STREET, US 6/ US 275 INTERCHANGE, OMAHA, NE ($18M)

1. Mr. Passmore was responsible for overall construction activities, construction quality management, and contract administration required for the completion of the $18M project. Specific construction activities included 2 bridges, 85 M long by 37 M wide; 1,055 M of concrete piling; 1,600M of H piling; 168,000 SQM of doweled concrete pavement; 44,000 Mg of asphalt surfacing; 5 box culverts; and 1,680,000 CUM of excavation. The project consisted of a new interchange and surrounding interstates. The project had 10 phases and Mr. Passmore was responsible for significant MOT operations on the site because of the traffic switches. He oversaw daily lane closures and traffic shifts as necessary to accommodate the phased sequencing of construction.


72ND STREET, PHASE I AND II, CITY OF OMAHA/NEBRASKA DEPARTMENT OF ROADS, OMAHA, NE ($16M)

1. Mr. Passmore was responsible for overall construction activities, construction quality management, and contract administration required for this project. The project was the renovation of the highest traffic volume street in mid town Omaha. Specific project details are 104,000 SQM of concrete paving; 120,000 SQM of subgrade preparation; and the renovation of an existing single span bridge. Due to the project location in the center of the business district, Mr. Passmore developed numerous ways to accommodate traffic flow while keeping access to each business open. As a result of the project Mr. Passmore was selected to be put on the City of Omaha’s engineer/contractor evaluation team.

2. Vrana Construction; Construction Manager 3. 2001 – 2002

VDOT MIDDLE GROUND BOULEVARD EXTENSION DESIGN-BUILD PROJECT, NEWPORT NEWS, VA ($39M)

1. Mr. Passmore is responsible for overall construction activities, construction quality control management, and contract administration for construction of this project. The project extends Middle Ground Boulevard from its current termini at Route 143 approximately 1.2 miles to Route 60. The scope of work includes road widening, intersection improvements, construction of a bridge over CSXT Railroad, and utility coordination and relocations. Access is being maintained to private and commercial properties during reconstruction of entrances through continuous coordination. Completion is anticipated three months ahead of schedule.


VDOT B26 HAMPTON BOULEVARD GRADE SEPARATION PROJECT, NORFOLK, VA ($50M)

1. Mr. Passmore is responsible for overall construction activities, construction quality control management, and contract administration required for the completion of this project. Infrastructure improvements require coordination with the City of Norfolk, Norfolk Southern/Portsmouth Beltline Railroads, the Virginia Port Authority, and the Navy. This seven-tenth of a mile improvement will provide six lanes for through traffic and a 13-foot median for left turn lanes as needed. The project includes excavating the existing Hampton Boulevard 35 feet below existing grade and constructing a new underpass retaining wall. Two new at-grade bridges streamline flow of rail and pedestrian traffic across Hampton Boulevard.

Appendix 3.4.1
Work History Forms
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. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement. (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDDLE GROUND BOULEVARD EXTENSION</td>
<td>Rinker Design Associated, P.C.</td>
<td>Name of Client / Owner: VDOT Phone: 757-253-5367 Project Manager: Thomas Druhot Phone: 757-592-6068 Email: <a href="mailto:Thomas.Druhot@VDOT.virginia.gov">Thomas.Druhot@VDOT.virginia.gov</a></td>
<td>12/2014</td>
<td>10/2014 (Estimated)</td>
<td>$32,653</td>
<td>$39,000</td>
</tr>
</tbody>
</table>

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

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Quality improvements to the design that reduce future maintenance include using concrete girders in place of structural steel and changing the bridge structure from three-span to two-span.
- Accelerated design and early utility relocations have maintained the original project completion date with additional scope of work.
- Traffic impacts to the public were minimized by utilizing soil stabilization for unsuitable soils in lieu of waste which would have created additional truck traffic.

PROJECT DESCRIPTION - This project extends Middle Ground Boulevard from its current termini at Route 143 (Jefferson Avenue) approximately 1.2 miles to Route 60. AI is responsible for overall design and construction including 1.2 miles of primarily new mainline four-lane divided highway, and widening of Jefferson Avenue and Warwick Boulevard to provide turn lanes to the new roadway, and intersection improvements. Additional scope of work includes a bridge over CSXT Railroad; utility coordination and relocations, installation of a mainline shared-use path, and ROW acquisition of 72 parcels with 56 relocations required.

Following award of the project, AI worked with the City of Newport News and Hampton Roads Sanitation District (HRSD) to add a betterment to the project that provides the City of Newport News with a system that will accommodate future growth in the area. Early coordination of this additional work, as well as early utility locations required, has allowed the AI Team to maintain the original project completion date.

Access was maintained to private and commercial properties during reconstruction of entrances through continuous coordination and strong public communications. Pedestrian access is being maintained at the work sites at Jefferson Avenue, Nat Turner Boulevard, Nettles Drive, and Warwick Boulevard. The AI Team developed an alternative TMP which implemented a short detour to keep two lanes of traffic open and eliminate the use of flagmen in three locations. This change has minimized safety risks and kept traffic moving.

LESSONS LEARNED FOR THE PROJECT

- Maintenance of Traffic – A detailed, project-specific community relations plan was developed to communicate with the traveling public and local stakeholders throughout design and construction of the project. AI created an organized task force made up of key players from the design and construction teams and project stakeholders.
- Geotechnical Challenges – Settlement time for bridge foundations was expected to take 6 months due to soft soils. Following geotechnical recommendations to increase the amount of surcharge decreased the settlement time to 3 months on the East side and 5 months of the West side of the bridge.
- Partnering with Stakeholders – Formal partnering with VDOT, the City of Newport News, and other affected stakeholders has allowed the team to quickly identify and resolve potential issues. In addition to VDOT oversight, the City is inspecting and granting approvals on traffic controls, the pump station, and water and sewer facilities. Partnering with the City has enabled the addition of HRSD betterments without extending the project schedule.
- Utility Coordination – Utilities affected by this project include Dominion Virginia Power, Newport News Water Works, HRSD, Virginia Natural Gas, City lighting, Cox Communications, Level 3 Communications, and Verizon fiber optic and copper wire telephone. Early coordination with utility owners has allowed AI to eliminate impacts to AT&T, Newport News Public Schools, and Sprint, and to minimize impacts to other affected utilities.

*For multiple phase projects, only a single phase of construction (or single contract) will be considered as a Project. If additional phases are shown under the same Work History Form, only the first phase (or contract) listed will be evaluated.
# LEAD CONTRACTOR - WORK HISTORY FORM

## LIMIT 1 PAGE PER PROJECT

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SAINTSBURY DRIVE AND VIENNA METRO IMPROVEMENTS</strong></td>
<td><strong>Name:</strong> Wendel Duchscherer Architects and Engineers</td>
<td><strong>Name of Client/Owner:</strong> Pulte Homes Corporation</td>
<td>11/2012</td>
<td>02/2013</td>
<td>02/2013</td>
<td>02/2013</td>
</tr>
<tr>
<td><strong>Location:</strong> Fairfax County, VA</td>
<td><strong>Phone:</strong> 703-359-7495</td>
<td><strong>Project Manager:</strong> Jeffrey Oetjen, PE</td>
<td><strong>Phone:</strong> 703-801-5848</td>
<td><strong>Original Contract Value:</strong> $15,933</td>
<td><strong>Final or Estimated Contract Value:</strong> $19,200</td>
<td><strong>Additional scope of work requested by the owner:</strong> $19,200</td>
</tr>
<tr>
<td><strong>Email:</strong> <a href="mailto:jeff.edelman@pulte.com">jeff.edelman@pulte.com</a></td>
<td><strong>Phone:</strong> 703-359-7495</td>
<td><strong>Email:</strong> <a href="mailto:jeff.edelman@pulte.com">jeff.edelman@pulte.com</a></td>
<td>02/2013</td>
<td><strong>Change due to design change orders for critical path items:</strong></td>
<td>02/2013</td>
<td>02/2013</td>
</tr>
</tbody>
</table>

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- There were zero recordable traffic incidents within the work zone.
- Construction was completed within budget and on schedule including the additional scope of work added by the owner.
- AI was given a rating of outstanding for the quality of communication, safety, and quality of construction on the project completion customer survey.

**PROJECT DESCRIPTION**

The Saintsbury Drive project consisted of the reconstruction of 0.8 miles of Saintsbury Drive and the Vienna Metro Station for the Washington Metropolitan Area Transit Authority (WMATA). It required 33 phases of construction to maintain traffic and accommodate the daily continuous flow of pedestrian and vehicular traffic. The scope of work included constructing 2 retaining walls; 2 roundabouts; 30,500 SY of demolition; 259,000 CY of mass excavation; 10,300 LF of utility installation and relocation; 24,000 SY of heavy duty concrete; and 20,255 SY of asphalt paving.

Construction activities included demolition of existing roadway and utilities, earthwork, E&S control, installation of new utilities, curb & gutter, sidewalks, roadway widening, paving, signage, striping, and erecting a canopy. This project is complex due to the many MOT changes, aggressive one-year construction schedule, and extensive coordination with the metro station and numerous subcontractors.

**LESSONS LEARNED FOR THE PROJECT**

- **Public Safety** – A MOT plan that reflects construction means and methods is important. AI redesigned the MOT plan to include jersey barrier walls with fencing on top to completely isolate each work zone from pedestrian and vehicular traffic. The fencing provided a 6 foot tall barrier.
- **Public Awareness** – Informing the public before any shift in the MOT was key to having zero recordable traffic incidents within the work zone. AI put out message boards 3 days prior to any shift in the MOT and had flaggers out the first day of the shift.
- **Phased Construction** – The roundabouts were each constructed in 6 different phases during non-peak traffic times to minimize disruptions for the public.
- **Stakeholder Coordination** – Daily coordination with the engineer, designer, owner, and WMATA allowed for quick resolution of any issue that arose and helped progress the project schedule without delay.

“Throughout the project the AI Team worked flawlessly and seamlessly with me and my team, were professional, patient, considerate and efficient. The entire AI Team took the time, in the beginning and throughout, to understand my constraints and requirements, and were always mindful of them, allowing them to be a primary consideration in the way the project progressed.” – Jeff Edelman, Pulte Homes

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## 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. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond Airport Connector Road</td>
<td>Dewberry</td>
<td>Transurban</td>
<td>05/2011</td>
<td>03/2011</td>
<td>$38,523</td>
<td>$39,446</td>
</tr>
</tbody>
</table>

### Name: Richmond Airport Connector Road
### Location: Henrico County, VA
### Relevance to the Project
- Design-Build
- Interchange construction
- Ramp construction
- Intersection modifications
- Retaining wall construction
- Geotechnical challenges

**Project Staff**
- Fran Parcell (Superintendent)

---

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---

*“Richmond Airport Connector experienced its fair share of the inevitable issues that will arise during the life of a project. What set this project apart from others was the manner in which the issues were addressed. The team managed to separate the issues from ongoing efforts in a manner that allowed the project to continue making progress while the issue received the necessary focus.”* – Richard Prezioso (Recommendation letter for DBIA award)
<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/ general contractor responsible for overall construction of the project.</th>
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<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement. (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-581 Elm Avenue Interchange Improvements</td>
<td>American Infrastructure</td>
<td>Virginia Department of Transportation</td>
<td>06/2015</td>
<td>06/2015</td>
<td>$20,400</td>
<td>$20,400</td>
</tr>
<tr>
<td>Location: City of Roanoke, Virginia</td>
<td>Name: American Infrastructure</td>
<td>Phone: 504-378-5038</td>
<td>Project Manager: Robert Phlegar</td>
<td>Phone: 504-378-5038</td>
<td>Email: <a href="mailto:r.phlegar@vdot.virignia.gov">r.phlegar@vdot.virignia.gov</a></td>
<td></td>
</tr>
</tbody>
</table>

**Verifiable Evidence of Good Performance**

- The plans were approved within 10 months after NTP.
- There were a limited number of review comments.

**Project Description - RDA performed the design services on this project as the Prime Designer out of their Glen Allen Office.** The project consists of four-lane divided highway, urban minor arterial typical section (GS-6) with curb and gutter, and raised median (1,200 linear feet); six-lane divided highway, freeway/other principal arterial (GS-5), and median barrier.

- The project scope was complete roadway and bridge design and construction for 0.3 miles of widening and reconstruction on Elm Avenue to include the replacement of two bridges (one over I-581 and the other over the Norfolk Southern Railroad). The project also includes reconstruction of all four ramps to provide additional capacity and improve traffic flow. Finally, the project includes guardrail replacement along I-581 to current standards along with the replacement of a 60-inch pipe crossing with an 84-inch pipe which was originally designed using micro-tunneling technology.

As the Lead Designer for the I-581/Elm Avenue project, RDA is responsible for the following critical project elements:

- **Roadway Design** — Includes typical section development, horizontal and vertical geometry, TMP/MOT Plans, signage (including major overhead signing), pavement marking, and signalization plans;
- **Drainage Design** — Roadway drainage, erosion/sediment control, and major drainage (box culverts & 84” culvert design) requiring detailed analysis;
- **Environmental Support** — Avoidance strategies and permit sketches/drawings preparation for impacted areas;
- **Right of Way Acquisition** — Responsible for right of way and easement acquisition from 5 affected parcels;
- **Utility Relocation Coordination** — Responsible for holding UFI meeting, developing easement requirements, evaluating UT-9 forms to determine cost responsibility, reviewing utility plan and estimates, and monitoring the relocation of utilities including the relocation of Norfolk Southern’s signal line;
- **Subconsultant Management** — Activities performed by subconsultants reporting to RDA include geotechnical, bridge design, surveying, and underground utility designation and location.

**Lessons Learned for the Project**

- Communication — Communication and early and often involvement of the City of Roanoke and FHWA was important to address issues uniquely affecting each of them.
- Quality Control — With as many “moving parts” as there are in a very confined interchange, the need to maintain and excel at quality control was critical to ensure that each piece and part correlates to the next and is accurate.
- TMP — A critical component of TMP is flexibility. Analyzing each phase of the MOT allows the designer to alter the sequencing in order to develop a better functioning workzone. However, observing the construction phasing in the field and applying those results back to the “working model” is the ultimate lesson learned.

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**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong>: ROUTE 36 IMPROVEMENTS</td>
<td>Name: Abernathy Construction Corporation</td>
<td>Name of Client: Virginia Department of Transportation</td>
<td>12/2012</td>
<td>12/2012</td>
<td>$8,225</td>
<td>$1,469</td>
</tr>
<tr>
<td><strong>Location</strong>: City of Hopewell and Prince George County, Virginia</td>
<td>Phone: 804-862-6450</td>
<td>Project Manager: R. Shane Mann</td>
<td>Phone: 804-862-6450</td>
<td>Email: <a href="mailto:shane.mann@vdot.virignia.gov">shane.mann@vdot.virignia.gov</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- Value-added designs were performed to reduce the project cost.
- Designer and contractor addressed RFI's together to implement simple, cost effective modifications.

**PROJECT DESCRIPTION - RDA performed the design services on this project as the Prime Designer out of their Fredericksburg and Glen Allen offices.** RDA provided engineering design services, right-of-way acquisition services, environmental permitting, and construction engineering/inspection services for this project. The project scope consisted of roadway widening construction for approximately 1 mile of Route 36 and 0.5 miles of Route 144, 0.2 miles of new roadway connection from Route 144 to Route 36, and 0.2 miles of widening to Sisisky Boulevard (Fort Lee entrance). Project limits are from 0.25 miles west of Sisisky Boulevard to 0.3 miles west of I-295 along Route 36 and from Route 36 to 0.5 miles west on Route 144. Access onto and off of Route 144 was designed to interchange ramp standards to facilitate higher speed access. The project was performed as a Design-Build project utilizing ARRA funds.

As the Lead Designer for the Route 36 Improvements Design-Build project, RDA was responsible for the following project elements:

- **Coordination** — Coordination with VDOT, the City of Hopewell, Prince George County, and the US Army/Fort Lee Military Base.
- **Roadway Design** — Included typical section development, horizontal and vertical geometry, TMP/MOT, signage and marking, signalization plans, and lighting plans.
- **Drainage Design** — Included roadway drainage, cross drainage (culvert design), erosion/sediment control plans, and storm water management (quantitative and qualitative.)
- **Environmental Permitting** — Responsible for all wetland (permanent and temporary) impacts, stream impacts, and hazardous materials/VOCs.
- **Right of Way Acquisition** — Responsible for right of way and easement acquisition from 12 affected parcels.
- **Utility Relocation Coordination** — Responsible for holding a UFI meeting, developing easement requirements, evaluating UT-9 forms to determine cost responsibility, reviewing utility plan and estimates, and monitoring the relocation of affected utilities.
- **Subconsultant Management** — Subconsultants reporting to RDA performed geotechnical services, traffic signal design, and underground utility designation and location.

**LESSONS LEARNED FOR THE PROJECT**

- **Coordination** — Coordination between RDA, Abernathy Construction, and our subconsultants was critical to ensure constructability, feasibility, and cost effectiveness. Continual sharing of data was crucial to ensure accuracy of the design plans with several different consultants having varying roles.
- **Quality Control** — QA/QC proved to be invaluable. As subconsultant work progressed, RDA’s independent QA/QC process ensured that the designs were accurate and met all applicable VDOT standards.
- **TMP** — Foresight and early coordination of TMP efforts ensured utility relocations were established outside of the footprint necessary for MOT staging.

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ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

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</tr>
</thead>
<tbody>
<tr>
<td>Location: Fairfax County, VA</td>
<td>Name: Fort Meyer Construction Corporation</td>
<td>Name of Client: VDOT NOVA District</td>
<td>Phone: (703) 259-1794</td>
<td>Project Manager: Mr. Zamir Mirza</td>
<td>Phone: (703) 259-1794</td>
<td>Email: <a href="mailto:Zamir.Mirza@vdot.virgnia.gov">Zamir.Mirza@vdot.virgnia.gov</a></td>
</tr>
</tbody>
</table>

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- RDA received high marks on the Consultant Performance Reports (3.76 to 4.0).
- Design revisions saved millions by avoiding a large water main and large fuel lines.
- RDA was hired by the Fairfax County to redesign several park parking areas to avoid project impacts.

PROJECT DESCRIPTION - RDA performed the design services on this project as the Prime Designer out of their Manassas Office. RDA prepared the right of way and construction plans for this 2.02-mile project to include all roadway, traffic, lighting, structural, and construction coordination and support. The project consists of widening the existing two-lane roadway to a four-lane divided roadway with on-road bicycle lanes, sidewalks, and trails. The project passes through a densely-populated residential corridor with several public facilities including a library, schools, parks, and several stream crossings. In addition, the corridor has major utilities including a newly installed 24-inch water main, several large aviation fuel lines serving Dulles International Airport’s fuel service, as well as numerous other overhead and underground utilities. Roadway design required various avoidance strategies regarding utilities, parks, and schools.

As a result, the proposed alignment crossed the existing alignment several times thereby complicating the Traffic Management Plan (TMP). In addition to the alignment challenges, the TMP also provides for pedestrian access during construction to facilitate the movement of the pedestrian receptors (i.e. schools, ballfields, library, etc.). RDA prepared and participated in frequent meetings with VDOT, Fairfax County, the public, and other stakeholders which helped create a partnering atmosphere focused on resolving challenges. Finally, RDA assisted VDOT with the relocation of underground and above-ground utilities by developing detailed utility relocation information plans depicting as-built information for each relocated utility in plan view, profile view, and on cross sections.

“Rinker (RDA) staff has been very cooperative in addressing the needs/requirements of the Department,” “RDA has worked very well with other agencies particularly Fairfax County” and “exceeded expectations on many tasks.” and “RDA staff work diligently to prosecute the work thoroughly and efficiently” – Zamir Mirza, NOVA

LESSONS LEARNED FOR THE PROJECT

- TMP – When developing a new roadway that transitions across pieces of existing roadway, MOT and TMP must be incorporated into the initial design to ensure that the design can be built with minimum disruption to the existing traffic.
- Stakeholders – In a developed corridor, stakeholders are varied and vocal. As designers, we must not only hear but also listen to community concerns in order to fully understand the project and provide a context sensitive design that addresses stakeholder’s needs.
- Utility Avoidance – The best way to mitigate utility impacts is to avoid them. The second best way is to minimize their impacts. Early coordination and strong working relationships help coordinate impacts that are unavoidable.

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