



Statement of Qualifications

A DESIGN-BUILD PROJECT

Route 606 Loudoun County Parkway/Old Ox Road Reconstruction and Widening

From: Route 621 Evergreen Mills Road

To: Route 267 Dulles Greenway

Loudoun County, Virginia

State Project No.: 0606-053-983

Federal Project No.: STP-5A01(165)

Contract ID No.: C00097529DB64

Date: August 27, 2013



Attachment 3.1.2

SOQ Checklist

ATTACHMENT 3.1.2

Project: 0606-053-983, P101

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Pages i-iii
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Page iv
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 2
Offeror's point of contact information	NA	Section 3.2.2	yes	Page 2
Principal officer information	NA	Section 3.2.3	yes	Page 2
Offeror's Corporate Structure	NA	Section 3.2.4	yes	Page 2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix 3.2.6
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix 3.2.7
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendix 3.2.8
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendix 3.2.9

ATTACHMENT 3.1.2

Project: 0606-053-983, P101

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appendix 3.2.10
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix 3.2.10
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix 3.2.10
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix 3.2.10
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix 3.2.10
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Pages 3-4
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix 3.3.1
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix 3.3.1

ATTACHMENT 3.1.2

Project: 0606-053-983, P101

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Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix 3.3.1
Key Personnel Resume – Lead Geotechnical Engineer	Attachment 3.3.1	Section 3.3.1.5	no	Appendix 3.3.1
Key Personnel Resume – Dam Design and Construction Specialist (optional)	Attachment 3.3.1	Section 3.3.1.6	no	Appendix 3.3.1
Organizational chart	NA	Section 3.3.2	yes	Page 5
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 6-8
Experience of Offeror’s Team				Pages 9-10
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix 3.4.1
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix 3.4.1
Dam Construction Work History Form	Attachment 3.4.1(c)	Section 3.4	no	Appendix 3.4.1
Dam Design Work History Form	Attachment 3.4.1(d)	Section 3.4	no	Appendix 3.4.1
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 11-15

Attachment 2.10

Form C-78-RFP



ATTACHMENT 2.10**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00097529DB64
 PROJECT NO.: 0606-053-983, P101

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 07/12/2013
(Date)
2. Cover letter of RFQ Addendum No. 1 08/09/2013
(Date)
3. Cover letter of _____
(Date)



 SIGNATURE

8/26/13

 DATE

3.2 Letter of Submittal



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August 27, 2013

John Daoulas, P.E.
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Letter of Submittal/Statement of Qualifications:
Route 606 Loudoun County Parkway/Old Ox Road
Reconstruction and Widening
Contract ID Number: C00097529DB64

Dear Mr. John Daoulas:

The team of American Infrastructure and Rummel, Klepper, & Kahl (AI/RK&K Team) has a substantial history of working together on many projects throughout the Mid Atlantic region. Those projects include both transportation and water/waste water projects using a design-bid-build delivery method. Inherently, this delivery system creates adversarial relationships between the designer and constructor. We are proud to say that our firms have overcome this challenge to form a strong mutual respect for each other. Our firms have significant experience in large-scale transportation projects, roadway reconstruction and widening projects, airport and dam construction.

There are many challenges and risks associated with the Route 606 Project. In the following narrative, our team will identify and suggest strategies to mitigate these risks. One of the greatest challenges is having a transportation project with another significant element, improvements to a high hazard dam that is in the flight path of a major international airport and adjacent to a residential neighborhood. The classification, “High Hazard Dam” identifies the significance of this dam and, in the opinion of our team; the dam is potentially the greatest risk on this Project. We must also construct the project while maintaining the unrestricted flow of both vehicular and air traffic.

Throughout American Infrastructure, we have field professionals who have constructed highways, bridges, dams and have experience in active runway construction. American Infrastructure’s Virginia operating unit, AI-VA, is supported by the experience of its affiliated companies and shares personnel and equipment resources company-wide. To mitigate all of the risks associated with the Route 606 Project, we have selected the most qualified professionals throughout our organization to serve as key construction personnel. These individuals will be supported by our local Virginia staff and their experience on VDOT transportation projects. In addition to AI and RK&K, our team has assembled industry leaders to fill additional key roles necessary to successfully investigate and design not only the dam, but also the roadway and structures to specific geological conditions.

Safety during construction is paramount not only for our field personnel, but also the traveling public that will continue to use Route 606 while construction is being executed. Every field operation is diligently planned and critiqued to ensure safe construction for both our workers and the public. It is incumbent on the AI/RK&K Team to keep the public informed throughout the field construction activities that will impact their daily lives. These informative initiatives must be announced well in advance of each occurrence to prepare the public for changes in traffic patterns. Prior to any announcements, the AI/RK&K Team leadership will confer with VDOT to have our plans reviewed prior to implementation. We are cognizant of the fact that a dissatisfied public does not routinely call the contractor, they call the local VDOT district office express any displeasure. Our inclusion strategies will minimize this impact.

3.3 Team Structure



The AI/RK&K Team provides VDOT with a full service design-build team for the Route 606 Project. Based on our previous work history with Gannett Fleming on high hazard dams, they have joined our team to support this aspect of the Project. Key personnel selected from our collective organizations provide specific experience with roadway reconstruction and widening projects and high hazard dams. **We have chosen to supplement the prescribed key personnel with three dam experts; one for each design, construction, and inspection.** The focus of these individuals on the dam design and construction will provide the necessary expertise to alleviate the risk related to this aspect of Project.

3.3.1 KEY PERSONNEL

3.3.1.1 Design-Build Project Manager (DBPM): AI has identified *Kevin Ott* as DBPM for the Project and the primary point of contact for VDOT. He will be responsible for the execution of the work under the contract including corresponding with third parties and project stakeholders, oversight of construction quality, coordination of design, and managing the project schedule to ensure timely completion. Mr. Ott's 17 years of experience includes the *I-95 at Contee Road Interchange Design-Build Project*, the *Inter-County Connector Design-Build* project, and the *State Highway 66 Reconstruction* project. His involvement in these three projects assisted in the development of multiple enhanced value changes. Changes at Contee Road project resulted in a \$600K cost savings and opening to traffic 4 weeks ahead of schedule.

3.3.1.2 Quality Assurance Manager (QAM): RK&K's *Miriam Kronish, P.E.* has over 17 years of experience and will serve as the QAM for this Project. Ms. Kronish reports directly to the DBPM and will have direct, independent access to VDOT. She has 12 years of Construction Management experience for large and small highway projects throughout Maryland and Virginia and spent 7 years on the Woodrow Wilson Bridge Program managing VDOT's largest construction contracts to date. She currently manages a staff of Engineers and Inspectors representing VDOT on the Fairfax County Parkway / Fair Lakes Interchange Project. She is local to Northern Virginia and is very familiar with Loudoun County's Erosion and Sediment Control and Grading permit process.

3.3.1.3 Design Manager (DM): RK&K has assigned *Owen Peery, P.E.* to serve as DM for the Project. He will be responsible for providing a quality product, meeting all design milestones and interfaces, and ensuring the Design QA/QC Manager's involvement. With nearly 30 years of experience, Mr. Peery leads RK&K's transportation efforts throughout Virginia focusing on the layout and design of urban and rural interstates, roadways, interchanges, and intersections. Mr. Peery is adept at managing the overall design process, including monitoring project schedules, assigning staff, reviewing work plans, and ensuring project goals and budgets are met. He has managed approximately 150 VDOT project assignments over the past 15 years. Owen is currently managing the complex *McIntire Road Interchange project* in Charlottesville as well as multiple VDOT design-build pursuits.

3.3.1.4 Construction Manager (CM): AI Construction Manager *Robert Rube* has 31 years of experience and will be responsible for managing the construction process, construction quality control, and meeting all contract and permit requirements. He has spent the last 8 years constructing large scale transportation projects similar to the Route 606 Project. Mr. Rube was a Segment Manager on the \$171M PA Turnpike Reconstruction and Widening project and served as CM responsible for the \$80M SR 476 Roadway Reconstruction and Widening project. Both of these projects met or exceeded challenging schedule milestones through aggressive scheduling and continuous management of the shifting critical paths. His transportation experience is complemented by his High Hazard dam construction experience on the Pine Run and Rapp Run High Hazard dams in Montgomery County, PA.

3.3.1.5 Lead Geotechnical Engineer (LGE): Gannett Fleming is providing *Cari Beenenga, P.E.* to serve as the LGE for the Project. Ms. Beenenga has 25 years of experience, and 15 years as a LGE including the *Lyman Run Dam Replacement project*, where she was responsible for the design and specifications for support structures that included an intake tower, inlet and outlet works, a two-span spillway bridge located

on the dam's centerline, spillway training walls, and support of excavation structures. Ms. Beenenga has been involved in planning, design, and construction stages of multiple high hazard dam projects. In 2012, she completed involvement in a five-year high hazard dam remediation project which was completed ahead of schedule and within budget. Ms. Beenenga's geotechnical career began specializing in transportation and facilities projects, including a \$90 million, seven-year Interchange Improvement project which involved complicated staging to provide minimum impact/inconvenience to the traveling public.

3.3.1.6.1 Dam Designer: With 24 years of experience, *Boyd Howard, P.E.* of Gannett Fleming is a Project Manager in the Dams and Hydraulics Section. He has worked on 24 final design packages for dam projects, including the Hunting Run Dam and Reservoir in Spotsylvania County, Virginia. As the Project Manager and designer responsible for final design and document preparation for the new 2,400-foot-long, 90-foot-high combined roller-compacted concrete (RCC)/embankment dam and appurtenant structures. For his role in this project, he will be responsible for leading the design of dam modifications, dam permitting, and coordinating with multi-disciplines regarding roadway and utility modifications on the dam.

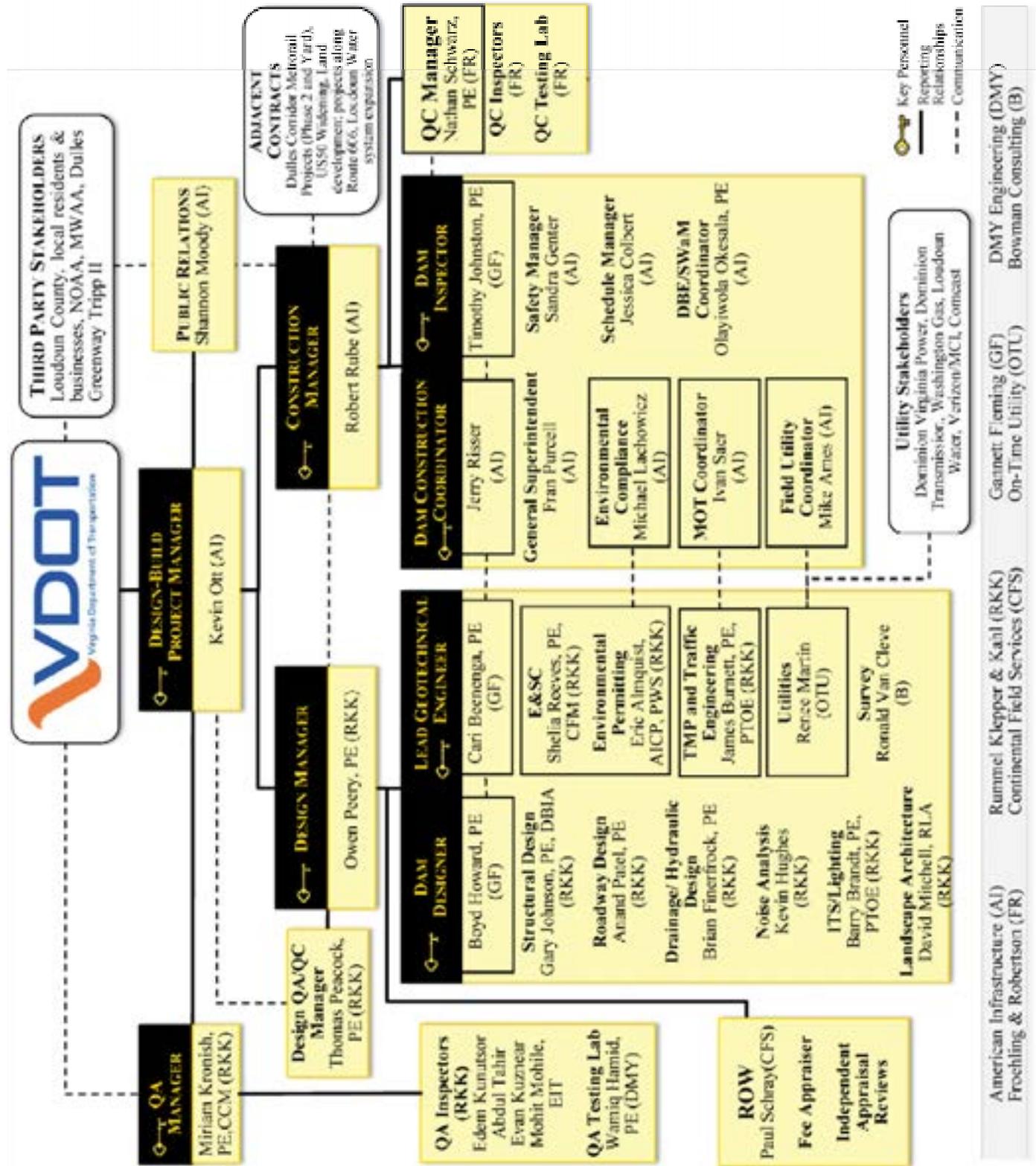
3.3.1.6.2 Dam Construction Coordinator: *Jerry Risser* has 32 years of experience and will oversee and support construction operations impacting the Horsepen Dam. Mr. Risser was the Superintendent for field operations during construction on the Lyman Run Dam Rehabilitation project. He has extensive experience as a structures superintendent and will oversee the bridge and retaining wall planning and construction field operations. Mr. Risser worked alongside CM Robert Rube on the PA Turnpike and SR 476 Roadway Reconstruction and Widening projects in PA.

3.3.1.6.3 Dam Inspector: *Timothy Johnston, P.E.* brings 38 years of experience and has completed over 60 dam inspections, including over 15 in Virginia. He was involved with the *Lyman Run Dam Replacement project* as a Senior Project Manager responsible for construction phase professional services, including biweekly progress inspections and technical support, construction quality assurance and post-construction monitoring activities. Currently, Mr. Johnston is leading the engineering design and construction technical support services for design-build modifications to control tower and appurtenant facilities at Tampa Bay Water's C.W. Young Reservoir and he is performing engineering design services for upgrades to VA DCR's Briery Branch Dam in southwest Virginia which relocates State Route 924.



Figure 3.3.1: Key Personnel will minimize project risks through personal experience and accountability.

3.3.2 ORGANIZATIONAL STRUCTURE



ORGANIZATIONAL CHART – The AI/RK&K Team organizational structure shows the chain of command and identifies major functions to be performed for the Project. This structure is similar to the successful model used by AI on VDOT’s Middle Ground Boulevard and I-581/Elm Ave Interchange D/B projects.

TEAM MEMBERS – The following team members will support AI and RK&K on the Project. AI has selected individuals from across our organization to provide the most qualified staff for this Project. These individuals will report to executive management of AI-VA throughout construction.

- *Gannett Fleming, Inc. (Gannett)* is supporting the team with geotechnical expertise, dam design, and dam inspection to fully manage this risk element. Gannett’s work experience with AI includes the Lyman Run High Hazard Dam. Gannett has completed more than 100 new dams, modified over 250 existing dams, and provided safety evaluations of more than 500 dams.
- *Froehling & Robertson, Inc. (F&R)* has a local office just 5 miles from the Project and has provided Construction QC oversight for AI on three VDOT design-build projects. In addition, F&R has provided QC oversight on previous projects for Dulles Airport.
- *Continental Field Services (CFS)* performance on large, complex projects is evidenced by their unique condition of being the only right-of-way consultant in the U.S. to be honored by FHWA with both the prestigious "Excellence in Right of Way" and "Innovations in Right of Way" awards. A certified WBE firm, they are also working with AI on the Route 460 Corridor Improvements Project. Other notable projects include the Woodrow Wilson Bridge and Virginia Megaprojects.
- *On-Time Utility Solutions, LLC (OTU)* is a certified WBE firm with a local office in Sterling, VA. They are a proven partner to RK&K on design-build pursuits. In addition, OTU’s Utility Coordinator, Renee Martin, has strong personal experience and knowledge of utility coordination in Northern Virginia.
- *Bowman Consulting (Bowman)* has a local office approximately 7 miles from the Project and is working with AI on numerous other VDOT design-build pursuits.
- *DMY Engineering Consultants, LLC (DMY)* is a local DBE firm that has teamed with AI and RK&K on a number of pursuits.



Figure 3.3.2 AI and RK&K are supported by six firms for specific, local expertise.

FUNCTIONAL RELATIONSHIPS AND COMMUNICATION

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. We anticipate VDOT’s oversight and support in our coordination efforts with project stakeholders. The AI/RK&K Team PR Manager will facilitate involvement of stakeholders to minimize additional effort by VDOT.

Design-Build Management – Our DBPM will serve as VDOT’s single point of contact for the Project. Reporting to the DBPM are four primary reports; the QAM, DM, CM and PR 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 design, construction, dam coordination, and environmental compliance efforts remain on-schedule and in conformance with VDOT commitments.

Quality Assurance –The QAM will report to our DBPM, with independent oversight by VDOT. QA Inspectors and Labs will report through the QAM. Our QAM will also monitor the construction QC program to ensure all work and materials, testing, and sampling is performed in accordance with the contract requirements and the “approved for construction” plans and specifications.

Design – Our DM will report to the DBPM and coordinate with the CM to develop an efficient and constructible design. He will work with the CM during construction to confirm field conditions meet design

assumptions and reevaluate these assumptions if necessary. Design QA/QC Manager, Tommy Peacock, PE, PLS, will report to the DM. Mr. Peacock has 48 years of experience and, as a Senior Director with RK&K, is responsible for the allocation of project personnel on design-build projects.

Gannett Fleming, Continental Field Services, On-Time Utility Solutions, Bowman, and DMY will all be subcontracted with RK&K for their respective services and their individual discipline leads will report to the Design Manager. This structure will ensure effective and efficient design development.

Experience of Select Value –Added Design Team Members		
Discipline – Name	Yrs Experience	Relevant Experience
Structural – Gary Johnson, P.E.	20	Route 250 / McIntire Road Interchange, Seminary Road over I-395
Roadway – Anand Patel, P.E.	20	Route 58 Widening, near Meadows of Dan, I-95 Shoulder Widening
Drainage/Hydraulics – Brian Finerfrock, P.E.	11	Ballston pond restoration, I-95 Shoulder Widening

Construction – The CM will report to the DBPM and communicate directly with adjacent projects and the PR Manager to provide construction progress updates. He will also communicate with the DM during both to ensure construction is consistent with the project design. Our CM will be on-site for the duration of construction operations. He will oversee the entire construction team, including the General Superintendent and Dam Construction Coordinator, who will oversee construction crews in the field. Construction leads have been identified for environmental compliance, MOT coordination, field utility coordination, safety, schedule management, and DBE/SWaM coordination and will all report to the CM.

F&R will oversee the Construction Quality Control program and ensure construction is compliant with the final design and VDOT specifications. Gannett’s Dam Inspection Specialist will work alongside the QC manager and also report to the CM.

Experience of Select Value –Added Construction Team Members		
Discipline – Name	Yrs Experience	Relevant Experience
General Superintendent – Fran Purcell	30	Richmond Airport Connector Road DB Middle Ground Boulevard Extension DB
MOT Coordinator – Ivan Saer	20	Saintsbury Drive & Vienna Metro Improvements Route 1 Improvements
Field Utility Coordinator – Mike Ames	10	Mulligan Road Phase I Westchester Commons at Watkins Center

TEAM COORDINATION – Team coordination meetings and discipline focused task teams will proactively resolve challenges before they become critical to the Project’s success. Throughout design and construction of the Project, the integration of our design and construction staff with VDOT and the project stakeholders will provide high quality solutions that are both cost-effective and efficient.

Progress Meetings –Weekly progress meetings will discuss key issues including design status, construction status, project schedule, ROW status, contract administration, safety, and public outreach with updates provided by the responsible person. Monthly meetings between the key personnel, and others designated by them, will discuss and resolve high level issues that may impede work progress.

Design Coordination Meetings – Coordination will occur between the design and construction staff will start with the design kickoff meeting and continue throughout the Project to incorporate means and methods into the design. Meetings will also include design disciplinary reviews, over the shoulder reviews, and comment resolution meetings with stakeholders. Task forces will be established by design discipline to coordinate technical discussions with project stakeholders.

Utility Coordination Meetings – After an initial utility kickoff meeting with all utility owners, the utility task team will coordinate design and construction of each utility with the Project scope of work. Where issues arise, the task team will meet to address and resolve the conflict with the necessary parties present. These meeting will also be used to discuss the schedule with each utility owner.

Stakeholder Coordination Meetings / Adjacent Contracts Coordination – Preconstruction meetings and monthly coordination meetings with adjacent contract representative will coordinate impacts of construction with the appropriate stakeholders. The DBPM, CM, DM, and ROW Manager’s involvement in these meetings will provide the authority to adjust construction schedules as necessary.

Public Outreach Meetings – Open houses will be used to allow the public to view plans and discuss concerns through the design and construction process. The DBPM and DM will be present to answer questions and address possible concerns.

Schedule Review Meetings – Schedule controls will include daily coordination meetings, as well as weekly planning and schedule meetings. Daily coordination meetings between the CM, senior inspectors, and VDOT’s representative will facilitate communication regarding construction progress. Weekly planning and schedule meetings may include the QA and QC team, VDOT representatives, and design team members as necessary. The weekly look ahead schedule and the project monthly CPM schedule will be distributed.

Safety Meetings – Before and after each shift, field supervisors will review safety issues and successes with their crews as part of the planning process. Once a month the entire project staff will review project-wide safety and address any issues. All members of the project staff will have the opportunity to promptly bring any concerns to the attention of the management team during safety meetings.

Formal Partnering – VDOT’s participation in formal partnering will be requested to promote routine and open communication. Formal partnering workshops will assist to create an atmosphere of trust and transparency between VDOT, the design-build team, and project stakeholders. This will encourage open dialogue when issues arise that may jeopardize the success of the Project. Partnering workshops provide a forum for stakeholders to voice their expectations, put all of the expectations into perspective, and mutually agree on a plan to meet each of those expectations. On the Middle Ground Boulevard Design-Build project, partnering with project stakeholders has maintained an aggressive schedule while adding utility betterments.

Task Teams – Integrated task teams for dam/structures, roadway, hydraulics, and utilities/right-of-way will proactively manage these focus areas with oversight by our DBPM. VDOT’s participation in these focused groups will be encouraged to address any comments or concerns.



Figure 3.3.3: Task Teams. Task teams that manage critical project elements demonstrate organizational integration and interaction throughout design and construction of the Project.

Collaboration and coordination between all project members will promote team-building and timely resolution of issues. Communication will occur at all levels throughout the Project to maintain a high-level of trust.

3.4 Experience of Team



The AI/RK&K Team's collective experience with design-build projects, major transportation projects, and the stakeholders provides a strong team for the Route 606 Project. This experience is further supported by our dam design and construction experience, as well as experience working on airports and secured sites.



American Infrastructure (AI) is a heavy civil contractor that has provided quality construction services in the Mid-Atlantic region since 1939 and in the Commonwealth of Virginia since 1967. With annual revenues in excess of \$435M, AI has performed over \$2.3B of construction in the Mid-Atlantic area over the last five years with \$1.6B of this work specifically in the highway and bridge sectors. Currently ranked #24 in Top 50 Domestic Heavy Contractors by *Engineering News-Record*, AI has a Virginia workforce of over 300 employees and 250 pieces of heavy equipment. Throughout the Mid-Atlantic region, AI strategically positions a total of 1600 employees and 1300 pieces of equipment to enable prompt response to schedule challenges that arise during construction. AI supports the establishment and preservation of small businesses owned by women and minorities and has met or is on track to meet the goal identified on each of our design-build projects.

AI's experience includes reconstruction and modification of five dam projects in the Mid-Atlantic region in the past five years. This experience includes the Lyman Run High Hazard Dam, Pine and Rapp Run High Hazard Dam, Edgar M. Hoopes Reservoir High Hazard Dam, Lake Jamie Dam, and the Spruce Run Dam. Construction on these projects includes modifications and replacement to earthen embankment modifications, existing structures, spillways, retaining walls, riprap slope protection, clearing, and flood-retarding structures.



Rummel, Klepper & Kahl, LLP (RK&K) was founded in 1923 and is a multidisciplinary consulting engineering firm providing service throughout the Mid-Atlantic region. RK&K services an array of federal, state, and local clients from their headquarters in Baltimore, Maryland and four Virginia offices including Fairfax and eight other offices in the region. Their staff of 875 employees includes engineers, planners, environmental specialists, surveyors, designers, and inspectors. In the past six years, RK&K's Fairfax office has completed numerous transportation design improvement projects including the *I-81 Truck Climbing Lane* and the *USACE Farrar Road Bridge Replacement DB projects*. RK&K's transportation experience includes roadway widening, intersection and interchange improvements, safety improvements, and pedestrian facilities. Services provided encompass conceptual designs, alternatives studies, signal modifications, traffic analysis, hydraulic and drainage design, construction management and inspection. RK&K's experience coordinating with airports includes the BWI Amtrak Station, BWI Airport Automated People Mover, and BWI Landside Environmental Assessment projects.



Gannett Fleming (Gannett) is an international consulting engineering company active in consulting engineering since its establishment in 1915 and has been providing continuous professional services in the Commonwealth of Virginia since 1955. Gannett Fleming's geotechnical engineering staff of more than 150 engineers, geologists, and hydrogeologists has been involved with projects across the U.S. Their staff provides geotechnical solutions for foundation design and rehabilitation, underground construction, earth structures, and groundwater resources, and has designed and supervised hundreds of subsurface site investigation programs for dams, levees, highway embankments, landfill, bridges, and slope stabilization projects. Gannett has completed more than 100 new dams, modifications of more than 250 existing dams, and provided safety evaluations of more than 500 dams. In the past 10 years, they have completed inspections, designs, and/or risk assessments for more than 300 dams throughout the U.S. The firm presently holds contracts for Basic Ordering Agreements for dam services with Newport News Waterworks, City of Fairfax, and Fairfax County, Virginia. They have additional project experience providing services to the Virginia dams for the City of Norfolk, Newport News, Fairfax Water, VA DCR, and Spotsylvania County.

DESIGN-BUILD EXPERIENCE

AI has been awarded over \$650M of design-build 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

RK&K has completed over a dozen design-build projects in the region over the last 10 years and is currently working supporting VDOT’s Alternative project Delivery Office with the procurement of several design build projects, including the Rolling Road Loop Ramp, Vienna Metro Ramp, and a number of pavement rehabilitation projects. Design build project experience includes:

- I-81 Truck Climbing Lanes
- Farrar Road Bridge replacement at Fort Belvoir
- Monroe Connector & Bypass
- Triangle Parkway

TEAM INTEGRATION

AI and RK&K have worked together on nine projects and pursuits in the past five years. We have been pursuing design-build transportation projects together since 2008 and currently have several active pursuits.

Our previous work history includes the following projects and pursuit:

- Middle Ground Boulevard Extension Design-Build project
- Route 29 NBL Bridge over Tye River Design-Build project
- Route 460 Corridor Improvements Design-Build project
- I-95 Interchange over Contee Road Design-Build project
- Route 60 and German School Road project
- Route 10 (I-95 to Ware Bottom Springs Road) project
- Broening Highway over Colgate Creek project
- 11th Street Bridge Replacement Design-Build pursuit
- Route 1 Improvements at Fort Belvoir Design-Build pursuit

	AI	RK&K	Gannett	F&R	OTU	CFS	Bowman	DMY
AI		✓	✓	✓		✓	✓	✓
RK&K	✓		✓	✓	✓	✓	✓	✓
Gannett	✓	✓		✓			✓	✓
F&R	✓	✓	✓			✓	✓	
OTU		✓					✓	
CFS	✓	✓		✓			✓	
Bowman	✓	✓	✓	✓	✓	✓		
DMY	✓	✓	✓					

Figure 3.4.1. Teaming Experience. Shared work history provides an integrated design-build team.

WORK HISTORY FORMS (APPENDIX 3.4.1)

The AI/RK&K Team has included work history forms for the projects that best represent our qualifications for the Route 606 Project. AI has included work history forms from affiliated company, Allan A. Myers. Key Personnel for Route 606 were selected from these projects and will report to executive management of AI-VA for the duration of the Project. AI utilized equipment and manpower from both Allan A. Myers and American Infrastructure-MD on VDOT’s Watkins Center Parkway project, and is using the same model on the Route 460 Corridor Improvements project.

Contractor Work History

- SR 476 Reconstruction/Widening Design-Build
- Richmond Airport Connector Road Design-Build
- Route 60 and German School Road
- Lyman Run High Hazard Dam

Designer Work History

- I-4744:I-40 Widening Design-Build
- I-95 Auxiliary Lane Improvements and Widening
- Route 58 Phase II Widening
- Hunting Run High Hazard Dam

3.5 Project Risks

In preparation of this SOQ, the AI Team has reviewed the plans, visited the project site, and evaluated the site conditions to identify the three risks most critical to the success of the Project. We weighed each major risk with the potential to impact the Project's success including stakeholder coordination, right of way acquisition, and maintenance of traffic. **To provide a focused discussion of the project risks, we selected dam spillway design and construction, stormwater management and hydraulic design, and raising the existing roadway.** These three elements will have the most significant impact on the project schedule and cost, and will significantly influence the environmental impacts.

DAM SPILLWAY DESIGN AND CONSTRUCTION

Risk Description: The proposed widening of Route 606 over the Horsepen Dam will require analysis and evaluation of the existing dam to ensure the spillway design and embankment modifications meet current Virginia Dam Safety Requirements (4VAC50-20-10). Horsepen Dam is rated as a high hazard dam, and will require the design of the spillway to safely pass the 0.9 Probable Maximum Flood (PMF) event. Currently, the plans envision placement of a bridge over the dam spillway to provide sufficient opening to allow unobstructed discharge of the flood flows during the 0.9PMF event. Attention may also need to be given to the spillway discharge at lesser flood events, such that discharges during events such as the 100-year storm do not increase above existing levels and exacerbate downstream flooding. Additionally, stability of the modified embankment slopes could be affected by a steepening of embankment slopes, and will be required to satisfy dam safety criteria under a variety of loading conditions.

There are also risks inherent to performing construction on dams, where storm events cause surges in discharge that must be properly accommodated and diverted in order to prevent failure of the dam while it is in a more vulnerable state of construction. These risks are further exacerbated if a reservoir pool must be partially or fully maintained throughout the work. It is important that diversion and control of water be carefully considered during the design process.

Impact:

Schedule – Demonstration of a properly designed spillway and satisfaction of other dam safety criteria will be critical to gaining the approval of the DCR Regional Dam Safety office (Warrenton). DCR review and approval of any modifications to the dam will be incorporated into the project schedule as a milestone prior to start construction.

Safety – Proper erosion design of the spillway will be critical to the safety of the public and continued stability of the dam. Not only must the spillway have the capacity to convey the 0.9 PMF, but it must safely pass the event such that erosion to the spillway will also not compromise the integrity of the dam. The existing spillway consists of erodible soil and highly weathered rock that may begin to headcut under 0.9 PMF conditions. The steep drop between Route 606 and the confluence with Horsepen Run, create an erodible condition. If the spillway erodes and begins to significantly headcut, a breach of the dam and complete loss of the reservoir can rapidly occur. Additionally, erosion on the spillway may undermine the proposed retaining walls that line the spillway and the bridge abutments.

Mitigation: Our approach to mitigating the risk related to the Horsepen Dam focuses around having qualified experts coordinating the dam design and construction with all appropriate parties, including DCR, MWAA, and VDOT. The AI/RK&K Team's approach includes:

- Assigning qualified experts in dam design, construction, and inspection to the Project.
- Utilizing their combined expertise through a Task Team to develop the best design concept.
- Meeting with DCR before the dam design is matured to identify any concerns that need to be addressed in the design submission.
- Providing experienced dam construction staff to implement the design in the field.
- Overseeing construction with experienced dam inspection staff.

To mitigate this risk, early coordination with DCR, MWAA, and VDOT will facilitate prompt resolution of concerns and gain alignment on the dam design approach.

Design Considerations – To specifically address the spillway erosion concerns, we will consider the following viable options that we have used in highly erodible situations. These include:

- Verification of erodibility utilizing geotechnical and geophysical subsurface investigation methods. Success on previous projects has been achieved through use of seismic refraction, multiple channel analysis of surface waves (MASW), Standard Penetration soil Testing (SPT), rock coring and test pitting. These methods will be utilized to determine the engineering parameters of soil and rock within the spillway, to develop a detailed subsurface stratigraphy utilized in assessing spillway integrity and erodability.
- Utilizing the developed subsurface spillway profile, integrity analysis is completed via the SITES computer modeling program paired with hydrology and hydraulics data. The result is a prediction of spillway activation, flow velocity and spillway erosion (i.e., headcut). Breach predictions are also completed to determine cost effective treatment options. Potential treatments include:
 - Spillway re-alignment.
 - Articulated Concrete Block (ACB) armoring,
 - Concrete lining, or
 - Roller Compacted Concrete (RCC).
- Constructability and aesthetics are also considered during the development of spillway remediation efforts.



Bedrock spillway



ACB spillway



Concrete spillway

Figure 3.5.1 Potential Spillway Treatments

Construction Methods – Constructability of the selected alternate will be considered early in the design effort by experienced members of our construction staff. A feasible alternate not only addresses functionality and deficiencies identified to pass the 0.9 PMF, but must be constructible to provide ease in completing the rehabilitation program. Construction considerations will include:

- Excavation safety and compliance with appropriate regulations.
- Support of excavation techniques that maintains integrity of critical dam features such as existing drainage features and earth embankment zoning during required rehabilitation of spillway.
- Evaluation of phreatic surface within the dam embankment and determination of dewatering needs to provide safety during construction. Many dewatering techniques exist in the contractor’s toolbox. Not all are appropriate in dam remediation work due to concerns with piping and inducing movement within the earth embankment. The project team will evaluate available methods with respect to anticipated magnitude of dewatering effort to permit selection of most cost effective and technically feasible method.
- Spillway remediation in combination with the bridge design will consider staging and phasing of work to eliminate conflicts.

Role of VDOT and other Agencies: Due to sensitive nature of the dam approvals, the AI/RK&K Team will ensure clear communications are maintained with VDOT, DCR, and MWAA. While we will perform all the required analysis and obtain the

Another mitigating strategy is having our Drainage/Hydraulic design lead, Brian Finerfrock, P.E., on our team. His experience as VDOT’s River Mechanics Engineer working side-by-side DCR’s Regional Dam Safety Engineer and VDOT’s District Drainage Engineer Mr. Pawan Sarang, P.E. will prove invaluable to quickly resolve dam related concerns.

Role of VDOT and other Agencies: We envision VDOT's role in this risk will be to coordinate the review of our plan design submissions with internal reviewers and other external agencies (MWAA, NOAA, etc). If VDOT or other coordinating agencies require further discussion regarding the stormwater management approach and design, we will support VDOT in participation of meetings to resolve any concerns that are raised.

RAISING THE EXISTING ROADWAY

Risk Description: The proposed roadway profile raises Route 606 approximately 20 feet at the Horsepen Dam and is lowered in very few areas while widening the existing roadway. We understand raising the roadway profile, as shown on the conceptual plans, is necessary based on the high water table, suitability of existing subsoils, potential for flooding, and development surrounding the corridor.

However, this raised roadway profile complicates constructing the project with respect to imported embankment material, maintaining access to businesses and residents, and coordinating existing utilities. The project will require on the order of 400,000 cubic yards of imported embankment material based on preliminary plans in order to raise the profile and widen the existing roadway. Poor subsoil conditions and a high water table will increase the amount of imported material required as unsuitable embankment material is encountered. There are numerous business and residential access points throughout the corridor that must be maintained for traffic. Maintaining access to business and resident in significant fill areas will present challenges to placing the roadway embankment. Existing utilities may require raising to maintain clearance requirements for overhead utilities and cover limits for underground utilities.

Impact: The final design of the roadway profile will impact the project cost, schedule, and public perception of the project.

Cost and Schedule – The amount of suitable embankment material that will be necessary to be acquired outside the limits of the corridor will increase project costs and will slow the placement of embankment. Project cost and schedule will be influenced by:

- Unsuitable subsoils that require treatment or handling and disposal of unsuitable material.
- Limited availability of select material nearby due to significant development surrounding the corridor.
- Acquisition of additional ROW adjacent to the corridor for mining suitable material.
- Adjustments to the roadway profile at all project termini in coordination with adjacent contracts will affect the amount of roadway embankment required.
- Maintenance of traffic and access will break down embankment areas in to smaller pieces that slow construction.
- Select material for placement at the dam may require special treatment or identification of material that meets the needs at this location. Need clay material for the core and select material on the embankment around the core.
- Addressing existing underground utilities that do not meet cover limits and overhead utilities that do not meet their clearance limits.

Public Perception – Communication and planning of access for local business and residents as result of significant elevation changes during phased construction will affect public perception. Changes to existing roadway elevation during placement of new elevated embankment may restrict access to local businesses and residents for short periods during construction.

Mitigation: The AI/RK&K Team will provide the most economical approach to minimizing the risk from raising the roadway profile by maximizing the use of the suitable materials within the corridor that will reduce costs, improve or meet the schedule, and assist in maintaining positive public perception throughout design and construction.

Imported Embankment Material – The material required will be minimized and managed by:

- Adjusting the profile of the roadway within an acceptable limit to meet the performance requirements to minimize the amount of imported material, thus reducing costs and compressing the construction schedule.
- Identifying additional material within the corridor that may be generated by design and construction of the SWM system to maximize capacity. Placement of ponds at locations where suitable material can be excavated will contribute to the site balance.
- Mining suitable material will be explored and include a cost-benefit analysis of acquiring additional ROW in pond areas.
- Utilizing land lease agreements between with adjacent property owners that allow mining or disposal of material without acquisition of additional ROW.
- Remediating soils through soil amendments or synthetic reinforcement products will be evaluated to stabilize embankment subsoils, reduce undercutting, and control the need for imported material.

Maintaining Access for Businesses and Residents – The project will be divided into several segments that can be phased independently in order to minimize traffic disruptions that can cause the public to become frustrated. Utilizing multiple existing access points will be necessary to complete the new roadway embankment. Segmenting the project into smaller pieces is part of our approach to create a more manageable plan to complete design & construction of the roadway embankment without negative public perception. The segment limits will be defined by local businesses & residents’ access & mobility needs. Shown below is one potential model to break down the project into segments.



Figure 3.5.2 Segmented Construction Conceptual Plan. Dividing the Project based on access and mobility needs will focus construction planning that minimizes inconvenience for impacted businesses and residents.

Utility Coordination – Early coordination with the utility owners will identify any existing utilities that encroach upon clearance requirements for overhead lines or cover limits for underground facilities. The final roadway profile will consider utility impacts to minimize any required relocations. Protection of existing utilities will meet the requirements of each utility owner.

Utility Coordination on VDOT’s Route 606 and German School Road Project - Identification of utility conflicts proactively and before they became critical to the schedule progressed AI’s construction to completion eight months ahead of schedule.

Role of VDOT and other Agencies: Additional effort by VDOT will not be required to mitigate this risk. VDOT’s review and approval of the source for imported materials will be necessary. VDOT will provide oversight, review and distribution of information to be released to the public regarding major traffic changes, lane closures, and construction activities that will impact the traveling public for the project duration. With respect to utility coordination, we anticipate direct coordination with the utilities with VDOT oversight as necessary.

Appendix 3.2.6 Affiliated and Subsidiary Companies



ATTACHMENT 3.2.6

State Project No. 0606-053-983

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	American Infrastructure, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Myers Aviation Company, LLC	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	American Infrastructure-MD, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, Co.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Allan A. Myers, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	American Infrastructure Investments, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Devault Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Devault Crushed Stone Partners, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	The Myers Group, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Compass Quarries, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	AI Transport Co	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Independence Construction Materials, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	ICM of Maryland, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490

ATTACHMENT 3.2.6

State Project No. 0606-053-983

Affiliated and Subsidiary Companies of the Offeror

Affiliate	ICM of Pennsylvania, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	ICM of Delaware, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	D. M. Stoltzfus & Son, Inc.	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Elk Mills Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Cedar Hill Quarry Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Talmage Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	440 Twin Oaks Drive, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Affiliate	Jessup Asphalt Partners, LP	1805 Berks Road, P.O. Box 98, Worcester, PA 19490
Subsidiary	US 460 Mobility Partners, LLC	301 Concourse Blvd, Suite 300, Glen Allen, VA 23059

Appendix 3.2.7 Debarment Forms

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0606-053-983

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

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

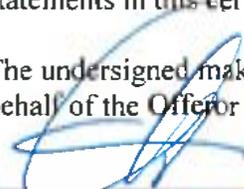
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under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

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

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

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

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



Signature Date Title

American Infrastructure-VA, Inc

Name of Firm

ATTACHMENT NO. 3.2.7(b)

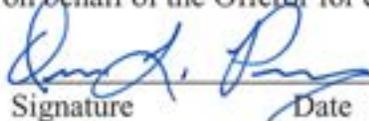
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

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

8/21/13

Date

Director, Transportation

Title

Rummel, Klepper & Kahl, LLP

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

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

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

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

W.A. Banta 08/16/13 SR. VICE PRESIDENT
Signature Date Title

Gannett Fleming, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

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.

JAMUEL H. KIRBY 8/15/13 PRESIDENT
Signature Date Title

Froehling & Robertson, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

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.

Paul Adams 8-16-13 ROW PROGRAM MGR
Signature Date Title

CONTINENTAL ACQUISITION SERVICES, INC.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

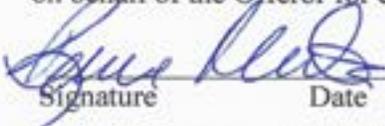
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

- 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.

	8/16/13	President
Signature	Date	Title
<u>On-Time Utility Solutions, LLC.</u>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

- 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.

BM 8/20/13 CFO
Signature Date Title

Bowman Consulting Group, Ltd

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0606-053-983

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

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

<u>Y.M.</u>	<u>8/15/2013</u>	<u>President and CEO</u>
Signature	Date	Title

DMY Engineering Consultants, LLC
Name of Firm

Appendix 3.2.8

VDOT Prequalification

=====
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

=====
A426
AMERICAN LIGHTING AND SIGNALIZATION, INC.
PREQ. EXP : 01/31/2015

--PREQ ADDRESS -----	WORK CLASSES (LISTED BUT NOT LIMITED TO)
11639 DAVIS DREEK ROAD EAST	018 - ELECTRICAL INSTALLATION
JACKSONVILLE, FL 32256	052 - TRAFFIC SIGNALIZATION
PHONE : 904-886-4300	072 - ROADWAY LIGHTING
FAX : 904-886-4422	

BUSINESS CONTACT: HARDIMAN, JAMES RICHARD
EMAIL: HARDIMAN@ASPLUNDH.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A

=====

Appendix 3.2.9 Surety Letter





Phone (610) 640-9400
Fax (610) 640-9410

ZURICH NORTH AMERICA SURETY

2000 Market Street
Suite 1100
Philadelphia, PA 19103

August 27, 2013

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

Re: American Infrastructure-VA, Inc.
Contract ID Number: C000975200864; Federal Project No.: STP-5A01 (165); State Project No.: 0606-053-983 – Route 606 Loudoun County Parkway/Old Ox
Road Reconstruction and Widening From: Route 621 Evergreen Mills Road To: Route 267 Dulles Greenway, Loudoun County, Virginia

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.

Henry C. Rosenberg
Chairman

HCR/kgf

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

Appendix 3.2.10 SCC & DPOR Registrations

ATTACHMENT 3.2.10

State Project No. 0606-053-983

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
American Infrastructure-VA, Inc.	0113780-1	Corporation	Active	44209 Wade Drive Chantilly, VA 20152	Class A Contractors	2701009872	12/31/2014
Rummel, Klepper and Kahl, LLP	K000417-8	Limited Liability Partnership	Active	10306 Eaton Place, Suite 240, Fairfax, VA 22030	ENG	041100057	02/28/2014
Rummel, Klepper and Kahl, LLP				81 Mosher Street Baltimore, MD 21217	ENG	0407002860	12/31/2013
Rummel, Klepper and Kahl, LLP				2100 East Cary Street, Suite 309 Richmond, VA 23223	ENG	0411000271	02/28/2014
Gannett Fleming, Inc.	F102463-9	Corporation	Active	Attn: Cris Mizerak P.O. Box 67100 Attn: Jeffrey D. Bryson Harrisburg, PA 17106-7100	ENG, ARC	0407002949	12/31/2013
Gannett Fleming, Inc.				4401 Fair Lakes Court, Suite 100 Fairfax, VA 22033	ENG	0411000261	02/28/2014
Froehling & Robertson, Inc.	0027211-2	Corporation	Active	22923 Quicksilver Drive, Suite 111 Sterling, VA 20166	ENG	0411000051	02/28/2014
Continental Acquisition Services, Inc.	F167489-6	Corporation	Active				
On-Time Utility Solutions, LLC	S205467-6	Limited Liability Company	Active				
Bowman Consulting Group, LTD	0448198-2	Limited Company	Active	14020 Thunderbolt Place, Suite 300 Chantilly, VA 20151	ENG, LS, LA	0407003896	12/31/2013

ATTACHMENT 3.2.10

State Project No. 0606-053-983

SCC and DPOR Information

Bowman Consulting Group, LTD				3951 Westerre Parkway, Suite 150 Richmond, VA 23233	ENG	0411000610	02/28/2014
DMY Engineering Consultants, LLC	S313497-2	Limited Liability Company	Active	45662 Terminal Drive, Suite 110 Dulles, VA 20166	ENG	0407005631	12/31/2013

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Rummel, Klepper and Kahl, LLP	Miriam Flo Kronisch	Fairfax, VA	12424 Alexander Cornell Drive Fairfax, VA 22033	Professional Engineer	0402038207	06/30/2015
Rummel, Klepper and Kahl, LLP	Owen Lee Peery	Richmond, VA	801 East Main Street, Suite 1000 Richmond, VA 23219	Professional Engineer	0402046882	10/31/2013
Gannett Fleming, Inc.	Cari Rae Beenenga	Harrisburg, PA	2506 River Road Bainbridge, PA 17502	Professional Engineer	0402046858	10/31/2013
Gannett Fleming, Inc.	Boyd Howard	Harrisburg, PA	100 North 23 rd Street Camp Hill, PA 17011	Professional Engineer	0402050706	08/31/2014



Commonwealth of Virginia
State Corporation Commission



Virginia.gov

08/20/13

CISM0180 CORPORATE DATA INQUIRY

14:51:43

CORP ID: 0113780 - 1 STATUS: 00 ACTIVE STATUS DATE: 11/03/08

CORP NAME: American Infrastructure-VA, Inc.

DATE OF CERTIFICATE: 10/06/1967 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:

R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301

AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143

ACCEPTED AR#: 212 16 0177 DATE: 10/10/12 HENRICO COUNTY

CURRENT AR#: 212 16 0177 DATE: 10/10/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	670.00				670.00	100,000

(Screen Id:/Corp_Data_Inquiry)

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, March 24, 2006

This is to Certify that the statement of registration of

Rummel, Klepper & Kahl, LLP

(Date of registration - September 25, 2001)

a partnership registered as a limited liability partnership under the laws of MARYLAND, was admitted to record in this office and that the partnership is registered to transact business in Virginia as a foreign Registered Limited Liability Partnership, subject to all laws applicable to the partnership and its business.



State Corporation Commission

Attest:

Joel H. Beck
Clerk of the Commission



Commonwealth of Virginia
State Corporation Commission


Virginia.gov

08/20/13

CISM0180

CORPORATE DATA INQUIRY

15:02:03

CORP ID: F102463 - 9 STATUS: 00 ACTIVE STATUS DATE: 02/16/10
 CORP NAME: GANNETT FLEMING, INC.

DATE OF CERTIFICATE: 12/20/1989 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: DE DELAWARE STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: R EDWIN BLAIR JR

STREET: 7021 HARBOUR BOULEVARD AR RTN MAIL:
 SUITE 112
 CITY: SUFFOLK STATE : VA ZIP: 23435
 R/A STATUS: 2 OFFICER EFF. DATE: 07/28/11 LOC : 220
 ACCEPTED AR#: 212 55 0133 DATE: 12/28/12 SUFFOLK CITY
 CURRENT AR#: 212 55 0133 DATE: 12/28/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	100.00					5,000

 (Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission


Virginia.gov

08/20/13

CISM0180

CORPORATE DATA INQUIRY

15:03:59

CORP ID: 0027211 - 2 STATUS: 00 ACTIVE STATUS DATE: 11/13/09

CORP NAME: FROEHLING & ROBERTSON, INCORPORATED

DATE OF CERTIFICATE: 10/11/1924 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 2480.00 MON NO: MON STATUS: MONITOR DTE:

R/A NAME: WILLIAM H HOOFNAGLE III

STREET: 1900 ONE JAMES CENTER

AR RTN MAIL:

901 E CARY ST

CITY: RICHMOND

STATE : VA ZIP: 23219

R/A STATUS: 4 ATTORNEY

EFF. DATE: 09/21/11 LOC : 216

ACCEPTED AR#: 212 14 0123 DATE: 08/29/12 RICHMOND CITY

CURRENT AR#: 212 14 0123 DATE: 08/29/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	1,700.00				1,700.00	1,100,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission


Virginia.gov

08/20/13

CISM0180

CORPORATE DATA INQUIRY

15:06:10

CORP ID: F167489 - 6 STATUS: 00 ACTIVE STATUS DATE: 02/13/13

CORP NAME: Continental Acquisition Services, Inc.

DATE OF CERTIFICATE: 07/14/2006 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: NY NEW YORK STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:

R/A NAME: NATIONAL REGISTERED AGENTS INC

STREET: 4701 COX ROAD

AR RTN MAIL:

SUITE 301

CITY: GLEN ALLEN

STATE : VA ZIP: 23060 6802

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 03/26/12 LOC : 143

ACCEPTED AR#: 213 03 7791 DATE: 02/14/13 HENRICO COUNTY

CURRENT AR#: 213 03 7791 DATE: 02/14/13 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	100.00					200

 (Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia State Corporation Commission

08/20/13

LLCM3220

LLC DATA INQUIRY

15:09:05

LLC ID: S205467 - 6 STATUS: 00 ACTIVE STATUS DATE: 01/14/13
LLC NAME: On-Time Utility Solutions, LLC

DATE OF FILING: 11/28/2006 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

P R I N C I P A L O F F I C E A D D R E S S

STREET: 6913 HOVINGHAM CT

CITY: CENTREVILLE STATE: VA ZIP: 20121-0000

R E G I S T E R E D A G E N T I N F O R M A T I O N

R/A NAME: RENEE T MARTIN

STREET: 44330 MERCURE CIR STE 140

RTN MAIL: Y

CITY: DULLES STATE: VA ZIP: 20166-0000

R/A STATUS: 2 O/D OF CORP M/M EFF DATE: 04/08/10 LOC: 153 LOUDOUN COUNTY

YEAR FEES PENALTY INTEREST BALANCE

12 50.00 25.00

(Screen Id:/LLC_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission


Virginia.gov

08/20/13

CISM0180

CORPORATE DATA INQUIRY

15:13:02

CORP ID: 0448198 - 2 STATUS: 00 ACTIVE STATUS DATE: 07/23/10

CORP NAME: BOWMAN CONSULTING GROUP, LTD.

DATE OF CERTIFICATE: 06/07/1995 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK

MERGER IND: CONVERSION/DOMESTICATION IND:

GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 700.00 MON NO: MON STATUS: MONITOR DTE:

R/A NAME: ROBERT A HICKEY

STREET: 3863 CENTERVIEW DR STE 300

AR RTN MAIL:

CITY: CHANTILLY STATE : VA ZIP: 20151

R/A STATUS: 2 OFFICER EFF. DATE: 05/13/04 LOC : 129

ACCEPTED AR#: 213 52 1753 DATE: 05/07/13 FAIRFAX COUNTY

CURRENT AR#: 213 52 1753 DATE: 05/07/13 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
13	1,700.00					360,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2014

9980 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
2701009872

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS H/H

AMERICAN INFRASTRUCTURE-VA INC
44209 WADE DRIVE
CHANTILLY, VA 20152



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS H/H
NUMBER: 2701009872 EXPIRES: 12-31-2014

AMERICAN INFRASTRUCTURE-VA INC
44209 WADE DRIVE
CHANTILLY, VA 20152



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9980 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

NUMBER
0411000577

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP
RK&K
10306 EATON PL STE 240
FAIRFAX, VA 22030



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPLSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000577 EXPIRES: 02-28-2014
PROFESSIONS: ENG
RUMMEL KLEPPER & KAHL LLP
RK&K
10306 EATON PL STE 240
FAIRFAX, VA 22030



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407002860

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP
81 MOSHER ST
BALTIMORE, MD 21217



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APPELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407002860 EXPIRES: 12-31-2013
PROFESSIONS: ENG
RUMMEL KLEPPER & KAHL LLP
81 MOSHER ST
BALTIMORE, MD 21217



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000271

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

PROFESSIONS: ENG

RUMMEL KLEPPER & KAHL LLP
RK&K
2100 EAST CARY ST
SUITE 309
RICHMOND, VA 23223



Gordon N. Duxon
Gordon N. Duxon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APPELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000271 EXPIRES: 02-28-2014
PROFESSIONS: ENG
RUMMEL KLEPPER & KAHL LLP RK&K
2100 EAST CARY ST
SUITE 309
RICHMOND, VA 23223



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON

12-31-2013

NUMBER

0407002949

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

PROFESSIONS: ENG, ARC

**GANNETT FLEMING, INC.
ATTN CRIS MIZERAK
P O BOX 67100
ATTN: JEFFREY D. BRYSON
HARRISBURG, PA 17106-7100**



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

**BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407002949 EXPIRES: 12-31-2013
PROFESSIONS: ENG, ARC
GANNETT FLEMING, INC. ATTN: CRIS MIZERAK
P O BOX 67100
ATTN: JEFFREY D. BRYSON
HARRISBURG, PA 17106-7100**



(FOLD)

(DETACH HERE)

**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233**

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000261

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

PROFESSIONS: ENG

GANNETT FLEMING INC
4401 FAIR LAKES CT STE 100
FAIRFAX, VA 22033



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPLSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000261 EXPIRES: 02-28-2014
PROFESSIONS: ENG
GANNETT FLEMING INC
4401 FAIR LAKES CT STE 100
FAIRFAX, VA 22033



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9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0411000051

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

PROFESSIONS: ENG

FROEHLING & ROBERTSON, INC
22923 QUICKSILVER DR STE 111
STERLING, VA 20166



Gordon N. Dixon
Gordon N. Dixon, Director

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA
BOARD FOR APESCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000051 EXPIRES: 02-28-2014
PROFESSIONS: ENG
FROEHLING & ROBERTSON, INC
22923 QUICKSILVER DR STE 111
STERLING, VA 20166



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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

**EXPIRES ON
12-31-2013**

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

**NUMBER
0407003896**

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

PROFESSIONS: ENG, LS, LA

**BOWMAN CONSULTING GROUP LTD
14020 THUNDERBOLT PLACE
SUITE 300
CHANTILLY, VA 20151**



Gordon N. Dixon
Gordon N. Dixon, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-28-2014

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0411000610

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

PROFESSIONS: ENG

BOWMAN CONSULTING GROUP LTD
3951 WESTERRE PARKWAY
SUITE 150
RICHMOND, VA 23233



Gordon N. Dixon
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000610 EXPIRES: 02-28-2014
PROFESSIONS: ENG
BOWMAN CONSULTING GROUP LTD
3951 WESTERRE PARKWAY
SUITE 150
RICHMOND, VA 23233



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9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
12-31-2013

9950 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0407005631

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

PROFESSIONS: ENG

DMY ENGINEERING CONSULTANTS, LLC
45662 TERMINAL DRIVE
SUITE 110
DULLES, VA 20166



Gordon N. Dixon
Gordon N. Dixon, Director

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

POCKET CARD: COMMONWEALTH OF VIRGINIA
BOARD FOR APPEALS
BUSINESS ENTITY REGISTRATION
NUMBER: 0407005631 EXPIRES: 12-31-2013
PROFESSIONS: ENG
DMY ENGINEERING CONSULTANTS, LLC
45662 TERMINAL DRIVE
SUITE 110
DULLES, VA 20166



DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9950 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
06-30-2015

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402038207

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

MIRIAM FLO KRONISCH
12424 ALEXANDER CORNELL DR
FAIRFAX, VA 22033



Gregory K. Davis
Gregory K. Davis, Director

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

POCKET CARD

COMMONWEALTH OF VIRGINIA
BOARD FOR APPLICANTS
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402038207 EXPIRES: 06-30-2015

MIRIAM FLO KRONISCH
12424 ALEXANDER CORNELL DR
FAIRFAX, VA 22033



(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
10-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
0402046882

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

OWEN LEE PEERY
801 EAST MAIN ST STE 1000
RICHMOND, VA 23219



Gordon N. Dixon
Gordon N. Dixon, Director

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THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPELSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402046882 EXPIRES: 10-31-2013

OWEN LEE PEERY
801 EAST MAIN ST STE 1000
RICHMOND, VA 23219



(DETACH HERE)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233

VOID

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

10-31-2013

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER

0402046858

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

CARI RAE BEENENGA
2506 RIVER RD
BAINBRIDGE, PA 17502



Gordon N. Dixon
Gordon N. Dixon, Director

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**DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA**

EXPIRES ON

08-31-2014

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NUMBER

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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
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Gordon N. Dixon
Gordon N. Dixon, Director

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

Appendix 3.3.1 Key Personnel Resume Forms

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: KEVIN R. OTT, DESIGN-BUILD PROJECT MANAGER
b. Project Assignment: DESIGN-BUILD PROJECT MANAGER
c. Name of Firm with which you are now associated: AMERICAN INFRASTRUCTURE
d. Years experience: With this Firm <u>2</u> Years With Other Firms <u>15</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): AMERICAN INFRASTRUCTURE, DESIGN-BUILD PROJECT MANAGER / SR. CONSTRUCTION MANAGER; 2011 - PRESENT: Responsible for managing all aspects of his projects including planning and scheduling work activities, coordination with the owner & other stakeholders, design consultants, private utility owners, and public outreach for all phases of construction. Oversees the field construction activities to ensure project delivery that meets or exceeds all expectations of quality, safety, environment, schedule, and budget. Mr. Ott has simultaneously managed up to 5 projects for a combined value of \$50M. GRANITE CONSTRUCTION COMPANY, PROJECT MANAGER; 2007-2011: Managed engineering, budget, schedule, documents, subcontractor & suppliers, and negotiated contract changes within a business unit generating \$12M monthly revenue. Managed staffs of up to 16 professionals including three departments and over one-hundred subcontractors and suppliers coordinating construction operations with design management, quality control, environmental monitoring, and public outreach. Assigned, monitored, and adjusted resources to ensure timely project completion. GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER; 2007 - 2007: Responsible for preparing and negotiating change orders with owners and subcontractors, performing cost analysis, and preparing progress payment applications. GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER/PRECAST PROJECT MANAGER; 2003 - 2007: Managed segmental precast operation from start-to-finish including the development of the complete work plan for the casting yard where all segments of the precast substructure of the WWB were fabricated. Managed the engineering, construction operations, and construction quality control departments of the precast operation. Responsible for casting schedule, budget, and construction quality, including coordination of numerous subcontractors and suppliers. GRANITE CONSTRUCTION COMPANY, PROJECT ENGINEER; 1999-2002: Oversight of project civil/sitework construction operations performing engineering, construction management, and project controls duties including scheduling, work plan development, submittals, cost management, forecast analysis, estimating, and subcontractor/supplier negotiations on large heavy/civil DOT project. GRANITE CONSTRUCTION COMPANY & ANGELO IAFRATE CONSTRUCTION, FIELD ENGINEER; 1997-1999: Production management on large highway DOT reconstruction and heavy rail projects. Responsible for material procurement, cost tracking, quantity tracking, and contract administration. Coordinated progress payments, developed work plans, provided field engineering and field supervision for bridges, retaining walls, concrete paving, electrical, and utility construction activities. SUMMARY OF RELEVANT EXPERIENCE <ul style="list-style-type: none">▪ 17 years experience▪ 13 years of D/B experience▪ 4 years of NOVA experience▪ Construction QC oversight▪ Utility coordination▪ Design oversight▪ Coordination with multiple stakeholders▪ Complex, heavy traffic widening
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Iowa State University – Ames, Iowa/B.S./1997/Construction Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2013/Registered Land Disturber (RLD)/VA Registration # 40335 ESCCC certification will be obtained prior to commencement of construction
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)



I-95 AT CONTEE ROAD INTERCHANGE DESIGN-BUILD PROJECT – LAUREL, MD (\$30.7M)

1. Construction Manager being the key person representing American Infrastructure coordinating the design, managing onsite operations, and coordinating with the Owner. Responsible for coordinating utility relocations with Verizon, Comcast, BGE gas, BGE electric, and WSSC for water mains up to 42"; coordinated directly with the adjacent town center site developed (Konterra) to ensure utilities were designed and relocated to accommodate that project. The project required close coordination with several adjacent state, county, and private contracts. The project designed and constructed a new bridge over-pass and interchange on I-95 between MD198 and the Inter-County Connector - MD200. It includes one-mile of approach roadways and ramps to/from the I-95 C-D roads being added by the ICC Contract D/E. AI's design concept for the bridge over I-95 shortened the length by 82 feet to 519 feet in length. Completion of the project is anticipated six months ahead of the schedule advertised by MSHA. Throughout construction, there have been no traffic incidents involving the public.

Relevance to the Project

- ✓ DOT Design-Build project
- ✓ Design oversight
- ✓ Bridge construction
- ✓ Utility coordination
- ✓ Adjacent contract coordination
- ✓ Stakeholder coordination

2. *American Infrastructure; Construction Manager*

3. *Dec. 2011 – Anticipated May 2014*

INTER-COUNTY CONNECTOR (ICC) CONTRACT DESIGN-BUILD PROJECT – ROCKVILLE, MD (\$485M)

1. Started the project as Project Controls Manager moving into a Segment Manager Position, and ultimately into the role of Construction Manager. Instrumental in establishing the builder's Joint Venture policies & procedures and developing the organizational structure. Assigned, monitored, and adjusted personnel to ensure the timely completion of the project as he managed the engineering staff including 3 departments, 16 engineers, and over 100 subcontractors and suppliers. Heavily involved in the coordination of design, quality control, environmental monitoring, and public outreach with day-to-day construction operations. Managed utility coordination and electrical aspects of construction as Segment Manager. Worked together with the Client's representatives and project stakeholders through open and constant communication for the duration of the project. The project included design and construction of a new 7-mile 6-lane toll road from I-270 to MD97. The scope of work included road widening, structures, ramps/interchanges, median construction, and a shared use path.

Relevance to the Project

- ✓ DOT Design-Build project
- ✓ Bridge construction
- ✓ Complex MOT phasing
- ✓ Utility relocation

2. *Granite Construction Company, Construction Manager*

3. *April 2007 – Nov. 2011*

WOODROW WILSON BRIDGE VIRGINIA APPROACH SPANS (BR3B) – ALEXANDRIA, VA (\$126M)

1. Served as Construction Manager for the precast operation and transitioned to the bridge substructure and foundation Construction Manager. Responsibilities included construction engineering, oversight of construction operations, and quality control. Managed construction of the 24" precast pile foundations which were driven 60 feet into the silty sandy soil conditions. Worked closely with the Client's designer, precast oversight personnel and the construction manager to develop the complete work plan for the casting yard where 460 segments were cast for the segmental concrete V-Pier substructure. Closely monitored and adjusted the plan as work progressed and was successful at completing the casting operation on schedule and on budget. The project included construction of 13 spans of a dual 6-lane bridge through Jones Point Park. Construction access issues were encountered during construction; essentially the access road was sinking due to poor subsoils. Access was maintained by strengthening the road with geogrid and imported materials. Most notably, the project received the 2008 Mid-Atlantic Construction Best of 2008 Bridge Award of Merit and 2009 American General Contractors (AGC) Marvin M. Black Excellence in Partnering Award.

Relevance to the Project

- ✓ NOVA Project
- ✓ Bridge construction
- ✓ Adjacent contract coordination
- ✓ Public Outreach

2. *Granite Construction Company, Construction Manager for Precast Operations and Foundations*

3. *Mar. 2003 – Dec. 2006*

STATE HIGHWAY 66 WIDENING AND RECONSTRUCTION, ROWLETT, TX (\$30M)

1. Served as Structures/Concrete Paving Engineer for construction of this 6-mile roadway widening from 2 lanes to 6 lanes. Responsible for construction operation planning and quality control. Managed shop drawings, verified compliance with contract plans and specifications, procured materials, and coordinated subcontractors. The project included two 57 foot wide, 1200 foot long bridges spanning Rowlett Creek, lime treated subgrade, numerous independent MOT phases, and coordination of access for local businesses. Construction access was installed and maintained utilizing a tressel and with consideration to environmental impacts.

Relevance to the Project

- ✓ Roadway reconstruction and widening
- ✓ Bridge construction over reservoir
- ✓ MOT phasing

2. *Granite Construction Company; Structures Engineer*

3. *May 1997 – July 1999*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: MIRIAM "MIMI" KRONISH, PE, CCM, SENIOR MANAGER, CONSTRUCTION SERVICES
b. Project Assignment: QUALITY ASSURANCE MANAGER
c. Name of Firm with which you are now associated: RK&K, LLP
d. Years experience: With this Firm 12 Years With Other Firms 5 Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): RK&K, LLP, SENIOR MANAGER/PROJECT MANAGER, CONSTRUCTION SERVICES; 2002 - PRESENT: As a Senior Manager for Northern Virginia, responsibilities include oversight of a staff of Construction Managers, Office Engineers and Quality Control and Quality Assurance Inspectors on various projects throughout the NOVA District to include Design/Build and Design-Bid-Build Delivery Methods, and identifying and developing new business pursuits for a wide array of clients which include local and State agencies. Develops teams of consultants and contractors to pursue work as well as oversees and participates in proposal development and interview presentations to clients. Business pursuits have consisted of on-call construction engineering inspection, D/B projects, and project specific Construction Management and Inspection Services. Representative project work includes Construction Management and overall Quality Assurance and Quality Control on VDOT's Fairfax County / Fair Lakes Interchange Project, Woodrow Wilson Bridge Route 1 Interchange and Woodrow Wilson Bridge Telegraph Road Interchange, Rollins Ford Road for Prince William County, Southern Collector Road for The Town of Purcellville, and other projects for VDOT and The City of Alexandria, including the Route 1 Design/Build Bus Rapid Transit Project. Performs Constructability Reviews, Bidability Reviews and Plan Reviews for various clients on projects of various size and type. THE DRIGGS CORPORATION, PROJECT MANAGER/PROJECT ENGINEER; 1997 - 2002: Route 288/Route 76 Interchange, Richmond VA (VDOT): Project Manager for this \$30 million VDOT contract. Duties included daily project management of all phases of construction including concrete pavement (CRCP), bridges, retaining walls, mechanically stabilized earth walls, mass excavation, and asphalt pavement. Managed/coordinated subcontractors and survey crews, hired employees, managed equipment and tracked daily production and cost. Coordinated daily with VDOT staff concerning quality, payment quantities, plan revisions, work orders, MOT and erosion and sediment control installations on the project. Updated the CPM schedule and maintained daily records, and prepared and submitted materials documentation and all contract correspondence. (1999-2002). Beulah Street Extension, Fort Belvoir (VDOT): As Project Engineer duties included management for all phases of construction for this \$2.5 million road extension for VDOT. Managed a crew of 8-10 employees, tracking production, cost and equipment utilization, developed, submitted and received approval for a Value Engineering package to reuse existing signal poles on the project to save VDOT and the contractor money, and to make a difficult traffic switch safer and faster for the traveling public. Updated the CPM schedule and maintained daily records, and prepared and submitted materials documentation and all contract correspondence (1998-1999). SUMMARY OF RELEVANT EXPERIENCE <ul style="list-style-type: none">▪ 17 years of construction experience▪ 12 years of NOVA experience▪ 12 VDOT construction projects▪ Construction Quality Assurance▪ MOT coordination/oversight▪ Structures▪ Utility coordination
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: The George Washington University – Washington DC /BS/1997/Civil Engineering Construction Management Association of American (CMAA) – Certified Construction Manager CCM/2007/ #A1275
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2003/Civil Engineering/Virginia #0402038207 2007/Erosion and Sediment Control Inspector
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a



similar function.)

VDOT FAIRFAX COUNTY PARKWAY / FAIR LAKES INTERCHANGE PROJECT, FAIRFAX, VA (\$49M)

1. As Construction Manager, responsibilities included overall construction quality assurance and quality control management and coordination with VDOT's Area Construction Engineer, the designers, VDOT's utility engineers, contractor, traffic engineering, and the public relations staff to resolve project issues. Conducted work order processing and negotiation with the contractor and VDOT, supervised a team of administrative support, office engineers, and quality assurance/quality control roadway and structures inspectors to ensure conformance with approved VDOT plans, specifications and other contract documents. Responsible for oversight of environmental documentation to include Fair Lakes Parkway. Dam alteration permits, approval of all monthly pay requests, writing project management correspondence, financial reporting of contract status for VDOT, coordination of maintenance of traffic, daily maintenance of project records including as-built drawings, materials documentation and plan revisions and overrun/underrun reporting in accordance with VDOT's policies and procedures. This project included 3 bridges, utility relocations, 3 miles of primary roadway reconstruction including subbase, drainage and paving installation, extensive retaining wall construction, and complex Maintenance of Traffic (MOT) coordination. This project received a 93.7 CQIP score.
2. *RK&K; Construction Manager*
3. *October 2010 – August 2013*

Relevance to the Project

- ✓ *VDOT project*
- ✓ *QA/QC Services*
- ✓ *Roadway Improvements*
- ✓ *Environmental/Dam*
- ✓ *MOT*
- ✓ *Bridges*
- ✓ *Utility Relocations*

ROUTE 1 BUS RAPID TRANSIT DESIGN-BUILD, CITY OF ALEXANDRIA, VA (\$11M)

1. Quality Assurance Oversight responsible for the Project Manager and Quality Assurance Inspection Staff for this \$11 million Design-Build project that includes the construction of dedicated concrete bus lanes along Route 1 in the City of Alexandria including roadway excavation and grading, utility and storm drainage installation, intersection improvements including signal modifications, and movement and placement of contaminated soil. Responsible for Quality Assurance Oversight to include coordination with the Quality Assurance staff, the Design-Builder, City of Alexandria engineering and construction staff. Also responsible for performing regular quality assurance oversight reviews on submittals and RFIs, estimate processing, change orders, contractor payments and materials verification. Monitor the Quality Assurance budget and review and submit invoices.
2. *RK&K; Quality Assurance Oversight*
3. *December 2012 – Anticipated December 2013*

Relevance to the Project

- ✓ *Design-Build Project*
- ✓ *Quality Assurance Reviews*
- ✓ *Storm Drainage Installation*
- ✓ *Stakeholder Coordination*

VDOT WOODROW WILSON BRIDGE – ROUTE 1 INTERCHANGE, ALEXANDRIA, VA (\$175M)

1. As Project Engineer, responsibilities included overall quality assurance and quality control of the contractor's activities, daily construction management to ensure conformance with approved VDOT plans, specifications and other contract documents, coordination with designers, environmental division, traffic engineering, Right-of-Way, and the public relations staff to recommend and resolve project issues. Supervised quality assurance and quality control inspection of contractors work for conformance with plans and specifications, oversight of EEO/Civil Rights documentation, wrote project management correspondence, coordination of maintenance of traffic between localities, VDOT and the contractor, daily maintenance of project records including as-built drawings. This project included 19 new bridges, utility relocations, 1.5 miles of primary roadway reconstruction including subbase, drainage and paving installation, extensive pile supported embankment ground improvement installation, new ITS/TMS devices, wetland mitigation and extensive Maintenance of Traffic (MOT) coordination.
2. *RK&K; Project Engineer*
3. *October 2010 – October 2012*

Relevance to the Project

- ✓ *VDOT Project*
- ✓ *Bridges*
- ✓ *Utility Relocations*
- ✓ *MOT*

SOUTHERN COLLECTOR ROAD, PURCELLVILLE, VA (\$4M)

1. Certified Construction Manager (CCM) responsible for the quality assurance and quality control staff on this \$4.0M Locally Administered (LAP) project including construction of a new roadway on new alignment connecting the southern end of the Town of Purcellville to Route 7/Main Street. Responsible for coordinating and assigning the Construction Management and inspection staff. Coordinated regularly with the Director of Public Works for the Town of Purcellville to ensure the project staff provided was performing and meeting the Towns expectations and ensuring contractor was conforming with the approved plans, specifications and other contract documents to be accepted into VDOT's roadway system for maintenance. As a locally administered project, project documentation and quality assurance followed the VDOT policies and procedures for contract administration.
2. *RK&K; Certified Construction Manager*
3. *November 2011 – June 2013*

Relevance to the Project

- ✓ *Quality Assurance*
- ✓ *VDOT Coordination*
- ✓ *MOT*
- ✓ *Utility Relocations*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.		
a. Name & Title: OWEN PEERY, PE, DIRECTOR TRANSPORTATION		
b. Project Assignment: DESIGN MANAGER		
c. Name of Firm with which you are now associated: RK&K, LLP		
d. Years experience: With this Firm 25 Years With Other Firms 4 Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): RK&K, LLP, DIRECTOR TRANSPORTATION; 1998 - PRESENT: Mr. Peery leads RK&K's transportation efforts throughout Virginia and is the project manager and/or lead project engineer for a large number of transportation and civil engineering projects. His responsibilities include management of in-house engineering and administrative staff, client and owner/agency coordination, the direction of design by in-house staff and subconsultant personnel, public interaction including public hearings and workshops, and the management of budgets and schedules. Mr. Peery's specific design experience includes the layout and design of urban and rural interstates, roadways, streets, interchanges, at-grade intersections, civil-site plan coordination and design, drainage and stormwater design, erosion and sediment control quantities, estimates, and specifications. He specializes in the design of urban and freeway, interstate facilities and the extensive inter-agency, stakeholder, utility and owner coordination required with urban improvements. He is RK&K's Design Manager on Design-Build projects and assists VDOT preparing Design-Build and P3 contract documents. The majority of his work is widening and rehabilitation of existing facilities. Mr. Peery has managed approximately 150 VDOT projects or assignments over the past 15 years. Additionally, he was a former member of the Engineering Consultant Leadership Committee (ECLC).		
SUMMARY OF RELEVANT EXPERIENCE		
<ul style="list-style-type: none">▪ 29 years of transportation experience▪ 25 years of design management experience	<ul style="list-style-type: none">▪ 150 VDOT projects▪ Interstate design▪ Roadway widening and rehabilitation	<ul style="list-style-type: none">▪ Coordinates multidisciplinary engineering services▪ Expertise in roadway improvement projects
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Military Institute – Lexington, VA/BS/1983/Civil Engineering		
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2009/Civil Engineering /Virginia #0402 046882		
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) VDOT ROUTE 58 PHASE II WIDENING, WASHINGTON COUNTY, VA (\$21M) 1. Mr. Peery was responsible for the development of final plans for this two-mile segment of Route 58. The project provided parallel lanes and reconstruction of existing roadway to turn an existing two-lane roadway into a four-lane divided facility. Mr. Peery led this fast-track design effort which required plans to be ready for PAC in four months. To complete this design, RK&K was tasked with taking a design that had been "shelved" for several years and bringing it up to current standards without impacting the right of way that had been previously purchased. Included in that was a complete overhaul of the previous stormwater management design, redeveloping all alignments in GeoPAK from the previous IGRDS designs and updating design features or developing design exceptions to make the project eligible for federal funding. Mr. Peery led all plan development during design, provided design reviews and participated in construction engineering. Due to the terrain on this project, and the relocation of a major water main as part of the contract, RK&K developed a detailed sequence of construction that would allow large cuts to take place early so that the water main could be relocated.		
2. <i>RK&K; Design Manager</i>	3. <i>August 2008 – October 2013</i>	<i>Relevance to the Project</i> <ul style="list-style-type: none">✓ <i>VDOT project</i>✓ <i>Roadway Widening</i>✓ <i>Stormwater Management</i>✓ <i>Stakeholder Coordination</i>✓ <i>Featured Work History Form in 3.4.1</i>



VDOT, STAFF AUGMENTATION FOR DESIGN-BUILD/P3 SERVICES, STATEWIDE, VA (\$1M IN FEES)

1. Responsible for overall project (contract) management. RK&K provided professional engineering on projects that were procured and administered in accordance with alternative delivery methods such as Design-Build or P3. These services include but are not limited to: survey, updating existing plans, developing right of way and construction plans, roadway design, hydraulic and drainage design, stormwater management design, traffic engineering and analysis, utility coordination, structure and bridge design, geotechnical and geophysical services, public involvement, constructability reviews, cost estimating, schedules, special provisions, development / preparation of RFQs, RFPs and technical requirements and engineering support in the evaluation of SOQs and EOIs. In his role of leading all of these efforts, Mr. Peery has strengthened his experience and knowledge of design-build
2. *RK&K; Design Manager*
3. *August 2008 – Current (August 2013)*

- Relevance to the Project**
- ✓ *Design-Build Project*
 - ✓ *VDOT Project*
 - ✓ *Design Management*
 - ✓ *Stormwater Manager*

VDOT ROUTE 250 BYPASS INTERCHANGE AT MCINTIRE ROAD, CITY OF CHARLOTTESVILLE, VA (\$20M)

1. Design Manager responsible for planning, environmental documentation, preliminary engineering, final engineering, public outreach and coordination between federal, state and local agencies to complete this \$30M project as part of VDOT's Urban Construction Initiative and the largest First Cities project in Virginia. Work has included roadway design, interchange layout and design, bridge design, environmental studies, traffic data collection and analysis, drainage design, stormwater management and hydraulics, and landscape and hardscape design. The initial phase of the project was the preparation of NEPA documentation to secure the appropriate level of environmental documentation for the proposed improvements. This includes performing extensive interchange alternatives analysis to avoid and minimize impacts to 4(f) and Section 106 properties. Mr. Peery, in conjunction with the City's project manager, led a City Council Steering Committee through this process which included the analysis of 14 interchange alternatives. Public outreach was so critical to this process that, under Mr. Peery's direction, RK&K is currently maintaining a project website that contains all project information, is linked to the City and VDOT websites, and is updated nearly real-time to provide information to the community. Mr. Peery led in-house design and constructability reviews and coordinated the development of the contract time determination report and the development of the detailed construction schedule.
2. *RK&K; Design Manager*
3. *June-2007 – October 2012*

- Relevance to the Project**
- ✓ *VDOT Project*
 - ✓ *Design Management*
 - ✓ *Multidisciplinary Services*
 - ✓ *Public Outreach*

VDOT ROUTE 11 WIDENING (WEST MAIN STREET), ROANOKE COUNTY, VA (\$15M)

1. Mr. Peery was responsible for preliminary and final plans for 2.2 miles of Route 11 widening three-lanes to six-lanes with a single span bridge. He is leading design and coordination overseeing all design and subconsultant activities to include all roadway and associated designs on this urban collector. Work includes roadway design, updating plans, hydraulics and drainage design, stormwater management, erosion control, river mechanics and scour, traffic data and analysis, roundabout design, signal design, TMP and MOT plans, quantities, internal QC reviews and estimates.
2. *RK&K; Design Manager*
3. *May 2006 – October 2013*

- Relevance to the Project**
- ✓ *VDOT Project*
 - ✓ *Design Management*
 - ✓ *Stormwater Manager*
 - ✓ *Traffic Engineering*

13TH STREET/ HOLLINS ROAD IMPROVEMENTS, ROANOKE, VA (\$39M)

1. Responsible for the development of preliminary and final engineering services for development of complete Right of Way and Construction Plans for the \$39M reconstruction and widening of 13th Street and Hollins Road in the City of Roanoke. The project covers approximately one mile and includes additional travel lanes, bike lanes, raised median, curb and gutter, sidewalks, two roundabouts, intersection improvements, drainage, stormwater management and a new grade separated crossing of Lick Run and the Norfolk Southern Railroad. The design also included extensive constructability reviews to ensure that the proposed improvements can be constructed while through traffic is maintained on this important commuter route throughout all phases of construction. As part of this effort, RK&K has developed a detailed Transportation Management Program and Traffic Control / Sequence of Construction plan. RK&K performed all of the traffic analysis and traffic engineering for the project including simulations for the two roundabouts and the Work Zone Traffic Impact Analysis. Mr. Peery was Project Manager for this design throughout design development and oversaw in-house design QC and coordinated sequence of construction reviews.
2. *RK&K; Design Manager*
3. *September 2009 – September 2013*

- Relevance to the Project**
- ✓ *Design Management*
 - ✓ *Multidisciplinary Services*
 - ✓ *Stream Crossing*
 - ✓ *Constructability Reviews*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.					
a. Name & Title: ROBERT G. RUBE, CONSTRUCTION MANAGER					
b. Project Assignment: CONSTRUCTION MANAGER					
c. Name of Firm with which you are now associated: AMERICAN INFRASTRUCTURE					
d. Years experience: With this Firm 8 Years With Other Firms 23 Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): AMERICAN INFRASTRUCTURE, PROJECT MANAGER; 2006 - PRESENT: Responsibilities include managing all aspects of the Project: planning and scheduling work activities, engineering, submittals, pay estimates, coordination with owner, subcontractors, suppliers and other stakeholders, customer satisfaction, and safety for all phases of construction. Typically manages and supervises multiple Project Engineers and other Project Managers. AMERICAN INFRASTRUCTURE, PROJECT ENGINEER; 2005 - 2006: Mr. Rube managed structural elements of the project: submittals & approvals of shop drawings and materials, workplans for crews, safety planning & QA/QC for structural work, scheduling of structural crews and related subcontractors, owner liaison for structures and schedule. CROSSING CONSTRUCTION COMPANY, JV SENIOR ENGINEER; 2000 - 2005: Mr. Rube was the lead Crossing Construction representative on the joint venture. He worked with the JV partner superintendent and crews to provide support for operations: submittals, RFIs, correspondence, schedule (CPM and weekly crew schedules), safety, generating pay estimates with owner's reps, and subcontractor coordination. CROSSING CONSTRUCTION COMPANY, PROJECT MANAGER; 1995 - 2000: Mr. Rube managed company resources to complete projects: Subcontracted & material PO and developed & maintained project schedule. He also worked with project superintendents and/or foremen to support projects: submittals, day-to-day material procurement, subcontractor coordination, look-ahead schedule, QA/QC, pay estimates, and resolved disputes w/owner. CROSSING CONSTRUCTION COMPANY, PROJECT ENGINEER; 1982 - 1995: Worked with project superintendents and/or foremen to support projects: submittals, material procurement, subcontractor coordination, safety, schedule, QA/QC, and pay estimates. SUMMARY OF RELEVANT EXPERIENCE <table style="width: 100%; border: none;"><tr><td style="width: 33%; vertical-align: top;"><ul style="list-style-type: none">▪ 31 years of construction experience▪ 5 years of large-scale highway and bridge roadway experience</td><td style="width: 33%; vertical-align: top;"><ul style="list-style-type: none">▪ Design-build▪ High hazard dams▪ Construction QC management</td><td style="width: 33%; vertical-align: top;"><ul style="list-style-type: none">▪ Roadway construction▪ Bridge construction▪ Retaining wall construction</td></tr></table>			<ul style="list-style-type: none">▪ 31 years of construction experience▪ 5 years of large-scale highway and bridge roadway experience	<ul style="list-style-type: none">▪ Design-build▪ High hazard dams▪ Construction QC management	<ul style="list-style-type: none">▪ Roadway construction▪ Bridge construction▪ Retaining wall construction
<ul style="list-style-type: none">▪ 31 years of construction experience▪ 5 years of large-scale highway and bridge roadway experience	<ul style="list-style-type: none">▪ Design-build▪ High hazard dams▪ Construction QC management	<ul style="list-style-type: none">▪ Roadway construction▪ Bridge construction▪ Retaining wall construction			
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Drexel University, Philadelphia, PA /B.S./1982 /Civil Engineering					
f. Active Registration: Year First Registered/ Discipline/VA Registration #: Year/Discipline/Registration #					
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)					



SR 476 RECONSTRUCTION, MONTGOMERY COUNTY, PENNSYLVANIA (\$72M)

1. Construction Manager having continuous coordination with other contractors working within and adjacent to the project limits. This project required the reconstruction of 4 miles of I-476 from the Schuylkill Expressway (I-76) to the PA Turnpike. This interstate is one of the most heavily traveled arteries in the Philadelphia area making maintaining traffic flow a key component. Due to the area geology having high incidences of sinkholes, the reconstruction included the removal of existing concrete pavement, sinkhole remediation, excavation, laying a sub-base, ATPB and 14" plain cement concrete pavement for three lanes and two shoulders on both NB & SB lanes. The project also included rehabilitation of five bridge decks with selective structural repairs, dam replacement, and latex overlay; four of them were repainted. Initial project schedule was critical. The project received ENR's Transportation Award of Merit for being completed on-time and within budget with minimal disruptions to the 130,000 daily motorists.
2. *American Infrastructure; Construction Manager*
3. *August 2009 – August 2013*

Relevance to the Project

- ✓ *Design-Build Traffic Control*
- ✓ *Roadway reconstruction and widening*
- ✓ *Bridge construction*
- ✓ *Challenging geotechnical conditions*
- ✓ *Utility coordination*
- ✓ **Featured Work History Form in 3.4.1**

PA TURNPIKE (I-276) RECONSTRUCTION AND WIDENING, MONTGOMERY COUNTY, PENNSYLVANIA (\$171M)

1. Construction Manager overseeing and working in collaboration with three area CMs, 7 engineers, 2 General Superintendants, 4 Craft superintendants, & up to 18 crews plus subcontractors due to the projects complexity gaining valuable collaborative work experience. This project reconstructed and widened the PA Turnpike from four to six mainline lanes. The scope of work included staged, full-depth reconstruction and widening of 5.3 miles of roadway, including new drainage, reconstruction of concrete paving at the Valley Forge Interchange, reconstruction of five bridges, extending three box culverts, and constructing over 250,000 SF of MSE, post-and-panel and ground mounted retaining walls and noise barrier walls. The area is sinkhole prone and required 658,000 CY of excavation and 423,000 tons of asphalt. The heaviest traveled section of the turnpike required staged construction occurring while maintaining the existing 2-lanes of traffic in each direction. The very tight project footprint required significant support of excavation at each structure to maintain traffic during construction. The aggressive schedule required construction of the outer lanes in each direction concurrently. The I-276 reconstruction was the first major Pennsylvania Turnpike project that was finished on time.
2. *American Infrastructure; Construction Manager*
3. *January 2007 – January 2009*

Relevance to the Project

- ✓ *Roadway reconstruction and widening*
- ✓ *Bridge construction*
- ✓ *Challenging geotechnical conditions*
- ✓ *Retaining wall construction*
- ✓ *Utility coordination*

SR-309, SECTION 100, MONTGOMERY COUNTY, PA (\$58M)

1. Directed, coordinated and exercised functional authority for the planning, organization, control, integration and completion of the project in conjunction with the Construction Manager. Coordinated with adjacent contractors on the project to ensure existing utilities were relocated and new ones were properly installed. The SR-309 project required full-depth reconstruction of 1.5 miles of Route 309 including new retaining walls, 5 bridges (two over the highway connected by MSE retaining walls and 3 on the highway), and new on and off-ramps. Minimal lateral limit of disturbance required construction of support of excavation to construct new retaining walls. The construction was staged with active traffic.
2. *American Infrastructure; Senior Project Engineer*
3. *April 2005 – July 2006*

Relevance to the Project

- ✓ *Roadway widening*
- ✓ *Bridge construction*
- ✓ *Retaining wall construction*
- ✓ *Utility coordination/relocation*

PINE RUN AND RAPP RUN DAM MODIFICATIONS, MONTGOMERY COUNTY, PENNSYLVANIA (\$9.4M)

1. Construction Manager being the key person coordinating with the owner, subcontractors, suppliers, and other stakeholders as well as superintendents to acquire and apply resources as needed. Planned and scheduled work activities and coordinated submittals. Prepared RFIs, value engineering solutions, construction work plans, and pay estimates. Ensuring customer satisfaction and safety for all phases of construction. The Pine and Rapp Run Dam modifications will detain water during flood events and prevent downstream flooding. The project is constructing two flood retarding structures with a concrete labyrinth weir system abutted by a 15 ft high earthen berm with a sheet-pile cutoff wall core. New wetlands are being constructed to mitigate the impact of structures on the existing wetlands. To ensure construction does not impact the surrounding area, significant and specific E&S was sequenced. A tight schedule has been kept due to the sensitive environmental area.
2. *American Infrastructure; Construction Manager*
3. *February 2013 – December 2013*

Relevance to the Project

- ✓ *High Hazard dam construction*
- ✓ *Challenging geotechnical conditions*
- ✓ *Utility coordination*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.						
a. Name & Title: CARI R. BEENENGA, P.E., SENIOR GEOTECHNICAL ENGINEER						
b. Project Assignment: LEAD GEOTECHNICAL ENGINEER						
c. Name of Firm with which you are now associated: GANNETT FLEMING, INC.						
d. Years experience: With this Firm <u>25</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): GANNETT FLEMING, INC., SENIOR GEOTECHNICAL ENGINEER; 1998 - PRESENT: Responsible for directing site reconnaissance, subsurface exploration, instrumentation, and field and laboratory testing programs; preparing geotechnical and foundation engineering recommendations and reports; and performing geotechnical analyses, including slope stability, seepage, settlement, internal stability, material compatibility, filter and drain design, and foundation analyses for dam, levee, environmental, water resources, transportation, and building projects. Also responsible for performing dam safety inspections, preparing construction contract provisions and cost estimates, performing shop drawing reviews, providing observation and geotechnical construction-related services for dam and geotechnical-related construction projects, preparing as-built drawings, and preparing dam safety performance evaluation reports. GANNETT FLEMING, INC., GEOTECHNICAL PROJECT ENGINEER; 1988 – 1998: Responsible for directing site reconnaissance, subsurface exploration and field and laboratory testing programs; preparing geotechnical and foundation engineering recommendations and reports; and performing geotechnical analyses, including foundation design, pavement design, bearing capacity, settlement, and geotechnical analyses for transportation projects, including retaining walls, bridges, tunnels and . Also responsible for preparing construction contract provisions and cost estimates, performing shop drawing reviews, providing observation and geotechnical construction-related services for transportation related construction projects. SUMMARY OF RELEVANT EXPERIENCE <ul style="list-style-type: none">▪ 25 years of geotechnical design experience▪ High-hazard dams▪ Bridge over spillway▪ Retaining wall design and construction▪ Seepage and slope stability analysis						
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Harrisburg Area Community College, Harrisburg, PA/A.A./1986/Engineering The Pennsylvania State University, State College, PA/B.S./1988/Civil Engineering						
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2009/PE/46858						
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, S.R. 0030 SECTION 010, LANCASTER COUNTY, PA. (\$48M) <ol style="list-style-type: none">1. Geotechnical Engineer responsible for performing geotechnical investigations, structure foundation design, and specifications for the final design of 2.2 miles of U.S. Route 30. The project involved mainline roadway reconstruction and widening, five bridge replacements, one new bridge, three sound barriers totaling 1,950 feet in length, a 500-foot-long retaining wall, and an 850-foot-long retaining wall supporting a sound barrier. The project area is underlain by limestone bedrock.<table border="1" style="float: right; margin-left: 20px;"><tr><td style="padding: 2px;">Relevance to the Project</td></tr><tr><td style="padding: 2px;">✓ Mainline Roadway</td></tr><tr><td style="padding: 2px;">✓ Five Bridge Replacements</td></tr><tr><td style="padding: 2px;">✓ One New Bridge</td></tr><tr><td style="padding: 2px;">✓ Retaining and Sound Walls</td></tr></table>2. <i>Gannett Fleming, Inc.; Geotechnical Engineer</i>3. <i>May 1998 – May 1999</i>		Relevance to the Project	✓ Mainline Roadway	✓ Five Bridge Replacements	✓ One New Bridge	✓ Retaining and Sound Walls
Relevance to the Project						
✓ Mainline Roadway						
✓ Five Bridge Replacements						
✓ One New Bridge						
✓ Retaining and Sound Walls						



PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, S.R. 0078, SECTION 17M, BERKS COUNTY, PA. (\$22M)

1. Geotechnical Project Engineer responsible for geotechnical investigations, structure foundation design, roadway design, and specifications for the final design of 3.4 miles of I-78. The project involved the reconstruction of the Hamburg Interchange, reconstruction of the mainline roadway, three bridge replacements, and seven new retaining walls totaling more than 2,500 LF. Followed Load and Resistance Factor Design (LRFD) procedures.
2. *Gannett Fleming, Inc.; Geotechnical Project Engineer* 3. June 1999 – September 2004

Relevance to the Project

- ✓ Roadway Design
- ✓ Structure Foundation Design
- ✓ Three Bridge Replacements
- ✓ Seven Retaining Walls

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, S.R. 0015 AND PA ROUTE 581 INTERCHANGE IMPROVEMENTS, CUMBERLAND COUNTY, PA (\$90M)

1. Geotechnical Project Engineer responsible for the management of all geotechnical design efforts, including a field subsurface exploration, laboratory testing, design calculations, and a report summarizing the recommendations. The project includes 2.4 miles of highway widening; the replacement of three dual three-span bridges, one dual single-span bridge, five retaining walls, and six sound barriers; and widening of the 17-span S.R. 0581 viaduct structure. Geotechnical issues include limestone bedrock that has the potential for developing sinkholes and constructability under staged construction conditions. Pre-drilled H-piling and spread footings underlain by reinforced aggregate were designed and detailed to provide economic foundation alternatives. Design and construction services are being provided.
2. *Gannett Fleming, Inc.; Geotechnical Project Engineer* 3. January 2003 – December 2009

Relevance to the Project

- ✓ Subsurface Exploration
- ✓ Highway Widening
- ✓ Retaining Walls

CITY OF NEWPORT NEWS, DEPARTMENT OF PUBLIC UTILITIES, LEE HALL RESERVOIR DAM IMPROVEMENT PROJECT, NEWPORT NEWS AND YORK COUNTY, VA. (\$27.9M)

1. Senior Geotechnical Engineer on this project to provide engineering services and related studies for improvements to the Lee Hall Reservoir Dam, which is located about 2 miles northeast of the Fort Eustis military base. The reservoir consists of two parts: the Upper Reservoir and the Lower Reservoir. The Upper Reservoir is controlled by a railroad embankment and a hydraulic control structure. The Lower Reservoir is controlled by the Lee Hall Reservoir Dam, also referred to as the "Lower Dam." Lee Hall Reservoir Dam is a 21-foot-high, 3,500-foot-long earth embankment structure reportedly constructed in 1892 and modified several times in its history. The Lower Lee Hall Reservoir Dam is presently classified as a high-hazard-potential dam. The Lee Hall Reservoir is used for water supply for the City of Newport News. The project provided engineering services in the following three phases: (1) concept development, (2) design and bid services, and (3) construction-related services. These three phases allowed completion of improvements to the existing dam impounding Lee Hall Reservoir to bring the facility into compliance with current Virginia Dam Safety Regulations. Responsibilities included development and oversight of subsurface investigation program, extensive laboratory soil testing and development of engineering parameters for design of remediation of earth embankment dam under nearly full pool loading.
2. *Gannett Fleming, Inc.; Senior Geotechnical Engineer* 3. July 2010 – July 2011

Relevance to the Project

- ✓ Inspection at High Hazard Dam
- ✓ VA Dam Safety Regulations
- ✓ Utilities at Dam
- ✓ River Diversion and Dam Modifications

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES, LYMAN RUN DAM REPLACEMENT PROJECT, GALETON, PA. (\$16M)

1. Senior Geotechnical Engineer responsible for design and specifications for support structures associated with the high hazard Lyman Run Dam replacement. Support structures included an intake tower, inlet and outlet works, a two-span spillway bridge located on the dam's centerline, spillway training walls, and support of excavation structures. Concerns over stability and safety necessitated the breach of the dam and drainage of Lyman Run Lake to replace the old earthfill dam with a new earthfill dam constructed at the same location.
2. *Gannett Fleming, Inc.; Geotechnical Engineer* 3. July 2001 – July 2004

Relevance to the Project

- ✓ Earth embankment dam
- ✓ Spillway
- ✓ Featured Work History Form in 3.4.1



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: BOYD HOWARD, P.E., PROJECT MANAGER	
b. Project Assignment: DAM DESIGNER	
c. Name of Firm with which you are now associated: GANNETT FLEMING, INC.	
d. Years experience: With this Firm <u>17</u> Years With Other Firms <u>7</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): GANNETT FLEMING, INC., PROJECT MANAGER; 1996 - PRESENT: Responsibilities typically include project management; technical/engineering analyses; conceptual, preliminary, and dam design specialist including preparation of engineering and construction cost estimates and construction documents; project inspection, field reconnaissance, and condition assessments; and feasibility and planning studies. Range of projects generally encompasses dams and hydropower structures and their appurtenant facilities; flood mitigation; water resource planning; water supply system components; and a particular technical emphasis on gravity dam stability analyses. Provided management on at least 25 projects, conducted nearly 40 routine dam safety inspections and approximately 50 additional reconnaissance or construction-phase inspection assignments, performed dam stability analyses at more than two dozen facilities, and participated in 8 post-tensioned anchor designs for concrete dam remediation. SUMMARY OF RELEVANT EXPERIENCE <ul style="list-style-type: none">▪ 24 years of construction experience▪ High-hazard dams▪ Spillway design▪ Dam permitting▪ Provided dam design and analysis services since 1988.▪ Virginia experience	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Carnegie Mellon University , Pittsburgh, PA/B.S./1988/Civil Engineering Carnegie Mellon University , Pittsburgh, PA/M.S./1992/Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2012/PE/50706	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) COUNTY OF SPOTSYLVANIA DEPARTMENT OF UTILITIES, HUNTING RUN DAM, SPOTSYLVANIA COUNTY, VA. (\$27.9M) <ol style="list-style-type: none">1. Project Engineer and Project Manager responsible for leading the final design and construction document preparation for a new 2,400-foot-long, 90-foot-high combined roller-compacted concrete (RCC)/embankment dam and appurtenant structures. Responsible for structural stability analyses, developing design details and calculations, preparing design drawings for construction, and developing construction specifications relating to the earth and concrete dam, reservoir clearing, site work, and erosion and sediment pollution control. The pump-storage reservoir is used for water supply and limited recreation. Managed engineer's activities during bidding and award of Contract IV, which included the dam, pump station, interconnect pipeline, and relocation of a state road that traversed the dam site, and Contract V, which included reservoir clearing, utility relocations, and realignment of a second state road. Oversaw general civil aspects of work during construction of Contract IV and V, performed submittal reviews and answered contractors' requests for information, and participated in construction monitoring of RCC placement, concrete and liner work, and civil site work. Managed and participated in post-construction activities including dam inspections, instrumentation monitoring, preparation of Operations and Maintenance and Emergency Action Plans, and supplemental dam and reservoir-related design services for the County.<div style="float: right; border-left: 1px solid black; padding-left: 5px;">Relevance to the Project<ul style="list-style-type: none">✓ <i>High Hazard Virginia Dam</i>✓ <i>Earthen Dam</i>✓ <i>Concrete Spillway</i>✓ <i>VDOT Road Relocation</i>✓ <i>Utility Relocation</i>✓ <i>Agency Coordination</i>✓ <i>Challenging Geotechnical Conditions</i>✓ Featured Work History Form in 3.4.1</div>2. <i>Gannett Fleming, Inc.; Project Engineer and Project Manager</i>3. <i>May 1998 – November 2004</i>	



CITY OF NEWPORT NEWS, DEPARTMENT OF PUBLIC UTILITIES, LEE HALL RESERVOIR DAM IMPROVEMENT PROJECT, NEWPORT NEWS AND YORK COUNTY, VA. (\$14.4M ESTIMATED CONSTRUCTION)

1. Engineering Manager and Dam Design Specialist responsible for the preliminary and final design of improvements for the Lee Hall Reservoir, which was formerly divided into two pools impounded by two structures: a 30-foot-high railroad embankment (Upper Reservoir) and an 18 foot high by 2,200-foot-long earthfill dam embankment (Lower Reservoir). The Lower Dam, originally constructed in the 1890s, required increased spillway capacity, seepage control, and embankment stabilization. Managed overall design activities and led the civil, hydraulic, and utility components of the remediation design and environmental/dam safety permitting. Prepared design submittal packages for Owner and agency review, and provided subcontractor and agency coordination.
Relevance to the Project
 - ✓ High Hazard Virginia Dam
 - ✓ Earthen Dam
 - ✓ Concrete Spillway
 - ✓ Utility Relocation
 - ✓ Agency Coordination
 - ✓ Full Reservoir
2. *Gannett Fleming, Inc.; Engineering Manager and Dam Design Specialist* 3. *March 2011 – Present*

CITY OF NEWPORT NEWS WATERWORKS, KING WILLIAM RESERVOIR CONCEPT CONFIRMATION AND DESIGN SERVICES, KING WILLIAM COUNTY, VA. (\$200M)

1. Assistant Project Manager and Dam Design Specialist for an 88-foot-high, 700-foot-long earthfill dam and water supply outlet works, which involved more than 2 miles of Virginia Department of Transportation primary Route 626 relocation. The project was halted about halfway through the concept confirmation phase upon revocation of critical environmental permits, which resulted from a successful Federal Court challenge by environmental opponents. Prior to cancellation, provided team coordination for subsurface exploration program and reservoir seepage assessments; oversaw hydrologic and hydraulic analyses, including probable maximum flood determination; conducted preliminary outlet works design layout and coordination with Owner; and initiated concept designs for Route 626 relocation; reservoir clearing plan; and aerial survey mapping for final design.
Relevance to the Project
 - ✓ High Hazard Virginia Dam
 - ✓ Earthen Dam
 - ✓ VDOT Road Relocation
2. *Gannett Fleming, Inc.; Assistant Project Manager and Dam Design Specialist* 3. *October 2008 – October 2009*

PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, RYERSON STATION STATE PARK DAM, GREENE COUNTY, PA, (\$21.7M)

1. Project Manager and Dam Design Specialist for final design, permitting, bid, and construction services for a concrete gravity dam and related project features to replace the damaged existing structure and bring the modified structure into compliance with current dam safety regulations. Attended initial emergency site visit to investigate regional site movements causing damage to the dam, and subsequent emergency drawdown of lake. Conducted stability analyses and contributed to initial data gathering and reporting. Managed and oversaw the design for the dam rehabilitation, which was completed in 2013. Coordinated project permitting and design finalization, which is pending further contributions from the owner. Also was instrumental in structural monitoring program from 2005 through 2012 that confirms the adequacy of site conditions after the initial period of regional ground movements that damaged the dam. Provided support to the owner's legal team and close agency coordination during successful litigation with potentially culpable entities.
Relevance to the Project
 - ✓ High Hazard Dam
 - ✓ Concrete Spillway
 - ✓ Dam Modifications
 - ✓ Agency Coordination
2. *Gannett Fleming, Inc.; Project Manager and Dam Design Specialist* 3. *July 2005 – Present*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.										
a. Name & Title: JERRY RISSER, SUPERINTENDENT										
b. Project Assignment: DAM CONSTRUCTION COORDINATOR										
c. Name of Firm with which you are now associated: AMERICAN INFRASTRUCTURE										
d. Years experience: With this Firm <u>26</u> Years With Other Firms <u>6</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): AMERICAN INFRASTRUCTURE, SUPERINTENDENT; 1986 - PRESENT: Responsibilities include assisting the Project Manager in planning and scheduling work activities, manpower, and equipment; supervision of hourly crew members, customer satisfaction, and safety for each phase of construction. Typically manages and supervises up to 10 foremen and up to 3 other Superintendents. NESHAMINY CONSTRUCTORS, INC, LABOR/CARPENTER; 1980 - 1986: Responsibilities include finishing concrete and forming walls for concrete tanks. SUMMARY OF RELEVANT EXPERIENCE <table style="width: 100%; border: none;"><tr><td style="width: 33%; vertical-align: top;">▪ 32 years of construction experience</td><td style="width: 33%; vertical-align: top;">▪ 1 DB Project</td><td style="width: 33%; vertical-align: top;">▪ Roadway reconstruction and widening</td></tr><tr><td style="vertical-align: top;">▪ 5 years of dam construction experience</td><td style="vertical-align: top;">▪ High Hazard dam construction</td><td style="vertical-align: top;">▪ Bridge construction</td></tr><tr><td></td><td style="vertical-align: top;">▪ Retaining walls</td><td></td></tr></table>		▪ 32 years of construction experience	▪ 1 DB Project	▪ Roadway reconstruction and widening	▪ 5 years of dam construction experience	▪ High Hazard dam construction	▪ Bridge construction		▪ Retaining walls	
▪ 32 years of construction experience	▪ 1 DB Project	▪ Roadway reconstruction and widening								
▪ 5 years of dam construction experience	▪ High Hazard dam construction	▪ Bridge construction								
	▪ Retaining walls									
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Penn Manor High School, Millersville, PA/ 1974										
f. Active Registration: Year First Registered/ Discipline/VA Registration #: OSHA 10 and 30 hour Certification, Rigging Qualification, Certified Traffic Control Supervisor, SWTPT (Storm Water), On the Job Training										
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) LYMAN RUN DAM REHABILITATION, POTTER COUNTY, PENNSYLVANIA (\$17.3M) <ol style="list-style-type: none">1. Superintendent that oversaw the construction of the concrete spillway and installed pre-stressed concrete pipe for the outfall structure. Lyman Run Dam received a complete reconstruction, including demolition and removal of the existing embankment, emergency spillway structure and all original features down to a new foundation elevation. Work operations began with construction of temporary structures including sediment traps and channels, twin 10' diameter pipe diversion conduits, a deepwell dewatering system, a retaining wall, plus a cofferdam at the breached area of the original dam, all to allow reconstruction work to proceed safely and efficiently. Major work operations included over 350,000 CY of earth excavation, 16,000 CY of roller compacted concrete placement, 290 LF of 96" pre-stressed concrete cylinder pipe installation, 8,300 CY of structural concrete placement (over 7,000 CY in the dam's spillway), and 234,000 CY of engineered fill placement.<table style="width: 100%; border: none;"><tr><td style="width: 60%;"></td><td style="border-left: 1px solid black; padding-left: 5px;">Relevance to the Project<ul style="list-style-type: none">✓ High Hazard✓ Embankment construction✓ Emergency spillway✓ Retaining wall construction✓ Deepwell dewatering system✓ Featured Work History Form in 3.4.1</td></tr></table>2. <i>American Infrastructure; Superintendent</i>3. <i>April 2004 – December 2006</i>			Relevance to the Project <ul style="list-style-type: none">✓ High Hazard✓ Embankment construction✓ Emergency spillway✓ Retaining wall construction✓ Deepwell dewatering system✓ Featured Work History Form in 3.4.1							
	Relevance to the Project <ul style="list-style-type: none">✓ High Hazard✓ Embankment construction✓ Emergency spillway✓ Retaining wall construction✓ Deepwell dewatering system✓ Featured Work History Form in 3.4.1									



SR 476 RECONSTRUCTION, MONTGOMERY COUNTY, PENNSYLVANIA (\$72M)

1. Superintendent responsible for the rehabilitation of the 5 bridge decks and construction of the dam replacement. Responsible for the installation of 1500 LF of 48" DIP and that tied in to the existing 48" finished water main. This project required reconstruction of 4 miles of I-476 (Blue route) from the Schuylkill Expressway (I-76) to the PA Turnpike tolls. Reconstruction includes removal of existing concrete pavement, sinkhole remediation, excavation, sub base, ATPB and 14" plain cement concrete pavement for three lanes and two shoulders both NB & SB. Also includes rehabilitation of five bridge decks – selective structural repairs, dam replacement & latex overlay; four structures are repainted. Maintenance and Protection of Traffic is Design-Build.

Relevance to the Project

- ✓ *Design-Build Traffic Control*
- ✓ *Roadway reconstruction and widening*
- ✓ *Bridge construction*
- ✓ *Challenging geotechnical conditions*
- ✓ *Utility coordination*
- ✓ **Featured Work History Form in 3.4.1**

2. *American Infrastructure ; Superintendent*

3. *August 2009 – March 2012*

I-276 RECONSTRUCTION, MONTGOMERY COUNTY, PENNSYLVANIA (\$171M)

1. Superintendent overseeing the widening of the PA Turnpike from four to six mainline lanes. Responsible for the demolition and rehabilitation of the 5 bridges on the project as well as the MSE walls. The I-276 reconstruction project widened the PA Turnpike from four to six mainline lanes. The project scope includes full-depth reconstruction and widening of 5.3 miles of bituminous roadway, reconstruction of concrete paving at the Valley Forge Interchange, reconstruction of five bridges, extension of three box culverts, and construction of over 250,000 SF of MSE, post-and-panel and ground mounted retaining walls and noise barrier walls.

Relevance to the Project

- ✓ *Road reconstruction and widening*
- ✓ *Bridge construction*
- ✓ *Challenging geotechnical conditions*
- ✓ *Retaining wall construction*
- ✓ *Utility coordination/relocation*

2. *American Infrastructure ; Superintendent*

3. *January 2007 – January 2009*



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.				
a. Name & Title: TIMOTHY W. JOHNSTON, P.E., SENIOR PROJECT MANAGER				
b. Project Assignment: DAM INSPECTOR				
c. Name of Firm with which you are now associated: GANNETT FLEMING, INC.				
<p>d. Years experience: With this Firm <u>38</u> Years With Other Firms <u>0</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</p> <p>GANNETT FLEMING, INC., SENIOR PROJECT MANAGER; 2008-PRESENT: Dam Inspection Specialist responsible for managing and performing professional engineering services under private, state, and federal contracts nationwide contracts for high hazard and intermediate hazard dams, including dam safety inspections; construction administration; technical support and quality assurance (QA) inspections of dam rehabilitation projects; dam safety assessments; the conceptual, preliminary, and final design of dam rehabilitation projects, including preparation of alternatives reports, design reports, plans, technical specifications, quantity estimates, and opinion of estimated probable construction costs. Currently, Mr. Johnston is leading the engineering design and construction technical support services for design-build modifications to the control tower and appurtenant facilities at Tampa Bay Water's C.W.Young Reservoir.</p> <p>GANNETT FLEMING, INC., PROJECT MANAGER; 2005-2008: Dam Inspection Specialist responsible for managing and performing the engineering design and safety inspection of high hazard and intermediate hazard dams, including associated structures such as spillways, outlet works systems, and siphons; preparation of hydrologic and hydraulic studies; investigations of dam failures; and review of hydraulic structure construction activities. Specific responsibilities include potential failure modes analysis; outlet facilities inspection; hydrologic, hydraulic, stability, and structural design and analyses; preparation of engineering reports and plans, specifications, and cost estimates; and periodic construction QA inspections of dam rehabilitation projects</p> <p>GANNETT FLEMING, INC., PROJECT ENGINEER; 1998-2005: Dam Inspection Specialist responsible for management of engineering technical support and inspection services during construction of high hazard and intermediate hazard dam rehabilitation and water supply facility projects, and performance of engineering analyses, design and inspection of dam and water resources projects.</p> <p>SUMMARY OF RELEVANT EXPERIENCE</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> ▪ 38 years of construction experience ▪ Performed over 60 dam inspections, including over 15 in VA </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> ▪ Performed and managed DB-related engineering design for rehabilitation of dam and appurtenant structures since 2011 </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> ▪ Performed dam safety inspection and managed construction inspection of dams nationwide since 1986. </td> </tr> </table>		<ul style="list-style-type: none"> ▪ 38 years of construction experience ▪ Performed over 60 dam inspections, including over 15 in VA 	<ul style="list-style-type: none"> ▪ Performed and managed DB-related engineering design for rehabilitation of dam and appurtenant structures since 2011 	<ul style="list-style-type: none"> ▪ Performed dam safety inspection and managed construction inspection of dams nationwide since 1986.
<ul style="list-style-type: none"> ▪ 38 years of construction experience ▪ Performed over 60 dam inspections, including over 15 in VA 	<ul style="list-style-type: none"> ▪ Performed and managed DB-related engineering design for rehabilitation of dam and appurtenant structures since 2011 	<ul style="list-style-type: none"> ▪ Performed dam safety inspection and managed construction inspection of dams nationwide since 1986. 		
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Drexel University, Philadelphia, PA/B.S./1979/Civil Engineering				
f. Active Registration: Year First Registered/ Discipline/VA Registration #:				
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> <p>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</p> <p>PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES (DGS), LYMAN RUN DAM REPLACEMENT PROJECT, GALETON, PA (\$17M)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Dam Inspection Specialist and Senior Project Manager on this high hazard dam, earthen embankment, and spillway replacement project. Responsible for performing a QA review of project manual technical specifications and drawings and providing construction-phase professional services and QA services in accordance with the DGS Bureau of Engineering and Architecture's Project Procedure Manual and the Bureau of Construction's Administrative Procedures during the construction of a \$17 million dam replacement project at the site of an existing 40-foot-high earth dam located at Lyman Run State Park. Responsibilities included technical and administrative support services; </td> <td style="width: 30%; vertical-align: top; border-left: 1px solid black; padding-left: 10px;"> <p><i>Relevance to the Project</i></p> <ul style="list-style-type: none"> ✓ <i>Inspection at High Hazard Dam</i> ✓ <i>Earth embankment dam</i> ✓ <i>Spillway</i> ✓ <i>QA Inspection of Contractor's Work</i> ✓ <i>Featured Work History Form in 3.4.1</i> </td> </tr> </table>		<ol style="list-style-type: none"> 1. Dam Inspection Specialist and Senior Project Manager on this high hazard dam, earthen embankment, and spillway replacement project. Responsible for performing a QA review of project manual technical specifications and drawings and providing construction-phase professional services and QA services in accordance with the DGS Bureau of Engineering and Architecture's Project Procedure Manual and the Bureau of Construction's Administrative Procedures during the construction of a \$17 million dam replacement project at the site of an existing 40-foot-high earth dam located at Lyman Run State Park. Responsibilities included technical and administrative support services; 	<p><i>Relevance to the Project</i></p> <ul style="list-style-type: none"> ✓ <i>Inspection at High Hazard Dam</i> ✓ <i>Earth embankment dam</i> ✓ <i>Spillway</i> ✓ <i>QA Inspection of Contractor's Work</i> ✓ <i>Featured Work History Form in 3.4.1</i> 	
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biweekly professional site visits; coordination with DGS in using Bureau construction inspection staff; coordination of in-house QA engineering inspection of foundation dewatering, preparation, and verification; drilling and grouting of foundation seepage cutoff; placement of embankment fill, filter drains, and seepage collection and instrumentation systems; and construction of a new 224-foot-wide labyrinth spillway with a foundation of roller-compacted concrete (RCC), a control tower, and a 96-inch prestressed-concrete cylinder pipe outlet conduit. Also responsible for preparation of a reservoir refilling and monitoring plan, cost evaluation, bid-phase services, and review of contractor qualifications. The existing dam was breached in response to dam safety problems related to seepage, spillway capacity, and spillway structure performance.

2. *Gannett Fleming, Inc.; Dam Inspection Specialist and Senior Project Manager* 3. *February 2004 – December 2006*

FAIRFAX WATER, UPPER OCCOQUAN DAM, FAIRFAX, VA. (\$10.2M)

1. Dam Inspection Specialist and Senior Project Manager on this high hazard dam and outlet works modification and utilities upgrade project. Responsible for performing intake and outlet facilities condition assessment, diving inspection, underwater coring, materials testing for compressive strength and susceptibility to alkali aggregate reaction (AAR), hydro-plant facilities and equipment assessment, structural analysis, and blow-off capacity analysis and for preparing conceptual-level alternatives, engineering report and cost estimates, preliminary and final design, and project quality control for upgrades to the existing 70-foot-high by 740-foot-long Upper Occoquan Dam constructed in the late 1950s to impound the 10 Bgal Occoquan Reservoir. Upgrades consisted of modifying three outlet works structures at the dam. The primary structure to be modified involved a large concrete intake and powerhouse building containing a 1,000 kW hydroelectric station. The hydro station will be removed to allow for construction of a new 70-foot-high concrete control tower and related appurtenances to increase outlet works capacity to current industry guidelines for reservoir draining. Other upgrades included electrical service upgrades and replacement motor control centers, adding custom-designed slide gates and a new trash rack and debris removal system to an adjacent structural steel raw water intake to better control unfavorably high manganese levels; adding piping interconnections between the new control tower and existing raw water lines; and lining a 70-foot-high concrete screen chamber silo with a polyvinyl chloride (PVC) membrane to abate seepage and AAR. With hydro station decommissioning at both the upper and lower dams, the project also involved assisting the owner with surrendering its current Federal Energy Regulatory Commission license and transferring regulatory jurisdiction to the Commonwealth of Virginia.

Relevance to the Project

- ✓ *Inspection at High Hazard Dam*
- ✓ *VA Dam Safety Regulations*
- ✓ *Utilities at Dam*
- ✓ *River Diversion and Dam Modifications*

2. *Gannett Fleming, Inc.; Dam Inspection Specialist and Senior Project Manager* 3. *January 2006 – April 2012*

COMMONWEALTH OF VIRGINIA, DEPARTMENT OF CONSERVATION AND RECREATION (DCR), UPGRADES/MODIFICATIONS TO LOWER NORTH RIVER DAM #78 (BRIERY BRANCH), ROCKINGHAM COUNTY, VA. (\$11.2M ESTIMATED)

1. Dam Inspection Specialist and Senior Project Manager on this high hazard dam earthen embankment and spillway modification project, which includes re-alignment of State Route 924. Responsible for Phase I, Pre-Design/ Investigation and Testing and Phase II, Schematics and Alternatives Analysis and Phase III, Preliminary Design for investigation and design of repairs and improvements needed to bring this Shenandoah Valley Soil and Water Conservation District dam into compliance with current Virginia Dam Safety Regulations and Natural Resources Conservation Service regulations. Spillway improvements alternatives included increasing existing auxiliary spillway capacity to safely pass the probable maximum flood event by either widening or by adding a second auxiliary spillway at the opposite abutment or replacing/abandoning the existing auxiliary spillway with a new RCC chute spillway over the dam's earth embankment. The evaluation of alternatives included review of existing historic documents, field inspection, assessment of existing dam safety deficiencies, development of embankment and drain modifications, outlet works modifications, identification of project constructability issues, anticipated construction sequence and schedule, temporary stream diversion and surface water control, long-term maintenance issues, project aesthetics, recreational impacts, and opinion of estimated construction cost. The presence of a state highway located within the existing auxiliary spillway channel required evaluation of roadway impacts up to and including re-alignment and abandonment. Services also included field and aerial surveys, preparation of topographic and planimetric mapping, remote-operated vehicle inspection, and televising of an existing 36-inch outlet conduit, and preparation of deliverable reports with exhibits and summary matrices that presented findings of the field investigations and alternatives analyses.

Relevance to the Project

- ✓ *Inspection at High Hazard Dam*
- ✓ *VA Dam Safety Regulations*
- ✓ *Earth Embankment and Spillway*
- ✓ *State Road Re-alignment*

2. *Gannett Fleming, Inc.; Dam Inspection Specialist and Senior Project Manager* 3. *May 2011 – Present*



Appendix 3.4.1 Work History Forms



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: SR 476 RECONSTRUCTION AND WIDENING Location: Montgomery County, PA	Name: AECOM	Name of Client / Owner.: Pennsylvania Department of Transportation Phone: 804-822-3460 Project Manager: George Dunheimer Phone: 610-205-6700 Email: gdunheimer@state.pa.us	10/2012	Substantial Completion 12/2011 Final Estimated 08/2013*	\$71,728	\$80,009 Increase due to additional scope of work including undercutting	\$80,009

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.

*Additional scope of work including bridge bearing replacement and lighting have significantly extended the project duration.

Allan A. Myers, LP (a company of American Infrastructure) was contracted with PennDOT for this Project. Key Personnel from this Project are assigned to the Route 606 Project, and will report to AI-VA executive staff throughout the duration of the Project.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- The project reached substantial completion in 27 months which was two weeks ahead of the scheduled milestone date despite encountering contaminated soils and replacing 60,000 cy of unsuitable subgrade soils.
- To provide the highest quality final product, concrete pavement was placed with the paving machine wherever possible. Construction joints were aligned with the final striping plans and guided the development of the design-build traffic control plan.
- To minimize the impacts of construction on the travelling public while maintaining quality standard for construction joints, crews worked continuously over two weekends to provide accelerated concrete pavement patches at seven bridges.
- ENR's Transportation Award of Merit for being completed on-time and within budget with minimal disruptions to the 130,000 daily motorists.

PROJECT DESCRIPTION – Located in Montgomery County near Philadelphia, PA, the SR 476 Project reconstructed approximately four miles of six-lane divided highway from the PA Turnpike (SR 276) to the Schuylkill Expressway (I-76). Major quantities of work elements included reconstruction of 12,000 LF of concrete roadway (201,000 SY); reconstruction of 6 ramps and construction of 3 additional ramp termini; rehabilitation of 6 bridges (deck and substructure); sinkhole remediation including drilling and grouting; ITS and Lighting; and 17 sign structures. The overall scope included landscaping, drainage, utilities, guardrail, barrier, retaining walls, lighting and aesthetic enhancements.

The roadway was reconstructed in the existing footprint and the inside and outside shoulders were widened, which presented significant challenges with maintenance of traffic. Allan A. Myers (a company of American Infrastructure) was contracted with PennDOT for project. Maintenance of traffic issues were so challenging that PennDOT included the traffic control as a design-build aspect of the contract. AI contracted Traffic, Planning and Design, Inc. to design design eight stages of construction that maintained six lanes of traffic throughout the total reconstruction and widening. An express-lane was utilized which retained two lanes of traffic on the roadway under construction and shifted a third lane to the opposite roadway. Providing safe access to the work zone with minimal impact to traffic flow was critical to meeting the project schedule milestones.

The sign structures foundations were designed by PennDOT's engineer as cast-in-place foundations. To remove the sign structures from the critical path schedule, caisson foundations were submitted as a design alternative. This changed moved the foundations outside of the roadway and accelerated the project schedule. Aggressive management of the project schedule included a global P6 schedule, schedule for each stage of construction, six-week look-ahead schedule, weekly schedule, and ultimately a schedule for each shift.

LESSONS LEARNED FOR THE PROJECT

- **MOT** – Critical hauling operations were scheduled at night to minimize traffic impacts. This required planning for anticipated excavation and replacement of unsuitable soils.
- **Schedule** — As unknown field conditions changed the critical path of the schedule, resources were adjusted to ensure on-time delivery. This included adding crews and equipment to manage additional scope of work based on changing field conditions.
- **Contaminated Soils** – Excess material from the roadway excavation was retained onsite to eliminate expensive disposal costs. This material was placed in waste sites adjacent to the roadway and within exit ramp infields, creating landscape buffers for adjacent residents. AI coordinated alterations to the environmental permitting to extend the project limits to include these waste sites as well as construction staging areas.

Similar Scope and Complexity

- ✓ Design-build
- ✓ Road reconstruction and widening
- ✓ Bridge construction
- ✓ Challenging geotechnical conditions

Personnel on this Project

- ✓ Robert Rube
- ✓ Jerry Risser



Removal of the existing concrete pavement.



Phased construction to maintain all three lanes of traffic during construction.

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: RICHMOND AIRPORT CONNECTOR ROAD DESIGN-BUILD Location: Henrico County, VA	Name: Dewberry	Name of Client / Owner.: Transurban Phone: 804-822-3460 Project Manager: Richard Prezioso Phone: 804-822-3460 Email: rprezioso@transurban.com	05/2011	03/2011	\$38,523	\$39,446 Change due to scope validation after engineering investigation was complete	\$39,446

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

- Worked over 152,000 man-hours with zero incidents;
- Completed the project two months ahead of schedule;
- Design-Build Institute of America Design-Build Merit Award for Transportation (2011);
- Received an overall rating of "Extremely Satisfied" (American Infrastructure Customer Survey 2010).

Similar Scope and Complexity

- ✓ Design-Build
- ✓ Road widening
- ✓ Bridge construction
- ✓ Retaining wall construction
- ✓ Stakeholder coordination

PROJECT DESCRIPTION

Richmond Airport Connector Road (ACR) consisted of approximately 1.6 miles (2.58 km) of new four-lane roadway that provides motorists with direct access to the Richmond International Airport from Route 895. The scope of work included construction of an interchange at Route 895 with four new ramps, and reconfiguration of an existing at-grade intersection with Charles City Road. Charles City Road was widened to handle the additional traffic, as an improvement for Henrico County, which required significant coordination to obtain their approval of the design. The project constructed three new bridges (one crossing over existing Route 895) and widened an existing bridge.

Personnel on this Project

- ✓ Fran Purcell
- ✓ Mike Ames

The project challenges included an environmentally sensitive site, an aggressive project schedule, and unsuitable soils. Schedule milestones were met by managing critical path items daily and scheduling the necessary settlement periods for fills. AI improved existing soils through lime stabilization and geotextile fabrics to minimize settlement periods.

Retaining wall construction was the critical path at each of the four bridges on the Project and totaled 111,511 SF. Between two of the bridges, a rectangular shaped MSE wall required careful construction sequencing. Three sides of the rectangular wall were built first, allowing construction to start on one of the bridges. To construct the fourth wall, backfill material and equipment were staged inside the rectangle. Once the retaining wall was complete, bridge construction could start on the adjacent bridge. Construction equipment was removed from the top of the wall with the cranes for utilization in other areas while the bridges were constructed.

LESSONS LEARNED FOR THE PROJECT

- **Communication** – Open Communication between AI, our lead designer, the Department, and Transurban reduced streamlined the design process and allowed the AI Team to fully understand the project goals before starting the work. AI implemented a formal partnering process with the Department and other stakeholders which included a set schedule, set project goals, and a dispute resolution process all managed by third party. This created an atmosphere of open communication that helped resolve issues as they arose on the project.
- **Innovative Solutions** – AI worked together with key stakeholders to provide innovative value engineering solutions including adjusting the roadway alignment to reduce overall excavation, altering the storm water management design for ease of constructability, and shortening the length of the bridges to reduce future maintenance costs.
- **Team Integration** – Superintendent, Fran Purcell, and Schedule Manager, Jessica Colbert, filled these roles on the Airport Connector Road project and were responsible for oversight of the schedule including the critical path retaining wall construction elements.



Construction of 800' long, 35' tall 4-sided MSE wall between two bridges



Airport Connector Road interchange with Route 895.

“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 other 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)



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: ROUTE 60 AND GERMAN SCHOOL ROAD PROJECT Location: Richmond, VA	Name: AECOM	Name of Client / Owner: VDOT Phone: 804-524-6211 Project Manager: Harold Dyson Phone: 804-276-6231 Email: hdyson@amtengineering.com	08/2013	12/2012 Completed early through schedule acceleration.	\$35,412	\$45,584 Increase due to extensive design changes, utility conflicts, and quantity overruns.	\$45,584

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

- Completed eight months ahead of schedule with additional scope of work;
- Minimized the effects of extensive design changes by evaluating each redesign for cost effectiveness;
- Rated 100% on VDOT's Contractor Employee Safety rating;
- Scored 95% or better on all VDOT Contractor Performance Evaluations.

Similar Scope and Complexity

- ✓ VDOT transportation project
- ✓ Roadway reconstruction and widening
- ✓ Challenging MOT
- ✓ Utility coordination

Personnel on this Project

- ✓ Fran Purcell

PROJECT DESCRIPTION - The Route 60 project consisted of a total of 4.5 miles of roadway reconstruction and widening on Midlothian Turnpike (six-lane divided highway) and German School Rd. The project scope included curb and gutter; concrete flatwork; paving; lighting; landscaping; and improvements to gas, water, sanitary sewer, and storm sewer.

A major error was found in the design survey on Route 60 and this required significant redesign and collaborative solutions from VDOT's design engineer and AI's construction team. An outside survey company was utilized to resurvey the entire job to locate grade issues throughout the project. To correct this problem, AI, VDOT, and AECOM spent weeks using the information gathered to formulate the final solution of profile milling to even out the grades on Route 60 and ensure the drainage already installed would work properly when the final pavement was placed. The significant redesign is evidenced by the 120 RFI's and 60 change orders issued to resolve the error.

"American Infrastructure proved to be an excellent partner working with the agency through a host of issues on the Route 60/German School project in the City of Richmond and delivered the job ahead of the scheduled completion date." - Harold Dyson, VDOT



German School Road North completed



Route 60 West Bound completed

LESSONS LEARNED FOR THE PROJECT

- **Safety and Public Impacts** - To safely perform the work in accordance with the MOT Plan, crews had to complete the majority of work on Route 60 during the night time hours. However, the work on German School Road had to be performed during the daytime hours due to a large number of residential homes. This dual-shift approach minimized disruption to the traffic on Route 60 during the day, minimized safety risks to AI crews and the public, and avoided impacting local residents on German School Road with night-time construction.
- **Utility Coordination** – Utility conflicts were identified proactively before they became critical to the schedule. By identifying issues in the planning stages, construction progress was not halted by conflicts. In addition, the project team had alternative work operations planned and prepared. When unexpected conflicts were encountered, AI crews moved quickly to another work operation without delaying the schedule or jeopardizing safety.
- **Formal Partnering** – Through formal partnering on this project, a good relationship between VDOT and AI's construction team was developed and maintained. The significant change negotiations were successful because of the teaming relationships created and the approach by all parties to put the success of the project above personal agendas.
- **Recent Relevant Experience** – Superintendent, Fran Purcell, oversaw field construction operations and delivered this project ahead of schedule despite challenging MOT issues, while maintaining continuous access for local residents and businesses during construction.

*Route 60 German School Road reconstruction project in Richmond where RKK is providing onsite consulting and inspection services for VDOT.



ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-4744: I-40 WIDENING & SIGNING Location: Wake County, NC	Name: S.T. Wooten	Name of Client: North Carolina DOT Phone: 919.707.6601 Project Manager: Rodger Rochelle, PE Phone: 919.707.6601 Email: rdrochelle@dot.state.nc.us	06/2011	06/2011	\$49,000	\$49,000	\$3,900

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 - Tommy Peacock, PE; Keith Skinner, PE; Brandon McInnis, PE; David Peterson, PE; Tina Swiezy, PE

- This project was awarded the 2011 NAPA Safety Innovations Award.
- Creative and innovative design and construction techniques completed this project a full year ahead of NCDOT's required June 15, 2012 completion date.
- The project was delivered on-schedule and within budget through the use of innovative designs and creative construction techniques
- Strict adherence to sediment and erosion control measures resulted in minimal environmental impacts.
- The project was noted by the client as one of their "finest transportation achievements." This project received several awards demonstrating the high quality of the team.
- Awards – ACEC/NC Engineering Excellence Award; 2011 AGC Pinnacle Award for Best Highway Project in the Carolinas; 2010 NAPA Safety Innovation Award

Relevance to the Project
 ✓ Widening existing roadway
 ✓ Design-Build delivery
 ✓ Complex Traffic Issues
 ✓ Public Involvement
 ✓ Utility Coordination

Personnel on this Project
 ✓ Tommy Peacock, PE
 ✓ Shelia Reeves, PE

"I commend the entire Design-Build Team for completing this project quickly, safely, and cost effectively. The Design-Build Team's efforts exceeded NCDOT's expectations in innovation during both design and construction. Despite the numerous and complicated traffic control, schedule, subgrade, and public information challenged of this project, the S.T. Wooten/RK&K total 'team approach' and responsiveness to the NCDOT contributed to one of North Carolina's finest transportation achievements." – Mr. Rodger Rochelle, PE Director of the NCDOT Transportation Program Management Unit - Source: ACEC Award - Endorsement Letter

PROJECT DESCRIPTION – RK&K's Raleigh office served as the Lead Designer for the entire project with assistance from RK&K's Richmond office. The 6.4 miles of I-40, from west of Wade Avenue to east of Jones Franklin Road is a critical commuter freeway with traffic volumes that exceed 130,000 per day. The project widened the existing four-lane divided roadway to a six-lane divided facility and included widening dual bridges over US 1/US 64 and dual bridges over eastbound Wade Avenue. With innovation and an aggressive design and construction schedule, the project approach circumvented complex traffic issues and was successfully completed nearly a full year ahead of schedule.

Highway/Roadway Design: I-40, known as the Triangle's "Main Street," is also a critical freeway. Traffic volumes exceeded 130,000 per day, which is far above the capacity of a freeway in this area. This rolling urban freeway with a 70-mph design speed included the following roadway improvements: design of one 12-foot wide lane in each direction of I-40 expanding the interstate from four to six lanes; a 12-foot-wide paved shoulder in each direction; median guardrail installation and shoulder guardrail replacement; at the eastbound I-40/Wade Avenue split, the roadway was expanded from two to three lanes.

Pavement Markings and Signing: As a heavily traveled urban facility, special attention was focused on signing and pavement markings.

Intelligent Traffic Systems: Responsible for the design of ITS communications cable routing plans, CCTV cameras, and ITS.

Bridge Design: Structures were designed for the bridge widening at Wade Avenue and US 1 / 64, as well as two sound barrier walls.

Utilities: Responsible for the identification of conflicting utilities, coordination of Level "A" S.U.E. data and management of utility coordination efforts. Utility design included the design and permitting of water services for the construction office and asphalt plant facilities.

LESSONS LEARNED FOR THE PROJECT

- **Work Zone Access** – When widening to the median, using alternate methods for delivering materials to the median reduces exposure to traffic and reduces construction time.
- **Coordination** – Close coordination with subconsultants and the Contractors is vital to a successful design-build project.
- **Design Work Packages** – Using staged submittals of design plans (structure, traffic controls, erosion control, etc.) allowed work to begin much earlier than following the typical process. The process works especially well for median widening because right of way and permits are minimal.
- **Maintenance of Traffic** – Additional traffic studies are valuable to show additional hauling during the day will not impact the traveling public. Also, the additional hauling during the day helped reduce the construction time.



ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-95 LEFT SHOULDER AND AUXILIARY LANE WIDENING Location: Prince William County, VA	Name: Lane Construction	Name of Client.: VDOT Phone: 703-259-2993 Project Manager: Jeff Daily Phone: 703-259-2993 Email: jeff.daily@VDOT.virginia.gov	08/2015	08/2015 (Estimated)	\$29,171	\$29,171	\$920

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Design was performed in Fairfax Office, RK&K was Prime designer.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- This is the largest SFTY (Safety Improvements) project in the Commonwealth. 53,000 LF of temporary safety barriers will be used during construction.
- All design milestones and submittals were delivered on-schedule.
- The design was delivered on budget and the awarded construction cost was less than 1.5 of engineer's cost estimate.
- More than 1,000 drawings and construction documents were produced, all meeting the current applicable design standards.
- RK&K met all VDOT QC procedures for design and provided LD-436 at each submittal.

PROJECT DESCRIPTION: The I-95 project involves several design items, including total of 14 miles of Left Shoulder Widening on NB and SB as well as Auxiliary Lanes Improvements to increase safety along the corridor in Prince William County. The improvements consisted of widening the median shoulder to provide a 12' width. The design component included Roadway, Pavement Markings, Drainage, Erosion and Sediment Control, overhead signing and lighting, ITS and Transportation Management Plans. The relocation of an approximately 1 mile stretch of fiberoptic backbone was also included in the project. The safety improvements of Auxiliary Lane extension and widening were provided at three interchange locations on I-95 in Prince William County.

Roadway Design: RK&K provided the design of all project development phasing and supporting advertisement. This included horizontal geometrics, typical sections, design features, proposed R/W limits, maintenance of traffic and other elements associated with the project. This activity concluded with resolution of comments from many coordination meetings.

Traffic Analysis: RK&K performed traffic and accident data analysis to prepare and complete a streamlined Interchange Modification Report for review and approval by VDOT and submission to FHWA for acceptance. RK&K conducted AM and PM peak hour capacity analyses to evaluate the traffic operations of the proposed improvements using the latest edition of the Highway Capacity Software for existing, future 2035 No Build, and future 2035 Build conditions. This report summarized the results of the capacity and safety analyses and addressed each of the FHWA policy points.

Drainage/SWM: RK&K designed a new open channel system that accommodates the planned improvements, including recommendations of ditch geometry. Evaluations of existing cross culverts were performed to ensure lengthening of the cross culverts will not have adverse backwater impacts, and meet current VDOT criteria. RK&K conducted adequate outfall (MS-19) assessments for all outfalls located within the project corridor. This effort included collating the appropriate construction plans, SWPPP sheets, E&SC plans, and preparation of VDOT VSMP General Permit, VDOT VSMP Construction Permit, LD-445 and LD-445E, ESC inspection reports (C-107), and ESC design comp.

MOT/TCP: RK&K, managed the TMP for a Type A, Category I project, and coordinated with VDOT. Multiple phases of MOT plans were developed for total of 14 miles of roadway. A work zone traffic analysis was developed based on ADT volumes and projected ADT. RK&K coordinated temporary traffic control plans (TCP) with I-95 Express Lane and other adjacent projects. All lane closures and time restrictions were comply with Regional Operation's lane closure policies. Proposed temporary traffic control plans were designed in accordance with the current MUTCD, current VDOT Road and Bridge Standards, VDOT IIM, VDOT Traffic Engineering Design Manual guidelines and VDOT Traffic Engineering Memorandum as applicable.

LESSONS LEARNED FOR THE PROJECT

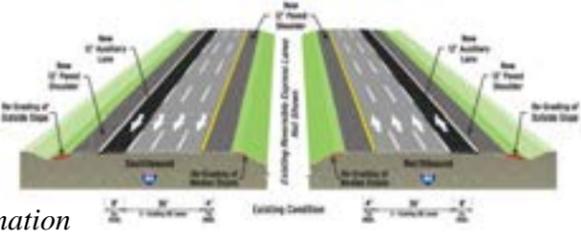
- **Accelerated Schedule:** Because of good resource management RK&K combined five projects into one and provided advertisement package to VDOT in five months. **Full Service Design: Incorporated request for additional scope including ITS and lighting into the project seamlessly by RK&K's full service design team.**
- **Adjacent project coordination:** Early coordination with adjacent projects and updates on each stage of design to VDOT.

Relevance to the Project

- ✓ Roadway Design
- ✓ Drainage Design
- ✓ ITS/Utility Design
- ✓ IMR/MOT
- ✓ Adjacent Project Coordination

Personnel on this Project

- ✓ Anand Patel, PE
- ✓ Brian Finerfrock, PE
- ✓ Barry Brandt, PE



Typical Section of I-95 Improvements

"The project complexity required coordination with multiple internal VDOT departments and the adjacent proposed MEGA project, I-95 Express Lanes. Further, you managed the design elements including, signing, lighting, traffic management system, utility relocation, and guiding an IMR LITE to approval. Most importantly, your management brought the project in on time and on budget!" "You skillfully managed the project over several hurdles including last minute utility relocations and a major expansion of scope that combined three other smaller projects. The combining of these projects into a single larger project was estimated to save millions. Thanks for your overall responsiveness to changes and numerous calls and inquires. I look forward to working with you on our next project together." – Jeff Daily, VDOT



ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: ROUTE 58 PHASE II WIDENING Location: Washington County, VA	Name: DLB, Inc.	Name of Client.: VDOT Phone: 276-669-9910 Project Manager: Dennis Harris, PE Phone: 276-669-9910 Email: dennis.harris@VDOT.virginia.gov	08/2012	10/2012 The increase in project schedule and project cost was due to Owner Directed Changes	\$20,095	\$21,410 The increase in project schedule and project cost was due to Owner Directed Changes	\$291

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

- Safety; Last minute re-design of an entrance to accommodate a specialized vehicle
- Schedule; Project delivered on schedule.
- Cost savings provided to VDOT included elimination of a proposed retaining wall through close coordination with the contractor.
- Context sensitive design allowed the roadway to be widened over a spring of unknown origin without damaging the source of the spring.

Similar Scope and Complexity

- ✓ Roadway widening from two to four lanes
- ✓ TMP with phased E&S
- ✓ Maintain connections to roadways and driveways
- ✓ Extensive coordination with utility relocations

Personnel on this Project

- ✓ Owen Peery, PE

PROJECT DESCRIPTION

RK&K provided final plans to VDOT. RK&K's Richmond Virginia staff was responsible for the design of this two-mile section of Route 58 beginning at Route 667 and ending at Route 638. The project widened and provided parallel lanes adjacent to the existing two-lane road to a four-lane divided facility, matching previous work to the west. Design work included major drainage and stormwater management designed to the latest standards, extensive coordination with utility relocations and two new structures over the Middle Fork of the Holston River. This rural principal arterial was designed with a 55 mph design speed and includes a graded median along with left and right turn lanes at intersecting roadways.

RK&K developed the traffic control plan to encompass the proposed road improvements along with the bridges and utility relocations. The new alignment was selected to ensure that one new bridge could be constructed while maintaining the existing road and bridge. Many of the utility relocations could not be completed until the large cut slopes were in place. The roadway, drainage, bridge and retaining wall elements were carefully evaluated to determine which elements impacted existing utilities. RK&K provided VDOT with a comprehensive TMP that included phased sequencing of the construction while accommodating utility coordination, earthwork operations, and maintenance of traffic.

LESSONS LEARNED FOR THE PROJECT

- **Utility Coordination** – Deep cuts required phasing proposed utility relocations to coincide with earthwork operations
- **MOT** – Ensure sight distance and design speed of cross-overs during maintenance of traffic
- **Business Access** – Existing farm entrances may require permanent and temporary accommodations for oversized vehicles



“Relevant Project Quote.” – VDOT

“On behalf of the Bristol District Staff and the Virginia Department of Transportation, we would like to thank you and the very capable and professional associates of your firm who played a major role in the development of the plans, finalizing all the details, as well as meeting some tight deadlines to enable us to take advantage of the American Reinvestment and Recovery Funding being utilized to construct this improvement. Please forward our thanks and gratitude to those on your staff who helped make this possible, and we look forward to working with your firm on projects in the future.”



ATTACHMENT 3.4.1(c)

DAM CONSTRUCTION - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Dam Construction Specialist for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: LYMAN RUN DAM REHABILITATION Location: Potter County, Pennsylvania	Name: Gannett Fleming	Name of Client.: Department of General Services Phone: 717-787-7095 Project Manager: David Folk Phone: 717-346-4021 Email: dsfolk@pa.gov	12/2006	12/2006	\$15,934	\$17,342	\$17,342

h. Narrative describing the Work Performed by the Firm identified as the contractor for Dam Construction for this Project.

AI-VA will serve as the contractor for Dam Construction for this Project. Allan A. Myers, LP (a company of American Infrastructure) was contracted with PennDOT for this Project. Key Personnel from this Project are assigned to the Route 606 Project, and will report to AI-VA executive staff throughout the duration of the Project.

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- During this multi-year construction period, there were no dam-safety hazards to downstream public. Contractor-designed soil-nail retaining wall protected constructions operations adjacent to cut face in mountain slope.
- Construction substantially completed on time.
- Construction costs were controled through regular measurement and reconciliation of unit price quantities with Owner and Engineer.
- This project site is in heart of the Pennsylvania Wilds area and the project was executed in a manner that minimized the overall disturbance footprint and protected surrounding forests, wildlife, waterways, and fish population.
- Total seepage through the new embankment and grouted foundation measured at less than one gallon per minute, satisfying Pennsylvania Department of Environmental Protection Dam Safety modification permit requirements.

Similar Scope and Complexity

- ✓ *High Hazard Dam*
- ✓ *Embankment construction*
- ✓ *Emergency spillway*
- ✓ *Retaining wall construction*
- ✓ *Deepwell dewatering system*

Personnel on this Project

- ✓ *Cari Beenenga, PE*
- ✓ *Jerry Risser*
- ✓ *Timothy Johnston, PE*
- ✓ *Mike Ames*

PROJECT DESCRIPTION

Lyman Run Dam is a high hazard earth embankment dam with emergency spillway that was built in 1951 and breached in 2000 due to foundation leakage. The dam received a complete reconstruction, including demolition and removal of the existing embankment, emergency spillway structure, and all original features down to a new foundation elevation. Work operations began with construction of temporary structures, including sediment traps and channels, twin 10-foot diameter pipe diversion conduits, a deepwell dewatering system, a soil-nail retaining wall, plus a cofferdam at the breached area of the original dam, all to allow reconstruction work to proceed safely and efficiently. Major work operations included over 350,000 CY of earth excavation, 16,000 CY of roller compacted concrete placement, 290 LF of 96-inch pre-stressed concrete cylinder pipe installation, 8,300 CY of structural concrete placement (over 7,000 CY in the dam's spillway), and 234,000 CY of engineered fill placement. The cost growth was caused by a change in scope per the Owner's request. The additional scope was handled with Change Orders to the original contract value. Due to proper planning and scheduling, the additional scope of work did not extend the project schedule at all and the original completion date was met. This dam is listed as **Pennsylvania Department of Conservation and Natural Resources Hazardous Dam # 53-049**.



Aerial View of Lyman Run Dam and Reservoir

LESSONS LEARNED FOR THE PROJECT

- Teamwork and building an atmosphere of cooperation among project stakeholders results in a succesful project
- Properly installed instrumentation is critical to monitoring and evaluating embankment and foundation performance when the new structure is placed under load and into the future
- Good planning leads to efficiencies large scale excavation, stockpiling, processing, and fill placement operations.

"I was completely satisfied with the work product produced by Gannett [Fleming] on the project. It was detailed and accurate. It is not often I get to work with a consultant that is as responsive as you." – James A. Eppley, Pennsylvania Department of Conservation and Natural Resources (Gannett Fleming Client Satisfaction Evaluation)



ATTACHMENT 3.4.1(d)

DAM DESIGN - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Dam Design Specialist for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: HUNTING RUN DAM Location: Spotsylvania County, Virginia	Name: ASI RCC, Inc. (Contract IV, dam construction & Rte. 620) Phillips & Jordan, Inc. (Contract V, reservoir clearing & Rte. 610)	Name of Client.: Spotsylvania County, Department of Utilities Phone: (540) 507-7300 Project Manager: Rick Hall Phone: 540-507-7341 Email: rhall@spotsylvania.va.us	08/2004 (cV)	07/2002 (substantial cIV completion) 10/2004 (cV)	\$21,500 (cIV) \$3,700 (cV) \$25,200 (total)	\$27,900 (total)	\$5,500

h. Narrative describing the Work Performed by the Firm identified as the designer of the Dam for this Project. 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

- Coordinated with Virginia Dam Safety personnel to secure necessary DCR permitting to construct new dam and river intake, and provided construction completion documentation.
- Provided phased excavation plan to accommodate challenging variabilities, provide flexibility during construction, fair payment and risk to contractor, and high quality dam foundation.
- Contractor and Engineering collaborated to develop RCC cooling plan that allowed production to continue through unusually hot summer conditions.
- Partnering process provided successful resolution of Contractor claims and issues that arose during construction, helping to limit Owner's liability against claims for changed conditions.
- Awards. 2003 Project of the Year, Construction Management Association of American (CMAA), dams and Waterways category for projects with construction value less than \$50 million.

PROJECT DESCRIPTION

Gannett Fleming provided preliminary and final design, and construction management services for this 2,200-foot-long, 90-foot-high composite roller-compacted concrete (RCC) and earthen dam and pump storage water supply reservoir. Preliminary designs and cost estimates were provided for three alternatives: an earthfill dam, an RCC gravity dam, and a composite RCC/earthfill dam. Features of the completed Hunting Run Dam include 1,200-foot-long, 20 to 30-foot-high zoned earth embankment with impervious core and chimney drain; precast concrete panels with geomembrane liner on upstream face; unfaced downstream RCC slope; integral 200-foot-wide emergency overflow spillway; reinforced concrete ogee-shaped spillway crest; reinforced concrete riser structure; multiple-level intake gates; reinforced concrete impact basin; 2,700 LF of 36-inch raw water transmission main; dam safety instrumentation linked to SCADA system via telemetry; 443 acres reservoir clearing; 7-square-mile drainage area; 20-foot-high dual earthfill cofferdams; 4-foot diameter pre-stressed concrete outlet conduit; utility relocations and structural demolition; and 3,000 LF of state road relocations. Gannett Fleming provided complete right-of-way and construction plans for the relocation onto new alignment of State Routes 610 that traversed the reservoir and 620 that traversed the dam site. Road design activities included realigning the existing roads horizontally and vertically to current Virginia Department of Transportation (VDOT) design standards, realignment of existing driveways, drainage design, and use of Grds design software. All roadway design was reviewed by VDOT Fredericksburg Residency. Project additionally involved design of stormwater management features, right-of-way work, and utility relocation coordination. Contract was let in two packages, with the first including the dam, pump station, interconnect pipeline, and relocation of state Route 620 to an alignment downstream; the second including reservoir clearing, utility relocations, and realignment of State Rte. 610 and adjacent utilities onto a causeway. We also provided post-construction activities, including dam inspections, instrumentation monitoring, preparation of operations and maintenance and emergency action plans, and supplemental dam and reservoir-related design services.

LESSONS LEARNED FOR THE PROJECT

- Work Flow** – Avoid “crisis management” mode by contractor during construction by including written work plans and mandatory coordination with Owner/Engineer. Include regular meetings with key personnel that generate clear action-items, and establish a productive precedent at start of job.
- Quality** – Improve contractor construction control through improved predefined submittal requirements, and ensure that sufficient construction inspection staffing can thoroughly monitor all concurrent work elements (particularly concrete and earth stockpiling and backfill).
- Coordination** – Some tasks such as property acquisition that were out of Engineer's scope were not completed prior to construction, leading to negotiations holding-up construction progress and creating many concessions that had to be designed well after final design was complete. Similarly, utility work was challenging due to lack of necessary action by utilities and Owner. Engineer has limited influence on process if not scoped to participate in coordination.

Similar Scope and Complexity

- ✓ High Hazard Virginia Dam
- ✓ Earthen Dam / Concrete Spillway
- ✓ VDOT Road Relocation
- ✓ Utility Relocation
- ✓ Agency Coordination
- ✓ Design & Construction Services
- ✓ Challenging Geotechnical Conditions

Personnel on this Project

- ✓ Boyd Howard, PE



Aerial View of Hunting Run Dam and Reservoir

“I am very pleased with the job Gannett Fleming did on this project.” – Bruce Boyer, former Water Resources Engineer, Spotsylvania County Dept. of Utilities (Gannett Fleming Client Satisfaction Evaluation)



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