STATEMENT OF QUALIFICATIONS

DESIGN-BUILD GLOUCESTER PARKWAY EXTENSION

FROM: LOUDOUN COUNTY PARKWAY

TO: PACIFIC BOULEVARD

LOUDOUN COUNTY, VIRGINIA

STATE PROJECT NO.: 2150-053-052
UPC NO.: 104418
CONTRACT ID NUMBER: C00104418DB68

A Qualifications Submission from:

CORMAN CONSTRUCTION

&

RK&K

Submitted to: Virginia Department of Transportation
1401 E. Broad Street
Richmond, Virginia 23219

JUNE 27, 2013
3.2 Letter of Submittal
June 27, 2013

Mr. Kevin C. Reichert, PE  
Alternative Project Delivery Office  
Commonwealth of Virginia  
Virginia Department of Transportation (VDOT)  
1401 East Broad Street  
Richmond, VA 23219

RE: Statement of Qualifications  
Design-Build Gloucester Parkway Extension  
From: Loudoun County Parkway / To: Pacific Boulevard  
Loudoun County, VA  
State Project No.: 2150-053-052 / UPC No.: 104418 / Contract ID No: C00104418DB68

Dear Mr. Reichert:

Corman Construction, Inc. (Corman) is pleased to submit one original paper version of our Statement of Qualifications (SOQ), 10 abbreviated copies of the original paper version, and one CD-ROM containing the entire original in a single PDF file to provide design-build services for the Gloucester Parkway Extension Design-Build project. Corman has thoroughly reviewed the Request for Qualifications (RFQ) (May 14, 2013), including Addendum 1 (June 6, 2013) and RFQ Q&A (June 3, 2013).

3.1.1 Corman Construction, Inc., 12001 Guilford Road, Annapolis Junction, MD 20701, is the legal entity who will execute the contract with VDOT.

3.2.2 Point of Contact: Jo Ellen Sines, DBIA - Vice President Project Development - 12001 Guilford Road, Annapolis Junction, MD 20701. She can be reached at: 301-953-0900 (T), 301-953-0384 (F), 301-343-5484 (C), or jsines@cormanconstruction.com. Alternate: Louis Robbins, PE, DBIA – Vice President, Design-Build, 301-953-0900 (T), 301-953-0384 (F), 301-703-772-8566 (C), or lrobbins@cormanconstruction.com.

3.2.3 Principal Officer: Arthur C. Cox, III, Vice President of Corman Construction, Inc., 12001 Guilford Road, Annapolis Junction, MD 20701. He can be reached at: 410-792-9400 x235 (T), 240-882-3973 (C).

3.2.4 Corporate Structure: Corman will be the design-build contracting entity for the Design-Build Gloucester Parkway Extension project. Corman is a corporation titled in Delaware, a wholly-owned subsidiary of CG Enterprises, Inc. and will be the sole major participant firm and responsible party to the design-build contract with the Virginia Department of Transportation (VDOT). Corman will hold all financial responsibility for the contract (a surety letter is attached). In addition, we are an active participant in the eVA Internet procurement solution program (Registration Number E27577).

3.2.5 Lead Contractor and Lead Designer: Corman Construction, Inc. is the Lead Contractor and Rummel, Klepper & Kahl, LLP (RK&K) is our Lead Designer.
3.2.6 Affiliated/Subsidiary Companies: A list of all Corman’s affiliated/subsidiary companies is on Attachment 3.2.6 in the Appendix.

3.2.7 Debarment Forms: Certification Regarding Debarment Form(s) Primary Covered Transactions, Attachment 3.2.7(a), and Certification Regarding Debarment Form(s) Lower Tier Covered Transactions, Attachment 3.2.7(b), have been signed and are included in the Appendix.

3.2.8 VDOT Prequalification Evidence: Corman is pre-qualified with VDOT (Vendor Number C097 – active) to provide Grading, Major Structures, Minor Structures and Underground Utilities. Evidence is attached in the Appendix.

3.2.9 Surety Letter: A Surety Letter is attached in the Appendix.

3.2.10 DPOR Licenses and SCC Registrations: Required licenses and registration information are attached in the Appendix.

3.2.11 DBE Requirements: Corman is committed to achieving a 6% DBE participation goal for the entire value of the contract.

We present to you a design-build team equipped with the experience, knowledge, dedication, and resources to partner with the Virginia Department of Transportation in successfully delivering the Gloucester Parkway Extension Design-Build project.

Sincerely,

CORMAN CONSTRUCTION, INC.

Arthur C. Cox, III, Vice President
3.3 Team Structure
3.3 TEAM STRUCTURE

With a track record of successfully delivering over $1.2 billion in design-build (DB) roadway and bridge projects, Corman Construction, Inc. (Corman) comes to VDOT with the hands-on experience and top notch personnel it takes to effectively execute the design and construction, as well as manage the risks of the Design-Build Gloucester Parkway Extension Project. During our 13-year design-build history, Corman has exceeded owners’ expectations in the on-time, on-budget delivery of high-quality projects, while meeting some of the most strenuous maintenance of traffic and environmental commitments. Out of these ventures, over $1 billion have included contractor-led QC programs.

Through the years, Corman has built a solid reputation of strategically aligning with the design-build partners most suited to meet the specific needs and requirements of the project at hand. For the Gloucester Parkway Extension, we selected Rummel, Klepper & Kahl, LLP (RK&K) as our lead design firm with the added depth of sub-consultants: Sabra Wang & Associates, Inc. (SWA), ECS Mid-Atlantic, LLC (ECS), Quinn Consulting Services, Inc. (QCS), Rice Associates, Inc. (RA), On-Time Utility Solutions, LLC (OUS) and Bowman Consulting Group, Ltd. (BCG). Together these firms make up the Corman Design-Build (DB) Team.

The Corman DB Team will deliver success with seasoned professionals and resources, providing the highest level of quality to ensure that the project will be completed within our promised budget and schedule.

Over the last several years, Corman has successfully worked with RK&K on the following design-build projects:

<table>
<thead>
<tr>
<th>PROJECT</th>
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<tbody>
<tr>
<td>Intercounty Connector Contracts A&amp;B (Montgomery Co., MD)</td>
<td>![DB]</td>
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<tr>
<td>MD Route 216 US 29 to I-95 (Howard Co., MD)</td>
<td>![DB]</td>
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<tr>
<td>Frederick Douglass Bridge/South Capitol Street over Anacostia River (Washington, DC)</td>
<td>![DB]</td>
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<tr>
<td>E. Deer Park Rd. Bridge Emergency Rehab. (Gaithersburg, MD)</td>
<td>![DB]</td>
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<tr>
<td>Division 1B – Bridge (Dare and Hyde Counties, NC)</td>
<td>![DB]</td>
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= design-build experience.

As evidenced above, Corman and RK&K have pre-established working relationships and therefore understand each other’s strengths and abilities.

3.3.1 KEY PERSONNEL

The Corman DB Team has assembled a team of highly-qualified and experienced individuals, and structured them accordingly for optimal performance. These key staff and design firms come together with a shared past history on successful projects, have established working relationships, and are ready to hit the ground running. Though our task leaders and technical staff are responsible for items, such as design, public involvement and/or construction, everyone is ultimately responsible for the total success of the project. The chart below introduces our Key Personnel (resumes in Appendix - Attachment 3.3.1):

<table>
<thead>
<tr>
<th>Design-Build Project Manager (DBPM)</th>
<th>Jo Ellen Sines, DBIA - Corman</th>
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</thead>
<tbody>
<tr>
<td>Quality Assurance Manager (QAM)</td>
<td>Kaushik Vyas, PE - QCS</td>
</tr>
<tr>
<td>Design Manager (DM)</td>
<td>Owen Peery, PE - RK&amp;K</td>
</tr>
<tr>
<td>Construction Manager (CM)</td>
<td>Chris Clark - Corman</td>
</tr>
<tr>
<td>Lead Structural Engineer/Deputy Design Manager (DDM)</td>
<td>Gary Johnson, PE – RK&amp;K</td>
</tr>
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</table>
Our key personnel team is comprised of experienced design-build professionals that will manage the project risks through personal accountability and competence. Each individual is a seasoned professional with an average of 20 years of experience within the industry and proven design-build experience.

**Additional Design and Construction Support**
Under the key personnel, we have assembled a highly skilled team of professionals to lead design disciplines and construction management, selected because of their proven competencies in engineering, construction and design-build. Listed below you will find short biographies on each of these design and construction professionals, provided to assure VDOT that the Corman DB Team is comprised of highly skilled professionals with the experience to deliver this project on time and within VDOT’s budget. Each member was hand-selected based on their experience relative to this project’s scope and complexities, as well as their familiarity working together. A **DB** has been placed next to the names of the individuals with design-build experience.

**DB Roadway Engineer, John McDowell, PE,** brings his more than 32 years of experience in the design and management of complex roadway design projects and will focus on roadway and intersection design for this contract. He has been responsible for leading and directing the geometric design and plans productions for the roadway design, preparation of the Traffic Control Plans, as well as, interfacing with the various elements of the roadway design including structures, drainage, signals and lighting design. Previous VDOT project experience includes multiple task orders under five of RK&K’s current VDOT On-Call Design Contracts, as well as previously serving as Deputy Project Manager for the Capital Beltway (I-495) Design-Build HOT Lanes project in Fairfax County, VA. John will report to Owen Peery, PE, the Design Manager (DM).

**DB Drainage/Hydraulics Design Engineer, Brian Finerfrock, PE,** reports to Owen Peery, PE, Design Manager (DM), and offers more than 10 years of advanced technical roadway and drainage training experience, as well as rural and urban design project experience. Brian has extensive experience in design, consultant management oversight of general drainage, hydrologic studies, hydraulic bridge studies, and bridge scour analysis for many of VDOT’s largest projects. He joined RK&K in 2009 after seven years working for VDOT (2002-2009). His project experience includes various types of municipal and roadway design projects on new location, reconstruction and widening, as well as major VDOT drainage improvements for 12 of RK&K’s contracts since 2009.

**DB Geotechnical Engineer, Randy Wirt, PE,** will be in charge of all aspects of geotechnical engineering and evaluation for the project, including evaluation of potentially unsuitable soils, slope and embankment stability and settlement, and geotechnical construction considerations. He will also assist the Design Manager (DM) and Construction Manager (CM) during construction, as needed, for earthwork and geotechnical project questions. Randy has 12+ years experience in geotechnical engineering related directly to similar transportation projects for various state agencies including VDOT. Randy recently served as the lead geotechnical engineer for Design-Build VDOT Route 29 Bypass, Albemarle County, Virginia and VDOT Route 28 Corridor Improvements PPTA, Fairfax and Loudoun Counties, Virginia. Randy will report to Owen Peery, PE, the Design Manager (DM).

**DB Landscape Architect, David Mitchell, RLA, LEED AP,** has 16 years of experience as a site designer specializing in site grading, planting plans, conceptual site planning and preparation of construction documents. His experience includes all aspects of site design and environmental design, as well as all facets of landscape architectural services. David’s projects effectively combine classic design principles with modern awareness, addressing infrastructure with innovative “green” alternatives to craft spaces that stimulate positive social interaction and purpose. His ability to integrate elements with minimal disturbance and financial impact has gained respect from clients and consultants. David will report to Design Manager (DM), Owen Peery, PE.

**DB Wetland Delineation & Environmental Permitting Coordinator, Justin Reel,** has 18 years of experience providing extensive project management experience leading and supporting the preparation of various NEPA documents and wetlands and water quality permit efforts (Section 404/401 of the CWA, Virginia Water Protection, Virginia Chesapeake Bay Preservation Act, for both large and small transportation projects. He is well-versed in NEPA document preparation, agency and public coordination, and environmental permitting with a strong foundation in environmental resource studies required for successful document/permit approval including; wetland delineation, Unified Stream Methodology, RTE studies, water quality monitoring, habitat assessments, and mitigation design. Justin has been involved in numerous VDOT projects providing engineering and environmental services, and has managed all environmental aspects of several major and minor infrastructure projects, including the Woodrow Wilson Bridge, I-81 Truck Climbing Lanes, US 301 in Delaware, and the Indian River Inlet Bridge. Justin will report to Owen Peery, PE, the Design Manager (DM).
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**Designing, Striping & Traffic Signals Engineer, Jyothi Paladugu, PE, PTOE**, Jyothi manages engineers and designers responsible for traffic signal design, signal timing and optimization, ITS, and communication design and traffic operations. Jyothi has prepared signal design plans for over 60 signals, and has developed optimized signal timing plans for over 1,000 intersections in the past eight years, ranging from isolated intersections to large urban grid networks. Jyothi is an expert user of Synchro and SimTraffic and is experienced in using HCM, MUTCD and ITE. She is hands-on with Eagle and Naztec controllers and has significant experience with field implementation and fine-tuning of signal timing plans. Her experience also includes signing and pavement marking design, development of work zone traffic control plans, design of Intelligent Transportation Systems, roadway lighting and traffic signal design, according to VDOT standards. Jyothi will report to Owen Peery, PE, the Design Manager (DM).

**Noise Analysis Designer, Kevin P. Hughes**, is RK&K’s lead Noise Analyst and Sound Barrier Design Project Coordinator and brings more than 25 years of experience to this project. His specific noise analysis experience includes identification of noise sensitive areas, evaluating existing noise environments through field reconnaissance and monitoring, determining community impacts and need for noise abatement, predicting future traffic noise levels using the FHWA Traffic Noise Model (TNM), determining reasonableness and feasibility, evaluating cost-effective mitigation measures, preparing technical reports, and participating in community meetings. Furthermore, he has prepared contract plans for many noise abatement projects. Kevin will report to Owen Peery, PE, the Design Manager (DM).

**Surveying/Plats, Randy Stowers, LS**, has more than 28 years of surveying experience involving a wide variety of project types including roadway alignments. He has completed numerous topographic, boundary, and construction stakeout surveys in Northern Virginia. Randy has over a decade of experience in managing and/or supporting VDOT infrastructure projects throughout the state. These surveys have been completed conventionally or through a combination of conventional surveying, aerial mapping and terrestrial LIDAR. Randy also has extensive experience in platting, and easement/right-of-way determinations. He has managed three consecutive VDOT statewide contracts for Surveying, Photogrammetry and Subsurface Utility Designation and Location. Randy will report to Owen Peery, PE, the Design Manager (DM).

**ITS/Lighting Engineer, Barry L. Brandt, PE, PTOE**, is responsible for providing the design of traffic signals, roadway lighting, ITS devices, and other traffic control devices such as highway signing and pavement markings. Barry brings more than 20 years of experience to the team and is familiar with the Manual on Uniform Traffic Control Devices, the IES RP-8 Standard Recommended Practice for Roadway Lighting, the National Electrical Code, the AASHTO Roadside Design Guide, and other applicable guidelines pertaining to traffic signal, roadway lighting and ITS design. In recognition of his service, he was awarded the “Outstanding Public Service Award” in recognition of his performance of signal, lighting and ITS design as well as development of the electrical and lighting design training programs. Barry will report to Owen Peery, PE, the Design Manager (DM).

**Erosion and Sediment Control Engineer, Sheila Reeves, PE, CFM, CPESC**, is experienced in erosion and sediment control design and other water resources engineering services for transportation projects. She will report to Owen Peery, PE, the Design Manager (DM). Sheila is a certified DCR Plan Reviewer and focuses on NPDES permit compliance consulting, stormwater management plan development, water resources engineering, and GIS integrated solutions. She is responsible for hydrologic analysis, hydraulic design/analysis, stormwater management plan (SMP) design, watershed studies and master planning for a variety of municipal, commercial and residential development projects. Sheila was the Project Engineer on two of the three lead engineer projects shown in this proposal.

**Utility Coordinator, Renee Martin**, will be providing the utility coordination effort for the project. As part of the utility coordination responsibilities she will work directly with RK&K, Corman, and the utility companies to value engineer and mitigate utility conflicts using the VDOT Utility Manual Tenth Edition. She has an in depth understanding of construction methods, standards, scheduling, permits, and DOT procedures for utility relocations, right-of-way impacts, private developments, and road improvements, widening and interchange projects. Renee is familiar with the NOVA District policies and procedures as well as the utility owners in the project vicinity. Renee will report to Owen Peery, PE, the Design Manager (DM).

**Lead Traffic Engineer (TMP), Keith Riniker, PE, PTOE**, is a recognized expert traffic engineer with strong credentials in design, analysis, and modeling, knowledge of MUTCD, FHWA, AASHTO, and ITE best practices. Keith has directly supervised and/or prepared traffic design plans for over 500 signals, hundreds of ITS devices, developed signal timing plans for 1,500 signals, over 30 miles of interstate signing and performed hundreds of traffic engineering studies. Keith will report to Owen Peery, PE, the Design Manager (DM).
Design Construction Coordinator (DCC)/Public Relations Manager, Lou Robbins, PE, DBIA, has been involved with local design-build projects since 1986 and has over 40 years of experience. He has led design-build teams as the General Contractor (GC), Designer and Quality Control Manager. His unique experiences as both the lead designer and GC will greatly assist in coordinating the efforts of the Corman DB Team to ensure the project’s success in meeting VDOT’s requirements. He will review all design submittals for conformance to project requirements, constructability and specific project scheduling needs. Lou has also successfully developed the strategy for and implemented numerous Community Involvement/Public Relations Programs for both large and small projects throughout the Mid-Atlantic States. Lou will report to the Design-Build Project Manager (DBPM).

Design QA/QC Manager, Tommy Peacock, PE, PLS, will report to the Design Manager (DM). Tommy will arrange for all design quality assurance and design quality control procedures in accordance with the quality control plan. He will verify that checks and reviews have been made prior to submissions, including review comment checking, contract conformance reviews, interdisciplinary reviews, and constructability reviews by Corman staff. Tommy, with over 48 years of experience will serve as a resource to the team in the manner of design-build delivery. As the project manager for two of the three projects listed in the lead designer’s experience section, he brings a tremendous amount of experience. Tommy provides the hands-on efforts needed to ensure adequate resources are assigned, accelerated schedules are maintained, and the team is responsive to clients.

Construction QC Manager (CQC Manager), Miriam (Mimi) Kronisch, PE, CCM, will coordinate with and report to the Construction Manager. Mimi will use her 14 years of experience to manage and coordinate all QC activities independent from, but coordinated with, the QA team. The CQC Manager will coordinate the third-party QC testing lab and testing technicians. Mimi has served at this capacity on several high profile projects including the VDOT Fair Lakes Interchange Project, Project Engineer on the VDOT Woodrow Wilson Bridge/Route 1 Interchange and I-95/Telegraph Road, and served as PM on the VDOT Route 288 in Richmond. Mimi will coordinate with the Quality Assurance Manager (QAM) during development of the QC program. She will attend weekly two-week look-ahead meetings and keep abreast of the overall project schedule for accurate inspection/testing staff scheduling. Mimi has the authority to stop specific work activities that do not meet QC requirements.

Safety Manager, John Lanigan, CHST, OHST, reports to the Construction Manager (CM). John will provide regular oversight of plans and field activities to provide a safe environment for VDOT, construction workers and the traveling public. John, with over 45 years of experience, will provide all needed safety training for the project and aid in developing a job-specific safety plan to address unique project hazards that will enhance our standard Corman policies, including subcontractor protocols. John has the authority to stop work which does not meet Corman’s strict safety requirements.

Right of Way Management Team
The Right of Way Management Team, led by Ronnie Van Cleve (BCG), will be responsible for all right of way/ easement acquisition efforts on the Project. Ronnie has more than 36 years of experience with land rights issues and managing right-of-way agents, appraisers, title companies and survey crews. The Right of Way Management Team will be involved in the design process, as needed, to become familiar with the design of the plans and to ensure awareness as to why certain right of way or easements may have to be acquired.

Negotiations will be handled by Tom Phillips (BCG). Tom has more than 25 years of experience acquiring right of way on VDOT projects and performing similar services on projects in the Cities of Lynchburg and Chesapeake, VA and Lee County, VA.

Appraisals will be completed by Mountain Empire Acquisitions, LLC. The firm is approved by VDOT to perform appraisal services and has experience preparing property appraisals on VDOT projects, performing similar services on projects such as: Dominion Boulevard, Chesapeake, VA; Midtown Tunnel, Cities of Portsmouth and Norfolk, VA; Route 229, Culpeper, VA; Route 50 Widening, Loudoun, VA; and Massaponax Church Road Widening.

Appraisal Reviews will be provided by Appraisal Review Specialists, LLC. The firm is approved by VDOT to perform appraisal review services and has 25 years of experience providing property appraisal review services on VDOT projects, performing similar services on projects such as I-81 Truck Climbing Lane in Montgomery County and the Route 61 New River Bridge Replacement in Narrows, VA.
Title Reports and Settlement Services will be provided by **Metro Title Services, LLC**. Catherine Strayhorne, President of Metro Title Services, has more than 30 years of experience preparing title reports and providing settlement services.

### 3.3.2 ORGANIZATIONAL CHART

The Corman DB Team organizational chart, at the end of this section, illustrates our “chain of command” and notes key personnel team members. Solid lines identify the reporting relationships of our team members in managing, designing and constructing the project, and illustrate clear reporting lines from the DBPM to the design and construction team. Dashed lines represent indirect reporting and obligations to the owner and/or Corporate Management. The chart also shows that a clear separation exists between QA and Construction QC inspection and field/laboratory testing.

#### Functional Relationships - Integrate to Facilitate

Design-build unites the contractor and designer more than just contractually. It integrates innovative design and construction techniques that benefit schedule and cost which ultimately lead to client satisfaction. Our Design Construction Coordinator, Lou Robbins PE, DBIA will ensure the required interface between Corman’s management/field crews and the designers occurs in a timely manner with the concerns of each openly discussed. Having a dedicated Design Construction Coordinator work on the project during the early design stages eliminates subsequent delays or rework, streamlines reviews, and eliminates potential construction field issues. Through our DBPM and CM, we will create a firm relationship that sets the foundation to interact and partner with VDOT and third-party stakeholders. Additional ways in which our team will be fully integrated include:

- Inter-disciplinary design reviews prior to milestones to ensure design disciplines are coordinated
- Corman constructability reviews of design, especially for MOT, Highway and Bridge Plans
- Weekly schedule meetings to review the previous weeks work and develop the two week look ahead, and monthly scheduling meetings to review CPM progress during design development and construction
- Weekly foreman meetings to discuss the schedule and coordination
- Morning huddles with the crews to set the safety and production goals for the day
- Weekly progress meetings with the owner to review and discuss quality, submittals, and progress payments once construction begins
- Monthly partnering meetings with all stakeholders for issue resolution

**Design-Build Project Manager (DBPM), Jo Ellen Sines, DBIA**, has full and complete authority of all design and construction matters for the Corman DB Team. Jo Ellen is responsible for all contract management and is VDOT’s primary point of contact throughout the project. As DBPM, Jo Ellen has full responsibility for coordination, integration and direction of the entire design-build team, including design, construction, quality assurance, MOT, safety, utilities and environmental permitting/protection. She will supervise the Design Manager, Design Construction Coordinator/Public Relations Manager, Construction Manager, and Quality Assurance Manager throughout the project. Jo Ellen will be involved with the project starting with preconstruction, through design, construction, and punch out; assist with constructability reviews and safety audits; oversee the quality management program, purchasing and all construction operations; and be responsible for third-party communication for the Corman DB Team, in conjunction with the Design Construction Coordinator/Public Relations Manager.

**Quality Assurance Manager (QAM), Kaushik Vyas, PE**, reports directly to the DBPM and will have direct, independent access to VDOT. He will ensure work is performed in conformance with contract requirements and “approved for construction” plans and specifications. He will be responsible for development and adherence to the QA Plan, QA inspection and testing of all materials used and work performed. As an independent entity, Kaushik will audit and monitor Corman’s Construction Quality Control Program. He will have the ability to stop construction, enforce compliance with all specifications, and issue/require resolution of all Non-Conformance Reports (NCRs). The QA team will conduct independent and concurrent tests and analysis of the work with the construction quality control team. He will maintain project quality records and approve and submit pay estimates. In addition, Kaushik will submit monthly written reports to the VDOT project manager and Corman’s Executive Committee.

**Construction Manager (CM), Chris Clark** will report directly to the DBPM. Chris will manage the efforts of the on-site construction team including the Construction Quality Control Manager, Project Controls Manager/Team, Safety Manager, Project Manager, superintendents, and project scheduling team. He will be assigned to this project and onsite full-time for the duration of construction. He will play a key role in conjunction with the Design Construction Coordinator in constructability reviews for all aspects of the design and work with him to oversee the coordination between the design and construction forces with regard to
utilities and MOT. Along with his staff, Chris will focus on ensuring that construction is performed safely, and all materials and work are in accordance with the approved plans and contract documents. He will also coordinate with the DM during construction for the proper and timely issuance and review of any RFI’s and shop drawings, as well as preparation of as-builts and plan revisions. Chris will hold responsibility for managing the construction quality control activities. The entire QC team will report to Chris.

**Design Manager (DM) Owen Peery, PE,** will also report directly to the DBPM. He will be responsible for providing a quality product and input into the project schedule, meeting all design milestones and interfaces, and ensuring the Design QA/QC Manager’s involvement. Owen is responsible for assuring all design work is performed in accordance with current policies, procedures, and guidelines. He will manage all aspects of design. He will assign resources as needed, oversee design sub-consultants, coordinate design and review schedules, develop and implement corrective measures, if necessary, and ensure environmental compliance measures are integrated into the design. Owen will maintain his involvement in the project once construction begins to oversee any plan modifications and shop drawings, and review construction activities with the CM as work progresses.

**Lead Structural Engineer/Deputy Design Manager (DDM), Gary Johnson, PE, DBIA,** will report directly to the DM and will be in charge of structural engineering for the project. Gary, with 20 years of experience, will lead production efforts for all structural engineering plans, estimates, and specifications for the project. He will also review structural shop drawings and assist the DBPM, CM and DM during construction for structural engineering project questions that arise. Gary will collaborate with the entire design and construction team leadership for constructability characteristics, inter-operability of project aspects, and project cost control. Gary is active with the VTCA Design-Build Committee. In the role of Deputy Design Manager, Gary will be involved in the day-to-day operations of the project and assist Design Manager (DM) Owen Peery, PE, with the overall project management.

### Keys to Success

Proper communication and coordination between the many parties involved in this project are the keys to success. This cooperation will be based upon open and honest communication plus frequent meeting and updates. The Corman DB Team will have internal weekly meetings during the design phases with key construction and design staff present. Tracking sheets will be developed to track progress of utilities, and various design disciplines efforts, as well as environmental and design approvals. Once construction starts, the design participants will be reduced to the DM, DCC, Design QA/QC Manager, and key design discipline leaders. Added to the weekly meetings as the construction begins will be the superintendents, field surveyors, MOT Manager and Construction QC Manager. Key stakeholder representatives including utility companies, EMS responders, etc. will be invited to these weekly meetings. Monthly meetings will also be held with the Corman DB Team, as well as VDOT, QAM, stakeholders and others required to enhance the partnering effort and resolve any pertinent issues.

Quality assurance efforts will be coordinated with, but independent of the day to day QC and construction efforts. The QAM, Kaushik Vyas, PE, will be given timely notice of all construction activities so his QA staff can be onsite at the appropriate and required times to document compliance. He will have access to all meetings and records he feels are required to provide independent assurance that the construction complies with all contractual and design requirements. Kaushik will report directly to the DBPM and provide VDOT and the project’s Executive Committee with the reports and assurances required. He will have unrestricted access to the construction and fabricator sites/facilities. A representative of Corman’s management team will contact the QAM monthly to confirm the project is in compliance.

From a design perspective, this major bridge project through a sensitive area will require close coordination between the following disciplines:

- Structural team, led by Gary Johnson, PE, of RK&K
- H&HA team, led by Brian Finerfrock, PE, of RK&K
- Geotechnical team, led by Randy Wirt, PE of ECS
- Environmental team, led by Justin Reel of RK&K

Building on their previous experience working together on similar projects, this design team, under the leadership of Owen Peery, PE, will work closely with the construction team to arrive at the best solution for this project. It is important to note that this previous experience working together is critical to ensure that a cost-effective and efficient bridge design is achieved and delivered.
Our own experience gained from work performed within the project vicinity enhances the skill level of our team. Corman and RK&K have effectively delivered projects using the design-build method in multiple states and will bring those proven management procedures to this project.

Team Organization Chart
3.4 Team Experience
3.4 TEAM EXPERIENCE

Corman and RK&K have successfully teamed on similar, complex projects including two highly successful Design-Build projects - MD Route 216 US 29 to I-95 ($21M) and Frederick Douglass Bridge Rehab/South Capitol Street ($34M) - that collected many awards to validate their success. This existing work history will enhance the Corman DB Team’s ability to identify, openly discuss and solve issues as they arise on the project. Also, the additional Corman DB Team members listed below have a solid history of working with Corman and RK&K, as well as strong design-build experience. The key Corman DB Team members include:

Corman Construction, Inc. (Corman) will serve as the Lead Design-Build Contractor. A privately-held family business since 1920, Corman is a licensed heavy civil contractor specializing in highway, bridge, restoration, and heavy utility construction. With a corporate headquarters in Annapolis Junction, MD and an office in Richmond, VA, Corman prides itself as a “Best in Class” contractor where our “A” ratings confirm the quality in our projects. Known for unparalleled partnering, Corman delivers projects on time and on budget without lingering disputes. We hold employee and public safety to a high standard and our 0.72 EMR ranks Corman in the top of the upper quartile of civil contractors validating our commitment to quality. Throughout the last few years, Corman received 20 local and national awards on three design-build projects. Other recent honors include the 2011 Maryland Washington Minority Contractors Association Prime Contractor of the Year Award, 2012 VTCA Transportation Contractor Safety Award, and 2011 ARTBA Women Leadership in Transportation Glass Hammer Award. Corman has constructed projects in Virginia for over 30 years. We consistently earn outstanding performance ratings and currently hold a CQIP of 94.2, CPE of 94.3 and C-36’s in the high 90’s.

Corman has successfully delivered over $1.2B of design-build roadway and bridge projects, many of similar scope and complexity to this project, including those for VDOT, DDOT, NCDOT, and MSHA. Included in the appendices are work history forms for the following projects: Design-Build MD 30 Hampstead Bypass, Telegraph Road Interchange Improvements, and Route 1 Tie-In to Woodrow Wilson Bridge Urban Deck VA-4.

Rummel, Klepper & Kahl, LLP (RK&K), founded in 1923, is a multi-disciplinary consulting firm providing a wide range of planning and design services for infrastructure design and rehabilitation, including the design of roadways, bridges, transit, water/sewer and site design. RK&K services an array of federal, state, and local clients from four Virginia offices – Richmond, Newport News, Virginia Beach, and Fairfax, and ten additional offices throughout the Mid-Atlantic and Southeast US.

RK&K provides complete transportation planning, highway design and traffic engineering services to all levels of municipal and private sector clients. RK&K’s services range from the transportation planning of major bridges, highways and intersections to traffic impact analyses, signal design, sidewalk design, and corridor and parking studies. Their transportation, planning and engineering team excels in resolving complex infrastructure and permitting challenges. RK&K’s experience in rural and urban areas, corridors, and central business districts dealing with highway, bridge, and railway projects have given them the experience necessary to become prequalified with multiple departments of transportation.

VDOT turns to RK&K for their design-build expertise. They were recently reselected for the Design-Build Staff Augmentation Services contract for VDOT. Under this contract, RK&K developed the design and contract documents to be advertised by VDOT for design-build procurement. For three years, RK&K conducted this service and the client was so satisfied, they were reselected for another three-year term. In addition, RK&K was recently presented with an award from the VTCA for their Main Street Improvement project in Blacksburg, VA. The project was chosen as the top submittal in the category of "Projects Smaller than $10 Million," which recognizes outstanding design work in the Transportation Industry in Virginia. Please see the appendices for RK&K’s work history forms for the following projects: Route 150 Widening – Chippenham Parkway, I-4744: Design-Build I-40 Widening & Signing, and Design-Build R-4463B NC 43 Connector.

Our Team has carefully selected subconsultants to further enhance our team capabilities. RK&K has enjoyed long-standing relationships in the design arena with Sabra Wang & Associates, ECS Mid-Atlantic, Quinn Consulting Services, Rice Associates and On-Time Utility Solutions, and look forward to delivering another successful project. In addition, these firms bring DBE and SWaM participation to our team.

Sabra, Wang & Associates, Inc. (SWA) is a multi-disciplinary DBE/MBE engineering firm located in Falls Church, VA, Baltimore, MD and Washington, DC. They offer professional consulting services including Traffic Engineering, Transportation Planning & Data Collection, Intelligent Transportation Systems & Lighting Design, Civil & Highway Engineering, Municipal Infrastructure
Design - Build for Gloucester Parkway Extension
Contract ID #: C00104418DB68

& Utilities Engineering, Structural Engineering, and Construction Management & Inspection. Since 1998, SWA has delivered cost-effective, efficient, and cutting-edge solutions to clients in the Mid-Atlantic region on the federal, state, and local level as well as in the private sector, on such projects as: Design-Build Intercounty Connector Contracts A, B, and C, and VDOT’s On-Call Traffic Engineering for the Northern Operations Region.

ECS Mid-Atlantic, LLC (ECS) is a multi-discipline engineering consulting firm specializing in the related fields of geotechnical, environmental, and construction materials engineering. The firm, based in Chantilly, VA, was founded in 1988 and employs a staff of approximately 500 throughout the Commonwealth. Staff includes registered professional engineers and geologists, certified lab technicians and construction inspectors, and field engineers. The Geotechnical Group performs subsurface explorations and engineering with emphasis on foundation systems for buildings of all types, drainage system designs and other groundwater issues, retaining structures, problem soil sites, slope stability evaluations, and deep foundation designs.

Quinn Consulting Services, Inc. (QCS) is a 100% woman owned DBE/WBE engineering consulting firm that provides quality control and/or quality assurance services on design-build projects for contractors, design engineers, and owners. As part of their QA/QC Design-Build Services, QCS can develop a project specific QA/QC Plan for inclusion in the design-build submission package and fully implement this QA/QC Plan at project execution. QCS has supported clients from all perspectives on numerous design-build projects.

Rice Associates, Inc. (Rice), a SWaM S firm, was founded in 1986 and provides conventional survey, LIDAR, photogrammetry and subsurface utility designation and mapping services. The firm maintains three offices in Virginia, including; Richmond, Manassas and Virginia Beach. The firm offers a broad range of surveying and mapping services and a full-time 68-person staff that includes licensed surveyors, photogrammetrists and field technicians. In terms of advanced capabilities, Rice Associates helped pioneer the use of Global Positioning within the Commonwealth of Virginia. Today the firm continues to operate at the leading edge of technology with three Leica Scanners – Ground Based Light Detection and Ranging (LIDAR) systems. This system is ideal for mapping buildings, highways, tunnels, bridges and plants of all types. Reduced data is used for design efforts and for developing as-constructed drawings. In addition to terrestrial scanning, Rice Associates is one of only a few survey-only firms that can offer in-house photogrammetric capabilities in the Mid-Atlantic region.

On-Time Utility Solutions, Inc. (OUS), a certified SWaM WS, will report directly to the DBPM and provide comprehensive utility management services for the project. Renee Martin, President, has more than 30 years of experience including significant utility management services. She has worked on numerous Design-Build projects identifying potential conflicts and issues. As part of the utility management responsibilities, Renee will work closely with Corman, RK&K and the utility companies and their contractors. Specifically for the Gloucester Parkway Extension project, Renee will rely on her experience working in and around Loudoun County, especially as it relates to the Dulles Potomac Interceptor Sewer, the Broad Run Interceptor, and Loudoun Water distribution lines. During the design phase she will value engineer, mitigate/eliminate conflicts during design, determine cost responsibilities and provide advanced designs to expedite the work of the utility company. Prior to and during construction, she will initiate and conduct utility field inspections, facilitate the relocation work required to be performed by the utility company, identify any relocation work that can be performed by Corman, and will verify and modify design in the event field conditions and construction operations warrant such modifications.

Bowman Consulting Group, Ltd. (Bowman) breadth of related multi-disciplinary services allows them to ensure efficient utilization of real estate assets, ultimately translating constraints into opportunities. In addition, Bowman is VDOT prequalified to provide ROW acquisition. The firm has significant experience in the research and preparation of appraisals for right-of-way and easement acquisition. Bowman also performs negotiations, closings and relocation assistance and condemnation (eminent domain) documentation. Our Team is experienced working together with Bowman to secure right-of-way (or easements) for transportation projects for VDOT and local governments.
**Design-Build and Teaming Experience**

The members of the Corman DB Team are strong believers in the design-build model. Our success is achieved by assigning key staff possessing strong leadership and technical skills, while recognizing design-build projects demand personal commitment, accountability and competency to manage the risks and keep the project moving forward. During the design phase, we will specifically lay out goals to determine where innovative techniques could lead to future maintenance, schedule and/or cost benefits. The design team will interface directly with the Design Construction Coordinator and management/field construction personnel throughout the design phase and project execution. Through this process, designers and contractors will benefit from creating working relationships. This integration allows us to interact and partner with VDOT and other stakeholders, streamline reviews, eliminate possible field problems during construction, and deliver this project safely and as early as possible within budget. It is important to note that every firm on our team has Design-Build experience and understands the Design-Build model.

**Inter-Team Relationships**

Corman and RK&K have a history of working together on projects for VDOT, DDOT, MSHA and various other transportation agencies/authorities. Some of our common projects include:

<table>
<thead>
<tr>
<th>Joint Corman/RK&amp;K Projects</th>
<th>Owner</th>
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<tbody>
<tr>
<td>I-95/Telegraph Road Interchange Improvements</td>
<td>VDOT</td>
</tr>
<tr>
<td>DB Intercounty Connector Contract A (Design-Build)</td>
<td>MSHA</td>
</tr>
<tr>
<td>DB Intercounty Connector Contract B (Design-Build)</td>
<td>MSHA</td>
</tr>
<tr>
<td>Route 1 Tie-In to Woodrow Wilson Bridge Urban Deck VA-4</td>
<td>VDOT</td>
</tr>
<tr>
<td>DB Frederick Douglass Bridge Rehab/S. Capitol St. (Design-Build)</td>
<td>DDOT</td>
</tr>
<tr>
<td>31st &amp; Grace Street – Gaston Storm Repairs</td>
<td>City of Richmond</td>
</tr>
<tr>
<td>Route 150 Widening – Chippenham Parkway</td>
<td>VDOT</td>
</tr>
<tr>
<td>DB MD Route 216 US 29 to I-95 (Design-Build)</td>
<td>MSHA</td>
</tr>
<tr>
<td>Woodrow Wilson Bridge MD 210 MB-3</td>
<td>MDOT/SHA</td>
</tr>
<tr>
<td>Woodrow Wilson Bridge VA Approach Spans VAC</td>
<td>MDOT/SHA</td>
</tr>
<tr>
<td>I-95/I-695 Interchange</td>
<td>MDTA</td>
</tr>
<tr>
<td>DB East Deer Park Road Bridge Emergency Rehab (Design-Build)</td>
<td>Mont. Co. Dept. of Transportation</td>
</tr>
<tr>
<td>Richmond Convention Center Expansion</td>
<td>Richmond Convention Ctr. Auth.</td>
</tr>
<tr>
<td>DB Division 1B – Bridges (Express Design-Build)</td>
<td>NCDOT</td>
</tr>
</tbody>
</table>

DB = design-build experience

Established, strong working relationships are vital to the success of any design-build project. Since the individuals on our team have already developed a rapport and knowledge of each other’s abilities, skills, and working style, the framework for the project implementation is strengthened. The Gloucester Parkway Extension design and construction phases will not be a “training ground” for the Corman DB Team, but instead will be one additional example of our Team’s success. Following is a graphic showing our strong inter-firm working relationship and experience.

<table>
<thead>
<tr>
<th>Experience Working Together</th>
<th>Corman</th>
<th>RK&amp;K</th>
<th>Sabra Wang</th>
<th>ECS</th>
<th>Quinn Consulting</th>
<th>Rice Associates</th>
<th>On-Time Solutions</th>
<th>Utility Solutions</th>
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<tr>
<td>RK&amp;K</td>
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</tbody>
</table>
3.5 Project Risks
3.5 PROJECT RISKS

The Corman DB Team will employ the CMAA endorsed approach to risk management through the use of a “Risk Register” which includes a formal list of identified risks, potential impacts to the project, and mitigation strategies for each issue. A successful risk management process is robust because it must consider project risks throughout all facets of the project’s life and delivery processes. Our team’s risk management process has already commenced, will continue throughout design and construction, and enable the team to respond to changes in an organized and proactive way as specific project issues unfold.

The Corman DB Team will employ a five step risk management approach to the project including the following stages:

1. **Identify** – name risks facing the project, determine cause and effect, and categorize risks
2. **Assess** – assign probability of occurrence, severity of impact, and determine response
3. **Analyze** – quantify risk severity, determine risk exposure, establish risk tolerance level, and determine risk contingency (applicable during preliminary design and pricing)
4. **Manage** – define response plans and actions, establish ownership of risk, and manage response (after NTP)
5. **Monitor / Review** – monitor/review/update risks, monitor response plans, update risk exposure, analyze trends, and produce reports (after NTP, during design, during construction)

We have reviewed the available information for the project, visited the site during various traffic and weather conditions, and jointly discussed the major risks. With the mindset of project risk being defined as an issue that has the potential to impact the project schedule, budget, or both, the team has identified the three most critical risks facing the design-build team during the course of the project:

**Risk No. 1 – Floodplain Impacts and CLOMR Approval**

**Risk Identification:** As Broad Run is a FEMA regulated floodplain, the control of the floodplain goes to the locality, which in this case is Loudoun County. Loudoun County is currently working with a CLOMR for an adjacent project described below that will greatly impact the design parameters of the Gloucester Parkway Project.

**Why this Risk is Critical:** The adjacent Nokes Boulevard Interchange project associated with the Route 28 PPTA placed fill material in the floodplain to the east of this Gloucester Parkway Project. A pending CLOMR is being prepared for the planned development along Pacific Boulevard for an adjacent property owner, which was to include the fill associated with the interchange project. Depending on the status of this CLOMR package and redevelopment, the impacts of the bridge to the floodplain may have to include the fill associated with the Nokes Boulevard Interchange work. This unknown parameter can have a significant effect on the design and construction of the proposed bridge. In addition, these parameters would force the start of construction to be contingent on the acceptance of the CLOMR by Loudoun County and FEMA, thus also affecting the schedule. As nearly the entire proposed bridge is in the floodplain, this risk is critical as literally no other work on the project can start without the acceptance of the CLOMR.

**Risk Impact to the Project:** Without proper coordination, construction could be fully stopped awaiting the approval of the CLOMR by FEMA. In addition, Loudoun County could impose less than efficient span arrangement (pier locations) for the bridge, thus increasing the overall cost of the project. Start of construction in the floodplain would have to wait on approval of the CLOMR by FEMA.

**Risk Mitigation Strategies:** Utilizing RK&K’s extensive experience with coordinating CLOMRs with Loudoun County and FEMA, our team will submit the floodplain alteration study early to get preliminary review comments and then submit the CLOMR for approval. We plan on conducting a concurrent submission to VDOT and Loudoun County to further streamline the process. We will also offer and encourage a meeting between the designers, Loudoun County, VDOT, and FEMA to review the details of the package, thus obtaining all of the needs and wants of the different groups in an efficient and open manner. This system, coupled with our personal relationships with the decision-makers, will ensure a review process as efficient as possible.
Role of VDOT and other Agencies: The Corman Team fully expects to handle and manage the risks associated with mitigating floodplain impacts. There is no role for VDOT or other state agencies with respect to handling this risk item.

Risk No. 2 – Bridge and Roadway Geotechnical Conditions

Risk Identification: The approximate 3,900-foot (0.75-mile) long project alignment passes through the NE-SW trending Balls Bluff Formation of the Culpeper Basin that includes sedimentary shale, silstone, and sandstone rocks. Alluvial deposits overly the Balls Bluff Formation within the floodplain of Broad Run, which flows generally north to south. The mapped alluvial deposits are generally located along the eastern half of the project alignment. The near surface soils are anticipated to include existing Fill (ML/SM) and residual soils (SM/SC/ML/CL). For the Broad Run bridge abutments and piers we anticipate Sandstone rock of the Culpeper basin at a depth from approximately 10 to 25 feet below existing grades. Ground water will likely be encountered at shallow depths given the direct proximity to Broad Run creek. For this project, we see these existing subsurface conditions as comprising risk for the bridge and roadway foundations due to soft alluvial deposits that are unsuitable for bridge and roadway support and if not addressed appropriately could lead to stability and settlement issues.

Why this Risk is Critical, Its Impact, and Risk Mitigation: The unknowns regarding the subsurface conditions places financial and schedule risk on the project. This risk is sub-divided into sub-groups with an explanation and mitigation strategy.

Sub-group 1 – Potentially Unsuitable Soils: With some sections of the alignment crossing Broad Run floodplains there is the likelihood that subgrade soils could be unsuitable for roadway embankment and pavement subgrades. Unsuitable soils per VDOT standards are typically identified by exhibiting natural moisture contents greater than or equal to 20% of the respective soils optimum moisture content. Also, subgrade soils classifying as highly-plastic clays and silts (CH/MH) are unsuitable and must be modified in place or removed entirely. These soils pose a risk to the project due to the additional time required to delineate the extent of these soils and the time required to modify or remove and replace these soils with suitable fill.

Sub-group 1 – Mitigation: To mitigate the potential for unsuitable soils to negatively affect the project schedule, the Project Team will focus early phase geotechnical explorations in the floodplain area around Broad Run, other low-lying areas, and portions of the alignment that lie in the Culpeper Basin geologic formation. The early phase exploration will also focus on laboratory tests of the samples to include natural moisture contents, Atterberg limits, and Standard Proctor tests. The results of these tests will help delineate the lateral extent and depth of unsuitable soils to allow for proactive measures to be taken in early earthwork construction phases. In addition, the Project Team will review available existing Geotechnical Data to further define the limits of the project alignment that crosses the Culpeper Basin’s eastern margin.

Sub-group 2 – Excavatability of Existing Soils: The proposed alignment lies within the Culpeper Basin and consists of sedimentary shale, sandstone, and/or siltstone. The sedimentary rock is typically encountered between 5 and 20 feet below existing grades and has an overlying highly weathered rock (HWR) and residuum soil profile. Excavation of subgrade soils along the alignment in this formation will likely encounter harder phases of soil and decomposed rock and can typically be excavated with conventional earthwork equipment without additional blasting measures. A project risk exists if harder phases of decomposed rock are encountered at shallow depths. Additional measures to excavate these materials, including blasting and ripping, pose a risk to the project schedule.

Sub-group 2 – Mitigation: To mitigate this potential adverse impact, the Project Team will focus on delineating these areas with a combination of test pits and SPT soil test borings. Early identification of these areas reduces the risk to the critical path of the project due to delays that could result in mobilizing different earthwork equipment, preparing blasting and ripping protection measures, etc.

Sub-group 3 – Settlement of Embankment Fill: New embankment fills will be constructed for bridge structures crossing Broad Run and will cross over the existing water utility easements. Risks to the project include long-term and post-construction settlement that must be analyzed and designed for by the Project Team.

Sub-group 3 – Mitigation: To mitigate this risk careful consideration of geotechnical field and laboratory testing will be followed. In-situ testing (CPTu, DMT, and PMT) of the on-site soils can be used to compliment traditional SPT soil test borings. Laboratory testing will include Consolidation testing to supplement traditional standard index testing. Results of these investigations will be critical to identifying both magnitude and time-rate of anticipated settlement at the bridge approaches. The Geotechnical Team has
considerable project experience in the vicinity Gloucester Parkway with settlement data from similar approach embankments on residual soils.

**Sub-group 4 - Bridge Foundation Scour:** An important factor in the foundation design of the new Gloucester Parkway bridge structure will be the Broad Run scour analysis. The Geotechnical Team will focus early phase explorations on the borings for the bridge structure with emphasis on material classification and laboratory grain size analyses for the residual soils overlying the siltstone and sandstone rock. Scourability of the overburden soils is a significant design consideration for the bridge pier and abutment foundations due to constructability of the foundation system and long-term stability of the structure during an extreme event.

**Sub-group 4 – Mitigation:** To mitigate this risk careful consideration of geotechnical field investigation and laboratory testing will be followed. In-situ testing (CPTu, DMT, and PMT) of the on-site soils can be used to compliment traditional SPT soil test borings. Additional SPT or Bulk soil samples will also be collected and a gradation analysis including hydrometer testing will be performed in order to provide adequate gradation information for scour analysis. The results of the scour analysis will be incorporated into the design of the bridge structures.

**Role of VDOT and other Agencies:** The Corman Team fully expects to handle and manage the risks associated with the existing subsurface conditions. We expect to take on these risks when we propose on a design-build project and this project is no exception. No role is anticipated from VDOT or any other state agency.

**Risk No. 3 – Accelerated Schedule with Limited Information**

**Risk Identification:** Gloucester Parkway Extension has been identified as an accelerated project and just recently added to the Design Build project list. The project has not gone thru the typical Design Build review process nor has the traditional information been included in the RFQ package indicating VDOT has not yet performed its typical detailed Preliminary Engineering.

**Why this Risk is Critical:** Design Build projects place substantial risk on the Design Builder. In order to minimize this risk and therefore the resulting bid price and scheduling VDOT typically provides the following critical preliminary information: Geotechnical, ROW, Utility, Environmental impacts and Permitting, wetlands, stormwater/hydraulics, roadway alignment and typical sections. None of this information is currently contained in the proposal package. If not provided in the Price proposal package the Design Builder will need to make assumptions that will increase the bid price, extend the schedule and potentially result in change orders during the scope validation or subsequent process.

**Risk Impact to the Project & Mitigation Strategies:**

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<tr>
<th>Risk</th>
<th>Potential Impact</th>
<th>Potential Mitigation Strategies (during procurement)</th>
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<td>Design Builder identify potential properties impacted</td>
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<tr>
<td>Environmental impacts</td>
<td>Cost, Schedule, Change Orders</td>
<td>Design Builder identify potential Environmental impacts</td>
</tr>
<tr>
<td>Utilities</td>
<td>Cost, Schedule, Change Orders</td>
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<td>Wetlands Floodplain</td>
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<td>Cost, Schedule, Change Orders</td>
<td>Design Builder obtain existing data from County or others</td>
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<td>Hydraulics</td>
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<td>Alignment</td>
<td>Cost, Schedule, Change Orders</td>
<td>Design Builder to conduct alignment study</td>
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<tr>
<td>Stakeholder / Political</td>
<td>Cost, Schedule, Change Orders</td>
<td>Designer Builder to assist VDOT in performing an appropriate public outreach program</td>
</tr>
</tbody>
</table>

**Role of VDOT and other Agencies:** As described in the above table. Geotechnical is shown as being mitigated by VDOT as the design-builder does not have drilling access to the site at this time. Stakeholder / Political input is shown as being mitigated by VDOT with the Design Builders assistance as there should only be one public outreach plan, not one for each proposer.

**Risk Summary**
The Corman DB Team understands that risks are inherent in design-build projects and proposes on this design-build project with eyes wide open. We fully take on the risk of this project as described.
Attachment 2.10

Acknowledgement of RFQ, Revisions and/or Addenda
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00104418DB68
PROJECT NO.: 2150-053-052

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 05/14/13 (Date)

2. Cover letter of RFQ Addendum No. 1 06/06/13 (Date)

3. Cover letter of (Date)

[Signature] 6/17/13

DATE
Attachment 3.1.2
Statement of Qualifications
Checklist and Contents
### ATTACHMENT 3.1.2

**Project: 2150-053-052**

**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.

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

**Project: 2150-053-052**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
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<td>DPOR Registration (Offices)</td>
<td>3.2.10</td>
<td>Section 3.2.10.2</td>
<td>no</td>
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<tr>
<td>DPOR Registration (Key Personnel)</td>
<td>3.2.10</td>
<td>Section 3.2.10.3</td>
<td>no</td>
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</tr>
<tr>
<td>DPOR Registration (Non-APELSCIDLA)</td>
<td>3.2.10</td>
<td>Section 3.2.10.4</td>
<td>no</td>
<td>Appendix</td>
</tr>
</tbody>
</table>

**DBE statement within Letter of Submittal** confirming Offeror is committed to achieving the required DBE goal

<table>
<thead>
<tr>
<th>Offeror's Team Structure</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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<td>Identity of and qualifications of Key Personnel</td>
<td>NA</td>
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<td>Pages 3-4</td>
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<td>Key Personnel Resume – DB Project Manager</td>
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<td>Section 3.3.1.1</td>
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<td>Key Personnel Resume – Quality Assurance Manager</td>
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<td>Section 3.3.1.2</td>
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<td>Key Personnel Resume – Design Manager</td>
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<td>Key Personnel Resume – Construction Manager</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.4</td>
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<td>Key Personnel Resume – Lead Structural Engineer</td>
<td>Attachment 3.3.1</td>
<td>Section 3.3.1.5</td>
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</tr>
</tbody>
</table>
### ATTACHMENT 3.1.2

**Project: 2150-053-052**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
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<td>Organizational chart</td>
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<td>Page 9</td>
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<td>Organizational chart narrative</td>
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<td>Pages 7-9</td>
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<td>Experience of Offeror’s Team</td>
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<td>Lead Contractor Work History Form</td>
<td>Attachment 3.4.1(a)</td>
<td>Section 3.4.1</td>
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<td>Appendix 3.4.1 (a)</td>
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<td>Lead Designer Work History Form</td>
<td>Attachment 3.4.1(b)</td>
<td>Section 3.4.1</td>
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<td>Appendix 3.4.1. (b)</td>
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<td>Project Risk</td>
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<td>NA</td>
<td>Section 3.5.1</td>
<td>yes</td>
<td>Pages 13-15</td>
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Attachment 3.2.6

Affiliated and Subsidiary Companies of the Offeror
**ATTACHMENT 3.2.6**

**State Project No. 2150-053-052**

**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.

- □ The Offeror does not have any affiliated or subsidiary companies.
- ✗ Affiliated and/ or subsidiary companies of the Offeror are listed below.

<table>
<thead>
<tr>
<th>Relationship with Offeror (Affiliate or Subsidiary)</th>
<th>Full Legal Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate (Parent)</td>
<td>CG Enterprises, Inc.</td>
<td>12001 Guilford Road, Annapolis Junction, MD 20701</td>
</tr>
<tr>
<td>Affiliate (Sister)</td>
<td>Corman Marine Construction, Inc.</td>
<td>711 East Ordnance Road, Suite 715, Baltimore, MD 21226</td>
</tr>
<tr>
<td>Affiliate (Joint Venture)</td>
<td>CK Constructors, A Joint Venture</td>
<td>c/o Corman Construction, 12001 Guilford Road, Annapolis Junction, MD 20701</td>
</tr>
<tr>
<td>Affiliate (Joint Venture)</td>
<td>Intercounty Constructors Joint Venture</td>
<td>c/o Granite Construction Northeast, Inc., 120 White Plains Road, Suite 310, Tarrytown, NY 10591</td>
</tr>
<tr>
<td>Affiliate (Joint Venture)</td>
<td>MD 200 Constructors, A Joint Venture</td>
<td>c/o Kiewit Infrastructure South Co., 11710 Beltsville Drive, Beltsville, MD 20705</td>
</tr>
<tr>
<td>Affiliate (Joint Venture)</td>
<td>Wagman, Corman, McLean Joint Venture</td>
<td>c/o GA &amp; FC Wagman, Inc., 3290 North Susquehanna Trail, York, PA 17406</td>
</tr>
</tbody>
</table>
Attachment 3.2.7(a)

Certification Regarding Debarment
Primary Covered Transactions
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 2150-053-052

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]  6/17/13  [Vice President]
[Name of Firm]  [Date]  [Title]

Corman Construction, Inc.
Attachment 3.2.7(b)

Certification Regarding Debarment
Lower Tier Covered Transactions
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

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

Signature Date Title

June 20, 2013

Rummel, Klepper & Kahl, LLP (RK&K)

Name of Firm
ATTACHMENT NO. 3.2.7(h)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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 6/20/2013  Principal

Date Title


Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

[Signature] 6/20/13  [Title]

[Name of Firm]
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

Signature: [Signature] Date: May 28, 2013
Title: President

Quinn Consulting Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

[Signature]       June 17, 2013       [Title]
Signature          Date               Title

Rice Associates, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

Signature Date Title

On-Time Utility Solutions

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

[Signature]  6/20/13  [Vice President]
Signature     Date     Title

[Name of Firm]

Bowman Consulting
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

[Signature] 6/19/2013 [President and CEO]
[Date] [Title]

[Name of Firm]
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

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

Signature      Date

May 23, 2013

Contracts Manager
Title

CTI Consultants, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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] 6-19-13 [Title]

[Name of Firm]
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

[Signature] June 27, 2013 [President]
Signature Date Title

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

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

Signature: [Signature]  Date: 6/22/13  Title: [Title]

Name of Firm: Mountain Empire Acquisitions LLC
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

[digitally signed]
June 20, 2013
Signature

Manager
Date

Appraisal Review Specialists, LLC
Title

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 2150-053-052

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

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

[Signature]
[Date]
[Title]

Metro Title Services, Inc.

Name of Firm
Certificate of Prequalification
C097
CORMAN CONSTRUCTION, INC.
PREQ. EXP : 03/31/2014

--PREQ ADDRESS ------------------ WORK CLASSES (LISTED BUT NOT LIMITED TO)
12001 GUILFORD ROAD
ANNAPOLIS, MD 20701-1201
PHONE : 410-792-9400
FAX : 301-953-0384

002 - GRADING
003 - MAJOR STRUCTURES
007 - MINOR STRUCTURES
045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: PENA, KENNETH JOHN
EMAIL: BHULME@CORMANCONSTRUCTION.COM

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

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

C1140
CORMAN MARINE CONSTRUCTION, INC.
PREQ. EXP : 03/31/2014

--PREQ ADDRESS ------------------ WORK CLASSES (LISTED BUT NOT LIMITED TO)
12001 GUILFORD RD
ANNAPOLIS JUNCTION, MD 20701-1201
PHONE : 301-953-0900
FAX : 301-953-0384

030 - PILE DRIVING AND CAISSONS
054 - MARINE CONSTRUCTION
082 - SHORING AND SHEETING

BUSINESS CONTACT: PENA, KENNETH JOHN
EMAIL: BHULME@CORMANCONSTRUCTION.COM

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

DBE TYPE : N/A
DBE CONTACT: N/A
Surety Letter
Kevin C. Reichert, P.E.
Alternative Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, VA 23219

R.E: Corman Construction, Inc.

Project: RFQ - Design/Build Project-Gloucester Parkway Extension
From: Loudoun County Parkway to Pacific Boulevard
State Project No. 2150-053-052, UPC No:104418
Contract ID Number: C00104418DB68

It is our understanding that Corman Construction, Inc. is submitting a proposal on the referenced project. As surety for the above named Contractor, Fidelity and Deposit Company of Maryland with an A.M. Best Rating of A+ and Financial Size Category of XV is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction with a current estimate of $38,500,000. and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

Our firm in conjunction with Fidelity and Deposit Company of Maryland have handled all of Corman Construction, Inc.'s bonding needs for over twenty years. Based on their excellent financial strength and track record of profitability, Fidelity and Deposit Company of Maryland has extended a bond program of $150,000,000 single/$400,000,000. total program. These are not the maximum limits they would consider but rather are general parameters to handle the company's day to day bonding needs.

In closing, we highly recommend this contractor and should you desire more specific information feel free to give me a call.

Sincerely,

Patricia L. Lewis
Attorney-In-Fact
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by Geoffrey Delisio, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Patricia L. Lewis its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland, in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 17th day of May, A.D. 2012.

ATTEST:

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

By: ____________
Assistant Secretary
Gerald F. Haley

Vice President
Geoffrey Delisio

State of Maryland
County of Baltimore

On this 17th day of May, A.D. 2012, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Geoffrey Delisio, Vice President and Gerald F. Haley, Assistant Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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

Constance A. Dunn, Notary Public
My Commission Expires: July 14, 2015
"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 27th day of June 2013.

Thomas O. McClellan, Vice President
Attachment 3.2.10

SCC and DPOR Information
**ATTACHMENT 3.2.10**

**State Project No. 2150-053-052**

**SCC and DPOR Information**

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

<table>
<thead>
<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>SCC Address</th>
<th>DPOR Registered Address</th>
<th>DPOR Registration Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corman Construction, Inc.</td>
<td>F046798-7</td>
<td>Foreign Corporation</td>
<td>Active</td>
<td>12001 Guilford Rd Annapolis Junction, MD 20701</td>
<td>Class A Contractors License</td>
<td>2701 014794A</td>
<td>10-31-2013</td>
<td></td>
</tr>
<tr>
<td>Rummel, Klepper &amp; Kahl, LLP</td>
<td>K000417-8</td>
<td>Foreign Registered Limited Liability Partnership</td>
<td>Active</td>
<td>81 Mosher Street Baltimore, MD 21217</td>
<td>ENG Business Entity Registration</td>
<td>0407002860</td>
<td>12-31-2013</td>
<td></td>
</tr>
<tr>
<td>Rummel, Klepper &amp; Kahl, LLP</td>
<td>K000417-8</td>
<td>Foreign Registered Limited Liability Partnership</td>
<td>Active</td>
<td>2100 East Cary St. Suite 309 Richmond, VA 23223</td>
<td>Eng Branch Office Registration</td>
<td>0411000271</td>
<td>02-28-14</td>
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<tr>
<td>Rummel, Klepper &amp; Kahl, LLP</td>
<td>K000417-8</td>
<td>Foreign Registered Limited Liability Partnership</td>
<td>Active</td>
<td>10306 Eaton Place Suite 240 Fairfax, VA 22030</td>
<td>Eng Branch Office Registration</td>
<td>0411000577</td>
<td>02-28-14</td>
<td></td>
</tr>
<tr>
<td>Sabra, Wang &amp; Associates, Inc.</td>
<td>F134320-3</td>
<td>Foreign Corporation</td>
<td>Active</td>
<td>101 West Broad Street, Suite 301 Falls Church, VA 22046</td>
<td>Eng Business Entity Registration</td>
<td>0407005636</td>
<td>12-31-2013</td>
<td></td>
</tr>
<tr>
<td>Sabra, Wang &amp; Associates, Inc.</td>
<td>F134320-3</td>
<td>Foreign Corporation</td>
<td>Active</td>
<td>7055 Samuel Morse Drive, Suite 100 Columbia, MD 21046</td>
<td>Eng Branch Office Registration</td>
<td>0411000839</td>
<td>02-28-2014</td>
<td></td>
</tr>
</tbody>
</table>
## ATTACHMENT 3.2.10

### State Project No. 2150-053-052

### SCC and DPOR Information

<table>
<thead>
<tr>
<th>Business Name</th>
<th>ID Number</th>
<th>Business Type</th>
<th>Status</th>
<th>Address Details</th>
<th>Eng Branch Office Registration</th>
<th>DPOR Certification Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECS Mid-Atlantic, LLC</td>
<td>S1208216</td>
<td>Limited Liability Company</td>
<td>Active</td>
<td>2119 – D North Hamilton Street Richmond, VA 23230</td>
<td>0411000384</td>
<td>02-28-2014</td>
</tr>
<tr>
<td>Quinn Consulting Services, Inc.</td>
<td>0492551-7</td>
<td>Corporation</td>
<td>Active</td>
<td>14160 Newbrook Drive, Suite 220 Chantilly, VA 20151</td>
<td>0407003733</td>
<td>12-31-2013</td>
</tr>
<tr>
<td>Rice Associates, Inc.</td>
<td>03316627</td>
<td>Corporation</td>
<td>Active</td>
<td>10625 Gaskins Way Manassas, VA 20109</td>
<td>0407003842</td>
<td>12-31-2013</td>
</tr>
<tr>
<td>On-Time Utility Solutions, LLS</td>
<td>S2054676</td>
<td>Limited Liability Company</td>
<td>Active</td>
<td>DPOR Not Required for this Service</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bowman Consulting Group, Ltd.</td>
<td>04481982</td>
<td>Corporation</td>
<td>Active</td>
<td>9813-9815 Godwin Drive Manassas, VA 20110</td>
<td>0411000497</td>
<td>02-28-2014</td>
</tr>
<tr>
<td>CTI Consultants, Inc.</td>
<td>0252760-4</td>
<td>Corporation</td>
<td>Active</td>
<td>2120 Berkmar Drive, Unit D Charlottesville, VA 22901</td>
<td>0411000466</td>
<td>02-28-2014</td>
</tr>
<tr>
<td>DMY Engineering Consultants, LLC</td>
<td>S313497-2</td>
<td>Limited Liability Company</td>
<td>Active</td>
<td>45662 Terminal Dr., Suite 110 Dulles, VA 20166</td>
<td>0407005631</td>
<td>12-31-2013</td>
</tr>
<tr>
<td>Specialized Engineering, Inc.</td>
<td>F128190-8</td>
<td>Foreign Corporation</td>
<td>Active</td>
<td>4845 International Blvd., #104 Frederick, MD 21703</td>
<td>0407004748</td>
<td>12-31-2013</td>
</tr>
<tr>
<td>GeoConcepts Engineering, Inc.</td>
<td>0516767-1</td>
<td>Corporation</td>
<td>Active</td>
<td>19955 Highland Vista Drive, Ste 170 Ashburn, VA 20147</td>
<td>0407004404</td>
<td>12-31-2013</td>
</tr>
</tbody>
</table>
### ATTACHMENT 3.2.10

**State Project No. 2150-053-052**

**SCC and DPOR Information**

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual's Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual's DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain Empire Acquisitions, Inc.</td>
<td>T0441891</td>
<td>Foreign Limited Liability Company</td>
<td>P.O. Box 6506</td>
<td>Real Estate Appraiser Board Business Registration</td>
<td>4008001754</td>
<td>11-30-2014</td>
</tr>
<tr>
<td>Appraisal Review Services, LLC</td>
<td>T0490682</td>
<td>Foreign Limited Liability Company</td>
<td>3058 Mount Vernon Road, Suite 12 Hurricane, WV 25523</td>
<td>Real Estate Appraiser Board Business Registration</td>
<td>4008001735</td>
<td>04-30-2014</td>
</tr>
<tr>
<td>Metro Title Services, LLC</td>
<td>S0921587</td>
<td>Limited Liability Company</td>
<td>DPOR Not Required for this Service</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Individual's Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
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<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rummel, Klepper &amp; Kahl, LLP</td>
<td>Owen Peery</td>
<td>2100 East Cary St. Suite 309 Richmond, VA 23223</td>
<td>801 East Main St., Suite 1000 Richmond, VA 23219</td>
<td>Eng</td>
<td>0402046882</td>
<td>10-31-2013</td>
</tr>
<tr>
<td>Rummel, Klepper &amp; Kahl, LLP</td>
<td>Gary Johnson</td>
<td>2100 East Cary St. Suite 309 Richmond, VA 23223</td>
<td>17333 Lafayette Dr. Olney, MD 20832</td>
<td>Eng</td>
<td>0402033863</td>
<td>09-30-2013</td>
</tr>
<tr>
<td>Quinn Consulting, Inc.</td>
<td>Kaushikkumar Vyas</td>
<td>14160 Newbrook Dr., Suite 220 Chantilly, VA 20151</td>
<td>10170 Spring Drive Gordonsville, VA 22942</td>
<td>Eng</td>
<td>0402039004</td>
<td>06-30-2014</td>
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</tbody>
</table>
Commonwealth of Virginia
State Corporation Commission
Registrations
CORMAN CONSTRUCTION, INC.

General
SCC ID: F0467987
Entity Type: Foreign Corporation
Jurisdiction of Formation: DE
Date of Formation/Registration: 11/2/1984
Status: Active
Shares Authorized: 1000

Principal Office
12001 GUILFORD ROAD
ANNAPOolis JUNCTION MD20701

Registered Agent/Registered Office
CT CORPORATION SYSTEM
4701 COX RD STE 301
GLEN ALLEN VA 23060
HENRICO COUNTY 143
Status: Active
Effective Date: 1/5/2004

Screen ID: e1000
Need additional information? Contact: sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov
RECEIPT

RE: RUMMEL, KLEPPER & KAHL, LLP

ID: K000417 - 8
DCN: 12-05-22-0543

Dear Customer:

This is your receipt for $50.00 to cover the fee for filing the annual continuation report for the above-referenced registered limited liability partnership.

The annual continuation report was filed on May 22, 2012.

If you have any questions, please call (804) 371-9733 or toll-free in Virginia, 1-866-722-2551.

Sincerely,

[Signature]
Joel H. Peck
Clerk of the Commission

GPACCEPT
CISO436

P.O. Box 1197, Richmond, VA 23218-1197
Tyler Building, First Floor, 1300 East Main Street, Richmond, VA 23219-3630
Clerk's Office (804) 371-9733 or (866) 722-2551 (toll-free in Virginia) www.scc.virginia.gov/clk
Telecommunications Device for the Deaf-TDD/Voice: (804) 371-9206
Commonwealth of Virginia

State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On September 25, 2001, a statement of registration as a foreign registered limited liability partnership was filed in this office by Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership.

This certificate of registration is in effect as of this date.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
January 24, 2013

Joel H. Peck, Clerk of the Commission
SABRA, WANG & ASSOCIATES, INC.

General
SCC ID: F1343203
Entity Type: Foreign Corporation
Jurisdiction of Formation: ND
Date of Formation/Registration: 6/30/1998
Status: Active
Shares Authorized: 5000

Principal Office
101 WEST BROAD STREET
SUITE 301
FALLS CHURCH VA22046

Registered Agent/Registered Office
RAYMOND H SUTTLE JR
701 TOWN CENTER DRIVE
SUITE 800
NEWPORT NEWS VA 23606
NEWPORT NEWS CITY 211
Status: Active
Effective Date: 4/14/2011

Select an action
File a registered agent change
File a registered office address change
Resign as registered agent
File an annual report
Pay annual registration fee
Order a certificate of good standing
View eFile transaction history
Manage email notifications

Screen ID: e1000
Need additional information? Contact sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov

PDF (.pdf) Viewer | Excel (.xls) Viewer | PowerPoint (.ppt) Viewer | Word (.doc) Viewer
Build #: 1-0-0-21121

https://sceefile.scc.virginia.gov/Business/F1343203

6/19/2013
QUINN CONSULTING SERVICES INCORPORATED

General

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

Principal Office

14160 NEWBROOK DRIVE
SUITE 220
CHANTILLY VA20151

Registered Agent/Registered Office

JOHN H QUINN JR
2208 S KNOLL ST
ARLINGTON VA 22202
ARLINGTON COUNTY 106
Status: Active
Effective Date: 10/24/1997

Screen ID: e1000

https://sccefile.scc.virginia.gov/Business/0492551
RICE ASSOCIATES, INC.

General
SCC ID: 03316627
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 12/15/1988
Status: Active
Shares Authorized: 60000

Principal Office
10625 GASKINS WAY
MANASSAS VA 20109

Registered Agent/Registered Office
DAVID F RICE III
10625 GASKINS WAY
MANASSAS VA 20109
PRINCE WILLIAM COUNTY 176
Status: Active
Effective Date: 12/20/2006

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

Screen ID: e1000
Need additional information? Contact sccinfo@scc.virginia.gov Website questions? Contact: webmaster@scc.virginia.gov
We provide external links throughout our site.
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That RICE ASSOCIATES, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is December 15, 1988;

That the period of its duration is perpetual; and

That the corporation is in existence and in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
October 13, 2012

Joel H. Peck, Clerk of the Commission
On-Time Utility Solutions, LLC

General
SCC ID: S2054676
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 11/28/2006
Status: Active

Principal Office
6913 Hovingham CT
CENITREVI LE VA 20121

Registered Agent/Registered Office
RENEE T MARTIN
44330 MERCURE CIR STE 140
DU LLES VA 20166
LOU DOUN COUNTY 153
Status: Active
Effective Date: 4/8/2010

Select an action
- File a registered agent change
- File a registered office address change
- Resign as registered agent
- File a principal office address change
- Pay annual registration fee
- Order a certificate of fact of existence
- Submit a PDF for processing (What can I submit?)
- View eFile transaction history
- Manage email notifications
CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

That On-Time Utility Solutions, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is November 28, 2006; and

That the limited liability company is in existence in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
January 14, 2013

Joel H. Peck, Clerk of the Commission
BOWMAN CONSULTING GROUP, LTD.

General
SCC ID: 04481992
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 6/7/1995
Status: Active
Shares Authorized: 360000

Principal Office
3863 CENTERVIEW DRIVE
SUITE 300
CHANTILLY VA20151

Registered Agent/Registered Office
ROBERT A HICKEY
3863 CENTERVIEW DR STE 300
CHANTILLY VA 20151
FAIRFAX COUNTY 129
Status: Active
Effective Date: 5/13/2004

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

STATE CORPORATION COMMISSION

Richmond, June 7, 1995

This is to Certify that the certificate of incorporation of

Bowman Consulting Group, P.C.

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

June 7, 1995

State Corporation Commission

[Signature]

Clerk of the Commission
C.T.I. Consultants, Inc.

General
SCC ID: 02527604
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/27/1984
Status: Active
Shares Authorized: 100000

Principal Office
13500 E BOUNDARY ROAD
MIDLOTHIAN VA 23112

Registered Agent/Registered Office
ANDREW W WHITE
LECLAIRRYAN A PROFESSIONAL CORPORATION
951 E BYRO ST 8TH FL
RICHMOND VA 23219
RICHMOND CITY 216
Status: Active
Effective Date: 1/18/2011
DMY Engineering Consultants, LLC

General
SCC ID: S3134972
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 1/11/2010
Status: Active

Principal Office
45662 TERMINAL DR STE 110
DULLES VA20166

Registered Agent/Registered Office
WEIYI MA
45662 TERMINAL DRIVE
SUITE 110
DULLES VA 20166
LOUDOUN COUNTY 153
Status: Active
Effective Date: 6/23/2011

Select an action
File a registered agent change
File a registered office address change
Resign as registered agent
File a principal office address change
Pay annual registration fee
Order a certificate of fact of existence
Submit a PDF for processing (What can I submit?)
View eFile transaction history
Manage email notifications
DIW GROUP, INC.

**General**

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

**Principal Office**

- **4845 INTERNATIONAL BLVD.**
- **#194**
- **FREDERICK MD 21702**

**Registered Agent/Registered Office**

- **CHARLES MITCHELL**
- **21601 AVENS CT**
- **ASHBURN VA 20148**
- **LOUDOUN COUNTY 153**
- **Status:** Active
- **Effective Date:** 1/30/1997

Screen ID: e1000
GeoConcepts Engineering, Inc.

General
SCC ID: 05167671
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/25/1999
Status: Active
Shares Authorized: 5000

Principal Office
19955 HIGHLAND VISTA DRIVE
SUITE 170
ASHBURN VA 20147

Registered Agent/Registered Office
VIVIAN LEWIS
GEOCONCEPTS ENGINEERING INC
19955 HIGHLAND VISTA DR #170
ASHBURN VA 20147
LOUDOUN COUNTY 153
Status: Active
Effective Date: 11/24/2004
MOUNTAIN EMPIRE ACQUISITIONS LLC

General
SCC ID: T0441891
Entity Type: Foreign Limited Liability Company
Jurisdiction of Formation: TH
Date of Formation/Registration: 8/27/2010
Status: Active

Principal Office
204 BUENA VISTA
CHATTANOOGA TN 37404

Registered Agent/Registered Office
INCORP SERVICES INC
7288 HANOVER GREEN DR
MECHANICSVILLE VA 23111
HANOVER COUNTY 142
Status: Active
Effective Date: 8/27/2010
Appraisal Review Specialists, LLC

General

SCC ID: T0490682
Entity Type: Foreign Limited Liability Company
Jurisdiction of Formation: WV
Date of Formation/Registration: 2/3/2012
Status: Active

Principal Office

3058 MOUNT VERNON RD
HURRICANE WV 25526

Registered Agent/Registered Office

INCORP SERVICES INC
7288 HANOVER GREEN DR
MECHANICSVILLE VA 23111
HANOVER COUNTY 142
Status: Active
Effective Date: 2/3/2012
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, August 10, 2012

This certificate of registration to transact business in Virginia is issued for

Appraisal Review Specialists, LLC
(Date of Registration: February 3, 2012)

a limited liability company organized under the laws of West Virginia and the said company is authorized to transact business in Virginia, subject to all Virginia laws applicable to the company and its business.

State Corporation Commission
Attest:

Joel H. Reck
Clerk of the Commission
Metro Title Services, L.L.C.

General
SCC ID: S0921587
Entity Type: Limited Liability Company
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/19/2003
Status: Active

Principal Office
450 W BROAD ST #301
FALLS CHURCH VA 22046

Registered Agent/Registered Office
ROBERT J STRAYHORNE
LAW OFFICES OF ROBERT J STRAYHORNE PLLC
450 W BROAD ST STE 301
FALLS CHURCH VA 22046
FALLS CHURCH CITY (FILED IN ARLINGTON COUNTY) 304
Status: Active
Effective Date: 10/26/2011

Screen ID: e1000
Richmond, February 19, 2003

This is to certify that the certificate of organization of

Metro Title Services, L.L.C.

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: February 19, 2003

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
Commonwealth of Virginia

DPOR Registrations
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

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

Gordon N. Dixon, Director

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

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

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

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

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER 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 APELSCIDLA
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
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

PROFESSIONS: ENG

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

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

COMMENWELLTH OF VIRGINIA
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000577 EXPIRES: 02-28-2014

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

ECS MID-ATLANTIC LLC
2119-D NORTH HAMILTON ST
RICHMOND, VA 23230
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

QUINN CONSULTING SERVICES INC
14160 NEWBROOK DR
SUITE 220
CHANTILLY, VA 20151
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: LS

RICE ASSOCIATES INC
10625 GASKINS WAY
MANASSAS, VA 20109

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

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG, LS

BOWMAN CONSULTING GROUP LTD
9813-9815 GODWIN DR
MANASSAS, VA 20110

Gordon N. Dixon, Director
DMY ENGINEERING CONSULTANTS, LLC
45662 TERMINAL DRIVE
SUITE 110
DULLES, VA 20166

PROFESSIONS: ENG

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

EXPRESSED ON
12-31-2013

ALTERATION OF THIS DOCUMENT USE AFTER EXPIRATION OR USE BY PERSONS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

DIW GROUP INC
SPECIALIZED ENGINEERING
4845 INTERNATIONAL BLVD
#104
FREDERICK, MD 21703

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Details of license number 4008001754

Name: MOUNTAIN EMPIRE ACQUISITIONS LLC
License Number: 4008001754
License Description: Appraisal Business Registration
Business Type: L
Address: PO BOX 6506
          PORTSMOUTH, VA 23701
Initial Certification Date: 2012-11-05
Expiration Date: 2014-11-30

No Open Complaints

"Open Complaints" reflect only those complaints against regulators for which a departmental investigation has determined that sufficient evidence exists to establish probable cause of a violation of the law or regulations. Only those cases that have proceeded through an investigation to the adjudication stage are displayed. State law prohibits the disclosure of any information about open complaints [Code of Virginia Section 54.1-108]. Members of the public may review official records and obtain copies only after a complaint investigation is closed.

No Closed Complaints

"Closed Complaints" reflect complaints against regulators closed since 1990. Cases closed without disciplinary action are purged after three years in accordance with DPOR's record retention policy.

To inquire about closed complaints, see the department's Public Records Access or contact the department's Information Management Section at (804) 367-8583 or publicrecords@dpor.virginia.gov.
DPOR’s for Key Personnel Practicing or Offering to Practice Professional Services in Virginia
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

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

GARY SEBASTIAN JOHNSON
3808 IVORY CT
RICHMOND, VA 23233

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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
06-30-2014

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

KAUSHIKKUMAR BHUPENDRAPRASAD VYAS
10170 SPRING DRIVE
GORDONSVILLE, VA 22942-7581

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(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
Key Personnel Resumes
ATTACHMENT 3.3.1  
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Jo Ellen Sines, DBIA – Vice President of Project Development
b. Project Assignment: Design-Build Project Manager
c. Name of Firm with which you are now associated: Corman Construction, Inc.
d. Years experience: With this Firm 32 Years With Other Firms 1 Year
   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.):

   **Vice President of Project Development**………………**Corman Construction** 2006-Present
   Jo Ellen is integral in senior management with a concentration in managing Projects in Innovating Contracting, including 11 design build projects, totaling over $1.1 Billion and completed on schedule and on budget. Relevant projects include:
   - 2012-2013 (Sr. DBPM) Design-Build I-64/Route 15 (Zion Crossroads), Louisa County, VA - $6.6 M
   - 2010-2013 (DBPM) Design-Build I-70 Phase 2D, Frederick, MD - $35.4 M – MDOT
   - 2008-2011 (Exec. Com.) Design-Build Intercounty Connector Contract B, Montgomery County, MD - $559 M – MDOT
   - 2009-2009 (DBPM) Design-Build E. Deer Park Rd/Bridge Rehab, Montgomery County, MD - $0.5 M – Mont. Co., MD
   - 2006-2009 (DBPM) Design-Build MD 30 Hampstead By-Pass, Hampstead, Maryland - $40.1 M - MDOT
   - 2006-2007 (DBPM) Design-Build Frederick Douglass Bridge Over Anacostia River, Wash., DC - $34.4 M - DDOT
   - 2006-2008 (DBPM) Design-Build MD 924 from MD 22 to Maulsby Avenue, Bel Air, MD - $7.6 M – MDOT

   **Sr. Project Manager/Operations Manager**………………**Corman Construction** 2003-2006
   Tasks and responsibilities include project oversight including scheduling, cost control, and planning to identify and mitigate potential delays resulting from design and/or constructability issues that keep projects on track. Relevant Projects included:
   - 2004-2006 (Ops. Manager) Churchman’s Road Bridge Over I-95, Newark, DE - $16.5 M - DelDOT
   - 2002-2005 (DBPM) Design-Build MD 216 US 29 to I-95, Howard County, MD - $21.1 M - MDOT
   - 2001-2002 (DBPM) Design-Build MD 7D Elkton – Utility & Streetscape, Elkton, MD - $8.4 M - MDOT

   **Project Manager/Engineer**……………………**Corman Construction** 1994-2003
   Performed Project Manager/Project Engineer duties on heavy highway, bridge and utility projects for MDOT, VDOT, DelDOT.
   - 2000-2001 (DBPM) Design-Build MD 32 Samford Road, Ft. Meade, MD - $6.6 M – MDOT

   **Active member of VTCA Design-Build Committee and DBIA.**

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
   - University of Pittsburgh – Johnstown, PA/BS/1980/Civil Engineering
   - Design-Build Institute of America (DBIA)/2004/#D651

f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A

g. Document the extent and depth of your experience and qualifications relevant to the Project.
   1. **Note your specific responsibilities and authorities for each assignment, not those of the firm.**
   2. **Note whether experience is with current firm or with other firm.**
   3. **Provide beginning and end dates for each assignment.**
   (List at least three (3), but no more than five (5) projects for which you have performed a similar function.)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Dates</th>
<th>With Current Firm?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design-Build MD 30 Hampstead By-Pass, Hampstead, MD</td>
<td>Feb 2006-Aug 2009</td>
<td>Yes</td>
</tr>
<tr>
<td>Project Role: Design-Build Project Manager</td>
<td></td>
<td></td>
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<tr>
<td>Client/Owner: Maryland State Highway Administration</td>
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</tbody>
</table>
As Design-Build Project Manager, Jo Ellen was responsible for design and construction of this $41 Million project from procurement to job completion. Pre-bid, she developed technical approach with designer and prepared best value submission. Post-bid, she assisted in determining extent of explorations such as geotechnical, utility and hazmat; integrated the job team and actively participated in plan development, in-house reviews, and reviews with owners and agencies. She assisted in preparation of project schedule (integrate design and construction), oversaw construction activities, led team in environmental stewardship program, provided construction management expertise to the Corman project team including PR duties and led the partnering process. Responsible for construction quality oversight.

Project included 4.5 mile new 2 lane asphalt roadway with 8 cross culverts, 4 bridges, 2 noise walls, storm drainage, roundabout lighting, 900,000 cy of excavation including 236,000cy of rock, utility relocations, 3 round-a-bouts, and 13 new SWM ponds. Project included a bog turtle habitat requiring special design accommodations. There were 22 design packages in all. Partnering project with “A” ratings in MOT, environmental and contractor performance. Worked 292,092 man-hours with one recordable incident.

| Project Name: | Design-Build MD Route 216 US 29 to I-95, Howard County, MD | Dates: | Sept 2002-June 2005 |
| Client/Owner: | Maryland State Highway Administration | With Current Firm?: | Yes |

As Design-Build Project Manager, Jo Ellen was responsible for integrating the job team for this $21 Million project. She developed/coordinated/ reviewed designs with design/permitting partner (RK&K), partnered with RK&K and project management team on innovative solutions, including bifurcating east and westbound roadways to reduce earthwork, established design-build procedures, phasing, and design deliverable schedule. She worked with staff on project management, including planning, QC scheduling and cost management; developed procurement approaches and was responsible for all design and construction.

Design/construction of 2 mi. realignment of MD 216 as a dual-divided highway with 2 signalized intersections, a new off-ramp from I-95, 167,000 SF noise walls, box culvert extensions, utility coordination, installation/relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling, E&SC, storm drainage, SWM (11 new ponds), roadway construction, signing, striping, signalization, & lighting.

| Project Name: | Woodrow Wilson Bridge, MD 210 Interchange, MB-3, Oxon Hill, MD | Dates: | May 2005-Dec.2007 |
| Client/Owner: | Maryland State Highway Administration | With Current Firm?: | Yes |

As Operations Manager for this $44.6 Million Interchange project (part of Woodrow Wilson Bridge Corridor), Jo Ellen oversaw the project from start to finish and was responsible for oversight of the project management staff. She was integral with the project scheduling, costing, staffing, quality control oversight, environmental compliance and constructability planning and troubleshooting.

Relevant project features include a complete reconstruction of the MD 210 Interchange with I-95/I-495 (Capital Beltway), including widening I-95 from 6 lanes to 12 lanes with new on and off ramps, construction of three ramps totaling, transformation of the Oxon Hill Road/MD 210 Intersection into a grade-seperated interchange, grading and drainage systems, 85,000 tons asphalt, 5 retaining walls, 2 SWM ponds and E&SC, demolition/bridge construction, ITS, overhead signs and signalization, complex phased construction required an extensive tie-back system to support adjacent bridges and roadway.

| Project Name: | Design-Build I-70 Phase 2D, Frederick, MD | Dates: | Sept 2010-July 2013 (est.) |
| Client/Owner: | Maryland State Highway Administration | With Current Firm?: | Yes |

As Design-Build Project Manager on this $35.4M project, Jo Ellen works with the design and permitting team developing/coordinating/ reviewing designs, integrating job team, participates in in-house, owner and agency reviews, assists in preparing the schedule (integrating design and construction), oversees construction, provides construction management expertise and project management, and leads the team in the environmental stewardship program and partnering.

Interchange reconstruction including widening approximately one mile of Interstate 70 under heavy traffic (adding one through lane and one auxiliary lane in each direction), ramp realignments/replacements, and adjusting the vertical profile(s) of mainline I-70 and ramps. In addition, replacement of the two I-70 bridges (EB and WB) over East South Street and MTA tracks, 2 new traffic signals, 2 new track crossings, E&SC, pond reconstruction, SWM, drainage, utility relocations, retaining walls, ITS, signing and coordination with FAA. Partnered and shared public outreach program with MSHA. Extensive TMP, permitting and railroad requirements.
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Kaushik Vyas, P.E., Quality Assurance Manager

b. Project Assignment: Quality Assurance Manager

c. Name of Firm with which you are now associated: Quinn Consulting Services, Inc.

d. Years experience: With this Firm 3 Years  With Other Firms 24 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.):

QA Manager……………………………………Quinn Consulting Services, Inc., March 2010 to Present
As QA Manager, works exclusively on VDOT design-build projects in lead QA and QC roles.

- **Design-Build** I-64, Exit 91 Interchange, Augusta County, VA - $21.07M – VDOT
- **Design-Build** Sycolin Road, Loudoun County, VA - $12.18M - VDOT
- **Design-Build** 495 Capital Beltway Express Lanes PPTA, Fairfax County, VA - $1.4B – VDOT

Transportation Engineer in QA/QC Department………TRC (formally Site-Blauvelt) April 2001 to March 2010
As Quality/Transportation Engineer, performed overall QA Control in line with VDOT PPTA Project QA/QC Guidelines.

- **Design-Build** Rte.15 Widening, Prince William County, VA - $40M - VDOT
- **Design-Build** Linton Hall Road Widening, Prince William County, VA - $20M - VDOT
- **Design-Build** Rte.895 Pocahontas Parkway PPTA, Richmond, VA - $314M - VDOT
- Spriggs Road Widening, Prince William County, VA - $30M - VDOT
- I-95/Rte.627 Interchange - Stafford County, VA - $35M – VDOT

Civil Engineer in QA/QC Department………………Gujarat Electricity Board March 1985 to March 2000
As Civil Engineer, worked in Power Plants (Generation Wing), dealt with construction and maintenance of plant and technical matters of thermal power plant projects, as well as QA/QC of construction works. Also performed land acquisition.

Gandhinagar Thermal Power Plant, Gandhinagar – Gujarat Electricity Board
Ukai Thermal Power Plant, Gandhinagar - Gujarat Electricity Board
Transmission Circle Office, Nadiad, Gujarat - Gujarat Electricity Board

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
  Gujarat University - Ahmedabad, India / BS / 1983 / Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
  Professional Engineer VA 2004 / Civil Engineer / 0402 039004

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

1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

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

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Dates</th>
<th>Project Role</th>
<th>Client/Owner</th>
<th>With Current Firm?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DB</strong> Design-Build I-495 HOT Lanes Fairfax County VA</td>
<td>Nov 2010-Early 2013 (est)</td>
<td>Resident - Area Quality Assurance Engineer</td>
<td>Virginia Department of Transportation</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Resident Area Quality Engineer on this nearly 2 billion dollar public-private Capital Beltway Project that includes widening of approximately 14 miles of High Speed, High Traffic flow Interstate, widening/replacement of over 50 bridges, construction of new HOV toll lanes, upgrades to 12 key interchanges and new soundwalls and carpool ramps. Responsibilities included oversight of quality control operations; daily staff assignments in the field; analyzing and interpreting project plans and specifications; participating in weekly progress meetings; working closely with contractors to identify and resolve problems; monitoring and reviewing daily diaries prepared by inspection staff; preparing deficiency and non-compliance reports; ensuring materials testing was performed in accordance with project specific QA/QC Plan and VDOT QA/QC Minimum Standards for Design-Build and PPTA Projects; working directly with General Contractor, Engineering and VDOT oversight personnel to discuss and/or recommend resolutions for field construction problems.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Design-Build Route 15 Widening, Prince William County, VA</th>
<th>Dates:</th>
<th>Nov 2007-Nov 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Quality Assurance Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>Virginia Department of Transportation</td>
<td></td>
<td></td>
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<tr>
<td>With Current Firm?:</td>
<td>No</td>
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Quality Assurance Manager on this five phased widening of Route 15 from Route 66 Interchange to Sudley Road involving Old Carolina Road, Heathcote Boulevard, and Waterfall Road Widening. Project also included three bridges. Provided coordination with QA/QC Teams for execution of the work according to plans & VDOT Specifications. Responsibilities included checking test reports, daily reports, safety reports, environmental reports, coordination with companies for utility relocations, and also with public relations in regards to the project.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Design-Build Route 895 (PPTA), Richmond, VA</th>
<th>Dates:</th>
<th>April 2001-July 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Quality Assurance Manager</td>
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<td></td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>Virginia Department of Transportation</td>
<td></td>
<td></td>
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<tr>
<td>With Current Firm?:</td>
<td>No</td>
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</table>

Quality Assurance Manager on this project that involves monitoring the James River crossing of I-95 using a segmental bridge. This bridge was built using a very advanced technique called the balanced cantilever method and was cast in place with traveling formwork. Responsible for studying the complex reinforcement plans, river crossing segmental drawings, and the pier table structure detailed drawings in order to methodically check and inspect the reinforcement of the critical river crossings. Also inspected the post tensioning of strands for the river crossing segments and reviewed the schedule of nodes and stressing data.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Linton Hall Road Widening, Prince William County, VA</th>
<th>Dates:</th>
<th>Nov 2007-Nov 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Quality Assurance Manager</td>
<td></td>
<td></td>
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<tr>
<td>Client/Owner:</td>
<td>Prince William County</td>
<td></td>
<td></td>
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<tr>
<td>With Current Firm?:</td>
<td>No</td>
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</table>

Served as the Quality Assurance Manager providing coordination with QA/QC Teams for execution of the work according to plans & VDOT Specifications. Project included bridge over Broad Run Creek and Roadway Widening up to Route 28. Responsibilities included checking test reports, daily reports, safety reports, and environmental reports. Also worked closely with utility companies during facility relocations and addressed public inquiries as related to the project.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Spriggs Road Improvements, Prince William County, VA</th>
<th>Dates:</th>
<th>May 2006-Oct 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Quality Assurance Manager</td>
<td></td>
<td></td>
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<tr>
<td>Client/Owner:</td>
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<tr>
<td>With Current Firm?:</td>
<td>No</td>
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</table>

Quality Assurance Manager of this project which included widening of Spriggs Road to make it a four-lane divided highway between Minnieville Road and Hoadly Road. Project also included the construction of access roads, MSE walls, and utility relocation. Responsibilities included interpreting geotechnical reports as related to actual field conditions and recommending solutions when unsuitable soils were encountered. Monitored ongoing roadway drainage work and soil stabilization work and prepared daily reports, pay item summaries, and project schedule reports.
**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

| a. Name & Title: | Owen L. Peery, PE / Senior Manager, 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.):

**Senior Manager, Transportation – RK&K**
November 1987 to present

Mr. Peery leads RK&K’s transportation efforts throughout Virginia and has been 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. His specialized experience is in the design of urban and freeway, interstate facilities and the extensive inter-agency, stakeholder, utility and owner coordination required with urban improvements. He has also been RK&K’s design manager on Design-Build projects and assisted VDOT preparing Design-Build and P3 contract documents. The majority of his work has been 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) of the VTCA.

**e. Education:**
Virginia Military Institute/BS/1983/Civil Engineering

**f. Active Registration:**
1994/Civil Engineering/Maryland #20474; 2009/Civil Engineering/Virginia #0402 046882

**g. Document the extent and depth of your experience and qualifications relevant to the Project.**
1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

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

| Project Name: | Route 150 Widening – Chippenham Parkway, Chesterfield County, VA |
| Project Role: | Design Project Manager |
| Client/Owner: | Virginia Department of Transportation |
| Dates: | 1997-2002 |
| With Current: | Yes |

Design Project Manager responsible for the preparation and widening and rehabilitation plans for the $38 million 4.5 mile section of a heavily traveled, highly developed principal arterial roadway. The project included the addition of median lanes and a median closed drainage system, upgrade of existing drainage facilities, stormwater management and erosion control. RK&K provided complete right-of-way and construction plans for this project. Project required that the design be completed in 15 months so that construction could be completed in sequence with other major improvements proposed for adjoining roadways. The proposed improvements followed the existing alignment and required widening to both the inside and outside of the existing four-lane facility. The additional lanes, soundwalls, retaining walls, drainage and stormwater management facilities were all designed to remain within the existing right-of-way with only minor exceptions. The project design required coordination with an adjoining section of Route 150 that was under construction to the north and with the designers for the proposed Route 895 project to the south. **Corman Construction was the contractor for this work.** This project incorporated formal teaming and took on a Design-Build like approach during construction making design revisions to facilitate construction methods.

| Project Name: | Route 250 Bypass Interchange at McIntire Road, Charlottesville, VA |
| Project Role: | Design Project Manager |
| Client/Owner: | Virginia Department of Transportation |
| Dates: | 1997-2002 |
| With Current Firm: | Yes |
Design Project Manager responsible for planning, environmental documentation, preliminary engineering, final engineering, public outreach and coordination between Federal, State and Local agencies to complete this $30 Million 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 selected Steering Committee through this process which included the analysis of 14 interchange alternatives. Public outreach has been so critical to this process that, under Mr. Peery’s direction, RK&K is maintaining a project web site that contains all project information, is linked to the City and VDOT web sites, and is updated nearly real-time to provide information to the community.

**Project Name:** Limited Services Design Contract – Statewide  
**Dates:** 2011 to Present  
**Project Role:** Design Project Manager  
**With Current Firm?** Yes  
**Client/Owner:** Virginia Department of Transportation

Design Project Manager responsible for overall project management as well as design including roadway plans, permit drawings, traffic data/analysis, traffic control devices, structures, public involvement, QA/QC and constructability. Also responsible for budget control and administration. Assigned tasks under this limited services contract include: I-81, Exit 14: Design of new interchange plus reconstruction of two main line bridges, improved shoulders and deceleration lanes. ($20M Construction Est.); Route 29/Route 250 (Best Buy) Ramp: Operational improvements to southbound Route 29, additional lanes on Route 29 and westbound ramp and addition of auxiliary lane widening along the Route 250 Bypass. ($8M Construction Est.); Odd Fellows Road Interchange: Development of a new freeway interchange with Route 460 for design-build procurement. ($23M Construction Est.); I-95 Shoulder Widening in Prince William County.

**Project Name:** On-Call Right-of-Way and Construction Plans Contract Statewide, VA  
**Dates:** 2008 to 2011  
**Project Role:** Design Project Manager  
**With Current Firm?** Yes  
**Client/Owner:** Virginia Department of Transportation

Responsible for overall project (contract) management, lead design and coordination overseeing all design and subconsultant activities to include designs on interstate, primary, urban, and secondary roadways for preliminary and final engineering. 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, estimates and public involvement. Assignments include the following tasks: Route 17 Widening TMP – Traffic control for widening project ($35M Construction Est.); Route 460 Public Outreach, Lynchburg – Lead public involvement (N/A); 10th Street South, Roanoke – Reconstruction of City Street ($9M Const. Est.); 10th Street North, Roanoke – Reconstruction of Urban Street ($6M Const. Est.); Route 155, New Kent County – Widening to add shoulders ($1.5 Const. Est.); Givens Widening Lane Final Design, Town of Blacksburg – Reconstruction and pedestrian enhancements ($1.4M Construction Est.); Riverland Road, Roanoke – Reconstruction and widening of urban street ($5M Construction Estimate)

**Project Name:** DBA Staff Augmentation for Design-Build/P3 Services  
**Dates:** 2007 - 2012  
**Project Role:** Design Project Manager  
**With Current Firm?** Yes  
**Client/Owner:** Virginia Department of Transportation

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: providing complete location survey, supplemental 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 design, structure and bridge design, geotechnical and geophysical services, preparations of environmental documents (NEPA), permit drawings, public involvement, constructability reviews, cost estimating, schedules, special provisions, project audits, claims support services, development / preparation of RFQs and RFPs, and engineering support in the evaluation of SOQs and EOIs.
ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: Chris Clark – Project Manager

b. Project Assignment: Construction Manager

c. Name of Firm with which you are now associated: Corman Construction, Inc.

d. Years experience: With this Firm 8 Years With Other Firms 2 Year

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.):

**DB Construction Manager**.................................Corman Construction 2010-Present

Chris supervises design coordination within DB team, oversees job team, manages subcontractors and suppliers, coordinates issue resolutions, produces comprehensive and short-term schedules, manages submittal procedures and material procurement, is main contact with owner for operations and procedures, participates in design development and reviews, and serves as the community and project liaison where he keeps the public informed while keeping the job on track. Relevant projects include:

- 2010-Present  Design-Build I-70 Phase 2D, Frederick, MD - $35.4M - MDOT

**DB Senior Project Engineer / Construction Manager ...........Corman Construction 2006-2010**

Chris’ responsibilities included managing subcontractors/suppliers, performing schedule coordination, tracking production, allocating resources, supervising daily construction, managing submittals, participating in design development, and reviewing design drawings. Also, he was in charge of material procurement, managing correspondence/meetings with owner, subcontractor coordination, project close out, and community outreach.

- March 2010-Oct 2010 Bell Manor Over Conowingo Creek, Conowingo, MD - $267,444 - Cecil County DPW
- Dec. 2008-Nov. 2009 Marley Jumpers Sewer Rehabilitation, Glen Burnie, MD - $4.7M - Anne Arundel DPW
- 2006-April 2009 Design-Build MD 30 Hampstead Bypass, Hampstead, MD - $40.1M - MDOT/SHA

**DB Project Engineer**...............................Corman Construction 2004-2006

Chris performed scheduling (including look-ahead), material procurement, design drawing reviews, subcontractor coordination, and project close out. He also was responsible for submittals, correspondence, and RFI's, and involved in value engineering and design development.

2005-2006 MD Route 70 Rowe Blvd. Bridges, Annapolis, MD - $29.6M - MDOT/SHA
2004-2005 Design-Build MD Route 216 US 29 to I-95, Howard County, MD - $21.1M - MDOT/SHA

**Field Engineer Assistant**......................The Quandel Group, Inc. 2003

Responsible for interpreting blueprints, determining quantity estimates, and handling submittal packages.

**Field Engineer Assistant**......................Cianbro Corporation 2002

Responsible for field layout, interpreting blueprints, establishing grades and elevations, and determining quantity estimates.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
Ohio State University – Columbus, OH/Bachelors in Agricultural Science/2003/Construction System Management

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2012/VDOT Erosion & Sediment Control Contractor Certification/#3-00061
2012/Virginia DCR Responsible Land Disturber/#38672

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

1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

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

| Project Name: Design-Build MD 30 Hampstead By-Pass, Hampstead, MD | Dates: Feb 2006-Aug 2009 |
### Project 1
**Project Name:** Design-Build I-70 Phase 2D, Frederick, MD  
**Dates:** 2010-July 2013 (est.)  
**Client/Owner:** Maryland State Highway Administration  
**With Current Firm?** Yes

As **Construction Manager** on this $41M Design-Build project, Chris performed design team, subcontractor and schedule coordination, and material procurement; EEO Officer and traffic manager duties including coordinating traffic switches; served as community and project liaison; managed submittals; reviewed design drawings; and oversaw project close out. Chris' suggestion to change a raised key (starter wall) in the weir wall of the stormwater management ponds to a depressed key resulted in expedient performance of formwork.

Construction of 4.5 mile new 2 lane asphalt roadway with 8 cross culverts, 4 bridges, 2 noise walls, storm drainage, roundabout lighting, 900,000 cy of excavation including 236,000 cy of rock, utility relocations, 3 round-a-bouts, and 13 new SWM ponds. Project included a bog turtle habitat requiring special design accommodations. There were 22 design packages in all. Partnering project with “A” ratings in MOT, environmental and contractor performance. Worked 292,092 man-hours with only one recordable incident.

### Project 2
**Project Name:** Design-Build MD Route 216 US 29 to I-95, Howard County, MD  
**Dates:** 2004-2005  
**Client/Owner:** Maryland State Highway Administration  
**With Current Firm?** Yes

As **Project Engineer** of this $21M Design-Build project, Chris performed material procurement and look-ahead schedules, and assisted in field crew and subcontractor coordination, RFI's, submittals, correspondence and project close out.

Design/construction of 2 mi. realignment of MD 216 as a dual-divided highway with 2 signalized intersections, a new off-ramp from I-95, 167,000 SF noise walls, box culvert extensions, utility coordination, installation/relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling, E&SC, storm drainage, SWM (11 new ponds), roadway construction, signing, striping, signalization, & lighting.

### Project 3
**Project Name:** MD Route 70 Rowe Blvd. Bridges, Annapolis, Maryland  
**Dates:** 2005-2006  
**Client/Owner:** Maryland State Highway Administration  
**With Current Firm?** Yes

As **Project Engineer** of this $29.6M project, Chris worked on the College Creek Bridge portion of the project and was responsible for look-ahead schedules, submittals, correspondence, RFI's, material procurement and coordinating daily with field operations. Also, he was involved in the value engineering of reducing the phases from three to two which resulted in a time and cost savings.

Rehabilitation and replacement of two 50+ year old structurally-deficient bridges crossing over Weems and College Creeks while improving the environment by implementing best management practices for storm drainage-system installation, and extensive architectural amenities adorning this gateway leading to Maryland's historic State Capital. Rowe Blvd. (MD Route 70) is the central artery providing direct connection with US Route 50 in Annapolis.
### Brief Resume of Key Personnel anticipated for the Project.

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Gary S. Johnson, PE, DBIA – Senior Manager, Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Lead Structural Engineer</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>RK&amp;K, LLP</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 3 Years With Other Firms 17 Years</td>
</tr>
<tr>
<td></td>
<td>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):</td>
</tr>
<tr>
<td></td>
<td><strong>Senior Manager, Structures – RK&amp;K, LLP</strong></td>
</tr>
<tr>
<td></td>
<td>As Senior Manager for Structures, Mr. Johnson is responsible for bridge design and design-build projects in Virginia. He has more than 20 years of project management, design and construction inspection experience in structures, roadways, and mass transit stations. His extensive project management experience, formal training and hands-on participation in inspection, design and construction engineering assignments afford him in-depth knowledge of project requirements. Additionally, his experience with design-build projects has developed his full understanding of the implementation of bridge plans and projects through construction. He is currently a member of the VTCA Engineering Consultant Leadership Committee is regularly attends and participates in the VTCA Design-Build Committee meetings.</td>
</tr>
<tr>
<td></td>
<td><strong>Mid-Atlantic Unit Manager – T.Y. Lin International</strong></td>
</tr>
<tr>
<td></td>
<td>Project Manager and Lead Structural Engineer for dozens of bridge projects. Oversaw staff of 20 structural engineers. Served as Engineer of Record on bridge replacement projects. Served as Principal in Charge for design-build projects in Virginia, North Carolina and Washington DC.</td>
</tr>
<tr>
<td></td>
<td><strong>Director of Virginia Operations – Ammann &amp; Whitney</strong></td>
</tr>
<tr>
<td></td>
<td>Project Manager and Lead Structural Engineer for projects throughout Massachusetts, Pennsylvania and Virginia. Served as Engineer of Record on bridge replacement and rehabilitation projects. Focused on rehabilitation of bridges damaged from over height loads and emergency response.</td>
</tr>
<tr>
<td>e. Education: Name &amp; Location of Institution(s)/Degree(s)/Year/Specialization:</td>
<td>Virginia Commonwealth University, Richmond, VA – MBA/2003/Business Administration</td>
</tr>
<tr>
<td></td>
<td>University of New Hampshire, Durham, NH – BSCE/1993/Civil Engineering</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
<td>1999/Professional Engineer/VA (#0402 033863)</td>
</tr>
<tr>
<td></td>
<td>2010/DBIA Professional (#125387)</td>
</tr>
<tr>
<td></td>
<td>2010/NBIS Certified Bridge Inspection Team Leader</td>
</tr>
<tr>
<td>g. Document the extent and depth of your experience and qualifications relevant to the Project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
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<td></td>
<td>2. Note whether experience is with current firm or with other firm.</td>
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<td>(List at least three (3), but no more than five (5) projects for which you have performed a similar function.)</td>
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<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Middle Ground Blvd. Extension, Newport News, VA (Design-Build)</th>
<th>Dates:</th>
<th>2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Structural Engineer</td>
<td>With Current Firm?</td>
<td>Yes, as a Subconsultant to RK&amp;K</td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>Virginia Department of Transportation</td>
<td></td>
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</tbody>
</table>

As part of a Staff Services contract for Innovative Project Delivery department Mr. Johnson developed preliminary plans depicting the location and a concept (TS&L plans and report) for the bridge over the CSX Railroad in order to identify right of way requirements. Mr. Johnson also played an integral role in estimating construction costs. The Extension of Middle Ground Boulevard is from approximately 0.120 miles east of Route 143 (Jefferson Avenue) to approximately 0.077 miles west of Route 60 (Warwick Boulevard) in Newport News, Virginia. The proposed improvements cover a distance of approximately 1.20 miles and include a new bridge over the CSX Railroad. Mr. Johnson coordinated with the roadway engineers, railroad, and utility designers to arrive at the most cost-effective design.
<table>
<thead>
<tr>
<th>Project Name:</th>
<th>US 158 Over Yadkin River, Mocksville, NC (Design-Build)</th>
<th>Dates:</th>
<th>2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Lead Structural Engineer</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>North Carolina Department of Transportation</td>
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</tbody>
</table>

Lead Structural Engineer and Project Design Manager for a roadway widening that included a nine-span bridge structure with a length of 1150 feet. The superstructure span arrangement consists of three, 3-span units made continuous for live load utilizing 72” Modified Bulb Tee girders. The substructure consists of three column bents founded on drilled shaft foundations. Mr. Johnson led a multi-member, multi-disciplined project team (including utilities, roadway, right-of-way, environmental, structures, and hydraulics) from proposal development through construction. Complicating the project was extensive right-of-way negotiations, complex maintenance of traffic, complex hydraulic analysis, and an aggressive schedule.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>New York Avenue, Washington, DC (Design-Build)</th>
<th>Dates:</th>
<th>2010-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Lead Structural Engineer</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>DC Department of Transportation</td>
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</table>

Lead Structural Engineer and Project Design Manager for this bridge replacement project in downtown Washington DC. Maintenance of Traffic during construction was the main driving force of the project. MOT drove the most applicable structural alternatives. Mr. Johnson worked closely with the client and contractor to arrive at the most feasible bridge replacement options. The project involved significant roadway work and Mr. Johnson was responsible for all aspects of the project, from initial costing to final design.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>The Bridges at Lancer Park for Longwood University (Design-Build)</th>
<th>Dates:</th>
<th>2008 to 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Lead Structural Engineer</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>Longwood University</td>
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</tbody>
</table>

Lead Structural Engineer and Project Design Manager for the design of two new bridge structures and associated approaches and ramps. The first structure, a 140 foot long through truss, completed the proposed West Third Street entrance into Lancer Park by spanning the Rails and Trails corridor. The second structure is a pedestrian bridge and crosses West Third Street. Responsibilities included coordination with the Virginia Bureau of Capital Outlay Management (BCOM), Department of Conservation and Recreation (DCR), VDOT and the Town of Farmville. This project also included a presentation before the Art and Architecture Review Board (AARB).

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Anacostia Riverwalk Trail, Washington, DC (Design-Build)</th>
<th>Dates:</th>
<th>2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Role:</td>
<td>Design Project Manager</td>
<td>With Current Firm?</td>
<td>No</td>
</tr>
<tr>
<td>Client/Owner:</td>
<td>Virginia Department of Transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lead Structural Engineer and Project Design Manager for the environmental assessment and design of approximately 16 miles of the Anacostia Riverwalk Trail following the east and west banks of the Anacostia River, mostly through Anacostia National Park property. The trail alignment is adjacent to some of the most environmentally sensitive portions of the National Park. The trail will also include numerous connections to adjacent neighborhoods and transit stations. The final project was divided into three Design-Build contracts. Final design for one of these contracts and for a portion of another contract has been completed under the direction of Mr. Johnson. For this work, he was the Project Design Manager and was responsible for all aspects of the project, from pricing to final delivery. These contracts involved the construction of approximately 5.75 miles of trail as well as two bridges over the CSXT railroad.
Attachment 3.4.1(a)
Lead Contractor
Work History Forms
**PROJECT FEATURES/NARRATIVE**

This fast-track, Corman (lead) Joint Venture project consists of reconstructing the Telegraph Road Interchange and widening/reconstructing approximately 2.5 miles I-95/I-495, west of Route 1 to the Eisenhower Connector exit to enable traffic to enter and exit Virginia by crossing the new Woodrow Wilson Bridge. Project included reconstruction for five local streets, including Huntington Avenue (four lanes), Lenore Lane (two lanes), East Drive (four lanes), North King Highway (four lanes), Mill Road (four lanes), Pershing Avenue (two lanes). Improvements include roadway/bridge reconstruction, intersection, and utility relocations. The new grade-separated interchange provides access to eastbound Huntington Avenue and North Kings Highway from the Beltway Outer Loop and southbound Telegraph Road, through elevated ramps over Telegraph Road, opposed to signalized intersections, and will refine traffic flow and provide easier/safer pedestrian access. Scope includes constructing 11 ramps and bridges totaling 380,000 SF of bridge deck, driving approximately 80,000 LF of concrete and steel piles, drainage improvements, micro-tunneling, 11 box culverts, 36,500 CY low permeability concrete, new traffic systems, lighting, traffic and overhead signs, traffic management system upgrades, guardrails, landscaping, 25,000 SF of temporary retaining walls with soil anchors, E&S controls that include General Water Permits, and an environmental mitigation project at nearby Cameron Run Wetlands. There are improvements to 24 lane miles with 321,000 SF of roadway paving, milling and resurfacing, extensive MOT, pavement marking, approximately 500,000 CY of excavation, 23 retaining and MSE walls, four sound walls, ADA handicamp ramps, and storm drainage with six stormwater management ponds.

**SCOPE AND COMPLEXITY SIMILARITIES**

- Construction of a local urban street.
- Construction of bridges
- VDOT project
- Coordination with local stakeholders
- Utility coordination and relocations
- Environmental permitting and protection

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**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

This is a complex project with an aggressive schedule as it is intertwined with existing traffic patterns and other Woodrow Wilson Bridge projects that must be accommodated while working over water, rail systems and on the Capital Beltway, considered one of the busiest roads in the country. Weekly progress meetings are held with the owner, as well as meetings dealing with MOT, scheduling and lane closures, to discuss coordination with the other ongoing projects. We also coordinate the work with the local city, police, fire and other emergency responders, and obtained required noise, grading and lane closure permits.

Construction is occurring in six stages with 12 traffic shifts and commands major interim milestone coordination from a demanding schedule with incentive/disincentive clauses. The project met all six milestones to date with the Substantial Completion milestone achieved 112 days in advance of the contract requirement and is on schedule to finish months ahead of the final completion date.

Our overall quality rating for this project is 95.3%. The following is a quote from Jalal Masumi, VDOT’s Deputy Project Manager: “Scoring 95.3% for a project of the enormity and complexity of our I-236 contract [the largest VDOT construction contract awarded to-date] is a truly significant positive achievement. It reflects our meeting the partnering mission statement commitments. I would like to extend my sincere appreciation to the VDOT, FCC/KC partnership team for their steadfastness and resolve. I congratulate the team for having met the challenges in achieving this score, and thank them again. Let’s keep up the good work.”

**LESSONS LEARNED**

1. **Coordination is Key:** Since effective coordination among all Woodrow Wilson Bridge projects was paramount, corridor coordination and job progress meetings are held to discuss issues/solutions, scheduling, partnering, safety, MOT, etc., which mitigate conflicts and ease the flow of each project.
2. **Revisit MOT to find a Better Design:** Due to excessive traffic congestion, Corman proposed MOT revisions to improve traffic flow which eliminated four phases of traffic and reduced traffic shifts. These revisions were implemented with VDOT’s approval resulting in improved public traveling.
3. **Be Proactive with Utilities:** Contract drawings showed no utility conflicts. As work began, it was clear many existed. Rather than wait to discover them, Corman proactively identified and recorded all existing utility locations for the entire project. As a result, the original scheduled was maintained with extensive relocations coordinated with the schedule.
4. **Make Safety a Priority:** In 2009, there were nine recordable incidents after 661,000 manhours. The JV developed “The Safety Time” Program which required crews to stop for five minutes at 9:00 am, 11:00 am and 1:30 pm to inspect, discuss, and immediately correct safety issues. Topics included identifying potential safety risks, reviewing methods, tools and equipment used, evaluating/discussing if work is performed the safest way and what can be done to improve safety, and reviewing housekeeping (tripping, falling, pinching, struck-by hazards, etc.). Since instituting this program, injuries have been significantly reduced.
CORMAN ROLE
General contractor responsible for all aspects of construction. Corman initiated an innovation solution to advance construction by constructing an "award winning" Virginia Advance Connector to the Woodrow Wilson Bridge and local Route 1 through Downtown Alexandria. Constructed new roadways with pavement markings, signing, cantilever and overhead sign structures, and a new intersection traffic signal. Approximately one mile cast-in-place cantilever concrete retaining walls were constructed to support the 140,000 CY excavation for the widened beltway and extensive MOT. Utility relocations included water mains, sewer lines, storm drains, CCTV, lighting and electrical facilities. Sewer upgrades included ½ mile of 42" and 300' of 30" micro-tunnel. A portion of the project was design-build and Corman worked with the designer to design and build a temporary low-density cementitious fill ramp bridge and with the sound wall producer to design and build specialty noise walls.

A new storm drainage system in the footprint of the Beltway and along Washington Street was also installed. Virginia Dept. of Environmental Quality erosion & sediment control measures were implemented. Project included extensive MOT on the heavily traveled capital beltway and local Washington Street in Alexandria. Traffic shifts included four major shifts on the Beltway including a complete shift from the inner loop to the newly widened outer loop over a weekend and eight major shifts on Washington Street.

SCOPE AND COMPLEXITY SIMILARITIES
- Widening of local roadways
- Construction of bridges
- VDOT project
- Design-Build elements including ramp bridge and noise wall
- Stakeholder coordination
- Signalized intersections
- Environmental protection
- Utility relocations and coordination
- Size of project: $62,737

COOPERATIVE WORK HISTORY
RK&K was the GEC on this project and worked closely with Corman to complete the project on-budget and ahead of schedule.

PROJECT FEATURES/NARRATIVE
Two phased demolition/construction and widening ½ mile of I-495 Beltway and local Route 1 through Downtown Alexandria. Constructed new roadways with pavement markings, signing, cantilever and overhead sign structures, and a new intersection traffic signal. Approximately one mile cast-in-place cantilever concrete retaining walls were constructed to support the 140,000 CY excavation for the widened beltway and extensive MOT. Utility relocations included water mains, sewer lines, storm drains, CCTV, lighting and electrical facilities. Sewer upgrades included ½ mile of 42" and 300' of 30" micro-tunnel. A portion of the project was design-build and Corman worked with the designer to design and build a temporary low-density cementitious fill ramp bridge and with the sound wall producer to design and build specialty noise walls.

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- Utility relocations and coordination
- Size of project: $62,737

COOPERATIVE WORK HISTORY
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VERIFIABLE EVIDENCE OF GOOD PERFORMANCE
The project had eight milestones all of which were successfully met and $1.5M in incentives earned. Project finished with a 0.24 Lost Time Incident Rating and a 1.96 Recordable Incident Rating which was the second best record among the Woodrow Wilson Bridge projects respectively. Corman also maintained a 99.29% C-36 rating for our efforts.

An innovative solution was implemented to advance construction by shifting the capital beltway traffic so construction could begin on the next stage sooner, saving nine months of construction time. Regarding the Beltway Shift, Nick Nicholson, PE, VDOT’s Project Manager for the Woodrow Wilson Bridge project commented, “The outcome was surprisingly better than expected. The shift was completed ahead of schedule and without incident-and with no significant traffic delays.”

AWARDS
- 2008 VDOT Commitment to Excellence Award for Environmental Compliance Distinction
- 2006 VDOT Commissioner’s Award for Outstanding Achievement for the “Beltway Shift”
- Innovation & Quality Improvement

LESSONS LEARNED
1. Work with The Public: Constant attention to MOT functionality and appropriateness of signs and MOT devices were critical to maintaining the smooth flow of heavy commuter traffic. Corman drove the project several times daily to review the effectiveness and condition of the controls to ensure proper function of the TMP.
2. Be Proactive with MOT: From working within 10’ of the Huntington Towers apartment complex, to working within 10’ of the oldest Catholic cemetery in Virginia, to working within 10’ of a federal pedestrian trail system, public outreach was critical to the success of VA-4. Corman partnered with VDOT, PCC, and other stakeholders to keep current project information flowing to the public and involving them in processes (where appropriate) to ensure their understanding of the project as well as their safety.
3. Frequent Coordination is Key to Success: Corman allowed the adjacent section contractor to place their office facilities adjacent to ours to ensure open communication and coordination occurred. Additionally, Corman participated in owner sponsored coordination and schedule meetings that were held to help keep all projects on track.
Design-Build MD 30 Hampstead Bypass
Hampstead, Maryland

Maryland Department of Transportation/State Highway Administration
Phone: 410-545-8824
Lisa Choplin
Phone: 410-545-8824
LChoplin@sha.state.md.us

12/2008
08/2009
Due to owner-directed change orders
$40,137
$43,294
Due to owner-directed change orders
$43,294

PROJECT FEATURES/NARRATIVE
4.5 miles of two-lane asphalt road constructed to return Hampstead to its residents by allowing heavy commuter and commercial traffic to bypass the town center and mitigate gripping rush-hour congestion. There were numerous stream/wetland crossings and four bridges spanning them, three new roundabouts with lighting, new storm drainage, extensive stormwater management facilities, water/sewer relocations, eight cross culverts, approx. 900,000 CY cut-to-fill, including 336,000 CY of rock excavation, signing, pavement markings, traffic signals, ROW acquisition, two major traffic tie ins, and BGE, Verizon and Adelphia utility relocations. Milled/resurfaced tie-in connections at the north and south termini points. Highway lighting was installed at the roundabouts and maintained traffic at the north and south points and at each roadway crossing. One noise wall is adjacent to the Singer Heights community and the other is adjacent to the Westwood Community totaling 3,500 LF.

Approximately 1,040’ of temporary road was constructed as a detour to maintain traffic while bridge and approach roadway was constructed on an existing alignment. Worked with adjacent residents to maintain access, reset fences, and rebuild driveways. Temporary fencing protected students from the construction zone as a middle and high school was in close proximity.

An Alternative Technical Concept shifted an alignment of a road to avoid a costly detour road. This involved a permanent shift of the centerline of Houcksville Road, approx. 40’ from its current location at the location where it was proposed to bridge over the bypass. Conceptual plans proposed constructing a detour road approx. 150’ east of the proposed bridge to maintain traffic on the detour road while the bridge and approach road was constructed on the existing Houcksville Road alignment. The permanent relocation of Houcksville Road as proposed by our team required 1,425’ of permanent road thereby saving 390’ of road construction. Permanently shifting Houcksville Road expedited construction and benefitted local homeowners by shifting the final road location away from their homes. It also lowered the profile over the bypass, improved the adjacent grading and driveway profiles over what was proposed in the conceptual plans, eliminated the RFP’s proposed standard 30 mph detour road on a currently straight section of Houcksville Road and reduced relocation work required for Baltimore Gas & Electric (BGE) lines.

PROPOSED TEAM MEMBERS
- Whitney, Bailey, Cox, & Magnani
- Maryland Department of Transportation/State Highway Administration
- Phone: 410-545-8824
- Lisa Choplin
- Phone: 410-545-8824
- LChoplin@sha.state.md.us

PROJECT FEATURES/NARRATIVE
- 4.5 miles of two-lane asphalt road constructed to return Hampstead to its residents by allowing heavy commuter and commercial traffic to bypass the town center and mitigate gripping rush-hour congestion. There were numerous stream/wetland crossings and four bridges spanning them, three new roundabouts with lighting, new storm drainage, extensive stormwater management facilities, water/sewer relocations, eight cross culverts, approx. 900,000 CY cut-to-fill, including 336,000 CY of rock excavation, signing, pavement markings, traffic signals, ROW acquisition, two major traffic tie ins, and BGE, Verizon and Adelphia utility relocations. Milled/resurfaced tie-in connections at the north and south termini points. Highway lighting was installed at the roundabouts and maintained traffic at the north and south points and at each roadway crossing. One noise wall is adjacent to the Singer Heights community and the other is adjacent to the Westwood Community totaling 3,500 LF.

Approximately 1,040’ of temporary road was constructed as a detour to maintain traffic while bridge and approach roadway was constructed on an existing alignment. Worked with adjacent residents to maintain access, reset fences, and rebuild driveways. Temporary fencing protected students from the construction zone as a middle and high school was in close proximity.

An Alternative Technical Concept shifted an alignment of a road to avoid a costly detour road. This involved a permanent shift of the centerline of Houcksville Road, approx. 40’ from its current location at the location where it was proposed to bridge over the bypass. Conceptual plans proposed constructing a detour road approx. 150’ east of the proposed bridge to maintain traffic on the detour road while the bridge and approach road was constructed on the existing Houcksville Road alignment. The permanent relocation of Houcksville Road as proposed by our team required 1,425’ of permanent road thereby saving 390’ of road construction. Permanently shifting Houcksville Road expedited construction and benefitted local homeowners by shifting the final road location away from their homes. It also lowered the profile over the bypass, improved the adjacent grading and driveway profiles over what was proposed in the conceptual plans, eliminated the RFP’s proposed standard 30 mph detour road on a currently straight section of Houcksville Road and reduced relocation work required for Baltimore Gas & Electric (BGE) lines.

Planning and Design-Engineer: Whitney, Bailey, Cox, & Magnani

ADVANCED TECHNOLOGIES
- Corman added resources to mitigate a schedule delay. Lesson learned was to employ more stringent design QC orders directed change

AWARDS
- 2010 DBIA National and Mid-Atlantic Region Design-Build Excellence Awards for a Transportation Project Under $50M
- 2010 ARTBA “Globe” Environmental Award –Local & Secondary Roads -$10-$100M
- 2010 MdQI Awards of Excellence for Environmental, Green Transportation & Consultant Highway Design

LESONS LEARNED
- Owner preferences delayed design approvals. Our team presented concerns to MSHA which resulted in instructing reviewers that RFP requirements were the sole guidelines for approvals. There was a delay and the owner granted additional time. MSHA carried this forward to other DB projects. Lesson Learned is the importance of educating reviewers of the requirements of the project.
- A plan was designed by a sub-consultant and work constructed, when a sight distance problem was detected. After further investigation, the design was at fault. A re-design was required at no expense to the state and the road reconstructed. Corman added resources to mitigate a schedule delay. Lesson learned was to employ more stringent design QC for subcontractor work.
Attachment 3.4.1(b)

Lead Designer

Work History Forms
**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM** *(LIMIT 1 PAGE PER PROJECT)*

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
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<tbody>
<tr>
<td>Route 150 Widening – Chippensham Parkway</td>
<td>Mega Construction <em>(Corman Construction was the bridge subcontractor)</em></td>
<td>Virginia Dept. of Transportation Phone: (804) 786- 2507 Project Manager: Mohammad Mirshahi Phone: (804) 786- 2507 Email: <a href="mailto:M.Mirshahi@vdot.virginia.gov">M.Mirshahi@vdot.virginia.gov</a></td>
<td>1997</td>
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<td>$435 (fee)</td>
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</table>

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

**PROJECT FEATURES/NARRATIVE CONT.**

**Roadway Design:** RK&K reviewed the preliminary alignment and typical sections provided by VDOT and developed revised horizontal and vertical alignments and typical sections that allowed the proposed shoulder width to be upgraded to the current standards and still minimize right-of-way impacts along the project corridor. This required designing the roadway and associated features to conform to the existing variable width right-of-way whenever practical. As a result, additional right-of-way acquisitions was limited to only 14 parcels out of more than 100 adjoining properties and averaged less than 0.3 acres per parcel.

**Hydraulic Design:** The design of storm drainage facilities included both open and closed systems as well as stormwater management. Drainage facilities included a myriad of benches, fill and roadside ditches combined with retaining walls and noise barriers. Storm drain systems included replacing deteriorated corrugated metal pipe culverts with bore & jack operations to maintain traffic and offset system alignments in the median to accommodate super-elevated sections with the concrete median barrier. Stormwater management facilities included both wet and dry detention basins adjacent to the roadway but limited by the existing right-of-way. Some facilities included a “staircase approach” to stormwater management, where small basins are placed in series along the project to provide longer overall detention times at the outfall point. The drainage and stormwater management designs were also coordinated with Chesterfield County authorities to meet ultimate 20-year development runoffs and include major private stormwater management facilities.

**Bifurcated Median Barrier:** In order to provide a smooth grade on top of the median barrier and to also insure proper drainage along the median barrier RK&K developed independent profiles for the northbound and southbound edges of pavement and for the top of barrier. This design helped to eliminate the appearance of bumps and ridges in the driver’s sight line along the median barrier. The median shoulder cross slope was designed to vary. This allowed for longer sections of the same type barrier to be used, thereby streamlining construction and reducing cost.

**SCOPE AND COMPLEXITY SIMILARITIES**

- Formal partnering led to Design-Build-Like construction revisions to expedite construction and simplify MOT.
- Highway Widening to median and outside.
- Led by our Proposed Design Manager.
- Shows experience of Lead Designer and Contractor working together.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

- Condition of the roadway today.
- Designer and Contractor wanting to work together on another project.

**LESSONS LEARNED**

1. Communication is Key: Clear and open lines of communication during design and construction are critical for a successful project.
2. Survey is Critical: Accurate survey along existing edge of pavement will result in a much better finished product.
3. Verify Constructability: Verify that proposed Right of Way and easements allow sufficient room for construction activities.
4. Include Entire Team in Design Process: Regular plan reviews with all members of the project team are essential and should include subconsultants and major stakeholders.
a. Project Name & Location
R-4463B NC 43 Connector (Design-Build)
Craven County, NC

b. Name of the prime/general contractor responsible for overall construction of the project.

R&K

Raleigh Office, with assistance from the R&K Richmond Office, led the Design-Build Team's efforts as Lead Designer for this 2.4-mile new location facility. Receiving an extremely high technical score of 96% for the design submittal, this was the first NCDOT DB project where the winner was determined by the technical score.

PROJECT FEATURES/NARRATIVE CONTENT
The Team used 1,750 feet of 2’-6” concrete curb and gutter along each side of NC 55 from the NC 43 Connector intersection to Kensington Park Drive rather than shoulder and open ditch sections as initially proposed in the preliminary plans. The curb and gutter improved the appearance of the roadway, provided better access control at driveways, reduced right-of-way and utility relocation costs, and will reduce future maintenance costs.

Hydraulic Design: RK&K’s Water Resources Group provided and upgraded drainage system along NC 55 including a proposed system that would follow NCDOT guidelines and remain within the project limits. However, it was determined that drainage improvements outside the initial project limits would be necessary in order to meet minimum slope requirements, pipe capacity requirements, hydraulic grade line limits, and not redirect overfall discharges. RK&K removed the existing pipes along NC 55, added new 24” and 30” RC pipes, increased the grade to the minimum 0.3%, and repaired pavement. This additional work improved the drainage capacity of the system, increased the life of the system, and will reduce maintenance costs.

Structure/Bridge Design: RK&K’s Structural Engineers designed dual bridges over US 70 and the Norfolk Southern / North Carolina Railroad. The two-span dual bridges over US 70 are approximately 202 feet long. The single-span dual bridges over the Norfolk Southern Railroad are each 171 feet long, with a 45 degree skew, and have a 36’ width. MSE walls were also used for the dual bridges over the Norfolk Southern/North Carolina railroad in order to reduce the bridge lengths, eliminate joints in the deck, lower grade and reduce embankment. This design reduced the initial construction cost.

Based on revised requirements from the railroad and to accommodate future economic development, the Client required that the bridge be designed to span five future tracks rather than three and that the vertical clearance be increased from 23’-6” to 27”. This required a major design change, additional railroad and utility coordination, additional right-of-way, and a permit modification. Even with this major scope change, the project was completed ahead of schedule.

Environmental: RK&K was responsible for minimization of environmental impacts, agency coordination, permit drawings, and preparing and submitting complete permit applications.

Utilities: RK&K was responsible for the design, permitting, and coordination of utilities. The project required over 3,250 LF of 6”, 12”, and 30” water main relocation, 2400 LF of 6”, 8”, and 10” vacuum, forced, and gravity sewer main, permitting, and coordination with private utility owners.

SCOPE AND COMPLEXITY SIMILARITIES
- Mainline Highway Facility
- Design-Build Delivery
- Roadway and Bridges
- Environmental Permitting
- Utility Coordination

VERSIFIABLE EVIDENCE OF GOOD PERFORMANCE
- RK&K received an extremely high technical score of 96% for the design submittal, this was the first NCDOT design-build project where the winner was determined by the technical score.
- Completed project 13 months ahead of schedule.

LESSONS LEARNED
1. Coordination is Key: Early coordination with commercial property owners adjacent to the project is very important because of possible future development.
2. Be Proactive with R/W: The importance of checking proposed R/W and easement needs for all temporary pavements and temporary drainage early in design development.
3. Cross Discipline Reviews are Critical: Perform interdisciplinary reviews before all design submittals.
4. Utilize Contractor and Design Meetings: Regularly scheduled meetings during design are essential and should include all subconsultants.

h. Narrative describing the Work Performed by the Firm 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.

R&K ROLE

The R&K Raleigh Office, with assistance from the RK&K Richmond Office, led the Design-Build Team’s efforts as Lead Designer for this 2.4-mile new location facility. Receiving an extremely high technical score of 96% for the design submittal, this was the first NCDOT DB project where the winner was determined by the technical score.

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The Team used 1,750 feet of 2’-6” concrete curb and gutter along each side of NC 55 from the NC 43 Connector intersection to Kensington Park Drive rather than shoulder and open ditch sections as initially proposed in the preliminary plans. The curb and gutter improved the appearance of the roadway, provided better access control at driveways, reduced right-of-way and utility relocation costs, and will reduce future maintenance costs.

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# LEAD DESIGNER - WORK HISTORY FORM

**PROJECT FEATURES/NARRATIVE**

The 6.4 miles of I-40, from west of Wade Avenue to east of Jones Franklin Road is a critical commuter roadway with traffic volumes that exceed 130,000 per day and was the source of rush hours that lasted for hours. Contracted by the North Carolina Department of Transportation to reduce congestion and improve traffic flow, the Design-Build Team widened the existing four-lane divided roadway to a six-lane divided facility. The project also included widening dual bridges over US1/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 roadway. Current traffic volumes exceed 130,000 per day, which is far above the capacity of a roadway in this area, and leading to an evening rush hour that can last for three hours eastbound.

This rolling urban roadway with a 70-mph design speed included the following roadway improvements: the design of one 12-foot wide lane in each direction of I-40 expanding the roadway from four to six lanes; a 12-foot wide paved shoulder was added in each direction, built to the same depth as the roadway, which allows for easier expansion of the roadway in the future; median guardrail was installed throughout the project and guardrail was replaced on the outside shoulders; at the eastbound I-40/Wade Avenue split, the roadway was expanded to provide three lanes for I-40 from the current two 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.

Structural Engineering: 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.

**SCOPE AND COMPLEXITY SIMILARITIES**

Design and Construction of Divided Roadway:
- Design-Build Delivery
- Complex Traffic Issues
- Public Involvement
- Bridge Widening/Replacement
- Utility Coordination

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE**

RK&K received an impressive technical score of 93% during the design-build selection process demonstrating the team had the experience and qualifications necessary to provide cost-effective and innovation solutions to this critical freeway project. The I-4744, I-40 Widening and Signing Project has won various professional accolades:
- ACEC/NC Engineering Excellence Award
- 2011 AGC Pinnacle Award for Best Highway Project in the Carolinas
- 2010 NAPA Safety Innovation Award

The project was delivered 1 year ahead of schedule.

**LESSONS LEARNED**

1. **Think out of The Box:** Investigate using alternate methods for delivering materials to the project site to reduce exposure to traffic and reduces construction time.

2. **Coordination is Key:** Close coordination with subconsultants and the Contractor are vital to a successful design-build project.

3. **Utilize Staged Submittals:** Using staged submittals of design plans (structure, traffic control, erosion control, etc.) allowed work to begin much earlier than following the typical process. This process works especially well for median widening because right of way and permits are minimal.

4. **Investigate Hauling Options:** Additional traffic studies are valuable to show additional hauling during the day may not impact the traveling project. Also, the additional hauling time helped to reduce the construction time.

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**a. Project Name & Location**

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<thead>
<tr>
<th>ID#</th>
<th>Design-Build</th>
<th>Location</th>
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<tbody>
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<td>1-4744</td>
<td>I-40 Widening &amp; Signing (Design-Build)</td>
<td>Wake County, NC</td>
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**b. Name of the prime/general contractor responsible for overall construction of the project.**

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<td>1-4744</td>
<td>I-40 Widening &amp; Signing (Design-Build)</td>
<td>S.T. Wooten, North Carolina Dept. of Transportation</td>
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**c. Contact information of the client and their Project Manager who can verify Firm’s responsibilities.**

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<th>Contact Information</th>
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<tr>
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<td>I-40 Widening &amp; Signing (Design-Build)</td>
<td>Rodger Rochelle, PE, Email: <a href="mailto:rdrochelle@dot.state.nc.us">rdrochelle@dot.state.nc.us</a></td>
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**d. Construction Contract Completion Date (Original) | Construction Contract Completion Date (Actual or Estimated) | Construction Contract Value (Original) | Construction Contract Value (Actual or Estimated) | Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands) |
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<td>June 2011</td>
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**RK&K ROLE**

The RK&K Raleigh Office, with assistance from the RK&K Richmond Office, served as the Lead Designer and in addition to providing design management and coordination for the entire project, RK&K’s staff was responsible for the following:

- Design Management
- Bridge Design
- Traffic Control and Pavement Marking
- Noise Analysis & Sound Barrier Design
- Environmental Permitting/Coordination
- ITS Conduit Routing
- Roadway Design
- Hydraulic and Erosion Control Design
- Public Involvement
- Utility Coordination/Utility Design
- Signing Design

As stated by NCDOT, “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 challenges 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.”

**Note:** Our proposed Design QA/QC Manager, Tommy Peacock, was the Project Manager.