

Submitted by:



in conjunction with



ORIGINAL

Statement of Qualifications Design-Build I-64 Widening and Route 623 Improvements Goochland and Henrico Counties, Virginia

State Project No.: 0064-964-110, P101, C501, B610-B614, B617, B616, D601-D606

Federal Project No.: NH-064-2(150)

Contract ID Number: C00070542DB55

November 15, 2012



Submitted to: **Virginia Department of Transportation**

1401 E. Broad Street

Richmond, Virginia 23219



3.2 LETTER OF SUBMITTAL



November 15, 2012

Brenda L. Williams
Commonwealth of Virginia
Virginia Department of Transportation (VDOT)
Central Office Mail Center
Loading Dock Entrance
1401 East Broad Street
Richmond, VA 23219

**RE: Statement of Qualifications
Design-Build I-64 Widening and Route 623 Interchange Improvements
Goochland County and Henrico County, VA
From: 0.99 miles west of Route 623 (WB-Route 622, EB-Route 623)
To: 0.38 miles west Route 271 (Pouncey Tract Road) in Short Pump
State Project No.: 0064-964-110, P101, C501, B610-B614, B617, B616, D601-D606
Federal Project No.: NH-064-2(150)
Contract ID No: C00070542DB55**

Dear Ms. Williams:

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 **I-64 Widening and Route 623 Interchange Improvements** project. Corman has thoroughly reviewed the Request for Qualifications (RFQ), including Addendum #1 (11/1/12).

The following is requested information and/or attachments separated by numbered tabs with sections corresponding to the order set forth in Section 3.2:

Acknowledgement of Receipt of RFQ, Revisions, and/or Addenda (Form C-78-RFQ) and SOQ Checklist - Completed and included as Attachments 2.10 and 3.1.2 in the appendix.

3.2.2 Official Representative and 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.

3.2.3 Principal Officer Information - William G. Cox, President of Corman Construction, Inc., 12001 Guilford Road, Annapolis Junction, Maryland 20701, is the principal officer of the legal entity (Offeror) with whom a design-build contract with VDOT will be written. He can be reached at: Telephone: 410-792-9400 x233, Mobile: 301-343-5401.

3.2.4 Corporate Structure - Corman will be the design-build contracting entity for the **I-64 Widening and Route 623 Interchange Improvements** 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 for this Project, meaning the prime/general contractor responsible for overall construction.

Rummel, Klepper & Kahl, LLP (RK&K) will be our Lead Designer for this Project, meaning the prime design consulting firm responsible for the overall design.

3.2.6 Affiliated/Subsidiary Companies – A list of all affiliated/subsidiary companies of Corman and RK&K is shown as 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. The standard VDOT prequalification certificate is presented as Attachment 3.2.8 in the appendix.

3.2.9 Surety Letter - A Surety Letter stating Corman is capable of obtaining a performance and payment bond based on the current estimated contract value, along with which bonds will cover the project and any warranty periods, is shown as Attachment 3.2.9 in the appendix.

3.2.10 DPOR Licenses and SCC Registrations – The necessary license and registration information is shown as Attachment 3.2.10 in the appendix, including supporting documentation.

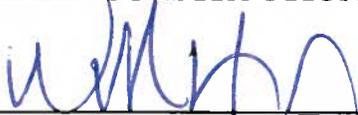
3.2.11 DBE Requirements – Corman is committed to achieving a ten percent (10%) DBE participation goal for the entire value of the contract.

This SOQ is signed in ink by an authorized representative of Corman.

Our Team (Corman and RK&K) is enthusiastic about the opportunity to participate in the design-build process for the **I-64 Widening and Route 623 Interchange Improvements** project and is confident we will complete this project on time and within budget. Collectively, Corman and RK&K bring the leadership, skills and shared core values to assist VDOT in delivering projects that set the standards for others to follow.

Sincerely,

CORMAN CONSTRUCTION, INC.



William G. Cox, 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 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 I-64 Widening and Route 623 Interchange Improvements Design-Build 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 I-64/Route 623 project, we selected Rummel, Klepper & Kahl, LLP (RK&K) as our lead design firm with the added depth of sub-consultants: ECS Mid-Atlantic, LLC (ECS), H&B Surveying and Mapping, LLC (H&B), and So Deep, Inc. Together these firms make up the Corman 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:

PROJECT	
Intercounty Connector Contracts A&B (Montgomery Co., MD)	DB
MD Route 216 US 29 to I-95 (Howard Co., MD)	DB
Frederick Douglass Bridge/South Capitol Street over Anacostia River (Washington, DC)	DB
E. Deer Park Rd. Bridge Emergency Rehab. (Gaithersburg, MD)	DB
Division 1B – Bridges (Dare and Hyde Counties, NC)	DB

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):

Design-Build Project Manager	Jo Ellen Sines, DBIA - Corman
Quality Assurance Manager	Lee Yowell, PE, DBIA - RK&K
Design Manager	Owen Peery, PE - RK&K
Construction Manager	Peter Bernat - Corman

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 at least 19 years of experience within the industry and proven design-build experience. In addition, our Design Manager and QAM both have lived in the Short Pump area, giving them firsthand knowledge of the project site, conditions and stakeholder interests.

An added strength of the Corman Team is the direct knowledge of the project site by key team members, Lee Yowell (QAM) and Randy Wirt (Geotechnical Engineer) as they both worked on the Route 295 flyover and Route 288 projects. Also, Corman has completed a bridge rehabilitation project of the Route 623/I-64 Bridge along with replacement of the Route 250 Bridge over Tuchahoe Creek.

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 the I-64 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 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 lead 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 DBPM.

DB Construction QC Manager, Danielle Litardo, will coordinate with and report to the Construction Manager. Danielle will use her seven 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. Danielle has served at this capacity on several high profile projects including the rehabilitation of the Lincoln Memorial Reflecting Pool and Catocin Aqueduct. Danielle will coordinate with the 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. Danielle has the authority to stop specific work activities that do not meet QC requirements.

DB Design QA/QC Manager, Tommy Peacock, PE, will report to the Design Manager. 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 (including 30 with NCDOT), is a Director of RK&K and will serve as a resource to the team in the manner of design-build delivery. As the project manager for the R4463B NC 43 Connector (Design-Build) project and the I-4744: I-40 Widening & Signing (Design-Build) project, listed in our experience section, he brings a tremendous amount of experience to our Team. He is actively involved with design, planning, and environmental activities. For design-build projects, he is responsible for the allocation of project personnel, adherence to scheduling and budgetary requirements, and maintains quality control / quality assurance. Over the 16 years he has been with RK&K, Tommy provides the hands-on efforts needed to ensure adequate resources are assigned, accelerated schedules are maintained, and the team is responsive to clients.

DB Safety Manager, John Lanigan, CHST, OHST, reports to the Construction Manager. 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 40 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.

DB Roadway Engineer, Ryan Masters, PE, brings his more than 13 years of experience in the transportation field, focusing on roadway and intersection design for this contract. Ryan has worked on numerous interstate road widening projects. He will report to Owen Peery, PE, the Design Manager, and serve as the second point of contact for design. Ryan will lead the roadway design work.

As Project Manager serving key roles on important VDOT projects including the Interstate 81 and Exit 243 Improvements in Rockingham County, VA, Ryan has developed preliminary designs of the mainline and six interchange alternatives in accordance with VDOT standards. He was also involved with several PPTA projects including I-495 HOT Lanes Plan Review, Northern Virginia (PPTA) and the I-264/MLK Freeway IJR, City of Portsmouth, VA (PPTA). Additionally, Ryan is currently the Lead Roadway Engineer the Route 250 Bypass Interchange at McIntire Road in the City of Charlottesville. This project is one of the largest undertaken to date as part of the VDOT First Cities Initiative.

DB Structural/Bridge Engineer, Gary Johnson, PE, DBIA, will report directly to the DM and will be in charge of structural engineering for the project, including but not limited to bridge, foundation, and retaining and sound wall designs. Gary, with 19 years experience, will lead production efforts for all structural engineering plans, estimates, and specifications for the project including the phased demolition of the existing bridge. He will also review structural shop drawings and assist the DBPM, CM and DM during construction, as needed, for structural engineering project questions that arise. Gary will collaborate with the entire design and construction team leadership for constructability characteristics, inter-operability of bridge/roadway/utilities/drainage aspects, and project cost control. Gary currently serves on the ECLC of the VTCA and ACEC's VA Transportation Committee.

DB Traffic Design Engineer (TMP), Rich Clifton, PE, is an experienced transportation engineer and planner. Rich is familiar with all aspects of transportation planning and brings 26 years of experience, predominately in the Commonwealth of Virginia, to this contract. He specializes in the area of corridor development, traffic calming, parking needs and mobility of urban arterial and interstate roadway systems for capacity and traffic management. Rich often joins projects as an expert to investigate traffic concerns and has been the lead Technical Design Engineer on a wide variety of transportation-related design projects. Rich will report to Owen Peery, DM, and collaborate with the Construction MOT Manager, Mike Hurry.

Before joining RK&K, Rich served as Hampton Roads District Project Management Office Manager for VDOT. In this role, he managed the District office where he supervised project managers working on a variety of projects ranging from a design-build mitigation site to billion dollar PPTA projects. His recent project experience relevant to this contract includes his work on the I-64/I-264 Interchange in the Virginia Beach, VA.

DB Geotechnical Engineer, Randy Wirt, PE, will be in charge of all aspects of geotechnical engineering and evaluation for the project, including but not limited to bridge, retaining wall and soundwall foundations, evaluation of potentially unsuitable soils, slope and embankment stability and settlement, and geotechnical construction considerations. He will also assist the DM and 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, MSHA, and DelDOT.

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. He also worked on the Route 295 Flyover and Route 88 projects, which are adjacent to this project. Randy will report to Owen Peery, the Design Manager.

DB Drainage/Hydraulics Design Engineer, Mike Hogan, PE, reports to Owen Peery, Design Manager, and has more than 13 years of advanced technical roadway and drainage training experience, as well as rural and urban design project experience. His intense hands-on training and knowledge provides him with the expertise to handle a wide variety of projects. His project experience includes various types of municipal and roadway design projects on new location, reconstruction and widening, as well as major drainage improvements. Mike is well versed and practiced in Virginia Stormwater Management Regulations, and as part of his role on ASCE's local Stormwater Management committee, has monitored development of the Chesapeake Bay TMDL and its impacts on the City of Richmond's operations. He is a DCR Erosion and Sediment Certified Plan Reviewer, Certificate #503.

DB Utility Design Engineer, Dave Plum, PE, has over 32 years of experience. His engineering design experience includes water distribution and storage, wastewater collection and pumping stations, stormwater management and drainage, roadways, and general civil/site development. Dave's experience also includes water line replacement, water distribution system hydraulic modeling, water main sizing, railroad crossing, sub-aqueous crossing, trenchless technology, small diameter water main construction, construction phase engineering services, environmental assessment/permitting, and design-build project delivery. Dave will

report to Owen Peery, Design Manager, and will interact closely with the Construction Utility Manager, Anmarie Collins.

DB Erosion and Sediment Control Engineer, Sheila Reeves, PE, is experienced in erosion and sediment control design and other water resources engineering services for transportation projects. She will report to Owen Peery, the Design Manager. Sheila is a Water Resources Engineer in RK&K's Richmond, Virginia office and a certified DCR Plan Reviewer. She has more than 11 years engineering experience with a focus on NPDES permit compliance consulting, stormwater management plan development, water resources engineering, and GIS integrated solutions. Her experience also includes general civil/land development engineering and environmental permit preparation. 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. She has been instrumental in guiding SMPs for permit approval through many jurisdictions throughout North Carolina and the Mid-Atlantic.

Sheila was the Project Engineer on the I-4744 Design-Build, I-40 from East of SR 1652 (Harrison Ave.) to East of SR 1319 (Jones Franklin Rd.) in Wake County, NC. She was responsible for the design of two stormwater Best Management Practices (BMPs) within the I-40\US-1 (Crossroads) Interchange.

DB Wetland Delineation & Environmental Permitting Coordinator, Tom Heil, PE, has 26 years of project engineering experience and 10 years of extensive project management experience leading and supporting the preparation of various NEPA documents (CE, EA, SEIS, Re-evaluations), and wetlands and water quality permit efforts (Section 404/401 Individual and State wetland disturbance and alterations, tidal wetland licenses, NPDES, and others) for both large and small projects. Tom has been involved in numerous VDOT, DelDOT, and MSHA projects providing water resource engineering and environmental services, and has managed water resource and marine aspects of several major infrastructure projects, including the Woodrow Wilson Bridge. Tom will report to Owen Peery, the Design Manager.

DB 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, the Design Manager.

DB ITS/Lighting Engineer, Barry L. Brandt, PE, is a Director-in-Charge of RK&K's Traffic Control Device Design Team. This team 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 has been the project manager for 14 traffic engineering and ITS contracts worth more than \$31 million in design fees.

DB Signing, Striping & Traffic Signals Engineer, Stuart M. Sandberg, is a Transportation Engineer in RK&K's Richmond office with seven years of experience. Stuart, who will report to the DM, was involved on the I-4744: I-40 Widening & Signing Design-Build project where he was an engineer for roadway design, quantity takeoffs, traffic control design, signing design, traffic analysis, and special noise wall studies.

Stuart serves as the co-chair of Transportation Research Board's Access Management Research Subcommittee. He has held this post for two years and has assisted in overseeing the development of multiple Access Management related research reports. Furthermore, as author of numerous traffic related publications, he is responsible for all facets of transportation engineering from planning and analysis to design for projects including roadways, highways, transit, bicycles, and pedestrians. His main focus is in transportation analysis and performs all necessary analysis using Synchro, Highway Capacity Software, VISSIM and Sidra. Stuart's clients include multiple municipalities of differing sizes, State DOTs, and Federal Military Installations.

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, Owen Peery.

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, thereby guaranteeing a superior project on time and on budget. 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

DB 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, environmental permitting/protection and geotechnical. 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.

DB Quality Assurance Manager (QAM), Lee Yowell, PE, DBIA, 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, Lee 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). Lee will manage all aspects of the QA program including the QA inspector and independent QA testing firm and testing technicians. 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, Lee will submit monthly written reports to the VDOT project manager and Corman's Executive Committee. Lee is a current member of the design-build committee for VTCA and former member of the ECLC.

DB 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, including but not limited to roadway, structural, hydraulic, traffic, environmental, noise analysis, ITS, and geotechnical. 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.

DB Construction Manager (CM), Peter Bernat will report directly to the DBPM. Peter 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, Peter 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. Peter will hold responsibility for managing the construction quality control activities. The entire QC team will report to Peter.

Keys to Success

Proper communication and coordination between the many parties involved in this project (i.e. Corman DB Team, VDOT, review agencies, all stakeholders) 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, Lee Yowell, 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. Lee 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.

The Corman DB Team identified three critical risks for the project in the areas of geotechnical, environmental and maintenance of traffic. Team members have been chosen because of their firsthand knowledge of the site, as well as their ability to handle the risks and minimize VDOT involvement. 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.

I-64/Route 623 Organizational Chart



Stakeholders & 3rd Parties

Utilities / Schools / Henrico Co. / Twin Hickory Homeowners Assoc. / Greater Richmond Chamber of Commerce / Emergency Responders / Commuter Organizations / Community Representatives / Local Businesses / Henrico Business Council

Public Relations Manager

Lou Robbins, PE, DBIA (CCI)

Design-Build Project Manager

*Jo Ellen Sines, DBIA (CCI)

Executive Committee

Chase Cox - Vice President (CCI)
Kevin Kern - Vice President (CCI)
Tom Mohler - Partner (RKK)

Design

Design Manager
*Owen Peery, PE (RKK)

Roadway Engineer Ryan Masters, PE (RKK)	Wetland Delineation & Environmental Permitting Coordinator Tom Heil, PE (RKK)
Structural/Bridge Engineer Gary Johnson, PE, DBIA (RKK)	Signing, Striping & Traffic Signals Engineer Stuart M. Sandberg (RKK)
Drainage/Hydraulics Engineer Mike Hogan, PE (RKK)	Noise Analysis Designer Kevin Hughes (RKK)
Geotechnical Engineer Randy Wirt, PE (ECS)	Surveying/Plats Les Byrnside, L.S. (H&B)
Landscape Architect David Mitchell, RLA, LEED AP (RKK)	Subsurface Utility Locating Mark Warden (SD)
ITS/Lighting Engineer Barry L. Brandt, PE (RKK)	E&S Control Engineer Sheila Reeves, PE (RKK)
	Utility Engineer Dave Plum, PE (RKK)
	Lead Traffic Engineer (TMP) Rich Clifton, PE (RKK)

Quality Control (QC)

Design QA/QC Manager
Tommy Peacock, PE (RKK)

Construction QC Manager
Danielle Litardo (CCI)

QC Inspection
EBA Engineering, Inc. or
CTI Consultants, Inc. or
NXL Construction Services, Inc.

QC Lab
CTI Consultants, Inc. or
DMY Engineering
Consultants, LLC (DBE)

Design Construction Coordinator

Lou Robbins, PE, DBIA

Construction Management

Construction Manager
*Peter Bernat (CCI)

Senior Project Engineer
Jake Leffler, EIT, LEED AP (CCI)

Project Controls / DBE Compliance
Dusan Golac (CCI)

Safety Manager
John Lannigan, CHST, OHST (CCI)

Grading Superintendent
CCI

Bridge Superintendent
CCI

Environmental Manager
Anmarie Colins (CCI)

Utility Manager
Anmarie Colins (CCI)

MOT Manager
Mike Hurry (CCI)

Quality Assurance (QA)

QA Manager
*Lee Yowell, PE, DBIA (RKK)

QA Inspection Staff
RK&K Staff

QA Lab
ECS Mid-Atlantic, LLC

LEGEND
* = Key Personnel
CCI = Corman Construction, Inc.
RKK = Rummel, Klepper & Kahl, LLC
ECS = ECS Mid-Atlantic, LLC
H&B = H&B Surveying and Mapping, LLC (WBE)
SD = So Deep, Inc. (DBE)



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, close to this project, 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, 2010 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: MD Route 216 US 29 to I-95, 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: I-40 Widening & Signing, and 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 ECS, H&B and So-Deep, and look forward to delivering another successful project. In addition, two of these firms bring W/DBE participation to our team.

 **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.



H&B Surveying and Mapping, LLC (H&B), a certified, woman-owned business based in Richmond, VA, is a full service land surveying firm led by a team of professionals with over 100 years of combined experience. Located in Richmond, VA, H&B has the ability to run three fully equipped conventional survey crews and the office staff to support these crews. H&B’s management and personnel have extensive experience in all phases of land surveying and aerial photogrammetry that involves surveying streets and highways throughout the Commonwealth of Virginia that are part of the Virginia Department of Transportation (VDOT) system.



So-Deep, Inc. is recognized as the original subsurface utility engineering company. Since their founding 31 years ago, So-Deep (DBE) has completed over fourteen thousand (14,000) subsurface utility designating and locating projects. They are committed to providing the most comprehensive subsurface utility engineering services available and to significantly decreasing

DOT construction costs by reducing utility conflicts, utility relocation costs, construction delay claims, and redesign costs.

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.

Inter-Team Relationships

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

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

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 I-64 Widening and Route 623 Interchange Improvements 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.



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. The 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 – Existing Subsurface Conditions

Risk Identification: This 4.52-mile long project passes through three distinct, NE-SW trending geologic formations. From west to east, these include Metavolcanic rocks of the early Paleozoic Era, Sedimentary rocks of the Richmond Triassic Basin, and Petersburg Granite of the middle Paleozoic Era. Tuckahoe Creek flows in a broad, flat floodplain through the middle of the Triassic Basin and is located along the eastern third of the project alignment. For this project, our Team sees these existing subsurface conditions as comprising risk.

Why this Risk is Critical: The unknown of subsurface conditions places financial and schedule risk on the project. This risk is divided into three sub-groups:

Sub-group 1 - Potentially Unsuitable Soils: Based on sections of the alignment crossing broad floodplains, particularly in the area of Tuckahoe Creek, it is possible that the subgrade soils are unsuitable for roadway embankment and pavement subgrades. Unsuitable soils per VDOT standards are typically identified by exhibiting natural moisture content greater than or equal to 20% of the respective soils optimum moisture content. Also, subgrade soils classifying as highly-plastic clays and silts (CH and 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/remove and replace these soils with suitable fill. On both the Route 288 Interchange with I-64 and the I-295 Flyover Projects, extensive soil improvement was performed on the I-64 portions. We know this because *Lee Yowell (our proposed QAM) served as the QAM on Route 288 and Responsible Charge Engineer on the I-295 Flyover Project.* The soil improvement was either undercut and backfilled, or manipulated with cement. Depending upon the depth of undercut, bolting down barriers may also be required or 6:1 wedges installed at the end of each work day during excavation activities.

Sub-group 1 – Mitigation: To mitigate the potential for unsuitable soils negatively affecting the project schedule, the Corman DB Team will focus early phase geotechnical explorations in the floodplain area around Tuckahoe Creek, other low-lying areas, and portions of the alignment that cross the Triassic 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, our Team will review available Coal Mining and existing Geotechnical Data to further define the limits of the project alignment that crosses the Triassic Basin’s eastern margin.

Sub-group 2 - Excavatability of Existing Soils: The proposed alignment crosses two geologic formations including Metavolcanic rocks of the early Paleozoic Era and Petersburg Granite of the middle Paleozoic Era. The Petersburg Granite is deeply weathered with a residuum which varies from coarse sand to clay. Excavation of subgrade soils along the alignment in these two formations will likely encounter harder phases of soil and decomposed rock that contain the relict features of the underlying rock. These soils can typically be excavated with conventional earthwork equipment without additional blasting measures. However, based on the close proximity of the Luck Stone Rockville Quarry and our experience in the area, a project risk exists if harder phases of decomposed rock are encountered. 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, our 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 - Existing I-64 Sub-base: The existing sub-base for the left (inside) shoulders is supported by cement stabilized soils. This is known because our Quality Assurance Manager (Lee Yowell) worked directly on this stretch of I-64 when he was the QAM on the Route 288 project, which terminates in the center of the proposed I-64 widening. This issue creates a risk as normal excavation procedures can dislodge large boulder-like sections of earth which can damage/undermine the existing I-64 pavement and barrier placement, as well as impact maintenance of traffic.

Sub-group 3 – Mitigation: To mitigate this risk, the Corman DB Team will remove the partial-depth shoulders with saw-cutting or similar methods prior to excavation. The end result is minimizing or eliminating damage to the existing pavement sections and creating a vertical edge to extend the proposed widening.

Role of VDOT and other Agencies: None

Risk No. 2 – Environmental NEPA Compliance, and Water Quality/Erosion and Sediment Control Permitting Compliance

Risk Identification: Ensuring that the project provides full Environmental NEPA Compliance, and Water Quality/E&S Control Permitting compliance.

Why this Risk is Critical: This discipline area represents a significant potential risk to the project as the design and construction personnel must be aware of and respect recent stormwater regulation policy changes, the environmental commitments made through the NEPA process, and environmental conditions placed on the approved permits. The Corman DB Team is fully aware how this potential risk can affect project schedule through slippage in permit acquisition; lead to violations and construction activity shutdowns if proper construction phasing and E&S control measures are not maintained properly; and result in punitive damages and loss of our reputation as responsible designers and builders of infrastructure projects. Adherence to NEPA commitments and environmental permit conditions compliance is paramount to the success of this and all VDOT projects.

Risk Impact to the Project: Should the environmental risks not be properly identified, conveyed, and managed, the project can and most probably will be exposed to schedule and budget issues that will affect project delivery. Potential areas of risk may include, but are not limited to, not obtaining environmental permits to facilitate construction; not adhering to VDOT's NEPA commitments specifically related to continued coordination on Section 4(f) mitigation strategies, violations and shutdowns during construction due to non-authorized work within sensitive environmental areas (i.e. wetlands and streams); and unauthorized discharge of sediment laden water during construction due to improper maintenance of E&S control devices.

Risk Mitigation Strategies and Team Experience: First and foremost, our approach to mitigating potential environmental risks on this project has been focused on assembling a team that has a proven track record of successfully navigating environmental compliance and permitting risks on similar VDOT projects, including design-build.

Stormwater Management: Recent updates to VDOT stormwater criteria can be challenging to implement on limited access highway projects where ROW impacts are costly. Our environmental design team has been

able to successfully apply the most current stormwater criteria to similar VDOT projects while minimizing risk by implementing unique stormwater management ideas that minimize ROW impacts. A recent example involves the stormwater management approach for the I-81 Exit 14 Interchange Improvement project, where our design team has been coordinating with VDOT and FHWA to utilize open space within the existing median for a proposed stormwater facility.

Permitting: Since 2008, RK&K has successfully navigated environmental NEPA compliance and water quality permitting risks on the \$74M I-81 Truck Climbing Lane project in Rockbridge County. The experience, working relationships, and successful risk mitigation strategies employed on I-81 TCL will be reviewed and enhanced to address all potential environmental risks on this project, including committing the same Environmental Compliance Manager (ECM), Tom Heil, PE, from I-81 TCL to this project.

The most successful strategy learned on the I-81 project, which will be carried through on this project, was the critical role and level of involvement of the ECM from the initial planning, through the design phase, and the transition into and through construction. The ECM will be a continuous and integral member of the Team, participating in all team progress meetings, initially helping the designers understand and comply with all NEPA commitments, and working side-by-side formulating strategies to avoid or minimize potential impacts to environmental resources. The ECM will also be advising the CM and QAM on environmental concerns and resolution of potential impacts before they become issues.

Secondly, and concurrent with project initiation, the environmental compliance team will develop an Environmental Compliance Database (ECD) that identifies and captures all NEPA commitments and environmental conditions that result through the permitting process that will affect design and construction. An example of database entries may include coordination with VDHR on avoidance, minimization, and mitigation for nearby properties; early identification of resources to support any wetland and stream impacts; and coordination of planned permit strategy which will satisfy DEO requirements and meet the Pre-Construction Notification for a USACE Nationwide 23 (Approved CE). It will also include identification and documentation of environmental resources during the scope validation phase to ensure that environmental information is available to the design team during concept development phase. As was done on I-81, this effort will include completion of field investigations, development of wetland delineation reports, and working with the agencies to obtain a jurisdictional determination of wetlands and streams within the corridor, included with the ECD. The ECD will not be a static document, but one that is distributed to all DM, CM, and QAM teams to ensure they understand what is expected through their activities.

Finally, our Team will ensure all design plan submittals and construction related changes are reviewed by the ECM for compliance to the ECD. The ECM will use the ECD as a tool during the review of the design plans at each critical milestone of the design development process, and during monthly/periodic construction meetings to ensure environmental commitments and permit conditions are adhered to. Based on past experience, we will use an independent DCR Plan Reviewer, Sheila Reeves, to review all E&S control plans through the design process. This added layer of review will ensure that the project is in compliance with DCR requirements and adheres to the VDOT general permit for erosion control and MS-19 compliance. The level of effort for these reviews is not significant, however, they create a check and balance to ensure that all environmental risks are managed through the design and construction process.

Role of VDOT and other Agencies: The Corman DB Team fully expects to handle and manage the environmental and permitting process. The expected role of VDOT and other agencies is extremely minimal beyond the regulatory role of the DEQ, DCR and USACE. Our team states this in confidence as we have extensive experience in this arena.

Risk No. 3 – Maintenance of Traffic

Risk Identification: The Rockville interchange is already experiencing significant traffic congestion and queuing in the peak periods. In the normal afternoon, traffic backs up at the interchange intersections and creates significant delays, not only on Route 623, but also on the interchange ramps. It will be important that the project is constructed in a manner that acknowledges this condition and improves the condition in the early phases of construction. This interchange provides access to the rapidly growing area of Goochland County and is the primary access point to Centerville and the Fire and Rescue Squad. Equally important, and impacting more motorists than Route 623, is the work on I-64, which passes through the Route 288 Interchange, a key

regional link for thousands of travelers each day. While most of the construction activities will be adjacent to and outside of the existing roadway, the project falls within an area of I-64 where there are a number of decision points for the motorists on I-64 when traveling through the project. Failure to clearly address and provide a well-defined traffic control plan will result in driver indecision, reduced speeds and capacity on the mainline, congestion, delays and potential for an increase in accidents.

Why this Risk is Critical: Confusing and poorly executed traffic control will lead to congestion and delays through the project area, which impacts driver safety and the construction of the project. The Route 288 and Route 623 interchanges provide access for thousands of vehicles each day to a large portion of the Richmond metro area and eastern Goochland County. Additionally, these two links are critical to public safety and the area economy. Local fire and rescue teams respond out of the station in Centerville and use Route 623 and I-64. Also, immediately adjacent to the Route 623 interchange, there are a number of suppliers who truck time-critical supplies to construction sites and other businesses. It will be extremely important that access through the construction limits, as well as access to and from Routes 288 and 623, are not impacted.

Risk Impact to the Project: Due to the location and large numbers of motorists traveling through the project limits each day, negative impacts to traffic will immediately get the attention of local leaders and VDOT, and create a situation that would have our Team responding to public concerns, delaying construction. Additionally, the impaired ability of fire and rescue would have a potential impact on life safety and immediately stop construction until resolved, thereby costing time and money due to delays.

Risk Mitigation Strategies: Mitigation of this risk will be accomplished through careful planning and a well-developed and executed Transportation Management Plan (TMP). The Corman DB Team will work with project stakeholders to develop a TMP that provides for safe and efficient access through the project for the duration of construction. This will be accomplished, in part, by the development of a Communications Plan to keep the stakeholders informed about impacts before and during construction, as well as options for avoiding construction-related delays and the need for community meetings. The goal is to maintain a safe working environment with minimal disruption to the public. A Work Zone Traffic Impact Analysis (WZTIA) will be used to evaluate how traffic is impacted during construction and determine if changes to the Temporary Traffic Control Plan (TTCP) can minimize impacts.

Also, mitigation of this risk will be accomplished by not only paying attention to the large items like phasing and signing, but also the small items that have a tendency to reduce the comfort level of the average driver and cause delays/safety issues. First, we will address the large issues which include signing, striping and construction phasing. As stated above, this project encompasses two interchanges that are in close proximity to each other and their acceleration/deceleration lanes are tied to each other creating continuous weaving lanes and numerous driver decision points. Additionally in our design, signing and striping will be clear and vary little from the non-construction signing that is currently present. This will provide a level of confidence for the numerous drivers that use these roadways daily and reduce the potential of surprises, delays and other events. Work crews and the construction site will be positively separated from the travel lanes by barriers with adequate offsets to traffic, enabling motorists to maintain speed and confidently travel through the area. Occasional work within the travel way will be carefully signed, performed in low traffic conditions, and lit with police presence, as necessary.

In addition, our Team will sweat the small items that also impact traffic and safety. For example, work taking place adjacent to the interchange intersections at Route 623 will be carefully planned and sequenced. Even though work may not take place in the middle of the intersection, work activities, barriers and construction vehicles and personnel, even behind positive separation like barriers, cause driver distractions, sight distance issues, and other situations that can negatively impact traffic safety. Our Team will check sight lines of the existing bridge and any planned positioning of barriers and other devices to ensure sight distance is maintained at these intersections. Construction activities could have an impact on the traffic storage conditions at the signalized ramp intersection. Traffic conditions in the field will be monitored to ensure that the actual conditions are as predicted, and after coordinating with VDOT, our Team may propose to adjust traffic controls where we see a potential issue. These adjustments could include simple things like altering the timing of the signal on Route 623 to better accommodate the actual field conditions, or providing additional signing if we detect that is necessary.

Role of VDOT and other Agencies: None

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.



APPENDICES



ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00070542DB55
PROJECT NO.: 0064-964-110, P101, C501, RW201

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 09/25/2012
(Date)
2. Cover letter of Addendum #1 - 11/01/2012
(Date)
3. Cover letter of _____
(Date)



SIGNATURE

Nov. 9, 2012
DATE

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendices
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendices
Letter of Submittal (on Offeror's letterhead)				1-2
Authorized Representative's signature	NA	Section 3.2.1	yes	2
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1-2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendices
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendices
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Appendices
Evidence of obtaining bonding	NA	Section 3.2.9	no	Appendices

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.10	no	Appendices
SCC Registration	3.2.10	Section 3.2.10.1	no	Appendices
DPOR Registration (Offices)	3.2.10	Section 3.2.10.2	no	Appendices
DPOR Registration (Key Personnel)	3.2.10	Section 3.2.10.3	no	Appendices
DPOR Registration (Non-APELSCIDLA)	3.2.10	Section 3.2.10.4	no	Appendices
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	2
Offeror's Team Structure				3-9
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	3-8
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendices
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendices
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendices
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendices
Organizational chart	NA	Section 3.3.2	yes	9
Organizational chart narrative	NA	Section 3.3.2	yes	7-8

ATTACHMENT 3.1.2

Addendum No. 1

Project: 0064-964-110, P101, C501, RW201

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Experience of Offeror's Team				10-11
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendices
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendices
Project Risk				12-15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	12-15

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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

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

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

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

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

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

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


Signature _____ Date Nov. 9, 2012 Title President
Corman Construction, Inc.
Name of Firm _____

ATTACHMENT NO. 3.2.7(b)

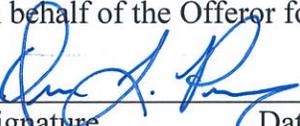
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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 11/8/12 Title DIRECTOR

RK&K, LLP
Name of Firm _____

ATTACHMENT NO. 3.2.7(b)

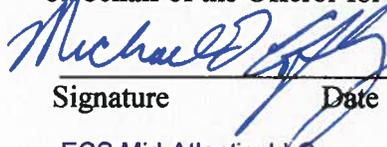
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

- 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.

	October 18, 2012	Vice President
Signature	Date	Title
<hr/>		
ECS Mid-Atlantic, LLC		
<hr/>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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.

M. Mulholland 9-28-13 President
Signature Date Title

H&B Surveying and Mapping, LLC
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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.

	10/12/12	Vice President
Signature	Date	Title

So-Deep, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

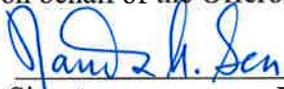
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

- 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.

	November 9, 2012	President
Signature	Date	Title

EBA Engineering, Inc.
Name of Firm

ATTACHMENT NO. 3.2.7(b)

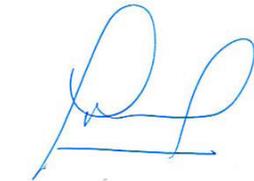
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

- 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

November 9, 2012

Date

President

Title

NXL Construction Services, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

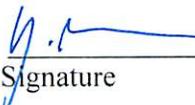
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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

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

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

	<u>November 12, 2012</u>	<u>President and CEO</u>
Signature	Date	Title
<u>DMY Engineering Consultants, LLC</u>		
Name of Firm		

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0064-964-110, P101, C501, RW201

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.

Galyna F. Cle *11/09/2012* *CONTRACTS MANAGER*
Signature Date Title

CTI CONSULTANTS, Inc.
Name of Firm



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

CORMAN CONSTRUCTION, INC.

Vendor Number: **C097**

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications have been assigned to you by the Commissioner:

PREQUALIFIED

Work Classes: GRADING; MAJOR STRUCTURES; MINOR STRUCTURES; UNDERGROUND UTILITIES

Issue Date: 03/31/2012

This Rating and Classification will Expire: 03/31/2013

Suzanne FR Lucas Prequalification Officer

Don E. Silles, State Contract Officer

RUTHERFOORD

A Marsh & McLennan Agency LLC Company

November 15, 2012

Stephen D. Kindy, P.E.
Alternative Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, VA 23219

RE: Corman Construction, Inc.

Project: RFQ - Design/Build Project-I-64 Widening and Route 623 Interchange Improvements
From: 0.99 Miles West of Route 623 (WB-Router 622,EB-Route 623)
To: 0.38 Miles West Route 271 (Pouncey Tract Road) in Short Pump
Goochland County and Henrico County, VA
State Project No. 0064-964-110,P101,C501,B610-B614,B617,B616,D601-D606
Federal Project No. NH-064-2(150)
Contract ID Number: C00070542DB55

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 \$31,000,000. 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 ten 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

RICHMOND OFFICE

1001 Haxall Point | Suite 800 | Richmond, VA 23219 | 804-780-0611 | Fax: 804-788-8944 | www.rutherford.com

Local Touch. World Class.

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: Gerald F. Haley
Assistant Secretary
Gerald F. Haley

Geoffrey Delisio
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, deposeth 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
Constance A. Dunn, Notary Public
My Commission Expires: July 14, 2015



EXTRACT FROM BY-LAWS OF THE COMPANIES

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

CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 15th day of November, 2012.



Thomas O. McClellan

Thomas O. McClellan, Vice President

ATTACHMENT 3.2.10

State Project No. 0064-964-110, P101, C501, RW201

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Corman Construction, Inc.	F046798-7	Incorporated	Active	12001 Guilford Rd Annapolis Junction, MD 20701	Class A Contractors License	2701 014794A	10-31-2013
Rummel, Klepper & Kahl, LLP	K000417-8	LLP	Active	2100 East Cary St., Suite 309 Richmond, VA 23223	Eng	0411000271	02-28-2014
ECS Mid-Atlantic, LLC	S123046-7	LLC	Active	2119-D N. Hamilton St. Richmond, VA 23230	Eng	0411000384	02-28-2014
H&B Surveying and Mapping, LLC	S290560-4	LLC	Active	612 Hull St., Suite 101B Richmond, VA 23224	LS	0407005432	12-31-2013
So Deep, Inc.	0216275-8	Incorporated	Active	8397 Euclid Ave. Manassas Park, VA 22111	Eng, LS	0407002900	12-31-2013
EBA Engineering, Inc.	F123900-5	Incorporated	Active	714 Westwood Office Park Fredericksburg, VA 22401	Eng	0411000871	02-28-2014
NXL Construction Co., Inc.	0349742-7	Incorporated	Active	114 E. Cary St., Suite 200 Richmond, VA 23219	Eng, LS	0407003031	12-31-2013
DMY Engineering Consultants, LLC	S313497-2	LLC	Active	45662 Terminal Dr. Suite 110 Dulles, VA 20166	Eng	0407005631	12-31-2013
CTI Consultants, Inc.	0252760-4	Incorporated	Active	2120 Berkmar Drive Unit D Charlottesville, VA 22901	Eng	0411000466	02-28-2014

ATTACHMENT 3.2.10

State Project No. 0064-964-110, P101, C501, RW201

SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
RK&K	Lee Yowell	2100 East Cary St. Suite 309 Richmond, VA 23223	906 Orchard Road Richmond, VA 23226	PE	0402035601	06-30-2014
RK&K	Owen Peery	2100 East Cary St. Suite 309 Richmond, VA 23223	801 East Main St. Suite 1000 Richmond, VA 23219	PE	0402046882	10-31-2013



Commonwealth of Virginia
State Corporation Commission

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CISM0180

CORPORATE DATA INQUIRY

10/11/12

11:30:10

CORP ID: F046798 - 7 STATUS: 00 ACTIVE STATUS DATE: 01/06/06
CORP NAME: CORMAN CONSTRUCTION, INC.

DATE OF CERTIFICATE: 11/02/1984 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: DE DELAWARE STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301

AR RTN MAIL:

CITY: GLEN ALLEN

STATE : VA ZIP: 23060 6802

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

ACCEPTED AR#: 212 12 1045 DATE: 07/17/12 HENRICO COUNTY

CURRENT AR#: 212 12 1045 DATE: 07/17/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	100.00				100.00	1,000

(Screen Id:/Corp_Data_Inquiry)

Page: 1 Document Name: untitled

CISA335

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GPSM3220

CIS

GENERAL PARTNERSHIP DATA INQUIRY

04/05/10

GP ID: K000417 - 8

STATUS: 50 LLP STATUS ONLY

15:44:13

STATUS DATE: 09/25/01

GP NAME: RUMMEL, KLEPPER & KAHL, LLP

DATE OF FILING:

GP EXPIRATION DATE:

INDUSTRY CODE:

STATE OF FILING: MD MARYLAND

MERGER INDICATOR:

PRINCIPAL OFFICE ADDRESS

STREET: 81 W MOSHER ST

CITY: BALTIMORE

STATE: MD

ZIP: 21217-0000

LLP EFF DTE: 09 25 2001

LLP CONT DTE: 05 26 2009

LLP EXP DTE: 07 01 2010

LLP STATUS: Y

REGISTERED AGENT INFORMATION

R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301

CITY: GLEN ALLEN

STATE: VA

ZIP: 23060-6802

R/A STATUS: 6 CORP/LLC/RLLP R

EFF DATE: 01/05/04

LOC: 143 HENRICO COUNTY

COMMAND:



COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

Office of the Clerk

May 22, 2012

CT CORPORATION SYSTEM
4701 COX RD STE 301
GLEN ALLEN, VA 23060-6802

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,

Joel H. Peck
Clerk of the Commission

GPACCEPT
CIS0436

Commonwealth of Virginia



STATE CORPORATION COMMISSION

Richmond, April 16, 2004

This is to certify that the certificate of organization of

**Engineering Consulting Services - Mid-Atlantic,
LLC**

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: April 16, 2004



State Corporation Commission

Attest:

Joel H. Peck
Clerk of the Commission

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

AT RICHMOND, AUGUST 5, 2004

The State Corporation Commission has found the accompanying articles submitted on behalf of

ECS - Mid-Atlantic, LLC
(formerly known as Engineering Consulting Services - Mid-Atlantic, LLC)

to comply with the requirements of law, and confirms payment of all required fees. Therefore, it is ORDERED that this

CERTIFICATE OF AMENDMENT

be issued and admitted to record with the articles of amendment in the Office of the Clerk of the Commission, effective August 5, 2004.

STATE CORPORATION COMMISSION

By

A handwritten signature in black ink that reads "Mark L. Christie". The signature is written in a cursive style with a large initial "M".

Commissioner



Commonwealth of Virginia
State Corporation Commission

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10/11/12

LLCM3220

LLC DATA INQUIRY

11:38:32

LLC ID: S123046 - 7 STATUS: 00 ACTIVE STATUS DATE: 05/12/04
 LLC NAME: ECS Corporate Services, LLC

DATE OF FILING: 05/12/2004 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 14026 THUNDERBOLT PL STE 100

CITY: CHANTILLY STATE: VA ZIP: 20151-0000

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

R/A NAME: JAMES A ECKERT

STREET: 14026 THUNDERBOLT PL STE 100

RTN MAIL:

CITY: CHANTILLY STATE: VA ZIP: 20151-0000

R/A STATUS: 1 MEMBER/MANAGER EFF DATE: 05/12/04 LOC: 129 FAIRFAX COUNTY

YEAR FEES PENALTY INTEREST BALANCE

12 50.00

(Screen Id:/LLC_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission



10/11/12

LLCM3220

LLC DATA INQUIRY

11:40:34

LLC ID: S290560 - 4 STATUS: 00 ACTIVE STATUS DATE: 04/27/09
LLC NAME: H & B Surveying and Mapping, LLC

DATE OF FILING: 04/27/2009 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 612 HULL STREET STE 101B

CITY: RICHMOND STATE: VA ZIP: 23224-0000

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

R/A NAME: TIMOTHY H GUARE

STREET: TIMOTHY H GUARE PLC
6802 PARAGON PL STE 100

RTN MAIL:

CITY: HENRICO STATE: VA ZIP: 23230-0000

R/A STATUS: 4 MEMBER OF VSB EFF DATE: 07/02/09 LOC: 143 HENRICO COUNTY

YEAR FEES PENALTY INTEREST BALANCE

12 50.00

(Screen Id:/LLC_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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CISM0180

CORPORATE DATA INQUIRY

10/11/12

11:41:11

CORP ID: 0216275 - 8 STATUS: 00 ACTIVE STATUS DATE: 11/15/85
CORP NAME: SO-DEEP, INC.

DATE OF CERTIFICATE: 04/07/1981 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:
R/A NAME: THUY ANH PHAM

STREET: 8397 EUCLID AVENUE AR RTN MAIL:

CITY: MANASSAS PARK STATE : VA ZIP: 20111
R/A STATUS: 2 OFFICER EFF. DATE: 04/09/97 LOC : 315
ACCEPTED AR#: 212 50 8366 DATE: 03/08/12 MANASSAS PARK
CURRENT AR#: 212 50 8366 DATE: 03/08/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 130.00 10,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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CORPORATE DATA INQUIRY

10/11/12

12:34:03

CORP ID: F123900 - 5 STATUS: 00 ACTIVE STATUS DATE: 12/03/07
CORP NAME: EBA ENGINEERING, INC.

DATE OF CERTIFICATE: 10/22/1997 PERIOD OF DURATION: INDUSTRY CODE: 70
STATE OF INCORPORATION: MD MARYLAND STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 2000.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301

AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143
ACCEPTED AR#: 212 53 6976 DATE: 09/26/12 HENRICO COUNTY
CURRENT AR#: 212 53 6976 DATE: 09/26/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
12 1,700.00 1,700.00 1,000,000

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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CORPORATE DATA INQUIRY

10/11/12

12:37:24

CORP ID: 0349742 - 7 STATUS: 00 ACTIVE STATUS DATE: 11/17/89
CORP NAME: NXL CONSTRUCTION CO., INC.

DATE OF CERTIFICATE: 11/17/1989 PERIOD OF DURATION: INDUSTRY CODE: 00
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:
R/A NAME: NICOMEDES L DE LEON

STREET: 9606 GEORGE'S BLUFF RD

AR RTN MAIL:

CITY: RICHMOND

STATE : VA ZIP: 23229

R/A STATUS: 2 OFFICER

EFF. DATE: 10/08/98 LOC : 143

ACCEPTED AR#: 212 15 2072

DATE: 09/24/12

HENRICO COUNTY

CURRENT AR#: 212 15 2072

DATE: 09/24/12

STATUS: A

ASSESSMENT INDICATOR: 0

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

(Screen Id:/Corp_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

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10/11/12

LLCM3220

LLC DATA INQUIRY

12:35:05

LLC ID: S313497 - 2 STATUS: 00 ACTIVE STATUS DATE: 01/11/10
 LLC NAME: DMY Engineering Consultants, LLC

DATE OF FILING: 01/11/2010 PERIOD OF DURATION: INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 45662 TERMINAL DR STE 110

CITY: DULLES STATE: VA ZIP: 20166-0000

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

R/A NAME: WEIYI MA

STREET: 45662 TERMINAL DRIVE
 SUITE 110

RTN MAIL:

CITY: DULLES STATE: VA ZIP: 20166-0000

R/A STATUS: 1 MEMBER/MANAGER EFF DATE: 06/23/11 LOC: 153 LOUDOUN COUNTY

YEAR	FEES	PENALTY	INTEREST	BALANCE
12	50.00			

(Screen Id:/LLC_Data_Inquiry)



Commonwealth of Virginia
State Corporation Commission

Virg

CISM0180

CORPORATE DATA INQUIRY

11/09/12

09:46:40

CORP ID: 0252760 - 4 STATUS: 00 ACTIVE STATUS DATE: 05/17/11
 CORP NAME: C.T.I Consultants, Inc.

DATE OF CERTIFICATE: 02/27/1984 PERIOD OF DURATION: INDUSTRY CODE: 00
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
 MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:
 GOOD STANDING IND: Y MONITOR INDICATOR:
 CHARTER FEE: 200.00 MON NO: MON STATUS: MONITOR DTE:
 R/A NAME: ANDREW W WHITE

STREET: LECLAIRRYAN A PROFESSIONAL CORPORATION AR RTN MAIL:
 951 E BYRD ST 8TH FL

CITY: RICHMOND STATE : VA ZIP: 23219

R/A STATUS: 4 ATTORNEY EFF. DATE: 01/18/11 LOC : 216

ACCEPTED AR#: 212 50 4912 DATE: 02/08/12 RICHMOND CITY

CURRENT AR#: 212 50 4912 DATE: 02/08/12 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
12	670.00					100,000

 (Screen Id:/Corp_Data_Inquiry)

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

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

EXPIRES ON
10-31-2013

NUMBER
2701 014794A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

CORMAN CONSTRUCTION INC

12001 GUILFORD RD

ANNAPOLIS JUNCTION MD 20701 0160

CLASSIFICATIONS H/H

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Gordon N. Dixon
Gordon N. Dixon, Director

(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR CONTRACTORS - CLASS A

CONTRACTOR LICENSE - CLASSIFICATIONS: H/H



NUMBER: 2701 014794A EXPIRES: 10-31-2013

CORMAN CONSTRUCTION INC

12001 GUILFORD RD

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8960 Mayland Dr., Suite 400, Richmond, VA 23233

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COMMONWEALTH OF VIRGINIA

EXPIRES ON
02-28-2014

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

NUMBER
0411000271

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

PROFESSIONS: ENG

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



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Gordon N. Dixon, Director

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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



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

**NUMBER
0411000384**

**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**



Gordon N. Dixon
Gordon N. Dixon, Director

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9980 Mayland Dr., Suite 400, Richmond, VA 23233**

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BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000384 EXPIRES: 02-28-2014
PROFESSIONS: ENG
ECS MID-ATLANTIC LLC
2119-D NORTH HAMILTON ST
RICHMOND, VA 23230**



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EXPIRES ON
12-31-2013

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

NUMBER
0407005432

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

PROFESSIONS: LS

H & B SURVEYING & MAPPING LLC
612 HULL ST
SUITE 101B
RICHMOND, VA 23224



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9960 Mayland Dr., Suite 400, Richmond, VA 23233
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EXPIRES ON
12-31-2013

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0407002900

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

PROFESSIONS: ENG, LS

SO-DEEP, INC.
8397 EUCLID AVENUE
MANASSAS PARK, VA 22111



Gordon N. Dixon
Gordon N. Dixon, Director

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BUSINESS ENTITY REGISTRATION
NUMBER: 0407002900 EXPIRES: 12-31-2013
PROFESSIONS: ENG, LS
SO-DEEP, INC.
8397 EUCLID AVENUE
MANASSAS PARK, VA 22111



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EXPIRES ON
02-28-2014

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0411000871

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

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

PROFESSIONS: ENG

EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401



Gordon N. Dixon
Gordon N. Dixon, Director

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BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000871 EXPIRES: 02-28-2014
PROFESSIONS: ENG
EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401



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EXPIRES ON
12-31-2013

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

NUMBER
0407003031

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

PROFESSIONS: ENG, LS

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



Gordon N. Dixon
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA

**BOARD FOR APPELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407003031 EXPIRES: 12-31-2013
PROFESSIONS: ENG, LS
NXL CONSTRUCTION CO INC NXL CONSTRUCTION
SERVICES INC
114 E CARY ST STE 200
RICHMOND, VA 23219**



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EXPIRES ON
12-31-2013

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

NUMBER
0407005631

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

PROFESSIONS: ENG

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



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BUSINESS ENTITY REGISTRATION
NUMBER: 0407005631 EXPIRES: 12-31-2013
PROFESSIONS: ENG
DMY ENGINEERING CONSULTANTS, LLC
45662 TERMINAL DRIVE
SUITE 110
DULLES, VA 20166



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

PROFESSIONS: ENG

C T I CONSULTANTS INC
2120 BERKMAR DRIVE
UNIT D
CHARLOTTESVILLE, VA 22901



Gordon N. Dixon
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA
BOARD FOR APPLSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000466 EXPIRES: 02-28-2014
PROFESSIONS: ENG
C T I CONSULTANTS INC
2120 BERKMAR DRIVE
UNIT D
CHARLOTTESVILLE, VA 22901



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06-30-2014

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

NUMBER
0402035601

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

LEE CASTLETON YOWELL
906 ORCHARD ROAD
RICHMOND, VA 23226



Gordon N. Dixon
Gordon N. Dixon, Director

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COMMONWEALTH OF VIRGINIA

EXPIRES ON
10-31-2013

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

NUMBER
0402046882

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

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



Gordon N. Dixon
Gordon N. Dixon, Director

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

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



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**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.
<p>d. Years experience: With this Firm <u>32</u> Years With Other Firms <u>1</u> 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.):</p> <p>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 \$1.1Billion and completed on schedule and on budget. Relevant projects include:</p> <p>2012-2013 (Sr. DBPM) Design-Build I-64/Route 15 (Zion Crossroads), Louisa County, VA - \$6.6 2010-2013 (DBPM) Design-Build I-70 Phase 2D, Frederick, MD - \$35.4 M – MDOT 2006-2011 (Exec. Com.) Design-Build Intercounty Connector Contract A, Montgomery County, MD -\$478.6 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/Brdg 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</p> <p>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:</p> <p>2005-2006 (Ops. Manager) Woodrow Wilson Bridge MD 210, MB-3, Oxon Hill, MD - \$44 M – MDOT 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</p> <p>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</p> <p>Active member of VTCA Design-Build Committee and DBIA.</p>	
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	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> <p>(List at least three (3), but no more than five (5) projects for which you have performed a similar function.)</p>	
Project Name:	Design-Build I-70 Phase 2D, Frederick, MD
Project Role:	Design-Build Project Manager
Client/Owner:	Maryland State Highway Administration
Dates:	Sept 2010-July 2013 (est.)
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.

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

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
Project Role:	Operations Manager	With Current Firm?	Yes
Client/Owner:	Maryland State Highway Administration		

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-separated 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 MD 30 Hampstead By-Pass, Hampstead, MD	Dates:	Feb 2006-Aug 2009
Project Role:	Design-Build Project Manager	With Current Firm?	Yes
Client/Owner:	Maryland State Highway Administration		

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.

**ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.			
a. Name & Title:	Lee C. Yowell, PE, CCM, DBIA / Director, Construction Services		
b. Project Assignment:	Quality Assurance Manager		
c. Name of Firm with which you are now associated:	RK&K, LLP		
d. Years experience: With this Firm <u>6</u> Years With Other Firms <u>13</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):			
Director, Construction Services – RK&K, LLP	January 2007 - Present		
As Director of Construction Services for Virginia, responsibilities include identifying and developing new business pursuits for a wide array of clients which include local, State and Federal government agencies. Develop teams of consultants and contractors to pursue work as well as oversee and participate in proposal development and interview presentations to clients. Business pursuits have consisted of on-call construction engineering inspection, DB projects, and project specific Construction Management. Representative project work includes review of Route 460 PPTA RFDP; 30% plan and constructability review of VDOT I-495 HOT Lanes; VDOT Bristol District, and Richmond District Central and Northern Region CEI Contracts; QAM for I-81 Truck Climbing Lanes Design-Build Project (1/09-3/10 and 9/12-present); Robertson Bridge Project; VDOT Battlefield Boulevard Project; and QA Plan Development Technical Expert for 395/95 Express Lanes PPTA and DT/MT Tunnel MLK Interchange PPTA.			
Responsible Charge Engineer – Virginia Department of Transportation	May 2005 – January 2007		
Responsible for the successful delivery of a \$62 million interchange project, the I-295 Flyover Project in Richmond, VA, where he was Responsible Engineer (5/05-1/07). Project Manager during design and construction. Served as the primary point of contact for the public, FHWA, local government agencies and politicians. Also, QAM for Route 288 PPTA/DB project (3/01-7/04)			
Quality Assurance Manager – CH2M Hill	March 2001 – May 2005		
Responsible for identifying and procuring new business for Construction related services. Also responsible for project delivery on the following projects: Sudley Manor Drive PPTA/DB project (7/04 – 5/05) – Manassas, VA – Design-Build Project Manager for \$30 million, design-build, PPTA project which was the first County PPTA Project in Virginia. Responsible for initiating, planning, controlling and executing the project throughout the design and construction phases. VA Route 288 – Quality Assurance Manager for \$236 million, PPTA project that consisted of 27 bridges and 17.5 miles of four-lane divided highway. Served as chief administrator of the QA office as the liaison between the QA staff, VDOT, Contractors and the design staff.			
Superintendent / CQC Manager – Moore Brothers Co., Inc.	January 1994 – March 2001		
Held various positions for this Heavy Highway and Bridge Contractor in Northern Virginia. Representative projects include CQC Manager for Dulles Greenway PPTA/Design-Build Project (1/94-3/01), Dulles Toll Road HOV Lanes, and the I-95 HOV Lanes. Positions held were focused on production, safety, and quality.			
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:			
	Virginia Military Institute/BS/1993/Civil Engineering		
	Design-Build Institute of America (DBIA)/2011/#D884		
	Lee is a current member of the Design-Build Committee for VTCA and former member of the ECLC.		
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2002/Civil Engineering/Virginia #0402035601		
g. Document the extent and depth of your experience and qualifications relevant to the Project.			
	1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>		
	2. <i>Note whether experience is with current firm or with other firm.</i>		
	3. <i>Provide beginning and end dates for each assignment.</i>		
	(List at least three (3), but no more than five (5) projects for which you have performed a similar function.)		
Project Name:	I-81 Truck Climbing Lane	Dates:	Jan. 2009 – March 2010 and September 2012 - current
Project Role:	Quality Assurance Manager	With Current Firm?	Yes
Client/Owner:	Virginia Dept. of Transportation		

Quality Assurance Manager on this \$74 million safety improvement project. The 7.2 mile-long project added a truck-climbing lane in this location, replaced the I-81 bridges at Route 716, Route 712 and Route 710, extended all underground drainage, seven culvert extensions, placement of seven miles of traffic barrier wall, placement of 16 Storm Water Management Basins, asphalt pavement on new sections plus overlay existing I-81 throughout the project, plus replace guardrails, guardrail transitions and end treatments to meet current Federal Highway standards. Responsibilities included approval of all contractor pay requests, materials book, daily diary for QA and QC records, inspection and monitoring of concrete tests, soil and aggregate, backfill, embankment density, rebar inspection, maintenance of traffic measures and erosion and sediment control. As the Quality Assurance Manager, responsible for coordination between the contractor and VDOT agencies along with various public agencies and individuals.

Project Name:	VA Route 288	Dates:	March 2001 – July 2004
Project Role:	Quality Assurance Manager	With Current Firm?	No, CH2M Hill
Client/Owner:	Virginia Dept. of Transportation		

QAM for \$236 million, design-build, PPTA project that consisted of 27 bridges and 17.5 miles of four-lane highway. Responsibilities included overseeing and monitoring the construction activities for contractor compliance with project specifications, plans, standards and contract, providing the necessary documentation and coordinating all construction engineering, inspection and implementation of the QA / CQIP Manual and monitoring, supervising, reviewing and coordinating the construction inspection and testing program. This project intersects with the I-64 Project giving us first-hand knowledge.

Project Name:	Sudley Manor Drive PPTA	Dates:	July 2004 – May 2005
Project Role:	Design-build Project Manager	With Current Firm?	No, CH2M Hill
Client/Owner:	Prince William County		

Project Manager: \$30 million, design-build, PPTA project that consisted of three miles of four-lane divided roadway and two bridges over the Norfolk Southern Railway. Responsible for the design, construction and QC/QA of the roadway and the design of the bridges including initiating, planning, controlling and executing the project throughout the design and construction phases. Responsibilities also included assuring adequate staffing, procuring and managing consultants and contractors, managing all aspects of the contracts such as negotiating amendments, directing charges, interpreting contracts and specifications, monitoring contract budget and performing risk analysis, communicating with stakeholders, responding to project inquiries and coordinating with local developers, property owners and other civic groups. (07/04 - 05/05)

Project Name:	I-295/I-64 Interchange	Dates:	May 2005 – January 2007
Project Role:	Responsible Charge Engineer	With Current Firm?	No, VDOT
Client/Owner:	Virginia Dept. of Transportation		

Responsible Charge Engineer: \$62 million project that consisted of a lane addition to the outside of I-64 in both directions between Route 288 and Route 250 (Broad St. exit 178), increase of the current one-lane ramp from northbound I-295 to westbound I-64 (towards Charlottesville) to two lanes and a new, two-lane flyover ramp for eastbound I-64 to southbound I-295. The ramp is 1,765 feet long and 35 feet above I-64. Responsible for all quality assurance activities on the project including inspection and testing.

Project Name:	Dulles Greenway	Dates:	January 1994 – May 1995
Project Role:	Construction Quality Control Manager	With Current Firm?	No, Moore Brothers
Client/Owner:	Virginia Dept. of Transportation		

Quality Control and Safety Engineer / Assistant Project Manager: \$200 million private toll road project that consisted of 13 bridges, more than five miles of four-lane roadways and ramp construction. Safety Engineer responsibilities included conducting weekly safety meetings, excavation and fall protection seminars and performing on-site accident investigations. Quality Control Engineer responsibilities included operating an on-site lab which performed concrete control cylinder breaks and soils analysis tests and troubleshooting soil density problems. Assistant Project Manager responsibilities included tracking materials, labor and equipment and tracking shop drawing submittals, aiding in RFI and NCR resolution, preparing as-built drawings, preparing lost time analyses, quantities and schedule tracking, attending and participating in weekly progress meetings, and designing and implementing changes in the field.

**ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.			
a. Name & Title:	Owen L. Peery, PE / Director, Transportation		
b. Project Assignment:	Design Manager		
c. Name of Firm with which you are now associated:	RK&K, LLP		
d. Years experience: With this Firm <u>25</u> Years With Other Firms <u>4</u> Years	Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):		
Director, 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: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	Virginia Military Institute/BS/1983/Civil Engineering		
f. Active Registration: Year First Registered/ Discipline/VA 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.	<ol style="list-style-type: none"> <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> <i>Note whether experience is with current firm or with other firm.</i> <i>Provide beginning and end dates for each assignment.</i> <p>(List at least three (3), but no more than five (5) projects for which you have performed a similar function.)</p>		
Project Name:	Route 150 Widening – Chippenham Parkway, Chesterfield County, VA	Dates:	1997-2002
Project Role:	Design Project Manager	With Current:	Yes
Client/Owner:	Virginia Department of Transportation		
Design Project Manager overseeing \$38 million widening and improvements project consisting of a 4.5 mile section of a heavily traveled, highly developed principal arterial roadway. RK&K provided complete right-of-way and construction plans for this project. Project required that the design be completed in fifteen (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	Dates:	1997-2002
Project Role:	Design Project Manager	With Current Firm:	Yes
Client/Owner:	Virginia Department of Transportation		

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 contract 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 projects:

- 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: 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:	Peter Bernat –Sr. 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 <u>21</u> Years With Other Firms <u>2</u> Years		
	Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):		
	Peter’s distinguished career spans over 23 years assigned to design-build/design-bid-build, fast-track bridges, large-scale transportation infrastructure and complex utility projects. For the past 5 years, Peter has been the Sr. Project Manager of the CK Constructors JV for VDOT’s \$236 M Telegraph Road Project. Under Peter’s leadership, 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.		
	Sr. Project Manager.....Corman Construction	2005-Present	
	Peter’s assignments include large-scale design-build and design-bid-build transportation infrastructures and fast-track bridges where he tackles projects with a proactive management approach leading to successful completion. Tasks and responsibilities include scheduling, cost control, and planning future work to identify and mitigate potential delays resulting from design and/or constructability issues that keep projects on track.		
	2007-2012	I-95 Telegraph Road Interchange Improvement, Alexandria, Virginia	-\$236.3 M - VDOT
	2005- 2007	Woodrow Wilson Bridge MD 210, MB-3, Oxon Hill, Maryland	-\$44.6 M - MSHA
	Project Manager.....Corman Construction	1998-2005	
	Managed the following projects where he supervised engineers on all aspects of construction:		
	2002-2005	Design-Build MD Route 216 US 29 to I-95, Laurel, Maryland	-\$21.1M - MSHA
	1999- 2002	Chippenham Parkway, Chesterfield, Virginia	-\$1.9M - VDOT
	1998-2001	I-95 @ Walthall Interchange, Chesterfield, Virginia	-\$4.9M - VDOT
	Sr. Project Engineer.....Corman Construction	1993-1997	
	Peter was responsible for all aspects of project management, including cost control, projection analysis, scheduling, subcontractor coordination, public relations, submittals, material procurement and owner relations for bridge and water main projects.		
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Texas - Austin, TX/1989-1990/Civil Engineering Major		
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: 2010/VDOT Erosion & Sediment Control Contractor Certification/#5454C 2012/Virginia DCR Responsible Land Disturber Certification/#37435		
g.	Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) projects for which you have performed a similar function.)		
Project Name:	I-95 Telegraph Road Interchange Improvement, Alexandria, VA	Dates:	Dec. 2007-Dec. 2012
Project Role:	Sr. Project Manager	With Current Firm?	Yes
Client/Owner:	Virginia Dept. of Transportation		
As Sr. Project Manager for this \$236.3 Million fast-track joint venture project with Kiewit, Peter Bernat oversees 14 engineers, a jobsite workforce of over 200, 39 subcontractors, and manages all aspects of construction. He is the primary contact for CK Constructors with VDOT and holds responsibility for contract administration of the project. This project commands major interim milestone coordination from a demanding schedule with incentive/disincentive clauses, is the largest design-bid-build in Virginia and the final major undertaking of the Woodrow Wilson Bridge project.			

In 2010, Peter led an effort to reduce traffic congestion by revising the MOT from its original 6 phases and 16 sub-phases to 3 phases with 10 sub-phases, thus improving travel conditions for the public. He was instrumental in developing alternate schedules and work areas that kept the project on track when unanticipated utility conflicts were discovered.

Relevant project features include: reconstruction of the Telegraph Road Interchange, widening/reconstruction of approx. 2.5 miles of Interstate I-95/I-495 with 11 ramps and bridges, MSE walls and bridge approaches, ITS, signalization, lighting, and signing, complex maintenance of traffic involving an ADT of 160,000, design and construction of sound walls, bridge widening at B617.

Under Pete's leadership, the project met all six milestones to date with the last milestone completed 29 days ahead of the contract milestone date. Substantial completion for entire project was achieved four months early on August 25, 2012.

Project Name:	Design-Build MD Route 216 US 29 to I-95, Laurel, MD	Dates:	Oct. 2002-April 2005
Project Role:	Project Manager/DB Coordinator	With Current Firm?	Yes
Client/Owner:	Maryland State Highway Admin.		

As **Project Manager/Design-Build Coordinator** for this \$21.1 Million project, Peter managed this design-build project with a partnered, hands-on, 24/7 approach, which ultimately resulted in an on-time, on-budget, award winning project. Peter supervised project engineers and superintendents and oversaw all field work. Unparalleled partnering was essential and contributed to effective communication with everyone, specifically the utility companies, homeowners, and agencies. Peter also directed construction, including QC to ensure materials and work met contract requirements/plans/specifications, oversaw the design team and chaired in-house working sessions for design development and reviews, participated in design review meetings with owner and MDE where real-time problem solving occurred, obtained permits, was the design-build team's Public Relations Coordinator and spokesperson at community meetings, served as utility coordinator.

Relevant project features include design and construction of a two-mile realignment of MD 216 as a dual-divided highway, new off-ramp from southbound I-95 to westbound MD 216, phased maintenance of traffic, roadway construction included widening, signing, striping, signalization, and lighting, 167,000 SF noise walls and box culvert extensions, coordinated installation/relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling, stormwater management (11 new ponds), erosion & sediment control, storm drainage, and Hammond Branch improvements, completed on-time, under budget without a work-zone accident or lost-time injury.

Project received 3 awards, including MDQI Partnering and Major Roadway Awards of Excellence, "A" rating from the owner, and PCI award for Best Custom Transportation Design.

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

As **Sr. Project Manager** for this \$44.6 Million Interchange project, Peter led this project team earning "A" ratings from the owner, as well as 3 MDQI Awards of Excellence in Partnering, Structure and Major Roadway. Peter oversaw the project from start to finish, managed a staff of engineers, worked hand-in-hand with the superintendents to schedule, coordinate and supervise field operations, and was the primary contact with owner. Peter possesses strong qualifications in scheduling, cost control, and advance study and planning future work to identify and mitigate potential delays resulting from design and/or constructability issues.

Peter was the primary conduit of information to VDOT and PCC, VDOT's general engineering consultant (GEC).

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 4,008 LF, realignment/transformation of the Oxon Hill Road/MD 210 Intersection into a grade-separated interchange, grading and drainage systems, 85,000 tons asphalt, 5 retaining walls (one CIP and four MSE), 2 stormwater management ponds and erosion and sediment control, demolition/bridge construction Rt. 210 over I-495 and construction of Rt. 210 over Oxon Hill Road, ITS, overhead signs and signalization, complex phased construction required an extensive tie-back system to support adjacent bridges and roadway.

The project maintained the best safety record among the Maryland Woodrow Wilson Bridge contracts and was completed on schedule and under budget (\$2 Million below the owner's \$46.2 Million budget).

ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Telegraph Road Interchange Improvement (I-95 & I-495) Alexandria, VA	Dewberry	Virginia Dept. of Transportation Phone (O): 703-329-0300 Jalal Masumi Phone (O): 703-329-0300 Phone (C): 571-237-2696 Jalal.masumi@VDOT.virginia.gov	6/30/13	6/30/13 (est) (substantial completion 8/25/12)	TOTAL: \$236,393	TOTAL: \$260,304 (est) (Increase from owner approved change orders)	TOTAL: \$260,304 (est) Joint Venture 100% Responsible (JV breakdown – Corman 55%, Kiewit 45%)

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



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. 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 handicap ramps, and storm drainage with six stormwater management ponds.

SCOPE AND COMPLEXITY SIMILARITIES

- Widening of a major commuter **interstate** under traffic
- Construction of bridges in phased stages
- VDOT project
- Interchange reconstruction including ramps
- Coordination with local stakeholders
- Utility coordination and relocations
- Environmental permitting and protection
- Installation of "state of the art" ITS/communication systems
- **Proposed Construction Manager, Peter Bernat, was Senior Project Manager on this job.**

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 VB 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/PCC/CKC 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. 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. 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. 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. 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

Corman, as the lead JV member, is responsible for all aspects of construction, including highways and structures, MOT, environmental permits and protection, public relations, coordination with adjacent contracts, and utility protection and relocation.

Project required extensive coordination with adjacent projects, local residents, and utility companies which were handled by Corman in conjunction with VDOT's GEC. Daily coordination occurred onsite and weekly meetings were held at GEC offices to discuss work plans and public information.

RK&K was the GEC on this project.

ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Route 1 Tie-In to Woodrow Wilson Bridge Urban Deck VA-4 Alexandria, VA	HNTB	Virginia Dept. of Transportation Phone (O): 703-329-0300 Jalal Masumi Phone (O): 703-329-0300 Phone (C): 571-237-2696 Jalal.masumi@VDOT.Virginia.gov	4/1/08	4/1/08	\$54,634	\$62,737 (owner directed increase in scope due to plan revisions resulted in increase of project value)	\$62,737

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



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 by shifting the capital beltway traffic so construction could begin on the next stage sooner, saving nine months of construction time.

Project required extensive coordination with adjacent projects, local residents, and utility companies which were handled by Corman in conjunction with VDOT’s GEC. Daily coordination occurred onsite and weekly meetings were held at GEC offices to discuss work plans and public information. Corman and VDOT partnered to relocate several residents and utilized vibration-less sheet pile pre-augered production piles during a sheet pile operation. Major MOT efforts were crucial and included shifting traffic four times on the Beltway and eight on Washington Street. *RK&K was part of the GEC team on this project.*

PROJECT FEATURES/NARRATIVE

Two phased demolition/construction and widening ½ mile of I-495 Beltway under traffic. 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 a major commuter interstate under traffic
- Construction of bridges in phased stages
- VDOT project
- *Design-Build elements including ramp bridge and noise wall*
- Stakeholder coordination
- Reconstruction of on and off ramps for Washington St. Interchange
- Signalized intersections
- Installation of “state of the art” ITS/communication systems
- Interchange reconstruction
- Environmental protection
- Utility relocations and coordination
- Size of project: \$62.7M

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. 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. 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.

ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for overall project design.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Design-Build MD Route 216 US 29to I-95 Howard County, MD	RK&K	Maryland Department of Transportation/State Highway Administration Phone: 410-545-8824 Lisa Choplin Phone: 410-545-8824 LChoplin@sha.state.md.us	11/1/04	5/1/05 (includes owner approved time extensions)	\$20,435	\$21,116 (includes owner approved change orders)	\$21,116

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



PROJECT FEATURES/NARRATIVE

Design and construction of two-mile realignment of MD 216 as a dual-divided highway with two signalized intersections and a new off-ramp from I-95 South to MD 216 West and reconstruction of Leishear and Crest Roads. Earthwork operations in excess of 200,000 CY, box culvert extensions, utility coordination, installation and/or relocation of electric, water, sewer, gas, petroleum, fiber optic, and cabling. Extensive 167,000 SF noise wall (sound wall caissons) construction spread over 15,000 LF along both sides of the new roadway and a comprehensive landscape plan. Sound absorptive wall panels contained an intricate art mural and rustic brick patterns including a Maryland landscape cast the precast concrete panels using form liners to generate a visual interest from the traveling public. Work also included E and S, storm drainage, SWM (11 new ponds), roadway construction and overlay of existing pavement, signing, pavement marking, signing, intersection/signalization, lighting, MOT phasing, turf establishment and improvements to Hammond Branch stream. Corman instituted an environmental stewardship program. Unparalleled partnering was essential and contributed to effective communication with all involved.

A rolling design was utilized with 6 packages enabling the contractor to start work as soon as possible. Midway through design development, team reacted to an owner request to change the design speed of Leishear Road. DB Team worked side-by-side during the entire design/construction process maximizing efficiency in both design applications and means and methods of construction.

SCOPE AND COMPLEXITY SIMILARITIES

- Acquisition of water quality permits
- Highway design and construction including widening
- Upgrading of existing and installation of new traffic signals
- New off-ramp from Interstate I-95 to westbound MD 216
- Design-build project with RK&K
- Size of project: \$21.1M
- *Proposed Design-Build Project Manager, Jo Ellen Sines, was Design-Build Project Manager and proposed Construction Manager, Peter Bernat, was Project Manager on this job.*

VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

The Corman Design-Build team partitioned the project into three phases which dictated design and construction flow. Frequent meetings were held to develop and finalize plans prior to construction. In the early stages, Corman and RK&K developed a plan to bifurcate the proposed MD 216 roadway in order to balance the earthwork. This effort cut months off the schedule and yielded an environmental benefit by reducing impact to wetlands and buffers. It also reduced heavy-equipment traffic through adjacent neighborhoods thereby minimizing noise, safety risks, wear on infrastructure and inconvenience to local communities and traveling public. Other cost control methods involved the utilization of HDPE in lieu of concrete pipe and design of oversized headwalls to minimize impacts to Waters of the US.

Project earned environmental impact reduction incentives, and maintained "A" ratings in MOT, environmental and contractor performance. These efforts yielded successful results as the project was completed on-time, under budget without a work-zone accident or lost-time injury and serves as a testament to the team functioning as a true partnership. Also, Corman and RK&K wanting to work together on another project is evidence of good performance.

AWARDS

- 2006 PCI Bridge Design Award -Best Custom Transportation Design
- 2006 MdQI Award of Excellence for Partnering -Major Project
- 2006 MdQI Award of Excellence for Major Roadway Project

LESSONS LEARNED

1. During early stages of design on the project, it became apparent that MDE review times were excessive. DB Team worked with SHA leadership to facilitate a process to prioritize MDE design reviews for SHA projects. This helped to reduce the lengthy review cycles and enabled installation of several critical cross culverts prior to the stream restriction period.
2. Corman successfully managed a complex situation of precast supplier going bankrupt during project. This was accomplished with high level communications and DB frequent visits to the supplier for quality control and panel inventory.
3. An effective community outreach program proved successful in partnering with the local community businesses and homeowners.

CORMAN ROLE

As Design-Builder, Corman was responsible for all aspects of design and construction, including highways and structures, MOT, environmental permits and protection, public relations, utility coordination/relocations, extensive storm water management facilities and improvements to an existing stream. Project included extensive noise wall construction including architectural treatments which won an award for context sensitive solutions.

Project included realignment of a busy cross county commuter route which included extensive traffic phasing within the neighborhood to maintain access for homeowners and local businesses as well as the construction of a new off ramp from I-95 to MD 216 on the heavily traveled section of I-95 between Baltimore and Washington.

ATTACHMENT 3.4.1(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Route 150 Widening – Chippenham Parkway Chesterfield County, VA	Mega Construction <i>(Corman Construction was a subcontractor)</i>	Virginia Dept. of Transportation Phone: (804) 786- 2507 Project Manager: Mohammad Mirshahi Phone: (804) 786- 2507 Email: M.Mirshahi@vdot.virginia.gov	1997	2002	\$38,800	\$38,800	\$435 (fee)

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.



RK&K ROLE

RK&K, with *Corman Construction as a sub to the contractor*, was selected by VDOT to design the improvements which provided a critical link to the proposed Route 895 connector over the James River which was under construction at the same time. In addition to development of complete Right of Way and Construction plans, RK&K also actively participated in partnering with VDOT and the Contractor and worked closely with all members of the project team to identify and resolve issues as they arose during construction. Owen L. Peery, PE was the Project Manager for this project and is our proposed Design Manager for this project.

In order to keep the project on schedule, RK&K made numerous site visits and worked closely with the project team to make significant modifications to the drainage design to accommodate the contractor's noise barrier foundations. RK&K also worked closely with the contractor to resolve drainage and MOT issues at several of the bridge locations. Corman Construction was responsible for widening the bridges on this project.

PROJECT FEATURES/NARRATIVE

Highway/Roadway Design: Route 150 (Chippenham Parkway) is a heavily traveled facility between the City of Richmond and I-95 and Route 895 to the south and carrying approximately 70,000 vehicles per day. RK&K provided complete right-of-way and construction plans to widen this 4.5-mile section of a highly developed, principal arterial roadway in Chesterfield County from four to six lanes. This project required that the design be completed in fifteen (15) months so that construction could be completed in sequence with other major improvements proposed for adjoining roadways, including Route 895 over the James River. The project included the following elements:

- Widening in median to provide additional travel lane, shoulder and bifurcated median barrier.
- Coordination with VDOT bridge design consultant for widening of 10 bridges.
- Widening to the outside to extend auxiliary lanes at four interchanges.
- Design of open and closed drainage systems – including median drainage.
- Design of stormwater management facilities.
- Design of horizontal alignments for approximately 10,000 linear feet of noise barrier.
- Design of detailed maintenance of traffic plans for roadway and bridge widening.

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 outside 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 fee 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 bench, 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 superelevated 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. Clear and open lines of communication during design and construction are critical for a successful project.
2. Accurate survey along existing edge of pavement will result in a much better finished product.
3. Verify that proposed Right of Way and easements allow sufficient room for construction activities.
4. Regular plan reviews with all members of the project team are essential and should include subconsultants and major stakeholders.

ATTACHMENT 3.4.1(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
I-4744: I-40 Widening & Signing (Design-Build) Wake County, NC	S.T. Wooten	North Carolina Dept. of Transportation Phone: 919-707-6601 Rodger Rochelle, PE Phone: 919-707-6601 Email: rdrochelle@dot.state.nc.us	June 2011	June 2011	\$49,000	\$49,000	\$3,900

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



RK&K ROLE

RK&K 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; E&S Control Engineer, Sheila Reeves, was Project Engineer; and Signing, Striping & Traffic Signal Engineer, Stuart Sandberg, was Roadway Engineer on this project. All played a major role in project completion/success.

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 freeway 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 freeway. Current traffic volumes exceed 130,000 per day, which is far above the capacity of a freeway in this area, and leading to an evening rush hour that can last for three hours eastbound.

This rolling urban freeway 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 interstate 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 highway in the future; median guiderail 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.

Bridge Design: 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

- Widening of interstate from four to six lanes
- 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. When widening to the median, using alternate methods for delivering materials to the median reduces exposure to traffic and reduces construction time.
2. Close coordination with subconsultants and the Contractor are vital to a successful design build project.
3. 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. Additional traffic studies are valuable to show additional hauling during the day will not impact the traveling project. Also, the additional hauling time helped to reduce the construction time.

ATTACHMENT 3.4.1(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Completion Date (Original)	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
R-4463B NC 43 Connector (Design-Build) Craven County, NC	S.T. Wooten	North Carolina Dept. of Transportation Phone: 919-707-6601 Rodger Rochelle, PE Phone: 919-707-6601 Email: rdrochelle@dot.state.nc.us	July 2010	June 2009 (finished early)	\$39,000	\$42,200 (includes approved change orders)	\$3,400

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



RK&K ROLE

RK&K 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

This project is an excellent example of multiple agencies, municipalities, businesses and local stakeholders working together to benefit the local economy. The State offered a major appliances corporation an incentive package to stay in State and expand its facilities. This roadway would allow products to be more quickly/efficiently delivered to the distribution center and remove truck traffic congestion from two heavily traveled routes.

Due to RK&K's innovation designs and responsiveness to task assignments, this project was successfully completed nearly 13 months ahead of schedule. RK&K was responsible for nearly all engineering services.

Highway/Roadway Design: This project was a four-lane facility with a 46-foot median extending from US 70 to NC 43/NC 55. A diamond-type interchange with one loop was provided at US 70. The loop was elongated to allow the existing utility transmission poles to retain their existing alignment and remain inside the loop. This innovative design resulted in a substantial cost savings to the NCDOT.

RK&K was also responsible for preparation of traffic control plans, pavement marking plans and signing plans. RK&K's engineers optimized the gradeline for the NC 43 Connector to reduce borrow, to reduce wetland impacts, to minimize undercut, and to maintain positive drainage which reduced the initial construction cost of the project and will also minimize long-term future maintenance costs.

PROJECT FEATURES/NARRATIVE CONT.

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 outfall 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

VERIFIABLE 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 with the Railroad Company very early in the design process is crucial to staying on schedule.
2. Early coordination with commercial property owners adjacent to the project is very important because of possible future development.
3. The importance of checking proposed R/W and easement needs for all temporary pavements and temporary drainage early in design development.
4. Perform interdisciplinary reviews before all design submittals.
5. Regularly scheduled meetings during design are essential and should include all subconsultants.