





3.2 Letter of Submittal



Jeffrey A. Roby, P.E., DBIA

Address: Alternate Project Delivery Division Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219 Re: Statement of Qualifications: I-64 Southside Widening and High Rise Bridge, Phase 1
State No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638
Federal No. NHPP-064-3(488)
Contract ID No. C00106692DB93

Dear Mr. Roby:

- **3.2.1** Granite/Parsons/Corman, a Joint Venture (GPC), 120 White Plains Road, Suite 310, Tarrytown, NY 10591, is the legal entity who will execute the contract with VDOT and submits the following:
 - One original Statement of Qualifications, with full supporting documentation.
 - Ten abbreviated copies of the Statement of Qualifications.
- One CD-ROM containing the entire proposal in a single cohesive Adobe PDF file.

3.2.2 Point of Contact	Secondary Point of Contact	3.2.3 Principal Officer
Peter Temple, Project Executive	Brian Quinlan	Michael Donnino,
Granite Construction Company	Parsons Construction Group Inc.	Attorney-in-Fact
120 White Plains Road, Suite 310	1499 W. 120th Ave, Suite 200	Granite Construction Company
Tarrytown, NY 10591	Westminster, CO 80234	120 White Plains Road, Suite 310
tel: (914) 606-3639	tel: (202) 775-3328	Tarrytown, NY 10591
fax: (914) 631-1403	fax: (202) 775-3300	tel: (972) 874-8724
peter.temple@gcinc.com	Brian.Quinlan@parsons.com	mike.donnino@gcinc.com

- 3.2.4 Granite/Parsons/Corman, a Joint Venture (GPC) is a construction joint venture (CJV) of Granite Construction Company (Granite), Parsons Construction Group, Inc. (PCG) and Corman Construction, Inc. (Corman). GPC will share financial responsibility for the Project. Granite, PCG, and Corman will be jointly and severally liable with no limitations. GPC will provide a single 100% performance bond and single 100% payment bond. Evidence that our Joint Venture (JV078) has been approved by VDOT can be found in the Appendix.
- **3.2.5** Lead Contractor: Granite/Parsons/Corman, a Joint Venture. Lead Designer: Parsons Transportation Group, Inc.
- **3.2.6** Affiliated and Subsidiary Companies Table (Attachment 3.2.6) is included in the Appendix.
- 3.2.7 Certification Regarding Debarment Forms (Attachments 3.27(a) and 3.27(b)) are included in the Appendix.
- **3.2.8** The CJV number is # JV078.
- **3.2.9** GPC's surety letter is included in the Appendix.
- **3.2.10** SCC and DPOR information are in Attachment 3.2.10 and supporting documentation are included in the Appendix.
- **3.2.11** GPC is committed to achieving an 8% DBE participation goal for the entire value of the contract using a combination of consultant DBE firms and construction DBE firms.

Sincerely,

GPC Authorized Representative

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3.3 Offeror's Team Structure



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Our construction team (referred to as "GPC" or the "GPC team") is an integrated joint venture composed of Granite Construction Company (Granite), Parsons Construction Group, Inc. (PCG), and Corman Construction, Inc. (Corman). The GPC team was formed based on our shared core values. management styles, and depth and availability of key resources and personnel, as well as on our successful history of working together on projects such as the Intercounty Connector – Contract A (ICCA) project in Maryland and the Woodrow Wilson Memorial Bridge project in Virginia. Granite, with its extensive experience in similar road and bridge projects, is leading the joint venture. Granite is currently ranked #2 and #6 by ENR in domestic roadway and bridge construction, respectively.

Figure 1: Offeror's Team Structure

Team Member Firms Team Member Firms GCC Granite Construction Company Parsons Construction, Inc. Corman Construction, Inc. PARSONS Parsons Transportation Group Inc. CKI & Associates, Inc. (DBE) Rummel Klepper & Kahl (RKK) Schnabel Engineering, LLC Athavale, Lystad & Associates, Inc. (DBE) H&B Surveying and Mapping, LLC (DBE)

Our construction joint venture (CJV) has subcontracted with Parsons Transportation Group

Continental Acquisition Services, Inc Hassan Water Resources, PLC (DBE)

Accompong Engineering Group (DBE)

Seventh Point, Inc.

Kerr Environmental Services Corporation (DBE)

(PTG) to develop the design. PTG has, in turn, selected subconsultant design firms including Rummel Klepper & Kahl (RKK) and Schnabel Engineering, LCC to complete the design team. We've provided a complete list of our design team members in Figure 1. PTG and its design team members all have extensive experience working on design-build projects with VDOT and will provide valuable personnel and resources required to successfully execute the project.

Senior management from the firms leading the GPC team have committed to work as a single team focused on the successful delivery of the project. The narrative that follows describes our key personnel committed to this project by our team members.

3.3.1 Key Personnel

The following Key Personnel Resume Forms and Key Personnel Reference Forms are included in the Appendix:

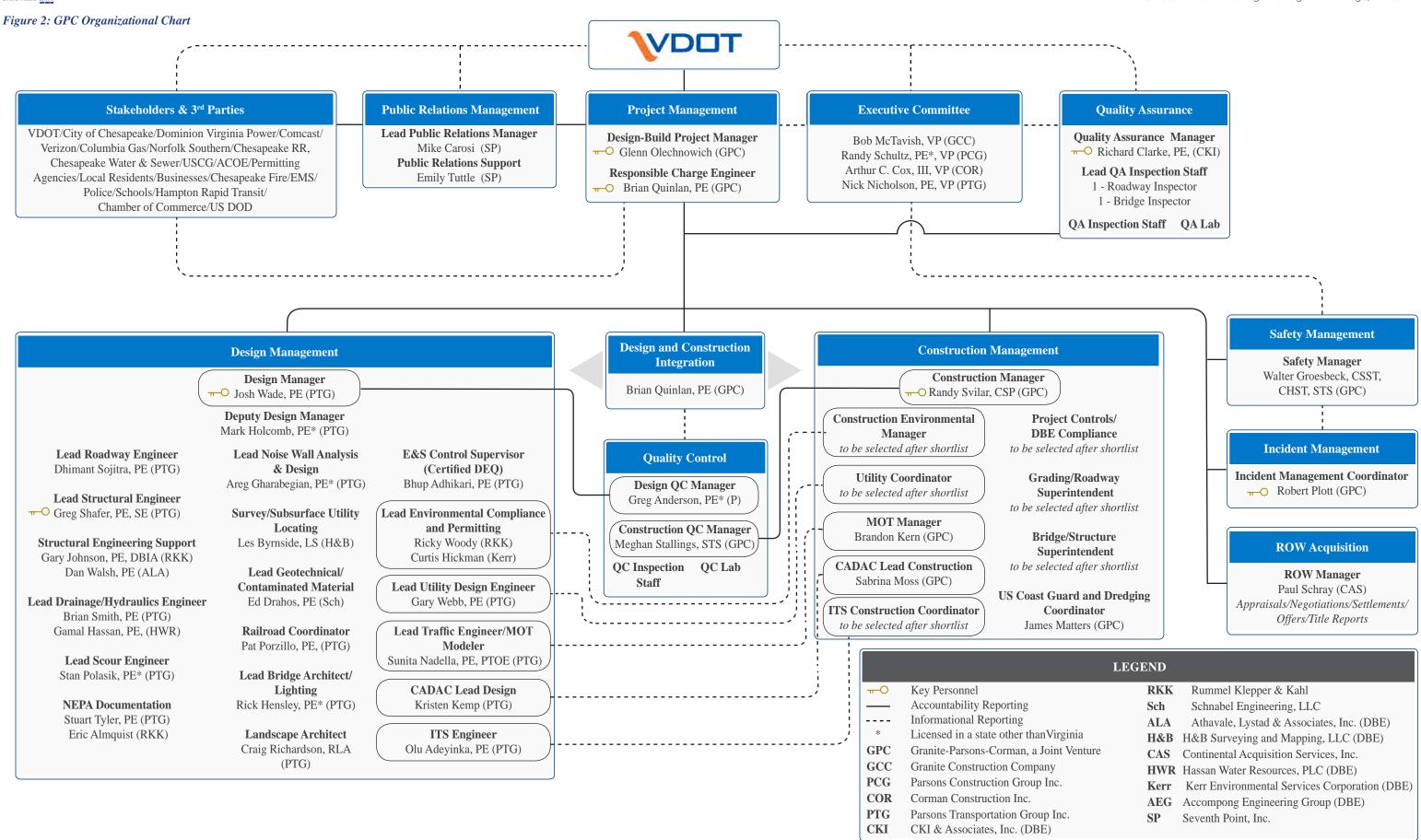
- Design-Build Project Manager (DBPM) –
 Glenn Olechnowich
- Responsible Charge Engineer (RCE) Brian Quinlan, PE
- Quality Assurance Manager (QAM) Richard Clarke, PE
- Design Manager (DM) Josh Wade, PE
- Construction Manager (CM) Randy Svilar, CSP
- Lead Structural Engineer Greg Shafer, PE, SE
- Incident Management Coordinator (IMC) Robert "Danny" Plott

3.3.2 Organizational Chart

Functional Relationships and Communication among Participants

Our organization chart, illustrated in Figure 2, GPC Organizational Chart, illustrates our "chain of command." The chart depicts our accountability and reporting requirements with solid lines, while dashed lines indicate required informational reporting. All







key personnel required by the RFP are noted on the chart. The chart also shows that a clear separation exists between QA/QC and construction, with no contractual relationship and no involvement in construction operations including QC inspection and testing.

During the project's early stages, our Construction Management, Safety, and Quality teams will work side by side with our RCE, Design/Construction Integrator, and Lead Designer, PTG, to develop an efficient, constructible design that meets all of VDOT's requirements. Once design is complete and construction begins, our construction team will expand its office and field support staff to facilitate the work while our designer, PTG, transitions into a support and compliance role (using its design staff to monitor work and provide feedback on any design questions that may arise) for the construction team.

The text below describes the roles, responsibilities, and reporting structure of our key personnel through the life of the project.

Integrate to Facilitate

Our CJV members have a long history of working together. Thus our team will hit the ground running and not have any learning curves or communication challenges. Taking this one step further, with PCG represented in the CJV, the PTG design team will be better integrated into the team and communication will be enhanced while costs will be reduced. We will also use additional techniques, processes, and practices to further increase this integration and reduce turnaround times as well as enhance our ability to get it done right the first time.

These additional techniques, processes, and practices include the following:

- Partnering will be invaluable on this project as it will help all sides (VDOT, GPC team, the City, and other major stakeholders) understand each other's needs, including how, what, and when to communicate to whom (such as issue resolution), and what it takes to get jobs of this magnitude done successfully.
- Taking maximum advantage of the leadership of the RCE, Brian Quinlan, PE, who will ensure that the interaction between GPC's construction sub-organization and the designer

sub-organization, as well as all other sub-organizations, on the team occurs in a timely manner and with concerns openly discussed. Having a dedicated Design/Construction Integrator such as this during design eliminates subsequent delays or rework, streamlines reviews, and eliminates potential construction field issues, thus facilitating delivery of a superior project on time and on budget.

- Interdisciplinary design reviews prior to milestones to coordinate design disciplines.
- Constructability reviews of design, especially for MOT, E&S Control, and Utility Plans.
- Weekly scheduling meetings to review the previous week and develop 3- and 4-week lookaheads.
- Monthly scheduling meetings to review CPM progress.
- Weekly foreman meetings to discuss safety, schedule, and coordination.
- Morning huddles with the crews to set daily safety and production goals.
- Weekly progress meetings with VDOT to review and discuss submittals and progress.
- Biweekly contractor coordination meetings with adjacent contracts, EMS, Police, etc.
- Design package narratives to help explain to reviewers at all stages what is being included in the package for review, what stage and what is expected from the review.
- Comment resolution processes that include package walk-throughs; comment and proposed resolution discussion; and agreement and comment resolution review (including pageturns showing the final resolution).

Senior Management (Executive Committee) Roles and Responsibilities

GPC's senior management will be responsible for achieving VDOT's objectives. The key personnel in this group are directly responsible for design, construction, quality, safety, and environmental compliance. DBPM Glenn Olechnowich is the main point of contact and will represent the design-build team on all critical issues. GPC's



Executive Committee is responsible for ensuring overall project success through regular review, by providing additional project resources as needed, and by resolving issues. Through regular meetings with VDOT, the Committee will verify that all goals are being met and also take action to help the project team if necessary. The Committee will also ensure that quality, safety, and environmental suborganizations are allowed to function independently from design and construction management. Continuous coordination among all senior managers in this group will provide the foundation for overall design-build team unity.

DBPM, Glenn Olechnowich, is responsible for overall project design, construction, quality management, and contract administration. He will be available to VDOT, and he has the expertise/ experience to supervise and exercise control of the work, as well as accept responsibility for the final work product. He will be VDOT's primary point of contact and will coordinate, integrate, and administrate the GPC team, including design, construction, quality assurance, MOT, safety, and utilities. He will supervise the DM, RCE, Design/ Construction Integrator, CM, Public Relations Manager, ROW Manager, QAM, Safety Manager, and the IMC. He will manage all efforts from preconstruction, design, and construction through punch-out. He will assist with constructability reviews and safety audits, and oversee the quality management program, purchasing, and construction operations. Partnering with the Public Relations Manager, he will be responsible for the team's thirdparty communication.

The remaining key members of this group will manage each of GPC's design-build sub-organizations, discussed individually in this section.

Construction Sub-Organization
The construction management team combines the capabilities of personnel from Granite, PCG, and Corman into a single organization: GPC, a Joint Venture. This group will manage construction of all temporary and permanent work. GPC's CM, Randy Svilar, will be responsible for completing all of the project's construction work on time and in accordance with requirements. This includes resolving issues as they arise, owner and stakeholder

coordination, ensuring efficient communication and resource sharing between segment teams, and ensuring coordination with all other suborganizations.

CM Randy Svilar has 30 years of on-site experience, during which he progressed from a Bridge Foreman to a Superintendent to a Senior Superintendent on transportation projects, including design-builds. He has the hands-on experience to manage construction, including QC activities to ensure that materials and work meet contract requirements and "approved for construction" plans/specifications.

On this project, the RCE, Brian Quinlan, will be the design and construction integration lead. He will report directly to the DBPM and serve as a liaison between the design and construction teams. As the RCE, he will be directly involved in the direction and decision making of both design and construction, ensuring that everyone is speaking the same language and making fully informed decisions (and not making decisions based solely on their view point). He will be informed and knowledgeable on all aspects of the project and be able to communicate regularly with VDOT, including with the authority to act on behalf of design-builder and shut down the project if warranted.

RCE, Brian Quinlan, PE reports to the DBPM with lines of communication to the DM, CM, QAM, and Safety Manager. He has the necessary expertise and experience to supervise and exercise a degree of control for design and construction, including the work of subcontractors and subconsultants. He is a registered professional engineer in Virginia, with 23 years of experience overseeing design and construction activities (and can answer detailed questions related to both). He will be co-located with the design team and continually coordinate with it, reviewing designs, ensuring that proper constructability reviews are completed, and ensuring that timely decisions and directions are made. He will also ensure that the engineering plans are developed according to proper standards and procedures as well as stamped and sealed by qualified professionals. During construction, he will be involved with construction reviews and task



forces, and he will coordinate engineering resources as needed.

Quality Assurance Sub-Organization The OAM, Richard Clarke, is from CKI, an independent firm that has no contractual relationship with the quality control (QC) firm and no involvement in the project's construction operations (to include QC inspection and testing). He will be responsible for the quality assurance (QA) inspection and testing of all materials used and work performed on the project, to include monitoring of the contractor's QC program. He will be on the project site full time for the duration of construction operations. He will ensure that all work and materials, testing, and sampling are performed in conformance with the contract requirements and the "approved for construction" plans and specifications. He will ensure all VDOT-required paperwork is completed accurately and on time including certifying the application for payment by the DBT.

QAM, Richard Clarke, PE reports to the DBPM and will have direct, independent access to VDOT. He will ensure that work is performed in conformance with contract requirements and "approved for construction" plans/specifications. He will be responsible for the development of and adherence to the QA Plan, QA inspection and testing of all materials used, and work performed. As an independent entity, he will audit and monitor the GPC team's Construction QC Program. He can stop construction, enforce compliance with specifications, and issue and require resolution of Non-Conformance Reports (NCRs). He will manage the QA program, including the QA inspectors and independent QA testing firm and testing technicians. The QA team will include a minimum of two lead QA inspectors (one for bridge elements and one for roadway elements) that will be assigned to the project and be on site full time for the duration of construction operations. Additional QA inspectors will be brought on as needed to meet the project schedule. As part of his duties, Richard will conduct independent and concurrent tests and analysis of the work by the construction QC team. He will maintain project quality records, and approve/submit pay estimates. He will also submit monthly written

reports to VDOT's project manager and the JV's Executive Committee.

Design Engineer Organization GPC's proposed design

GPC's proposed design management structure will report directly to the DBPM and will be responsible for all design. DM Josh Wade will lead this sub-organization. GPC's design sub-organization will be structured to produce design work packages to support our construction organizational approach. Design packages will be assembled based on the work activities handled by one of the three proposed segment construction teams, and in accordance with the project schedule. Discipline leads have been assigned to ensure consistent design across the project.

DM Joshua Wade, PE, reports to the DBPM and will provide a quality product and input into the schedule, and meet design milestones and interfaces. Along with the Design QC Manager, Josh will establish and oversee the QA/QC program for the pertinent disciplines involved in the design, including review of design, working plans, shop drawings, and specifications. He will manage the design and assign resources, oversee design subconsultants, coordinate design and review schedules, develop and implement corrective measures, if necessary, and integrate environmental compliance measures into the design. He will remain involved once construction starts to oversee any plan modifications and shop drawings, and he will review construction progress with the CM. Josh has worked with all three CJV members in a similar capacity on such design-build projects as the \$560 million ICC B in Maryland and with VDOT on I-64/Route 15 (Zion Crossroads) DDI and Military Highway CFI.

Lead Structural Engineer Greg Shafer, PE, SE reports to the DM. With his 30 years of experience,

Greg knows how to develop and manage structural design teams for design-build projects of this size and complexity, such as the John James Audubon Bridge in St. Francisville, LA. He will report to the DM and oversee all structural design on the project including the High Rise Bridge; the replacement of the bridge on Great Bridge Boulevard; the widening of overpasses; retaining walls; special drainage structures; and even sign, signal, and wall foundations. He will develop a structural work plan



and schedule to meet the overall project schedule and goals. This work plan will include structural design teams with task leaders. These task leaders will report directly to him. As a team, they will ensure that the structural plans are developed from concept through final design including QA/QC. This will include breakout packages to allow phasing of the construction work as required to meet the overall construction schedule. Greg will participate in multidisciplinary, environmental, constructability, and safety reviews of each structural package as well as packages from other disciplines. This will help to reduce rework, conflicts in the field, and impacts to resources, and help to optimize the overall solution. He has worked with all three CJV partners in a similar role on such projects as the \$463 million ICC A in Maryland and the Woodrow Wilson Bridge in Alexandria, VA.

Other key design staff include:

Deputy Design Manager, Mark Holcomb, PE*

will report to and assist DM Josh Wade with overall design management including task force coordination, work package development, and overall schedule compliance. Mark brings 35 years of major bridge and roadway project management including recently completing the \$850 million SH 183 Managed Lanes design-build project that consisted of 13 miles of interstate-level roadway and bridge widenings and installation of managed lanes. Prior so SH 183, Mark served as the DM for the \$240 million Fore River Bridges drawbridge replacement project and the \$478 million ICC A with Granite and Corman.

Lead Roadway Engineer Dhimant Sojitra, PE

will report to DM Josh Wade, and will ensure all of the roadway construction packages are developed to a consistently high quality across the corridor. He will ensure that the geometrics are developed to VDOT and AASHTO standards and that all information needed for proper reviews and construction are developed and shown correctly in the plans. He will lead the design efforts during roadway task force meetings and represent the roadway discipline during coordination meetings and interdisciplinary reviews. Dhimant brings 27 years of experience leading roadway projects including serving as deputy DM on several VDOT

design-build projects under Josh such as the I-395 HOV Ramp and Auxiliary Lane, I-64/Route 15 (Zion Crossroads) DDI, and the Military Highway CFI in Hampton Roads.

Lead Geotechnical and Contaminated Material Engineer Ed Drahos, PE will develop the geotechnical reports and recommendations for the project including the foundation analysis and requirements. He will also lead the contaminated soils investigations efforts. Ed has experience in geotechnical engineering and pavement design on multiple VDOT projects, including many in the Hampton Roads District that included soft soil characterization using various methods of exploration and testing. He has recent experience evaluating embankment settlement and slope stability on several local projects, including the following:

- Dominion Boulevard in Chesapeake replacement bridge over the Southern Branch of the Elizabeth River; interchange improvements.
- VDOT's I-395 HOV Ramp, Route 1 widening at Ft. Belvoir; and most recently, the Military Highway CFI in the Hampton Roads District.
- Martin Luther King Expressway portion of the Downtown/Midtown Tunnel project in Portsmouth.

Kristen Kemp will oversee the CADAC efforts for the design team. Kristen has 12 years of document control experience and has been working with CADAC since 2012 when it was introduced by VDOT on the Downtown Tunnel/Midtown Tunnel/ Martin Luther King Extension project (DT/MT/ MLK). She worked directly with CADAC on the creation of the original three modules for VDOT. Referred to as Submittals, Correspondence; and Civil Rights, these original modules are the basis of all of the other CADAC modules in VDOT. Kristen has led numerous trainings of the DT/ MT/MLK modules for VDOT, FHWA, the GEC Project Staff, the Concessionaire, and the Design-Build Contractor's team. She continues to be the Document Control Manager for the DT/MT/MLK and assists VDOT on other projects including the GRTC BRT project and the I-66 Transformation project. Kristen attends the monthly VDOT CADAC



Administration Meetings and continues to evaluate new proposals from CADAC for processing through VDOT and yearly renewal of the software.

Safety Sub-Organization

Each of the CJV member firms has safety as a core value and, as such, GPC will prioritize safety. Walter Groesbeck, CSST, CHST, STS will serve as the project's Safety Manager. He is serving in this role for the Military Highway CFI in Hampton Roads and is a Construction Site Safety Master Trainer through the National Center for Construction Education and Research (NCCER), an authorized OSHA 10 and 30 Hour Outreach Instructor, and an American Heart Association BLS instructor.

The IMC will be Robert Plott, who will report to the CM and be responsible for responding to all incidents within the project limits. He will serve as VDOT's IMC, applying National Incident Management System (NIMS) principles and practices. He will be the key point of contact for issues arising relative to incident management and be required to be on site full time for the duration of construction operations.

Robert will coordinate with the EMS agencies in the corridor early and often. He has extensive experience with the Virginia State Police and his relationships with the local EMS agencies will provide seamless coordination and enable the responses to be focused and efficient to any incidents that occur on the project.

Description of the QA/QC Program

As GPC member firms have done on past VDOT design-build projects, we will develop a project-specific QA/QC Program that follows the minimum requirements for QA/QC on Design-Build and Public-Private Transportation Act Projects manual dated January 2012. This program details the QA and QC plans for both design and construction and includes staff roles and responsibilities, the overall processes and procedures, and how CADAC will be used to submit and document the project. The QC/QA program document will be submitted at the first meeting held after NTP. As is required, the project specific QA/QC Plan will document how QA and QC functions are distinct and separate from the construction production forces staff.

Design QA/QC

The design QA/QC program is the responsibility of DM Josh Wade. He will be responsible for coordinating the individual design disciplines to include design subconsultants and ensuring that the overall project design is in conformance with the Contract Documents. Design QC manager Greg Anderson will assist Josh in developing the project-specific design QA/QC program, which will include separate QA and QC plans. Greg is a proven quality professional with 37 years of experience including many VDOT projects such as the I-395 HOV Ramp and Auxiliary design-build project, I-64/Route 15 (Zion Crossroads) DDI, and Military Highway CFI in Hampton Roads District.

The overall purpose of the Design QA plan and program is to ensure that the QC is performed correctly and includes audits and oversight. Greg Anderson will lead the audits under Josh's direction and will include a signed conformance form with each submittal stating that the submittal has gone through the proper QC process.

Submittals will follow set milestones and will include those items needed, developed to the proper level of detail as per the project schedule and review requirements/needs. All will be documented through the LD-436 form. Prior to submission to VDOT, each package will have gone through design QC, constructability, environmental compliance, and safety reviews. RCE Brian Quinlan will coordinate these reviews to ensure that they are thorough and completed in a timely manner. This reduces potential conflicts, delays, and rework, and optimizes the overall solution and improvements.

Prior to submission, subject matter experts in each field (i.e., roadway, structural, H&H, and geotechnical) will review each package to perform the QC of submittals. These experts will not be directly involved in the design efforts so they will serve as an impartial and new set of eyes to perform an independent check of the design submittals. Their reviews are meant to ensure that quality standards are being met. This is done by checking the designs against the standards, checking the selection of suitability of materials, and ensuring the proposed work is constructible and can be completed safely and can be maintained.



PTG is ISO 9001 certified and follows strict procedures on how to check calculations and design packages. The documented check prints will be available to VDOT, Design QA, the RCE, and the QAM for review purposes. These documents often can assist in the comment resolution process by clearly showing the changes made to address comments.

The Design QA will then review each package. The Design QA reviewer, who is independent of the design QC, will sign off prior to submittal to VDOT. The QA will ensure that the design solution meets the contractual requirements, that the designs have been completed and reviewed by appropriately skilled staff, and that the designs meet all standards and contractual and legal requirements. The Design QA review will also ensure that proper standard of care has been taken in the design.

Comment resolution will include meetings with the reviewers, WebEx sessions, and phone calls as needed. The goal is to initially agree on the resolution of each comment and also to confirm that the resolution or change to the design has been made prior to resubmittal of the package. This will reduce the number of submittals, review times and increase overall quality of the plans. Once all comments have been resolved and Released for Construction (RFC) plans have been submitted, the title sheet will be signed off by the DM, DBPM, VDOT PM, VDOT DCE, and VDOT's chief engineer. The sheet will be marked Approved for Construction. The DBPM or CM will then request from the VDOT PM Notice to Commence Construction for each work package.

Construction QA/QC

CM Randy Svilar reports directly to the DBPM and is responsible for construction QC and for ensuring construction of the work in accordance with the QA/QC Plan.

The Construction QC manager, Meghan Stallings, will report to the CM and will assist the CM with management of the construction QC. Meghan has extensive experience with Federal and VDOT QA/QC programs on the DT/MT/MLK project and currently is serving as the construction QC manager on the nearby Military Highway CFI, both in the Hampton Roads area. She will oversee the process

and guide the QC testing and inspection technicians. These technicians are responsible for QC testing and/or inspection of items of work for conformance with QC plans and specifications.

Meghan will ensure that the C-25 forms are completed and submitted through CADAC and will make sure all shop drawing reviews are completed on time by the appropriate entities. For compliance at all phases of construction, she will use the threestage inspection strategy. This strategy starts with a preparatory meeting for all parties involved in the definable feature of work. Once the work has started, we perform an intermediate inspection, and upon completion, we perform a final inspection. This process also helps to lessen the items that would typically show up on a punchlist or a work-inprogress list. Meghan will use a spreadsheet to track the frequency of testing requirements for all quality parties involved (QC, QA, and IA/IV). This has proven to be one of the most useful tools. It shows the quantity of work performed each week, the total number of tests that should have been taken, and the total number of tests that were taken to ensure we are meeting the contract requirements.

Additionally, Meghan has oversight of the materials notebook process and sourcing of materials for the project. This includes oversight of the submission of the C-25s (source of materials) to the OAM or to VDOT (as required) for review and acceptance. She will ensure that the materials that arrive on the project are in compliance with the specifications, the contract documents, and all source-of-materials forms. Along with this sourcing process is the process of maintaining the materials notebook. The maintenance of the materials notebook is done by the QAM initially. Each month QC back-checks the notebook to ensure that everything has been entered correctly and all documents have been appropriately filed. This helps to ensure that there are no delays when the project reaches completion and VDOT reaches out to FHWA for the final signatures. This monitoring also helps confirm as the project progresses that all materials that are required to be "Buy America" have the appropriate paperwork for that certification.

The QC Manager will not be assigned conflicting duties and will operate independently from the



production work. QC testing and inspection technicians will hold current applicable VDOT certifications. Meghan will have the authority to stop individual construction operations that do not comply with the required quality requirements.

QAM Certification

The QAM will certify that each work package has been completed in accordance with the contract documents and that all required QA/QC tests, measurements, permits, or other requirements have been completed and all NCRs relative to the respective Work Package have been resolved before payment is approved by VDOT.

3rd Party Coordination

Many stakeholders are touched by this project, and each has different priorities and responsibilities. Our approach will be to tailor the communication for each of the major stakeholders and assign a coordinator/liaison who already has proven experience and a trusting relationship with the stakeholder. The major stakeholders on this project include the following:

- Utilities We have assigned a team of utility experts to manage and coordinate with the utilities including Gary Webb, PE for Wet Utilities during the design phase, and a fulltime project engineer during construction. The approach to the utilities will be early coordination to begin the process and to get the utilities into the project as smoothly as possible. We will develop and finalize master agreements with each utility as required and ensure that the utilities develop their P&E's on schedule and without conflicting other project elements. During construction we will have weekly and pre-activity meetings to ensure full coordination and, where needed, we will obtain additional permits for necessary relocations.
- Permitting Agencies Timely permitting is critical to the success of the project. The GPC team is pleased to have two experts with recent, direct experience working with the permitting agencies: Ricky Woody of RKK (who has 26 years of experience at VDOT as the Natural Resource Programs Manager) and Curtis Hickman of Kerr Environmental. Ricky

and Curtis will work with the full team and the permitting agencies to determine the permit needs and appropriate mitigation measures, and will obtain the final permits for construction operations. Ricky worked with Corman on the I-64 widening in Short Pump and the 29 Solutions project in Charlottesville. Curtis is leading the permitting efforts on Corman's Military Highway VDOT design-build project. The importance of this element of the project is further discussed in Section 3.5 (Risks).

- United States Coast Guard (USCG) As a navigable waterway, coordination with the USCG is critical to project success. The project may require dredging, for channel maintenance or construction activities, and may need management of access through or even temporary relocation of the channel. These types of requests and activities must be coordinated with the USCG. One of our CJV team members, Corman Construction's affiliate, Corman Marine, has its own dredging operations in the area and is currently leading the existing High Rise Bridge maintenance contract for VDOT. James Matters of Corman is deeply involved with these operations and with 35 years of experience with the USCG will ensure smooth communication and compliance.
- City of Chesapeake Throughout the project, the City of Chesapeake will need to be involved. The City will oversee the lane closure permit process and will likely be involved with plan reviews and other elements of the project. Gary Webb has 30 years of experience working in the Hampton Roads area and will assist with the coordination with the City on design issues. Emily Tuttle and Mike Carosi of Seventh Point will coordinate with the city and VDOT regarding press releases and interaction with neighborhoods and local businesses to ensure that they have up-to-date project information and to minimize impacts or inconveniences to them. Emily and Mike have been involved in many of the high-profile projects in the district including the Military Highway CFI.
- Transit Operators Hampton Roads Transit (HRT) operates bus lines in the area. Emily



Tuttle and Mike Carosi will coordinate with HRT to minimize impacts to their bus schedules and will coordinate any potential changes to bus stops within the corridor.

- Railroads The Norfolk Southern Railway Company (NS) and Norfolk & Portsmouth Belt Line Railroad operate and have facilities in the corridor. Timely and knowledgeable communication and coordination is needed to ensure that safe operations continue in the vicinity of these lines. Knowing the railroads' needs and requirements (such as insurance and clearance standards) is a must. Our Railroad Coordinator, Pat Porzillo, worked for NS for more than 10 years, managing capital programs. He has developed a thorough understanding of its business and needs. Pat currently manages Parsons' NS contracts and knows what is important to the railroads. He will ensure smooth coordination.
- Emergency Management Services (EMS) On any project, coordination with EMS is of utmost importance. This interstate project is no exception. Our IMC, Robert Plott, is a retired police officer with 37 years of experience in Virginia. His experience includes 28 years as a Virginia State Trooper in the Hampton Roads area. This experience, which includes the relationships he built as a Trooper and with the other EMS services, will ensure smooth and rapid coordination, improving the overall safety of the users, workers, and EMS providers during the project.

Communications Plan

Mike Carosi and Emily Tuttle of Seventh Point will develop the project's Communications Plan. As with any major transportation project, a proactive and comprehensive public outreach plan is essential. The key to any Communications Plan is strategically informing and engaging the public. Motorists and key stakeholder groups will be targeted by a comprehensive program including direct engagement, community meetings, e-newsletters, email updates, informational materials, advertising, and social media content. Throughout the project, key messages will be consistent, clear, and timely.

Communications materials will address the project's many safety and vehicular/pedestrian traffic flow benefits. Use of systems and programs such as Virginia 511, Highway Advisory Radio (HAR) 1680 AM, and the LCAMS system with Thursday morning coordination meetings is key to this plan.

The Communications Plan will lay out the following information:

- Communication objectives
- Identification of all stakeholders and the target audience
- Communication strategies
- Key messaging framework
- Identification of useful media
- Results-driven public outreach tactics
- Potential communication materials

A separate Crisis Plan will also be developed to ensure that the project team is prepared to clearly communicate with the public and key stakeholders when unexpected issues or crises arise — particularly in the immediate aftermath when accurate information is mixed with rumor and reactions are being sought. This plan will be based on our currently in-place plan for the Military Highway CFI project in Hampton Roads.

Commitment to Keeping the Team Intact

The GPC team commits to VDOT that we will keep our team intact for the project's duration. Our key personnel shown have a history of completing their projects. For example, DM Josh has been on all of his projects from day one through completion and closeout, including three design-build projects for VDOT.

I-64 Southside Widening And High Rise Bridge, Phase 1

3.4 Experience of Offeror's Team

Please see Appendix Tab, Work History Forms.



3.5 Safety



I-64 Southside Widening And High Rise Bridge, Phase 1

3.5 Safety

Please see Appendix Tab, Lead Contractor Safety Qualifications Form (Addendum No. 1 Form).



3.6 Project Risks



3.6 Project Risks

GPC uses a risk register and a structured sequence of analysis and management activities to identify and address the various project-related risks. The four steps to managing risk include the following:

- **1. Risk Planning and Identification:** During this pre-bid phase, we are actively identifying risk and creating a preliminary risk register.
- **2. Risk Assessment and Analysis:** Through a qualitative analysis, we identify, describe, and characterize risks.
- **3. Risk Response:** We have already developed a preliminary response action for each identified risk and have included here in this section three unique risks that GPC considers the most relevant and critical to the project's success.
- 4. Risk Monitoring and Control: The key to minimizing negative impacts from all risks is a partnership between VDOT and the Design-Builder through a regular joint review of the risk register during monthly progress meetings with timely, open, and honest communication.

GPC has reviewed the available information, visited the project area during various traffic conditions, spoken with our crews presently performing MOT for the rehabilitation of the existing High Rise Bridge, and jointly discussed the major project risks. With project risk being defined as an issue that has the potential to negatively affect the public, schedule, and/or budget, our team has identified the three most critical risks we anticipate facing during the Project.



The Interaction between Construction and the Traveling Public

Risk Identification

Improper management of the interface between project activities and vehicular, rail, and marine traffic is a serious risk when working on or near major roadways in a metropolitan area that bisect railroads and commercially navigable waterways. That risk is magnified by the magnitude of this widening project and the unique characteristics of this section of I-64 in this area including the seasonal variations in traffic.

In assessing this risk and developing mitigation strategies, the need to safely complete the work in a timely manner must be weighed against the need to maintain safe and continuous traffic flow through the corridor.

Why This Risk Is Critical

This MOT risk is considered critical because of the I-64 corridor's importance to regional mobility, evidenced in the project area on a daily basis by heavy usage and long traffic backups in both directions. Two of the primary causes for these chronic traffic problems are: (1) this is the only unwidened section of the Hampton Roads Beltway; and (2) there are limited alternative routes. More specifically:

- This I-64 corridor is a major commuter route serving more than 85,600 vehicles per day, including heavy usage by commercial trucking.
- The south branch of the Elizabeth River is a physical barrier to east-west mobility because no nearby alternate high-speed river crossings exist. However, Dominion Boulevard and South Military Highway provide signalized alternate routes that are about 1.5 miles and 1 mile away, respectively.
- This 7-mile east-west stretch of I-64 is a physical barrier limiting north-south movement of local traffic to five locations: Yadkin Road, Route 17, Shell Road, Bainbridge Boulevard, and Great Bridge Boulevard.

Because the I-64 corridor (within the project limits) is already subject to severe congestion, the challenge is to manage the MOT interface between construction activities and the motoring public so as not to unnecessarily exacerbate this condition. Work activities that will create potential friction points affecting the movement of motor vehicles include the following:

- Interior and exterior mainline widening.
- Bridgework over the transverse local streets, as well as work on the new mainline bridge where it parallels Libertyville Road.
- Reconstruction of Great Bridge Boulevard, especially the bridge over I-64.



Potential Impacts from the Risk

The potential project impacts of improperly mitigating the MOT risk include the following:

- Unacceptable worsening of traffic congestion.
- Increased frequency, severity, and duration of traffic accidents.
- Dangerous working conditions for project personnel.
- Schedule disruption due to inefficient sequencing of and access to work.
- Interference with rail traffic at two separate crossings and marine traffic on the Elizabeth River.

Any (or all) of these impacts would likely lead to a negative public perception of project.

GPC's Mitigation Strategy

Mitigation of the MOT risk requires a systematic approach to the planning of work zones and of means and methods, and monitoring the results and then modifying the plan as required. The focal points will be the tie-in points, interior roadway widening that occurs primarily west of the river, the exterior roadway widening at the approaches to the existing and new Elizabeth River Bridges, the bridge work over local roadways, and the bridge work over the I-64 mainline.

As with any major transportation project, a proactive and comprehensive public outreach program will keep the public and all key stakeholders fully engaged and informed throughout the project's life. VDOT research shows that motorists want to be informed, in advance, of major road impacts so they can have control over their travel experience. The VDOT Lane Closure Advisory Management System (LCAMS), a part of the VDOT 511 Virginia Traffic Information System, provides a collaborative method to plan and monitor projects, resolve conflicts, and exchange information about existing scheduled activities for this project. GPC, through its MOT Manager, will provide systematic updates to LCAMS for any traffic-related changes within the construction corridor to keep the traveling public consistently updated. In addition, traffic enforcement zones will be set up before and after the work zones

to reduce the need to perform traffic stops within work areas or lane closures. These enforcement zones will also include the staging of tow trucks for quick response to accidents. Our IMC, Robert Plott, will also manage regular weekly meetings with the state police and EMS agencies in the area to update them on and discuss work zone changes and overall project activities on the project. This will also include potential detours that may be needed during potential incidents that could occur in the up-coming week.

The MOT mitigation strategy at tie-in points and the interior widening will be to maximize the amount of work done in a static, barrier-protected, median work zone, while minimizing project-related disruption outside the work zone. This static work zone will provide positive protection for workers and day-today predictability for motorists. Preparatory work for establishment of this work zone will include evaluation of the load-bearing capacity of exterior shoulders and verification that adequate provisions are being made for temporary drainage that prevents the unsafe accumulation of standing water or ice in travel lanes. These preliminary engineering efforts are needed to avoid recurring maintenance and/or emergency interventions in the travel lanes while the work zone is in place. Consistent with these efforts to avoid remedial work in travel lanes, GPC will also seek to minimize the frequency and overall timeframe of mainline lane closures for planned contract work like setup/removal of the work zone and paving operations. GPC will also give careful attention to friction points at the interface between the work zone and operating roadways through remedies such as providing offline acceleration/ deceleration lanes for construction traffic so as not to impact the travel lanes, scheduling deliveries at offpeak hours (preferably nights), and providing access from the cross-streets where possible.

The MOT mitigation strategy for the exterior widening in the vicinity of the river is philosophically consistent with the measures used for the interior widening that typifies most of the alignment, although it does require a different approach to sequencing and access. The defining MOT feature for this exterior widening will be the static work zones set up on both sides of the river



for the new High Rise Bridge and its approaches, but the sequencing to establish that work zone is worth noting. In particular, the preparatory work for this work zone is not just shoulder evaluation/ strengthening for hard shoulder running in a temporary traffic pattern. Rather, it requires full execution of the exterior widening/realignment of the existing I-64 roadway in order to develop the full footprint for the static work zones. Thus, this reconstruction work on the northern side of the corridor will be prioritized. Access to the work zone on the western bank of the river will typically be via I-64 eastbound. There is more flexibility on the eastern bank because of the surface streets, particularly Bainbridge Boulevard. Another source of flexibility is the navigable channel of the river.

GPC will explore and likely adopt marine delivery as a delivery route for beams and other material used in the construction of the High Rise Bridge. Corman Marine's equipment and experience will prove invaluable in exercising this alternative.

The MOT mitigation strategy for bridge construction activities that cross over local roads (and railroads) is generally more typical. The focus will be on deploying lane shifts or using positive measures such as shielding to separate construction activities from motorists. Where this is not possible for activities like beam erection, nighttime closures with appropriate detours will be used. One atypical facet of this MOT risk is the longitudinal proximity of Libertyville Road to four spans of new High Rise Bridge. This will be a challenge from start of the foundations through completion of the superstructure. For noisy foundation work this will typically mean nighttime positioning of equipment to support daytime construction activities in work zones adjacent to Libertyville Road. Conversely, for events like beam erection and concrete pours, it will mean nighttime closures of portions of Libertyville Road, while maintaining access to the adjoining residential area.

The MOT mitigation strategy for the construction of the new bridge and removal of the old bridge where Great Bridge Road crosses the I-64 corridor is also straightforward. The approach work can be largely isolated from the motoring public because it follows a new alignment. GPC anticipates a weekend cutover to minimize disruption when the roadway is put into service. As for the bridge work above I-64, methods will be similar to those employed for widening I-64 mainline bridges over local roads, although the requirements for I-64 lane closures will be more demanding.

In addition to employing preventive measures, GPC named retired State Trooper Robert Plott as the IMC to mitigate the impact of any MOT incidents. As the IMC, Robert will draw on the experience he gained as an active trooper assigned to similar situations and as the Incident Manager overseeing the VDOT Statewide Safety Patrol program for Parsons.

The GPC team is well equipped to implement these mitigation strategies for VDOT as demonstrated nearby on the Military Highway Continuous Flow Interchange project and on the I-395 HOV Ramp at Seminary Road and Auxiliary Lane Extension. Clearly, we have the requisite blend of local knowledge and of expertise in designing and building high-volume urban interstates—a blend that is required to effectively mitigate the risk of major traffic disruptions associated with the project.

Role of VDOT and Other Agencies

VDOT's role in implementing the MOT risk mitigation strategies will be to review and ultimately approve the Traffic Management and Public Outreach Plans and, using existing VDOT technology, to disseminate GPC-supplied information about project progress, schedule, and events, as well as to monitor our implementation.



Risk Identification

Obtaining the required water quality permits without any major delays is one of this project's greatest risks. The project requires individual water quality permits from USACE, DEQ, and VMRC because of unavoidable impacts to both tidal and non-tidal streams and wetlands. Protected species may potentially be found within the project corridor,



and dredging and dredge material management and disposal will be prominent issues in the permitting process. In addition, VDEQ will need to issue their Coastal Zone Management Consistency Determination (CZM), which is required prior to the DEQ or USACE issuing their individual permits. Because the project is a design-build project and the Design-Builder may be required to serve as the applicant, it will be important to provide easement documentation early in the permit review process to document that all permanent and temporary impacts to wetlands and waters will be within easements held by VDOT. This step is important to maintain the governmental exemption for review by the Local Wetlands Board (LWB). In this case, since the City of Chesapeake does not maintain an LWB, the VMRC would step in to perform the required LWB permitting responsibilities for the City.

Why This Risk Is Critical

This environmental permitting risk is considered critical for the following reasons:

- No land disturbance within 50 feet of jurisdictional determined wetlands can occur without the required permits and, because this project includes a major water crossing, most of the new disturbance will be in the vicinity of these protected areas.
- The USACE, VDEQ, and VMRC will each require separate public notices as part of their permitting process.
- These separate water quality permit processes have defined specific information requirements for the permit application and have regulatory defined time periods of review/evaluation.
- Permit decisions will result in compensatory mitigation requirements regarding wetlands and stream impacts, threatened and endangered species, and water quality.
- This process of working with multiple permit agencies provides an increased opportunity for additions or modifications to the environmental commitments contained in the project's NEPA documentation.
- Besides the potential significant increase to permit or mitigation costs, an overarching risk is

that these permit agencies could deny the permit for the proposed project or delay application review for extended periods of time.

Potential Impacts from the Risk

The water quality permits from the USACE, VDEQ, and VMRC are required prior to starting construction in jurisdictional areas. The impacts from this risk include schedule and cost and are as follows:

• During the water quality permit process, there is always a strong potential that agencies will introduce significant new impacts to cost, schedule, and scope. These impacts can originate from the required coordination with reviewing agencies or the extent of impacts to a myriad of natural resources identified within the project corridor in the NEPA documentation as well as resources not identified in the NEPA documentation, such as the example below.

Example: The Atlantic Sturgeon critical habitat designation public comment period closed on September 1, 2016. Under this public notice, the James River from Bosher Dam downstream to where the main stem discharges into the Chesapeake Bay would be considered critical habitat. NOAA's final decision on the final critical habitat limits for this species could require project and regulatory agency permit conditions not presented in the current FONSI.

 The permit process for the High Rise project will require actions to avoid or minimize impacts to the tidal and non-tidal wetlands and streams identified within the project corridor.

On Corman's and RKK's Route 29 Solutions design-build project, during the permit acquisition process, it was discovered by the project team that there was a recorded Stream Conservation Easement that was not previously identified in the NEPA documentation. Discovering this early in the process allowed the team to mitigate the impact to the schedule and still complete the work on time.

 Due to the industrial activities in the area, there are waters on the High Rise project site that



VDEQ considers impaired. This could increase testing requirements of the dredge material, increase permitting time, and reduce the available dredge disposal options.

- The permit process has the ability to make a resource agency recommendation into a regulatory permit condition changing the project scope. The issues noted below for other Corman projects around the Commonwealth are examples of issues that were not included in the RFP pre-bid NEPA documentation and could have adversely impacted schedule.
 - On the I-64 Widening design-build project, the coordination with VMRC required additional documentation from Goochland County showing concurrence with the project's hydraulic analysis for the project's bridges.
 - On the Route 29 Solutions project, the
 USFWS federal listing of the Northern Long
 Ear Bat required additional surveys and timeof-year restrictions on tree-cutting on the
 project that were not identified in the project's
 environmental documentation. Also on that
 project, the EPA recommended (and USACE
 made it a permit condition) upsizing the
 culverts and providing flatter side fill slopes
 to accommodate wildlife and aquatic passage
 throughout the project corridor.

These actions affected the project scope, schedule, and costs beyond what was considered in the project's NEPA documentation.

GPC's Mitigation Strategy

Although the GPC team has proven experience with regulatory agencies and permitting processes, we must be proactive in anticipating the needs and critical pathways of each permitting agency because doing so is critical to keep the permitting timeline on track. At each of our weekly progress meetings, our DBPM and Design/Construction Integrator will closely monitor the progress of the permit process. Our team has current and relevant experience to quickly identify challenges early and to collaborate to achieve consensus on appropriate avoidance and minimization actions that will result in securing the required environmental clearances and water quality permits within the project schedule.

We will have informal discussions with the regulatory agencies early on in the process to ensure complete understanding of their expectations on regulated environmental resources within our project limits and as well as complete understanding of the applicant's expectations regarding schedule. During these early meetings with the permitting agencies, we will present the option of combining multiple agency permitting and review into a joint permit process. We will also explore utilizing joint USACE, VDEQ, and VMRC public notices and meetings.

We will use pre- and post-application meetings as the project progresses to minimize and manage environmental risk. Our environmental team developed and uses an Environmental Compliance Matrix (ECM) that contains listings of all environmental commitments for each project phase based on the NEPA documents, special provisions, water quality permits, and other project documentation. The ECM outlines our approach to avoid and minimize potential impacts to environmental resources as well as potential impacts to the project schedule throughout the project's design and construction. The ECM is our lead environmental management tool, which defines the procedures for achieving environmental milestones and establishes a program of monitoring, reporting, and tracking of those milestones. Each environmental milestone is established as a hold point in the project schedule to ensure that any regulatory issues that may arise are dealt with quickly and efficiently.

Our environmental team has implemented the ECM approach on the I-64 Widening and Route 29 Solutions design-build projects with great success. We completed the design and construction of the projects in compliance with environmental commitments and without delays due to acquisition of environmental clearances or water quality permits. On the ICC A project, led by Granite (which included Corman, PTG, and Schnabel), the ECM database included over 300 commitments and was used for environmental reviews of each design package and daily pre-activity meetings ensuring full compliance.



Our environmental team will also work with the design and construction teams to establish and refine the environmental constraints mapping for the project to focus in on those areas where avoidance and minimization evaluation will occur prior to permit application submittal. Using this mapping during the design and permit acquisition process, we will meet and work with the regulatory agencies to further avoid and minimize the impacts to the jurisdictional areas and prepare restoration approaches for temporary impact areas.

GPC's environmental team used this mapping and agency coordination approach on the I-64 Widening and Route 29 Solutions design-build projects to establish projects that are permittable prior to submitting the Joint Permit Application.

During the project design, our team will continue to identify avoidance and minimization techniques for the natural resources and present the findings to the regulatory agencies during pre-application meetings. Our team is experienced in recognizing and effectively analyzing avoidance and minimization techniques to the environmental resources prior to determining the final project design features and preparing the permit application and required compensatory mitigation package for impacts to these resources. An analysis of available dredge disposal option will be conducted starting at NTP and presented to the regulatory agency during a preapplication meeting.

Already, our environmental team has determined that the Route 13 interchange will require avoidance and minimization design efforts because the 12 acres of non-tidal forested wetland are the largest area in the project corridor.

This project's impacts to wetlands and waters of the United States will be extensive. Providing the required compensatory mitigation may be a challenge depending on the final unavoidable impacts required and the approved credits available at the time the project goes to construction. GPC will determine if sufficient non-tidal wetland mitigation credits are currently available from approved mitigation banks in the watershed. Our research has already indicated the following:

- Only limited tidal wetland mitigation credits are available from the Libertyville Tidal Wetland Mitigation Bank located within the project area.
- Additional tidal wetland credits are available at the VDOT Goose Creek Mitigation Bank, which is also located within the project vicinity.
- Stream mitigation credits are not available from private mitigation banks but are currently available from the Virginia Aquatic Resource Trust Fund (VARTF).

If sufficient approved mitigation credits are not available to support the impacts proposed, project-specific mitigation may be required, which would involve significant cost and time to develop and to gain regulatory approval. Careful attention to the availability of mitigation credits for the project will be necessary to ensure their availability when needed.

To mitigate delays due to permitting, our design must avoid the Chesapeake Land Development Tidal Bank adjacent to Libertyville Road. This wetland mitigation bank property is protected by a recorded Declaration of Restrictions (DOR) prohibiting development within the property. Encroachments within the bank property would require that the DOR be amended which would require the consent of the USACE and DEQ. Wetland impacts within this bank will require additional mitigation above and beyond the standard mitigation ratios. Double mitigation has been required for a roadway project in Virginia Beach where a DOR was amended.

Recent experience with tidal wetland permitting for the Military Highway Continuous Flow Intersection project has taught us that the identification and characterization of intertidal non-vegetated wetlands can be a challenge. The EPA and NOAA Marine Fisheries have been pushing to mandate greater mitigation for impacts to these intertidal non-vegetated wetlands, which are sometimes called mudflats. Mitigation for these impacts was required at a 1:1 ratio using tidal vegetated wetland credits. Detailed characterizations of these intertidal wetlands and early coordination with NOAA Marine Fisheries will be important to minimize the scheduling delays to obtain approved mitigation required for impacts to these resources. Also, careful



mapping of the extent of tidal wetlands will also be required as part of the survey effort.

Our environmental team uses our knowledge of environmental laws and regulations and our team's experience in applying this knowledge to determine options to minimize the project's environmental risk and mitigate the critical risks as they arise during project development. For example, our team is exploring creating project segments to permit in advance of each other to expedite the schedule. Our desire is to use the streamlined regulatory agency general permit process such as the use USACE SPGP/VDEQ WP3 permits.

We used this segmented project approach on the Route 29 Solutions project to enable the median and utility work to proceed early. By facilitating the construction of the Rio Road Grade Separated Intersection portion our team completed this significant project 7 weeks ahead of the mandated schedule date. We also used this approach on the I-64 Widening project, which enabled work to begin at 7 of the 8 permit areas within the project limits in advance of starting the bridge construction at Little Tuckahoe Creek.

Role of VDOT and other Agencies

Due to our design and construction teams' extensive experience in permitting in the district and on other VDOT design-build projects, VDOT's role will be limited to their normal roles of review and comment.



The project will include the placement of embankment fill to raise the grade or for widening of the existing roadway to support new pavement. Embankments will generally be constructed with 2H:1V slopes, but may also be supported by retaining walls such as mechanically-stabilized earth (MSE) walls. Due to the expected soils to be encountered, one of our greatest risks on the project is the settlement and stability of these embankments and walls.

The borings and soil laboratory tests included in the Geotechnical Data Report (GDR) indicate that much

of the site is underlain by alluvial soils that include layers of loose sand, soft clay, and highly organic peat. These soils are expected to be compressible under the weight of new fill and embankment settlements are anticipated. In addition, near-surface soils are soft and loose or possibly contaminated in portions of the site and will be considered unsuitable for use in or support of embankments without removal and replacement, or without in-place stabilization.

The subsurface conditions disclosed by the borings and CPT soundings in the GDR include the following geologic section: existing fill (where present), and natural alluvial soils (recent alluvium formation and Tabb Formation) over the Plioceneage Yorktown Formation. The alluvial soils generally consisted of loose to medium dense sand with layers of soft to medium clay, silt, and peat. The peat layers were relatively thick at the nearby Route 17 and I-464 Interchanges, which means that settlements could be extensive if the same is encountered here. The Yorktown Formation soils were mostly medium dense sand with some loose and dense layers and shells. Settlements within this formation are expected to be much less than those within the natural alluvial soils. Groundwater depths were recorded at most of the boring locations. Stabilized ground water levels were obtained in 12 of the 142 borings and these depths varied from about 3 feet to 5 feet below the current ground elevation.

The GDR also indicated that a void space was encountered in two borings at the I-464 Interchange and one boring at the Military Highway interchange in the alluvial sediments just above the Yorktown Formation. Additional borings were drilled adjacent to the I-464 Interchange borings, presumably to evaluate the extent of the voids. However, voids were not encountered at these locations. The presence of voids within the alluvial soils would likely cause an increase settlement in these areas.

The risk of unanticipated poor soil conditions may increase during project execution due to the following factors:

 Soil sampling within a boring is typically not continuous so voids or compressible or weak soil layers may not be sampled if present between



samples. In addition, compressible or weak soils could be present between boring locations. Accordingly subsurface explorations may not identify all of the potentially compressible or weak clay and peat layers or voids on site.

 Soil laboratory and in-situ soil testing (e.g., cone penetrometer and dilatometer soundings) may not completely characterize the compressibility and strength of the in-situ soft clay and peat.

Why This Risk Is Critical

Primary settlement is that which occurs when an embankment fill is placed over compressible soils and the pore (water) pressures that develop within the foundation soils dissipate over time. Primary settlement is generally considered complete when the excess pore pressures have dissipated. The soft clay and peat soils anticipated are also subject to secondary settlement (i.e., long-term settlement) that occurs after primary settlement is complete. The loose sands will settle rather quickly due to their high permeability as water is squeezed out. However, settlement of the soft clay layers will occur much more slowly due to lower permeability. Primary settlement of the peat soils can occur quickly or slowly depending on the amount and type of inorganic materials within the peat layers, but secondary settlements can be large.

Embankment settlement risk is critical because of the following:

- The inability to predict correct embankment settlement values could affect the construction schedule (waiting on embankments to settle), and potentially could affect the quality of the finished work product (paving over embankments before allowing the correct settlement to occur).
- Compressible soils present a risk because the placement of up to about 30 feet of embankment fill will result in settlement that could require months or even years to naturally dissipate.
- The presence of voids within the alluvial soils could increase embankment settlements.
- Settlement of the alluvial layers could result in down-drag loads on bridge foundations or differential settlements on retaining structures.

Some of the alluvial soils will also exhibit low shear strengths. As a result, factors of safety calculated for embankment slopes and for global stability of retaining walls could be lower than those required by VDOT.

Potential Impacts from the Risk

The impacts on the project from this risk are as follows:

- Embankment settlements are time-dependent.
 Longer wait times for settlements to be
 completed could extend the project schedule.
 This is even more important where the
 embankment construction is staged due to MOT
 requirements, and the time for each stage could
 be impacted.
- Low factors of safety could require flattening of embankment slopes and increasing the length of the reinforced zone of MSE walls, resulting in greater cost.
- Excess unsuitable or contaminated soils could require removal or stabilization, potentially adding cost and time to perform the work.
- Improper soil testing or analyses could cause new work to fail or maintenance issues to arise in the future.

GPC's Mitigation Strategy

Mitigation strategies would include both those performed during the design phase to reduce the number of unknowns and to incorporate mitigation measures into the design, and those performed during the construction phase to minimize costs and delays. These strategies would include a thorough evaluation of the subsurface conditions for both geotechnical and hazmat purposes in order to properly characterize the subsurface conditions prior to design and construction. Mitigation will include the following:

 Additional subsurface exploration and soil laboratory testing to better delineate the risk. The additional exploration would include the number of borings and types of sampling to meet or exceed the requirements of the VDOT Materials Manual of Instructions, Chapter III. This would include undisturbed Shelby tube sampling and



testing of clay and peat soils to evaluate the settlement characteristics and strength of these soils. In-situ cone penetrometer testing (CPT) with pore-pressure dissipation testing will be performed for design of possible wick drains and surcharging. Dilatometer testing will also be performed to help with evaluation of settlement and slope stability.

CPT soundings will be used to evaluate the presence of voids in addition to the three encountered in the GDR borings.

- Triaxial shear strength testing on the soils below the areas to be widened, in or adjacent to the wetland areas, for slope-stability analyses.
- Standardized remedial design information on the plans to clearly illustrate how the impacts should be mitigated during construction.
- Design alternatives including prefabricated vertical drains (i.e., PVDs or wick drains) used in conjunction with surcharging can be used to accelerate primary settlement and account for the anticipated secondary settlement. If embankment settlements potentially affect any nearby structures, alternatives to wick drains and surcharging include the use of lightweight embankment materials such as expanded polystyrene and expanded shale fill. In addition, stone columns or piles (or other inclusions) can be used to structurally support the embankments.

These alternatives will be used where settlement of adjacent structures must be avoided or settlement is anticipated to be so extensive that time does not allow for the traditional methods of wick drains or surcharge.

- Consideration of lengthening of the bridge to reduce embankment lengths or heights.
- Establishment of a monitoring plan for embankment settlement and pore pressures such that the frequency of data collection allows for a rapid assessment of potential problems so that mitigation efforts can be implemented as soon as possible during construction.
- Monitoring of embankment settlements, which will provide data that can be used to calibrate

settlement estimates. For example, if more time is required for embankment settlements on initial stages of the project to dissipate, it may be possible to reduce the spacing of the prefabricated vertical drains (PVDs) on later stages of the project to reduce settlement times. The impact would be additional cost of PVDs for the later stages.

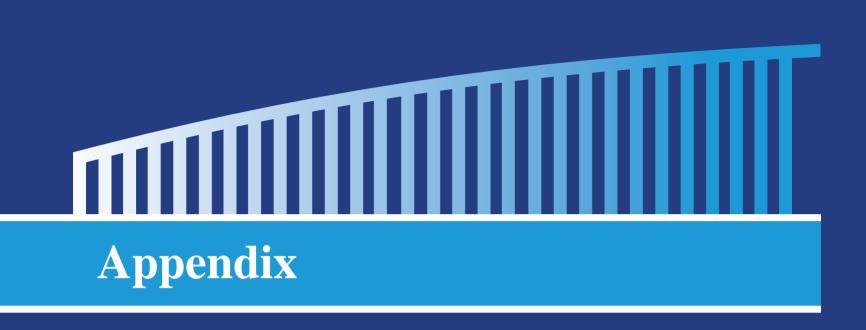
- Having the geotechnical Engineer of Record:
 - Included in the multidiscipline Quality Review team to ensure that his recommendations are clearly indicated in the RFC plan and Specification package
 - Included as part of the Design-Builder's construction team in the field for consultation regarding embankment settlement monitoring, foundation installation, unsuitable soils, and other geotechnical aspects of the project.

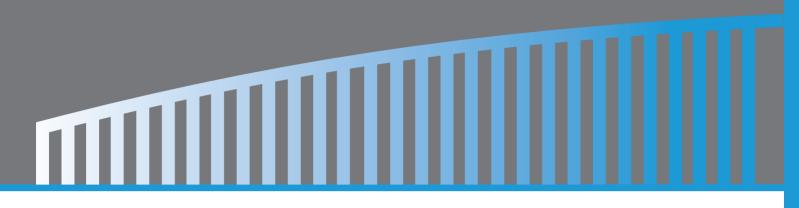
On the ICC A project, our DBJV team, which included Granite, Corman, PTG, and Schnabel, continued with excavation and embankment operations through one of the wettest construction seasons in recorded history. The Granite led DBJV team developed and implemented several modifications to the standard specifications including the use of zoned embankments, drainage mats, lime treatment, modified soil testing protocols, and enhanced QC inspection procedures. These enhancements minimized schedule impacts to the project team.

Role of VDOT and other Agencies

As was done on the Military Highway project during the RFP and Technical Proposal process, VDOT should consider increasing the scope of its pre-bid geotechnical boring program. An increased pre-bid geotechnical program would assist the contractors in a more thorough evaluation of geotechnical risks and could result in lower bid prices to VDOT due to decreased contingencies for added cost and time to manage potential settlement risk.

After the project is awarded, VDOT's role is primarily limited to review and approval of design submittals and general project oversight.





The SOQ Checklist

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

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 20- page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	21
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.11 (Form C-78-RFQ)	Section 2.11	no	25
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	1
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
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	26 - 34
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	35 - 49
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	50 - 55
Evidence of obtaining bonding	NA	Section 3.2.9	no	56 - 54

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20-page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	68 - 104
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	68 - 104
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	68 - 104
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	n/a
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	2
Key Personnel Resume – DBPM	Attachment 3.3.1(a)	Section 3.3.1.1	no	105, 106
Key Personnel Reference – DBPM	Attachment 3.3.1(b)	Section 3.3.1.1	no	130
Key Personnel Resume – RCE	Attachment 3.3.1(a)	Section 3.3.1.2	no	107, 108
Key Personnel Reference - RCE	Attachment 3.3.1(b)	Section 3.3.1.2	no	130, 131
Key Personnel Resume – QAM	Attachment 3.3.1(a)	Section 3.3.1.3	no	109, 110
Key Personnel Reference – QAM	Attachment 3.3.1(b)	Section 3.3.1.3	no	131
Key Personnel Resume – DM	Attachment 3.3.1(a)	Section 3.3.1.4	no	111, 112

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

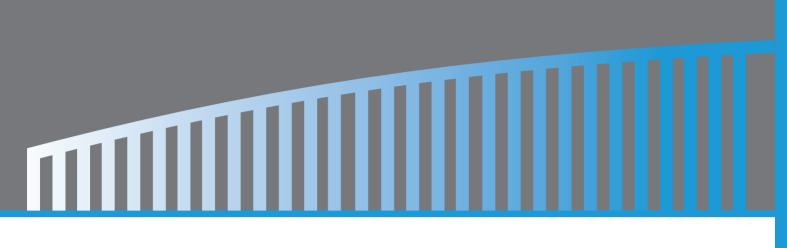
STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
Key Personnel Reference – DM	Attachment 3.3.1(b)	Section 3.3.1.4	no	131, 132
Key Personnel Resume – CM	Attachment 3.3.1(a)	Section 3.3.1.5	no	113, 114
Key Personnel Reference – CM	Attachment 3.3.1(b)	Section 3.3.1.5	no	132
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1(a)	Section 3.3.1.6	no	115, 116
Key Personnel Reference – Lead Structural Engineer	Attachment 3.3.1(b)	Section 3.3.1.6	no	132, 133
Key Personnel Resume – IMC	Attachment 3.3.1(a)	Section 3.3.1.7	no	117, 118
Key Personnel Reference – IMC	Attachment 3.3.1(b)	Section 3.3.1.7	no	133
Organizational chart	NA	Section 3.3.2	yes	3
Organizational chart narrative	NA	Section 3.3.2	yes	2 – 11
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	134 - 138
Subcontractor Work History Form	Attachment 3.4.1(b)	Section 3.4	no	n/a
Lead Designer Work History Form	Attachment 3.4.1(c)	Section 3.4	no	139 - 141
Subconsultant Work History Form	Attachment 3.4.1(d)	Section 3.4	no	n/a
Safety				
Lead Contractor Safety Qualifications Form	Attachment 3.5	Section 3.4	no	142 - 153

Project: I-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.6	yes	12 – 20



Form C-78-RFQ

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

PROJECT: 1-64 SOUTHSIDE WIDENING AND HIGH RISE BRIDGE, PHASE 1

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

Federal Project No. NHPP-064-3(488)

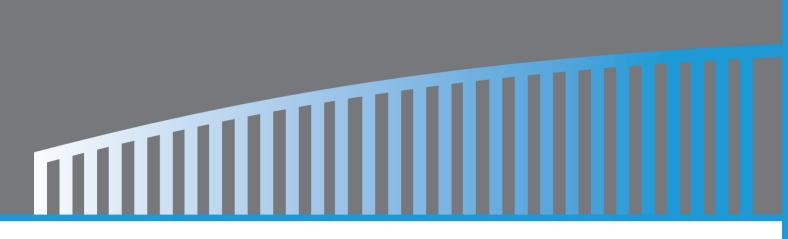
Contract ID Number C00106692DB93

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 - August 16, 2016 (Date)		
2.	Cover letter of	RFQ Addendum No. 1 (Date)	09/16/2016	
3.	Cover letter of	RFQ Addendum No. 2	10/04/2016	
Mucha	SIGNATURE	nne		12014 ATE
Michael Donnino			Attorney-in-Fac	t
	PRINTED NAI	ME	TI	TLE



List of Affiliated and Subsidiary Companies

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638 Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Granite		
Parent	Granite Construction Incorporated (we define "affiliate" as our Parent Company and any direct consolidated subsidiary of our Parent Company)	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	GILC, Incorporated	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Granite Construction Northeast, Inc.	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Granite Construction International	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Granite Industrial, Inc.	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Granite Land Company	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Intermountain Slurry Seal, Inc.	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Kenny Construction Company	P.O. Box 50085 Watsonville, CA 95077-5085
Affiliate	Pozzolan Products Company	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Granite Northwest, Inc.	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Wilder Realty I, Inc.	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Cooper Hills Constructors, a Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Eastside Corridor Constructors*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Granite/Ames Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085

^{*} Sponsored joint ventures are consolidated due to the implementation of FIN 46 effective 01/01/2004, thus sponsored joint ventures are included on our list of subsidiaries

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Subsidiary	Granite/Rizzani de Eccher, A Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Granite/RLW Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Granite-Healy Tibbitts A Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Granite-McCrossan*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Hill Country Constructors*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Intercounty Constructors*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Minnesota Transit Constructors*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Paso Del Norte Trackworks*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Tangerine Corridor Constructors*	P.O. Box 50085 Watsonville, CA 95077-5085
Subsidiary	Yaquina River Constructors, A Joint Venture*	P.O. Box 50085 Watsonville, CA 95077-5085
Parsons Construction Group Inc.		
Subsidiary	Parsons Construction Craft Services Inc.	1499 West 120th Avenue, Suite 200, Westminster, Colorado 80234, United States
Affiliate	3D/International, Inc.	16055 Space Center Boulevard, Suite 725, Houston, Texas 77062, United States
Affiliate	Argotek, Inc.	5875 Trinity Parkway, Suite 300, Centreville, Virginia 20120, United States
Affiliate	Barton-Aschman Associates, Inc.	100 M. Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Barton-Aschman Associates, Inc. of Ohio	100 M. Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Bonifica S.P.A.	Via Vincenzo Bona 101/C,Roma, Italy 00156, Italy
Affiliate	Bright Star For Engineering Services LLC	House 41, Street 11, District 601, Al Mansur District, Baghdad, Iraq, Republic of, Iraq

^{*} Sponsored joint ventures are consolidated due to the implementation of FIN 46 effective 01/01/2004, thus sponsored joint ventures are included on our list of subsidiaries

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(Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Chas. T. Main of Louisiana, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Chas. T. Main, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Contingency Response Services LLC	13500 Heritage Parkway, Forth Worth, Texas 76177, United States
Affiliate	De Leuw, Cather & Company	100 M Street, Southeast, Washington, District of Columbia 20003, United States
Affiliate	De Leuw, Cather International Inc.	10 S. Riverside, Suite 400, Chicago, Illinois 60606, United States
Affiliate	De Leuw, Cather International Limited	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Delcan Corporation	650 E. Algonquin Road, Suite 400, Schaumburg, Illinois 60194, United States
Affiliate	Delcan Technologies, Inc.	2055 Sugarloaf Circle, Suite 500, Duluth, Georgia 30097, United States
Affiliate	Delcather Limited Inc.	650 E. Algonquin Road, Suite 400, Schaumburg, Illinois 60173, United States
Affiliate	DZSP 21 LLC	1818 Market Street, 22nd Floor, Philadelphia, Pennsylvania 19103-3672, United States
Affiliate	Engineering-Science Development Corporation	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	ES Environmental Services, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	EXi Parsons Telecom Inc.	1301 W. President George Bush Highway, Richardson, Texas 75081, United States
Affiliate	EXi Parsons Telecom LLC	1301 West President George Bush Hwy, Suite 350, Richardson, Texas 75080, United States
Affiliate	Fair Oaks Consultants, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Finley McNary Engineers, Inc.	3500 Financial Plaza, Suite 300, Tallahassee, Florida 32312, United States
Affiliate	Global Response Services LLC	13601 Heritage Parkway, Fort Worth, Texas 76177, United States
& Affiliate	H. E. Hennigh, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	International Aviation Consultants, L.L.C.	524 West Peachtree Street, Atlanta, Georgia 30308, United States

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	Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
	Affiliate	KP Leasing Company	Kiewit Western Co., 1000 Kiewit Plaza, Omaha, Nebraska, United States
	Affiliate	Main Construction Management, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Main Constructors, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	META Associates, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Nateng Technology Group, Inc.	650 E. Algonquin Road, Suite 400, Schaumburg, Illinois 60173, United States
	Affiliate	PARCAN, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parfinco TX, LLC	16055 Space Center Boulevard, Houston, Texas 77062, United States
	Affiliate	Parfinco, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parmetek, S.A. De C.V.	1A Cerrada de Santa Lucia No. 38, Santa Lucia, Delegacion Alvaro Obregon, Mexico, D.F., C.P. 01400, Mexico
	Affiliate	Parsons Advanced Technologies Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Parsons Architectural Services of Illinois Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Parsons Architecture of Florida Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Parsons Architecture of New Jersey P.C.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Parsons China Inc.	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parsons Commercial Services Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
	Affiliate	Parsons Constructors & Fabricators Inc.	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parsons Constructors Inc.	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parsons Corporation	100 West Walnut Street, Pasadena, California 91124, United States
	Affiliate	Parsons CTMain Projetos de Infraestrutura Sociedade Simples Ltda.	Parsons do Brasil, Rua Ministro Nelson Hungria No. 239, offices 1 e 2, District of Jardim Tramontano, 05690-050 Sao Paulo, SP, Brazil, Brazil
29	6 Affiliate	Parsons do Brasil Construcoes Ltda.	Rua Álvares Penteado, 97, 4 Andar Sala 1,São Paulo, SP, Brazil 01012-001, Brazil
	Affiliate	Parsons Engineering Inc. of Michigan	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States

Relationship with Offeror		
(Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Parsons Engineering Inc. of Ohio	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Engineering Limited	Unit 4100, Airport Business Park, Cork, Ireland, Ireland
Affiliate	Parsons Engineering of New York, Inc.	301 Plainfield Road, Suite 350, Syracuse, New York 13212, United States
Affiliate	Parsons Engineering Science International, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Engineering Science, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Environment & Infrastructure Group Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Evergreene, LLC	10235 South Jordan Gateway, Suite 300, South Jordan, Utah 84095, United States
Affiliate	Parsons Federal Construction Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Federal Services Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Global Services, Ltd.	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003-3515, United States
Affiliate	Parsons Government Services Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Government Services International Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Government Support Services Inc.	1301 W. Presdent George Bush Highway, Suite 350, Richardson, Texas 75080, United States
Affiliate	Parsons Group Services Pte Ltd	80 Robinson Road, #02-00, Singapore 068898, Singapore
Affiliate	Parsons Hanford Fabricators Inc.	3005 East Ainsworth Street, Warehouse 5, Pasco, Washington 99301, United States
Affiliate	Parsons Harland Bartholomew & Associates Inc.	400 Woods Mill Road, South, Suite 330, Chesterfield, Missouri 63017-3427, United States
Affiliate	Parsons Infrastructure & Technology Group Inc. of Ohio	100 West Walnut Street, Pasadena, California 91124, United States
ob Affiliate	Parsons Infrastructure & Technology Group of Illinois P.C.	100 West Walnut Street, Pasadena, California 91124, United States

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Parsons Infrastructure & Technology Group of Michigan Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Infrastructure & Technology Group of New York Inc.	100 Broadway, New York, New York 10005, United States
Affiliate	Parsons Inspection & Maintenance Corporation	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons International & Company LLC	The Old Ericsson Building, Way No. 4149,Al Khuwair, Muscat, Sultanate of Oman, Oman
Affiliate	Parsons International Corporation, L.L.C.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons International L.L.C.	47 City center - 90th Street, El Tagamu El Khames, the Fifth Settlement - Area 1, new Cairo - Cairo, Egypt, Arab Republic of, Egypt
Affiliate	Parsons International Limited	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons International Limited	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Investments Corp.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Italia S.r.L.	Via Antonio Salandra 18 cap 00187,Roma, Italy, Italy
Affiliate	Parsons Main of New York, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Main, Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Middle East Corporation	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons of North Carolina Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	Parsons Overseas Company	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Overseas Limited Inc.	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Parsons PATCO Inc.	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
2 Affiliate	Parsons Professional Corporation	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Project Services, Inc.	100 West Walnut Street, Pasadena, California 91124, United States

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638 Affiliated and Subsidiary Companies of the Offeror

Relationship with Offeror	r Full Legal Name	Address
(Affiliate or Subsidiary)		
Affiliate	Parsons RCI Inc.	1216 140th Avenue, Court E, Sumner, Washington 98390, United States
Affiliate	Parsons RCIE Inc.	1216 140th Avenue, Court E, Sumner, Washington 98390, United States
Affiliate	Parsons RDS Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons S.I.P. Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Savannah Construction Company	1080 Silver Bluff Road, Aiken, South Carolina 29803, United States
Affiliate	Parsons Savannah Services Company	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Services Company	The Parsons Building, 16055 Space Center Boulevard, Suite 725, Houston, Texas 77062-6269, United States
Affiliate	Parsons Technical Services Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Technical Services International Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Technical Support Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Telecommunication Services Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Tournament for Life Corp.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Transportation Concessionaires LLC	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Parsons Transportation Group Inc.	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	Parsons Transportation Group Inc. of Michigan	26777 Central Park Boulevard, Suite 275, Southfield, Michigan 48076, United States
Affiliate	Parsons Transportation Group Inc. of Ohio	100 M Street SE, Suite 1200, Washington, District of Columbia 29993, United States
Affiliate	Parsons Transportation Group Inc. of Virginia	3926 Pender Drive, Suite 100, Fairfax, Virginia 22030, United States
R Affiliate	Parsons Transportation Group of New York, Inc.	100 Broadway, New York, New York 10005, United States
Affiliate	Parsons Transportation Group, Professional Corporation	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Parsons Water & Infrastructure Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Parsons Water Resources, Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	PARSONSECUADOR Cia. Ltda.	E4-41 Av. Patria, La Mariscal, San Blas, Quito, Pichincha, Ecuador, Ecuador
Affiliate	Parsons-J&J LLC	1013 Centre Road, 2nd Floor, Suite 228, Wilmington, Delaware 19810, United States
Affiliate	Parsons-Jurden International Corporation	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Partnership for Temporary Housing LLC	3190 Fairview Park Drive, Suite 350, Falls Church, Virginia 22042, United States
Affiliate	PFI Design, P.C.	100 High Street, Boston, Massachusetts 02110, United States
Affiliate	PGS Subsidiary II Company	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Process Facilities, Inc.	100 High Street, Boston, Massachusetts 02110, United States
Affiliate	PTG Construction Services Company	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	PTGI, Inc.	100 M Street, SE, Suite 1200, Washington, District of Columbia 20003, United States
Affiliate	PTSI Managed Services Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Research and Development Solutions, LLC	3604 Collins Ferry Road, Suite 200, Morgantown, West Virginia 26505, United States
Affiliate	RMP International, Ltd.	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	S.I.P. Engineering, Inc.	The Parsons Building, 16055 Space Center Boulevard, Suite 725, Houston, Texas 77062, United States
Affiliate	S.I.P., Inc.	The Parsons Building, 16055 Space Center Boulevard, Suite 725, Houston, Texas 77062, United States
Affiliate	Saudi Arabian Parsons Limited	Post Box 1174, Dar Al Riyadh, Prince Mamdouh Street, Riyadh, Saudi Arabia 111431, Saudi Arabia

Relationship with Offeror		
(Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Secure Mission Solutions LLC	5875 Trinity Parkway, Centreville, Virginia 20120, United States
Affiliate	Secure Mission Solutions, Inc.	5875 Trinity Pkwy., Suite 300, Centreville, Virginia 20120, United States
Affiliate	Steinman Boynton Gronquist & Birdsall	100 Broadway, New York, New York 10005, United States
Affiliate	Steinman Boynton Gronquist & Birdsall Inc.	100 Broadway, New York, New York 10005, United States
Affiliate	Steinman Inc.	100 Broadway, New York, New York 10005, United States
Affiliate	T.J. Cross Engineers, Inc.	200 New Stine Road, Suite 270, Bakersfield, California 93309, United States
Affiliate	The C. T. Main Corporation	4701 Hedgemore Drive, Charlotte, North Carolina 28209, United States
Affiliate	The Ralph M. Parsons Company	100 West Walnut Street, Pasadena, California 91124, United States
Affiliate	Wholesale Supply Co., Inc.	100 West Walnut Street, Pasadena, California 91124, United States
Corman Construction		
Affiliate (Parent Company to Corman Construction, Inc.)	C.G. Enterprises	12001 Guilford Road Annapolis Junction, MD 20701
Affiliate (Sister)	Corman Marine Construction, Inc.	711 East Ordnance Road, Suite 715, Baltimore, MD 21226
Affiliate (Joint Venture)	CK Constructors, A Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate (Joint Venture)	Intercounty Constructors Joint Venture	120 White Plains Road, Suite 310, Tarrytown, NY 10591
Affiliate (Joint Venture)	MD 200 Constructors, A Joint Venture	450 Dividend Drive, Peachtree City, GA 30269
Affiliate (Joint Venture)	Wagman, Corman, McLean Joint Venture	3290 North Susquehanna Trail, York, PA 17406
Affiliate (Joint Venture)	Corman-Wagman, A Joint Venture	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate (Joint Venture)	KC Constructors, A Joint Venture	1800 South Bell Street, Suite 300, Arlington, VA 22202
Affiliate (Joint Venture)	LANE/Corman Joint Venture	14500 Avion Parkway, Suite 200, Chantilly, VA 20151
Affiliate (Joint Venture)	Corman-E.V. Williams, a Joint Venture	925 S. Military Highway, Virginia Beach, VA 23464
Affiliate (Joint Venture)	Kiewit-Corman-Greenbelt, a Joint Venture	7250 Parkway Drive, Suite 310, Hanover, MD 21076

Debarment Forms

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Michael Donnino/	Junio 9/28/2016	Attorney-in-Fact	
Signature	Date	Title	
Granite / Parsons / Corman	a Joint Venture		
Name of Firm			

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Jahr De	√ 10/3/16	Jigisha Desai, Vice President
Signature	Date	Title
Granite Construction	Company	
Name of Firm		·



CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

1)	The prospective primary	participant	certifies to	the best	of its	knowledge	and
belief, that it a	nd 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.

1			
Andy Chex	an 9/29/2016	Senior Vice President	
Signature	Date	Title	
Parsons Construction	Group Inc.		
Name of Firm			

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Allago	10.6.16	Vice President
Signature	Date	Title
Corman Construction	on, Inc.	
Name of Firm		

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

full of	10/3/2016	Vice President
Signature	Date	Title
Parsons Transpo	ortation Group Inc.	
Name of Firm	•	

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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

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

Signature

Date

Title

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

In Mh	September 28, 2016	Director, Structures
Signature	Date	Title
Rummel, Klep	per & Kahl, LLP (RK&K)	

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Edward 6. 7	Prohoz September 23, 2016	Senior Vice President
Signature	Date	Title
Schnabel Engin	neering, LLC	

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Ihre Iyor 10/4/16	President
Signature Date	Title
Athavale, Lystad & Associates, Inc.	
Name of Firm	

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

Leslie K	Bysiste	September 27, 2016	Vice President
Signature	Date		Title

H&B Surveying and Mapping, LLC

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

THE ACQUISITION SERVICES, INC.

CONTINENTAL Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- The prospective lower tier participant certifies, by submission of this proposal, that 1) 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.
- 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 Presidento

HASSAN WATER RESOURCES, PLC

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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 President

Signature Date Title

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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 9/23/16 Title

Accompany Engineering Group LLC

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

- 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.

$M(\cdot)$	9/23/2016	Vice President of Public Affairs
Signature	Date	Title
Seventh Point T	ransportation PR	



Offeror's VDOT Prequalification Certificate

From: Prequalification (VDOT) [mailto:Prequalification@VDOT.Virginia.gov]

Sent: Tuesday, September 20, 2016 10:22 AM **To:** Desai, Jigisha < <u>Jigisha.Desai@gcinc.com</u>> **Subject:** Your assigned Joint Venture # is JV078

Dear

Granite Construction Company, Parsons Construction Group Inc. Corman Construction, Inc.

Thank you for submitting the Joint Venture agreement to the Prequalification Office.

We have processed the paperwork and the Joint Venture: Granite/Parsons/Corman a Joint Venture is assigned the # JV078.

This email is being sent to the Lead Firm so please forward to the other Joint Venturers.

Please feel free to contact me if there are any concerns.

Thank-you for your firm's inquiry.

Suzanne Lucas, CAPM

State Prequalification Supervisor Construction Division Virginia Department of Transportation 1401 East Broad Street Richmond, Virginia 23219

(804)-786-2941

 ${\tt Email:} \ \, \underline{Prequalification@VDOT.Virginia.gov}$



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

GRANITE CONSTRUCTION COMPANY

Vendor Number: G386

your firm is hereby notified that the following Rating has been assigned to your firm: In accordance with the Regulations of the Virginia Department of Transportation,

PREQUALIFIED (CURRENTLY INACTIVE)

Your firm specializes in the noted Classification(s):

ASPHALT CONCRETE PAVING; PORTLAND CEMENT CONCRETE PAVING; GRADING; MINOR STRUCTURES; RAILROAD CONSTRUCTION / REPAIR; MAJOR STRUCTURES

Issue Date: May 31, 2016

This Rating and Classification will Expire: May 31, 2017

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies, Director of Contracts

It is not permissible to after this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.

From: Silies, Don E. (VDOT) [mailto:Don.Silies@VDOT.Virginia.gov]

Sent: Tuesday, September 20, 2016 12:25 PM

To: Stonich, Tobi

Cc: Patel, Shailendra G., P.E. (VDOT)

Subject: RE: Waiver of Prequalification Status for the design/build I-64 Southside & High Rise Bridge Phased

Construction

Good afternoon Tobi,

I was pleased to learn that your firm is interested in working for VDOT. I have reviewed the qualifications of Granite Construction Company and I find them acceptable for the purpose of bidding this project. Therefore, I hereby waive the bidding restriction on your firm for this project. VDOT looks forward to your joint venture proposal.

Don E. Silies Director of Contracts

(804) 786-1630



2021200000000000

Vendor ID: P1044

Vendor Name: PARSONS CONSTRUCTION GROUP INC.

Prequal Exp: 08/31/2016

- PREQ Address - Work Classes (Listed But Not Limited To)

1499 W. 120TH AVENUE, SUITE 200 002 - GRADING

 WESTMINSTER, CO 80234
 003 - MAJOR STRUCTURES

 Phone: (303)566-1140
 005 - DRAINAGE STRUCTURES

 Fax: 303-566-1141
 045 - UNDERGROUND UTILITIES

101 - EXCAVATING

Bus. Contact: FOWLER, MITCHELL GUY

Email: MITCH.FOWLER@PARSONS.COM

- DBE Information -

DBE Type: N/A
DBE Contact: N/A

From: Silies, Don E. (VDOT) [mailto:Don.Silies@VDOT.Virginia.gov]

Sent: Friday, October 07, 2016 4:59 PM

To: Quinlan, Brian

Cc: Patel, Shailendra G., P.E. (VDOT); Lucas, Suzanne F., CAPM (VDOT)

Subject: RE: Parsons Construction Group (P1044) Request for Waiver for State Project No. 0064-131-

811, P101, R201, C501, B662-B669, D637, D638

Good afternoon Brian,

I was pleased to learn that you are interested in working for VDOT. I have reviewed the qualifications of Parsons Construction Group and I find them acceptable for the purpose of bidding this project. Therefore, I hereby waive the bidding restriction on your firm for this project. I look forward to your JV proposal.

Don E. Silies Director of Contracts





COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

CORMAN CONSTRUCTION, INC.

Vendor Number: C097

your firm is hereby notified that the following Rating has been assigned to your firm: In accordance with the Regulations of the Virginia Department of Transportation,

PREQUALIFIED

Your firm specializes in the noted Classification(s):

GRADING; MAJOR STRUCTURES; MINOR STRUCTURES; UNDERGROUND UTILITIES

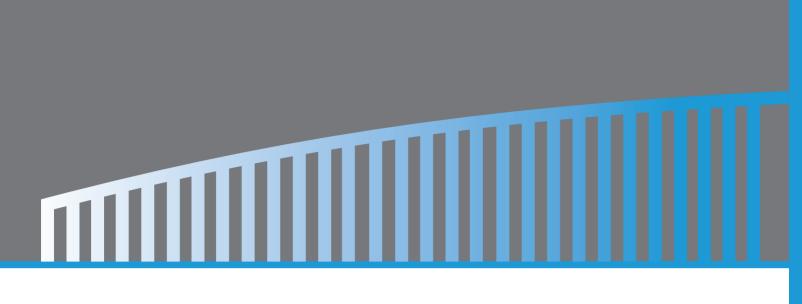
Issue Date: March 31, 2016

This Rating and Classification will Expire: March 31, 2017

Don E. Silies, Director of Contra

Suzanne FR Lucas, State Prequalification Officer

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.



Surety Letter



CHUBB GROUP OF INSURANCE COMPANIES

3 Mountain View Road, Warren, NJ 07059

September 26, 2016

Jeffrey A. Roby, P.E., DBIA Alternate Project Delivery Division Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219

Re: Design-Build Project for I-64 Southside Widening and High Rise Bridge, Phase 1
State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638
Federal Project No. NHPP-064-3(488) | Contract ID Number: C00106692DB93

Dear Mr. Roby:

We understand that Granite Construction Company, Parsons Construction Group Inc., and Corman Construction, Inc., in a joint venture known as Granite / Parsons / Corman a Joint Venture (the "Joint Venture"), are submitting a Statement of Qualifications for the above-captioned project. The undersigned are the sureties for Granite Construction Company, Parsons Construction Group Inc., and Corman Construction, Inc., individually. We are pleased to provide this letter in accordance with the Request for Qualifications.

We have determined that the Joint Venture is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated contract value for this Project, which has a current estimated project value of \$480Million, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Joint Venture, in the event that such firm be the successful bidder and enter into a contract for this Project. It is the intent of the sureties to provide the Joint Venture with the required bonds, subject to acceptable contract terms, contract conditions, bond forms, and underwriting conditions at the time the bonds are requested by the Joint Venture, and upon award and acceptance of the referenced contract. This letter is not an assumption of liability, nor is it a bid bond or a performance bond

Each of the below sureties is listed on the Treasury Department Circular 570.

We have every confidence that Granite Construction Company, Parsons Construction Group Inc., and Corman Construction, Inc., in a joint venture known as Granite / Parsons / Corman a Joint Venture, has the necessary financial and operational capacity to successfully complete such a project. We hold the parties in the highest regard and we recommend them to you for every possible consideration.

Sincerely,

FEDERAL INSURANCE COMPANY, A.M. Best Rating: A++ XV
TRAVELERS CASUALTY and SURETY COMPANY of AMERICA, A.M. Best Rating: A++ XV
ZURICH AMERICAN INSURANCE COMPANY, A.M. Best Rating: A+ XV
FIDELITY AND DEPOSIT COMPANY OF MARYLAND, A.M. Best Rating: A+XV
THE CONTINENTAL INSURANCE COMPANY, A.M. Best Rating: A XV

Ashley Stinson Attorney in Fact A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

signed the document to which this certificate is hed, and not the truthfulness, accuracy, or validity at document.		
State of California County of <u>Santa Cruz</u>)	
On _ September 26, 2016	before me, _	Tobi Stonich, Notary Public (insert name and title of the officer)
subscribed to the within instru his/her/their authorized capac	s of satisfactory ev ment and acknowl ity(ies), and that by	ridence to be the person(s) whose name(s) is/are edged to me that he/she/they executed the same in y his/her/their signature(s) on the instrument the person(s) acted, executed the instrument.
I certify under PENALTY OF F paragraph is true and correct.	PERJURY under th	ne laws of the State of California that the foregoing
WITNESS my hand and official Signature Tobi Stonich, Notar		TOBI STONICH Commission # 2087928 Notary Public - California Santa Cruz County My Comm. Expires Oct 28, 2018 (Seal)

CHUBB.

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

Attn: Surety Department | 15 Mountain View Road | Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Jigisha Desai, John D. Gilliland,

Kathleen Schreckengost, Ashley Stinson and Lillian Tse of Watsonville, California --

each as their true and lawful Attorney- in- Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business on behalf GRANITE CONSTRUCTION INCORPORATED and all Subsidiaries alone or in joint venture as principal, in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bond or obligation by such Attorney- in- Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 29th day of August, 2016.

David B. Norris, Jr., Vice Presiden





STATE OF NEW JERSEY

ounty of Somerset

On this 29th day of August, 2016 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR NOTARY PUBLIC OF NEW JERSEY No. 2316686 Commission Expires July 16, 2019

CERTIFICATION

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"Except as otherwise provided in these By-Laws or by law or as otherwise directed by the Board of Directors, the President or any Vice President shall be authorized to execute and deliver, in the name and on behalf of the Corporation, all agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and the seal of the Corporation, if appropriate, shall be affixed thereto by any of such officers or the Secretary or an Assistant Secretary. The Board of Directors, the President or any Vice President designated by the Board of Directors may authorize any other officer, employee or agent to execute and deliver, in the name and on behalf of the Corporation, agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fluctary or other capacity, and, if appropriate, to affix the seal of the Corporation thereto. The grant of such authority by the Board or any such officer may be general or confined to specific instances."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the signature of any authorized officer executing this Power of Attorney or any certificate relating thereto on behalf of the Companies, and the seal of the Companies, may be affixed to such Power of Attorney or certificate by facsimile and such Power of Attorney or certificate shall be valid and binding upon the Companies, and any such Power of Attorney so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Companies with respect to any bond or undertaking to which it is attached.
- (iii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iv) the foregoing Power of Attorney is true, correct and in full force and effect

Given under my hand and seals of said Companies at Warren, NJ this September 26, 2016







Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT THE ADDRESS LISTED ABOVE, OR BY: Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

Notary Public



POWER OF ATTORNEY

Farmington Casualty Company Fidelity and Guaranty Insurance Company Fidelity and Guaranty Insurance Underwriters, Inc. St. Paul Fire and Marine Insurance Company St. Paul Guardian Insurance Company St. Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America United States Fidelity and Guaranty Company

Attorney-In-Fact No. 228138

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc. is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint John D. Gilliland, Jigisha Desai, Kathleen Schreckengost, Catherine Gustavson, Ashley Stinson, and Lillian Tse of the City of Watsonville, State of California, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power of Attorney is limited to bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof for Granite Construction Incorporated and all subsidiaries and affiliates, alone or in joint venture.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 26th day of June, 2014.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America United States Fidelity and Guaranty Company



















State of Connecticut

City of Hartford ss.

By:

Robert L. Raney, Senior Vice President

On this the 26th day of June, 2014, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2016.



Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Secion Vice President, any Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filled in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this September 26, 2016

Kevin E. Hughes, Assistant Secretary

Keir & Fleger



















To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That The Continental Insurance Company, a Pennsylvania insurance company, is a duly organized and existing insurance company having its principal office in the City of Chicago, and State of Illinois, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

John D Gilliland, Jigisha Desai, Kathleen Schreckengost, Catherine Gustavson, Ashley Stinson, Lillian Tse, Individually

of San Francisco, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the insurance company and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Board of Directors of the insurance company.

In Witness Whereof, The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 24th day of June, 2015.



The Continental Insurance Company

Paul T. Bruflat

Vice President

State of South Dakota, County of Minnehaha, ss:

On this 24th day of June, 2015, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires February 12, 2021

S. Eich

Notary Public

CERTIFICATE

I, D. Bult, Assistant Secretary of The Continental Insurance Company, a Pennsylvania insurance company, do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance company printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance company this **September 26, 2016**



The Continental Insurance Company

D. Bult

Assistant Secretary

Form F6850-4/2012

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF THE CONTINENTAL INSURANCE COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company at a meeting held on May 10, 1995.

"RESOLVED: That any Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Group Vice President to the Secretary of the Company prior to such execution becoming effective.

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execution power of attorneys on behalf of The Continental Insurance Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012.

"Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the "Authorized Officers") to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, "Electronic Signatures"), Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company."



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 Jigisha DESAI, Catherine GUSTAVSON, Cynthia P. JOHNSON, Kathleen SCHRECKENGOST, John D. GILLILAND, Ashley STINSON and Lillian TSE, each 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, issued on behalf of Granite Construction Incorporated, Watsonville, California and all subsidiaries alone or in a joint venture 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 1st day of March, A.D. 2013.

	(SEAL)	
	AS	
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Gerald	0 7. Ha	lag J
Ву:		
Assistant Secre	etary – Gerald I	F. Haley
State of Marylar	nd	

On this 1st day of March, A.D. 2013, 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.

By:

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



County of Baltimore

By: _______ Constance A. Dunn - Notary Public
My Commission Expires: July 14, 2015

Constance a. Dunn

Teoffrey Delisio

Vice President - Geoffrey Delisio

Page 1 of 2 63

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, <u>Attorneys-in-Fact</u>. 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 of 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 September 26, 2016

Thomas O. McClellan, Vice President

The o. mehll





SCC and DPOR Information Tables

ATTACHMENT 3.2.10

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

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 INFORM	IATION FOF	SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)	ctions 3.2.10.1	and 3.2.10.2)	
	SCC In	SCC Information (3.2.10.1)	0.1)		DPOR Info	DPOR Information (3.2.10.2)	
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Granite Construction Company	F0275976	Foreign	Active/In Good Standing	585 West Beach Street, Watsonville, CA 95076	Corporation	2701011241	11/30/2016
Parsons Construction Group Inc.	F1921834	Foreign	Active/In Good Standing	4701 Hedgemore Drive Charlotte, NC 28209	Class A Contractor	2705151847	10/31/17
Corman Construction	F046798-7	Foreign	Active/In Good Standing	12001 Guilford Road Annapolis Junction, MD 20701	Class A Contractor	2701014794	10/31/17
Darcone Transmortation			Active/In	4701 Hedgemore Drive Charlotte, NC 28209 *address provided is of licensing contact, DPOR license is for Washington DC headquarters	Engineering	0407006418	12-31-2017
Group Inc.	F194302-8	Foreign	Good Standing	4701 Hedgemore Drive Charlotte, NC 28209 *address provided is of licensing contact, DPOR license is for Fairfax, VA regional office, which recently moved to Tysons, VA	Engineering	0411001042	2-28-2018
CKI & Associates, Inc.	04888467	Corporation	Active/In Good Standing	7006 Little River Tpke Suite 3E Annandale VA22003	Engineering	0407003720	12-31-2017

ATTACHMENT 3.2.10

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

				2100 East Cary St, Suite 309	Engineering	0411000271	2-28-2018
				Suite 300 Virginia Beach, VA	Engineering	0411000667	2-28-2018
Rummel Klepper & Kahl	K0004178	LLP	Active/In Good Standing	721 Lakefront Commons Suite 203 Newport News, VA 23606	Engineering	0411000443	2-28-2018
				12600 Fair Lakes Cir, Ste 300 Fairfax, VA 22030	Engineering	0411000577	2-28-2018
				81 Mosher Street Baltimore, MD 21217	Engineering	0407002860	12-31-2017
Schnabel Engineering, LLC	S0889123	Limited Liability Company	Active/In Good Standing	9800 Jeb Stuart Parkway, Suite 100 Glen Allen, VA 23059	Engineering	0411000322	02-28-2018
Athavale, Lystad & Associates, Inc.	F060584-2	Foreign Corporation	Active/In Good Standing	8180 Greensboro Dr, # 550, McLean, VA 22102	Engineering	0407002804	12-31-2017
H&B Surveying and	7 0230000	Limited	Active/In	612 Hull Street Suite 101B Richmond, VA 23224	Business Entity	0407005432	12-31-2017
Mapping, LLC	3230300-4	Liability Company	Standing	2105 Electric Road SW Suite 103 Roanoke, VA 24018	Business Entity	0411001268	02/28/2018
Continental Acquisition Services, Inc.	F1674896	Foreign	Active/In Good Standing				
Hassan Water Resources, PLC	S2293282	Professional Limited Liability	Active/In Good Standing	2255 Parkers Hill Drive, Maidens, VA 23102	Engineering	0413000299	12-31-2017
Kerr Environmental Services, Corp.	0578235-4	Corporation	Active/In Good Standing	1008 Old Virginia Beach Road, Suite 200 Virginia Beach, Virginia 23451	Business Entity	0407005065	12/31/2017
Accompong Engineering Group, LLC	S283521-5	Limited Liability Corporation	Active/In Good Standing	9510 Iron Bridge Road Suite 200 Chesterfield, VA 23832	Engineering	0407005442	12-31-2017

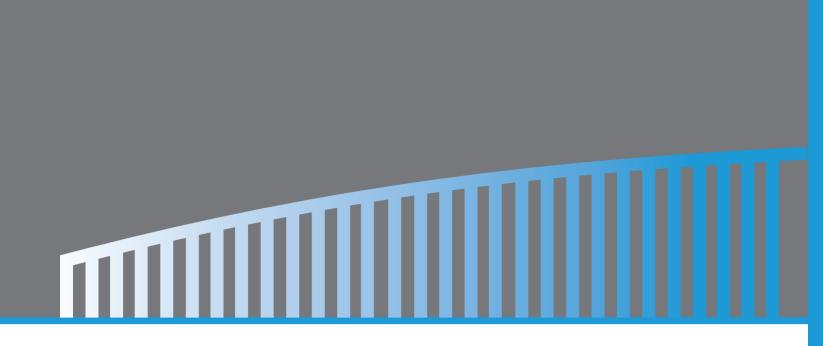
ATTACHMENT 3.2.10

State Project No. 0064-131-811, P101, R201, C501, B662-B669, D637, D638

SCC and DPOR Information

Active/In	Good	Standing
	Corporation	
	0267541-1	
Seventh Point		

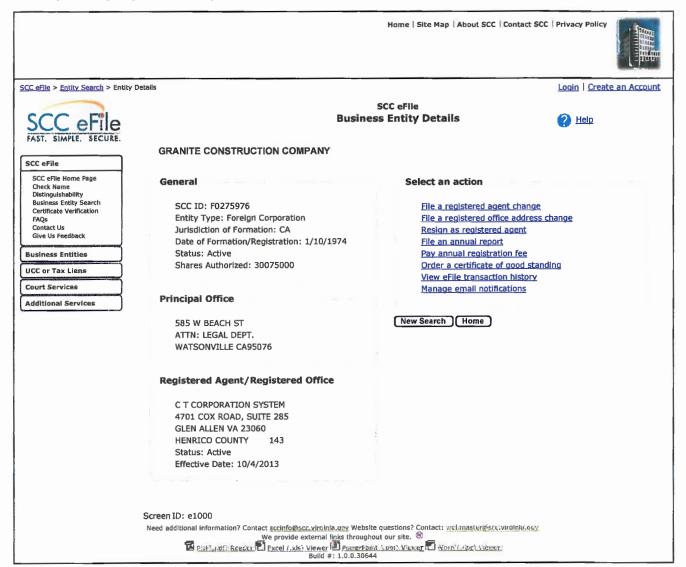
	DPOR	DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)	JIVIDUALS (RFQ Section	1s 3.2.10.3 and	3.2.10.4)	
Business Name	Individual's	Office Location Where Professional	Individual's DPOR	DPOR	DPOR Registration	DPOR Expiration
	Name	Services will be Provided (City/State)	Address	Type	Number	Date
Parsons Transportation	Post Wada	Treens VA	43346 Riverpoint Drive	Professional	NC0C50C0V0	01.31.2017
Group Inc.	JUSII W auc	Lysons, VA	Leesburg, VA 20176	Engineer	0402032724	01-31-2017
Parsons Construction	Deion Ordination	Troop WA	1738 Archers Glen	Professional	0403033401	10.21.2017
Group Inc.	Dilan Çunnan	1 ysons, VA	Sykesville, MD, 21784	Engineer	0402033491	10-31-2017
Parsons Transportation	Chofor	Troops 17A	9404 Tiller Drive	Professional	0.402053031	05 31 2017
Group Inc.	Greg Sharer	I ysolis, v.A.	Ellicott City, MD 21042	Engineer	0402032031	03-31-2017
CVI & Association Inc	Diobond Closles	A XX September 17 A	2785 East West Lane	Professional	0402040081	05 31 3017
CNI & Associates, IIIC.	Nicilalu Cialne	Alillalidale, VA	Quinton, VA 23141	Engineer	0402040301	7107-16-60



Full size SCC and DPOR supporting registration/license documentation

Business Entity Details Page 1 of 1

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office websit



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

EXPIRES ON 11-30-2016

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

NUMBER 2701011241

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

GRANITE CONSTRUCTION COMPANY 585 WEST BEACH STREET WATSONVILLE, CA 95076 ATTN LEGAL DEP



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

SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

CLASS A BOARD FOR CONTRACTORS CONTRACTOR (POCKET CARD)

NUMBER: 2701011241 EXPIRES; *CLASSIFICATIONS* H/H

GRANITE CONSTRUCTION CAMPA **585 WEST BEACH STREET** WATSONVILLE, CA 95076 ATTN LEGAL DEP



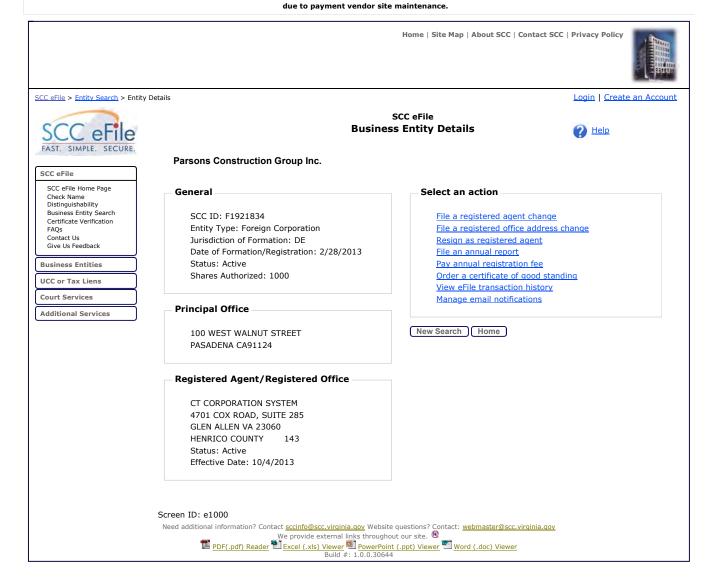
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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION 9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

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

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL FOR CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office websil SCC eFile will be unable to accept transactions requiring payment beginning Thursday, October 6, at 11:45 p.m. through Friday morning, October 7, 2016, at 3:00 a.m.



EXPIRES ON 10-31-2017

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400. Richmond, VA 23233 Telephone: (804) 367-8500

> **BOARD FOR CONTRACTORS CLASS A CONTRACTOR** *CLASSIFICATIONS* H/H

NUMBER 2705151847



PARSONS CONSTRUCTION GROUP INC 4701 HEDGEMORE DR CHARLOTTE, NC 28209

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015) (DETACH HERE)



DEOK COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS CONTRACTOR

CLASSIFICATIONS H/H

NUMBER: 2705151847 EXPIRES: 10-31-2017

PARSONS CONSTRUCTION GROUP INC 4701 HEDGEMORE DR CHARLOTTE, NC 28209

Status can be verified at http://www.dpor.virginia.gov

Alert to corporations regarding unsolicited mailings from VIRGINIA COUNCIL CORPORATIONS is available from the Bulletin Archive link of the Clerk's Office w



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09/01/16 CISM0180 CORPORATE DATA INOUIRY 14:49:46 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 ROAD, SUITE 285 AR RTN MAIL: CITY: GLEN ALLEN STATE: VA ZIP: 23060-0000 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/04/13 LOC: 143 ACCEPTED AR#: 215 17 5630 DATE: 11/23/15 HENRICO COUNTY CURRENT AR#: 215 17 5630 DATE: 11/23/15 STATUS: A ASSESSMENT INDICATOR: 0 YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES 15 100.00 1,000

(Screen Id:/Corp_Data_Inquiry)

EXPIRES ON 10-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500







ANNAPOLIS JUNCTION, MD 20701-0160 CORMAN CONSTRUCTION INC 12001 GUILFORD RD



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SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

Status can be verified at http://www.dpot.virginia.gov

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NUMBER: 2701014794 EXPIRES: 10-31-204 *CLASSIFICATIONS* H/H

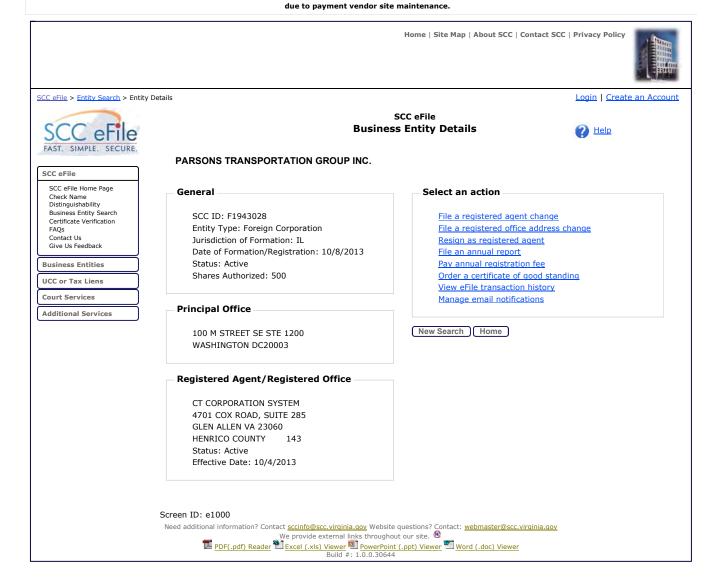
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ANNAPOLIS JUNCTION MD 20701-0

CORMAN CONSTRUCTION INC

12001 GUILFORD RD

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EXPIRES ON

12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0407006418

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



PARSONS TRANSPORTATION GROUP INC ATTN: LICENSING 4701 HEDGEMORE DRIVE CHARLOTTE, NC 28209 DPOR

Status can be verified at http://www.dpor.virginia.gov

Jan W. De Borer Jan W. De Borer Director

Jax W DeBoer Director

DPOR-LIC (05/2015)

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(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407006418 EXPIRES: 12-31-2017
PROFESSIONS: ENG

PARSONS TRANSPORTATION GROUP INC ATTN: LICENSING 4701 HEDGEMORE DRIVE CHARLOTTE, NC 28209

Status can be verified at http://www.dpor.virginia.gov

EXPIRES ON

02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0411001042

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



PARSONS TRANSPORTATION GROUP INC ATTN: LICENSING 4701 HEDGEMORE DRIVE CHARLOTTE, NC 28209 DP OR

Jan W. D. D.

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DESCRIPTION COMMONWEALTH of VIRGINIA Department of Professional and Occupational Regulation

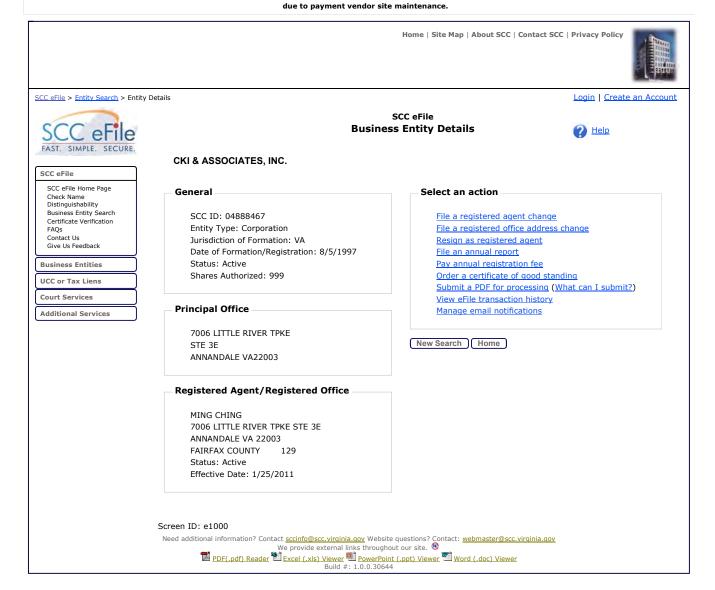
BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001042 EXPIRES: 02-28-2018
PROFESSIONS; ENG
PARSONS TRANSPORTATION GROUP INC.

ATTN: LICENSING 4701 HEDGEMORE DRIVE CHARLOTTE, NC 28209

Status can be verified at http://www.dpor.virginia.gov

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EXPIRES ON 12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0407003720

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

PROFESSIONS: ENG



CKI & ASSOCIATES INC 7006 LITTLE RIVER TNPK SUITE 3E ANNANDALE, VA 22003

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(DETACH

Status can be verified at http://www.dpor.virginia.gov

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA BUSINESS ENTITY REGISTRATION NUMBER: 0407003720 EXPIRES: 12-31-2017

PROFESSIONS: ENG CKI & ASSOCIATES INC 7006 LITTLE RIVER TNPK SUITE 3E

ANNANDALE, VA 22003

Status can be verified at http://www.dpor.virginia.gov

Commonwealth & Hirginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On September 25, 2001, a statement of registration as a foreign registered limited liability partnership was filed in the Clerk's Office of the Commission by Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership.

As of the date below, this statement of registration is in effect.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: January 12, 2016

Joel H. Peck, Clerk of the Commission



COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

Office of the Clerk

June 22, 2016

CT CORPORATION SYSTEM 4701 COX ROAD, SUITE 285 GLEN ALLEN, VA 23060

RECEIPT

RE: RUMMEL, KLEPPER & KAHL, LLP

ID: K000417 - 8

DCN: 16-06-22-0506

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 June 22, 2016.

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

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

02-28-2018 EXPIRES ON

041100027 NUMBER

81

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



SUITE 309 2100 EAST CARY ST RUMMEL KLEPPER & KAHL LLP

RICHMOND, VA 23223



(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

Status can be verified at http://www.dpor.virginia.gov



NUMBER: 0411000271 EXPIRES: 02-28-2018 BUSINESS ENTITY BRANCH OFFICE REGISTRATION BOARD FOR APELSCIDLA Department of Professional and Occupational Regulation

RUMMEL KLEPPER & KAHL LLP PROFESSIONS: ENG

SUITE 309 2100 EAST CARY ST RICHMOND, VA 23223 RK&K



DPOR-LIC (05/2015)

(DETACH HERE)

W DeBoer, Director

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EXPIRES ON

02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0411000577

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

PROFESSIONS: ENG



RUMMEL KLEPPER & KAHL LLP RK&K 12600 FAIR LAKES CIR, STE 300 FAIRFAX, VA 22030

DPOR-PC (05/2015)

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COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA BUSINESS ENTITY BRANCH OFFICE REGISTRATION NUMBER: 0411000577 EXPIRES: 02-28-2018 PROFESSIONS: ENG **RUMMEL KLEPPER & KAHL LLP**

RK&K 12600 FAIR LAKES CIR, STE 300 FAIRFAX, VA 22030

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DPOR-LIC (05/2015) (DETACH HERE)

EXPIRES ON

12-31-2017

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233. Telephone: (804) 367-8500

NUMBER

0407002860

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



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

Status can be verified at http://www.dpor.virginia.gov

Jay W. De Boer

DPOR-LIC (05/2015)

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DEDIC COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NI IMBER: 0407002860, EXPIRES:

NUMBER: 0407002860 EXPIRES: 12-31-2017
PROFESSIONS: ENG
RUMMEL KLEPPER & KAHL LLP
81 MOSHER ST

BALTIMORE, MD 21217

12-31-2017

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EXPIRES ON 02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER 0411000443

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 721 LAKEFRONT COMMONS SUITE 203 **NEWPORT NEWS, VA 23606**

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DEOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation **BOARD FOR APELSCIDLA**

BUSINESS ENTITY BRANCH OFFICE REGISTRATION NUMBER: 0411000443 EXPIRES: 02-28-2018 PROFESSIONS: ENG **RUMMEL KLEPPER & KAHL LLP** RK&K 721 LAKEFRONT COMMONS SUITE 203 **NEWPORT NEWS, VA 23606**

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EXPIRES ON

02-28-2018

Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0411000667

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

PROFESSIONS: ENG



RUMMEL KLEPPER & KAHL LLP 2901 S. LYNNHAVEN RD SUITE 300 VIRGINIA BEACH, VA 23452

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DPOR-LIC (05/2015)

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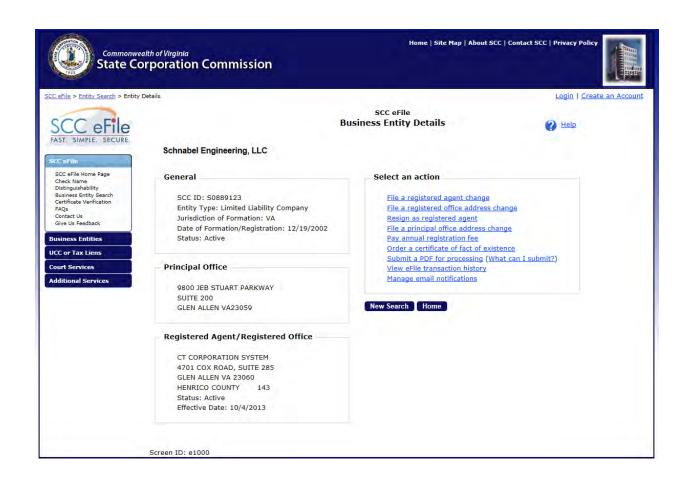
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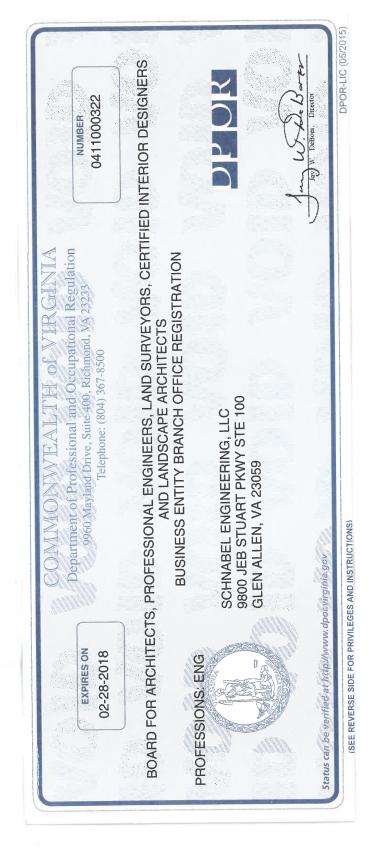
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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA

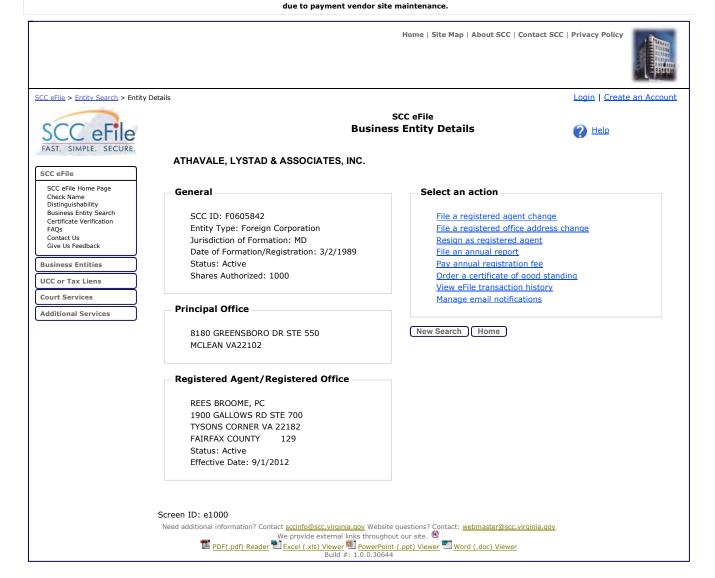
BUSINESS ENTITY BRANCH OFFICE REGISTRATION NUMBER: 0411000667 EXPIRES: 02-28-2018 PROFESSIONS: ENG **RUMMEL KLEPPER & KAHL LLP** 2901 S. LYNNHAVEN RD SUITE 300 VIRGINIA BEACH, VA 23452

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0407002804 NUMBER

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

BUSINESS ENTITY REGISTRATION

PROFESSIONS, ENG

ATHAVALE, LYSTAD AND ASSOCIATES INC 8180 GREENSBORO DRIVE

J D T

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MCLEAN, VA 22102

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UNIVERSITY OF VIRGINIA DEPARTMENT OF VIRGINIA Department of Professional and Occupational Regulation BUSINESS ENTITY REGISTRATION BOARD FOR APELSCIDLA

NUMBER: 0407002804 EXPIRES: 12-31-2017 ATHAVALE, LYSTAD AND ASSOCIATES INC. 8180 GREENSBORO DRIVE PROFESSIONS: ENG **MCLEAN, VA 22102**

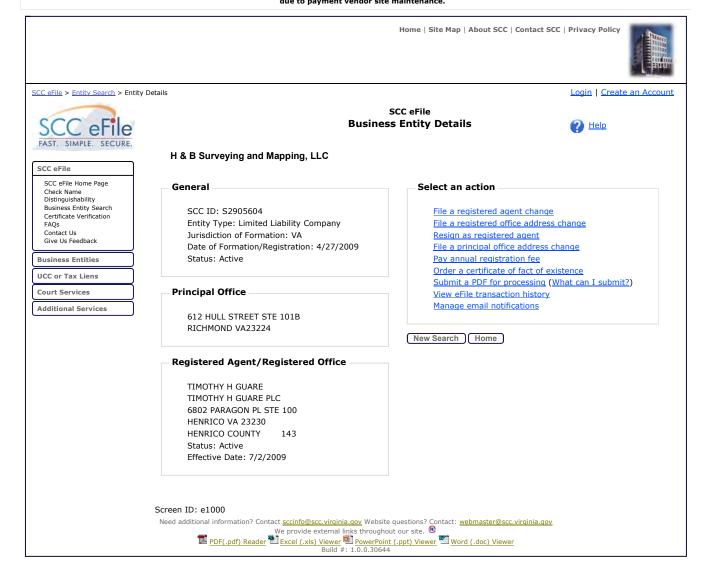


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Telephone: (804) 367-8500

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NUMBER

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

BUSINESS ENTITY REGISTRATION



H & B SURVEYING & MAPPING LLC



RICHMOND, VA 23224 612 HULL ST SUITE 101B



Jay W DeBoer, Duector

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Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

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BUSINESS ENTITY BRANCH OFFICE REGISTRATION



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H & B SURVEYING & MAPPING LLC 2105 ELECTRIC RD SW STE 103 ROANOKE, VA 24018



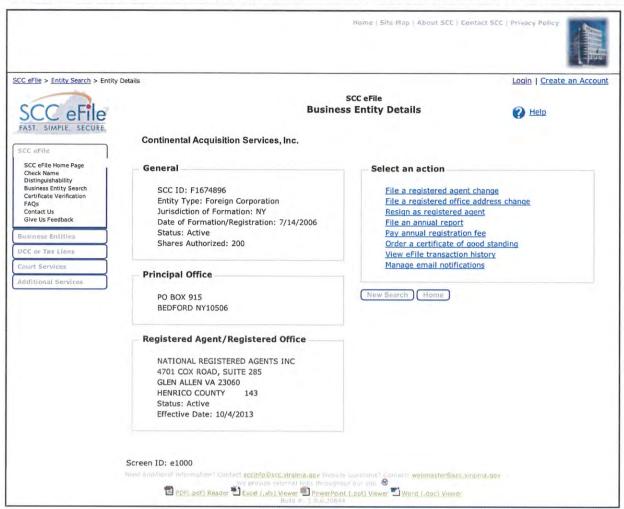
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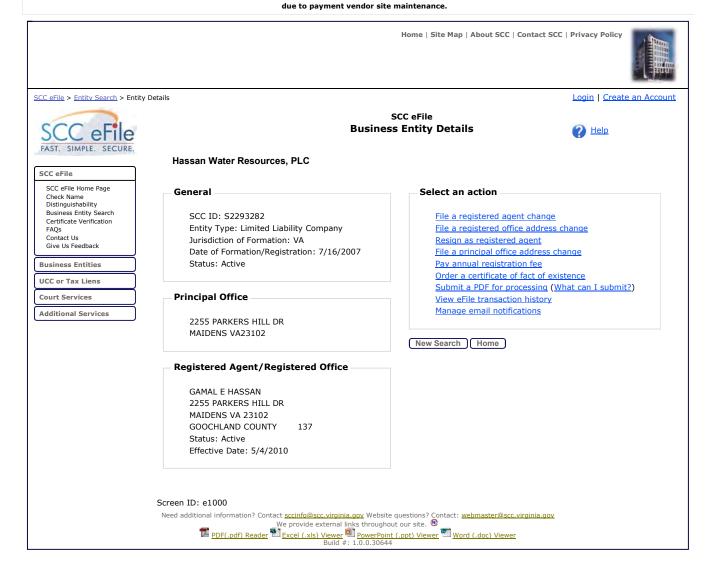
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Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0413000299

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS PROFESSIONAL LIMITED LIABILITY COMPANY



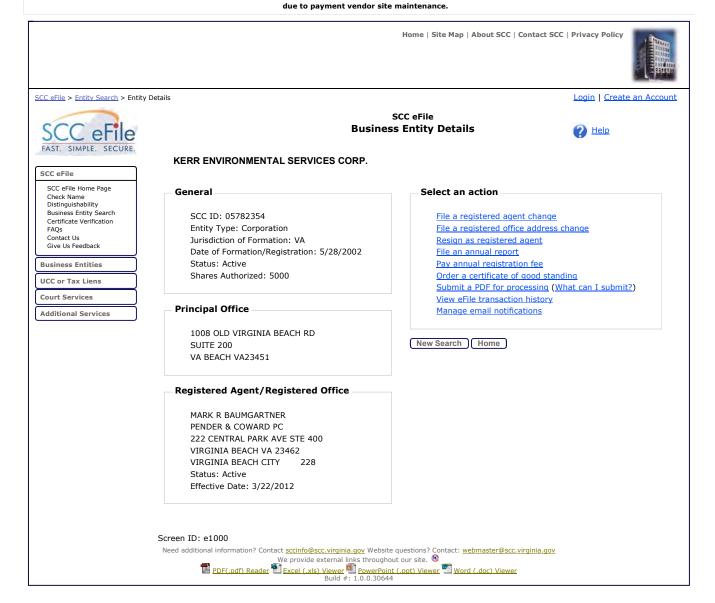
HASSAN WATER RESOURCES PLC **HWR** 2255 PARKERS HILL DRIVE MAIDENS, VA 23102-2244

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Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400, Richmond, VA 23233 Telephone: (804) 367-8500

NUMBER

0407005065

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

BUSINESS ENTITY REGISTRATION

KERR ENVIRONMENTAL SERVICES CORP 1008 OLD VIRGINIA BEACH RD VIRGINIA BEACH, VA 23451 **STE 200**

W. DeBoer. Director

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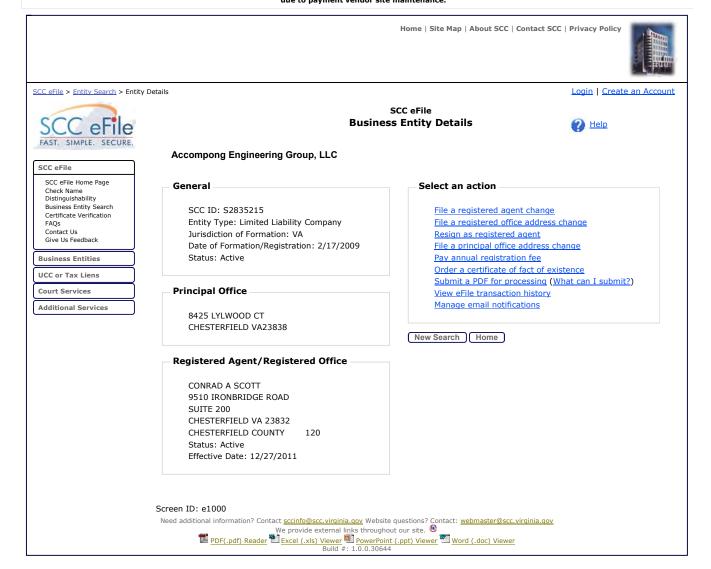
UNING COMMONWEALTH OF VIRGINIA Department of Professional and Occupational Regulation

JUMBER: 0407005065 EXPIRES: 12-31-2017 KERR ENVIRONMENTAL SERVICES COM BUSINESS ENTITY REGISTRATION 1008 OLD VIRGINIA BEACH RD BOARD FOR APELSCIDLA PROFESSIONS: ENG

VIRGINIA BEACH, VA 23451



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> **EXPIRES ON** 12-31-2017

0407005442 NUMBER

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

PROFESSIONS: ENG



ACCOMPONG ENGINEERING GROUP, LLC 9510 IRON BRIDGE RD CHESTERFIELD, VA 23832 SUITE 200

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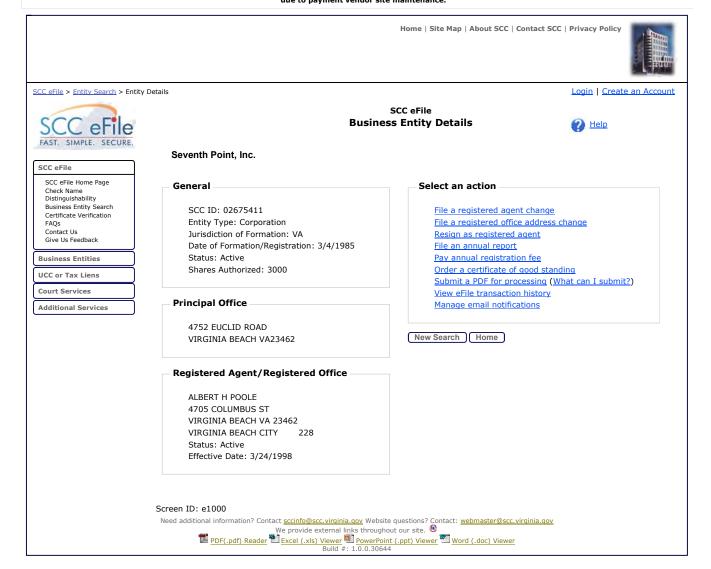
ACCOMPONG ENGINEERING GROUP, LLC PROFESSIONS: ENG SUITE 200

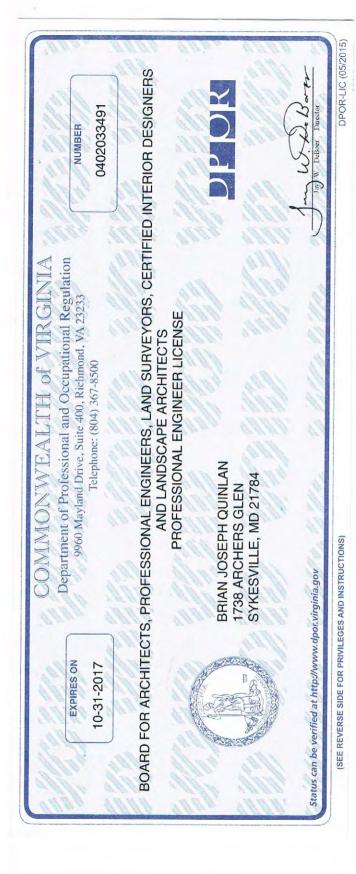
CHESTERFIELD, VA 23832

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA

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

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BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS

PROFESSIONAL ENGINEERS LICENSE

PROFESSIONAL ENGINEERS LICENSE



0402040981

NUMBER

RICHARD LAYNE CLARKE 2785 EAST WEST LN QUINTON, VA 23141

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

01-31-2017 **EXPIRES ON**

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0402032924

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

JOSHUA SHEPPARD WADE 43346 RIVERPOINT DRIVE LEESBURG, VA 20176



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BOARD FOR APELSCIDLA PROFESSIONAL ENGINEER LICENSE NUMBER: 0402032924 EXPIRES: 01-31-2017

JOSHUA SHEPPARD WADE 43346 RIVERPOINT DRIVE LEESBURG, VA 20176

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA

05-31-2017

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

0402052031

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

GREGORY HAMILTON SHAFER 9404 TILLER DR ELLICOTT CITY, MD 21042



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Key Personnel Resume Forms (**Addendum No. 1 Form**)

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Glenn Olechnowich, Project Manager
- b. Project Assignment: **Design Build Project Manager**
- c. Name of Firm with which you are now associated: Granite Construction Company
- d. Employment History: With this Firm 12 Years With Other Firms 7 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
 Purdue University, Fort Wayne, IN | BS | 1994 | Civil Engineering Technology
- f. Active Registration: Year First Registered/ Discipline/VA Registration #:
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

ProjectPennsylvania Rapid BridgeDates: Month Year –December 2015–Name:Replacement DBFM, PAMonth YearPresentProject Role:Design-Build Project ManagerWith Current Firm?Yes

Eastern Region

Responsibility/Specific Job Duties: The \$899 million project consists of replacing 558 bridges; demolition of existing bridges; design; coordination and implementation of MOT plans and temporary roadway widening to accommodate staged construction; full-depth pavement replacement; guide rail; and striping of all bridge replacements. This project required an extensive permit-tracking and compliance effort in order to maintain the design and construction schedule for the large quantity of bridges. The entire program is moving on a fast-tracked basis, with contract requirements in place to construct bridges in either 2-week or 5-week increments based on the bridge complexity. In the region that Glenn oversees, more than 90% of the bridges are over streams or waterways, requiring extensive permitting efforts. Glenn is responsible for the overall project design progress and construction, including budget, schedule, and public and third-party coordination, for the eastern portion of the project. He is working with multiple bridge design teams to coordinate permits, design deliverable progress, perform constructability reviews, and develop efficient means and methods. He worked with designers to refine ABC methods, including the use of several precast elements, to meet the aggressive schedule. He manages all aspects of the work and demonstrates successful project execution by maintaining an integrated approach to managing compliance with Safety, Health Environmental and Safety systems; he minimizes risk and exposure to ensure on-time, on-budget completion of the project. In addition to being responsible for

relocating utilities and obtaining permits for each bridge, Glenn and his team are meeting with and managing coordination with Norfolk Southern Railroad.

Client: Penn DOT | Cost: \$899 Million

Relevancy: Design Build, a) roadway, c) survey, d) right-of-way, e) utilities, f) structures and bridges, g) demolition of structures, j) permitting, m) geotechnical, n) storm drainage and water management, q) pavement reconstruction-pavement overlay, s) railroad coordination, t) guardrails, u) retaining walls, w) traffic control devices, aa) traffic maintenance and management, bb) landscaping, cc) public involvement/relations, dd) quality assurance and quality control, ee) construction engineering and inspection, ff) overall project management

Project	Queens Bored Tunnels and Structures	Dates: Month Year -	September 2009 –
Name:	(QBT), Queens, NY	Month Year	November 2013
Project Role:	Project Manager	With Current Firm?	Yes

Responsibility/Specific Job Duties: Glenn was the Project Manager for the \$777 million Queens Bored Tunnels and Structure project, which was recognized by *Engineering News-Record* as one of 2011's Top Project Starts. Glenn was responsible for managing all aspects of the work, including successfully supervising a large Joint Venture project team, managing design, construction quality, contract administration, scheduling of the project with a large exposure to geotechnical risk, and effective management and control of compliance with safety, quality, and environmental requirements and goals.

Glenn was responsible for managing all aspects of the work, including successfully supervising a large Joint Venture project team, working with designers on several critical project elements, construction quality, contract administration, scheduling of the project with a large exposure to geotechnical risk, and effective management and control of compliance with safety, quality, and environmental requirements and goals. In order to overcome schedule impacts due to a defective slurry wall installed by a previous contractor, he worked with designers to develop a remediation and schedule acceleration plan. He led the team to complete the project on-time despite the setback. Glenn also worked with the design team to engineer custom support of excavation measures to mitigate the risks of performing work in this urban environment, which was constrained by buildings and railroad infrastructure. He oversaw full-time quality control staff and independent inspection and testing operations.

Client: MTACC | Cost: \$777 Million

Relevancy: a) roadway, c) survey, e) utilities, f) structures and bridges, g) demolition of structures, j) permitting, m) geotechnical, o) storm drainage and water management, q) pavement reconstruction-pavement overlay, s) railroad coordination, u) retaining walls, w) traffic control devices, bb) landscaping, cc) public involvement/relations, dd) quality assurance and quality control, ee) construction engineering and inspection, ff) overall project management

Project	Broad River Bridge, DB	Dates: Month Year –	April 2001 –
Name:	Beaufort, SC	Month Year	November 2002
Project Role:	Construction Manager	With Current Firm?	No

Responsibility/Specific Job Duties: Glenn was responsible for managing the \$80 million construction of two bridge crossings totaling more than 1 mile of water work. The bridge featured precast concrete girders, architectural columns, and a cast-in-place concrete deck, and required constructing in-water foundations. Other project elements included phased widening and reconstruction of 20 miles of roadway requiring MOT plans, traffic control to minimize mobility impacts, full-depth pavement replacement, environmental permitting and utilities. Among the challenging conditions that Glenn and the team overcame on this project were construction in tidal waters, settlement issues in marshy areas surrounding the abutments, and maintaining traffic during construction.

Glenn was responsible for construction operations, including quality and contract administration. In order to accommodate the tidal waters, he coordinated with designers and the owner to supervise the construction of a trestle system for access on the banks of the river, and he managed the drilled shaft operations, working with designers when unanticipated field conditions were encountered. He initiated a "floating batch plant" to accommodate concrete pours in the river. He also managed construction of drilled shafts, piers, and footings. In order to mitigate settlement risks due to poor soil stability, the team used a 6-month process that involved pre-loading and wick drains to mitigate risk.

Client: South Carolina DOT | Cost: \$80 Million

Relevancy: Design Build, a) roadway, b) state road widening, c) survey, d) right-of-way, e) utilities, f) structures and bridges, g) demolition of structures, j) permitting, k) coast guard coordination, l) navigable channel fender system, m) geotechnical, o) storm drainage and water management, q) pavement reconstruction-pavement overlay, t) guardrails, u) retaining walls, w) traffic control devices, x) sign and sign structures, y) roadway and marine navigation lighting, aa) traffic maintenance and management, bb) landscaping, dd) quality assurance and quality control, ee) construction engineering and inspection, ff) overall project management

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. N/A

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- Name & Title: Brian Quinlan PE, Area Manager
- Project Assignment: Responsible Charge Engineer
- Name of Firm with which you are now associated: Parsons Construction Group Inc.
- d. Employment History: With this Firm 1 Years With Other Firms 36 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Parsons Construction Group, Area Manager2016–Present Brian is responsible for pursuing and executing Mid-Atlantic construction projects.

Archer Western, Area Manager/DBPM......2008-2015 Brian was responsible for pursuing and executing Mid-Atlantic construction projects.

Brian was responsible for executing Mid-Atlantic construction projects.

Brian was an Operations Manager responsible for executing Florida construction projects from 2003 to 2005 and served as Construction Manager responsible for Route 895 project from 2000 to 2002.

Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Maryland, College Park MD | MBA | 1986 | Business Administration Georgia Institute of Technology, Atlanta, GA | BS | 1979 | Civil Engineering

Active Registration: Year First Registered/ Discipline/VA Registration #: 1999 | Civil Engineering | Virginia PE #0402033491

- Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - Note whether experience is with current firm or with other firm.
 - Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOO may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

I-395 HOV Ramp at Seminary Road with March 2012 -**Dates: Month Year – Project** I-395 NB Aux Lane DB, Alexandria, VA January 2016 Name: **Month Year** Project Role: Design-Build Project Manager With Current Firm?

Responsibility/Specific Job Duties: Prior to joining PCG, Brian was Design-Build Project Manager (DBPM) for the design-build team (Lead Designer was PTG) that constructed a new, widened deck on the Seminary Road Bridge, constructed a new HOV Ramp to the reconstructed Seminary Road Bridge, constructed three sound barrier walls, and widened the northbound I-395 General Purpose Lanes from the Duke Street On-Ramp to and including the Seminary Road Off-Ramp. There was a large MOT component as the roadway widening and new HOV Ramp required longterm work zones on an urban expressway, while the Seminary Bridge reconstruction took advantage of lane closures.

As the DBPM, Brian supervised and controlled all phases of this \$56 million project. This included selection of the Lead Designer (Virginia PE), supervising the task force process during development of the Technical Proposal, coordinating development of the Final Design, selection of means and methods for executing the work, selection of the Construction Engineer (Virginia PE), and execution of the work up to and including the opening of the new HOV Ramp. Brian also worked with the Department to negotiate and implement two value-engineering agreements; one of which accelerated the opening of the Auxiliary Lane by 16 months. In fulfilling these responsibilities, he supervised the Construction Manager, Design Manager, Quality Assurance Manager, and Safety Manager. Of particular note, he worked with Design Manager Josh Wade, PE, (proposed as Deputy Design Manager for this SOQ) to produce the highest-ranked Technical Proposal and the Final Design. He also worked with the Construction Engineer to develop the delivery and erection plans for the concrete beams and steel girders for the bridges.

Client: VDOT | Cost: \$56 Million

Relevancy: Design-Build a) interstate widening; b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges; g) demolition of structures; h) civil infrastructure for managed lanes; j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) pavement reconstruction, pavement overlay and new pavement; r) intelligent transportation systems for monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; u) retaining walls; v) sound barrier walls; w) traffic control devices; x) signs, sign

structures, and foundations; y) roadway lighting; z) transportation management plan; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

Project I-95 Bridges Reconstruction Dates: Month Year - June 2010 – October Name: Month Year - Month Year - 2014

Project Role: Project Executive With Current Firm? No

Responsibility/Specific Job Duties: Brian was the Area Manager overseeing a \$74 million VDOT contract for the reconstruction of 11 bridges (20 separate structures) and localized widening on the I-95/I-64 corridor in Richmond and Henrico County, VA. The majority of this work was completed at night by reducing the I-95/I-64 corridor to one lane in each direction, which required a well-orchestrated MOT effort and intensive coordination with the Department. The mainline reconstruction finished 4 months early to earn a \$3 million No-Excuse Bonus for Early Completion. The final scope of work incorporated contractor-proposed value-engineering agreements to resolve utility conflicts and modify bearing designs. In addition to the engineering associated with these Work Orders, the use of precast superstructure elements (Accelerated Bridge Construction) required extensive construction engineering in the form of shop drawings for the precast units, analysis of load-bearing capacities of existing and new bridge structures, falsework designs for supporting existing bridge decks during substructure reconstruction, and contractor-facilitated relocation of existing overhead electrical transmission lines (Dominion unable to provide outages as planned).

As the Area Manager, Brian exercised supervision and control over all construction phases of the project, including the extensive construction engineering effort. He was responsible for the selection of means and methods used in the estimate, selection of the site for casting yard, design of casting beds, development of the casting sequence and procedures, selection of the Construction Engineer (Virginia PE), development of means and methods to execute the work, execution of the work, and final acceptance/closeout. Noteworthy means and methods included engineered plans for more than 1,000 critical lifts, falsework designs to support the Lombardy Bridge during reconstruction of the substructure, detailed erection plans for 234 precast deck sections, and coordination of bridgework over and adjacent to two active railroad tracks. In fulfilling these responsibilities, Brian supervised the Construction and Safety Managers.

Client: VDOT | Cost: \$74 Million

Relevancy: a) interstate widening; b) roadway; c) survey; e) utilities; f) structures and bridges; g) demolition of structures; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) pavement reconstruction, pavement overlay and new pavement; s) railroad coordination; t) guardrail; u) retaining walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality control; ee) construction engineering and inspection; ff) overall project management.

Project Vietnam Veterans Memorial Bridge and I- Dates: Month Year - 2000–2002

Name: 95 Interchange DB, Richmond, VA Month Year

Project Role: Construction Manager With Current Firm? No

Responsibility/Specific Job Duties: Brian was the Construction Manager for the joint venture that built the Route 895 Bridge over the James River and three new I-95 ramp structures. This design-build assignment was part of a VDOT P3 contract. The I-95/Route 895 ramp work consisted of three new multispan bridges, for which the superstructure was a combination of cast-in-place deck on structural steel beams and precast segmental box girders. The Route 895 river-crossing work featured dual bridges that were a combination of precast and cast-in-place segmental box girders. Just downstream from the Port of Richmond, the main span of these dual high-level bridges provide 145 feet of vertical clearance over the 300-foot-wide James River shipping channel.

As the Construction Manager, Brian was the joint venture point of contact for the concessionaire and the Department, participated in task force meetings that led to the Final Design, collaborated in the selection of means and methods, supervised the development of work plans, and supervised all construction activities including the precasting operation. Brian's supervisory responsibilities included oversight of the Construction Engineer (Virginia PE) during development of the precast segment casting plan, precast segmental erection plans, traveler sequencing for the cast-in-place river crossing, and falsework for the pier tables. Brian also supervised the General Superintendent, Casting Yard Manager, and Safety Manager, while working closely with the concessionaire's Quality Control Manager.

Client: VDOT | Cost: \$115 Million

Relevancy: Design-Build c) survey; d) right-of-way; f) structures and bridges (over navigable waterway); k) Coast Guard coordination; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; aa) traffic maintenance and management during all phases of construction; cc) public involvement/relations; dd) quality control; ee) construction engineering and inspection; ff) overall Project management.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. N/A

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

(Addendum No. 1 –reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Richard Clarke, PE, Quality Assurance Manager
- b. Project Assignment: Quality Assurance Manager
- c. Name of Firm with which you are now associated: CKI & Associates, Inc.
- d. Employment History: With this Firm 40 Years With Other Firms 2 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

CKI Associates, Inc......2014–Present

As Quality Assurance/Quality Control (QA/QC) Manager and Assistant Resident, Richard knows the VDOT construction inspection and documentation procedures. He is responsible for daily quantity review and quantity reconciliation of contractors' work, reviews inspectors' IDR, and oversees/assigns daily work inspections. As QA/QC Manager, he is responsible for field operations and company projects, including reviewing layout, material quality, and building standards as per approved plans; project controls for material testing, including soils, concrete, and rebar placement and alignment; performing field reviews to maintain quality as per plans/specifications; budgets and completion schedule; coordinating, directing, and managing QC testing staff to ensure work meets plans/ specifications; scheduling daily work, reviewing inspector IDR, preparing the DN and NCR, RFI request, and plan revisions; and final project closeout.

<u>Quinn Consulting Services, Inc.</u> 2012–2013
As Quality Assurance Manager, Richard coordinated, directed, and managed the QA staff to adhere to the approved

QA/QC Plan for a \$958 million VDOT design-build project.

As Senior Construction Management, Richard directed and managed construction projects, including overseeing construction through turnkey opening, managing budgets, negotiating change orders, inspecting franchise properties through construction, and verifying the execution of drawings, specifications, and Brand Standards.

As Senior Project Manager, Richard was responsible for administration of a multilane highway design-build project, and he coordinated, directed, and managed inspection personnel.

As Area Project Manager, Richard was responsible for administration, personnel, equipment, subcontractors, safety, schedule, cost budgets, and profitability on area projects.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Kentucky, Lexington, KY | BS | 1974 | Civil Engineering

Active Registration: Year First Registered/ Discipline/VA Registration #:

2010 | Professional Engineer | VA #040981

- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1(b))

ProjectDesign-Build I-95 Express Lanes, Fairfax,
Name:Dates: Month Year -
Month YearJanuary 2012 -
October 2013Project Role:Quality Assurance ManagerWith Current Firm?Yes

Responsibility/Specific Job Duties: As Quality Assurance Manager, Richard was on site full time during construction and oversaw project QA staff and verified work performed was inspected and tested per the VDOT Minimum Requirements for QA and QC on Design-Build and Public-Private Transportation Act Projects and the Project-Specific QA/QC Plan. He implemented and maintained the Quality Management System and provided leadership to a team of Quality Assurance (QA) inspectors responsible for monitoring and verifying the QC Process. He scheduled, facilitated, and prepared Preparatory Inspection Meetings meeting minutes, initiated the non-conformance process for those items

reported by the QA Inspection and Testing Team, and conducted internal and external design and construction auditing. Richard managed internal auditing to verify that the QA/QC material sampling and testing process met or exceeded the contract minimum requirements and that the Materials Notebook documentation was in conformance with the established process. He provided materials sampling and testing audits to ensure that practices and procedures were consistent throughout the project, and he conducted periodic auditing of erosion and sediment control measures and documentation to verify adherence with project requirements and recommend procedural improvements as necessary. Richard provided continued improvement to the existing QA/QC process. Client: VDOT | Cost: \$958 Million

Relevancy: VDOT Design-Build; performed identical QA Management Services, including the use of VDOT's Design Build Manual and the procedures and rates specified for inspection, testing, preparatory meetings, and nonconformance issues, a) interstate widening; b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges; g) demolition of structures; h) civil infrastructure for managed lanes, excluding integration system; i) reconfiguration of barrier gates and lane markings for bridges; j) permitting; k) geotechnical; n) hydraulics; o) storm drainage and SWM facilities; p) installation of tide gate; q) pavement reconstruction, pavement overlay and new pavement; r) ITS for monitoring traffic conditions and safety; s) CSX & WMATA railroad coordination; t) guardrail; u) sound wall, retaining walls post foundation/panels and MSE walls construction. v) sound barrier walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; z) TMP; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) QA/QC; ee) construction engineering and inspection; ff) overall project management.

Project Design-Build I-81 Truck Climbing Lanes, Dates: Month Year – 2008–2010

Name: Lexington, VA Month Year

Project Role: Quality Assurance Manager With Current Firm? No

Responsibility/Specific Job Duties: As Quality Assurance Manager, Richard was on site full time during construction, and he coordinated, directed, and managed the QA staff to adhere to the approved QA Plan. He was responsible for approval of contractor RFIs, interpretation of specifications, submittals and pay requests, client IV and IA oversight inspections, material record books, QC team testing/documentation per the approved QC Plan, and he conducted Preparatory Meetings for all operations at startup, received weekly contractor updates, performed constructability reviews, reviewed contractors' schedule, and conducted weekly progress meetings. Client: VDOT | Cost: \$75 Million

Relevancy: VDOT Design-Build; a) interstate widening; b) roadway; c) survey; d) utilities; e) structures and bridges; f) demolition of structures; g) civil infrastructure for managed lanes, excluding integration system; h) reconfiguration of barrier gates and lane markings on existing bridge; i) permitting; j) geotechnical; k) hydraulics; l) storm drainage and SWM facilities; m) pavement reconstruction, pavement overlay and new pavement; n) ITS for monitoring traffic conditions and safety; o) guardrail; p) retaining walls; q) sound barrier walls; r) traffic control devices; s) signs, sign structures, and foundations; t) roadway lighting; u) TMP; v) traffic maintenance and management during all phases of construction; w) landscaping; x) public involvement/relations; y) QA/QC; z) construction engineering and inspection; aa) overall project management.

Project Design-Build I-63 Highway, Northwest Dates: Month Year - 2003–2005

Name: MO Month Year

Project Role: Senior Project Manager With Current Firm? No

Responsibility/Specific Job Duties: As Senior Project Manager, Richard was on site full time during design and construction and was responsible for administration of this multilane highway project. He coordinated, directed, and managed inspection personnel, reviewed final design, construction layout, 1.2 million-cubic-yard earthwork, drainage, lime stabilization, base stone and asphalt pavement. He reviewed, approved, and monitored the CPM schedule, contracts, change orders, and RFIs. He coordinated subcontractors, materials, and plan interpretation, and he oversaw public relations. Client: Kansas City DOT | Cost: \$39 Million

Relevancy: Design-build; a) interstate widening; b) roadway; c) survey; d) utilities; e) structures and bridges; f) demolition of structures; g) civil infrastructure for managed lanes, excluding integration system; h) reconfiguration of barrier gates and lane markings on existing bridge; i) permitting; j) geotechnical; k) hydraulics; l) storm drainage and SWM facilities; m) pavement reconstruction, pavement overlay and new pavement; n) ITS for monitoring traffic conditions and safety; o) guardrail; p) retaining walls; q) sound barrier walls; r) traffic control devices; s) signs, sign structures, and foundations; t) roadway lighting; u) TMP; v) traffic maintenance and management during all phases of construction; w) landscaping; x) public involvement/relations; y) QA/QC; z) construction engineering and inspection; aa) overall project management.

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

Project Role Duration

Design-Build Route 7 Ashburn Village, Loudon/VA Quality Control Manager 2013 - July 2017

(Addendum No. 1 –reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Joshua Wade, PE, Principal Project Manager
- b. Project Assignment: **Design Manager**
- c. Name of Firm with which you are now associated: Parsons Transportation Group, Inc.
- d. Employment History: With this Firm 22 Years With Other Firms 0 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
 University of Maryland University College, Adelphi, MD | MBA | 2009 | Business Administration
 University of Maryland, College Park, MD | BS | 1993 | Civil Engineering
- f. Active Registration: Year First Registered/ Discipline/VA Registration #:

1999 | Professional Engineer | VA #0402032924

- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1 (b)

Project Design-Build Military Highway CFI, Dates: Month Year - 2015–Present

Name: Norfolk, VA Month Year

Project Role: Design Manager With Current Firm? Yes

Responsibility/Specific Job Duties: As Design Manager, Josh oversees the design for Virginia's first Continuous Flow Intersection (CFI) which includes adding new lanes, signals, and traffic management technology to increase capacity and reduce congestion. He led development of the Design QA/QC Plan and oversees implementing the design QA/QC program, including design packages, working plans, shop drawing reviews, specifications, subconsultant efforts, and constructability reviews.

Josh coordinates the design disciplines, including subconsultants, through task force meetings, schedule and risk monitoring, and work audits. Through rigorous project procedures and reviews, he ensures that the overall project design is in conformance with the contract and standards, and that it meets VDOT and stakeholders' goals and expectations. This project widens Military Highway and includes survey validation/additions, ROW acquistion of more than 30 locations, a new dual box culvert, retaining walls along the interstate, new SWM and drainage facilities, CCTV design and installation to provide the City with full coverage of the facility, railroad crossing upgrade and widening and coordination, final noise analysis following VDOT's process (which resulted in the recommendation of designing and constructing three noise abatement walls), roadway lighting meeting above-normal lighting levels, public meetings and coordination (including radio and other media ads), and construction engineering (including SOE review and wall type analyses). Josh oversaw wetland impact analyses, permit acquisitions, and dry/wet utility avoidance and relocation throughout the corridor. The Design is substantially completed and recently entered the Construction phase. During construction, he manages engineering construction support services. Client: VDOT | Cost: \$59 Million

Relevancy: VDOT design-build, working with Corman Construction (Lead Design-Build Contractor JV partner), Hampton Road District location, same permitting agency contacts and review agencies such as the Army Corps of Engineers, VMRC, and US Fish and Wildlife, local jurisdiction coordination, b) roadway; c) survey; d) right-ofway; e) utilities; f) structures and bridges; g) demolition of structures; j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and SWM facilities; q) pavement reconstruction, pavement overlay and new pavement; r) ITS for

monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; u) retaining walls; v) sound barrier walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; z) TMP; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) QA/QC; ee) construction engineering and inspection; ff) overall project management.

Project Design-Build I-395 HOV Ramp at **Dates: Month Year** – 2013–2015

Name: Seminary Road with I-395 NB Auxiliary Month Year Lane Extension, Alexandria, VA

Project Role: Design Manager With Current Firm? Yes

Responsibility/Specific Job Duties:

As Design Manager, Josh managed design for this project that widened I-395 through an auxiliary lane, widened a mainline bridge, and included a reversible HOV ramp and a pedestrian bridge across I-395. He determined design packaging, set the design schedule, resource and subconsultant management, ROW avoidance and acquisition support, coordinated with stakeholders (including VDOT and the City), permit acquisition, and oversaw design reviews (including interdisciplinary, environmental, constructability, and safety). He led development of the Design QA/QC Plan and oversaw implementation of the design QA/QC program, including design packages, working plans, shop drawing review, specifications, subconsultant efforts, and constructability reviews. Josh ensured that the overall project design was in conformance with the contract and standards and met client and stakeholders' goals and expectations, including the locality. He coordinated with Parsons' worldwide resource network to apply lessons learned to ensure a fully optimized project solution. He worked with VDOT and the City to determine the most cost-effective design enhancements to address City concerns and pedestrian safety resulting in a value-engineered pedestrian bridge over I-395 and the use of architectural LED lighting. Client: VDOT | Cost: \$55 Million

Relevancy: VDOT Design-Build, local similar MOT and construction operation to proposed replacement of Great Bridge Boulevard, local jurisdiction coordination, a) interstate widening; b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges, including bridge widening and replacing Seminary Road bridge deck over I-395; g) demolition of structures; h) civil infrastructure for managed lanes, excluding integration system; j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and SWM facilities; q) pavement reconstruction, pavement overlay and new pavement; r) significant ITS, including cameras and gates, for monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; u) retaining walls; v) sound barrier walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; z) TMP; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) QA/QC; ee) construction engineering and inspection; ff) overall project management.

Project Design-Build Intercounty Connector Dates: Month Year - 2008–2011

Name: Contract B, Montgomery County, MD Month Year

Project Role: Design Manager With Current Firm? Yes

Responsibility/Specific Job Duties: As Design Manager, Josh was responsible for design of this project consisting of 7 miles of a new, controlled access six-lane tolled roadway and two interchanges: ICC/MD 182 and ICC/MD 650. He worked closely with Corman (Design-Build Contractor JV partner) and assisted in developing the project schedule, reviewed daily progress, and ensured successful completion per contract, on time and under budget. He led development of the Design QA/QC Plan, and oversaw the implementation of the design QA/QC program, including design packages, working plans, shop drawing review, specifications, subconsultant efforts and constructability reviews. The innovative bridge foundations and pier configurations design led by Josh and approved through the ATC process significantly reduced project costs and environmental impacts. The innovative MOT and construction phasing of the MD 650 SPUI approved through the ATC process reduced neighborhood, traveling public, and utility impacts while reducing project costs and risks. Client: Maryland State Highway Administration | Cost: \$560 Million

Relevancy: Design-Build, Alternative Technical Concepts (ATCs), worked with Corman Construction (Design-Build Contractor JV partner), phasing and coordination with adjacent and subsequent phases, b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges; g) demolition of structures; j) environmental permitting/coordination; m) geotechnical; n) hydraulics; o) storm drainage and SWM facilities; q) pavement reconstruction, pavement overlay and new pavement; r) ITS for monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; u) retaining walls; v) sound barrier walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; z) TMP; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) QA/QC; ee) construction engineering and inspection; ff) overall project management.

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. N/A

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Randy Svilar/ Principal Construction Manager
- b. Project Assignment: Construction Manager
- c. Name of Firm with which you are now associated: Parsons Construction Group, Inc.
- d. Employment History: With this Firm <u>3</u> Years With Other Firms <u>34</u> Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

<u>Principal Construction Manager, Parsons Construction Group, Inc.</u>

2013–Present Randy is a Principal Construction Manager with PCG, supervising complex roadway and bridge projects. He is also a Lead Estimator on several pre-bid pursuits, performing value analyses and constructability reviews and ensuring that appropriate materials are used.

<u>Various Roles, Flatiron Constructors, Inc.</u>

2007–2013
Randy was a General Superintendent and a Construction Manager on several complex roadway and bridge projects.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: Certified Safety Professional (CSP) | Board of Certified Safety Professionals Certificate #IEX05943

Randy will obtain the required Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC) prior to the commencement of construction.

- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1 (b))

ProjectJohn James Audubon Bridge, DBDates: Month Year –September 2008 –Name:St. Francisville, LAMonth YearMay 2011Project Role:Construction ManagerWith Current Firm?No

Responsibility/Specific Job Duties: Randy was Construction Manager responsible for the construction of 11 miles of on-grade roadway, eight approach bridges, and a 1,583-ft cable-stay main span bridge over the Mississippi River. He oversaw work crews, coordinated field activities with the Quality Control (QC) team and inspected construction for specification compliance and schedule adherence. He led the development of work plans that complied with contract specifications, and he oversaw material procurement and supplier coordination. He performed schedule reviews and managed subcontractors, construction, equipment, safety, and QC.

Granite and Parsons were joint venture partners on this project, affording Randy the opportunity to work on a fully-integrated basis with GPC's Lead Structural Engineer, Greg Shafer (PTG), to simplify reinforcement in the towers of the cable-stay bridge to ease the placement and pre-tie all rebar used.

Client: Louisiana Department of Transportation and Development | Cost: \$358 Million

Relevancy: Design-Build b) roadway; c) survey; e) utilities; f) structures and bridges; j) permitting; k) Coast Guard coordination, including permitting; l) navigable channel fender system; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) new pavement; s) railroad coordination; t) guardrail; u) x) signs, sign structures, and foundations; y) roadway and marine navigation lighting; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

Project I-35 Emergency Replacement, DB, Dates: Month Year - October 2007 – Name: Minneapolis, MN Month Year September 2008

Project Role: Segmental Bridge Construction Manager With Current Firm? No

Responsibility/Specific Job Duties: Randy was the Segmental Bridge Construction Manager for this \$237 million design-build project to replace the collapsed I-35W bridge over the Mississippi River in downtown Minneapolis. Randy planned all casting/erection and post-tensioning operations and managed all construction staff tasked with completing the work. He also managed subcontracts with suppliers of the post-tensioning materials and acquired all specialized materials, keeping the project on schedule. He also led the development of work plans that complied with contract specifications, performed schedule reviews, and oversaw all QC activities in compliance with all contract requirements.

Randy was integrated with the design team and owner throughout the life of the project. He led the procurement of all specialized equipment from the Straddle Crane to Closure Forms and long line casting formwork and heating plan while building in winter. The project was designed and built in 11 months, which was 3 months ahead of schedule.

Client: Minnesota Department of Transportation | Cost: \$237 Million

Relevancy: Design-Build a) interstate; b) roadway; c) survey; e) utilities; f) structures and bridges j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) new pavement s) railroad coordination; t) guardrail; u) retaining walls; w) traffic control devices; x) signs, sign structures, and foundations; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

Project Maroon Creek Bridge Dates: Month Year - October 2005 –
Name: Aspen, CO Month Year October 2007

Project Role: Construction Manager With Current Firm? No

Responsibility/Specific Job Duties: Randy was Construction Manager responsible for managing the construction of this 620-foot-long structure on SH 82, which features a 270-foot span, 100 feet above the Maroon Creek Basin. Randy led the construction of the project, managing work crews and leading the development of work plans that complied with contract specifications, performing schedule reviews, and overseeing all QC activities in compliance with contract requirements to complete the project on time and within budget. Randy worked with the owner and design firm, PTG, during construction.

Client: Colorado Department of Transportation | Cost: \$14 Million

Relevancy: b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges; j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) new pavement; t) guardrail; u) retaining walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway lighting; aa) traffic maintenance and management during all phases of construction; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

Project | Role | Duration

I-395 Reconstruction, Miami FL | PCG Proposal Estimator | February 2016 - December 2016

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Gregory Shafer, PE, SE, Vice President
- b. Project Assignment: Lead Structural Engineer
- c. Name of Firm with which you are now associated: Parsons Transportation Group, Inc.
- d. Employment History: With this Firm **16** Years With Other Firms 14 Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

<u>VP/Bridge and Tunnel Southeast District Manager, Parsons Transportation Group, Inc.......2000–Present</u>
As a member of the Bridge and Tunnel Division, Greg is responsible for the production of design drawings and specifications for large and complex bridge projects, with an emphasis on concrete and segmental concrete structures. In addition, he is responsible for the supervision and direction of the Southeast Bridge and Tunnel district.

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

University of Colorado Boulder | Master of Engineering | Civil Engineering University of Delaware | Bachelor of Engineering (Magna Cum Laude) | Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2013 | Professional Engineer | VA #0402052031

- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1 (b))

Project Intercounty Connector, Contract A, DB Dates: Month Year - August 2007 - Name: Montgomery County, MD Month Year January 2013
Project Role: Structures Design Manager With Current Firm? Yes

Responsibility/Specific Job Duties: Greg was responsible for all structural design of bridges and noise walls for this \$560 million design-build project to reconstruct a 7.2-mile segment of the ICC. He supervised the design and construction of 18 bridges including a 611-foot-long deck-over structure where the ICC crosses under residential communities and then east of the deck where the ICC crosses an environmentally sensitive area on a signature arch bridge, designed to complement the natural terrain. Recognizing the sensitive environmental features at this and other locations, the project took special precautions during design and construction to minimize potential impacts.

Greg managed and reviewed all designs and verified or modified designs based on field conditions and construction activities for all structures including five bridges composed of continuous steel plate girders; six mainline bridges composed of prestressed concrete bulb tee beams; four existing bridges widened to accommodate the new roadway; one simple span steel girder bridge; nine major culverts; and 43 overhead and cantilevered sign structures and noise barriers. With PTG as the Lead Designer, Greg worked with CJV members Granite and Corman.

Client: Maryland State Highway Administration | Cost: \$560 Million

Relevancy: Design-Build; a) interstate widening; b) roadway; c) survey; e) utilities; f) structures and bridges; g) demolition of structures; j) permitting; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; q) pavement reconstruction, pavement overlay and new pavement; r) intelligent transportation systems for monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; x) signs, sign structures, and foundations; y) roadway lighting; aa) traffic maintenance and management during all phases of construction; bb) landscaping; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

Project	John James Audubon Bridge, DB	Dates: Month Year –	March 2006 –	ı
Name:	St. Francisville, LA	Month Year	November 2012	ı
Project Role:	Project Manager/Design Manager	With Current Firm?	Yes	

Responsibility/Specific Job Duties: Granite and Parsons were joint venture teammates on this design-build project. Greg was involved from the initiation of the project to the turnover to the owner. As Parsons' Project Manager and Design Manager, he was responsible for all aspects of the delivery of the signature cable-stayed span over an active navigable channel. The cable-stayed bridge features include:

• Total length of 3,186 ft • Navigational clearance of 65 ft • Tower height of 459 ft • 21 drilled shafts

The 21 foundations for the bridge were constructed on 8-foot-diameter drilled shafts to eliminate the risk associated with lowering a caisson. The drilled shafts are founded in a dense sand layer approximately 200 feet below the riverbed. Greg also reviewed the designs and verified or modified designs for the seven approach bridges across bayous and a railway siding.

GPC's CM, Randy Svilar, worked with Greg through design development and construction completion.

Client: Louisiana Department of Transportation and Development | Cost: \$358 Million

Relevancy: Design-Build; b) roadway; c) survey; e) utilities; f) structures and bridges; j) permitting; k) Coast Guard coordination, including permitting; l) navigable channel fender system; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; p) installation of tide gate; q) pavement reconstruction, pavement overlay and new pavement; s) railroad coordination; t) guardrail; u) retaining walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway and marine navigation lighting; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

ProjectWoodrow Wilson Memorial Bridge,Dates: Month Year -September 2000 -Name:Conceptual and Final DesignMonth YearOctober 2009

Alexandria, VA, and Oxon Hill, MD

Project Role: Project Manager With Current Firm? Yes

Responsibility/Specific Job Duties: Greg was responsible for the design of a 6,000-foot-long signature replacement structure crossing the Potomac River near Alexandria, VA. The bridge consists of steel I-girder approach spans and a bascule span over an active navigable channel. In addition, V-shaped piers were used throughout the project, which included precast for the approach spans and cast-in-place for the bascule span. The design was distinguished for its aesthetics and innovative structural system, which addressed the difficult foundation conditions at the site and allowed for the production of an economical and easy-to-construct bridge. The bridge was also designed to carry 12 lanes of traffic on two structures, 15 feet apart, with two lanes to be used for high occupancy vehicle or future rail.

Greg was responsible for overall project delivery by the design team during the final phases of design and during the construction support phase. He was also responsible for the design of the segmental concrete substructure elements, as well as other aspects of the project. He assisted with the design of the heavily post-tensioned concrete V-pier supporting the 170-foot movable span. Due to the many stakeholders and the high visibility of the project, careful attention to quality, economy, and aesthetics was required.

Client: Maryland Department of Transportation State Highway Administration | Cost: \$680 Million

Relevancy: b) roadway; c) survey; d) right-of-way; e) utilities; f) structures and bridges; g) demolition of structures; h) civil infrastructure for managed lanes, excluding integration system; j) permitting; k) Coast Guard coordination, including permitting; l) navigable channel fender system; m) geotechnical; n) hydraulics; o) storm drainage and stormwater management facilities; p) installation of tide gate; q) pavement reconstruction, pavement overlay and new pavement; r) intelligent transportation systems for monitoring traffic conditions and safety; s) railroad coordination; t) guardrail; u) retaining walls; v) sound barrier walls; w) traffic control devices; x) signs, sign structures, and foundations; y) roadway and marine navigation lighting; z) transportation management plan; aa) traffic maintenance and management during all phases of construction; bb) landscaping; cc) public involvement/relations; dd) quality assurance and quality control; ee) construction engineering and inspection; ff) overall project management.

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

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. N/A

(Addendum No. 1 – reference form on 2nd page removed)

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title: Robert Daniel Plott, Chief of Police
- b. Project Assignment: Incident Management Coordinator
- c. Name of Firm with which you are now associated: Colonial Beach Police Department
- d. Employment History: With this Firm <u>2</u> Years With Other Firms <u>36</u> Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

As the Chief Of Police, Danny is responsible for National Incident Management System (NIMS) operations to ensure a common and standard understanding of emergency response. He implemented and coordinated the traffic operation plan for seasonal beach events to ensure efficient and safe ingress and egress of the area. He coordinates with the public works department for all traffic diversions and construction within the city.

Danny has established excellent working relationships with federal, state, and local public safety agencies within and bordering Colonial Beach, including but not limited to local police chiefs, sheriffs, fire chiefs, emergency management personnel, VA Game Commission, VA ABC Commission, VA Marine Resources, FBI, and DEA.

PTG, Virginia Beach, VA, Eastern Region Safety Service Patrol Manager. 2013–2015

As the Virginia Eastern Region Safety Service Patrol (SSP) Manager, Danny was responsible for all aspects of the SSP program, including daily operations, personnel, training, equipment, planning, policies, and logistics. He participated in SSP operations analysis, including measures of effectiveness, patrol route designations, staffing requirements, reporting criteria, and methodology. He also participated in Traffic Incident Management activities, meetings, and training. He assisted in development and maintenance of Operations Manuals and Standard Operations Guidelines. He was responsible for developing and sustaining positive professional and working relationships with the regional first responder community. He served as a member of Emergency Operations staff during inclement weather, natural disaster, and security-related events. He completed the FHWA SHRP 2 "TIM" Responder Training; FEMA ICS/NIMS 100, 200, 700, and 800; and the FEMA/VDEM Hazardous Material Awareness. He is also Basic First Aid/CPR/AED certified.

<u>Asst. Fifth Division Commander (Lieutenant), VA State Police, Field Operations, Chesapeake, VA.....2005–2006</u> Supervised, coordinated, mentored, and guided sworn and civilian employees assigned to Fifth Division Headquarters; sworn employees, administrative staff, and communication dispatchers.

<u>Asst. Division Commander, VA State Police, Criminal Intelligence Division, Richmond, VA</u>......2004–2005 Supervised, coordinated, mentored, and guided sworn and civilian employees assigned to the Criminal Intelligence Division; sworn employees, administrative staff, and intelligence analysts.

Area 47 Commander, Fifth Division, VA State Police, Bureau of Field Operations, Chesapeake, VA....2000–2003 Supervised, coordinated, mentored, and guided approximately 25 sworn employees, 22 troopers, three sergeants, and two administrative staff. Under the direction of the Fifth Division Commander and staff, responsible for criminal and traffic violation enforcement in Area 47, primarily on the interstate highways of all three cities listed previously.

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

Saint Leo University, Lakeland FL BS | 1997 | Criminology

Saint Leo University, Lakeland FL | Associate | 1995 | Liberal Arts

VDOT and Parsons Corporation | 2014 | Basic Safety Service Patroller Training

University of Louisville, Louisville, KY | Southern Police Institute | 2002 | Police Administrators Course

Virginia Association of Chiefs of Police | 2016 | New Police Chief Training

Virginia State Police Academy, Richmond, VA | 1980 | Virginia State Police Basic School

Richmond, VA Bureau of Police Academy, Richmond, VA | 1978

Active Registration: Year First Registered/ Discipline/VA Registration #:

- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated. Provide references for each of the three (3) projects using Key Personnel References form-Attachment 3.3.1 (b))

Safety Service Patrol Manager, Eastern 2013-2015 **Project Dates:**

Region Operations, Virginia Beach, VA Name:

Safety Service Patrol Manager Yes (although he is **Project Role:** With Current Firm? not employed by

Parsons at this time)

Responsibility/Specific Job Duties: Danny supervised, coordinated, and guided approximately 75 Safety Service Patrollers, SSP Foreman, Fleet Mechanics, and one Assistant SSP Manager working under the VDOT ERO Contract with the Serco Corporation. He handled billing and payroll, inventory control for personnel and fleet services, and human resources (including hiring and termination, and discipline matters for four different contractors and subcontractors, Serco, Parsons, NJW, and Akima). His "on the highway" duties included acting as SSP Shift Foreman, SSP Truck accident investigation, and Incident Management Coordinator.

He participated in SSP operations analysis, including measures of effectiveness, patrol route designations, staffing requirements, reporting criteria, and methodology. Participated in Traffic Incident Management activities, meetings, and training. Assisted in development and maintenance of Operations Manuals and Standard Operations Guidelines. Responsible for developing and sustaining positive professional and working relationships with the regional first responder community. Served as member of Emergency Operations staff during inclement weather, natural disaster, and security-related events. Completed the FHWA SHRP 2 "TIM" Responder Training; FEMA ICS/NIMS 100, 200, 700, and 800; and the FEMA/VDEM Hazardous Material Awareness. Also Basic First Aid/CPR/AED certified.

During Danny's role as SSP Manager for Eastern Region Operations on behalf of VDOT from 2013 to 2015, he managed and coordinated incident management in this part of the Commonwealth. He is recognized as one of the more experienced and capable IMCs in Virginia. Client: VDOT

Virginia State Police Bureau of Field 2006-2013 **Project** Dates:

Operations, Chesapeake, VA Name:

Fifth Division Commander (Captain) No **Project Role:** With Current Firm?

Responsibility/Specific Job Duties: As the State Police Division Commander (Captain), Bureau of Field Operations, Chesapeake, VA, Danny was responsible for the promotion of highway safety and proper patrol of the highways. Ensured safe, quick clearance principles were applied to roadway clearance. Conducted evaluations of traffic needs, trends, and response. Participated in Incident After Action Reviews, meetings, and conferences. Supervised the Virginia State Police Towing and Recovery program. Participated in the Hampton Roads Transportation Operations (HRTOC) Traffic Incident Management Committee. Worked closely with VDOT on interstate construction projects and detour planning. Client: Citizens of and Visitors to the Commonwealth of Virginia

Virginia State Police Bureau of Field 2005-2006 **Project Dates:**

Operations, Chesapeake, VA Name:

Assistant Fifth Division Commander No **Project Role:** With Current Firm?

(Lieutenant)

Responsibility/Specific Job Duties: As the State Police Assistant Division Commander (Lieutenant), Danny was responsible for the State Police Fleet and the State Police Communications Center. Worked with dispatchers to document incident response and clearance times. Deployed incident management best practices to minimize operating risk at multi-agency events. Client: Citizens of and Visitors to the Commonwealth of Virginia

Danny Plott has completed the following training courses, as required within the RFQ for this position:

- (1) FHWA SHRP2 "TIM" Responder Training
- (2) FEMA ICS/NIMS 100, 200, and 700

We commit that Danny will complete the FEMA/VDEM Hazardous Materials Awareness class prior to the commencement of construction.

- * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.
- h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

Currently Robert serves as Chief of Police for the Colonial Beach Police Department. Prior to commencment of construction Robert has committed to being 100% full time on the project and would resign from his current position.

Operator Initial Operator Initial Demonstrate
Training Activiti

This document will be used to record training received upon starting employment as a Safety Service Patroller and to certify incumbent employees transitioning to Serco upon Service Commencement Date. A completed copy of this record will be kept in the Serco Talent Management System and forwarded to the TOC and SSP Manager. SSP Training and Certification Record for New Hires and Incumbents

Region: ERO/HRTOC	Position (Operator, Lead, Foreman): SSP 171ANA GER
Employee Name: DANIEL PLOT T	New Employee/Incumbent: New Employmen!
Hire Date: 09 - 03 - 13	Supervisor: TOM MARTIN (PARSONS)
Trainer:	Observer Name and Title (if different than Supervisor or Trainer):
JOE KOVALESKI	JOE KOVALESKI

Introduction / Overvie	Overview / Administrative Policies and Procedures	dicies and Proc	cedures	
Work schedules, leave requests, and administrative policies/procedures	11-12-40	DO	41-18-19	1
SSP administrative policies and guidelines	H1-18-40	3	04-21-14	
Situation Awareness - Major Incidents and Special Events	4-18-10	3	11-18-10	le,
Review and read references; (SOP's, Manuals)	H-18-40	3	11-12-40	
CII/SSI (Critical Infrastructure Information/Sensitive Security) Information	1-1210	25	14-12-40	Jest Control of the C
Public Relations (upholding the image of SSP & VDOT)	H-18-40	一人	14-16-40	J.
	Health & Safety	0		
Driving Defensively	14-18-10	2	04-31-14	8
Back Injury Prevention	104-31-14	X	H-18-50	100

Training Activities (Demonstrate/Perform)	Training/Review (Date)	Operator Initial (when completed & feel confident in being able to accomplish)	Demonstrate Knowledge/Skill (Date)	Observer Initial
Chemicals and Hazardous Materials (SDS)	p1-12-h0	2	41-12-10	9
Hand, Head and Foot Safety and Protection	41-12-40	H	4-18-60	n n
Hearing Loss Prevention	11-18-40	2	4-18-40	3
Vehicle Safety	H-18-40	C Ta	p1-18-40	B
Portable Fire Extinguishers	11-18-40	7	4-18-40	1
Slips, Trips and Falls	71-18-40	£	41-12-40	d
Basic First Aid/CPR/AED	11-60-50	3	11-20-50	4
Blood borne Pathogens	p1-20-50	A.	11-50-50	6
Cold Stress	41-60-50	161	11-50-20	9
Heat Stress	050274	35	412020	ع
Highly visible reflective uniform	11-ce-40	7	11-50-40	10,
	Operations	ģ		
Pre-Trip Preparedness/Post Trip Check (Pre/Post Trip Checklists)	14-23-14	W.	104-23-14J	d
ITS Program Overview	41-22-40	35	Kr26-40	8
SSP and the Law (including tort liability-liability exemption for quick clearance)	41-22-14	3	4-ER-40	9
SSP Operations (parking, backing, lane numbering, skills for patrolling when not on assignment)	71-56-40	2	W-88-40	3
Communications (escalations procedures, protocols, strategy & tactics)	04-23-14	18 0	04-23-1U	d
SHRP II STREADED 5 / 19 / 14)	5/19/14	Fi	p100	No.
Customer Service (Interpersonal Skills)	04-25-14	200	19-25-14	1
Personal Safety and Security (use of PPE, safety issues while on patrol and interacting with motorists, steps to take if SSP is injured, worker's compensation)	H-22-40	Sky	04-25-14	2

SSP Training & Certification Record for New Hires and Incumbents 2

ing Activities Instrate/Perform) (Date)	Operator Initial (when completed & feel confident in being able to accomplish)	Demonstrate Knowledge/Skill Observer Initial (Date)
---	--	---

Bi-Lingual (Spanish for Novice Mid speakers – Read and demonstrate an understanding of the Bi-Lingual Spanish Guide Book)	H1-E0-50	do	H-20.50	¥
Motorist Assistance (vehicle push and the five motorist assistance services; fuel, tire change, jump start, cooling system)	D4-35-14	az	41-5040	2
Incident and Event Management (incident classifications, use of crossovers, driving on shoulder, incidents in work zones, on-scene actions)	h1-10-50	A.	H-1050	Jo.
The Patrol Vehicle (four-wheel drive, High/Low range transmission, after-market electrical equipment)	11-50-40	7	11-26-10	8
Defensive Driving certification				
	TOC Orientation	(
Orientation to Control Room Operations	H-52-40	15	W 55-40	K
Hands-On T	Hands-On Training/Vehicle Preparatory	reparatory		
Patrol Vehicle Familiarity (after-market equipment used in the SSP mission & automotive features of the patrol vehicle)	11/11/2	AC.	6/13/14	À
Refueling/Fuel Island Awareness	lo lulia	3	6/13/14	X
Hands-On Train	Training/Motorist Assistance Services	stance Services) (
Fuel	2/11/14	96	2/13/14	A
Tire Change / Air	11/11/9	3	6/13/14	**************************************
Cooling System	11/11/2	3	6/13/14	X
Jump Start	10/11/14	36	6/13/4	98
Use of Roadside Assistance Waiver of Liability	411119	H	6/13/14	X
Dealing with Motorist stress	b/11/14	F	6/13/14	X
Hands-On Training/Traffic Management & Quick Cleapance Strategy	c Management &	Quick Cleayance S	Arategy	
Channelization (Shoulder, Single lane; Two lanes; Split; Complete road)	6/11/14) EQ	Hilly	X
)

SSP Training & Certification Record for New Hires and Incumbents 3

Training Activities (Demonstrate/Perform)	Training/Review (Date)	Operator Initial (when completed & feel confident in being able to accomplish)	Demonstrate Knowledge/Skill (Date)	Observer Initial
Use of Highway Flares (safely ignite & extinguish, use with cones during nighttime, use in daylight when not enough cones)	11/6/19	7	411314	X
Implementation of Move It! For Quick Clearance	41/61/0	35.	6/13/14	198
Emergency light discipline air compressor operation	11/2/14	9	6/13/14	
Using push bumpers, tow straps, and fundamentals of relocating cars and trucks	12/11	3	4/13/14	X
Cargo tank truck familiarization with MC 406 gasoline, MC 407 chemical and MC 331 compressed gases	N/A	NA	NA	N (A
Light duty tow patroller training (Wreckmaster or VATRO) and TRAA (NRO Only)	NIA	NIA	¢ 2	N/A
	Hands-On Training/Incident Operations	Operations		
Abandoned Vehicle	71 0 9	2	41/21/9	X
Managing the Impaired Motorist (under the influence, sleeping, sick, talking on the phone)	F 12 19	7	D1/51/2	M
Scene Set Up (correctly parking patrol vehicle; initial use of automotive hazard flashers, arrow board and light bar; providing location/status/vehicle information to Control; safely exiting patrol vehicle and approaching incident)	4/61/2	A D	6/13/14	A.
Use of Cut-through / Crossover / shoulder	カーベーコ	3	HICI 19	X
Vehicle Push	41/21/0	2	h1/81/9	rX
S	Situation Subsystem).
TAMS (VDOT maintenance contract practices)	61-10-50	H	41-10-50	4
LCAMS	1/1/4	NA	N A	NA

SSP Training & Certification Record for New Hires and Incumbents

11-10-50

1-02-40

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Additional Training Topics/Certifications

430-14

Virginia WAPM (Work Area Protection Manual) Guidelines

MUTCD (Manual of Uniform Traffic Control Devices)

Discuss the importance of Situational Awareness

Observer Initial		2	4/2	7	Remarks	COMPETED	CAN GIED
Demonstrate Knowledge/Skill (Date)		4/0	\$ 2	US 53-14	Rei	Con	5
Operator Initial (when completed & feel confident in being able to accomplish)		AlA	NA	25	Date Completed	1-14	4-14
Training/Review (Date)	4111	VIVN	WIT	10502-14	Date Co	04-21-14	11-24-11
Training Activities (Demonstrate/Perform)		National Driver Certification for SSP tow unit assignment	Discuss acceptable use policies & procedures for:	Fail Over (NW/SW Only)	Web-Based Training	New Employee Orientation (Ethics, Diversity & Sexual Harassment, Timekeeping, Employee Handbook, etc.)	ICS-100. Introduction to the Incident Command System

National Driver Certification for SSP tow unit assignment	it assignment	NIN NIN	A V
Discuss acceptable use policies & procedures for:	for:	WITH WIA	4/2
Fail Over (NW/SW Only)		10502-14 DF	US-82-14 R
Web-Based Training	gı	Date Completed	Remarks
New Employee Orientation (Ethics, Diversity & Sexual Harassment, Timekeeping, Employee Handbook, etc.)	& Sexual ook, etc.)	64-21-14	COMPETED
ICS-100, Introduction to the Incident Command System	nd System	04-24-14	COMPLETED
ICS-700, National Incident Management		カーカアーカウ	Taldwoo
ICS-200, ICS for Single Resources and Initial Action Incidents	al Action Incidents	11-12-14	COMPLETED
ICS-800, National Response Framework, An Introduction (Managers)	Introduction		
Virginia Highway Traffic Incident Management (TIM)	ent (TIM)	14-23-14	COMPLETED
	SSP	SSP Operator Certification	
	Pass/Fail	Observer Remarks/Recom	Observer Remarks/Recommendations for Further Training
Training Complete	Phsy		
Knowledge Assessment	(200)		
Skills Assessment	Paos		-
Ride Along/Parking Lot Skills	PASS		

ad/Foreman) based on	7/24/14 (Date)	7/24/14 (Date)
is hereby recommended for certification as SSP (Operator/Lead/Foreman) based on the attached assessment. (Circle One)	(Signature)	(Signature)
(a)	(Printed Name) SSP Manager	Oliver Rose (Printed Name) Regional Traffic Operations Manager
Lenny Plott Operator Nam	Certification Recommended by:	Certification Approved by:

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

DANNY PLOTT

professional development and completion of the independent study course: has reaffirmed a dedication to serve in times of crisis through continued

IS-00100.b

Introduction to Incident Command System

ICS-100

Issued this 24th Day of April, 2014



Tony Russell
Superintendent
Emergency Management Institute

ORIZED VIDER

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

DANNY PLOTT

professional development and completion of the independent study course: has reaffirmed a dedication to serve in times of crisis through continued IS-00200.b

Initial Action Incident, ICS-200 ICS for Single Resources and

Issued this 25th Day of April, 2014





0.3 IACET CEU

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

DANNY PLOTT

professional development and completion of the independent study course: has reaffirmed a dedication to serve in times of crisis through continued

IS-00700.a

National Incident Management System (NIMS)

An Introduction

Issued this 24th Day of April, 2014



Tony Russell
Superintendent
Emergency Management Institute

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

ROBERT D PLOTT

professional development and completion of the independent study course: has reaffirmed a dedication to serve in times of crisis through continued

IS-00800.b

National Response Framework, An Introduction

Issued this 29th Day of December, 2014



Tony Russell
Superintendent
Emergency Management Institute

September 22, 2016

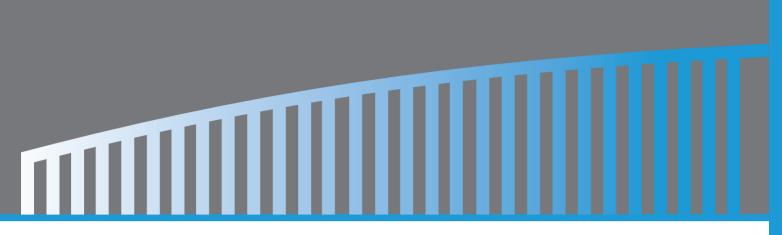
To Whom It May Concern:

Granite/Parsons/Corman (GPC) is submitting a Statement of Qualifications (SOQ) to the Virginia Department of Transportation for the I-64 Southside Widening and High Rise Bridge, Phase 1 project.

By this letter, I am granting permission to GPC to use my name and resume within their SOQ for the Incident Management Coordinator position, and commit to join GPC should the team win the project. As a former Virginia State Police Captain and a former regional Safety Service Patrol manager, I have extensive incident management experience, and am excited by the possibility of managing these activities on this important VDOT project.

Sincerely

Robert D. Plott



Key Personnel Reference Forms

ATTACHMENT 3.3.1(b)

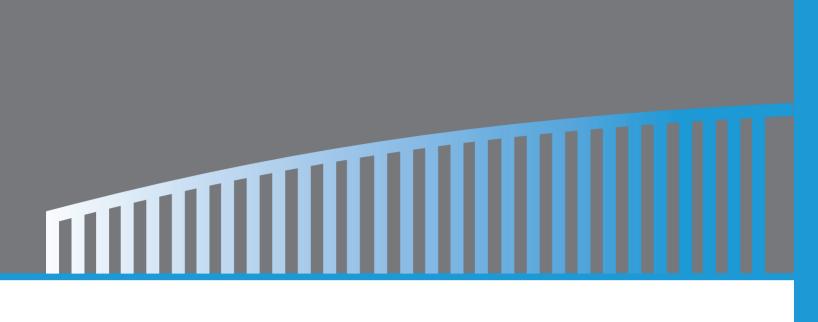
KEY PERSONNEL REFERENCE FORM

PROJECT	POSITION HELD ON THE PROJECT	DURATIO N IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/ POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
DESIGN-BUILE	DESIGN-BUILD PROJECT MANAGER (DBPM) – Glenn Olechnowich	AGER (DBPM) – Glenn Olechr	10 wich				
Pennsylvania Rapid Bridge Replacement	Eastern Region Project Manager	9 Months	George McAuley	2550 Oakland Avenue, Indiana, PA	PennDOT	Construction	Ph: 724-422-0231	gmcauley@pa.gov
Queens Bored Tunnels and Structures	Project Manager	4 Years	Frank Perrone	1400 Broadway, 30th Floor, New York, NY 10018	Mott MacDonald	Principal Engineer	Ph: 212-532-4111 516-2 <i>5</i> 2-7633	frankie.perrone@mottma c.com
Broad River Bridge, DB	Construction Manager	19 Months	Kevin Turner	6355 Fain Street, Building E, North Charleston, SC 29406	South Carolina DOT	District Construction Engineer	Ph: 843-746-6726	turnermk@scdot.org
RESPONSIBLE	RESPONSIBLE CHARGE ENGINEER (RCE)	VEER (RCE) -	- Brian Quinlan, PE	Ŧ				
I-395 HOV Ramp @ Seminary Road & Aux Lane Extension	Design-Build Project Manager	3/2012- 1/2016	Larry Tomlinson	Springfield VA.	VDOT	VDOT Area Construction Engineer (Retired)	(703) 477-3142	LTVTCE80@gmail.com
I-95 Bridges Reconstruction	Project Executive	6/2010-	Malcolm Kerley, PE	Richmond VA	NXL Construction Services, Inc. (VDOT – Retired)	President (current)	(804) 644-4600	mkerley@nxl.com

PROJECT	POSITION HELD ON THE PROJECT	DURATIO N IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/ POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
I-95 / Route 895 Interchange & Vietnam Veterans Memorial Bridge	Construction Manager	2000-2002	Carter Washington PE	Mechanics ville VA	Wagman	Assistant Project Manager	(804) 720-3718	jcwashington@wagman.c
QUALITY ASSU	QUALITY ASSURANCE MANAGER (QAM) – Richard Clarke,	3ER (QAM) –]		PE, CCM				
Design-Build I- 95 Express Lanes	QAM	11 Months	Geoff Pelletier	2900 South Quincy Street, Suite 200, Arlington, VA 22206	HNTB Corp.	QC Manager	202-503-6632	gpelletier@hntb.com
I-81 Truck Climbing Lanes	QAM	2 Years	Lee Yowell	81 Mosher Street, Baltimore, MD 21217	Rummel, Klepper &Kahl, LLP (RK&K)	Associate	804-239-3956	lyowell@rkk.com
Design-Build Highway 63	Senior Project Manager	2 Years	Jim Schmidt	4111 East 37th Street North, Wichita, Kansas 67220	Koch Performance Roads, Inc.	President	316-250-5157	Schmid3j@kochind.com
DESIGN MANA	DESIGN MANAGER (DM) – Josh Wade, PE	Wade, PE						
Design-Build Military Highway CFI	Design Manager	12 Months	Robert "Bud" A. Morgan, Ph.D., P.E.	VDOT - Hampton Roads District 1992 South Military Highway, Chesapeake, VA	Virginia Department of Transportation – Hampton Roads District	Area Construction Engineer - Urban	757-494-5472	Robert.Morgan@VDOT. Virginia.gov

PROJECT	POSITION HELD ON THE PROJECT	DURATIO N IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/ POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
Design-Build I- 395 HOV Ramp at Seminary Road with I-395 NB Auxiliary Lane Extension	Design Manager	36 months (entire length of project)	Susan Shaw	VDOT –NOVA District 4975 Alliance Drive Fairfax, VA 22030	Virginia Department of Transportation - Northern Virginia District	Regional Transportation Program Director	800-367-7623	Susan.Shaw@VDOT.Vir
Design-Build Intercounty Connector Contract B	Design Manager	48 months	Mark Coblentz	707 North Calvert Street, Baltimore, MD	Maryland State Highway Administration	Project Director	(301) 586-9267 (443) 844-9886 (cell)	MCoblentz@iccproject.c
CONSTRUCTIC	CONSTRUCTION MANAGER (DM) – Randy Svilar	M) – Randy Sv	ilar					
Design-Build John James Audubon Bridge	Construction Manager	09/2008-	Frank Daams	Vancouver, Canada	Flatiron Constructors	Vice President for Flatiron Constructors	(604) 244-7343	F.Daams@flatironcorp.co
Design-Build I-35 Emergency Replacement,	Segmental Bridge Superintendent	10/2007-	Dustin Thomas	Oakdale, MN	Flatiron Constructors	MNDOT Manager of Segmental work on I-35	(651) 366-4565	Dustin.thomas@state.mn.
Maroon Creek Bridge	Construction Manager	10/2005- 10/2007	Terry Ostrom	Denver, Co.	BTE/Atkinson joint Venture	Project Manager/ Owner BTE	(970) 379-1120	Terry.Ostrom@Plenarygr oup.com
LEAD STRUCT	LEAD STRUCTURAL ENGINEER – Greg Shafer, PE, SE	R – Greg Shafe	r, PE, SE					
Intercounty Connector, Contract A, DB	Arch Bridge Engineer of Record	8/2007-	Mark Coblentz	707 North Calvert Street Baltimore, Maryland 21202	Maryland Department of Transportation State Highway Administration (SHA)	Project Director	(301) 586-9267	MCoblentz@iccproject.c

PROJECT	POSITION HELD ON THE PROJECT	DURATIO N IN THAT POSITION	NAME OF REFERENCE	REFERENCE'S LOCATION	NAME OF REFERENCE'S EMPLOYER	REFERENCE'S TITLE/ POSITION	REFERENCE'S PHONE	REFERENCE'S EMAIL ADDRESS
John James Audubon Bridge, DB	Project Manager/ Design Manager	3/2006-	Paul Fossier	Baton Rouge, LA 70804- 9245 United States of America	Louisiana Department of Transportation and Development	State Bridge Design Engineer	(225) 379-1302	Paul.Fossier@LA.GOV
Woodrow Wilson Memorial Bridge, Conceptual and Final Design	Project Manager	9/2000-	Shirlene Cleveland	4975 Alliance Drive Fairfax, VA 22030	Virginia Department of Transportation	NOVA Design Build Program Manager	(703) 691-6710 (703) 713-2084	Shirlene.Cleveland@vdot .virginia.gov
INCIDENT MA	INCIDENT MANAGEMENT COORDINATOR (IMC) – Robert	ORDINATOR (Plott				
VDOT Safety Service Patrol	Eastern Region Manager	2 years	Tom Martin	Richmond, VA	Parsons Corp.	Incident Management Coordinator	(757) 345-9939	Tom.Martin@Parsons.co
Virginia State Police Bureau of Field Operations	5th Division Commander (Captain)	7 years	George Daniels, Jr.	Richmond, VA	Virginia State Police	Lieutenant Colonel	(804) 674-2013	george.daniels@vsp.virgi nia.gov
Virginia State Police Bureau of Field Operations	5 th Division Commander (Lieutenant)	2 years	Kelvin Wright	Chesapeake, VA	Chesapeake Police Department	Police Chief	(757) 382-6404	klwright@cityofchesapea ke.net



Work History Forms

a. Project Name & Location	b. Name of the prime design consulting	c. Contact information of the Client or	d. Contract	e. Contract Completion Date		g. Dollar Value of Work Performed by the
	firm responsible for the overall project design.	Owner and their Project Manager, who can verify Firm's responsibilities.	Completion Date (Original)	(Actual or Estimated)	I mai of Estimated	Firm identified as the Lead Contractor for this procurement.(in thousands)
Design-Build Intercounty Connector Contract A (ICC-A) Rockville, Maryland ROADWAY	Parsons Transportation Group/Jacobs, a Joint Venture	Maryland State Highway Administration Mark Coblentz 443-572-5222	8/2010	February 2011 (Due to owner approved changes)	\$483,489 (Due to incentive payment and owner directed changes)	\$276,751
		mcoblentz@sha.state.md.us				

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.



On this project, PTG and Corman were teamed with Granite

GRANITE'S ROADWAY PROJECT EXPERIENCE

Granite served as the Lead Joint Venture (JV) Partner and Prime Design-Build Contractor with joint and several liabilities. Granite provided the Project Manager, full-time engineers, managers, foremen, superintendents and crews. Granite worked in collaboration with Corman, as a JV team member, and PTG, as the Lead Designer.

The JV self-performed all roadway-widening work as well as the majority of bridge construction, erosion and sediment control, water and sewer utility construction, roadwork, and work zone traffic control. Granite secured all permits for the project.

PROJECT FEATURES NARRATIVE

The design-build team designed and built 7.2 miles of controlled-access, six-lane divided highway. This project included roadway and bridge widening of I-370; 18 steel-girder or precast-concrete girder bridges; 630,000 square yards of HMA pavement that encompassed new access ramps to two major interchanges; 400,000 square feet of sound walls; MOT; Intelligent Transportation Systems (ITSs); and outreach to 10,000 residents surrounding the corridor. The multiphased construction of a new interchange at I-370, as well as a new interchange at ICC-A and MD 97, required maintaining traffic on major thoroughfares and working over heavily traveled roadways and in extremely sensitive neighborhoods. Temporary roads/walkways were constructed to provide access for pedestrian and vehicular traffic through the construction area.

As part of widening of I-370, the team widened an existing steel-girder bridge over a CSX rail line, requiring both bridge and foundation construction within the railroad's right-of-way. Traffic was shifted for the bridge to remain open during construction and an access road was constructed along the railroad to access the bridge construction. The team coordinated extensively with CSX, including on-site coordination with a CSX flagman for construction, along with design submissions for review/ approval from CSX and CSX's consultant.

The team coordinated with more than 10 utility companies to complete relocations at 106 locations, including water, sewer, power/electrical, cable lines, and fiber optic (underground and overhead), and critical transmission lines for Columbia and Williams Gas, which required working outside normal timeframes, particularly for the tie-ins. The team completed sewer work at two major stream crossings with impending stream closure deadlines that necessitated working 24/7 with adverse ground conditions (water running in). Many relocations involved elaborate, complex, and extensive piping design, coordination, and construction.

The team brought all stakeholders together early, including permitting agencies, ICC, and the owner. The design-build team coordinated with permit agencies over significant environmental commitments and conditions including MDE permits for sediment control, stormwater management, and work in wetlands and waterways.

Innovative Design Solutions and Construction Techniques

The team developed Alternative Technical Concepts (ATCs) to redesign a major interchange from three levels to two levels, resulting in millions of dollars of cost savings to the project. The team also revised noise wall foundations from drilled shafts to spread footings, minimizing and reducing potentially hazardous spoil removal. The team implemented creative environmental mitigation measures, such as the relocation of more than 400 box turtles from the footprint of construction.

Limiting Traveling Public Impacts

The design-build team worked together to develop and implement an effective Traffic Management Plan that used phased construction and temporary concrete barriers to reduce impacts to the traveling public while maximizing the safety of the workforce. The JV maintained safe and efficient traffic flow on two major intersections (the I-370 interchange and MD 97 interchange) during multiphased construction operations with continuous monitoring of work zone traffic control devices 7 days per week.

Meeting and Exceeding DBE Program Commitments

Project Goals: 15.0 % DBE

Actual DBE Awarded: 23.8 % DBE Exceeded Goal by 88%

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build

ATCs

- a) Interstate Widening
- b) Roadway
- c) Survey
- e) Utilities
- f) Structures and Bridges
- g) Demolition of Structures
- j) Permitting
- m) Geotechnical
- n) Hydraulics
- o) Storm Drainage & SWM
- q) Pavement Reconstruction,
 Mill & Overlay of Existing
 Pavement, & New Pavement

- r) Installed ITS
- s) Railroad Coordination
- t) Guardrails
- u) Retaining Walls
- v) Sound Barrier Walls
- w) Traffic Control Devices
- x) Signs & Sign Structures and Foundations
- y) Roadway Lighting
- aa) Traffic Maintenance and Management
- bb) Landscaping
- cc) Public Involvement/Relations
- ee) Construction Eng. & Inspection
- ff) Overall Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Project finished with a 92% "A" rating for Environmental Compliance
- Project completed on Schedule and on Budget
- 2012 AGC of America Alliant Build America Award for Design-Build Highway and Transportation
- 2011 ENR Best Project Transportation

TEAMING EXPERIENCE

- Corman was a JV partner
- PTG was the Lead Designer subcontractor; Mark Holcomb was the Design Manager and Greg Shafer was the Engineer of Record for the arch bridge
- Schnabel performed geotechnical engineering under subcontract to Parsons
- RKK and ALA served as the GEC on the owner's side

Lead Contractor – Work History Form submitted by Granite

a. Project Name & Location	b. Name of the prime design consulting	c. Contact information of the Client or		e. Contract Completion Date	f. Contract Valu	ue (in thousands)	g. Dollar Value of Work Performed by the
	firm responsible for the overall project design.	Owner and their Project Manager, who can verify Firm's responsibilities.	Completion Date (Original)	(Actual or Estimated)	Original Contract Value	Final or Estimated Contract Value	Firm identified as the Lead Contractor for this procurement.(in thousands)
Design-Build I-64 to Route 623 Widening & Improvements, Short Pump, Virginia ROADWAY	RKK	Virginia Dept. of Transportation Shane Mann 804-720-4229 shane.mann@vdot.virginia.gov	11/2015	12/2015 (Due to approved slope correction change order which brought a section of I-64 into compliance)	\$33,238	\$34,782 (Due to owner-approved slope correction change order which brought a section of I-64 into compliance)	\$34,782

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.



CORMAN'S ROADWAY PROJECT EXPERIENCE

Corman was the Design-Build Contractor that managed the design, construction, quality, safety, DBE, environmental compliance, owner coordination/communication, budget, and the schedule. Corman self-performed the excavation, grading, sub-base installation, and site drainage and water quality swales, and it constructed the five MSE walls and performed the structural work on the two new bridges.

PROJECT FEATURES NARRATIVE

This project is west of Short Pump, with heavy residential and commercial traffic. The project spans to the eastern part of Goochland County, a booming population and development area. With a 48,313 ADT, which is anticipated to grow to 73,900 by 2036, the goal was to relieve congestion along this I-64 corridor where traffic volume is increasing and to improve operational efficiency of the Route 623 Interchange.

Approximately 4.5 miles of I-64 was widened from a 4- to a 6-lane divided highway, and I-64/Route 623 interchange improvements were made, including widening the ramp for an additional turn lane and the I-64 eastbound off-ramp to Route 623 for an additional turn lane. An additional through-lane in each direction reduces congestion and travel time. A widening safety measure included adding a 12-foot paved inside-shoulder instead of relying on the existing 5-foot inside-shoulder. The signalized intersection on Route 623 was rebuilt and four new CCTV cameras were installed along the project corridor. The project was completed on schedule and on budget.

Innovative design solutions and construction techniques: There were culverts below I-64 at five locations that were not continuous through the median area. With the widening occurring to the inside, the additional width of these new travel lanes and fill needed

resulted in having to extend the culverts further into the median area. The design team proposed MSE walls to support the widened roadway. This change resulted in the elimination of stream diversion or work in the wet, and stream/wetland impacts were avoided, trees were saved in the median, and loading on the existing culvert was reduced. MSE walls also lowered cost and took less time to construct than culvert extensions.

All substandard outside shoulders were rebuilt in place through the Full Depth Reclamation (FDR) process, where feasible. By re-using the existing roadway materials, we reduced waste and were able to compress the schedule.

The RFP plans called for the rehabilitation of two bridges over Little Tuckahoe Creek. The Corman Team proposed and built new bridges in lieu of rehabilitating the existing bridges. This modification lessened the maintenance requirements significantly and will save VDOT money in the future.

Mass cut/fill operations were demanding. Corman collaborated with RKK's roadway staff to reuse the material on site and worked on mass excavation flow charts to confirm the final product was successful and efficient. This resulted in completing the additional interior lanes and a structurally-sound embankment.

During the Scope Validation period, the Design-Build Team worked with VDOT to resolve a slope correction issue on the existing I-64 lanes. Early in design, it was discovered that some segments did not have the minimum 2% cross-slope required to meet state and federal guidelines. For the 2% cross-slope, variable-depth milling and overlay were required at these areas, which means it would impact the schedule and budget. The mill and overlay work was done under night-time lane closures, and with the intricacies involved with variable-depth milling, only a fraction of the area could be covered in a single night as compared to straight 2-inch mill.

Our stormwater management design reduced the linear-foot distance of water quality swales, which minimized construction costs and long-term maintenance needs.

Limiting traveling public impacts: In working with VDOT, we gave advance notice for each construction phase through the media and Portable Changeable Message Signs (PCMS) announcing traffic pattern changes and lane closures; provided timely updates to VDOT for the project website and email alerts; lowered the speed limit through the work zone where allowable; and implemented lane closures for safe egress into the high-speed lanes. MOT was designed to reduce construction phases and MOT shifts, thereby creating long-term work zones, minimizing changes for motorists; and maximizing protection for workers. Designs included increasing median shoulder area and removing hazards/obstructions.

Meeting/exceeding DBE program commitments:

• Project Goals: 10.0 % DBE

Actual DBE Awarded: 14.3 % DBE Exceeded Goal by 43%

SCOPE AND COMPLEXITY SIMILARITIES

VDOT Design-Build

- a) Interstate Widening
- b) Roadway
- c) Survey
- e) Utilities
- f) New bridges over Little Tuckahoe Creek
- g) Structure Demolition
- j) Wetland Delineation & Env. Permitting
- m) Geotechnical
- n) Hydraulics
- o) Storm Drainage & SWM
- q) Pavement Reconstruction,
 Mill & Overlay of Existing
 Pavement, & New Pavement

- r) Installed ITS (CCTV cameras)
- t) Replaced Guardrails
- u) MSE Retaining Walls
- w) Traffic Control Devices
- x) Signs & Sign Structures
- y) Roadway Lighting
- aa) MOT throughout construction
- bb) Landscaping
- cc) Public Involvement | Relations
- dd) OA | OC
- ee) Construction Eng. & Inspection
- ff) Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

"This message is just a pat on the back to the crews and construction companies that are currently working on the widening project (64 & 288). I travel this road several times a day and am very pleased with the traffic safety and direction signage. The travel through this area is very smooth and hope that the work is completed soon. Thank you very much for a job well done. Keep up the good work." — Goochland County, VA, resident

TEAMING EXPERIENCE

- RKK served as the Lead Designer
- Proposed Safety Manager Walter Groesbeck, CSST, CHST, STS, was the Safety Supervisor
- Curtis Hickman of Kerr Engineering Services Corporation provided environmental compliance and permitting services
- H&B Surveying and Mapping, LLC (DBE), was the Surveyor

Lead Contractor – Work History Form submitted by Corman

a. Project Name & Location	b. Name of the prime design consulting	c. Contact information of the Client or	d. Contract	e. Contract Completion Date	f. Contract V	alue (in thousands)	g. Dollar Value of Work Performed by the
	firm responsible for the overall project design.	Owner and their Project Manager, who can verify Firm's responsibilities.	Completion Date (Original)	(Actual or Estimated)	Original Contract Value	I mai oi Lommatcu	Firm identified as the Lead Contractor for this procurement.(in thousands)
Design-Build I-15 Cajon Pass Rehabilitation	Parsons Transportation Group Inc.	California Department of Transportation Alex Daouk – Project Director	12/2015	06/2016 (Owner initiated change orders)	\$113,645	\$117,541 (Owner initiated change orders)	\$35,262
Cajon, San Bernardino County, California ROADWAY		909-841-2068 Alex.daouk@dot.ca.gov					

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.





PARSONS' ROADWAY PROJECT EXPERIENCE

The contracting entity for the I-15 Cajon Bypass project was PTG, an affiliated company of PCG. PTG was a member of a fully-integrated design-build joint venture (DBJV) and the project's Lead Designer. As a member of the DBJV, PTG was responsible for all aspects of design and construction, including quality, safety, cost, schedule, and environmental compliance. The DBJV self-performed 84% of the work.

Notwithstanding the contractual arrangements, as a member of the DBJV, PTG's obligations that were related to construction estimating, management, and operations were filled by PCG staff. This has been the typical internal teaming arrangement used by Parsons for projects in which PTG was a member of the CJV and the Lead Designer. Through recent internal restructuring for more expedient management solutions, PCG is now the sole Parsons contracting entity wherever Parsons is a member of a CJV, such as the case is for this I-64 High Rise project.

As evidence of this successful arrangement and justification why this project is a good indicator of PCG's resources and capabilities, PCG offers the following:

- PCG's Randy Schultz, PE, served as Parsons' Project Executive for Cajon Bypass and is proposed in the same role for this I-64 High Rise project.
- The independent estimate supplied to the DBJV was prepared by the same PCG estimating staff that will prepare the estimate for this I-64 High Rise proposal.
- The CPM Schedule for I-15 Cajon Bypass was developed by the same PCG schedulers that will prepare the CPM Schedule for this I-64 High Rise project.
- Parsons supplied DBJV project staff for I-15 Cajon Bypass proportional to its share
 of the DBJV, drawing on PTG and PCG to do so. For example, PTG staffed the
 Contractor Quality Control Program and PCG provided jobsite engineers such as the
 Scheduler and MOT Supervisor.

This project is an excellent example of the One Parsons approach to design-build work. At a summary level, the approach provided Caltrans a cost savings in the bid price by eliminating redundant contingencies and compounded markups because the design-build team was directly responsible for both design and construction.

PROJECT FEATURES NARRATIVE

This project rehabilitated and widened inside shoulders to be used as future travel lanes of the existing I-15 freeway from approximately 0.4 miles north of Kenwood Avenue to 0.3 miles south of Ranchero Road. The work included reconstructing 12 miles of existing roadway by replacing two Portland Cement Concrete Pavement (PCCP) outer lanes, asphalt concrete shoulders, and asphalt concrete patched areas with rigid pavement that has a 40-year design life. It also included surface grinding and random slab replacement of the inside lanes, milling and overlaying the existing asphalt concrete ramps, constructing PCCP ramp termini, and upgrading highway appurtenances and facilities.

Innovative design solutions and construction techniques: The DBJV structure described above also facilitated the development of an innovative approach to the project. Early on in the procurement phase it was agreed that slipforming was preferable to the precast concrete roadway panels shown in the conceptual drawings. The slipforming, however, was not compatible with the overnight lane closures contemplated in the RFP so Parsons developed an alternate MOT plan using movable barriers for reversible lanes. This allowed the roadway to be slipformed in static work zones, which resulted in a far safer and more economical approach. Caltrans approved this approach based on the traffic simulation modeling by PTG because it allowed the DBJV to reduce the construction period for the two longest stretches of paving from 10 months to 5 months by using the managed lane cross-overs. This concept, along with a robust outreach program to the local communities through stakeholder meetings, social media, and news media, thoroughly educated the traveling public on what to expect during the heaviest construction activities.

Later, during construction, PCG provided the MOT Supervisor and other jobsite construction engineering. It also provided the quality control plan and staffing to ensure that the slipforming was executed properly. The results were outstanding as evidenced by PCG's positive relationship with Caltrans, and by owner and stakeholder feedback from partnering meetings, lack of traffic issues, and overall quality of work.

Limiting impacts to the traveling public: I-15 through Cajon Pass is the main interstate connection between Los Angeles, CA, and Las Vegas, NV. It is a major commuter and freight/truck route carrying nearly 200,000 vehicles per day. The DBJV understood that reducing impacts to the traveling public was a major goal of Caltrans. Parsons took the lead in implementing a proactive partnering approach in the development and approval of its traffic management plan. As part of this approach, the DBJV held a technical workshop with Caltrans to present the planned solutions to handling traffic maintenance and construction staging. Subsequently, a traffic simulation model was developed and shared with Caltrans, which led to approval of what proved to be a highly successful traffic management and work staging plan.

At each partnering meeting, surveys were included as an important feedback tool for the DBJV. With traffic major mobility being a major goal and performance metric for Caltrans, it was imperative to the project's success that the DBJV achieve high ratings. The DBJV ultimately received a 4.63 rating out of 5 for a corridor that carries more than 200,000 vehicles per day. As a result of this successful partnering approach, the DBJV was awarded Caltrans' 2015 Partnering Success in Motion Award.

Other actions the DBJV took to limit impacts to the traveling public include the following:

- Implemented four 55-hour weekend shutdowns
- Replaced 4,000 to 5,000 feet per shutdown. Advertised to the public as the "Cajon Crawl."
- Implemented 12 island configurations, which was increased from original estimate of three

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build

- a) Interstate Widening
- b) Roadway
- c) Survey
- e) Utilities
- j) Permitting
- m) Geotechnical

r) Installed ITS

- n) Hydraulics
- o) Storm Drainage & SWM
- q) Pavement Reconstruction,
 Mill & Overlay of Existing
 Pavement, & New Pavement

- t) Guardrails
- w) Traffic Control Devices
- x) Signs
- y) Roadway Lighting
- z) Transportation Management Plan
- aa) MOT Throughout Construction
- bb) Landscaping
- cc) Public Involvement/Relations
- dd) QA/QC
- ee) Construction Engineering & Inspection
- ff) Overall Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- The Quality Program has received high marks, evident in partnering survey results which have quality receiving a 4.7 out of 5 (5 being excellent) from the project stakeholders. There have been 27 non-conformance reports (NCRs) on the project, with the majority being minor. The lack of quality issues for this size of project (48 lane miles of concrete paving) is outstanding, and has been commended by the owner.
- Caltrans awarded the DBJV the 2015 Partnering Success in Motion Award.

Lead Contractor – Work History Form submitted by PCG

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager, who can verify Firm's responsibilities.		e. Contract Completion Date (Actual or Estimated)	Original	I mai of Estimated	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Woodrow Wilson Bridge, VA Approach Spans VAC Contract #BR-3B (VA) PG5175173 Alexandria, Virginia BRIDGE	Parsons Transportation Group (worked for owner)	Maryland State Highway Administration Shirlene Cleveland 410-545-8838 Scleveland@sha.state.md.us	10/2008	7/2008 (completed 3 months ahead of schedule)	\$125,800	\$125,800	\$99,382

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.



On this project, Parsons Transportation and Corman were teamed with Granite

GRANITE WITH CORMAN BRIDGE PROJECT EXPERIENCE

Granite was the lead JV partner for the Woodrow Wilson Bridge project. Granite managed the project's construction, while supplying key hourly and salaried staff. Key personnel included Project Executive Robert McTavish, plus full-time engineers, managers, foremen, superintendents, and crews.

The JV self-performed the "V" piers, PCC pile, bridge footings, structural steel, concrete bridge deck, demolition of existing bridge, concrete barrier, and utilities coordination.



PROJECT FEATURES NARRATIVE

The project consisted of constructing dual six-lane bridges spanning the Potomac River, with decks elevated approximately 100 feet from ground level, at about 2,300 feet in length. Site challenges on this project included tidal conditions and flooding, poor soil conditions, and extensive environmental permitting requirements. The project also included demolition of the existing six-lane bridge. Construction of the new bridge accommodated six lanes of traffic plus shoulders on each span. After the structural steel plate girders were erected on top of the arch piers, the concrete bridge deck was installed.

The team used a phased-construction approach and MOT plans to minimize impacts in this urban environment. By establishing an extensive monitoring plan, the team ensured that traffic could safely use the existing bridge during construction of the new bridge. The project exceeded expectations in schedule and environmental stewardship. The project was completed approximately 3 months ahead of schedule.

Innovative design solutions and construction techniques:

The JV accelerated the schedule with an innovative design that eliminated the shoring of precast segments through the use of tie-backs. The team used an on-site concrete fabrication plant that was erected to produce 460 concrete segments which were assembled and subsequently post-tensioned to form the bridge arch piers. This included innovative concrete mixes to achieve permeability and early strength requirements.

The team also designed and constructed a universal rigging frame that efficiently and safely handled precast segments set at varying angles and positions.

Limiting traveling public impacts: With more than 220,000 vehicles daily and extensive development in the surrounding communities in Maryland, Virginia, and Washington, DC, this reconstruction project was a high-profile undertaking. The team monitored workzone traffic control 7 days per week. The team conducted partnering sessions with local municipalities and agencies, and participated in public outreach programs for stakeholders and the traveling public.

Meeting/exceeding DBE program commitments:

• Project Goals: 15.0 % DBE

Actual DBE Awarded: 16.5 % DBE Exceeded Goal by 15%

SCOPE AND COMPLEXITY SIMILARITIES

Bridge over an Active Navigable Channel

- c) Survey
- e) Utilities
- f) Structures and Bridges
- g) Demolition of Structures
- j) Construction Permitting
- m) Geotechnical
- o) Storm Drainage and Water Management
- t) Guardrails
- . ..
- u) Retaining Walls

- v) Sound Barrier Walls
- w) Traffic Control Devices
- x) Sign and Sign Structures
- y) Roadway lighting
- aa) Traffic Maintenance and Management
- cc) Public Involvement / Relations
- dd) Quality Assurance and Quality Control
- ff) Overall Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Project completed approximately 3 months ahead of schedule
- Two lanes of traffic opened less than 15 months after project start, and all four lanes opened 3 months later
- 2008 ASCE OPAL "Outstanding Civil Engineering Achievement"
- 2008 AASHTO "America's Transportation Award" National Grand Prize
- 2007 ASBI "Bridge Award of Excellence"
- 2007 IRF "Global Road Achievement Award" (Program Management)
- 2009 Marvin M. Black Excellence in Partnering Award

TEAMING EXPERIENCE

- Corman was a CJV Partner, RKK was the GEC, and PTG was the Lead Designer (worked for owner)
- Permit acquisition was performed by PTG
- Granite Robert McTavish served as Project Manager and later Project Executive; he
 will be part of the Executive Committee for the I-64 High Rise project
- Greg Shaffer, PE, SE, was the Lead Bridge Designer; Josh Wade, PE, led the Preliminary Engineering and Permitting/Environmental Impact Analysis; and Nick Nicholson was VDOT's Project Manager

a. Project Name & Location	b. Name of the prime design consulting	c. Contact information of the Client or		e. Contract Completion Date	f. Contract Valu	e (in thousands)	g. Dollar Value of Work Performed by the
	firm responsible for the overall project design.	Owner and their Project Manager, who can verify Firm's responsibilities.	Completion Date (Original)		Original Contract Value	I mai of Estimated	Firm identified as the Lead Contractor for this procurement.(in thousands)
Design-Build US Highway 90 across St. Louis Bay Contract #BR-3B (VA) PG5175173 Pass Christian, Michigan BRIDGE		Mississippi Department of Transportation Melinda McCrath 601-359-7004	02/2008	11/2007 (completed 3 months ahead of schedule)	\$266,800	\$284,000 (Due to 20 owner-directed change orders and a \$5 million milestone completion bonus)	\$170,400

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.



GRANITE BRIDGE PROJECT EXPERIENCE

Granite led the JV that successfully completed this design-build project. Granite was responsible for all aspects of the project and provided a full-time Project Manager, plus full-time engineers, managers, foremen, superintendents, and field staff.

The integrated JV self-performed the majority of the work including demolition of the existing bridge, substructures, superstructures, foundations, environment compliance, utility coordination, and relocation and disposal of the existing structure and roadway.



PROJECT FEATURES NARRATIVE

Granite completed this project on a fast-track schedule as part of an emergency plan to replace the US Highway 90 Bridge that was destroyed by Hurricane Katrina in 2005. The hurricane affected both the navigable waterway and vehicular traffic between St. Louis Bay and Pass Christian. The design-build team constructed a new 85-foot-tall, 1.9-mile-long bridge and demolished and removed the existing US 90 bridge structure and roadway.

The team constructed concrete pile foundations, precast concrete girders, and reinforced concrete bridge decks within a navigable channel. Due to the accelerated schedule, the JV collaborated with the United States Army Corps of Engineers, Coast Guard, and other agencies to secure critical project permits. The team implemented quality control plans for both design and construction services, as well as utility coordination and relocation.

The team completed the new 1.9-mile-long bridge 3 months ahead of schedule while maintaining an active shipping channel. The overall project was completed in less than 2 years, and exceeded all schedule expectations for such a complex undertaking with one of the largest, fastest bridge replacements in the region.

Innovative design solutions and construction techniques:

Together, the design-build team developed and implemented a specialized Interior Diaphragm Gang Forming System that expedited construction. The team also developed a falsework system for the precast drop-in beams that used tension ties, reducing the necessary falsework towers by 50% and expediting the construction schedule. The team designed and constructed precast pier caps and concrete bridge deck panels, which eliminated the need for conventional shoring and formwork systems, reducing the exposure for crews working at excessive heights and over water, while still maintaining the aggressive schedule.

Limiting traveling public impacts: MOT risk was a major component of this project. Due to storm damage, the existing bridge was completely closed, causing long traffic backups on this major commuter and truck route. Granite worked with the designer to develop and implement a phased-construction plan that reopened two lanes less than 15 months after the project began and opened all four lanes 3 months later. The team also implemented MOT strategies to ensure that the public had safe access through the project. By implementing safe and effective MOT, and by completing the project ahead of schedule, Granite minimized traffic impacts during construction.

Meeting/exceeding DBE program commitments:

Project Goals: 5.0 % DBE

Actual DBE Awarded: Met DBE requirements

SCOPE AND COMPLEXITY SIMILARITIES

Bridge over an Active Navigable Channel Design-Build

- b) Roadway
- c) Survey
- e) Utilities
- f) Structures and bridges
- g) Demolition of structures
- j) Permitting
- k) Coast Guard coordination, including permitting
- 1) Navigable Channel Fender System
- m) Geotechnical
- n) Hydraulics

- o) Storm Drainage and Storm Water Management Facilities
- q) Pavement Reconstruction, Pavement Overlay and New Pavement
- t) Guardrail
- w) Traffic Control Devices
- x) Signs, Sign Structures and Foundations
- y) Roadway and Marine Navigation Lighting
- aa) Traffic Maintenance and Management
- ee) Construction Engineering and Inspection
- ff) Overall Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- Project completed approximately 3 months ahead of schedule
- Two lanes of traffic opened less than 15 months after project start, and all four lanes opened 3 months later

AWARDS

- 2007 Ranked 2nd in annual "Top 10 Bridges" by Roads and Bridges magazine
- 2008 AASHTO "On-Time" Award, Large Project Category
- 2008 AASHTO People's Choice Award

TEAMING EXPERIENCE

 Granite – Robert McTavish was the Project Executive; he will be part of the Executive Committee on I-64

ATTACHMENT 3.4.1(c) 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		e. Construction Contract Completion Date (Actual or Estimated)	Construction Contract	Construction Contract	g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
Design-Build Intercounty Connector Contract B Montgomery County, Maryland ROADWAY	MD200 Constructors, a JV (a JV that included Corman)	Maryland State Highway Administration 301-586-9267 PM: Mark Coblentz Phone: 443-844-9886 MCoblentz@iccproject.com	11/2011	11/2011	\$560,000	\$560,000	\$40,900

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated



On this project, PTG and Corman were teamed together

PTG'S ROADWAY PROJECT EXPERIENCE

PTG served as the Lead Designer to MD200 Constructors, a JV that included Corman Construction, Inc. to provide engineering design services for Segment B of the Intercounty Connector Contract. The project was performed on an accelerated schedule through a design-build delivery process.

PTG was responsible for the overall design of this toll road, including ITS, electronic toll collection (ETC), traffic signals, signing and pavement marking, more than 80 acres of reforestation, hiker and biker trails, and the relocation of six side-roads. The project requirements called for numerous environmental protections, mitigations, and construction methods. What resulted from the work of more than 150 designers is a successful and environmentally friendly roadway project.

PROJECT FEATURES NARRATIVE

The \$560 million Intercounty Connector Contract B Design-Build (ICC B) project consisted of approximately 6.9 miles of six-lane, controlled-access toll road in Montgomery County, Maryland. The project constructed a diamond interchange at MD 182, and a single-point urban interchange (SPUI) at MD 650.

The project included 10 highway bridges consisting of five steel-girder bridges and five dual-structure mainline bridges. Five of the 10 bridge structures span 4,400 feet over streams, wetlands, and 100-year floodplains. Several local roadways crossing over the ICC mainline were relocated to allow for new overpass and interchange construction.

Efficient Transportation System: The ITS elements include integration with the existing administration's Authority Operations Center and Coordinated Highways Action Response Team program. These elements also consisted of closed-circuit television, dynamic message signs, highway advisory radio, road weather information system, fiber-optic communications, telephone communications, electrical services, and other improvements to provide a fully functioning ITS.

Innovative design solutions and construction techniques: This portion of the toll road is located in a sensitive environmental area and crosses through two important watersheds. The project requirements called for numerous environmental protections, mitigations, and construction methods. As the Lead Designer, PTG met these stringent environmental requirements and developed several innovative designs to minimize impacts to the surrounding environment.

As part of the project ATC process, drilled shaft foundations (some up to 6.5 feet in diameter) were used for bridge foundations to eliminate the need for many deep excavations. This was to reduce costs as well as impacts to floodplains, wetlands, and waters. Through changes to cross slopes and the vertical alignment, PTG was also able to reduce the overall excavation from a waste project of approximately 2 million cubic yards to a near-balanced job. To reduce impacts to trees and nearby residences, the overall width of a large portion of the job was reduced by using innovative stormwater management techniques, including median sand filters and underground storage.

In addition, many environmental requirements were met through the design, including the protection of wildlife through search and removal, the use of special wildlife fencing, and time-of-year restrictions on stream work. Many of the culverts designed for the project had to include wildlife passage capability as well as stream relocation designs. Furthermore, the design of the mainline bridges (discussed above) was such that their span lengths would facilitate wildlife crossings and corridors to minimize impacts to the wildlife in the area and reduce the conflicts caused by wildlife crossing an active roadway. In addition, temperature treatments were developed to control the temperature of the outfall water to decrease the impacts of hot pavement on runoff into the sensitive streams nearby.

Limiting traveling public impacts: Public involvement occurred throughout the project and included public meetings, homeowner association presentations, elected official briefings, and individual homeowner meetings. In addition, approximately 200 permits or modifications were needed and coordination with several adjacent projects was necessary to minimize the overall impacts on the public. With the diverse group of stakeholders and agendas, extensive outreach and partnering effort were required to involve as many of the different viewpoints as possible. The success of this effort culminated with the 2012 Maryland Quality Initiative's Silver Partnering Award.

Meeting/exceeding DBE program commitments:

Project Goals: 13.34% DBE

Actual DBE Awarded: 17.34 % DBE Exceeded Goal by 40%

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build

- b) Roadway
- c) Survey
- d) Right-of-Way
- e) Utilities
- f) Structures and Bridges
- j) Permitting
- m) Geotechnical
- n) Hydraulics
- o) Storm Drainage & SWM
- q) New Pavement
- r) ITS

- t) Guardrails
- u) MSE Retaining Walls
- v) Sound Barrier Walls
- w) Traffic Control Devices
- x) Signs & Sign Structures
- y) Roadway Lighting
- z) Transportation management plan
- bb) Landscaping
- cc) Public Involvement/Relations
- dd) QA/QC
- ee) Construction Eng. & Inspection
- ff) Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- "On behalf of the ICC Corridor Partners Joint Venture (serving as GEC to the Maryland State Highway Administration and the Maryland Transportation Authority) and in reference to the \$2.556 billion InterCounty Connector project, I write to commend Parsons Corporation on their efforts in the delivery of the ICC Design-Build project. This project had many monumental engineering and environmental challenges which the Parsons team continually rose above to obtain timely resolution. On behalf of ICC CP JV, I would like to acknowledge your teams' effort and recognize the support of all Parsons staff participating in the program." David Wallace, PE, Executive Program Manager, ICC CP JV
- 2016 Honor Award General Design category (Intercounty Connector) from American Society of Landscape Architects, Maryland Chapter
- 2012 Transportation National Design-Build Award (Intercounty Connector) from Design-Build Institute of America
- 2013 Award of Excellence Partnering Silver Award from Maryland Quality Initiative

TEAMING EXPERIENCE

- Corman was a CJV partner
- Schnabel: Geotechnical Engineering
- RKK: Owner's GEC
- ALA: Structural Engineering

- Josh Wade: Design Manager
- Greg Shafer: Structural Engineer
- Dhimant Sojitra: Roadway Engineer
- Greg Anderson: Design QA

ATTACHMENT 3.4.1(c) 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		e. Construction Contract Completion Date (Actual or Estimated)	Construction Contract Value	cact Value (in thousands) Construction Contract Value (Actual or Estimated)	g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
Design-Build The New I-64 St. Louis, Missouri ROADWAY	Gateway Constructors JV (a JV that included Granite)	Missouri Department of Transportation Ronald Morris, Project Director 314-453-0580 ronald.morris@modot.mo.gov	07/2010	07/2010 (completed 3 weeks ahead of schedule)	(Original) \$420,000	\$438,000 (Owner-initiated changes increased the final project value; the project was delivered \$11 million under MoDOT's original budget)	\$36,078

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated



On this project, PTG and Corman were teamed together

PTG WITH CORMAN ROADWAY PROJECT EXPERIENCE

PTG served as the Lead Designer to Gateway Constructors, a JV that included Granite, to provide engineering design services for the new I-64, located in St. Louis, Missouri. This was the first MoDOT project to use the design-build delivery method and, at the time, was the largest highway construction project in the state's history. PTG completed 45% of the design work and oversaw the remaining 55% as Subconsultant and Lead Designer for the construction.

PROJECT FEATURES NARRATIVE

Built between the 1930s and 1960s, I-64's roadway and ramps were geometrically deficient by today's standards, and many of its bridges had deteriorated to one inspection point away from being shut down. The reconstruction of I-64 was the number one priority for MoDOT due to severe safety and capacity deficiencies. I-64 carried 130,000 vehicles per day at the start of the project.

The project reconstructed 10 miles of I-64 through St. Louis and six other cities; widened and reconstructed the entire roadway; rebuilt 38 bridges; improved 11 interchanges; and constructed extensive retaining and sound walls, which required design and construction coordination with adjacent communities and property owners. A major project feature was the reconstruction of the I-64/I-170 interchange to a high-speed, fully directional facility.

Innovative design solutions and construction techniques:

ATCs: The ATC process on I-64 was highly successful. The team presented MoDOT with more than a dozen ATCs, with a majority being accepted including eliminating one level of a major interchange. These ATCs contributed to the project, achieving significant cost and schedule savings.

Reduce ROW: The innovative redesign of the I-64/I-170 interchange avoided two high-profile properties associated with the Galleria Center, a major shopping center in St. Louis. This approach saved the owner time and the cost of acquisition.

Practical Design: The project's bridges made up 27% of the project's total cost. The design team used the principle of practical design to reduce bridge costs. PTG focused on cost-effective structure type selections and designed safe and efficient cross-sections that optimized geometrics and reduced bridge lengths. In the system interchange, PTG reduced the deck area, saving \$35 million in structure costs and winning a MoDOT award for practical design. Structures were designed for a 75-year life with strict quality control during construction to produce high-quality, long-lasting, and durable structures that reduce maintenance activities and cost.

Fast Track Design: PTG mobilized a dedicated team of more than 100 design professionals within the first 30 days of NTP to fast-track design efforts. This fast-tracking provided the design team enough schedule float such that the more than 60 Owner-initiated changes were able to be instituted without variance to the schedule. This also meant that a robust and viable Design Quality Management Plan (DQMP) had to be implemented early to ensure that quality was included in all early works.

Robust Design Quality: PTG prepared a detailed ISO 9001:2008 certified DQMP that included detailed design checklists to ensure that technical requirements were incorporated. This effort resulted in the owner's design acceptance immediately after the completion of the design effort. PTG also completed quality audits on all design deliverables at each design stage. This resulted in zero design nonconformances at design completion.

Limiting traveling public impacts: A primary reason MoDOT chose Gateway Constructors was due to the team's aggressive construction schedule and MOT approach. The MOT plan included three phases: planning and preparation, construction of the west segment, and construction of the east segment. The PTG staff worked with Gateway's construction staff to develop an approach that closed two segments of the existing freeway, each more than 4 miles long, to all traffic during each construction stage. Traffic was maintained at all times throughout the interchange reconstruction. The result was an approach with the least impact to regional traffic during the project's life as compared with other MOT schemes proposed by the city, county, and other bidders.

Meeting/exceeding DBE program commitments:

Project Goals: 16.00% DBE

Actual DBE Awarded: 18.60 % DBE Exceeded Goal by 26%

SCOPE AND COMPLEXITY SIMILARITIES

Design-Build

- a) Interstate Widening
- b) Roadway
- c) Survey
- d) Right-of-Way
- e) Utilities
- f) Structures and Bridges
- g) Demolition of Structures
- j) Permitting
- m) Geotechnical
- n) Hydraulics
- o) Storm Drainage & SWM
- q) New Pavement
- s) Railroad Coordination

- t) Guardrails
- u) MSE Retaining Walls
- v) Sound Barrier Walls
- w) Traffic Control Devices
- x) Signs & Sign Structures
- y) Roadway Lighting
- z) Transportation Management Plan
- aa) Traffic Maintenance and Management during all Phases of Construction
- bb) Landscaping
- cc) Public Involvement/Relations
- dd) QA/QC
- ee) Construction Eng. & Inspection
- ff) Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- "On the Interstate 64 project in St. Louis, Parsons Transportation Group did a great job for MoDOT's Design-Build joint venture contractor, Gateway Constructors. The Parsons engineers and staff worked to complete the design for nearly 10 miles of interstate including 13 interchanges in 1 year. The Parsons staff was co-located with Gateway Constructors staff and the Missouri Department of Transportation staff to expedite the work. Design tasks forces were organized and design reviews were completed in a collaborative manner. Parsons engineers led the task forces and worked to respond to and address the comments of the MoDOT engineers as well as the joint venture construction engineers. MoDOT appreciates the efficient and collaborative work your staff provided to Gateway Constructors. The I-64 project was completed nearly a month ahead of schedule and \$11 million under MoDOT's budget. Your contributions were invaluable to the quick construction of this complete interstate reconstruction." Ron Morris, PE, Project Director
- 2011 National Recognition, Engineering Excellence Awards from American Council of Engineering Companies
- 2007 Practical Design Award for Excellence from the ACEC

TEAMING EXPERIENCE

Granite was the CJV Lead

ATTACHMENT 3.4.1(c) 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			Construction	Construction Contract Value	g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
US 90 Bridge Over Biloxi Bay Design-Build Biloxi and Ocean Springs, Michigan BRIDGE	GC Constructors	Mississippi Department of Transportation Melinda McGrath, Deputy Executive Director 601-359-7007 m.mcgrath@mdot.state.ms.us	06/2006	04/2008 (completed 1.5 months ahead of schedule)	\$338,600	\$338,600	\$14,311

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. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated



PTG'S BRIDGE PROJECT EXPERIENCE

As the Lead Designer, PTG was responsible for the design and construction support for the accelerated bridge construction of bay bridges, CSX railroad bridges, and approach roadways. PTG performed its work ahead of schedule and developed a design that supported the contractor in delivering the project on budget. This success demonstrated PTG's ability to deliver complex technical and management solutions while providing value to its clients and service to the community.

PROJECT FEATURES NARRATIVE

Hurricane Katrina, one of the deadliest and costliest natural disasters in US history, made landfall on August 29, 2005, devastating the Gulf Coast. The US 90 Bridge over Biloxi Bay, which connects the communities of Biloxi and Ocean Springs, Mississippi, was one of many major highway and railroad bridges knocked out of service due to storm damage.

The Mississippi Department of Transportation (MDOT) and the Federal Highway Administration (FHWA) elected to replace it with a new high-level bridge using the design-build project delivery method, which allowed design, permitting, and construction activities to be conducted simultaneously. MDOT awarded the contract to rebuild the bridge to GC Constructors (GCC) and its Lead Designer, PTG. A critical factor in MDOT's selection of GCC was the team's highest scoring technical proposal that included a number of PTG's technical and management solutions.

Innovative design solutions and construction techniques: The massive reconstruction efforts along the Gulf Coast following the hurricane produced an overwhelming demand

on the precast industry and represented a significant supply and schedule risk. The design was thus developed to diversify the required precast piling and girders and to minimize the specialty products that only a few precastors are capable of producing. This technique provided GCC with significant redundancy in potential suppliers during construction if a specific precastor could not deliver products according to the required schedule.

PTG was tasked with developing an economical approach to pier and foundation construction that addressed the wide range of geometric and loading conditions. The piers vary in height from 6 feet to 90 feet. The goal was to develop a design that could be built using an assembly-line approach that minimized variability in formwork and equipment.

This project, which received the Innovative Management Award in the large project category from the Southeastern Association of State Highway and Transportation Officials, is an excellent example of how design-build delivery, precast construction, and a great deal of hard work and cooperation among all parties involved can result in the successful fast-track delivery of major transportation projects.

Limiting traveling public impacts: Approximately 35,000 cars per day crossed the four-lane bridge between Biloxi and Ocean Springs before the hurricane damaged it. The loss of the bridge created a significant hardship and mobility issues for the surrounding communities, as the detour route added 30 minutes to what was normally a 2-minute commute. In just 18 months from NTP, the bridge was required to have one lane open to traffic in each direction, and the entire project was required to be complete in 22 months. The first bridge was opened to one lane of traffic in each direction 2 weeks ahead of schedule, and the entire project was completed in 20.5 months—1.5 months ahead of schedule. In addition, the PTG-led design team completed 90% of the design work within 6 months. GCC combined the use of precast construction and the development of an assembly-line production approach for both design and construction work to deliver this emergency reconstruction project in record time and to a high-degree of quality.

Success in construction over an active navigable channel: The new bridge consists of dual structures, each carrying three lanes of traffic. The eastbound bridge also has a 12-foot shared-use path. The total width is 129 feet.

The bridge was also designed to withstand hurricane-force winds and waves similar to those of Katrina. PTG made the following two design provisions to increase the future safety and reliability of the bridge during hurricane events:

- PTG maximized the length of the bridge's superstructure above the critical wave height. Six-percent grades are now designed into each end of the bridge to raise the bridge above the critical height as soon as possible.
- For the portion of the superstructure below the critical wave height, PTG designed concrete restrainer blocks on top of the piers and between the girders to prevent the superstructure from being pushed off its supporting piers when subjected to waves.

Meeting/exceeding DBE program commitments:

Due to the accelerated project schedule a DBE goal was not required.

SCOPE AND COMPLEXITY SIMILARITIES

Bridge over an Active Navigable Channel

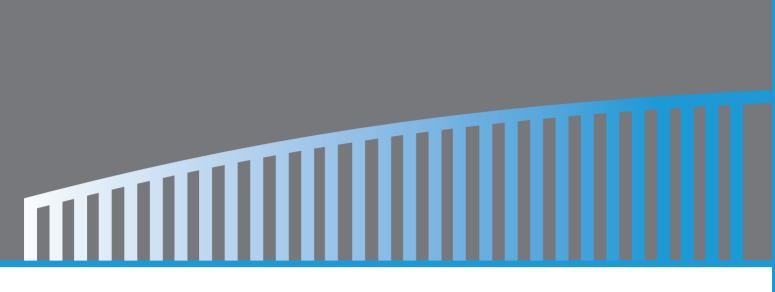
Design-Build

- b) Roadway
- c) Survey
- e) Utilities
- f) Structures and Bridges
- g) Demolition of Structures
- j) Permitting
- k) Coast Guard Coordination, including Permitting
- Navigable Channel Fender System
- n) Hydraulics

- o) Storm Drainage & SWM
- q) New Pavement
- s) Railroad Coordination
- t) Guardrails
- w) Traffic Control Devices
- x) Signs & Sign Structures
- y) Roadway and Marine Navigation Lighting
- bb) Landscaping
- cc) Public Involvement/Relations
- dd) QA/QC
- ee) Construction Eng. & Inspection
- ff) Project Management

RELEVANT AND VERIFIABLE EVIDENCE OF GOOD PERFORMANCE

- 2011 PCI Design Award, Transportation Category for main spans greater than 150 feet from Precast/Prestressed Concrete Institute (PCI)
- 2008 Award of Excellence in Project Management from Federal Highway Administration (FHWA)
- America's Transportation Award for Innovative Management "Large Project" 2008 from Southeastern Association of State Highway Transportation Officials
- Project Achievement Award 2008 from Construction Management Association of America
- 2008 Engineering Excellence Honor Award from American Council of Engineering Cos. (ACEC), Illinois Chapter
- 2008 Mississippi Award of Excellence in Transportation
- 2009 Engineering Excellence Award National Finalist from American Council of Engineering Cos. (ACEC), Illinois Chapter
- 2009 Structural Systems Honor Award from American Council of Engineering Cos. (ACEC), Tennessee



Lead Contractor Safety Qualifications Form (Addendum No. 1 Form)

ATTACHMENT 3.5

(Addendum No. 1 Form 3.5)

LEAD CONTRACTOR SAFETY QUALIFICATIONS FORM

The following information will be used to understand and evaluate the Offeror's past performance on safety in accordance with RFQ Section 3.5.

Company Name: Granite Construction Company		Date:	9/29/16
Number of Employees: 3 Year Average – 3.074		•	
Workers' Compensation Experience Modification Ratio (EMR) and/or Experience Modification Factor	2013	2014	2015
(EMF) 3.5.1.1 List your company's Worker's Compensation EMR/EMF calculated by National Council on Compensation Insurance, Inc. or other similar advisory organization or rating bureau for the past 3 years.	.65	.62	.61
Accident and Illness	2013	2014	2015
3.5.1.2 List your company's recordable injuries and illnesses rate for the past 3 years.	1.9	1.5	1.2
3.5.1.3 List your company's days away from work injury incident rate for the past 3 years.	0.5	0.3	0.3
3.5.1.4 Submit a completed Occupational Safety and Health A 300A, Summary of Work-Related Injuries and Illnesse		`	*

Log of Work-Related Injuries and Illnesses OSHA's Form 300A (rev. 01/2004)

U.S. Department of Labor Occupational Safety and Health Fear: 2013 Administration



Form Approved OMB no. 1218-0176

Your Establishment Name GRANITE CONSTRUCTION COMPANY - 2

Establishment information

All establishments covered by part 1904 must complete this Summary page, even if no work related injuries or illneses occured during the year. Remember to view the Log to verify that the entries are complete and accuratebefore completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0".

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR Part 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

recordable cases Total other 71 5 Total cases with job transfer/restriction Total cases with days away from work Number of Cases Total deaths Number of Days ଠା ପ୍ରି

Employment information (If you don't have these figures, see the worksheet on the back of this

page to estimate)

Standard Industrial Classification (SIC), if known (e.g., SIC 3715) 1611

Industry description (e.g., Manufacture of motor truck trailers) Highway and Street Construction, Except Elevated Highways

Address:

Fotal days of jobtransfer/restriction \mathbb{G} Total days away from work 2167 $\overline{\mathbf{X}}$ Injury and Illness Types

Total number of ...

01 01 01 (5) All Other Illnesses (5) Hearing Loss (4) Poisonings 0 10 (3) Respiratory Conditions (2) Skin Disorders (1) Injuries

Vice President Date: 1/31/2014 Title /Jigisha Desai, Company Executive

I certify that I have examined this document and that to the best of my knowledge the entries are

true, accurate, and complete.

Knowingly falsifying this document may result in a fine

Sign Here

Total hours worked by all employees last year: 7.427,118

Annual average number of employees: 3.714

Post this summary page from February 1 to April 30 of the year following the year covered by the form.

Reporting burden for collection of information is estimated 50 minutes per form. Persons are not required to collect the information unless the form has a valid OMB control number. For comments about the process or this form, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send form to this office.

Phone:



Form Approved OMB no. 1218-0176

Your Establishment Name GRANITE CONSTRUCTION COMPANY - 2

Establishment information

Industry description (e.g., Manufacture of motor truck trailers) Highway and Street Construction, Except Elevated Highways

Address:

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Number of Cases				Standard Industrial Class	ification (SIC), if know	Standard Industrial Classification (SIC), if known (e.g., SIC 3715) 1611	
Total deaths Total caway away (G)	Total cases with days away from work 10 (H)	Total cases with job transfer/restriction 17 (1)	Total other recordable cases 25 (1)	Employment informatic page to estimate)	on (If you don't have the	Employment information (If you don't have these figures, see the worksheet on the back of this page to estimate)	on the back of this
Number of Days				Annual average number of employees: 3.550 Total hours worked by all employees last year: 7.099.875	of employees: 3.550 l employees last year: Z	099.875	
Total days away from work \frac{1061}{(K)}	y from work	Total days of job	Total days of jobtransfer/restriction 1614 (L)	Sign Here Knowingly falsifying this document may result in a fine	is document may result	t in a fine	
Injury and Illness Types			,	I certify that I have examined true, accurate, and complete.	ined this document and tete.	I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.	dge the entries are
Total number of (M)				× God	As a second	/Jigisha Desai	Vice Presiden
(1) Injuries(2) Skin Disorders	05 0	(4) Poisonings(5) Hearing Loss	0 7	8	Company Executive		Title
(3) Respiratory Conditions	O I	(5) All Other Illnesses	ଠା	Phone:			Date: 1/19/201

Post this summary page from February 1 to April 30 of the year following the year covered by the form.

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Date: 1/19/2015

Vice President

Log of Work-Related Injuries and Illnesses

U.S. Department of Labor Occupational Safety and Health Vear: 2015 Administration



Form Approved OMB no. 1218-0176

All establishments covered by part 1904 must complete this Summary page, even if no work related injuries or illneses occured during the year. Remember to view the Log to verify that the entries are complete and accuratebefore completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0".

Address: 585 West Beach Street, Watsonville, CA 95076

Industry description (e.g., Manufacture of motor truck trailers) Highway and Street Construction, Except Elevated Highways

Your Establishment Name GRANITE CONSTRUCTION COMPANY - 2

Establishment information

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Number of Cases				Standard Industrial Classification (SIC), if known (e.g., SIC 3715) 1611	
Total deaths Total aw $\frac{0}{(G)}$	Total cases with days away from work 12 (H)	Total cases with job transfer/restriction 19 (1)	Total other recordable cases 11 (J)	Employment information (If you don't have these figures, see the worksheet on the back of this page to estimate)	the back of this
Number of Days				Annual average number of employees: 3.468 Total hours worked by all employees last year: 6.936.079	
Total days av	Total days away from work \\ \frac{452}{(K)}	Total days of jobtransfer/restriction 1558 (L)	ansfer/restriction	Sign Here Knowingly falsifying this document may result in a fine	
Injury and Illness Types				I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.	e the entries are
Total number of (M)				X Sm. M. /Jigisha Desai Vice	Vice President
(1) Injuries(2) Skin Disorders	24 0	(4) Poisonings(5) Hearing Loss	010	Company Executive	Title
(3) Respiratory Conditions	01	(5) All Other Illnesses	ΙO		

Post this summary page from February 1 to April 30 of the year following the year covered by the form.

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Phone: 831-724-1011

Date: 1/22/2016

ATTACHMENT 3.5

(Addendum No. 1 Form 3.5)

LEAD CONTRACTOR SAFETY QUALIFICATIONS FORM

The following information will be used to understand and evaluate the Offeror's past performance on safety in accordance with RFQ Section 3.5.

Company Name: Parsons Construction Group Inc.		Date: 10	0/6/16
Number of Employees: 180			
Workers' Compensation Experience Modification			
Ratio (EMR) and/or Experience Modification Factor	2013	2014	2015
(EMF)			
3.5.1.1 List your company's Worker's Compensation EMR/EMF calculated by National Council on Compensation Insurance, Inc. or other similar advisory organization or rating bureau for the past	0.56	0.55	0.55
3years.			
Accident and Illness	2013	2014	2015
3.5.1.2 List your company's recordable injuries and illnesses rate for the past 3 years.		0.59	0.47
3.5.1.3 List your company's days away from work injury incident rate for the past 3 years.	0.00	0.00	0.00
3.5.1.4 Submit a completed Occupational Safety and Health A	Administrat	ion (OSHA)	Form
300A, Summary of Work-Related Injuries and Illnesse	es, for the p	ast three (3)	years.

Form 300A (Rev. 01/2004)

Overall Summary of Work-Related Injuries and Illnesses

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Year: 2015

U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

very page of the Log. If you had during the year. Remember to review the Using the Log, count the individual entries you made for each category. Then write the totals is no cases, write "0," All establishments covered by Part 1904 must complete this Summary page, even if no w Log to verify that the entries are complete and accurate before completing this summary.

Employees, formst employees, and their representatives have the right to review the OSH4 Form 300 in ta entreky. They also have limited access to the OSH4 Form 301 or ta equivalent. See 29 CFR 1904.35, in OSH4's recordis

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (9)	10 (H)	8 (1)	(J)
Number of Days	ays		
Total number of days away from work		Total number of days of job transfer or restriction	o transfer

			0	0	τ-
288 (L)			(4) Poisonings	(5) Hearing Loss Cases	(6) All Other Illnesses
	sed		39	0	0
269 (K)	Injury and Illness Types	Total Number of	(1) Injuries	(2) Skin Disorders	(3) Respiratory Conditions

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instructions, search and gather the data needed and complete and review the collection of information. Persons are not required to response for information unless it displays a currently valid CMB coorded number. If you have any comments about these estimates of any other sepects of this data collection, contact. US Department of Labor, CSHA Office of Satistical Analysis, Room N-5644, 200 Constitution Avenue, NW Washington, DC 20210, Do not send completed forms to this office. Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

(If you don't have these figures, see the Corporate Vice President - SH&E Director Industry description (e.g., Manufacture of motor truck trailers) - Engineering Services North American Industrial Classification (NAICS), if known (e.g., 336212) - 541330 ZP-91124 Knowingly falsifying this document may result in a fine. I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete. 1/25/2016 Date Total hours worked by all employees last year - 17,684,836 Your Establishment Name - Parsons Corporation Street - 100 West Walnut Street City - Pasadena State - California Standard Industrial Classification (SIC), if known (e.g., 3715) Establishment Information Annual average number of employees - 8,653 Employment Information Worksheet on the back of this page to estimate.) Bodley c Bal Sign Here (704) 558-4178 Company Executive Phone OR

Form 300A (Rev. 01/2004)

Overall Summary of Work-Related Injuries and Illnesses

Year: 2014

U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no work. Log to verify that the entries are complete and accurate before completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log, if you had no cases, write "0."

limited access to the OSHA Form 301

impbyees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirely. They also have r its equivalent. See 29 CFR 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases	ases		
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (G)	9 (H)	6 (1)	22 (J)
Number of Days	ays		
Total number of days away from work		Total number of days of job transfer or restriction	o transfer
333 (K)		494	

			0	0	2
(L)			(4) Poisonings	(5) Hearing Loss Cases	(6) All Other Illnesses
	sec		35	0	0
(Y)	Injury and Illness Types	Total Number of (M)	(1) Injuries	(2) Skin Disorders	(3) Respiratory Conditions

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

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Establishment Information

Your Establishment Name - Parsons Corporation Street – 100 West Walnut Street City - Pasadena State - California Zip Co

Zip Code - 91124

Industry description (e.g., Manufacture of motor truck trailers)- Engineering Services

Standard Industrial Classification (SIC), if known (e.g., 3715)

OR North American Industrial Classification (NAICS), if known (e.g., 336212) - 541330

(If you don't have these figures, see the Employment Information

Annual average number of employees 9,308

Total hours worked by all employees last year 19,360,443 Worksheet on the back of this page to estimate.)

Sign Here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete. c Ball

Corporate VP, SH&E Brodly Company Executive

01/21/2015 Date (704)558-4178 Phone

U.S. Department of Labor Occupational Safety and Health Administratio

Form approved OMB no. 1218-0176

Overall Summary of Work-Related Injuries and Illnesses

Using the Log, count the individual entries you made for each catagory. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0." All establishments covered by Part 1904 must complete this Summary page, even if no work-related injuries or illnesses occurred during the year. Ramember to review the Log to verify that the entries are complete and accurate before completing this summary.

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entriety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's recordisepting rule, for further details on the access provisions for these forms.

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Number of Cases	ases		
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (5)	12 (H)	(1)	16 (J)
Number of Days	ays		
Total number of days away from work		Total number of days of job transfer or restriction	b transfer
709 (K)		880 (L)	

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instructions, search and gather the data needed, and complete and review the orderion of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any other expensis of this data collection, contact. US Department of Labor, OSHA Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send completed forms to this office. Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Date

Phone

(If you don't have these figures, see the Industry description (e.g., Manufacture of motor truck trailers) - Engineering Services OR North American Industrial Classification (NAICS), if known (e.g., 336212) - 541330 Knowingly falsifying this document may result in a fine. Corporate VP, SH&E I certify that I have examined this document and that to the best of my 1/22 /14 Zip code - 91124 Standard Industrial Classification (SIC), if known (e.g., 3715) 8711 Annual average number of employees 8,474 Total hours worked by all employees last year 17,560,637 knowledge the entries are true, accurate, and complete. Your Establishment Name - Parsons Corporation Street - 100 West Walnut Street City - Pasadena State - California Zip o Establishment Information Worksheet on the back of this page to estimate.) **Employment Information** Sign Here (704) 558-4178

ATTACHMENT 3.5

(Addendum No. 1 Form 3.5)

LEAD CONTRACTOR SAFETY QUALIFICATIONS FORM

The following information will be used to understand and evaluate the Offeror's past performance on safety in accordance with RFQ Section 3.5.

Company Name: Corman Construction, Inc.		Date:	10/6/16
Number of Employees: 434			
Workers' Compensation Experience Modification Ratio (EMR) and/or Experience Modification Factor (EMF)	2013	2014	2015
3.5.1.1 List your company's Worker's Compensation EMR/EMF calculated by National Council on Compensation Insurance, Inc. or other similar advisory organization or rating bureau for the past 3years.	0.72	0.66	0.74
Accident and Illness	2013	2014	2015
3.5.1.2 List your company's recordable injuries and illnesses rate for the past 3 years. (RIR)	2.92	2.64	1.67
3.5.1.3 List your company's days away from work injury incident rate for the past 3 years. (LWDC IR)	0.73	0.44	0.19
3.5.1.4 Submit a completed Occupational Safety and Health A 300A, Summary of Work-Related Injuries and Illness		`	,

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

illnesses occurred during the year. Remember to review the Log to verify that the entries are complete All establishments covered by Part 1904 must complete this Summary page, even if no injuries or

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0." Employees former employees, and their representatives have the nght to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases				
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases	
(9)	(H)	(1)	(7)	
Number of Days				
Total number of days away from work		Total number of days of job transfer or restriction		
170 (K)		179		
Infine and Illness Tymes	Tymes			

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

(6) All Other Illnesses

(4) Poisoning (5) Hearing Loss

(1) Injury(2) Skin Disorder(3) RespiratoryCondition

Total number of...

displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless if of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office

Year 2013

U.S. Department of Labor

Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

Establishment information				
Your establishment name C. G. Enterprises, Inc.				
Street 12001 Guilford Rd.				
City Annapolis Junction State	WD	diz	20701	
Industry description (e.g., Manufacture of motor truck trailers) Construction				
Standard Industrial Classification (SIC), if known (e.g., SIC 3715)				
OR North American Industrial Classification (NAICS), if known (e.g., 336212)	336212)			_
Employment information				
Annual average number of employees 419				
Total hours worked by all employees last year				
Sign here				
Knowingly falsifying this document may result in a fine.				
I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete. Presider Arthur C. Cox, Jr. (410) 792-84008 Phone	of my knowledge the entries are t	ve, accurate, and President Title Title Date	esident Title	

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

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Number of Cases			
Fotal number of deaths	Total number of cases with days	Total number of cases with job transfer or	Total number of other recordable
0 (5)	away ironi work 2 (H)	(1)	(1)
Vumber of Days			
Total number of days away from		Total number of days of job transfer or restriction	
203 (K)		148 (L)	ı

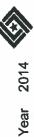
Injury and Illness Types Total number of

	(4) Poisoning	(5) Hearing Loss		(6) All Other Illnesses	
	11	0		0	
(M)	1) Injury	2) Skin Disorder	3) Respiratory	Condition	

(5) Hearing Loss	(6) All Other Illnesses
0	0
-	

Dost this Summary page from February 1 to April 30 of the year following the year covered by the form

displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office. Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it



U.S. Department of Labor Occupational Safety and Health Administration

Form approved OMB no. 1218-0178

mation on the contract of the	ord Rd.	Junction State MD Zip 20701	Industry description (e.g., Manufacture of motor truck trailers) Construction	Standard Industrial Classification (SIC), if known (e.g., SIC 3715)	OR North American Industrial Classification (NAICS), if known (e.g., 336212)		mber of employees 415	Total hours worked by all employees last 907,606		Knowingly falsifying this document may result in a fine.	I certify that I have examined this documentand that to the best of my knowledge the entries are true, accurate, and complete.	President Arthur C. Cox, Jr.
Establishment information Your establishment name	Street 12001 Guifford Rd.	City Annapolis Junction	Industry description (e	Standard Industrial	OR North American Ind	Employment information	Annual average number of employees	Total hours worked year	Sign here	Knowingly falsifyl	I certify that I have complete.	Ar

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

ilinesses occurred during the year. Remember to review the Log to verify that the entries are complete All establishments covered by Part 1904 must complete this Summary page, even if no injuries or

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

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number of cases			
otal number of leaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction 4	Total number of other recordable cases
(9)	(H)	(2)	(f)
Number of Days			
otal number of lays away from work		Total number of days of job transfer or restriction	
16 (K)		247 (L)	

	(4) Poisoning (5) Hearing Loss	(6) Ali Other Illnesses
Injury and Illness Types	Total number of (M) (1) Injury (2) Skin Disorder (2)	(a) Respiratory Condition

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

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Year 2015

U.S. Department of Labor

Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

Street 19001 Guilford BA	200
City Annapolis Junction State	MD Zip 20701
Industry description (e.g., Manufacture of motor truck trailers) Construction	
Standard Industrial Classification (SIC), if known (e.g., SIC 3715)	
OR North American Industrial Classification (NAICS), if known (e.g., 336212)	212)
Employment information	
Annual average number of employees 448	
Total hours worked by all employees last year	
Sign here	
Knowingly falsifying this document may result in a fine.	
I certify that I have examined this docriment and that to the best of my knowledge the entries are true, accurate, and complete.	y knowledge the entries are true, accurate, and
The second second	President
Arthur C. Cer. Jr.	Title
(410) 782-9400 Phone	Pate Date
H	•



