



### 3.2 Letter of Submittal

January 10, 2013

Mr. Kevin Reichert, P.E.  
Alternate Project Delivery Office  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

RE: Route 7 – Westbound Truck Climbing Lane, RFQ No.: C00058599DB54  
Loudoun County, Virginia

Dear Mr. Reichert:

On behalf of the team of Trumbull Corporation and HDR Engineering, Inc., we are pleased to submit the attached response to your request for qualifications on the above referenced project.

Please contact me at 412-807-2000 if you have any questions.

We look forward to your favorable response.

Sincerely,

TRUMBULL CORPORATION



John P. Maffeo, Jr., P.E.

Executive Vice President



**3.2.2- Point of Contact for the Offeror:**

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Pittsburgh, PA 15212  
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Fax: 412-807-2011  
Cell: 412-877-0093

**3.2.3 – Principal Officer of the Offerer:**

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**3.2.4 – Offeror Corporate Structure:**

Corporation

**3.2.5 – Full Legal Name of Prime Contractor and Lead Designer:**

Prime Contractor- Trumbull Corporation

Lead Designer- HDR Engineering, Inc.

**3.2.11- Statement regarding commitment to achieve 15% DBE participation:**

Trumbull and HDR perform a significant amount of work on Federal and State funded projects that have DBE participation requirements. Both companies understand the requirements and have long established procedures, beginning at the time of bid, to locate pre-approved and competitive DBE subcontractors and suppliers. The DBE's performance is monitored throughout the project and additional firms are added as needed when contract value increases during construction due to change orders and quantity overruns. Both firms make every effort to solicit additional DBE's throughout the project, especially when additional work is anticipated. The Team will commit to achieving the prescribed 15% participation goal.



### **3.3 Offeror's Team Structure**

The Trumbull-HDR team offers extensive design and construction experience for the Virginia Department of Transportation, Design-Build experience together on previous successful projects, knowledge of the type of work involved in the project, familiarity with the local labor market, and a working relationship with other members of the project team, which are essential for the success of this project. We have selected key individuals with knowledge of VDOT requirements that have extensive experience in their designated project role. Clear lines of responsibility have been established so that key personnel will understand their relationship to each other and to VDOT. We will establish clear lines of separation regarding Quality Control the project team will include Michael Saunders, P.E. from NXL Construction Services as Quality Assurance Manager. Mr. Saunders has extensive experience in this capacity and is every familiar with the requirements of the Department.

Our Executive Oversight Team is comprised of John Maffeo, Jr., P.E., Executive Vice President Trumbull Corporation and Ken Aducci, P.E., Senior Vice President, HDR Engineering, Inc. Together they bring almost 60 collective years of experience in the highway & bridge construction industry, and will provide executive oversight for this project. Our Project Management Team structure is illustrated on our Organization Chart detailing our key staff member's roles and responsibilities on this project as described on their resume.

The organization chart included in Appendix 3.3.2 shows the management structure that will be put in place to manage the Route 7 project to a successful completion. Key positions from all D-B Team members shown are filled by current employees that have many years of experience in design and construction of highway projects similar to the Route 7 project. Our D-B Team structure employs the strengths of both designers and construction staff in determining design requirements for construction, the design and construction sequence, and the costs associated with appropriate construction techniques. Through our combined teaming experience on other design build projects, the Team has established tried and true procedures, processes and relationships that will ensure the team hits the ground running and meets the project goals. By having the contractor work directly with the designer during final design, the design gets early closure in addressing constructability and sequencing issues. By integrating contractor reviews into the design process, construction may be accelerated by releasing certain elements of design for approval prior to complete plan development ("rolling submissions"). Early active involvement by the contractor will provide insights in averting construction revisions and incorporating more effective ways of designing and constructing the project.

#### **Project Manager**

Our Design Build Team will be led by Bryon Breese, P.E. Mr. Breese has recently worked as the Design Build Project Manager on the Maryland Department of Transportation's Intercounty Connector Section C projects. These projects are included on his resume and are one of the most significant Design Build projects completed in the region. The project continues to be recognized, through several notable awards, as one of the most successful projects of its type in the nation. Mr. Breese understands the complexities of a fast past, multi-faceted design build project and can be counted on to deliver the project safely, on-time and within budget. The cornerstone of his delivery protocol is extensive planning and effective execution of the plan. As our proposed Design Build Project Manager for the Route 7 climbing lanes, Bryon will be



assigned full time to the project as the person in charge for the Trumbull-HDR Team. He will report to the Executive Oversight Team and VDOT, and will be responsible for delivery of the project in accordance with the contract requirements.

### **Quality Assurance Manager**

The Quality Assurance program will focus on delivering quality from start to finish through the use of pre-activity meetings, timely quality check points, and a focus on continuous improvement and communication with VDOT project personnel. The Quality Assurance Manager, Mr. Saunders, P.E., will lead the effort regarding meeting and exceeding the requirements of the contract. He will work independently of the operations personnel on-site and will report directly to VDOT project managers in relation to quality assurance matters. The project Team strongly believes that true Quality Assurance begins when planning the work. The Quality Assurance Manager will coordinate with construction personnel early in the process to review all pertinent requirements for each activity of work. An example of how the process will be implemented includes the preparation of work plans for major items of work, the review of proper reference material while developing the work plan, determining the availability of specified materials, coordinating the approval of required materials, procurement of necessary equipment, and all other related requirements for a particular activity of work. The Quality Assurance Manager and the Design Build Manager will coordinate preparatory meetings to review work plans prior to performing any major items of work with the Construction Manager and key field personnel. Once production begins the Quality Assurance Manager will coordinate the independent evaluation of construction procedures and material conformance. He will also coordinate the appropriate testing of materials and processes, documenting of test results and follow up on remedial action plans as necessary. The key to successful Quality Assurance during production is early identification of potential issues and immediate intervention of the process. The Quality Control Manager will maintain full authority to stop work, so that the Design Build Manager can take corrective actions to mitigate detrimental effects.

### **Design Manager**

Mr. Michael Tugman, P.E., will be the DB Design Project Manager responsible for all work performed by the team's designers. Michael will be responsible for coordinating the design of each design discipline and ensuring that the overall project design is completed on schedule and that the design criteria and quality management requirements are met. He will communicate frequently with all discipline managers and design-build coordinators and facilitate design review meetings.

Mike has more than 25 years of experience in all phases of urban highway and freeway planning, design, and construction, and has served as Design Manager on the highly successful I-95 Express lanes project in Stafford and Prince William Counties, VA and the I-495 Express lanes project for the Dulles Toll Road Interchange

Mike will have 100 percent availability to see the Route 7 Truck Climbing Lane Design-Build project to a successful completion. He is currently employed by HDR and a registered professional engineer in Virginia. He holds a B.S. in Civil and Environmental Engineering from North Carolina Sate University.



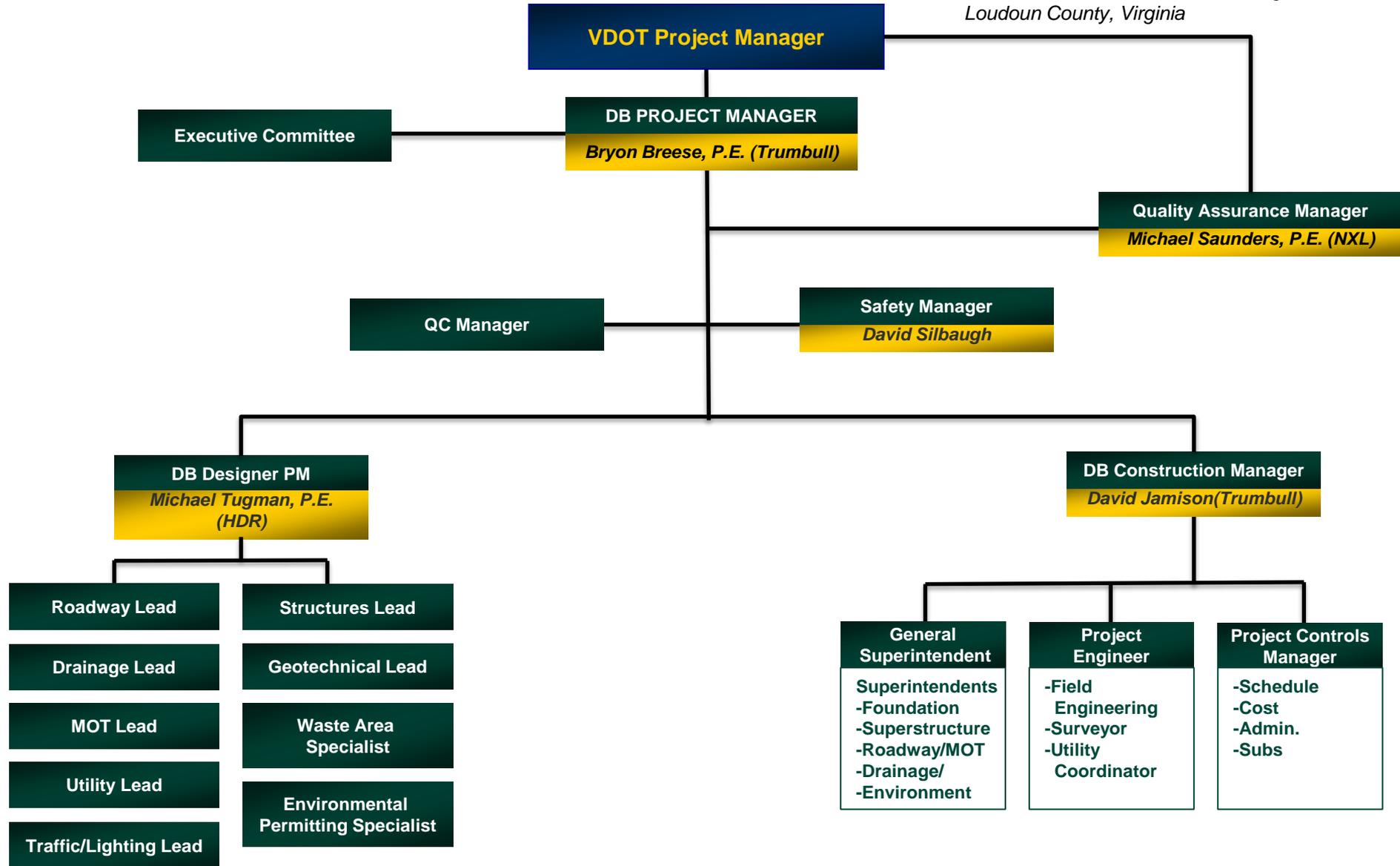
Michael will follow HDR's commitment to quality design as evidenced by their comprehensive Corporate Master Quality Plan. This plan requires the development of a specific Project Guide that will delineate all project contacts, protocols, schedules, budgets, and QA/QC reviews required. Our QA/QC program incorporates reviews of all aspects of the project, beginning with a review of the project scope, budget, and schedule. Subsequent reviews examine deliverables, progress, and financials to ensure that they meet the appropriate quality standards. Senior staff members conduct all technical reviews and examine conformance to code and VDOT standards, economy, constructability, safety, correctness, and policies. All QA/QC reviews are documented reviews that can be provided to the VDOT. As an employee-owned company HDR is committed to their QA/QC Plans both to assure technical quality and as a risk mitigation and cost reduction mechanism for the Design-Build team. HDR's Corporate Quality Office conducts a yearly audit of each office to assure compliance with the plans

### **Construction Manager**

David Jamison, Trumbull Corporation, will be the Contractor Project Manager. David has 24 years of experience in the management and supervision of large bridge and heavy highway construction projects that include urban bridges and roadways. David has experience creating unique solutions that allow for the efficient construction of projects, with an emphasis on safety. David has worked on both design build and design bid build projects in Virginia, West Virginia, Maryland, and the District of Columbia, including the complex reconstruction of interstate highways, urban bridges, and widening projects. David's experience supervising and managing highway and bridge construction projects includes the \$39 million Design Build Shenandoah River Bridge, the \$514 million Design Build Intercounty Connector and, and the \$191 million Woodrow Wilson Bridge project in a highly congested urban area of the District of Columbia. He will be onsite full time and will not be involved with any other projects concurrently.

During David's extensive career, many of his roles included positions of authority directly regarding project environmental compliance. Though he does not hold the Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber (RLD) Certification or the VDOT Erosion and Sediment Control Contractor Certification (ESCCC), he has attained similar certifications in Maryland with the Erosion and Sediment Control Green Card and Yellow Card. Dave played a critical role on the Maryland Department of Transportation Intercounty Connector project in regard to meeting the stringent environmental requirements of the project. This project was a complete new alignment through some the most environmentally sensitive terrain in the region.

Trumbull will guarantee David will attain the prescribed requirements prior to commencement of work. David fully understands the requirements for the RLD and ESCCC certifications. The Heavy Construction Contractors Association is conducting an ESCCC class on February 12, 2013 and David will be registered to attend. In regard to the Responsible Land Disturber, David will apply on-line to take the certification test through the Virginia Department of Conservation & Recreation. He has reviewed the requirements and expects to pass the exam without issue.



### 3.3.2 Narrative for Organization Chart

#### Lines of Communication

The Design Build (DB) Manager will have overall authority for the project. As such, he will coordinate the design and construction teams and resolve problems that may arise between the design and construction. The Design Manager will assist the DB Manager with coordination by making sure that design is synchronized with the construction, therefore allowing the Lead Designer Engineer to focus on providing the proper design that meets VDOT requirements and coordinating all aspects of the design and disciplines of the design team. The DB Manager will be the Lead Estimator in the pre-bid phase so he will know the bid inside and out. The Design Manager will coordinate the pre-bid design. By filling these roles pre-bid and during final design and construction, the DB Manager and Design Manager will make sure the product bid and the product constructed conform to all VDOT requirements.

The Design Build Team will have complete responsibility for the Quality Control of design and construction and for compliance with the contract requirements. Responsibilities will include reviewing/checking all drawings and calculations and performing process quality control inspection and testing during construction.

The Quality Assurance Manager will be responsible for providing Quality Assurance and Quality Control of the Work, and ensuring conformance with the Contract Documents. He will be the individual with overall responsibility for the development of and adherence to the Design-Build QA/QC Plan. The QAM is responsible for supervising the performance of all field material tests performed by the Design Builder including but not limited to, density, moisture, air content of concrete, slump, and other required material test.

The Construction Manager reports directly to the Design Build Manager and will be responsible for day to day field operations. Several superintendents and lead foreman will assist the Construction Manager in ensuring construction is completed in accordance with all applicable contract documents. He will also be responsible to ensure that Best Practices are employed during activities with environmental considerations. Field Managers will be responsible to alert the Construction Manager of situations that develop during construction. They will also be expected to engage with project staff during the preparation of work plans to become familiar with the activities early on and provide insight regarding constructability issues.

#### Partnering

An important aspect to successfully designing, constructing, and managing the Route 7 Westbound Truck Climbing Lanes Project is partnering with the VDOT and all major stakeholders. Trumbull-HDR is committed to the partnering concept for this project to assure that it is designed and constructed on time, with the highest quality, and on budget. Both Trumbull and HDR make strong efforts to partner every major job we perform and have successfully introduced the partnering concept to owners not familiar with the process.

This relates to the Organization Chart in that the project team believes in clarifying lines of communication during the Partnering process. The primary goal is to ensure all project personnel understand their role on the project and to whom they report. Project personnel will



clearly understand the limits of their authority and responsibilities. The Trumbull – HDR Team focuses on early conflict resolution. Our philosophy is to identify issues as early as possible and bring them to a resolution, at the appropriate level, without delay. VDOT can expect from the Design Build Team early identification of project challenges with an assortment of potential resolutions. The project culture will be one of working out challenges during planning and preventing the necessity of working out issues while related construction activities are ongoing.

If the project is faced with a particular challenge, our project team will focus on resolving any issues with mutually beneficial results. To mitigate the effects of such circumstances, project control meetings will be formally conducted on a weekly basis and more frequent meetings will be conducted as required. The Design Build Team views a successful project as one that includes full collaboration both from the Design Build Team and the Owners Representatives. The Design Build Team will commit to designing and constructing the project with a focus on planning, preparation and effective execution. Throughout the Design Build process, our preparatory approach will minimize the amount of overall involvement required by the Department. The motto will be “Efficient Delivery through Extensive Preparation”.

### **Construction Management and Construction Planning**

To accomplish the work required by this project we will develop a realistic work plan. The responsibility for the execution of the work planning process falls on the Design Build Manager and Construction Manager. This ongoing and continuous process involves all the project management team. The question of how, when, where, by whom, and with what equipment and materials will be addressed and committed to in writing for each work activity or group of related activities. Our effective work plan integrates the best people and equipment, the best quality methods and practices, and a work hazard analysis with solutions to which all parties are committed. A team from engineering, field operations, quality control, and the safety department will develop these plans. Planning is an area where the assistance of experienced offsite personnel from both members of the team will provide additional help and expertise. Final work plans will be written by the Project Engineer and reviewed and signed off by the Safety Department, QC Manager, and the Project Manager.

### **Safety Management**

Committed accident prevention and safety management is vital to the success of any project. Safety will be integrated into the management of this project. Our Safety Manager will report directly to the Project Manager and will have no other duties. The Trumbull Corporation Corporate Safety department will assist in the initial development of the Project Safety Program and provide oversight management of the on-site safety program and personnel for the duration of the project.

The most important aspect of any effective safety program is a sincere commitment by top management. Our owners and management have made it clear to employees and clients alike that safety takes precedence in every project we undertake.

Our goal is to blend safety and project operations into one function. We believe that by making safety intuitive to all employees, we can solve safety problems without creating barriers to cost effective project completion.



### 3.4 Experience of Offeror's Team

#### Project Team Member Experience Together on Previous Projects

Trumbull Corporation has teamed up with HDR Engineering, Inc. to provide the best design-build team for the Virginia Department of Transportation on this project. Trumbull Corporation will be the general contractor and will have an exclusive agreement with HDR Engineering, Inc. to provide Design of the Project.

Trumbull Corporation will supply all key individuals that will manage and construct this project while HDR will provide key individuals to manage and perform design services and assist with quality control on the project. NXL Construction Services, a Certified DBE subcontractor, will supply the Quality Assurance Manager for the project.

Trumbull and HDR both have highly qualified staffs with many years of experience in the design and construction of bridges and highways throughout the Mid Atlantic Region.

#### Overview

Trumbull Corporation (Trumbull), a family owned business incorporated in 1955, is a Heavy and Highway Contractor and Construction Manager based in Pittsburgh, Pennsylvania, with regional offices in West Virginia and Maryland.

Trumbull has earned an unequalled reputation in the Heavy and Highway Construction Industry by completing some of the most challenging projects in our region on or ahead of schedule, with a constant focus on safety, quality, and customer satisfaction.

Trumbull has an annual volume of sales over \$200 Million and consistently ranks among the Top General Contractors according to Engineering News-Record. Earthwork, drainage, utilities, and bridges of all types are among the work that is self-performed on a regular basis. Trumbull has successfully constructed numerous bridge structure projects and has a wide range of experience in all types and sizes of bridges throughout the region. Trumbull has competed on numerous Design-Build bids and has successfully completed three highway Design-Build projects. We are currently under contract to complete eight others including a Joint Venture that is constructing a \$100+ Million section of the Intercounty Connector in Maryland. Trumbull has also teamed with "sister" company, P.J. Dick, Inc. to successfully complete three major Design-Build prison projects that exceeded \$100 Million each.

HDR Engineering, Inc. (HDR) has been providing quality highway and bridge design services for over 90 years. HDR offers the combined resources of more than 8,000 engineers, scientists, architects, and support personnel located in over 185 locations worldwide. Consistently ranked one of the top engineering design firms in the country, the 2012 *Engineering News-Record* rankings list HDR No. 11 among the top 500 design firms, No. 8 among the top 50 transportation design firms. Also, HDR is ranked in the Top 100 Design-Build firms.

HDR has been a design partner with VDOT since the 1950's providing quality services and dedicated to the transportation needs of the Commonwealth.



HDR has successfully completed hundreds of Design-Build projects, including numerous transportation projects, with a large portion of the projects having construction costs exceeding the anticipated cost for this project.

NXL Construction Services, Inc is highly qualified to provide the services required for the successful completion of this project and has previously worked on VDOT roadway and bridges projects. NXL has successfully teamed up with HDR on several VDOT projects.

The enclosed information will demonstrate that the Trumbull-HDR team has a long history of successfully designing, managing and constructing projects of the type and magnitude of the Route 7 Truck Climbing Lanes and will provide the Virginia Department of Transportation high quality design and construction on this project.

Trumbull Corporation and HDR's relationship dates back to 1985 when HDR purchased the Pittsburgh engineering firm of Richardson, Gordon and Associates. HDR has provided construction engineering support on over thirty different Trumbull projects, with construction contract values in excess of \$40 million on multiple projects. Most recently performed projects including the Shenandoah River Bridge Design Build project (which includes the largest delta frame steel truss bridge in North America); Hardy County, WV Corridor H Interchange with Rt. 220 near Moorefield; Ford City Bridge Replacement, near Pittsburgh, PA; I-79 Reconstruction, near Pittsburgh; Patrick Street Bridge Rehabilitation, in Charleston, WV; I-81 Reconstruction, near Harrisburg, PA; Market Street Bridge Replacement, near Williamsport, PA; the 31<sup>st</sup> Street Bridge Rehabilitation, in Pittsburgh, PA, and Mon-Fayette Expressway Section 51J. Trumbull and HDR successfully teamed up to complete a \$17.7 Million Design-Build project for the Pennsylvania Turnpike Commission in 2004 and 2005. The Design-Build project was the PTC's first major mainline reconstruction Design-Build project. In 2006, Trumbull and HDR teamed up on an alternate bridge design for the I-64 and Route 35 Interchange Project in Putnam County, West Virginia that offered savings to the WVDOH of over \$2 Million and enabled completion of the project eight months ahead of the original schedule. In February of 2008, when there was an apparent collapse of bridge girders on the Birmingham Bridge in Pittsburgh, PA, PennDOT immediately enlisted the services of Trumbull and HDR, knowing their ability to work well together, to design and install falsework to temporarily support the girders. Further contracts were negotiated with Trumbull and HDR totaling over \$10 Million to design and make permanent repairs to the bridge. This was a major six lane structure crossing the Monongahela River connecting the South Side with the Oakland area of the City.

The mutual respect, complimentary skills, and previous working relationships will enable Trumbull and HDR to provide the best team available to complete this project

### **Commitment of Resources**

Trumbull and HDR have substantial personnel resources with years of VDOT design and construction experience. All key positions shown on our proposed Organization Chart are filled with experienced candidates currently employed by either Trumbull or HDR. The staff shown on our organization chart has been selected for this project as based on their experience with the Department and the type of work involved. These people have been committed to this project.



HDR has emphasized technical expertise and accuracy, subscribed to appropriate innovation, delivered cost-effective solutions, and has been totally committed to being responsive to the client's needs. HDR has more than 8,000 engineers, scientists, architects and support personnel in over 185 offices worldwide. HDR utilized many of these personnel to deliver contracts on aggressive schedules, particularly in the Design-Build arena. HDR's corporate commitment to work sharing has proven effective in efficiently allowing them to meet aggressive schedules.

From the Construction side, this project falls directly in the center of Trumbull's region. Supervisory personnel resources can be drawn from Virginia, West Virginia, Pennsylvania and Maryland/DC work forces. We have a good standing relationship with the craft unions in the project area and have their commitment to supply us with the best available craft workers for this project. The Trumbull-HDR Team completed the Shenandoah River Bridge project in November of 2012. The project is located in Harpers Ferry, WV which is 20 miles from the Route 7 Truck Climbing Lane project. Our personnel are intimately familiar with this specific region. Project staff developed strong relationships with local craft workers, subcontractors and material suppliers. Many of our project staff are residents of this area and can be counted on to utilize local business concerns to the maximum extent possible. Trumbull maintains an extensive equipment fleet and will commit those resources necessary for timely completion of this project. Trumbull maintains an equipment fleet of over 550 pieces of heavy equipment and will dedicate all required pieces for this project as necessary. Trumbull maintains strong relations with all regional equipment suppliers and rental agencies and will additionally contract other equipment when needed.

Financial strength is vital to the success of any company in the construction industry. Trumbull Corporation is fortunate to have a strong financial condition. Trumbull also carries insurance limits much higher than the VDOT minimum requirements. Bonding capacity and strength are also critical to success in the construction business. Trumbull has excellent bond ratings.

In closing, the Trumbull-HDR Team is ready to take on the challenge of the Route 7 – Westbound Truck Climbing Lane project. The Department can be sure that our Team will provide superior personnel to manage the project and can draw from deep resources to complete the project in a highly effective manner.

### **3.5 Project Risk**

**The three main project risks the Team will focus on in our qualification response will include the following**

- **Stakeholder Coordination**
- **Schedule (Particularly Addressing Utilities and Conflicts)**
- **Maintenance of Traffic**

#### **Stakeholder Coordination**

The project team understands that the number one consideration of project success is the public's perception of the project. Many factors contribute to developing a positive perception. To ensure that a favorable view of the project is achieved, the project staff must commit to construction processes that are proactive and responsive. Our construction professionals operate under a protocol which entails extensive planning and effective execution.

The Design Build Manager will closely coordinate with EMS respondents and Loudoun County Public School's. Because each construction project presents unique problems for emergency responders, the PM of designee will hold bi-weekly meetings for the first three months of the project. The primary goals of these meetings will be to develop strategies and work through various incident scenarios, including hazardous materials incidents, isolated crashes, recurring congestion, construction related activities, special events and access to the work area. These meetings will eliminate the "guess work" that could otherwise occur during actual emergencies by further developing specific protocols to be utilized during specific types of incidents. Of particular consideration will be close coordination with Loudoun County Public Schools. The team will work closely with the school staff to ensure adequate notification of construction progress so accommodations can be made for rerouting buses. Meetings will be conducted to review alternative routes for buses and a detailed schedule will be developed to match optimum times to employ traffic restrictions with minimum impacts to busing.

As the project progresses, project staff will conduct follow on stake holders meetings to review the projects ongoing and future impacts. At this stage, the primary goal of these meetings will be to review protocols, prior incident management histories, and/or develop "lessons learned" for future emergency response implementation.

Property owners directly impacted by the RT 7 improvements will be contacted early in the process to identify their specific concerns. The main objective for the Project Team will be to complete work on adjacent property efficiently and effectively. Prior to starting any work in these sensitive areas, supervisors will take great care in preparing to complete this work in a timely fashion. Crews will be instructed on best practices while completing work adjacent to private residences. The best practices include courteous dialogue, prompt response to complaints, maintaining a particularly orderly operation and understanding the limitations of work and all applicable agreements in place.

The project team will employ a variety of media alternatives to update project stakeholders and local community members on the progress of the project. The media updates will include



information regarding traffic restrictions, specialized construction activities, general progress information and other information regarding the projects impact on adjacent interest.

### Schedule

A very significant element of the project is the relocation of existing utilities that conflict with the construction of the project. By providing dedicated management and supervision, the project team has had great success on previous projects, in managing utility relocation on large scale design-build projects. Having clear agreement that lays out clear responsibilities and roles is essential to success. The project team will engage applicable stakeholders early on in the schedule to maximize the time available for performance of third party activities. The Trumbull–HDR Team will provide utility coordination services for utility relocation and installation as required in the Project Scope. A utility task force will identify and contact all affected or involved utilities. The coordination process will start with initial project notification at the onset of design. The project Team will provide the utility owners preliminary project-specific information, including the location of conflicts; request for information to verify locations; anticipated relocation work; and a schedule for design, relocation, and construction.

Shortly after notice to proceed, we will schedule and conduct periodic coordination meetings with the utility owners. Preliminary design, schedule, and anticipated relocation needs will be addressed. Our team will use the meetings to develop and encourage cooperation among the affected parties. The frequency and required participants of future meetings will be adjusted to ensure efficient and timely progress. The project Team will provide advanced notice to VDOT of the meeting times and location and will document the proceeding with accurate and timely meeting minutes. Our team will update and distribute the required utility conflict matrices monthly.

New construction limits will be evaluated early in the design process to identify any potential conflicts that will need to be incorporated in the final design. Items such as the cut beneath the Market Street Interchange, which may conflict with the existing substructure, will be investigated through physical inspection to validate elevations and alignment. This type of verification of field conditions will occur immediately upon contract award and will be included in the contract schedule. The design process itself will be itemized and placed in the overall contract schedule. The design team will be fully aware of their activities of work and the project team will incorporated the progress of the design activities in the project schedule. Everyone will be held accountable to perform their activities of work on time. Our team fully understands the schedule starts on day one of a design build project and every activity thereafter either impacts the project schedule negatively or positively.

There is as a potential, the acquisition of off site waste area will be required. The Design Build Manager will immediately assign a Project Engineer to evaluate, secure and permit any needed material waste site needed for the project. All permitting and land disturbance will be completed in strict adherence with applicable regulatory requirements.

In addition to Third Party utilities the Design Build Team will be prepared to meet any requirements regarding abandoned wells, sewers and similar existing facilities. Our experienced Team understands the technical and administrative requirements of proper decommissioning of such facilities.

## Maintenance of Traffic

The Design Build Team will focus on traffic impacts while developing the project schedule. Trumbull utilizes Primavera P6 scheduling software and a Corporate Scheduling Manager, who oversees the staff's development of a master schedule and supervises the maintenance of the project schedule. Corporate oversight of the maintenance of the project schedule will continue for the life of the project. As the project is developed, the Team will develop a list of critical periods of time related to project Stakeholders such as the public school schedules, community events, holidays and special occasions which impact traffic levels. The list will be placed on a calendar schedule and as the project schedule is developed, activities will be manipulated to minimize their impact on peak traffic periods. The Maintenance of Traffic Superintendent and Safety Manager will take a proactive approach to indentifying and resolving stakeholder challenges before there is an issue. This will be accomplished by providing temporary entrances or driveways, as well as adding business access signs to minimize the impact on the local stakeholders during construction. The Design Build Manager will release information about the upcoming construction activities and will relay comments and/or concerns received to the Maintenance of Traffic Superintendent and Safety Manager. The Design Build Manager will then take steps to address the concerns to minimize the disruptions to the local stakeholders.

One of the key elements of developing an effective MOT plan is the judicious use of detours, lane restrictions and alternate routes. Our team is extremely experienced in developing a variety of scenarios then comparing them to each other. Of particular note will be the reconstruction of the Route 9 interchange ramps. Rather than constructing in half widths, as would be required to maintain traffic. East Colonial Highway and Routes 704, which also has interchange access to Route 7, can potentially be used as a proposed detour route. This could significantly reduce construction time and cost of construction. Sometimes the cost is not great enough to justify certain detours, but the main point is our team is fully prepared to perform our due diligence in thoroughly evaluating all similar situations for the best approach.

All of the proceeding processes employed to evaluate the Maintenance of Traffic revolve around maintaining 2 lanes of traffic at all times during construction while maintaining a safe, active work zone. Trumbull-HDR collaborated on several similar circumstances with great success in the past. This would include the referenced Pennsylvania Turnpike Commission project in Somerset, PA. The Turnpike project included reconstruction from two lanes in each direction to three lanes while maintaining two lanes at all times. The project was nearly twelve miles long and extended through multiple seasons. The complexities involved with finding the right combination for phasing are quite familiar to our Design Build Team and we look forward to the challenge of performing a comprehensive evaluation of comparative traffic scenarios to determine the optimum protocol to follow. After that, success is based on pure commitment and our team will deliver.

**ATTACHMENT 3.1.2**

**Project: 6007-053-133, R201, C501**

**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.

| <b>Statement of Qualifications Component</b>              | <b>Form (If Any)</b>                       | <b>RFQ Cross Reference</b> | <b>Included Within 15-Page Limit?</b> | <b>SOQ Page Reference</b>                  |
|---|--|----------------------------|---------------------------------------|--|
| <b>Statement of Qualifications Checklist and Contents</b> | Attachment 3.1.2                           | Section 3.1.2              | No                                    | Attachment 3.1.2                           |
|   |  |                            |                                       |  |
| <b>Acknowledgement of RFQ, Revision and/or Addenda</b>    | Attachment 2.10<br>(Form C-78-RFQ)         | Section 2.10               | No                                    | Attachment 2.10<br>(Form C-78-RFQ)         |
|   |  |                            |                                       |  |
| <b>Letter of Submittal (On Offeror's letterhead)</b>      |  |                            |                                       | Pages 1-2                                  |
| Authorized Representative's Signature                     | NA   | Section 3.2.1              | Yes                                   | Page 1                                     |
| Offeror's Point of Contact Information                    | NA   | Section 3.2.2              | Yes                                   | Page 2                                     |
| Principal Officer Information                             | NA   | Section 3.2.3              | Yes                                   | Page 2                                     |
| Offeror's Corporate Structure                             | NA   | Section 3.2.4              | Yes                                   | Page 2                                     |
| Identity of Lead Contractor and Lead Designer             | NA   | Section 3.2.5              | Yes                                   | Page 2                                     |
| Affiliated/Subsidiary Companies                           | Attachment 3.2.6                           | Section 3.2.6              | No                                    | Attachment 3.2.6                           |
| Debarment Forms   | Attachment 3.2.7(a)<br>Attachment 3.2.7(b) | Section 3.2.7              | No                                    | Attachment 3.2.7(a)<br>Attachment 3.2.7(b) |

**ATTACHMENT 3.1.2**

**Project: 6007-053-133, R201, C501**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

|  |                  |                  |     |                   |
|--|------------------|------------------|-----|-------------------|
| Offeror's VDOT Prequalification Evidence   | NA               | Section 3.2.8    | No  | Attachment        |
| Evidence of Obtaining Bonding  | NA               | Section 3.2.9    | No  | Attachment        |
| Full Size Copies of SCC and DPOR Registration Documentation (Appendix)   | NA               | Section 3.2.10   | No  | Attachments       |
| SCC Registration   | 3.2.10           | Section 3.2.10.1 | No  | Attachment 3.2.10 |
| DPOR Registration (Offices)  | 3.2.10           | Section 3.2.10.2 | No  | Attachment 3.2.10 |
| DPOR Registration (Key Personnel)  | 3.2.10           | Section 3.2.10.3 | No  | Attachment 3.2.10 |
| DPOR Registration (Non-APELSCIDLA)   | 3.2.10           | Section 3.2.10.4 | No  | Attachment 3.2.10 |
|  |                  |                  |     |                   |
| <b>DBE Statement Within Letter of Submittal</b> Confirming Offeror is Committed to Achieving the Required DBE Goal | NA               | Section 3.2.11   | Yes | Page 2            |
|  |                  |                  |     |                   |
| <b>Offeror's Team Structure</b>  |                  |                  |     |                   |
| Identity and Qualifications of Key Personnel   | NA               | Section 3.3.1    | Yes | Pages 3-5         |
| Key Personnel Resume – DB Project Manager  | Attachment 3.3.1 | Section 3.3.1.1  | No  | Attachment 3.3.1  |
| Key Personnel Resume – Quality Assurance Manager   | Attachment 3.3.1 | Section 3.3.1.2  | No  | Attachment 3.3.1  |
| Key Personnel Resume – Design Manager  | Attachment 3.3.1 | Section 3.3.1.3  | No  | Attachment 3.3.1  |
| Key Personnel Resume – Construction Manager  | Attachment 3.3.1 | Section 3.3.1.4  | No  | Attachment 3.3.1  |

**ATTACHMENT 3.1.2**

**Project: 6007-053-133, R201, C501**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

|   |                     |               |     |                     |
|---|---------------------|---------------|-----|---------------------|
| Organizational Chart                                      | NA                  | Section 3.3.2 | Yes | Page 6              |
| Organizational Chart Narrative                            | NA                  | Section 3.3.2 | Yes | Pages 7-8           |
|   |                     |               |     |                     |
| <b>Experience of Offeror's Team</b>                       |                     |               |     | Pages 9-11          |
| Lead Contractor Work History Form                         | Attachment 3.4.1(a) | Section 3.4   | No  | Attachment 3.4.1(a) |
| Lead Designer Work History Form                           | Attachment 3.4.1(b) | Section 3.4   | No  | Attachment 3.4.1(b) |
|   |                     |               |     |                     |
| <b>Project Risk</b>                                       |                     |               |     |                     |
| Identify and Discuss Three Critical Risks for the Project | NA                  | Section 3.5.1 | Yes | Pages 12-14         |

**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00058599DB54  
PROJECT NO.: 6007-053-133, R201, C501

**ACKNOWLEDGEMENT OF RFO, REVISION AND/OR ADDENDA**

Acknowledgement shall be made of receipt of the Request for Qualifications (RFQ) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Statement of Qualifications (SOQ) submission date shown herein. Failure to include this acknowledgement in the SOQ may result in the rejection of your SOQ.

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ 10/31/12  
(Date)
2. Cover letter of Addendum #1 - 12/14/12  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

  
\_\_\_\_\_  
SIGNATURE

1/10/2013  
\_\_\_\_\_  
DATE



**ATTACHMENT 3.2.6**

**State Project No. 6007-053-133, R201, C501**

**Affiliated and Subsidiary Companies of the Offeror**

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

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

| <b>Relationship with Offeror<br/>(Affiliate or Subsidiary)</b> | <b>Full Legal Name</b>        | <b>Address</b>  |
|--|-------------------------------|---|
| Affiliate  | HDR Engineering, Inc.         | 8404 Indian Hills Drive<br>Omaha, NE 68114-4049               |
| Affiliate  | HDR Architecture, Inc.        | 8404 Indian Hills Drive<br>Omaha, NE 68114-4049               |
| Affiliate  | HDR Design-Build, Inc.        | 8404 Indian Hills Drive<br>Omaha, NE 68114-4049               |
| Affiliate  | HDR Security Operations, Inc. | 315 East Robinson Street, Suite 400<br>Orlando, FL 32801-1949 |
|  |                               |   |
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ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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

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

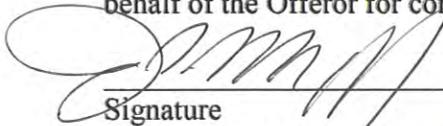
b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under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

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

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

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

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

|   |                  |                       |
|---|------------------|-----------------------|
|  | <u>1/10/2013</u> | <u>Vice President</u> |
| Signature   | Date             | Title                 |
| <u>Trumbull Corporation</u>   |                  |                       |
| Name of Firm  |                  |                       |

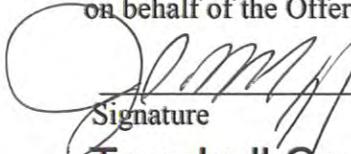
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

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

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

|   |                   |                       |
|---|-------------------|-----------------------|
|  | <u>11/10/2013</u> | <u>Vice President</u> |
| Signature   | Date              | Title                 |
| <u>Trumbull Corporation</u>   |                   |                       |
| Name of Firm  |                   |                       |

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

Project No.: 6007-053-133, R201, C501

- 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

11/30/12  
\_\_\_\_\_  
Date

Sr. Vice President, Department Manager  
\_\_\_\_\_  
Title

HDR Engineering, Inc.  
\_\_\_\_\_  
Name of Firm



COMMONWEALTH OF VIRGINIA



## CERTIFICATE OF QUALIFICATION

### TRUMBULL CORPORATION

Vendor Number: **T368**

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

**PREQUALIFIED (Currently Inactive)**

**Work Classes:** GRADING; MAJOR STRUCTURES; PORTLAND CEMENT CONCRETE PAVING; MINOR STRUCTURES

**Issue Date:** 08/15/2012

**This Rating and Classification will Expire:** 10/31/2013

Handwritten signature of Suzanne FR Lucas in black ink.

Suzanne FR Lucas, Prequalification Officer

Handwritten signature of Don E. Silies in blue ink.

Don E. Silies, State Contract Officer



**Travelers Casualty and Surety Company of America**

**Fidelity and Deposit Company of Maryland**

Office at: 10 Sentry Parkway, Suite 300  
Blue Bell, PA 19422

Office: Six PPG Place, Suite 800  
Pittsburgh, PA 15222

November 26, 2012

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

Re: Request For Qualifications  
Design – Build Project  
Route 7 – Westbound Truck Climbing Lane  
From Route 9 to West Market Street  
Loudoun County, Virginia  
RFQ No.: C00058599DB54  
Estimated Contract Value: \$32,000,000

Dear Mr. Millikan:

Please allow this letter to confirm that Travelers Casualty and Surety Company of America, and Fidelity and Deposit Company of Maryland, are the Sureties for Trumbull Corporation.

The A.M. Best Company rating for Travelers Casualty and Surety Company of America is A+ XIV, and the A.M. Best Company rating for Fidelity and Deposit Company of Maryland is A+ XV.

Trumbull Corporation is capable of obtaining 100% Performance Bond and 100% Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for the Project referenced above.

Should you need any further verification of the surety bond capabilities of Trumbull Corporation, please contact me at 412-586-1419.

Sincerely,  
**Travelers Casualty and Surety Company of America**

**Fidelity and Deposit Company of Maryland**

Jeffrey A. Frank, Attorney-in-Fact

Jeffrey A. Frank, Attorney-in-Fact



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. 224209

Certificate No. 004862181

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, and 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

Robert J. Cawley, Jeffrey A. Frank, Susan C. Caputy, Paul W. Aaron, Kevin E. Bethel, and Jonathan P. McCauley

of the City of Pittsburgh, State of Pennsylvania, 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.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 17th day of May, 2012.

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: [Signature]
George W. Thompson, Senior Vice President

On this the 17th day of May, 2012, before me personally appeared George W. Thompson, 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, 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.



[Signature]
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 Senior 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 filed 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 Secretary, 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, 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 26th day of November, 20 12.

  
Kevin E. Hughes, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at [www.travelersbond.com](http://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.

Letter

Bond Number

Virginia

Department of Transportation

Obligee

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 THOMAS O. MCCLELLEN, 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 Jeffrey A. FRANK, Robert J. CAWLEY, Paul W. AARON, Susan C. CAPUTY, Kevin E. BETHEL, Vicki L. HRACH and Jonathan P. MCCAULEY, all of Pittsburgh, Pennsylvania, 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, 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 23rd day of April, A.D. 2012.

ATTEST:

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



By: Eric D. Barnes Assistant Secretary  
Thomas O. McClellen Vice President

State of Maryland  
City of Baltimore

On this 23rd day of April, A.D. 2012, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, THOMAS O. MCCLELLEN, Vice President, and ERIC D. BARNES, Assistant Secretary, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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

*Maria D. Adamski*

Maria D. Adamski, Notary Public  
My Commission Expires: July 8, 2015



### EXTRACT FROM BY-LAWS OF THE COMPANIES

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

### CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 26th day of November, 20 12.



*Geoffrey Delisio*

Geoffrey Delisio, Vice President



**ATTACHMENT 3.2.10**

**State Project No. 6007-053-133, R201, C501**

**SCC and DPOR Information**

| <b>DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)</b> |                          |  |                                  |                  |                                 |                             |
|--|--------------------------|--|----------------------------------|------------------|---------------------------------|-----------------------------|
| <b>Business Name</b>   | <b>Individual's Name</b> | <b>Office Location Where Professional Services will be Provided (City/State)</b> | <b>Individual's DPOR Address</b> | <b>DPOR Type</b> | <b>DPOR Registration Number</b> | <b>DPOR Expiration Date</b> |
| Not applicable   |                          |  |                                  |                  |                                 |                             |
|  |                          |  |                                  |                  |                                 |                             |
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|  |                          |  |                                  |                  |                                 |                             |

# Commonwealth of Virginia



## STATE CORPORATION COMMISSION

Richmond, March 30, 1994

*This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for*

TRUMBULL CORPORATION

*a corporation organized under the laws of PENNSYLVANIA and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.*



State Corporation Commission

Attest:

*William J. Bridge*

*Clerk of the Commission*

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
03-31-2014

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

NUMBER  
2705083490

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

TRUMBULL CORPORATION  
PO BOX 6774  
PITTSBURGH, PA 15212



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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

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

(POCKET CARD)

COMMONWEALTH OF VIRGINIA  
BOARD FOR CONTRACTORS  
CLASS A CONTRACTOR  
\*CLASSIFICATIONS\* H/H  
NUMBER: 2705083490 EXPIRES: 03-31-2014

TRUMBULL CORPORATION  
PO BOX 6774  
PITTSBURGH, PA 15212

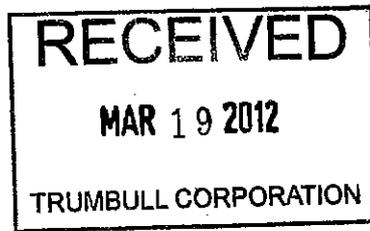


DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
9960 Mayland Dr., Suite 400, Richmond, VA 23233

(DETACH HERE)

(FOLD)

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.



Congratulations on receiving your license issued by the Board for Contractors. In order to properly maintain your license and prevent situations from occurring that may result in disciplinary action being taken against you by the Board, it is important that you read and understand the regulations issued by the Board. This disciplinary action can include fines and even a suspension or revocation of your license. Here are some highlights of those regulations and other information you may find helpful.

- Your license is valid for two years (the expiration date is printed on the license) and you are responsible for ensuring that your license is renewed properly. If you don't receive a notice to renew your license by the first day of the month your license expires, please contact us to receive assistance in the renewal process. You are still responsible for renewing your license, even if you do not receive a renewal notice.
- You are responsible for notifying the licensing staff directly if you change your address. Notifying the Post Office will not change your address with the Board. Failure to provide us with your new address may result in a delay when you try to renew, or even disciplinary action by the Board.
- If you change your type of business (i.e. sole proprietor to corporation or limited liability company) or, in some cases, you want to change one or more of the owners, you will have to apply for a new license. If you continue to operate under the wrong business type, you may be in violation of the regulations or even the law. Contact the licensing staff if you have a question about whether or not you will need a new license.
- If any of the individuals you listed on your application (Qualified Individual, Designated Employee, or Responsible Management), leave your company, you must notify the Board. Failure to do so may result in disciplinary action being taken against you.
- Your license may require continuing education as a condition of renewing or reinstating your license. Failure to complete your continuing education may result in a delay in renewing or reinstating your license. Contact the license staff if you have a questions about whether or not you will need to complete continuing education.
- The Board for Contractors web page contains downloadable copies of the regulations, all forms and applications required by the Board, and other information you may find helpful in maintaining your license in good standing.

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How to contact the Board for Contractors:

E-mail: [contractor@dpor.virginia.gov](mailto:contractor@dpor.virginia.gov)  
Webpage: [www.dpor.virginia.gov](http://www.dpor.virginia.gov)  
Telephone: (804) 367-8511  
Fax: (866) 430-1033  
Mail: Department of Professional and Occupational Regulation  
Board for Contractors  
Perimeter Center  
9960 Mayland Drive, Suite 400  
Richmond, Virginia 23233







Commonwealth of Virginia  
State Corporation Commission



CISM0180

CORPORATE DATA INQUIRY

11/09/12

15:35:08

CORP ID: F048460 - 2 STATUS: 00 ACTIVE STATUS DATE: 07/16/12  
CORP NAME: HDR ENGINEERING, INC.

DATE OF CERTIFICATE: 06/25/1985 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: NE NEBRASKA STOCK INDICATOR: S STOCK  
MERGER IND: CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060 6802  
R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/05/04 LOC : 143  
ACCEPTED AR#: 212 11 5789 DATE: 07/04/12 HENRICO COUNTY  
CURRENT AR#: 212 11 5789 DATE: 07/04/12 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
12 130.00 13.00 10,000

(Screen Id:/Corp\_Data\_Inquiry)

# Commonwealth of Virginia



## STATE CORPORATION COMMISSION

Richmond, June 25, 1985

*This is to Certify, that* HDR Infrastructure, Inc.  
*a corporation organized under the laws of* Nebraska  
*having complied with all the requirements of law, is*  
*hereby authorized to transact business in the State of*  
*Virginia in so far as not in conflict with and subject to the*  
*laws of the State.*



State Corporation Commission

Attest:

*George W. Bryant*

Clerk of the Commission

# Commonwealth of Virginia



## STATE CORPORATION COMMISSION

*Richmond,* November 19, 1987

*This is to Certify, that* HDR Engineering, Inc.  
*a corporation organized under the laws of* Nebraska  
*having complied with all the requirements of law, is*  
*hereby authorized to transact business in the State of*  
*Virginia in so far as not in conflict with and subject to the*  
*laws of the State.*



*State Corporation Commission*

*Attest:*

*William J. Bridge*

FIRST ASSISTANT

*Clerk of the Commission*

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000770

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

PROFESSIONS: ENG

HDR ENGINEERING INC  
2600 PARK TOWER DRIVE  
SUITE 100  
VIENNA, VA 22180



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APPLSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000770 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
HDR ENGINEERING INC  
2600 PARK TOWER DRIVE  
SUITE 100  
VIENNA, VA 22180



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

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000192

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

PROFESSIONS: ENG

HDR ENGINEERING INC  
4480 COX ROAD #103  
GLEN ALLEN, VA 23060



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR APESCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000192 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
HDR ENGINEERING INC  
4480 COX ROAD #103  
GLEN ALLEN, VA 23060



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

(DETACH HERE)

19204

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION  
COMMONWEALTH OF VIRGINIA

EXPIRES ON  
02-28-2014

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

NUMBER  
0411000028

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

PROFESSIONS: ENG

HDR ENGINEERING INC  
5700 LAKE WRIGHT DRIVE  
SUITE 300  
NORFOLK, VA 23502



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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(POCKET CARD)

COMMONWEALTH OF VIRGINIA

BOARD FOR AP/ELSC/DLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000028 EXPIRES: 02-28-2014  
PROFESSIONS: ENG  
HDR ENGINEERING INC  
5700 LAKE WRIGHT DRIVE  
SUITE 300  
NORFOLK, VA 23502



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

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

**EXPIRES ON  
07-31-2014**

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

**NUMBER  
0402021470**

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

**MICHAEL FREDERICK TUGMAN  
3237 SUNNYBROOK LANE  
VIRGINIA BEACH, VA 23452**



*Gordon N. Dixon*  
Gordon N. Dixon, Director

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

(POCKET CARD)

**COMMONWEALTH OF VIRGINIA**  
BOARD FOR APPEALS  
PROFESSIONAL ENGINEER LICENSE  
NUMBER: 0402021470 EXPIRES: 07-31-2014

**MICHAEL FREDERICK TUGMAN  
3237 SUNNYBROOK LANE  
VIRGINIA BEACH, VA 23452**



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

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**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

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

a. Name & Title:  
Bryon Breese, P.E., Design Build Project Manager

b. Project Assignment:  
Design Build Project Manager

c. Name of Firm with which you are now associated:  
Trumbull Corporation

d. Years experience: With this Firm 8 Years With Other Firms 18 Years  
Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):

***Trumbull Corporation, Design Build Project Manager and Construction Coordination Manager, 2011-Present:*** Mr. Bryon Breese is Trumbull Corporation’s lead Design Build Manager. He is responsible for the coordination of design and all construction activities to ensure milestone deliverable dates are met by each discipline and to optimize the efficiency and constructability of each design. He is currently overseeing our ICC Intercounty Connector Design Build Contract as our Design Build Manager, an over \$500 million job that is coming to a close.

***Trumbull Corporation, Project Manager 2011-2006:*** Bryon worked as a Project Manager at Trumbull Corporation for six years before being promoted to our Design Build Manager. Responsibilities included the overall management of all construction related activities and the coordination of design support for all of his projects.

***AMEC Civil, LLC, Project Manager, Engineer, Superintendent, 2000-2005:*** Bryon worked at AMEC for five years prior to coming to Trumbull Corporation. He initially worked as an Engineer/Superintendent and was responsible for the management and overnight of the engineering staff and all project control activities on all of his projects. He was then promoted to Project Manager after two years, and his responsibilities included management and overnight of all construction related and administrative activities of his projects.

***Ogden Remediation Services, Field/Project Engineer, 1995-1999:*** Bryon began his career at Ogden Remediation Services and performed various Field and Office Engineering duties including project controls, estimating, scheduling, and cost management of several projects. Projects included both heavy civil construction and environmental remediation.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
Pennsylvania State University – Bachelor of Science in Civil Engineering, 1994

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

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

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

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

**Intercounty Connector Contract D/E, \$89M, Beltsville, MD**

- Mr. Breese is our Design Build Project Manager on this job.
- Responsible for the coordination of design and construction activities to ensure milestone deliverable dates are met by each discipline and to optimize the efficiency and constructability of the design. Project involves design and construction of 1.5 miles of toll highway, 4 miles of collector and distribution lanes and ramps, 1 bridge, retaining walls and major culverts.
- 2011- Present

**Intercounty Connector Contract C, \$513.9M, Silver Spring, MD**

- Mr. Breese served as our Project Manager on this job.
- Responsible for the overall management of all construction related activities and the coordination of design support for the US29/MD200 interchange worth approximately \$300M. The overall project involved complete design and construction of 6 miles of new 6 lane toll highway, two major interchanges, 24 bridges, and substantial retaining wall and noise wall components.
- 2008-2011

**Woodrow Wilson Bridge Project, BR-3C, \$191M, Washington, DC**

- Mr. Breese served as our Project Director on this job.
- Responsible for the oversight and management of all construction and administrative activities relating to the construction of approximately 3,300 lf of dual fixed bridge approach spans, foundations, substructure, superstructure and incidental appurtenances.
- 2006-2008

**Route 58 Bypass Project, \$73M, Clarksville, VA**

- Mr. Breese served as the Project Manager on this project when he worked for AMEC Civil, LLC.
- Responsible for management and oversight of all construction related and administrative activities. Project consisted of 11 bridges, the longest of which was 5,000 ft in length, approximately 3,000,000 CY of excavation and embankment, and several miles of limited access highway.
- 2002-2005

**ATTACHMENT 3.3.1**  
**KEY PERSONNEL RESUME FORM**

|   |  |
|---|--|
| <b>Brief Resume of Key Personnel anticipated for the Project.</b>   |  |
| a. Name & Title:  | <b>Michael W. Saunders, PE, CCM, Project Manager/Quality Assurance Manager</b>   |
| b. Project Assignment:  | <b>Quality Assurance Manager</b>   |
| c. Name of Firm with which you are now associated:  | <b>NXL Construction Services, Inc.</b>   |
| d. Years experience: With this Firm <u>1</u> Years With Other Firms <u>10</u> Years<br>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): | <p><b>Name of Firm: NXL, Richmond, Virginia Start Date: 11/2011 End Date: Present</b><br/> <b>Position: Project Manager/Quality Assurance Manager</b><br/> <b>Responsibilities:</b> Mr. Saunders serves as Independent Quality Assurance Manager and Quality Control Manager for Design-Build projects. In addition to his Design-Build duties, Mr. Saunders currently performs Responsible Engineer duties on VDOT's Huguenot Bridge Replacement project (\$50M, estimated completion in 2013).</p> <p><b>Name of Firm: VDOT, Richmond District Start Date: 5/2011 End Date: 11/2011</b><br/> <b>Position: Project Control Engineer/Area Construction Engineer</b><br/> <b>Responsibilities:</b> Mr. Saunders was responsible for quality assurance and for coordinating constructability reviews to include developing pre-advertisement schedules and construction sequences; and District Wide NOI and claims analysis. Project assignments included Design Build and Locally Administered Projects.</p> <p><b>Name of Firm: VDOT, Richmond District Start Date: 1/2007 End Date: 5/2011</b><br/> <b>Position: Area Construction Engineer, Richmond District, Southern Area Construction</b><br/> <b>Responsibilities:</b> He provided Responsible Charge supervision and technical guidance during project delivery for design-build and design-bid-build projects. He also assisted the Fredericksburg District with a Regional Design-Build Bridge Replacement project.</p> <p><b>Name of Firm: VDOT, Salem District Start Date: 11/2005 End Date: 1/2007</b><br/> <b>Position: Construction Project Manager, Salem District, Southern Area Construction</b><br/> <b>Responsibilities:</b> Mr. Saunders supervised all phases of multi-operational roadway and structural construction projects to ensure all work was performed in accordance with project plans, specifications and special provisions.</p> <p><b>Name of Firm: VDOT, Christiansburg Residency Start Date: 4/2005 End Date: 10/2005</b><br/> <b>Position: Permits/Subdivision Supervisor</b><br/> <b>Responsibilities:</b> Mr. Saunders was responsible subdivision, rural streets and land use permit programs.</p> <p><b>Name of Firm: VDOT, Salem District Start Date: 3/2004 End Date: 4/2005</b><br/> <b>Position: Architect/Engineer I</b><br/> <b>Responsibilities:</b> Mr. Saunders assisted in the Land Development and Maintenance Program Operations.</p> <p><b>Name of Firm: VDOT, Salem District Start Date: 6/2001 End Date: 2/2004</b><br/> <b>Position: Transportation Engineer Associate</b><br/> <b>Responsibilities:</b> Mr. Saunders completed the Associate Engineers Program at the Christiansburg Residency.</p> |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:  | <b>Bachelor of Science / 2001 / Civil Engineering, Virginia Tech, Blacksburg, VA</b>   |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #:  | <b>2005 / Virginia Professional Engineer / 0402 041295</b>   |
| g. Document the extent and depth of your experience and qualifications relevant to the Project.   | <ol style="list-style-type: none"> <li><i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i></li> <li><i>Note whether experience is with current firm or with other firm.</i></li> </ol>  |

3. Provide beginning and end dates for each assignment.

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

**Project: VDOT Route 36 Design Build Improvements, Richmond District**

**Name of Firm:** NXL Construction Services, Inc. **Start Date:** 12/2011 **Finish Date:** 1/2013

**Project Role:** Quality Assurance Manager (QAM)

**Responsibilities:** Construction of improvements to Routes 36 and 144 near Fort Lee in Prince George County. The project includes improvement to approximately 0.9 mile of Route 36 and approximately 0.5 miles of Route 144. Mr. Saunders serves as the project's Quality Assurance Manager where he is responsible for:

- Preparation of project's Quality Assurance and Quality Control Plans.
- Oversight of QA program, including performance and coordination of QA testing and inspection.
- Monitoring QC program and liaising with VDOT with respect to project compliance.
- Approving QC Plan for staffing and testing before submission to VDOT
- Project documentation including diaries, materials reports, as-builts, requisitions, and final records.
- Managing the project QA staff to ensure compliance with contract, plans, and specifications.

**Client/Owner Contact:** Tom Gilman, PE, VDOT Project Manager, (804) 266-1465

**Project: VDOT I-295/Meadowville Interchange, Richmond District**

**Name of Firm:** NXL Construction Services, Inc. **Start Date:** 11/2011 **Finish Date:** 12/2011

**Project Role:** Quality Control Manager (QCM)

**Responsibilities:** Mr. Saunders served as the Quality Control Manager (QCM) reporting to the Construction Manager, while in parallel reporting all sampling, testing, visual inspections, certifications, and daily diaries to the QAM. He led the QC team and directed the activities of the QC staff. Other duties included:

- Leading all preparatory inspection meetings.
- Coordinating with QAM to monitor the installation and maintenance of erosion and sediment controls.
- Coordinating with the CM to monitor work zone safety and traffic management plans.
- Coordinating with the QC testing firm to ensure conformance with VDOT 2008 design-build guidelines.
- Managing the QC staff to ensure compliance with contract, plans, and specifications.

**Client/Owner Contact:** Harold Dyson PE, VDOT Richmond District Constr. Manager, (804) 524-6211

**Project: VDOT I-295/Meadowville Interchange, Chesterfield Virginia**

**Name of Firm:** Virginia Department of Transportation **Start Date:** 4/2011 **Finish Date:** 11/2011

**Project Role:** Area Construction Engineer/Project Manager

**Responsibilities:** VDOT's Project Manager during final design and phase 1 construction a cloverleaf interchange. Duties included attending regularly scheduled progress meetings, reviewing project documentation, reviewed and approved pay applications and coordinated IA/IV testing. After leaving VDOT, Mr. Saunders continued duties as Quality Control Manager for this project with NXL, seeing the project through to close out.

**Client/Owner Contact:** Harold Dyson PE, VDOT Richmond District Constr. Manager, (804) 524-6211

**Project: Region 4 Design-Build Structures Project, Various Counties**

**Name of Firm:** Virginia Department of Transportation **Start Date:** 4/2010 **Finish Date:** 11/2011

**Project Role:** Project Manager

**Responsibilities:** VDOT's Project Manager during the construction of various bridge superstructure replacements throughout the Richmond District. Duties included making responsible charge decisions, attending regularly scheduled progress meetings, reviewing project documentation for compliance with contract documents, coordinated IA/IV testing and handled public/stakeholder concerns throughout the duration of the project.

**Client/Owner Contact:** Rob Shackelford PE, VDOT Fredericksburg District Constr. Mgr., (540) 654-1511

**Project: Route 10 Widening & Bridge Replacement, Chesterfield Virginia**

**Name of Firm:** VDOT/NXL Construction Services, Inc. **Start Date:** 4/2011 **Finish Date:** 6/2013 (est.)

**Project Role:** Area Construction Engineer/Responsible Engineer

**Responsibilities:** Responsible engineer overseeing the construction of this project which includes coordination with Chesterfield County, the contractor, Dominion Virginia Power, CSX railroad and the FHWA. *\*Mr. Saunders remained in the same role on this project when he transitioned from VDOT to consultant firm.*

**Client/Owner Contact:** Harold Dyson PE, VDOT Richmond District Constr. Manager, (804) 524-6211

**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

|  |
|--|
| <b>Brief Resume of Key Personnel anticipated for the Project.</b>  |
| a. Name & Title:<br><i>Michael Tugman, PE – Senior Project Manager</i>   |
| b. Project Assignment:<br><i>Design Manager</i>  |
| c. Name of Firm with which you are now associated:<br><i>HDR Engineering, Inc.</i>   |
| d. Years experience: With this Firm <u>25</u> Years With Other Firms <u>0</u> Years<br>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen(15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):<br><br><b><i>HDR Engineering, Inc., Senior Project Manager; 1987 – Present:</i></b> Mr. Tugman is the Department’s Transportation Business Group Lead. He has extensive highway design experience in urban and rural highways, intersections and interchanges, for roadway types from interstate to secondary. Mr. Tugman was selected as a Professional Associate within HDR for his expertise with complex Maintenance of Traffic. He has managed several contracts for VDOT and is currently wrapping up his role as design manager for segment 1 of the I-95 Express Lanes project.  |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:<br><i>North Carolina State University, Raleigh, NC / Bachelor of Science / 1987 / Civil Engineering</i>   |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #:<br><i>1990 / Professional Engineer / Virginia No. 021470</i>  |
| g. Document the extent and depth of your experience and qualifications relevant to the Project.<br>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i><br>2. <i>Note whether experience is with current firm or with other firm.</i><br>3. <i>Provide beginning and end dates for each assignment.</i><br><b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b><br><br><b><i>Fluor-Lane, LLC, 95 Express Lanes Design-Build, Stafford and Prince William Counties, VA</i></b><br><br>1. Mr. Tugman served as Design Manager for 9 miles of two reversible HOT/HOV lanes on new alignment in the I-95 median. Project scope included concept development, preliminary and final design for 7 bridges, including 2 interchange flyovers, 8 retaining walls, MOT, geotechnical engineering, drainage including over 4 miles of new pipe, stormwater management, signing, lighting, pavement marking, ITS, utility relocation and coordination, right of way acquisition services and 5 miles of new soundwall.<br><br>2. HDR Engineering, Inc.; Design Manager for Segment 1<br><br>3. July 2010 – Present |

***Virginia Department of Transportation, I-495 HOT Lanes Dulles Toll Road Interchange, Washington D.C.***

1. Roadway and Maintenance of Traffic Quality Control. Mr. Tugman was responsible for the design quality control for the interchange roadway and MOT plans that HDR was responsible for designing. He was responsible for checking that the roadway design accurately reflected the designs of other HDR departments on this project including the substructure, superstructure and retaining wall design. He also coordinated between departments to keep submittal dates and deliverables in proper order. He was the lead for developing the intensive MOT for this congested interchange.
2. HDR Engineering, Inc.; Roadway and Maintenance of Traffic Quality Control
3. March 2010 – June 2011

***Virginia Department of Transportation, I-81 Widening and Interchange Modification, Bristol, VA***

1. Roadway Engineer. Responsible for developing alternatives, final design, maintenance of traffic plans, preparing right of way and multiple PS&E documents for a 7.5 kilometers section of I- 81 including the interchange modification at Exit 1 (Route 58/I-81).
2. HDR Engineering, Inc.; Roadway Engineer
3. September 1997 – September 2004

***Virginia Department of Transportation, Valley View Interchange with I-581, Roanoke, VA***

1. Concept Development and Roadway Quality Control. Responsible for the roadway quality control for the design of the completion of the existing Valley View Boulevard Interchange with I-581. Phase One consisted of developing and evaluating alternatives including preparing bridge concepts, traffic analysis and an IMR and a public involvement program.
2. HDR Engineering, Inc.; Concept Development and Roadway Quality Control
3. December 2008 – Present

***Virginia Department of Transportation, U.S. 460, Buchanan County, VA***

1. Project Manager. Responsible for the concept development, multidiscipline design, preparation of right of way and construction plans for 2.8 miles of Rte 460 through downtown Grundy. Other responsibilities included determining right-of-way needs, earthwork analysis, and preparing construction estimates along with coordination with the Army Corps of Engineers flood improvement plans.
2. HDR Engineering, Inc.; Project Manager
3. June 1987 – Present

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

|   |
|---|
| <b>Brief Resume of Key Personnel anticipated for the Project.</b>   |
| a. Name & Title:<br><br>David Jamison, Construction Manager   |
| b. Project Assignment:<br><br>Construction Manager  |
| c. Name of Firm with which you are now associated:<br><br>Trumbull Corporation  |
| d. Years experience: With this Firm <u>24</u> Years With Other Firms <u>30</u> Years<br>Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.):<br><br><b>1988 - Present, Construction Manager, Trumbull Corporation,</b><br>Mr. David Jamison has held many different positions at Trumbull Corporation. For the first 11 years he served as a Survey Party Chief on many highway and bridge projects. For a short period of time he served as the Survey Coordinator managing all company survey crews. In 1999, he became a Project Engineer where he gained valuable field experience and worked his way up to Project Superintendent and Project Manager roles. Most recently, he has served as a Construction Manager on several major design build and joint venture projects. As a Construction Manager, David is responsible for managing the construction process which includes all Quality Control activities to ensure the work performed meets the contract requirements and the “approved for construction” plans and specifications.  |
| e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:<br><br>West Virginia Tech, Montgomery, West Virginia, Bachelor of Science in Engineering Technology, 1984  |
| f. Active Registration: Year First Registered/ Discipline/VA Registration #:<br>Mr. Jamison will hold a Virginia Department of Conservation and Recreation (DCR) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification prior to the commencement of construction.   |
| g. Document the extent and depth of your experience and qualifications relevant to the Project.<br>1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i><br>2. <i>Note whether experience is with current firm or with other firm.</i><br>3. <i>Provide beginning and end dates for each assignment.</i><br><b>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</b><br><br><b><i>Shenandoah River Bridge and Approaches WV 9, \$39.9 million,</i></b> <ul style="list-style-type: none"><li>• Mr. Jamison is our Construction Manager/Senior Project Engineer on this project.</li><li>• Responsibilities included scheduling work and sub contractors, ordering materials, reviewing design and shop drawings, maintaining and updating quantities, planning and managing work, tracking cost, time keeping, submittals, assist with design changes.</li><li>• 2010 – current</li></ul> <b><i>ICC – Contract C, \$513.9 million</i></b> <ul style="list-style-type: none"><li>• Mr. Jamison was our Construction Manager on this project.</li><li>• Responsibilities included computing stakeout for survey crews from the design drawings, creating surface models for the GPS Rovers and the earth moving and grading equipment, computing earthwork quantities, survey stakeout, bridge deck computations.</li><li>• 2008-2010</li></ul> |

## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

***Maryland Approach Spans for the Replacement of the Woodrow Wilson Bridge  
on I-95/I-495, \$191 million***

- Mr. Jamison was our Construction Manger on this project.
- Responsibilities included all surveying office and field work for constructing both Inner and Outer Loop Bridges, including deck grade computations and approvals. Responsibilities also included supervising all earthwork activities at the Maryland Abutment, and all earthwork, pipe, grading and paving activities for construction of the two ramps leading into National Harbor.
- 2005-2008

***Corridor H: US 220 – Fort Run, \$22.7 million***

- Mr. Jamison worked as our Project Superintendent on this project.
- Responsibilities included planning, scheduling, and supervising all earthwork, drainage, grading, and paving activities for the Corridor H project. Also very much involved in the planning, scheduling, and supervision of the bridge structures and MSE walls.
- 2004-2005

**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location   | b. Name of the prime design consulting firm responsible for the overall project design. | c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.   | d. Contract Completion Date (Original) | e. Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands) |                                   | g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands) |
|--|---|---|--|---|----------------------------------|-----------------------------------|---|
|  |   |   |  |   | Original Contract Value          | Final or Estimated Contract Value |   |
| Name: Shenandoah River Bridge – WV9<br><br>Location: Jefferson County, West Virginia | Name:<br><br>HDR Engineering, Inc.  | Name of Client./ Owner: West Virginia Dept. of Transportation, District 5<br>Phone: 304-289-3521<br>Project Manager: Stephen "Todd" Rumbaugh, P.E.<br>Phone: 304-289-3521<br>Email: stephen.t.rumbaugh@wv.gov | 07/2012                                | 01/2013   | \$39,887                         | \$42,074                          | \$38,333  |

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 Shenandoah River Bridge was a two step Design-Build project with a pass/fail technical proposal awarded to Trumbull Corporation, with their lead designer, HDR Engineering. The Design Build Team had the task of designing a 1,650 foot bridge spanning the Shenandoah River for the new four lane divided roadway alignment of WV 9 near Charles Town in Jefferson County, West Virginia. The project required a unique design to meet the owner's budget, provide a 600 foot main river span, and limit the substructure footprint in the river valley to the restrictions in the environmental documents. The team of Trumbull and HDR provided the lightest and lowest cost solution of five teams. Three alternate structures were evaluated including a steel truss, a segmental concrete option, and the Delta-Rahmen Bridge which proved to be the most cost effective solution.

This Design-Build project, awarded to Trumbull Corporation and HDR Engineering on January 5, 2010, aimed to create a new bridge over the Shenandoah River in Jefferson County, West Virginia. The project's stretch of roadway is a portion of the recently upgraded WV Route 9, a partially controlled access four-lane divided highway, which extends from the Charles Town Bypass on US 340 to the West Virginia and Virginia state line. The project included the approaches to the bridge, which will carry West Virginia Route 9 between County Route 27 and County Route 32/2, a distance of approximately 1,805 feet.

The Delta-Rahmen Bridge stretches 1,650 feet across the Shenandoah River Valley, carrying the highway 200 feet above the river below. The substructure consists of two abutments and four piers, utilizing 560,000 pounds of reinforcing steel, 7,700 cubic yards of concrete and 43,000 square feet of formwork. The second abutment also required the construction of a 200 foot long, 45 foot tall MSE wall. The superstructure of the bridge contains nearly 13 million pounds of structural steel and utilizes a 5-girder, 4-substringer system supported by five lines of Delta Legs. A Conspan bridge system was used on one side of the bridge to eliminate an additional span on the main bridge structure. This Conspan bridge was 105 feet long, 24 feet wide, and 20 feet tall, with the heaviest piece weighing 52,000 pounds.



**ATTACHMENT 3.4.1(a)**

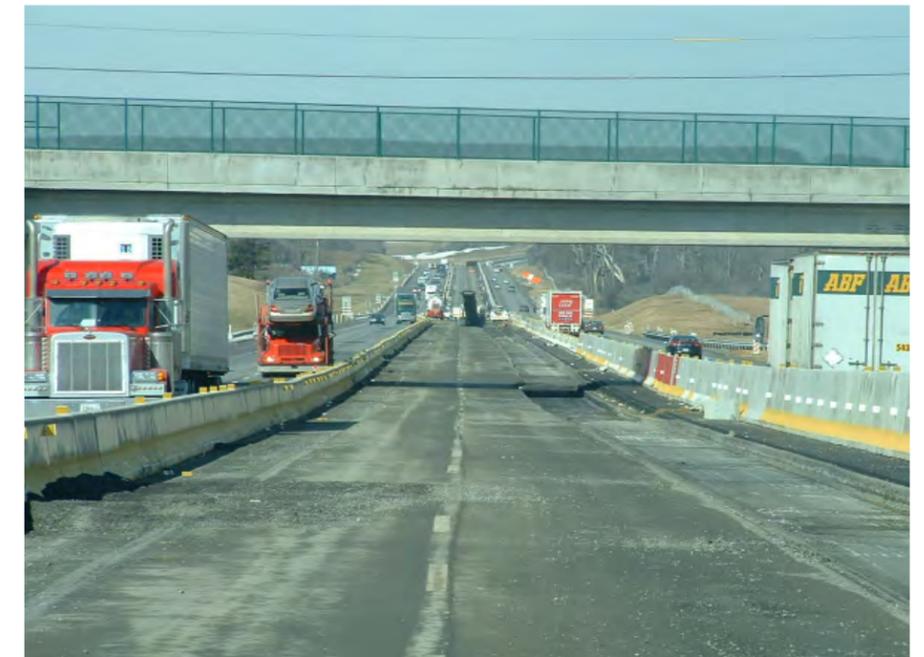
**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location  | b. Name of the prime design consulting firm responsible for the overall project design. | c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.  | d. Contract Completion Date (Original) | e. Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands) |                                   | g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands) |
|---|---|--|--|---|----------------------------------|-----------------------------------|---|
|   |   |  |  |   | Original Contract Value          | Final or Estimated Contract Value |   |
| Name: Somerset County Turnpike Reconstruction<br>M.P. 109.10 to 121.63<br><br>Location: Somerset , Pennsylvania | Name:<br><br>HDR Engineering, Inc.  | Name of Client./ Owner: Pennsylvania Turnpike Commission<br>Phone: 717-939-9551<br>Project Manager: John Ozimok<br>Phone: 717-939-9551<br>Email: jozimok@paturndpike.com | 11/2004                                | 11/2004   | \$94,340                         | \$115,946                         | \$64,967  |

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.

Trumbull – Lindy, A Joint Venture, provided general construction services for the total reconstruction of 12 miles of the Pennsylvania Turnpike from Mileposts 109 to 121 in Somerset County, PA. The project involved the construction/reconstruction of 18 structures including: 5 steel multi-girder bridges, 7 concrete beam bridges, 5 concrete culverts and a twin pair of soil nail retaining wall structures. Extensive shoring was required throughout the project to facilitate the phased construction of the bridges and roadway. Extensive maintenance of traffic was required to keep four lanes, two in either direction, open to uninterrupted flow at all times. Roadway related work on the project included approximately 1.2 million cubic-yards of excavation and grading, construction of 8 Geogrid reinforced slopes, construction of new drainage structures, lime/cement stabilization of the existing subgrade, and full depth reconstruction of the roadway, shoulders and a widened median the full length of the project utilizing Superpave bituminous pavement. Also included in the project was the construction/reconstruction of the ramps at the Somerset Interchange utilizing concrete pavement, and upgrades to the ramps and parking areas within the Somerset Service Plazas and the Somerset Maintenance Facility.



**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location   | b. Name of the prime design consulting firm responsible for the overall project design. | c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.   | d. Contract Completion Date (Original) | e. Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands) |                                   | g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands) |
|--|---|---|--|---|----------------------------------|-----------------------------------|---|
|  |   |   |  |   | Original Contract Value          | Final or Estimated Contract Value |   |
| Name: PA Turnpike Design/Build Butler Interchange MP 37.9 to MP 39.6<br><br>Location: Gibsonia, Pennsylvania | Name:<br><br>HDR Engineering, Inc.  | Name of Client./ Owner: Pennsylvania Turnpike Commission, Western Regional Office<br>Phone: 724-755-5000<br>Project Manager: John Pavlovich, P.E.<br>Phone: 724-755-5000<br>Email: jpavlovi@paturndpike.com | 11/2005                                | 11/2005   | \$17,743                         | \$18,506                          | \$8,964   |

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.

Trumbull Corporation provided Design-Build Services for the roadway reconstruction and new construction of the eastbound and westbound portions of the Pennsylvania Turnpike, between milepost 37.9 and milepost 39.6. The roadway and shoulders on the Turnpike mainline, as well as the Butler Valley Interchange (milepost 39) ramps, were removed and replaced. The work involved rubblization of the existing pavement and replacement of all drainage structures, as well as the construction of three geogrid retaining walls. The project included a five-year pavement warranty.

The rehabilitation of two bridge structures were also included in the contract. The overhead bridge carrying State Route 8 was jacked, the bearings were reset, and the structure was painted. The ramp bridge work included new expansion dams, removal and replacement of parapets, and structural painting. In addition to the roadway and bridge construction, the scope of work involved obtaining all applicable permits, coordinating utilities, maintain the right-of-way, and protection of traffic.

As part of this Design-Build project, the Quality Control requirements were specified as the contractor's responsibility. Trumbull Corporation, as the prime contractor, assigned the oversight of the Quality Control requirements to Trumbull Construction Management Services (TCMS) Group. TCMS assigned a QC Manager and field inspectors to oversee the QC requirements on the Project. The initial responsibility was to develop a QC plan to be used to ensure QC requirements were properly performed throughout the design and construction process. Additionally, an organization chart was developed to clearly define responsibilities for the QC process. The owner employed a separate independent consultant to perform Quality Assurance oversight. TCMS's QC Manager oversaw both the QC for construction and QC for design.



**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location   | b. Name of the prime/ general contractor responsible for overall construction of the project. | c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.  | d. Construction Contract Completion Date (Original) | e. Construction Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands)       |   | g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands) |
|--|---|---|---|--|--|---|--|
|  |   |   |   |  | Construction Contract Value (Original) | Construction Contract Value (Actual or Estimated) |  |
| <b>Name:</b> I-495 Express Dulles International Airport Access Highway Interchange Improvements (DIAAH)<br><br><b>Location:</b> Washington, D.C. | <b>Name:</b> Fluor/Lane   | <b>Name of Client:</b> Virginia Department of Transportation<br><b>Phone:</b> 571.483.2600<br><b>Project Manager:</b> Larry Cloyed, PMP<br><b>Phone:</b> 571.483.2584<br><b>Email:</b> Larry.Cloyed@VDOT.Virginia.gov | 12/2012   | 12/2012  | \$3,262<br>(includes Final Design)     | \$3,262   | \$3,262  |

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

**PROJECT DELIVERY METHOD:** DESIGN – BUILD

**PROJECT DESCRIPTION:** Metropolitan Washington Airports Authority (MWAA) , a major stakeholder to the I-495 Express Lanes project and owner of the land in the vicinity of the interchange, required modification to interchange to provide direct connection from the DIAAH to I-495 as part of the I-495 Express Lanes project. HDR evaluated both the near and long term improvements required to alleviate the merge and weave conditions to determine modifications required to the I-495 Express Lanes project, which was in design and construction at the time, as well as considerations for the future MetroRail planned by MWAA in the median of the DIAAH corridor.

In January 2010, HDR began final design for the first phase of near term improvements to the DIAAH, Dulles Toll Road, and I-495 interchange. Modification to the Dulles Toll Road ramp network to accommodate the I-495 Express Lanes, the near term DIAAH improvements designed by HDR includes the relocation of approximately 1 mile of the eastbound DIAAH, construction of approximately 1 mile of new ramp providing a direct connection for eastbound DIAAH to both northbound and southbound I-495. This new ramp construction included an 872' curved steel bridge crossing over the Dulles Toll Road with high MSE wall approaches. The project also included signing and pavement marking and lighting improvements associated with the interchange modification. Geotechnical investigation and final design was completed in six months and is currently in construction.



**LESSONS LEARNED / KEYS TO SUCCESS**

- Thorough design coordination with project stakeholders including Fluor-Lane, Metropolitan Washington Airports Authority, VDOT and the Virginia MegaProjects GEC will allow for successful delivery of a project on time and budget through stakeholder buy-in.
- Weekly technical work group meetings allowed the design team to address issues immediately and efficiently.
- In-house multi-disciplined design team that included roadway, structures, hydraulics and geotechnical provided seamless communication and coordination that was provided for an efficient design process.



**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location  | b. Name of the prime/ general contractor responsible for overall construction of the project. | c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.   | d. Construction Contract Completion Date (Original) | e. Construction Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands)       |   | g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands) |
|---|---|--|---|--|--|---|--|
|   |   |  |   |  | Construction Contract Value (Original) | Construction Contract Value (Actual or Estimated) |  |
| <b>Name:</b> I-95 Express Lanes<br><br><b>Location:</b> Fairfax and Stafford County, Virginia | <b>Name:</b> Fluor-Lane 95, LLC   | <b>Name of Client:</b> Fluor<br><b>Phone:</b> 864-281-4400<br><b>Project Manager:</b> John Thomas<br><b>Phone:</b> 703-839-7183<br><b>Email:</b> john.thomas@fluor.com | 03/2015   | 03/2015  | \$250,000<br>(includes Final Design)   | \$250,000   | \$14,956   |

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 I-95 Express Lanes project is being accomplished through the Public Private Transportation Act (PPTA). A concessionaire team led by Fluor/Transurban has partnered with VDOT to design and build this project. The 29 mile project is broken into 4 design segments. **HDR is the Lead Designer for Segment 1**, which is nine miles of two lane reversible HOT lanes in the interstate median from Garrisonville Road (MP 143) to just north of Quantico Creek near Dumfries (MP 152) in northern Virginia. The construction plans for this segment included performing the engineering design and plan development for 9 miles of new roadway within tight constraints (median), 7 new bridges including 2 curved flyovers, 4.5 miles of new drainage structures and Best Management Practices (BMP), stormwater management planning and permitting, erosion and sediment control design, 9 retaining walls, over 4 miles of new sound walls, signing and pavement marking, utility coordination and relocation, public involvement and right of way acquisition. Following are project highlights of the construction plans and final design currently underway:



- **Roadway.** Performed horizontal and vertical alignment optimization for reversible lanes within interstate median. New ingress/egress in Segment 1 includes two flyovers from the HOT lanes to the southbound I-95 general purpose (GP) lanes and one northbound slip ramp from I-95 to the HOT lanes. Minimized earthwork costs and avoided archeological sites.
- **Bridges/Structures.** Determined the type, size and location for 7 new bridges along the project corridor. The new bridges included 2 steel curved girder, two span flyovers near Garrisonville Road and Joplin Road, 3 single span bridges with steel girders over Aquia and Chopawamsic Creeks and Russell Road, 1 two span concrete girder bridge over Joplin Road and replacing existing Telegraph Road bridge across I-95 with a new two span steel girder bridge. Adjusted the alignment and span configuration to eliminate need for costly straddle bent design for flyovers. Foundation designs included both driven piles and drilled shafts. Additional structural design is being done for a large number of retaining and sound walls, signs, and toll gantries in Alexandria, Fairfax, Prince William and Stafford Counties VA. HDR is performing scour analyses for new stream crossing bridges.
- **Drainage.** Project includes over 4.5 miles of new storm drainage pipe, 15 stormwater management ponds and surface drainage system for 9 miles of new roadway. Prepared clearing and grubbing and erosion and sediment control plans for over 100 acres. Performed scour analysis for Aquia and Chopawamsic Creek bridges.
- **Retaining wall.** Project includes 9 new MSE retaining walls associated with the new bridges. Adjusted bridge and roadway alignments to avoid cut and fill retaining walls along the project corridor.
- **ITS.** Responsible for ITS design and construction support work elements of ITS field system that consists of multiple subsystems including 17 CCTV traffic surveillance cameras, 7 toll and driver information DMS signs, 25 microwave traffic detectors, 13 video-based automatic incident detection cameras, 3 emergency gate telemetry, 19 express lane access gates, EZ-pass toll equipment, fiber optic communications, power distribution, and emergency back-up power system.
- **Geotechnical.** Performed geotechnical investigation and analysis for over 250 borings for the RFE plans with 130 more needed for final design. Performed pavement design and optimized foundation design in areas containing Potomac clay and acidic soils. Coordinated with VDOT to reduce MOI requirements but allow for subsurface information needed for design. HDR's geotechnical design services included development of recommendations for 7 bridges, 7 retaining walls, multiple tall cut and fill slopes, sound barrier walls, minor structures, new pavements and storm water management ponds for over 8.3-miles of proposed Express Lanes between I-95 general purpose lanes. Specific challenges included design of walls and slopes on Potomac Formation clay soils, ground improvement on soft alluvial soils, mitigation of acidic subsurface soils during excavation and limiting the impacts of large fills on existing drainage structures.
- **Traffic.** Responsible for signing, lighting and pavement marking. Lighting requirements will be determined based on the results of our lighting warrant analysis.
- **Utility Relocation and Coordination.** HDR team is responsible for the utility relocation design and coordination. Utility conflicts include overhead power with new sound walls and underground water lines with bridge foundations.
- **Right of Way Acquisition Services.** Responsible for the right of way acquisition services. Potential acquisition includes temporary easements for construction access and permanent easements for side street arterial overhead signing support structures.
- Other services included **Public Involvement, Environmental Services, included coordination with WSSI (wetlands) and PTG/VDOT (NEPA).** HDR obtained the VSMP permit and prepared SWPPP. HDR prepared plans and displays and attended the Design Public Hearing in September 2011. Coordinated with concessionaire, VDOT and local agencies to plan and participate in multiple public meetings.

**ATTACHMENT 3.4.1(b)**

**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

| a. Project Name & Location  | b. Name of the prime/ general contractor responsible for overall construction of the project. | c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.   | d. Construction Contract Completion Date (Original) | e. Construction Contract Completion Date (Actual or Estimated) | f. Contract Value (in thousands)       |   | g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands) |
|---|---|--|---|--|--|---|--|
|   |   |  |   |  | Construction Contract Value (Original) | Construction Contract Value (Actual or Estimated) |  |
| <b>Name:</b> I-81 Widening and Interchange Modification<br><br><b>Location:</b> Bristol, Virginia | <b>Name:</b> English Construction   | <b>Name of Client:</b> Virginia Department of Transportation<br><b>Phone:</b> 804.786.2801<br><b>Project Manager:</b> Jim Lassiter<br><b>Phone:</b> 804.786.6839<br><b>Email:</b> Jim.Lassiter@vdot.virginia.gov | 2004  | 2004   | \$24,000                               | \$24,000  | \$2,815  |

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

**PROJECT DELIVERY METHOD:** Design-Bid-Build

**PROJECT DESCRIPTION:** HDR performed the preliminary and final design as well as the construction documents for Interstate 81 roadway widening and bridge construction beginning at the Route 11W interchange in Tennessee and extending approximately 7,500 meters (4.6 miles) to just south of the intersection with the CSXT Railroad and Island Road near the city of Bristol, Virginia. Project components include field surveys, photogrammetric mapping, interchange alternative studies, bridge concept studies, roadway design, hydrologic/hydraulic design, stormwater management, retaining wall structure design, bridge design and the preparation of final right-of-way and construction plans. As part of this assignment, HDR provided interchange modifications for Exit 1 that included structural designs for the new Route 58 bridge over I-81. Multiple construction contracts were prepared including new interstate bridges at Nininger Road and Wagner Road which were surveyed and designed under a fast-track schedule. They were completed within eight months of Notice-to-Proceed. Both bridges are three-span structures, ranging in length from 39 meters (128 feet) to 49 meters (162 feet).

**LESSONS LEARNED / KEYS TO SUCCESS**

- Thorough Maintenance of Traffic/Construction Sequence plan to accomodate interstate widening and removal of an existing interchange while maintaining existing traffic along I-81 allowed for smooth and successful project completion with no complaints to the owner.
- Interchange alternative study resulted in lower cost solution that provided the same improved level of service.
- In-house multi-disciplined design team that included roadway, structures, hydraulics and geotechnical provided seamless communication and coordination that provided for an efficient design process.

