



RESPONSE TO REQUEST FOR QUALIFICATIONS

# I-64 CAPACITY IMPROVEMENTS – SEGMENT III

## A DESIGN-BUILD PROJECT

From: 1.15 Miles West of Route 199 (Lightfoot)

To: 1.05 West of Route 199 (Humelsine Parkway)

## YORK COUNTY, VIRGINIA

**State Project No.:** 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611

**Federal Project No.:** NHPP-064-3(498)

**Contract ID Number:** C00106689DB97

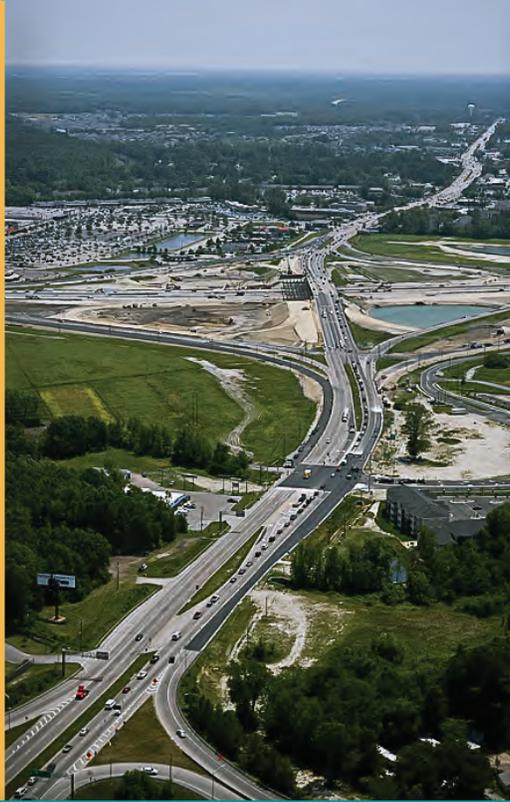
**MAY 2, 2017**

SUBMITTED TO:



SUBMITTED BY:





## 3.2. LETTER OF SUBMITTAL

SUBMITTED TO:



SUBMITTED BY:



May 2, 2017

Attention: Joseph A. Clarke, P.E.  
Alternative Project Delivery Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

**RE: Letter of Submittal | Design-Build | I-64 Capacity Improvements – Segment III | York County, Virginia State Project No.: 0064-965-229, P-101, R-201, C-501, B-638, B-639, B-640, B-641, B-642, B-643, D-609, D-610, D-611 | Federal Project No.: NHPP-064-3(498) | Contract ID Number: C00106689DB97**

Dear Mr. Clarke,

**Flatiron | Branch II, a Joint Venture** (Flatiron | Branch) formally expresses our interest in being selected by the Virginia Department of Transportation (VDOT) as the design-build team to efficiently and safely design and construct the I-64 Capacity Improvements – Segment III (I-64 Project). **Flatiron Constructors, Inc.** (Flatiron) will be the Lead Contractor for this Project supported by their joint venture partner **Branch Civil, Inc.** (Branch), **A. Morton Thomas and Associates, Inc.** (AMT) as the Lead Designer, and **STV Incorporated** as the Structural Design Lead. Our Team **combines nationally recognized industry leaders with local knowledge and dedicated resources ready to address critical project elements, and successful national design-build experience in highway and bridge projects** similar to the I-64 Project. As requested in **Section 3.2 – Letter of Submittal**, the Flatiron | Branch team offers the following:

**3.2.1 Flatiron | Branch II, a Joint Venture;** 385 Interlocken Crescent; Suite 900; Broomfield, CO 80021

**3.2.2** Vice President of Preconstruction Services, Dennis L. Stoddard, will serve as the Point of Contact for Flatiron | Branch II, a Joint Venture and for all matters concerning this Statement of Qualifications:

**Dennis L. Stoddard, Vice President of Preconstruction Services** Phone: (303) 517-0947  
860 Aviation Parkway, Suite 1000, Fax: (919) 460-5708  
Morrisville, NC 27560 Email: dstoddard@flatironcorp.com

**3.2.3** Vice President, Southeast Region, Ted Kirk, is the Principal Officer for Flatiron | Branch II, a Joint Venture:

**Ted Kirk – Vice President, Southeast Region** Phone: (919) 460-5393  
860 Aviation Parkway, Suite 1000, Fax: (919) 460-5708  
Morrisville, NC 27560 Email: tkirk@flatironcorp.com

**3.2.4** Flatiron | Branch II, a Joint Venture is a construction joint venture of Flatiron and Branch. Flatiron | Branch will share financial responsibility for the I-64 Project.

**3.2.5** Flatiron | Branch II, a Joint Venture will act as the Lead Contractor with A. Morton Thomas and Associates, Inc. as the Lead Designer.

**3.2.6** All affiliated and subsidiary companies are identified on the attachment in Appendix 3.2.6.

**3.2.7** Executed certification regarding Debarment Forms are included in Appendix 3.2.7.

**3.2.8** Flatiron’s Prequalification No. is F319, currently listed as inactive with VDOT and Branch’s Prequalification is B319. Flatiron | Branch’s Joint Venture Prequalification is JV086. See evidence of prequalification in Appendix.

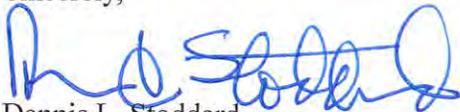
**3.2.9** Flatiron | Branch’s ability to obtain a performance and payment bond for the \$240M estimated contract value of the I-64 Project is exhibited by the surety letter in the Appendix.

**3.2.10** SCC and DPOR information and licenses for each team member are included in Appendix 3.2.10.

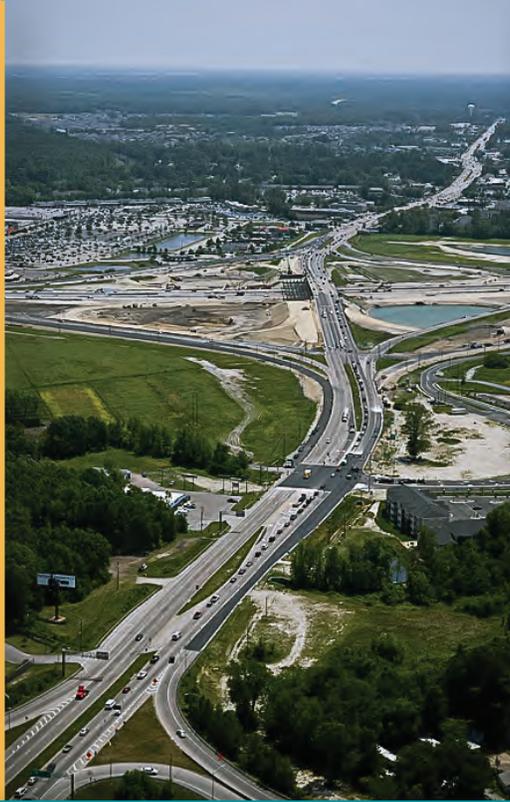
**3.2.11** Flatiron | Branch is committed to achieving the ten percent DBE participation goal for the I-64 Project.

Thank you for your consideration. We look forward to creating a strong relationship with VDOT and other stakeholders associated with the I-64 Project.

Sincerely,



Dennis L. Stoddard  
Vice President of Preconstruction Services  
Flatiron Constructors, Inc.



## 3.3 OFFEROR'S TEAM STRUCTURE

SUBMITTED TO:



SUBMITTED BY:



### 3.3 Offeror's Team Structure

#### Lead Contractor

Flatiron Constructors, Inc. (Flatiron) will be the Lead Contractor for the I-64 Project and will be supported by their joint venture partner Branch Civil, Inc. (Branch).

 **FLATIRON CONSTRUCTORS, INC.** is a leading transportation, energy, and water infrastructure contractor in North America, having successfully completed 22 design-build projects with a combined value of over \$6.5B and six more under construction worth an additional \$3.2B. Of the 28 design-build projects, 19 included major bridge structures, 10 of which were award-winning bridges over water including the U.S. 17 Washington Bypass and Cooper River Bridge. Flatiron, consistently **ranked as a Top 20 Transportation Contractor (#8), Top Highway Contractor (#5), and Top 10 Bridge Builder by *Engineering-News Record (ENR)***, brings extensive experience managing traffic along active interstates, including the **award-winning \$136M I-85 NCDOT Yadkin River Bridge and \$134M Knightdale Bypass projects with designer STV Incorporated.**

 **BRANCH CIVIL, INC.** is a full-service heavy highway contractor with successful projects throughout the Mid-Atlantic Region. As a local contractor, Branch's offices are located in Roanoke (headquarters), Manassas, and Virginia Beach, Virginia as well as Cary, North Carolina. Branch **continuously ranks as a Top 400 Contractor (#195) by ENR.** As **one of the largest Virginia-based contractors**, Branch's experience includes managing designers, right-of-way acquisition; utility relocation and coordination; and environmental permit acquisition and monitoring on numerous successful design-build and PPTA projects. Branch has completed more than \$600M in design-build projects including several relevant projects in the Hampton Roads area such as the **\$103M Design-Bid-Build I-64/ Battlefield Boulevard project for VDOT and the \$195M Design-Bid-Build Dominion Boulevard project for the City of Chesapeake.**

#### JOINT VENTURE SUBCONSULTANTS

The following are highly qualified subconsultants under subcontract to Flatiron | Branch for independent QA:

- NXL Construction Services, Inc. (NXL)
- Geotechnical Environmental and Testing Solutions, Inc. (GET)

#### Lead Designer

 **A. MORTON THOMAS AND ASSOCIATES, INC. (AMT)** is a respected provider of transportation design, construction management, and inspection services in Virginia and the Mid-Atlantic Region. **For over 60 years, AMT has delivered design services for some of Virginia's busiest interstates and roadways** and has demonstrated success on major design-build projects involving highway widening, interchanges, bridge replacement, and rehabilitation for major state highways and local roads throughout Virginia. This includes highly visible VDOT projects such as the Woodrow Wilson Bridge; U.S. Route 1 at Fort Belvoir; U.S. 460 Connector Phase I; I-81 Resurfacing; and I-66.

#### DESIGN SUBCONSULTANTS

 **STV INCORPORATED** has completed 35 design-build projects in the Mid-Atlantic Region over the past 25 years, including the I-581 Improvements/Valley View Mall Interchange near Roanoke, the 830-foot long Route 199 Bridge over College Creek near Williamsburg, and over 60 miles of phased interstate widening/reconstruction along major interstates such as I-77 and I-85. Their most recent interstate widening – involving I-85/I-485 in North Carolina – was named the **Top Highway Design-Build project in the United States by DBIA in 2015.** Based in Richmond since 1985, STV offers 60 employees in four (4) Virginia/DC offices and has continually served VDOT for over three decades. **STV is ranked #39 in the ENR List of Top 500 Firms (#9 for Roadways and #13 for Bridges).**

In addition to STV, the following other highly qualified subconsultants will serve under subcontract to AMT:

- Bowman Consulting Group, Ltd. (Bowman)
- Schnabel Engineering, LLC (Schnabel)
- Kerr Environmental Services Corp. (Kerr)
- Harris Miller Miller & Hanson Inc. (HMMH)
- Seventh Point, Inc. (Seventh Point)
- Circa-Cultural Resource Management, LLC (Circa)

#### 3.3.1 Key Personnel

**.1 Design-Build Project Manager (DBPM):** Previously serving as Design-Build Project Manager for the I-85 Yadkin River Widening & Bridge Replacement and Washington Bypass, Ted Kirk (Flatiron) will lead the Flatiron | Branch team. He will have complete authority over the project and be supported by key personnel and design-build delivery

experts to successfully deliver the Project to VDOT. Ted will provide overall project design, construction, quality management, and contract administration. Acting as the single point-of-contact for VDOT, he will promote efficient communication and coordination between the design and construction team while enforcing safety and environmental compliance. Additionally, Ted will use his design-build expertise to foster innovative solutions for project design, construction means and methods. He will have full authority for the resolution of all disputes and disagreements.

**.2 Responsible Charge Engineer (RCE):** Reporting directly to the DBPM, **Harold Dyson, P.E. (AMT)** will be fully integrated into the Flatiron | Branch team including specialty subcontractors and subconsultants, and will have direct involvement or supervisory direction and control authority in making and/or approving engineering decisions during design and construction. Harold will respond to design-related issues and/or construction engineering decisions. He will have full authority to stop work on behalf of the design team, if necessary.

**.3 Quality Assurance Manager (QAM):** **Michael Saunders, P.E., CCM, DBIA (NXL)** will report directly to the DBPM with full independence from design and construction operations. He will communicate with the RCE on Quality Assurance (QA) inspection, testing, and monitoring the Contractor's Quality Control (QC) program. As QAM, Michael will hold authority to suspend work if quality issues warrant and the responsibility to ensure corrective action is taken before the work is accepted and certified for payment. All QA inspectors will report directly to him for the duration of construction.

**.4 Design Manager (DM):** Reporting directly to the DBPM, **Laura Mehiel, P.E. (AMT)** will maintain close communication with all key personnel. She will coordinate all design disciplines, including subconsultants, so that overall project design conforms to the contract. All design disciplines will report directly to Laura who will provide VDOT design plans for review and approval. She will establish and oversee the design QA/QC program for all pertinent disciplines involved in project design.

**.5 Construction Manager (CM):** **Greg Suttle (Branch)** will report directly to the DBPM, be on-site full-time for the duration of construction operations, and hold all required VDOT certifications. Greg will manage the construction process through an accurate project baseline schedule including QC activities so that materials used and work performed meet contract requirements and approved construction plans. He will be responsible for all on-site construction and oversee project controls, the QC Manager, field staff, scheduling, safety, environmental compliance, utilities, and maintenance of traffic. Greg will coordinate weekly meetings to discuss the current schedule and ongoing activities.

**.6 Lead Utility Coordination Manager:** Reporting directly to the DBPM, **Richard Bennett (Bowman)** will be responsible for the coordination and design of utility relocations during the project design and construction phases. Richard has over 48 years of experience in all aspects of VDOT ROW and utility transportation project development. He will initiate early contact with both utility owners and design engineers to identify alternatives to eliminate or minimize utility conflicts. Once utility conflicts are identified, Richard will pro-actively coordinate with utility providers to prepare relocation plans and obtain authorization for construction.

**Please see Attachment 3.3.1- Key Personnel Resumes in the Appendix.**

### Value-Added

To further support the Flatiron | Branch team and help mitigate risks, the following individuals will play a significant role to help complete a high quality project ahead of schedule, under budget, and safely with minimal support from VDOT.

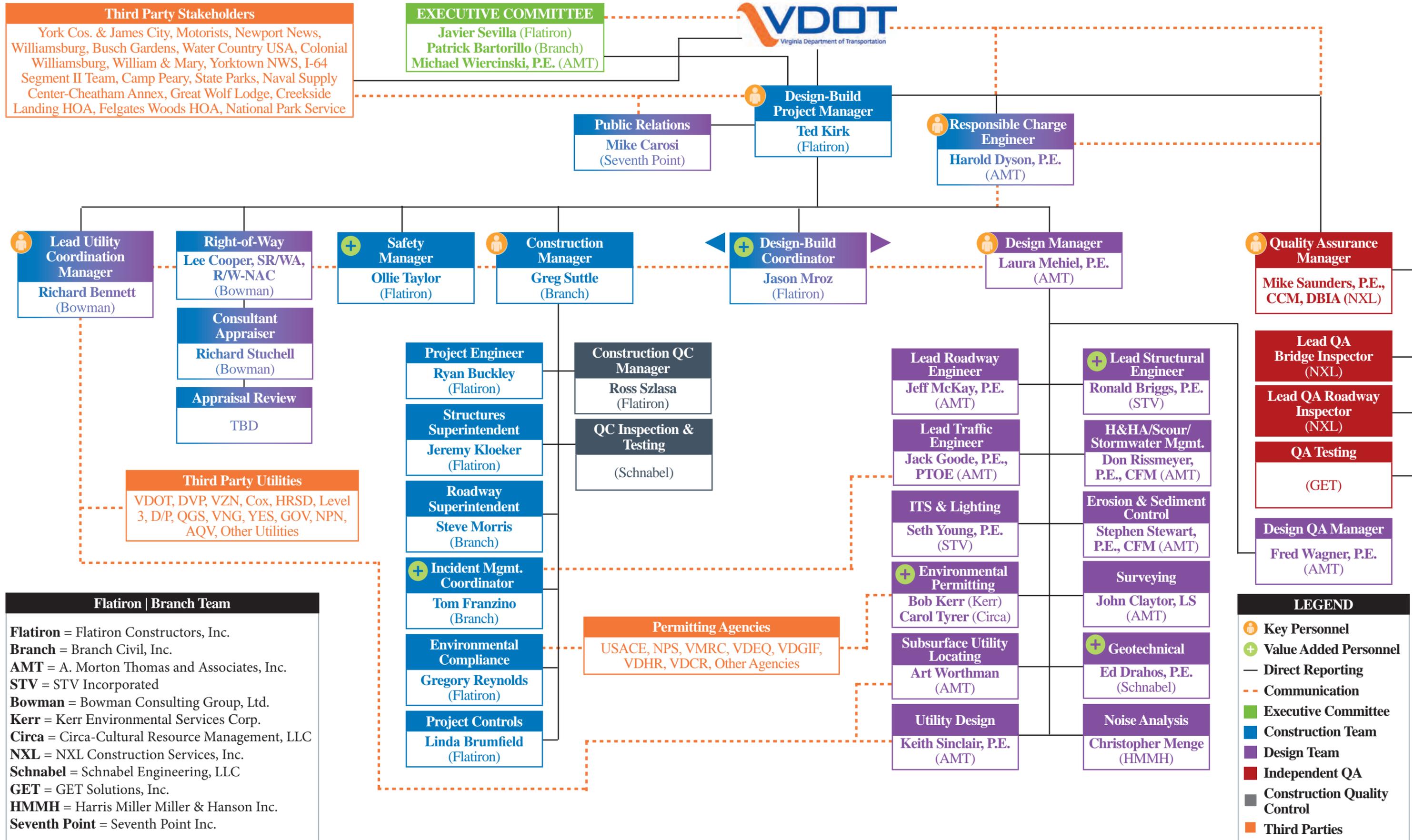
- Ollie Taylor, Safety Manager (Flatiron)
- Jason Mroz, Design-Build Coordinator (Flatiron)
- Ronald Briggs, Lead Structural Engineer (STV)
- Bob Kerr, Environmental Permitting (Kerr)
- Carol Tyrer, Environmental Permitting (Circa)
- Tom Franzino, Incident Management Coordinator (Branch)
- Ed Drahos, P.E., Geotechnical (Schnabel)

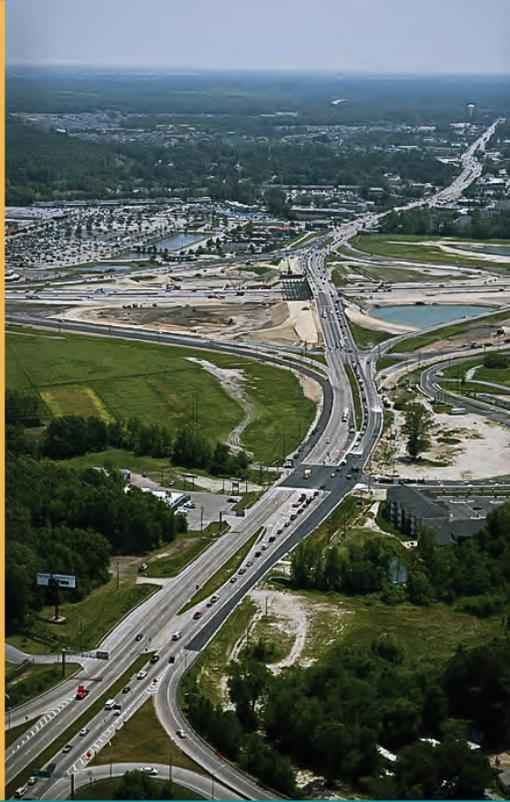
### 3.3.2 Organizational Chart

Flatiron | Branch has established an organizational chart, on the following page, that demonstrates our reporting and functional structure of our Key Personnel and Value-Added team members. Functional relationships are indicated by the solid black lines identifying the reporting relationships of our team members in managing, designing, and constructing the project. They illustrate reporting lines from the DBPM to the design and construction teams. Dashed orange lines represent primary lines of communication.

### FUNCTION OF EXECUTIVE COMMITTEE

Our Executive Committee, comprised of senior officers, will operate independently and will support the project team to provide adequate resources to ensure success of the project.





## 3.4 EXPERIENCE OF OFFEROR'S TEAM

SUBMITTED TO:



SUBMITTED BY:



## 3.4 Experience of the Offeror’s Team

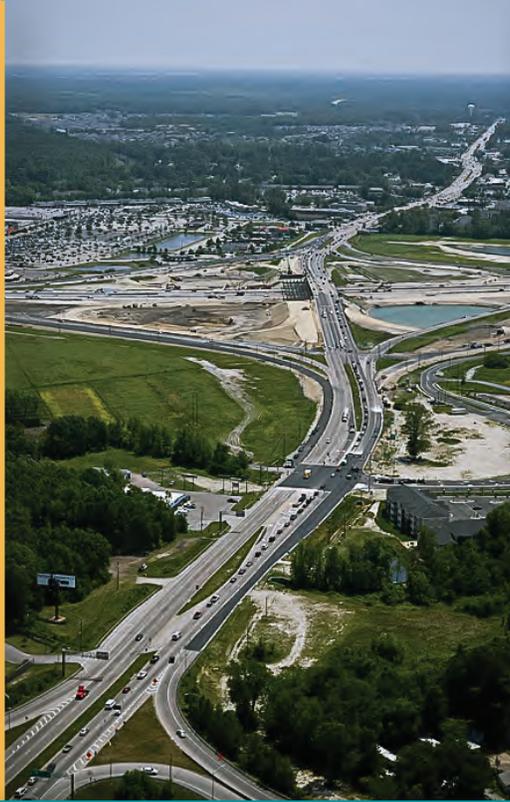
### 3.4.1 Work History Forms

Please see **Table 3.4.1 – Experience Successfully Delivering Similar Projects** for a summary of design-build and relevant projects that illustrate our background in projects of similar size and complexity. Each of these projects reflects our commitment to schedule, innovation, safety, and client partnership. Please see **Attachment 3.4.1** for our team’s recent relevant roadway and bridge construction experience.

**TABLE 3.4.1: Experience Successfully Delivering Similar Projects**

	Project Name and Location	Cost	Delivery Method	Roadway Const./Widening	Interchanges	Bridge Structures	Bridges Over Water	Environmental/Permitting	Utility Coord./Relocation	Complex MOT/High AADT	Stakeholder Relations
FLATIRON	<b>I-405 Tolled Express Lanes*</b> , Kirkland, Washington	\$155M	DB	■	■	■		■	■	■	■
	<b>I-85 Yadkin River Widening and Bridge Replacement*</b> , Salisbury, NC	\$140M	DB	■	■	■	■	■	■	■	■
	<b>Washington Bypass</b> , Washington, NC	\$140M	DB	■	■	■	■	■	■	■	■
	<b>Cooper River Bridge</b> , Charleston, SC	\$541M	DB	■		■	■	■	■	■	■
	<b>Knightdale Bypass</b> , Raleigh, NC	\$134M	DB	■	■	■	■	■	■	■	■
	<b>I-85/ I-385 Interchange</b> , Greenville, SC	\$230M	DB	■	■	■		■	■	■	■
BRANCH	<b>I-64/Battlefield Blvd.*</b> , Chesapeake, VA	\$102M	DBB	■	■	■		■	■	■	■
	<b>I-95 Express Lanes Southern Terminus Extension</b> , Stafford, VA	\$31M	DB	■		■		■	■	■	■
	<b>Route 3 Widening Improvements</b> , Culpeper, VA	\$24M	DB	■	■	■		■	■	■	■
	<b>I-95 Express Lanes</b> , Stafford, VA	\$922M	DB	■	■	■		■	■	■	■
	<b>Military Highway CFI</b> , Norfolk, VA	\$59M	DB	■	■	■		■	■	■	■
AMT	<b>US 460 Connector Phase I*</b> , Breaks, VA	\$113M	DB	■		■	■	■	■	■	■
	<b>US Route 1 at Fort Belvoir*</b> , Fairfax County, VA	\$76M	DB	■		■	■	■	■	■	■
	<b>Southgate Drive / US 460 Interchange*</b> , Blacksburg, VA	\$47M	DBB	■	■	■		■	■	■	■
	<b>InterCounty Connector</b> , Montgomery/Prince George’s County, MD	\$1.04B	DB	■	■	■	■	■	■	■	■
STV	<b>I-581 at Valley View Boulevard Interchange</b> , Roanoke, VA	\$43M	DB	■	■	■		■	■	■	■
	<b>I-95 Bridge Replacement over Meherrin River</b> , Emporia, VA	\$22M	DBB	■		■	■	■	■	■	■
	<b>Capitol Crossing Final Design</b> , Washington, DC	\$1.3B	DB	■	■	■		■	■	■	■
	<b>Fantasy Harbour Bridge</b> , Myrtle Beach, SC	\$46M	DBB	■		■	■	■	■	■	■

\* Details on these projects can be found in Attachment 3.4.1.



## 3.5 PROJECT RISKS

SUBMITTED TO:



SUBMITTED BY:



### 3.5 Project Risks

Flatiron | Branch has thoroughly reviewed the RFQ package documents as well as visited the project site to understand the existing site conditions and constraints. By using a formal risk management approach endorsed by the Construction Management Association of America, our team has identified the most relevant and critical risks, their potential impacts, and mitigation strategies. We have determined that Maintenance of Traffic (MOT), Environmental Compliance, and Geotechnical Conditions are the three most critical risks to the success of the project. Our risk management strategy will focus on design optimization; identification and monitoring potential impacts; and leveraging of team strengths from similar design-build projects as well as knowledge of the local area. The table below highlights our experience mitigating these three risks on some of our team’s similar projects.

**TABLE 3.5.1: Experience Successfully Delivering Similar Projects**

Project Name and Location	Risk #1 MOT		Risk #2 Environmental		Risk #3 Geotechnical	
	Phased Construction	Corridor Access	Environmental Permitting	Bridges over Water	Subgrade Soils	Structure Foundations
I-405 Tolled Express Lanes, Kirkland, Washington	■	■	■	■		■
I-85 Yadkin River Widening & Bridge Replacement, Salisbury, NC	■	■	■	■	■	■
I-64/Battlefield Boulevard, Chesapeake, VA	■	■				
Route 3 Widening, Culpepper County, VA	■	■	■		■	
U.S. Route 1 at Fort Belvoir, Fairfax County, VA	■	■	■	■	■	■
U.S. 460/Southgate Drive Interchange, Blacksburg, VA	■	■			■	■
I-95 Bridge Replacement over Meherrin River, Emporia, VA	■	■	■	■	■	■
I-95 Southern Terminus Extension, Stafford, VA	■	■	■		■	

#### Risk 1 – Maintenance of Traffic

**RISK IDENTIFICATION:** Design and implementation of a comprehensive MOT plan is the most critical risk for the project. I-64 is the main thoroughfare between Richmond and Hampton Roads carrying almost 100,000 Average Annual Daily Traffic (AADT). The freeway portions of the project currently operate at a Level of Service (LOS) D or E/F. Ramp weaves and interchanges also function at a LOS D or E/F. This corridor provides access for daily commuters, commercial trucks, families traveling to the beach, and tourists visiting local attractions. The existing posted speed limit is 70mph and there are heavier volumes during the AM and PM rush hour. The Transportation Management Plan (TMP) which includes temporary traffic control (i.e. MOT), public outreach, and operations along with advance warning and smart traffic measures will need to address adequate separation between the traveling public and construction, mobility concerns to reduce or minimize congestion, construction access into and out of work zones, and advanced warning/education of drivers before entering the project area.

**WHY THE RISK IS CRITICAL:** MOT is critical to provide the minimum of two efficient lanes of travel in each direction, safe ingress/egress to the work zone, and safety to the traveling public and construction workers. The following project components have been identified to demonstrate why this risk is critical:

- Proposed reconstruction of the existing pavement will require development of a phased temporary traffic control plan (TTCP) to maintain two open lanes of traffic in each direction as well as provide access to and from interchange ramps. The TTCP will also provide adequate shoulders or emergency pull-off areas for disabled vehicles and first responders.
- Multiple traffic shifts will be required to make necessary improvements. Traffic will be initially shifted to the

outside shoulders. Prior to shifting traffic, existing shoulders will be evaluated to determine if strengthening is required.

- Seasonal increase in traffic volume occurs on this section of I-64 due to visitors traveling for vacation or visiting local attractions. Construction operations and lane closures will need to be scheduled to minimize disruptions to traffic to eliminate further congestion due to the seasonal increase in volume.
- Construction access into and out of the median will affect the left thru lane of I-64. Clearly identified access points as well as sufficient acceleration and deceleration areas will require planning to allow construction to continue while minimizing impacts to the traveling public.
- Speed differentials, temporary alignment changes, and congestion within the work zone contribute to potential work zone accidents. Timely notice for advance warning and public education of work zone construction operations will help to reduce incidents and allow motorists to plan their trip.
- Close coordination with other construction projects, such as I-64 Segment II, will need to be maintained to avoid any conflicts with traffic control or construction activities.

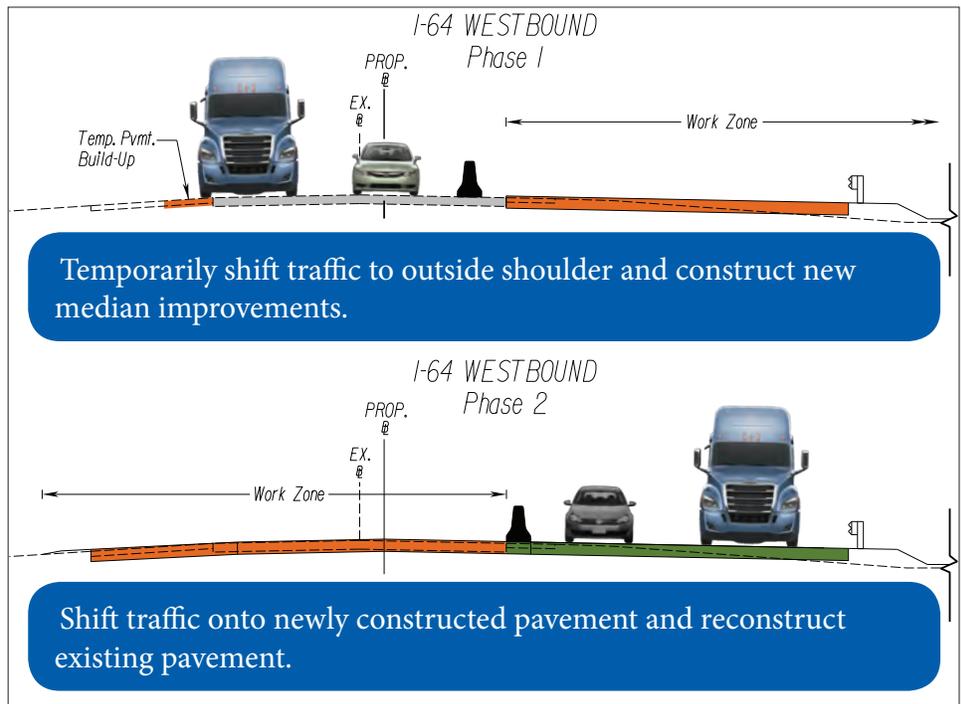
**IMPACT ON THE PROJECT:** Should issues associated with properly maintaining an effective TMP and the associated public safety concerns along the project corridor not be addressed, the following impacts may occur:

- Diminished safety for the traveling public and construction personnel.
- Further delays in driver commutes.
- Negative impacts to project stakeholders, businesses, and local attractions.
- Limited shoulder access could prevent emergency responders from traveling through the work zone and would not allow a place of refuge for disabled vehicles.
- Entering and exiting the median work zone from I-64 could cause accidents or backups.
- Conflicting work zone traffic control between the I-64 Segment II and Segment III projects.
- Loss of public support should public outreach not be clearly and properly conducted.

**MITIGATION STRATEGIES:** The Flatiron | Branch team will develop MOT/public safety solutions to address the safety of the traveling public and construction personnel; minimize the congestion during construction; address the entry and exit of construction vehicles; and educate the traveling public concerning the project. The following strategies will be implemented to mitigate the impacts associated with the MOT/public safety concerns:

- **Developing and Monitoring an Effective MOT Plan:** Our team will develop the MOT plan by reviewing the identified MOT/public safety challenges and then determining how the project can be constructed to reduce or minimize these challenges. We will prepare a detailed TMP in accordance with VDOT IIM-LD-241.6/ TED-351.4 that will include a TTCP, a Public Communications Plan, and a Transportation Operations Plan. A comprehensive team approach led by Jack Goode, PE, PTOE, Lead Traffic Engineer will be implemented and supported by Jason Mroz, Design-Build Coordinator and Tom Franzino, Incident Management Coordinator. By using this approach, the design team will obtain input from construction operations allowing the opportunity for constructability reviews which help to tailor the MOT plan so that it addresses public safety and construction operations during MOT plan development. During construction, Tom Franzino will lead the construction team to manage traffic control and will provide updates to the design team on any MOT issues. This coordination will allow our team to update the MOT plan to accommodate real-time issues.
- **Shifting Traffic and Adequate Separation between Traveling Public and Construction:** A temporary shift will be required to make necessary improvements in the median and maintain safe separation between traffic and construction activities. Similar to Branch’s Battlefield Boulevard project in Chesapeake, traffic will be shifted to the existing outside shoulder to provide sufficient room for placement of a temporary concrete barrier. This temporary barrier will provide distinct separation between traffic and construction activities while allowing median widening to commence. **Figure 3.5.1 – Phasing Plan**, on the following page, illustrates a phased construction typical section throughout various project stages.

- **Existing Shoulder:** The existing outside shoulder may require strengthening to accommodate this traffic shift. We will analyze the existing shoulder by gathering as-built information, traffic volumes, and determining the length of time traffic will need to be shifted onto the shoulder. This information will verify if the existing shoulder is adequate to support traffic or if improvements are required prior to the shift. Should the existing shoulder require strengthening, night closures will be used to strengthen four to six feet of the shoulder.



**Figure 3.5.1 – Phasing Plan**

- **Ramp Access to I-64:** To maintain the connection of I-64 interchange ramps during construction, a

detailed phasing plan will be developed to maintain these connections whenever temporary traffic shifts place traffic on the existing outside shoulder or in the area of median widening.

- **Emergency Access and Refuge:** When applicable, shoulders will be maintained to provide access for emergencies and disabled vehicles. In areas where shoulders cannot be maintained, temporary pull-off areas will be constructed.
- **Use of Lane Closures:** Our design team will evaluate current traffic volumes to determine when a lane closure will least impact traffic along the I-64 corridor. This data will then be used to develop the project schedule to minimize impacts to the traveling public and provide guidance for construction activities.
- **Construction Access and Speed Differentials:** Safe and efficient access to the median work zone is critical to keep the traveling public safe, advance construction activities, and maintain the project schedule while minimizing congestion along the I-64 corridor. Access points for median construction will be kept to a minimum with proper signage to provide drivers with advance notice. We will determine appropriate locations of median access points and construct acceleration/deceleration areas early in the construction schedule. Adequate opening lengths for these access points will be provided to minimize speed differentials that can cause congestion or vehicular accidents.
- **Improved Visibility within the Work Zone:** To improve driver visibility and awareness, use of temporary raised pavement markers and temporary lane markings wider than the minimum standard will be investigated. Lane shift geometry will be evaluated to create a smooth transition of traffic into the construction work zone. The design team will review congestion times, crash data, and construction sequencing to determine if additional improvements can be made to advance warning or changeable message signs to educate drivers before they enter the work zone.
- **Public Awareness:** Seventh Point, Inc. will lead Flatiron | Branch’s public outreach program. A Public Awareness Plan will be developed to communicate project information, updates on construction sequencing, construction activities that may impact traffic, and congestion notifications. Within the work zone, changeable message signs will provide advance warning and notification to the traveling public. Our team will work closely with VDOT Public Affairs to provide project updates through public distribution of traditional paper media, social media, VDOT’s project website, stakeholder meetings, and the Hampton Roads District. Traffic pattern

changes, delays and lane closures will be coordinated directly with the Hampton Roads Traffic Operations Center to provide motorists with real-time travel information.

- **Coordination with Adjacent Projects:** We will work with VDOT and adjacent projects such as I-64 Segment II and other nearby construction projects to coordinate construction activities.
- **Innovative Alternative Approaches to MOT:**
  - **Ramp Access:** To further minimize traffic impacts during median improvement activities, our team will evaluate use of temporary median access ramps. For example, if the bridge carrying traffic along Barlow Road over I-64 could be used to construct a ramp into the median, then temporary mechanically stabilized earth (MSE) walls could be used to create a ramp to the bridge. Additionally, along Lakeshead Drive, a possible ramp will be evaluated to provide access from Lakeshead Drive to the I-64 median. Temporary soil nail walls could be used to create a ramp between the dual bridges carrying traffic on I-64.
  - **Early Construction of Third Lane:** Early delivery of a third lane in either direction would relieve congestion. During development of our technical proposal, Flatiron | Branch will evaluate potentially providing a third lane in both the eastbound and westbound directions early in the construction schedule.



**Example of median ramp access to minimize disruptions to existing traffic.**

**ROLE OF VDOT AND OTHER AGENCIES:** The Flatiron | Branch team expects that VDOT’s role will include the typical review and approval process of the TMP and design plans, regular coordination with the D-B team regarding traffic operations, and attendance at public information meetings.

## Risk 2 – Environmental Compliance

**RISK IDENTIFICATION:** One of the most critical environmental compliance risks is the efficient and timely acquisition of all necessary permits as well as authorizations for impacts to wetlands and State Waters and Waters of the United States (hereafter Waters) for the Queen’s Creek Crossing. A well-crafted and proactive approach to address regulatory concerns associated with this crossing will be necessary to acquire all authorizations and environmental permits within the project schedule. The Queen’s Creek Crossing will be a focal point for permitting and reviewing agencies, and as such, an experienced team will need to anticipate all regulatory requirements and pro-actively address agency-specific concerns related to this environmentally sensitive portion of the project corridor.

**Environmental Compliance issues related to the Queen’s Creek Crossing is a critical risk to cost, schedule, and scope.** If this risk is not coordinated, managed, and mitigated appropriately, schedule and overall success of the project could be adversely affected.

**WHY THE RISK IS CRITICAL:** The Queen’s Creek Crossing, which encompasses the bridging of a large tidal marsh and creek, will be a critical point of regulatory concern within the overall project. This portion of the corridor will be at the intersection of numerous state and federal laws and regulations. The individual permitting process and environmental commitments associated with the NEPA documents will attract increased scrutiny by local, state, and federal entities and will require robust documentation for any impacts to the sensitive resources and habitats found at the Queen’s Creek Crossing.

There is a strong potential that regulatory agencies may introduce significant impacts to cost, schedule, and scope during the water quality permitting process. These impacts can originate from required coordination with reviewing agencies or issues related to a myriad of natural resources, which may or may not have been identified in the NEPA documentation.

Specific environmental compliance concerns that will need to be addressed at the Queen’s Creek Crossing include:

- **Management of Regulatory Authority Scope:** The fundamental purpose and need at the Queen’s Creek Crossing requires involvement of several regulatory authorities. Preliminary evaluations show the minimum impacts to wetland/Waters necessary to complete the crossing will require individual water quality permits from the USACE, VDEQ, and VMRC. Additional regulatory oversight may be required depending on design approach and project management as well as diligent management of the concerns of commenting agencies.
- **Wetland Impacts and Mitigation:** The majority of the estimated 3.4-acres of wetland/Waters impacts associated with the overall project will occur at the Queen’s Creek Crossing. Given project scope and the crossing’s location, impacts to multiple wetland/Water habitats will be likely, including:
  - Tidal open water
  - Subaqueous bottom
  - Tidal non-vegetated wetlands
  - Tidal emergent wetlands
  - Tidal scrub-shrub wetlands
  - Non-tidal emergent wetlands
  - Non-tidal forested wetlands
  - Tidal forested wetlands

In addition to efforts to minimize permanent impacts, avoiding and minimizing temporary impacts during construction will be a major focus of regulatory agencies. Resolving the means and methods of construction, duration of impacts to habitats, and potential to restore habitats will be critical to resolve permit conditions thus securing permits on-schedule.

- **Protected Species and Regulated Habitat Coordination:** The Queen’s Creek Crossing provides multiple habitats which are potentially suitable for various protected species. Coordination with the U.S. Fish and Wildlife Service will be required to determine if additional habitat surveys or Time-of-Year Restrictions (TOYRs) will be required for any federally protected species, such as the Northern Long-Eared Bat which may use the existing bridge structure or surrounding forested lands as roosting habitat. Coordination with the Virginia Department of Game and Inland Fisheries and Virginia Department of Natural Heritage may also be required for state protected species, such as the Little Brown and Tri-Colored Bats. In addition, coordination with VMRC, NOAA, and the National Marine Fisheries Services will be needed to address bridging techniques and pile driving as it relates to essential fish habitat, anadromous fish, and protected aquatic species such as the Atlantic Sturgeon which may use Queen’s Creek.
- **Stormwater Management:** Design challenges associated with treating stormwater associated with the ~900-foot-long Queen’s Creek Crossing will need to be addressed before the VDEQ Water Protection Permit can be issued. In addition to the general VDEQ Stormwater Management Guidance, VDOT’s Stormwater Management Program guidelines will need to be met and consideration will need to be given to Queen’s Creek’s designation as a Category 4A Impaired Water.

### IMPACT ON THE PROJECT:

All the above listed aspects of the Queen’s Creek Crossing will need to be addressed to the satisfaction of the permitting agencies and the many associated commenting parties before issuance of environmental permits. Ensuring that a well-orchestrated and proactive environmental compliance plan is in place for the construction of the crossing will be critical to securing reasonable permit conditions, and timely permit acquisition.

**MITIGATION STRATEGIES:** Potential risks associated with the Queen’s Creek Crossing pose significant challenges to achieving overall project success. However, a comprehensive environmental mitigation strategy, as outlined below, can significantly reduce the associated risks and help ensure project success.

- **Develop a Proactive and Collaborative Permitting Strategy:** Mapping out a critical pathway which meets specific permit application review protocols for each permitting agency will be an essential first step to mitigate impacts associated with the Queen’s Creek Crossing. Based on past experiences, the key to successfully meet the unique challenges associated with sensitive habitat crossings is to bring permitting agencies and commenting partners into the process early. Our team will schedule regular discussions with the key permitting agencies (i.e.

USACE, VDEQ, VMRC) early in the process, specifically speaking to the unique character of the Queen’s Creek Crossing. These early conversations are critical to identify any specific concerns of the permitting agencies and establish expectations for permitting review including overall schedules. This collaborative process helps to bring the design, construction, and regulatory efforts together to focus on the critical pathway to achieve project goals and minimize risks to project scope, cost and schedule. Flatiron | Branch has the proven experience with regulatory agencies to achieve consensus on appropriate avoidance and minimization actions. This helps reduce costs of mitigation while minimizing risks to the schedule associated with securing the required environmental clearances and water quality permits. Additionally, we will use pre-and post-application meetings to minimize and manage environmental risk to the project.

- **Integrated Design Coordination to Minimize Impacts:** Our environmental team will collaborate with the design and construction staff to minimize impacts associated with the Queen’s Creek Crossing. The goal is to not just accept impacts as described by the EIS, but to also identify opportunities that reduce impacts, where possible, while maintaining an aggressive schedule. Risks from design changes will be reduced through rigorous internal communication between design and environmental staff as plans are developed and changes proposed.
- **Construction Phase Monitoring:** As successfully demonstrated on other roadway projects involving Individual Permits, a thorough construction phase monitoring plan will be developed and implemented so that permitted conditions are satisfied and potential non-compliance is identified and corrected before they result in a Notice of Violation or Stop Work Order. This will be particularly critical at the Queen’s Creek Crossing, where multiple specific permit conditions are anticipated. In addition to the permit-mandated inspections, our team has found periodic visits to the site by members of the permitting team during all phases of construction helps identify potential regulatory concerns in their earliest stages. Interactions which occur between the team’s regulatory specialists and contractors at these visits also helps foster open lines of communication which encourages proactive dialogue and an understanding of how regulatory obligations interacts with specific ground conditions. This multi-level understanding of project components creates a ready-made, rapid response team which can act quickly and efficiently when unavoidable issues arise, allowing complications to be addressed promptly, and to the satisfaction of regulatory agencies.
- **Addressing Specific Environmental Concerns:** Along with being minimized through the comprehensive mitigation strategy outlined above, specific environmental compliance concerns of the Queen’s Creek Crossing will be mitigated individually:
  - **Management of Regulatory Authority and Scope:** Early in the design phase, we will identify the limits of features which will be regulated by each agency at the Queen’s Creek Crossing. Our team will focus regulatory authority on essential project elements while anticipating and minimizing avoidable regulatory oversight. For example, a Public Hearing, permitting by the Local Wetlands Board, and mitigation requirements can potentially be avoided if advanced preparations and coordination ensures all impacts are limited to lands owned and/or leased by VDOT. In addition, encroachments can likely be avoided to Camp Perry in the planning stage, which is a federal entity, a fully operational military reservation and an adjacent property owner located immediately downstream of the Queen’s Creek Crossing. Avoiding impacts to Camp Perry would prevent the need for additional federal coordination and a detailed alternative analysis, reducing project costs and schedule. Two cultural resources are at or near the crossing with one (44YO1187) being eligible for listing on the National Registry of Historic Places (NRHP) and the other (44YO513) being evaluated by VDOT and the NRHP. Our goal will be to avoid any eligible resource and remain within the proposed right-of-way (ROW) limits for additional investigations and coordination which must be performed with the Programmatic Agreement (November 2013) between VDOT and VDHR.

Regulatory scoping by our team would also include the preparation and submittal of a Coastal Zone Management Consistency Determination in the Joint Permit Application. In addition, our team would work to maintain VDOT’s finding that there are no navigable waters within or immediately adjacent to the proposed project, including the Queen’s Creek Crossing, and that Section 10, Section 408 and Coast Guard permit

considerations are not needed. Any individual impact which may increase the regulatory scope of permitting agencies or require the involvement of additional authorities will be evaluated for its impact to the critical pathway and managed to achieve peak efficiency in design and overall cost.

- **Wetland Impacts and Mitigation:** As soon as a jurisdictional determination for the corridor is provided, the team will evaluate the extent and type of all necessary temporary and permanent wetland/Waters impacts associated with the Queen’s Creek Crossing. Avoiding all unnecessary impacts will be a top priority of the team. Our approach will be to minimize and avoid all impacts while considering construction means and methods and overall costs. Considerations will be made to use the least damaging practicable impact type (i.e. indirect shading, habitat conversion, or temporary impacts) thereby making permanent impacts the last resort. Each habitat category will require specific mitigation ratios and strategies depending on the impact type. One area of clarity and elimination of duplicative mitigation cost may be in documenting that stream habitat mitigation may be unnecessary given all adjoining areas will likely be considered tidal vegetated or non-vegetated wetlands.

Mitigation requirements will be calculated and availability of mitigation credits from banks and ILF programs within the York River HUC will be determined. Although all appropriate compensatory mitigation strategies will be considered and evaluated, including project specific mitigation, an efficient mitigation strategy for the Queen’s Creek Crossing will likely necessitate the purchase of tidal and non-tidal wetland and/or stream credits from mitigation banks and an in-lieu fee program. The detailed and precise accounting of impacts will be crucial as mitigation costs can be substantial in the York River Watershed, which at the upper end are estimated to be approximately \$400,000+ per acre for tidal wetland credits and \$400+ per linear foot for stream credits. In addition, out-of-kind mitigation for impacts to tidal non-vegetated wetlands has recently become costly as the USEPA is requesting 1:1 mitigation utilizing vegetated wetlands. If appropriate, the team would apply a benthic assessment procedure for habitat conditions of the Queen’s Creek Crossing, as a means to reduce this ratio.

The most efficient and economical mitigation approach will be determined before the Joint Permit Application is submitted and the strategic purchase of any required mitigation credits will be made before construction begins in jurisdictional areas.

- **Protected Species and Regulated Habitat Coordination:** An early comprehension of the protected species within the Queen’s Creek Crossing will help inform project goals and timeliness by understanding potential impacts of TOYRs and the need for additional species specific surveys. Early coordination will begin with agencies responsible for each potential protected species and regulated habitats before permit applications are submitted including USFWS, VAFWS, VDCR, VMRC, NOAA, and the National Marine Fisheries Service. Collaboration between these agencies and the team’s permitting specialists, designers, and contractors will occur early in the design process as construction means and methods will likely have a significant influence on the potential need for TOYRs and other mitigative measures. This will be particularly important in relation to bridge construction techniques at the Queen’s Creek Crossing, such as considering the impact associated with the use of trestles versus temporary fill and selection of pile size, type (i.e. hollow, filled), and pile driving techniques. In addition to mitigating impact through design and construction methods, any potential TOYRs which may be a requirement of the project will be outlined and examined early in schedule development to ensure construction window restraints are included in the Critical pathway. We will also work to maintain the validity of all current VDOT surveys to maintain their viability through construction, such as those performed for the Small Whorled Pogonia.
- **Stormwater Management:** Since Queen’s Creek is identified as an “impaired water”, our impact areas to the creek crossing will be minimized to the greatest extent practicable. In addition, all Stormwater Management Facilities (SWMF) required associated with the crossing will either be managed in upland areas outside of NRHP eligible sites, or a detailed alternative analysis will be conducted to establish that SWMF impacts are

the Least Environmentally Damaging, Practicable Alternative as required for USACE and DEQ approval. Strict sediment and erosion control measures will also be maintained (i.e. Virginia DEQ Permit, VDOT/DEQ Approval of SWPPP Addressing E&S Control).

**ROLE OF VDOT AND OTHER AGENCIES:** VDOT’s primary and most critical role will be the timely review and approval of all environmental permitting submittals. In addition, VDOT will likely need to interact with the FHWA in their responsibility as Lead Federal Agency to review the project for compliance with Federal regulations.

### Risk 3 – Geotechnical Conditions

**RISK IDENTIFICATION:** The Flatiron | Branch team has reviewed existing geologic data and information for this site, geological mapping, and the *Geotechnical Data Report* (GDR) dated December 2, 2016 that was produced by our geotechnical engineer, Schnabel Engineering, LLC and provided by VDOT with the RFQ for this project. Based on our review of this information and our experience with transportation projects in the vicinity of the I-64 Capacity Improvements – Segment III project, we have identified unsuitable subgrade materials as a relevant and critical risk to the project. The subsurface soil conditions within the corridor of this project present a high likelihood of encountering unsuitable subgrade materials sporadically throughout the proposed 8.2-mile Segment III section.

**WHY THE RISK IS CRITICAL:** Based on information in the GDR, a 2.5-mile segment of the western portion of the project corridor is underlain with soils from the Bacons Castle Formation and a 7.5-mile segment of the eastern portion of the project corridor is underlain with soils from the Windsor Formation. The Yorktown Formation underlies both the Bacons Castle and Windsor Formations and is anticipated to be the bearing stratum for the deep foundations of the bridge structures. Composed of thinly bedded and fine grained sands and lean clays, laboratory testing for the Bacons Castle Formation, as presented in the GDR, indicate variations in soil liquid limits, plasticity index, and natural moisture content. The Windsor Formation is composed predominantly of sandy clay and clayey sand with silt and traces of gravel. These soils exhibit wide variations in liquid limits, plasticity index, natural moisture content, and tend to have more pockets of material with lower California bearing ratio (CBR) value than the Bacon Castle Formation. Additionally, soils of the Windsor Formation are typically less dense and more compressible than the Bacons Castle Formation. In the area of Queens Creek, loose to medium dense alluvial sands were encountered below and adjacent to the creek.

Under the scope of this project, the existing lanes of I-64 are required to be fully reconstructed with full-depth pavement. In addition, a new 12-foot-wide travel lane and 12-foot-wide paved shoulder will be added in each direction with the majority of widening toward the median. Acceleration and deceleration lanes will be lengthened. Proposed structure work includes the replacement of the existing I-64 bridges over Queens Creek, the repair and widening of I-64 bridges over Colonial Parkway and Lakeshead Drive and a 2,050-foot long retaining wall along widened WBL beginning east of the Rte. 143 Interchange. The presence of the soil conditions, as outlined above, create the risk to the overall project schedule and to overruns of project cost.

Soil borings and GDR indicate potential variable unsuitable soil conditions of the upper existing subgrade soils throughout the project limits that create a risk to project schedule and cost:

- **Unsuitable Subgrade Materials:** Subgrade soils with low CBR, high-plasticity index or high moisture content may not meet the requirements of strength and compaction to adequately support the pavement structure. This potentially results in under-performing pavement which can lead to pavement reconstruction and an increase in long-term maintenance costs.
- **Settlement of Roadway Embankments:** Soft soil strata can lead to excessive settlements as fill is placed. Further risks of differential settlements between existing pavement structure and new median infills can impact traffic flow during construction and can adversely impact schedule.
- **Downdrag on Bridge Foundations:** Settlement of bridge approach fills due to soft soils can result in added loads on deep foundation piles and a corresponding reduction in pile capacity, and an increase in project cost.
- **Retaining Wall Foundation Bearing Capacity and Settlements:** Potentially unsuitable soils encountered at the approximate retaining wall subgrade elevation could result in bearing capacity and settlement problems.

**IMPACT ON THE PROJECT:** Variable and unknown subgrade conditions of the project corridor may impact the project schedule as well as costs associated with mitigation efforts to modify and/or replace the soils. Specific project impacts associated with the geotechnical risk include:

- **Unsuitable Subgrade Materials:** Presence of unsuitable subgrade soils will require removal or modification. This creates an additional safety risk to the traveling public due to an increased volume of trucks entering/exiting the project site, and this risk is compounded by the majority of work being performed in the median between travel lanes of the interstate. Additionally, on-site soil modification can adversely impact schedule and is limited by the constraints of working in the confined median area.
- **Settlement of Roadway Embankments:** Soft and/or compressible soils may impact the schedule due to potential long-term settlements. Excessive settlements along new embankments or differential settlements between new and existing embankment fills along the roadway and bridge approaches can decrease the integrity of the pavement structure.
- **Bridge Foundations:** Although we anticipate that bridge foundations will be founded in the Yorktown stratum, variable unsuitable soils in the upper strata can impact bridge structures by adding downdrag on piles. Additionally, the loose alluvial sands near the creek increases the likelihood and potential depth of scour at the proposed Queens Creek bridges. The soil conditions add risk to the project schedule and cost.
- **Retaining Wall Foundations:** The presence of unsuitable soils at the foundation subgrade elevation could require undercut and replacement or subgrade stabilization to reduce potential settlement and improve the bearing capacity for shallow foundations and/or MSE walls. A permanent tieback retaining wall could be an alternative at this location.

**MITIGATION STRATEGIES:** Flatiron | Branch has teamed with Schnabel due to their unique knowledge of the project corridor having completed the GDR for VDOT's RFQ package for the I-64 Project, and provided geotechnical engineering services in the Williamsburg area for more than 40 years. Our mitigation strategies will include the following:

- A well-planned field exploration and laboratory testing program focused on identifying and mitigating the geotechnical risk associated with variable unsuitable soil conditions. For example, Schnabel was recognized on the I-81 Truck Climbing Lane design-build project in Rockbridge County in which most of the soils locally available for use as fill would be considered unsuitable for use as embankment fill due to high-plasticity. Schnabel devised a laboratory testing program that demonstrated the high-plasticity soils would have sufficient strength and CBR value to be used as embankment fill on the project. A reliability analyses was then used to show that the use of the high-plasticity soils in embankments would meet factor of safety requirements for slope stability and settlement.
- Additional sampling of subsurface soils and pavement coring to further delineate areas of concern to include potential subgrade problem areas in proposed areas of pavement widening; deep soft soil strata; areas with excessive moisture content or poor drainage; excessive organic materials; and problem areas at the locations of proposed structures.
- Shoulder strengthening may be required when traffic is temporarily shifted during construction. A supplemental detailed pavement evaluation will be performed and may include a patching survey, pavement coring, falling-weight deflectometer testing, and ground-penetrating radar testing to evaluate the condition of the existing shoulders and if strengthening these shoulder areas is required.
- Investigation and development of material treatment strategies during design to reduce the amount of material to be hauled from the site and disposed. Material treatment may include cement or lime stabilization; use of geogrid and geotextile fabrics; and scarification and drying of excessively wet materials. By using on-site materials, imported subgrade materials will be reduced which will further decrease truck traffic to the site, increase safety of the traveling public, and reduce overall project costs. On Branch's Route 3 Widening project in Culpeper County, some of the residual clay soils of the Culpeper Basin were considered unsuitable for use as embankment

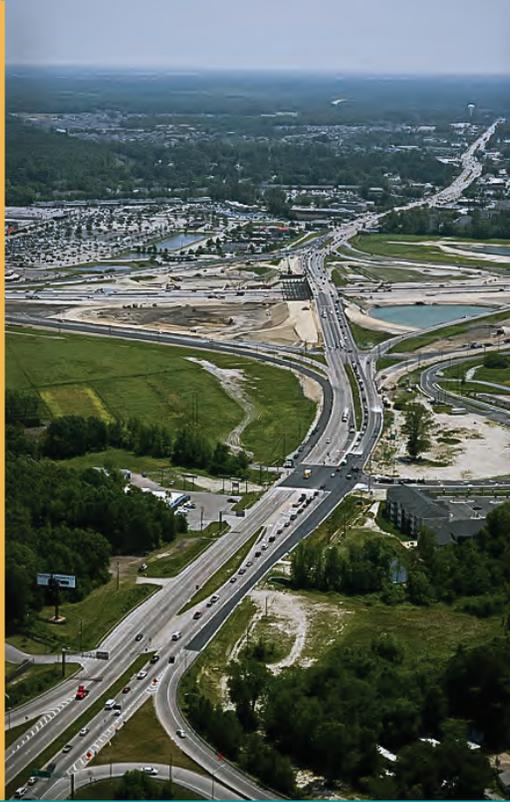
fill and as pavement subgrade due to high moisture content and low CBR value. Schnabel provided recommendations to modify pavement subgrades using lime to lower the soil moisture content for compaction, to increase the CBR value of the subgrade soils, and stabilize unsuitable subgrade soils below embankments in low-lying areas using geotextiles.

- Areas where excessive settlement of roadway embankments may be encountered due to the compressibility of the underlying soils will be identified. During design, primary and secondary consolidation will be evaluated and the construction schedule adjusted to allow early embankment fills in specific areas to allow sufficient time for settlement without impact to the overall project schedule. If additional mitigation strategies are required, we will consider undercut and soil replacement; surcharge of embankments; improvements to cross drainage to accelerate dewatering of saturated soils; and geotextile stabilization.
- During field exploration, samples from structure borings for the Queens Creek bridges will be obtained. Soil classification, grain-size analysis (D50), and Atterberg Limits testing will be performed to facilitate evaluation of potential scour depths at each substructure unit. Soil properties of soft upper layers will be analyzed to determine the impacts of downdrag on foundation piles. Additionally, the boring log stratigraphy will be plotted to determine the required depth of deep foundations. Downdrag on piles due to settlement of upper layers can be mitigated by oversizing foundation piles; adjusting the construction schedule to allow primary settlement of subsurface soils prior to driving of piles; using lightweight fill material to minimize settlements; and using coatings or jackets on piles to reduce friction of the subsurface soils as they consolidate.
- During field exploration, samples from structure borings taken at retaining wall locations will be analyzed to determine the potential for short and long-term settlements and to facilitate the selection of foundation type.
- Schnabel will be integrated within the design team. Essential recommendations for design will be based on long-term performance and risk. Locations where unsuitable soils are present will be delineated on project drawings and a soils remediation plan will be developed prior to construction.
- During construction, as an integral member of the construction team, Schnabel will assist Flatiron | Branch by developing an installation plan for roadway embankments and foundation construction. Schnabel will visit the site to review cut/fill and foundation installation operations; verify that work is consistently completed within geotechnical recommendations; and modify recommendations, if needed, based on conditions encountered.



**Remediation of unsuitable soils on the Route 3 Widening project.**

**ROLE OF VDOT AND OTHER AGENCIES:** All proposed geotechnical exploration locations, types, and associated laboratory testing program will be shared with the team and VDOT representatives prior to field activities. This advance submission allows for review comments and suggestions to be incorporated into the program without affecting the design schedule. Additionally, our team will inform and coordinate with VDOT when challenging subsurface conditions are identified during the design phase and will vet through VDOT our planned mitigation strategies. We do not anticipate VDOT or others to help identify and mitigate geotechnical risks identified herein.



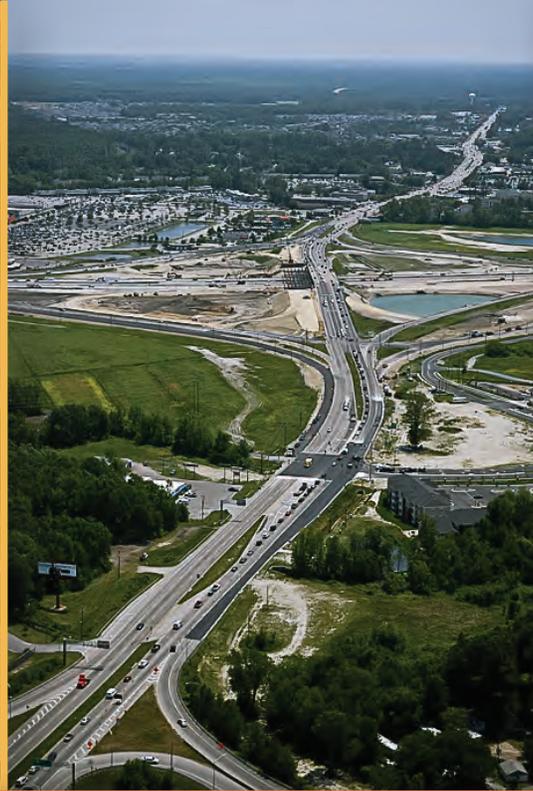
# APPENDICES

SUBMITTED TO:



SUBMITTED BY:





## 3.1.2 SOQ CHECKLIST

SUBMITTED TO:



SUBMITTED BY:



**ATTACHMENT 3.1.2**

**Project: 0064-965-229, Contract ID: C00106689DB97**

**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	<b>A-1 to A-3</b>
<b>Acknowledgement of RFQ, Revision and/or Addenda</b>	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	<b>A-4</b>
<b>Letter of Submittal (on Offeror's letterhead)</b>				<b>1</b>
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	A-5 to A-7
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	A-8 to A-19
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	A-20 to A-23
Evidence of obtaining bonding	NA	Section 3.2.9	no	A-24 to A-49

**ATTACHMENT 3.1.2**

**Project: 0064-965-229, Contract ID: C00106689DB97**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

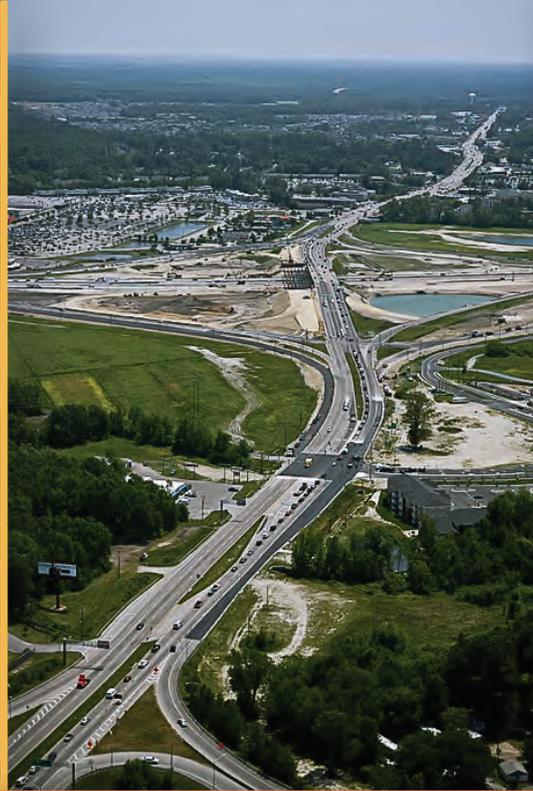
Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
<b>SCC and DPOR registration documentation (Appendix)</b>	Attachment 3.2.10	Section 3.2.10	no	A-50 to A-53
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	A-54 to A-81
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	A-82 to A-90
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	A-91 to A- 92
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	A-92 to A-96
<b>DBE statement within Letter of Submittal</b> confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	<b>1</b>
<b>Offeror's Team Structure</b>				<b>2</b>
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	2-3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	A-97 to A-98
Key Personnel Resume – RCE	Attachment 3.3.1	Section 3.3.1.1	no	A-99 to A-100
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	A-101 to A-102

**ATTACHMENT 3.1.2**

**Project: 0064-965-229, Contract ID: C00106689DB97**

**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	A-103 to A-104
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	A-105 to A-106
Key Personnel Resume – Lead Utility Coordination Manager	Attachment 3.3.1	Section 3.3.1.5	no	A-107 to A-108
Organizational chart	NA	Section 3.3.2	yes	3
Organizational chart narrative	NA	Section 3.3.2	yes	4
<b>Experience of Offeror’s Team</b>				5
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	A-109 to A-111
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	A-112 to A-114
<b>Project Risk</b>				6-15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	6-15



## 2.10 FORM C-78-RFQ

SUBMITTED TO:



SUBMITTED BY:



**ATTACHMENT 2.10**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

PROJECT: I-64 Capacity Improvements – Segment III  
RFQ NO. C00106689DB97  
PROJECT NO.: 0064-965-229

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

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

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

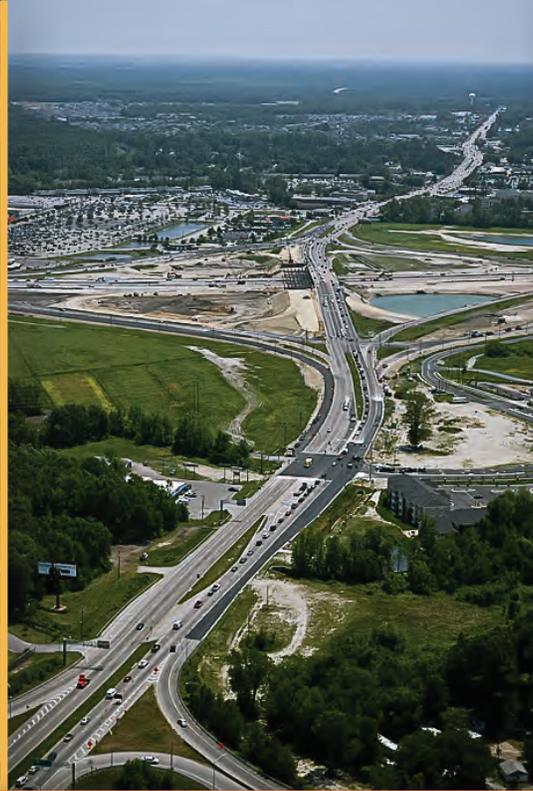
1. Cover letter of RFQ – March 29, 2017  
(Date)
2. Cover letter of \_\_\_\_\_  
(Date)
3. Cover letter of \_\_\_\_\_  
(Date)

  
SIGNATURE

05/02/2017  
DATE

DENNIS L. STODDARD  
PRINTED NAME

VICE PRESIDENT  
TITLE



## 3.2.6 LIST OF AFFILIATED AND SUBSIDIARY COMPANIES

SUBMITTED TO:



SUBMITTED BY:



## ATTACHMENT 3.2.6

**State Project No. 0064-965-229, Contract ID: C00106689DB97**

### **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>

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate	Flatiron Corp.	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Subsidiary	Flatiron West, Inc.	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Subsidiary	FECO Equipment LLC	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Subsidiary	Flatiron Constructors Canada Limited	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Subsidiary	Flatiron Equipment Company Canada Limited	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Affiliate	Flatiron/Dragados LLC	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Affiliate	Flatiron/Dragados, LLC	500 North Shoreline Blvd. Suite 500 Corpus Christi, TX 78404
Affiliate	Flatiron/AECOM, LLC	7852 South Elati Street Littleton, CO 80120
Affiliate	Dragados / Flatiron JV	1775 Park Street, Bldg 75 Selma, CA 93662
Affiliate	Flatiron / Kiewit JV	1051 Edie Road San Francisco, CA, 94129
Affiliate	Dragados / Sukut / Flatiron JV	12750 Calaveras Rd Fremont Ca 94539

## ATTACHMENT 3.2.6

**State Project No. 0064-965-229, Contract ID: C00106689DB97**

### **Affiliated and Subsidiary Companies of the Offeror**

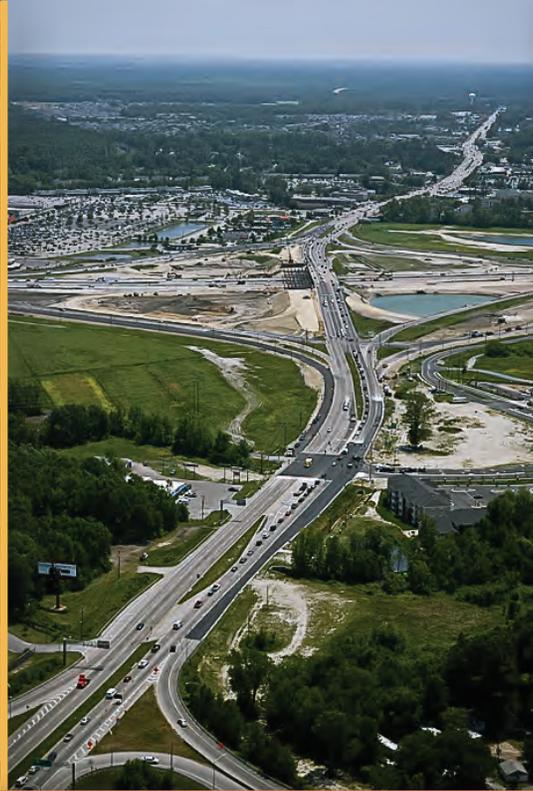
<b>Affiliate</b>	<b>Turner/ Goodfellow Topgrade / Flatiron JV</b>	<b>1111 Broadway, Suite 2100 Oakland, CA 94607</b>
<b>Affiliate</b>	<b>Flatiron-Lane, a JV</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>
<b>Affiliate</b>	<b>Flatiron-Blythe Development, a JV</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>
<b>Affiliate</b>	<b>Flatiron-Zachry, a JV</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>
<b>Affiliate</b>	<b>Turner-Flatiron, A Joint Venture</b>	<b>5500 Greenwood Plaza Blvd, Suite 220 Greenwood Village, CO 80111</b>
<b>Affiliate</b>	<b>Flatiron-Graham-Parsons, a Joint Venture</b>	<b>210-4020 Viking Way Richmond, BC V6V 2N2</b>
<b>Affiliate</b>	<b>Flatiron-Graham, a Joint Venture</b>	<b>4020 Viking Way Richmond, BC V6V 2N2</b>
<b>Affiliate</b>	<b>Flatiron/Dragados/Aecom/Lafarge Joint Venture</b>	<b>12009 Meridan Street NE Edmonton, AB T6S 1B8</b>
<b>Affiliate</b>	<b>Flatiron-Dragados, a Joint Venture</b>	<b>10400 Hayward Street Mission BC V4S 1H8</b>
<b>Affiliate</b>	<b>Graham-Flatiron Joint Venture</b>	<b>10909 27<sup>th</sup> Street SE Calgary, AB T2H 2G7</b>
<b>Affiliate</b>	<b>Rokstad/Flatiron Joint Venture</b>	<b>80 Golden Dr. Coquitlam, BC V3K 6T1</b>
<b>Affiliate</b>	<b>Kiewit Flatiron General Partnership</b>	<b>#310, 4350 Still Creek Drive Burnaby, BC V5C 0G5</b>
<b>Affiliate</b>	<b>Trans-Park Highway Constructors</b>	<b>210-4020 Viking Way Richmond, BC V6V 2N2</b>
<b>Affiliate</b>	<b>Stoney Trail Constructors</b>	<b>210-4020 Viking Way Richmond, BC V6V 2N2</b>
<b>Affiliate</b>	<b>Signature on the Saint Lawrence General Partnership</b>	<b>8, Place du Commerce, Bureau 300 Verdun, QC H3E 1N3</b>

**ATTACHMENT 3.2.6**

**State Project No. 0064-965-229, Contract ID: C00106689DB97**

**Affiliated and Subsidiary Companies of the Offeror**

<b>Affiliate</b>	<b>Flatiron   Branch, a Joint Venture</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>
<b>Affiliate (Parent Company to Branch)</b>	<b>The Branch Group, Inc.</b>	<b>P.O. Box 40004 Roanoke, Virginia 24022</b>
<b>Affiliate</b>	<b>Branch and Associates, Inc.</b>	<b>P.O. Box 40051 Roanoke, Virginia 24022</b>
<b>Affiliate</b>	<b>G.J. Hopkins, Inc.</b>	<b>P.O. Box 12467 Roanoke, Virginia 24025</b>
<b>Affiliate</b>	<b>Corman – E.V. Williams, a Joint Venture</b>	<b>12001 Guilford Road Annapolis Junction, MD 20701</b>
<b>Affiliate</b>	<b>Balfour Beatty Infrastructure, Inc. / E.V. Williams, Inc. JV</b>	<b>430 Eastwood Road Wilmington, NC 28403</b>
<b>Affiliate</b>	<b>Flatiron   Branch, a Joint Venture</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>
<b>Affiliate</b>	<b>Corman – Branch JV</b>	<b>442 Rutherford Ave., N.E. Roanoke, VA 24016</b>



## 3.2.7 DEBARMENT FORMS

SUBMITTED TO:



SUBMITTED BY:



ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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.

Ted K...  
Signature

April 24, 2017  
Date

Vice President  
Title

FLATIRON  
Name of Firm

**ATTACHMENT NO. 3.2.7(a)**

**CERTIFICATION REGARDING DEBARMENT  
PRIMARY COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**  
**Project No.: 0064-965-229**  
**Contract ID: C00106689DB97**

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

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

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

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

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

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

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

  
Signature

5/2/2017  
Date

President  
Title

Branch Civil, Inc.  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

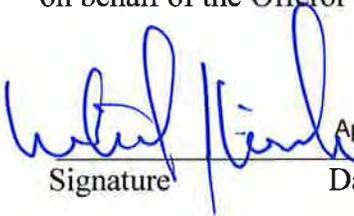
**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

April 18, 2017

\_\_\_\_\_  
Date

Principal

\_\_\_\_\_  
Title

A. Morton Thomas and Associates, Inc.

\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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.

*ERCapps*

May 2, 2017

Senior Vice President

Signature

Date

Title

E. Ricard Capps Jr., P.E.

STV Incorporated dba STV Group Incorporated

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**  
**Project No.: 0064-965-229**  
**Contract ID: C00106689DB97**

- 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.

	4/14/2017	
Signature	Date	Chief Legal Officer
		Title

Bowman Consulting Group, Ltd.  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

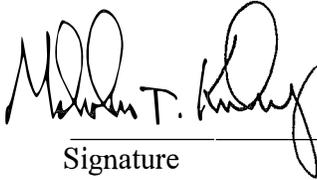
**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

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



April 13, 2017

Malcolm T Kerley, PE, President

Signature

Date

Title

NXL Construction Services, Inc

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

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

*Edward G. Draloz*

April 17, 2017

Senior Vice President

Signature

Date

Title

Schnabel Engineering, LLC

Name of Firm

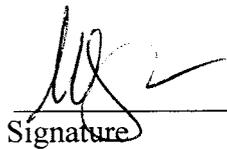
**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**  
**Project No.: 0064-965-229**  
**Contract ID: C00106689DB97**

- 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

4/14/17

\_\_\_\_\_  
Date

President & CEO

\_\_\_\_\_  
Title

Harris Miller Miller & Hanson Inc.

\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

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



4/17/2017

President

Signature

Date

Title

GET Solutions, Inc.

---

Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

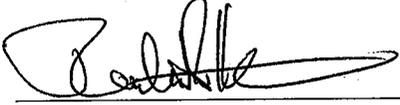
**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

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

 9/28/17      President  
Signature                      Date                      Title  
Robert P. Kerr, President  
Kerr Environmental Services Corp.  
Name of Firm

ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**  
**Project No.: 0064-965-229**  
**Contract ID: C00106689DB97**

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

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

<u>Carol D Tyra</u>	April 26, 2017	President
Signature	Date	Title

Circa~ Cultural Resource Management, LLC  
\_\_\_\_\_  
Name of Firm

**ATTACHMENT NO. 3.2.7(b)**

**CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS**

**Project: I-64 Capacity Improvements – Segment III**

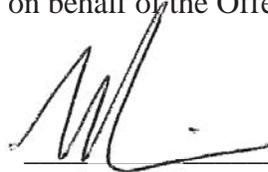
**Project No.: 0064-965-229**

**Contract ID: C00106689DB97**

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

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



4/17/2017

VP of Public Affairs

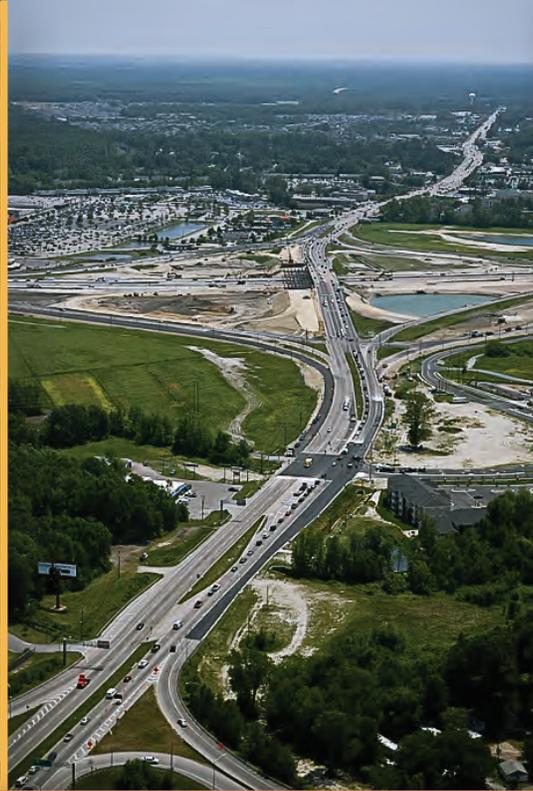
Signature

Date

Title

Seventh Point Transportation PR

Name of Firm



# OFFEROR'S VDOT PREQUALIFICATION CERTIFICATE

SUBMITTED TO:



SUBMITTED BY:



## Walker, Jodi

---

**From:** Morrison, Roberta  
**Sent:** Thursday, April 27, 2017 11:44 AM  
**To:** Walker, Jodi  
**Cc:** Joy, Brandon  
**Subject:** Your assigned Joint Venture # is JV086

**Importance:** High

**From:** Prequalification (VDOT) [<mailto:Prequalification@VDOT.Virginia.gov>]  
**Sent:** Thursday, April 27, 2017 11:31 AM  
**To:** Kirk, Ted <[tkirk@flatironcorp.com](mailto:tkirk@flatironcorp.com)>  
**Cc:** Morrison, Roberta <[RMorrison@flatironcorp.com](mailto:RMorrison@flatironcorp.com)>  
**Subject:** Your assigned Joint Venture # is JV086  
**Importance:** High

Flatiron Constructors, Inc.  
Branch Civil, Inc.

Thank you for submitting the Joint Venture agreement to the Prequalification Office.  
We have processed the paperwork and the  
Joint Venture: Flatiron/Branch Civil II, a Joint Venture is assigned the # **JV086**

(Please forward this email to Branch Civil, Inc.)

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

Thank-you

*Suzanne Lucas*, CAPM

State Prequalification Supervisor  
Construction Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219  
(804) - 786-2941

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

## Walker, Jodi

---

**From:** DePorter, Katie  
**Sent:** Tuesday, April 11, 2017 2:16 PM  
**To:** Walker, Jodi  
**Subject:** Fwd: I-64 Peninsula Widening Segment III, Hampton Roads Dist. UPC 106689 Waiver Request

----- Original message -----

From: "Silies, Don E. (VDOT)" <[Don.Silies@VDOT.Virginia.gov](mailto:Don.Silies@VDOT.Virginia.gov)>  
Date: 4/11/17 2:03 PM (GMT-07:00)  
To: "DePorter, Katie" <[KDeporter@flatironcorp.com](mailto:KDeporter@flatironcorp.com)>  
Subject: RE: I-64 Peninsula Widening Segment III, Hampton Roads Dist. UPC 106689 Waiver Request

I have reviewed the qualifications of Flatiron Constructors, Inc. and I find them acceptable for the purpose of submitting a proposal on the captioned project. Therefore, I hereby waive the contract dollar value limit imposed by your Probationary Prequalification status for this project. VDOT is looking forward to Flatiron's submittal on this project.

*Don E. Silies*

Director of Contracts

(804) 786-1630





COMMONWEALTH OF VIRGINIA



## CERTIFICATE OF QUALIFICATION

### FLATIRON CONSTRUCTORS, INC.

Vendor Number: **F319**

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

**PREQUALIFIED (CURRENTLY INACTIVE)**

Your firm specializes in the noted Classification(s):

**MAJOR STRUCTURES; MARINE CONSTRUCTION; BRIDGE REPAIRS; EXCAVATING**

Issue Date: August 18, 2016

This Rating and Classification will Expire: May 31, 2017

Suzanne FR Lucas, State Prequalification Officer

Don E. Silles, Director of Contracts

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



COMMONWEALTH OF VIRGINIA



A-23

# CERTIFICATE OF QUALIFICATION

## BRANCH CIVIL, INC.

Vendor Number: **B319**

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

### PREQUALIFIED

Your firm specializes in the noted Classification(s):

**GRADING; MAJOR STRUCTURES; UNDERGROUND UTILITIES**

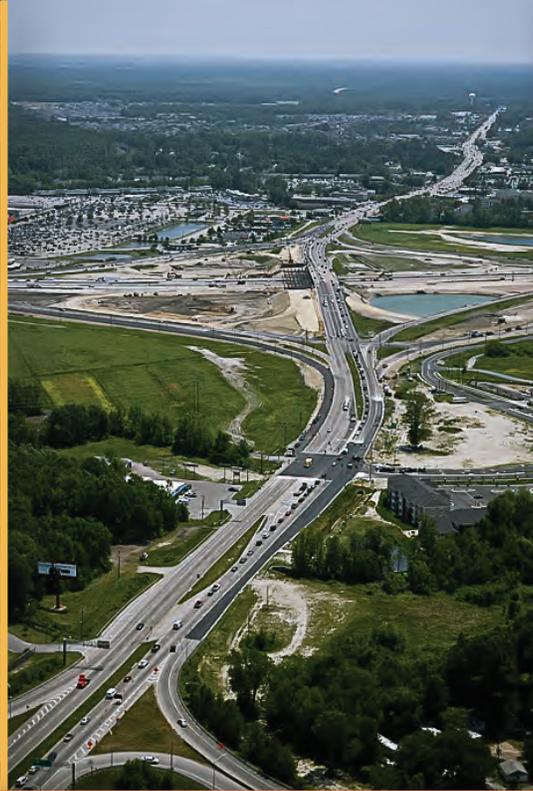
**Issue Date:** February 28, 2017

**This Rating and Classification will Expire:** February 28, 2018

Suzanne FR Lucas, State Prequalification Officer

Don E. Silies, Director of Contracts

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



# SURETY LETTER

SUBMITTED TO:



SUBMITTED BY:



April 25, 2017

Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

Re: **Flatiron/Branch Civil, a Joint Venture**  
Request For Qualifications A Design-Build Project  
I-64 Capacity Improvements – Segment III  
From: 1.15 Miles West of Route 199 (Lightfoot) To: 1.05 West of Route 199 (Humelsine Parkway)  
Contract ID Number: C00106689DB97  
Estimated Contract Value: \$240,000,000.00

Gentlemen:

This letter confirms that Flatiron/Branch Civil, a Joint Venture comprised of Flatiron Constructors, Inc. and Branch Civil, Inc. is supported by the following co-sureties, Liberty Mutual Insurance Company, Travelers Casualty and Surety Company of America, Zurich American Insurance Company, Federal Insurance Company, The Continental Insurance Company, Berkshire Hathaway Specialty Insurance Company and Hartford Fire Insurance Company. All Sureties are listed in the U.S. Treasury Circular 570 dated July 1, 2016 and licensed to do business in all States.

The undersigned sureties agree that, Flatiron/Branch Civil, a Joint Venture is well qualified to perform the above captioned project. Furthermore, the undersigned sureties confirm the joint venture is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond based on the current estimated contract value referenced in Section 2.1 of the RFQ which bonds will cover the Project and any warranty periods in the event the Team is the successful bidder and enters into a contract for this Project.

The standard underwriting procedures in the surety industry would be performed prior to any final approvals and would be contingent on the satisfactory review of contract documents, confirmation of financing, acceptable payment provisions, acceptable bond forms, etc. As this letter is provided to document the abilities of Flatiron/Branch Civil, a Joint Venture, we assume no liability to third parties or to you by issuance of this letter.

We are pleased to share with you our favorable experience and high regard for Flatiron/Branch Civil, a Joint Venture.

Sincerely,

Liberty Mutual Insurance Company – A.M. Best Rating A XV  
175 Berkeley Street, Boston, MA 02116 (A Massachusetts Corporation)

Travelers Casualty and Surety Company of America – A.M. Best Rating A++ XV  
Construction Services, One Tower Square, Hartford, CT 06183 (A Connecticut Corporation)

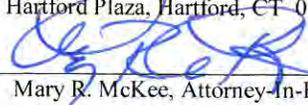
Zurich American Insurance Company – A.M. Best A+ XV  
1299 Zurich Way, Schaumburg, IL 60196 (A New York Corporation)

Federal Insurance Company – A.M. Best rating – A++ XV  
15 Mountain View Road, Warren, NJ 07061 (An Indiana Corporation)

The Continental Insurance Company – A.M. Best Rating – A XV  
333 Wabash Avenue, Chicago, IL 60604 (A Pennsylvania Corporation)

Berkshire Hathaway Specialty Insurance Company – A.M. Best Rating A++ XV  
100 Federal Street, 20<sup>th</sup> Floor, Boston, MA 02110 (A Nebraska Corporation)

Hartford Fire Insurance Company – A.M. Best Rating – A+ XV  
One Hartford Plaza, Hartford, CT 06155-0001 (A Connecticut Corporation)

By:   
Mary R. McKee, Attorney-In-Fact

**CORPORATE ACKNOWLEDGMENT**

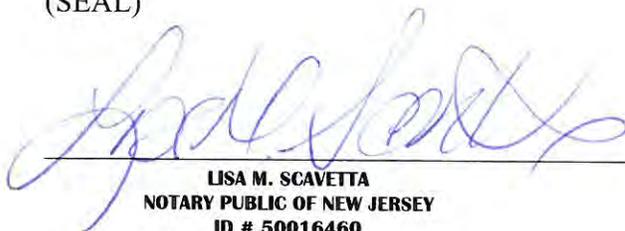
Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came MARY R. McKEE to me known, who, being by me duly sworn, did depose and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is the ATTORNEY IN FACT of the LIBERTY MUTUAL INSURANCE COMPANY the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**



LIBERTY MUTUAL INSURANCE COMPANY  
FINANCIAL STATEMENT — DECEMBER 31, 2015

<b>Assets</b>		<b>Liabilities</b>	
Cash and Bank Deposits.....	\$753,038,641	Unearned Premiums.....	\$6,580,520,311
*Bonds — U.S Government.....	1,547,613,446	Reserve for Claims and Claims Expense.....	16,917,138,677
*Other Bonds.....	11,088,162,545	Funds Held Under Reinsurance Treaties.....	210,794,503
*Stocks.....	9,919,835,033	Reserve for Dividends to Policyholders.....	358,033
Real Estate.....	295,926,247	Additional Statutory Reserve.....	29,659,093
Agents' Balances or Uncollected Premiums.....	4,487,501,643	Reserve for Commissions, Taxes and	
Accrued Interest and Rents.....	120,872,424	Other Liabilities.....	<u>2,789,478,276</u>
Other Admitted Assets.....	<u>14,130,266,527</u>	<b>Total.....</b>	<b><u>\$26,527,948,893</u></b>
<b>Total Admitted Assets.....</b>	<b><u>\$42,343,216,506</u></b>	Special Surplus Funds.....	\$67,890,944
		Capital Stock.....	10,000,000
		Paid in Surplus.....	8,829,183,823
		Unassigned Surplus.....	6,908,192,846
		<b>Surplus to Policyholders.....</b>	<b><u>15,815,267,613</u></b>
		<b>Total Liabilities and Surplus.....</b>	<b><u>\$42,343,216,506</u></b>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values.  
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2015, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 15th day of March, 2016.

*T. Mikolajewski*

\_\_\_\_\_  
Assistant Secretary

**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7673879

Liberty Mutual Insurance Company  
The Ohio Casualty Insurance Company West American Insurance Company

**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Elliot W. Wolfe; Lisa M. Scavetta; Maria L. Spadaccini; Mary R. McKee; Nicholas F. Walsh; Sherryanne M. DePirro; Vincent C. Miseo

all of the city of Paramus, state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 17th day of March, 2017.



The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
West American Insurance Company

By: David M. Carey  
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss  
COUNTY OF MONTGOMERY

On this 17th day of March, 2017, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute 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 have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Teresa Pastella, Notary Public  
Upper Merion Twp., Montgomery County  
My Commission Expires March 28, 2021  
Member, Pennsylvania Association of Notaries

By: Teresa Pastella  
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

**ARTICLE IV – OFFICERS** – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings.** Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, 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 APR 25 2017 day of \_\_\_\_\_, 20\_\_\_\_\_.



By: Renee C. Llewellyn  
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

**CORPORATE ACKNOWLEDGMENT**

Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came  
MARY R. McKEE to me known, who, being by me duly sworn, did depose  
and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is  
the ATTORNEY IN FACT of the TRAVELERS CASUALTY AND SURETY  
COMPANY OF AMERICA the corporation described in and which executed the above  
instrument that she/he knows the seal of said corporation; that the seal affixed to said  
instrument is such corporate seal; that it was so affixed by order of the Board of Directors  
of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2015

CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
CASH AND INVESTED CASH	\$ 54,550,881	UNEARNED PREMIUMS	\$ 862,633,464
BONDS	3,500,572,638	LOSSES	735,725,171
STOCKS	245,901,111	LOSS ADJUSTMENT EXPENSES	278,900,106
INVESTMENT INCOME DUE AND ACCRUED	43,905,720	COMMISSIONS	35,398,814
OTHER INVESTED ASSETS	3,580,975	TAXES, LICENSES AND FEES	11,351,717
PREMIUM BALANCES	200,990,913	OTHER EXPENSES	39,486,867
NET DEFERRED TAX ASSET	65,751,186	CURRENT FEDERAL AND FOREIGN INCOME TAXES	15,158,620
REINSURANCE RECOVERABLE	22,532,968	REMITTANCES AND ITEMS NOT ALLOCATED	4,995,722
SECURITIES LENDING REINVESTED COLLATERAL ASSETS	11,772,178	AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	33,959,553
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	29,659,492	RETROACTIVE REINSURANCE RESERVE ASSUMED	898,144
OTHER ASSETS	5,685,697	POLICYHOLDER DIVIDENDS	9,080,181
		PROVISION FOR REINSURANCE	3,834,904
		ADVANCE PREMIUM	1,572,635
		PAYABLE FOR SECURITIES	8,000,000
		PAYABLE FOR SECURITIES LENDING	11,772,178
		CEDED REINSURANCE NET PREMIUMS PAYABLE	26,036,328
		ESCHEAT LIABILITY	664,927
		OTHER ACCRUED EXPENSES AND LIABILITIES	1,858,650
		TOTAL LIABILITIES	\$ 2,081,307,981
		CAPITAL STOCK	\$ 6,480,000
		PAID IN SURPLUS	433,803,780
		OTHER SURPLUS	1,863,312,028
		TOTAL SURPLUS TO POLICYHOLDERS	\$ 2,103,595,788
TOTAL ASSETS	\$ 4,184,903,769	TOTAL LIABILITIES & SURPLUS	\$ 4,184,903,769

STATE OF CONNECTICUT )  
 COUNTY OF HARTFORD ) ss.  
 CITY OF HARTFORD )

MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS SECOND VICE PRESIDENT, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2015.

*Michael J. Doody*  
 SECOND VICE PRESIDENT

*Susan M. Weissleder*  
 NOTARY PUBLIC

SUSAN M. WEISSLEDER  
 Notary Public  
 My Commission Expires November 30, 2017

SUBSCRIBED AND SWORN TO BEFORE ME THIS  
 18TH DAY OF MARCH, 2016





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. 231084

Certificate No. 007105981

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, 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 are corporations duly organized under the laws of the State of Connecticut, 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

Mary R. McKee, Sherryanne M. DePirro, Maria L. Spadaccini, Nicholas F. Walsh, Elliott W. Wolffe, Vincent C. Miseo, and Lisa M. Scavetta

of the City of Paramus, State of New Jersey, 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 25th day of January, 2017.

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]
Robert L. Raney, Senior Vice President

On this the 25th day of January, 2017, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, 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, 2021.



[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

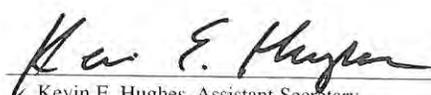
**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is 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 \_\_\_\_\_ day of **APR 25 2017**, 20 \_\_\_\_\_.

  
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.

**CORPORATE ACKNOWLEDGMENT**

Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came  
MARY R. McKEE to me known, who, being by me duly sworn, did depose  
and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is  
the ATTORNEY IN FACT of the ZURICH AMERICAN INSURANCE COMPANY the  
corporation described in and which executed the above instrument that she/he knows the  
seal of said corporation; that the seal affixed to said instrument is such corporate seal;  
that it was so affixed by order of the Board of Directors of said corporation, and that  
she/he signed her/his name thereto by like order.

(SEAL)

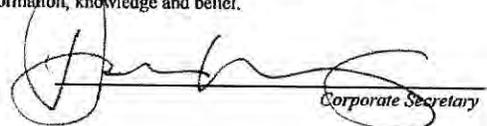


**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**

**ZURICH AMERICAN INSURANCE COMPANY**  
**COMPARATIVE BALANCE SHEET**  
**ONE LIBERTY PLAZA, 165 BROADWAY, 32nd FLOOR, NEW YORK, NY 10006**  
**As of December 31, 2015 and December 31, 2014**

<u>Assets</u>	12/31/2015	12/31/2014
Bonds	\$ 17,260,128,973	\$ 17,933,136,241
Preferred Stock	-	-
Common Stock	3,457,354,146	3,213,266,911
Real Estate	743,791,691	-
Other Invested Assets	2,048,959,102	2,602,433,930
Short-term Investments	403,620,083	707,396,303
Receivable for securities	86,823,468	20,334,654
Cash and cash equivalents	182,127,374	9,155,828
Securities lending reinvested collateral assets	86,554,110	167,993,212
Employee Trust for Deferred Compensation Plan	153,274,854	140,606,132
Total Cash and Invested Assets	<b>\$ 24,422,633,801</b>	<b>\$ 24,794,325,211</b>
Premiums Receivable	\$ 3,598,435,742	\$ 3,317,513,374
Funds Held with Reinsurers	1,906,522	2,357,701
Reinsurance Recoverable	521,790,582	492,689,841
Accrued Investment Income	123,257,424	116,594,177
Federal Income Tax Recoverable	1,045,367,647	941,023,188
Due from Affiliates	200,022,690	83,375,591
Other Assets	558,041,597	561,819,983
Total Assets	<b>\$ 30,471,456,005</b>	<b>\$ 30,309,699,066</b>
<b><u>Liabilities and Policyholders' Surplus</u></b>		
<b>Liabilities:</b>		
Loss and LAE Reserves	\$ 14,173,584,657	\$ 13,922,765,027
Unearned Premium Reserve	4,463,409,342	4,502,895,029
Funds Held with Reinsurers	203,459,214	191,291,330
Loss In Course of Payment	386,200,590	306,093,345
Commission Reserve	120,630,088	79,627,248
Federal Income Tax Payable	93,480,741	115,512,376
Remittances and Items Unallocated	178,038,986	123,759,621
Payable to parent, subs and affiliates	69,640,403	154,224,298
Provision for Reinsurance	44,528,436	59,189,897
Ceded Reinsurance Premiums Payable	939,196,923	721,709,366
Securities Lending Collateral Liability	86,554,110	167,993,212
Other Liabilities	1,947,276,015	1,949,229,453
Total Liabilities	<b>\$ 22,705,999,505</b>	<b>\$ 22,294,290,202</b>
<b>Policyholders' Surplus:</b>		
Common Capital Stock	\$ 5,000,000	\$ 5,000,000
Paid-In and Contributed Surplus	4,394,131,321	4,394,131,321
Surplus Notes	-	-
Special Surplus Funds	56,772,000	57,824,000
Cumulative Unrealized Gain	430,546,047	572,072,362
Unassigned Surplus	2,879,007,132	2,986,381,181
Total Policyholders' Surplus	<b>\$ 7,765,456,500</b>	<b>\$ 8,015,408,864</b>
Total Liabilities and Policyholders' Surplus	<b>\$ 30,471,456,005</b>	<b>\$ 30,309,699,066</b>

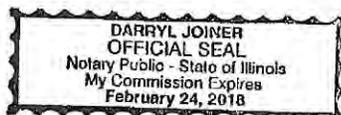
I, Dennis F. Kerrigan, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2015, according to the best of my information, knowledge and belief.

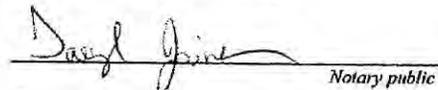
  
 \_\_\_\_\_  
 Corporate Secretary

State of Illinois  
 County of Cook

} SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.



  
 \_\_\_\_\_  
 Notary public

**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 **MICHAEL BOND, 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 **Mary R. MCKEE, Maria L. SPADACCINI, Sherryanne M. DEPIRRO, Nicholas F. WALSH, Lisa M. SCAVETTA, Elliott W. WOLFFE and Vincent C. MISEO, all of Paramus, New Jersey, 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 12th day of August, A.D. 2016.

ATTEST:

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



By: *Eric D. Barnes*  
*Secretary*  
*Eric D. Barnes*

*Michael Bond*  
*Vice President*  
*Michael Bond*

State of Maryland  
County of Baltimore

On this 12th day of August, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **MICHAEL BOND, Vice President, and ERIC D. BARNES, 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, deposed 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, 2019



**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 \_\_\_ day of APR 25 2017, 20\_\_\_.



*Gerald F. Haley*

Gerald F. Haley, Vice President

**TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:**

Zurich American Insurance Co.  
Attn: Surety Claims  
1299 Zurich Way  
Schaumburg, IL 60196-1056

**CORPORATE ACKNOWLEDGMENT**

Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came  
MARY R. McKEE to me known, who, being by me duly sworn, did depose  
and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is  
the ATTORNEY IN FACT of the FEDERAL INSURANCE COMPANY the corporation  
described in and which executed the above instrument that she/he knows the seal of said  
corporation; that the seal affixed to said instrument is such corporate seal; that it was so  
affixed by order of the Board of Directors of said corporation, and that she/he signed  
her/his name thereto by like order.

(SEAL)



**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**

# FEDERAL INSURANCE COMPANY

## STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

DECEMBER 31, 2015

(in thousands of dollars)

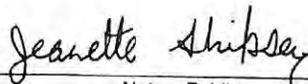
ASSETS		LIABILITIES AND SURPLUS TO POLICYHOLDERS	
Cash and Short Term Investments.....	\$ 687,917	Outstanding Losses and Loss Expenses .....	\$ 12,174,848
United States Government, State and Municipal Bonds .....	9,544,097	Unearned Premiums.....	3,726,665
Other Bonds.....	4,491,238	Dividends Payable to Stockholder .....	1,400,000
Stocks.....	692,901	Ceded Reinsurance Premiums Payable.....	329,694
Other Invested Assets.....	<u>2,187,839</u>	Provision for Reinsurance .....	35,560
		Other Liabilities.....	<u>1,295,093</u>
TOTAL INVESTMENTS .....	<u>17,603,992</u>	TOTAL LIABILITIES .....	<u>18,961,860</u>
Investments in Affiliates:		Capital Stock.....	20,980
Chubb Investment Holdings, Inc. ....	3,679,770	Paid-In Surplus.....	3,106,809
Pacific Indemnity Company.....	2,930,246	Unassigned Funds .....	<u>10,150,916</u>
Executive Risk Indemnity Inc.....	1,267,144		
Chubb Insurance Investment Holdings Ltd....	1,020,650	SURPLUS TO POLICYHOLDERS.....	<u>13,278,705</u>
CC Canada Holdings Ltd.....	590,955		
Great Northern Insurance Company .....	469,230		
Chubb Insurance Company of Australia Ltd.	404,845		
Vigilant Insurance Company.....	306,232		
Chubb European Investment Holdings SLP ..	294,200		
Other Affiliates .....	566,480		
Premiums Receivable .....	1,659,749		
Other Assets .....	<u>1,447,072</u>		
TOTAL ADMITTED ASSETS .....	<u>\$ 32,240,565</u>	TOTAL LIABILITIES AND SURPLUS TO POLICYHOLDERS.....	<u>\$ 32,240,565</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners.  
At December 31, 2015, investments with a carrying value of \$546,611,273 were deposited with government authorities as required by law.

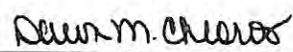
State, County & City of New York, — ss:

Dawn M. Chloros, Assistant Secretary \_\_\_\_\_ of the Federal Insurance Company  
being duly sworn, deposes and says that the foregoing Statement of Assets, Liabilities and Surplus to Policyholders of said Federal Insurance Company on December 31, 2015 is true and correct and is a true abstract of the Annual Statement of said Company as filed with the Secretary of the Treasury of the United States for the 12 months ending December 31, 2015.

Subscribed and sworn to before me  
this March 11, 2016.

  
\_\_\_\_\_  
Notary Public

JEANETTE SHIPSEY  
Notary Public, State of New York  
No. 02SH5074142  
Qualified in Nassau County  
Commission Expires March 10, 2019

  
\_\_\_\_\_  
Assistant Secretary

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

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

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Sheryanne M. DePirro, Mary R. McKee, Vincent C. Miseo, Lisa M. Scavetta, Maria L. Spadaccini, Nicholas F. Walsh and Elliott W. Wolfe of Paramus, New Jersey

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than ball bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 30th day of June, 2016.

Tina M. Hawkins, Assistant Secretary

David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

County of Somerset

ss.

On this 30th day of June, 2016 before me, a Notary Public of New Jersey, personally came Tina M. Hawkins, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Tina M. Hawkins, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 18, 2019

Katherine J. Adelaar, Notary Public

CERTIFICATION

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

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

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

- (i) the foregoing extract of the By-Laws of the Companies is true and correct.
(ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
(iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 25th day of April, 2017.



Tina M. Hawkins, Assistant Secretary

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

**CORPORATE ACKNOWLEDGMENT**

Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came  
MARY R. McKEE to me known, who, being by me duly sworn, did depose  
and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is  
the ATTORNEY IN FACT of THE CONTINENTAL INSURANCE COMPANY the  
corporation described in and which executed the above instrument that she/he knows the  
seal of said corporation; that the seal affixed to said instrument is such corporate seal;  
that it was so affixed by order of the Board of Directors of said corporation, and that  
she/he signed her/his name thereto by like order.

(SEAL)



**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**

THE CONTINENTAL INSURANCE COMPANY  
 Radnor, Pennsylvania  
 Statement of Net Admitted Assets and Liabilities  
 December 31, 2015

ASSETS

Bonds		\$ 1,029,630,968
Stocks		154,739,571
Cash and short-term investments		246,391,807
Receivables for securities		18,845
Investment income due and accrued		14,125,269
Amounts recoverable from reinsurers		122,240,351
Funds held by or deposited with reinsured companies		1,850,091
Net deferred tax asset		73,791,202
Premiums and considerations		23,054,396
Other assets		1,019,110
<b>Total Assets</b>		<b>\$ 1,666,861,610</b>

LIABILITIES AND SURPLUS

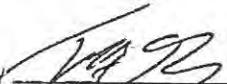
Losses		\$ 774,879,701
Loss adjustment expense		36,650,259
Other expenses		736,867
Unearned premiums		-
Ceded reinsurance premiums payable (net of ceding commissions)		27,199,039
Provision for reinsurance		76,000,000
Other liabilities		(717,874,026)
<b>Total Liabilities</b>		<b>\$ 197,591,840</b>

Surplus Account:

Capital paid up		\$ 53,566,360
Gross paid in and contributed surplus		1,423,436,994
Special Surplus		136,028,695
Unassigned funds		(143,762,279)
Surplus as regards policyholders		<b>\$ 1,469,269,770</b>
<b>Total Liabilities and Capital</b>		<b>\$ 1,666,861,610</b>

I, Troy Wray, Assistant Vice President of The Continental Insurance Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2015, as filed with the various Insurance Departments and is a true and correct statement of the condition of The Continental Insurance Company as of that date.

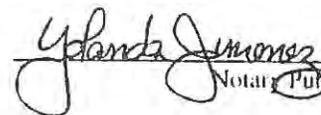
The Continental Insurance Company

By   
 Assistant Vice President

Subscribed and sworn to me this 21st day of March, 2016.

My commission expires:



  
 Notary Public

**POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT**

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

**Mary R McKee, Sherryanne M De Pirro, Maria L Spadaccini, Nicholas F Walsh, Elliott W Wolffe, Vincent C Miseo, Lisa M Scavetta, Individually**

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

**- In Unlimited Amounts -**

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

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

**In Witness Whereof,** The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 5th day of January, 2017.

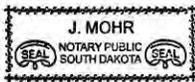


The Continental Insurance Company

*Paul T. Bruflat*  
Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 5th day of January, 2017, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires June 23, 2021

*J. Mohr*  
J. Mohr Notary Public

**CERTIFICATE**

I, D. Bult, Assistant Secretary of The Continental Insurance Company, a Pennsylvania insurance company, do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance company printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance company this \_\_\_\_\_ day of **APR 25 2017**.



The Continental Insurance Company

*D. Bult*  
D. Bult Assistant Secretary

## Authorizing Resolutions

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

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

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

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

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

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

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

**CORPORATE ACKNOWLEDGMENT**

Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came MARY R. McKEE to me known, who, being by me duly sworn, did depose and say that she/he resides in SADDLE BROOK, NEW JERSEY that she/he is the ATTORNEY IN FACT of the BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



**LISA M. SCAVETTA**  
**NOTARY PUBLIC OF NEW JERSEY**  
**ID # 50016460**  
**My Commission Expires 6/4/2020**

# BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102

## ADMITTED ASSETS\*

	<u>12/31/2015</u>	<u>9/30/2015</u>	<u>12/31/2014</u>
Total invested assets	\$ 3,186,498,049	\$ 3,136,760,813	\$ 3,496,596,431
Premium & agent balances (net)	111,888,220	87,914,911	1,575,140
All other assets	73,200,653	57,838,968	23,436,525
<b>Total Admitted Assets</b>	<u>\$ 3,371,586,922</u>	<u>\$ 3,282,514,692</u>	<u>\$ 3,521,608,096</u>

## LIABILITIES & SURPLUS\*

	<u>12/31/2015</u>	<u>9/30/2015</u>	<u>12/31/2014</u>
Loss & loss exp. unpaid	\$ 33,586,302	\$ 22,748,711	\$ 7,856,614
Unearned premiums	62,997,856	33,154,834	454,617
All other liabilities	230,891,273	195,785,652	279,153,584
<b>Total Liabilities</b>	<u>327,475,431</u>	<u>251,689,197</u>	<u>287,464,815</u>
<b>Total Policyholders' Surplus</b>	<u>3,044,111,491</u>	<u>3,030,825,495</u>	<u>3,234,143,281</u>
<b>Total Liabilities &amp; Surplus</b>	<u>\$ 3,371,586,922</u>	<u>\$ 3,282,514,692</u>	<u>\$ 3,521,608,096</u>

\* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

A.M. Best: A++ Rating

Standard & Poor's: AA+ Rating



Power Of Attorney

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY

Know all men by these presents, that BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 100 Federal Street, 20th Floor, Boston, Massachusetts 02110, NATIONAL INDEMNITY COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131, and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: Andrew Waterbury, Sherryanne M. DePirro, Elliott Wolffe, Mary R. McKee, Maria L. Spadaccini, Nicholas F. Walsh, Lisa M. Scavetta, Vincent C. Miseo, 650 From Road of the city of Paramus State of New Jersey, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of November 18, 2014. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY,

NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

[Signature of David Fields]

[Signature of David Fields]

By: David Fields, Executive Vice President

By: David Fields, Vice President



NOTARY

State of Massachusetts, County of Suffolk, ss:

On this 18th day of November, 2014 before me appeared David Fields, Executive Vice President of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY and Vice President of NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



[Signature of Vicki S. Soutter]

Notary Public

I, Brennan Neville, the undersigned, Assistant Secretary of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE 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 affixed the seals of said companies this date of April 25, 2017.



[Signature of Brennan Neville]

Assistant Secretary

To verify the authenticity of this Power of Attorney please contact us at BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, 100 Federal Street, 20th Floor, Boston, MA 02110 | (617) 936-2971 or by email at Courtney.Walker@bhspecialty.com. THIS POWER OF ATTORNEY IS VOID IF ALTERED. To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claimsnotice@bhspecialty.com, via fax to (617) 507-8259, or via mail.

**BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)**

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

**NATIONAL INDEMNITY COMPANY (BY-LAWS)**

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

**NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)**

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

**NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)**

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

**NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)**

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

**CORPORATE ACKNOWLEDGMENT**

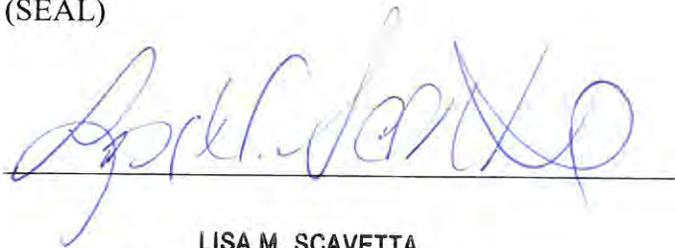
Form 152

STATE OF NEW JERSEY

COUNTY OF BERGEN

On this 25th day of April, 2017, before me personally came Mary R. McKee to me known, who, being by me duly sworn, did depose and say that she/he resides in Saddle Brook, NJ that she/he is the Attorney-In-Fact of the Hartford Fire Insurance Company the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



LISA M. SCAVETTA  
NOTARY PUBLIC OF NEW JERSEY  
ID # 50016460  
My Commission Expires 6/4/2020

# HARTFORD FIRE INSURANCE COMPANY

**Hartford, Connecticut**  
*Financial Statement, June 30, 2016*  
 Statutory Basis

## ASSETS

U.S. Government Bonds .....	\$ 511,271,791
Bonds of Other Governments .....	143,805,859
State, County Municipal Miscellaneous Bonds .....	12,010,958,895
Stocks .....	5,644,194,495
Short Term Investments .....	373,530,086
	<b>\$ 18,683,761,126</b>
Real Estate .....	\$ 361,230,861
Cash .....	72,583,334
Agents' Balances (Under 90 Day) .....	3,003,227,502
Other Invested Assets .....	438,950,733
Miscellaneous .....	3,042,353,045
<b>Total Admitted Assets .....</b>	<b>\$ 25,602,106,601</b>

## LIABILITIES

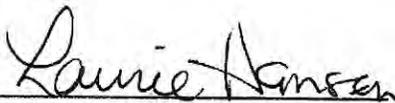
Reserve for Claims and Claim Expense .....	7,690,472,270
Reserve for Unearned Premiums .....	2,163,378,783
Reserve for Taxes, License and Fees .....	55,987,906
Miscellaneous Liabilities .....	2,597,812,034
<b>Total Liabilities .....</b>	<b>\$ 12,507,650,993</b>
Capital Paid In \$	55,320,000
Surplus .....	13,039,135,608
<b>Surplus as regards Policyholders .....</b>	<b>\$ 13,094,455,608</b>
<b>Total Liabilities, Capital and Surplus .....</b>	<b>\$ 25,602,106,601</b>

STATE OF CONNECTICUT  
 COUNTY OF HARTFORD  
 CITY OF HARTFORD

} SS.

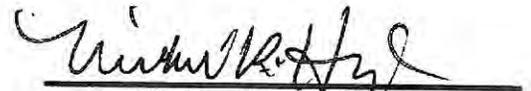
Michael R. Hazel, Vice President and Controller, and Allen R. Craig, Assistant Secretary of the Hartford Fire Insurance Company, being duly sworn, each deposes and say that the foregoing is a true and correct statement of the said company's financial condition as of June 30, 2016.

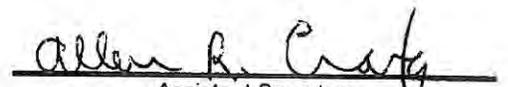
Subscribed and sworn to before me  
 this 1st day of September, 2016.



Notary Public

**LAURIE HANSEN**  
 NOTARY PUBLIC  
 State of Connecticut  
 My Commission Expires  
 December 31, 2018

  
 Vice President and Controller

  
 Assistant Secretary

# POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

[Bond.Claims@thehartford.com](mailto:Bond.Claims@thehartford.com)

call: 888-266-3488 or fax: 860-757-5835

Agency Name: TURNER SURETY & INS BROKERAGE INC

Agency Code: 13-653035

**KNOW ALL PERSONS BY THESE PRESENTS THAT:**

- Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
- Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
- Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
- Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
- Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, **up to the amount of Unlimited** :

Sherryanne M. DePirro, Mary R. McKee, Vincent C. Miseo, Lisa M. Scavetta, Maria L. Spadaccini, Nicholas F. Walsh, Elliott W. Wolffe of PARAMUS, New Jersey

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by , and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments 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**, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



*John Gray*

John Gray, Assistant Secretary

*M. Ross Fisher*

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT }  
 COUNTY OF HARTFORD } ss. Hartford

On this 11th day of January, 2016, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

*Nora M. Stranko*

Nora M. Stranko  
 Notary Public

My Commission Expires March 31, 2018

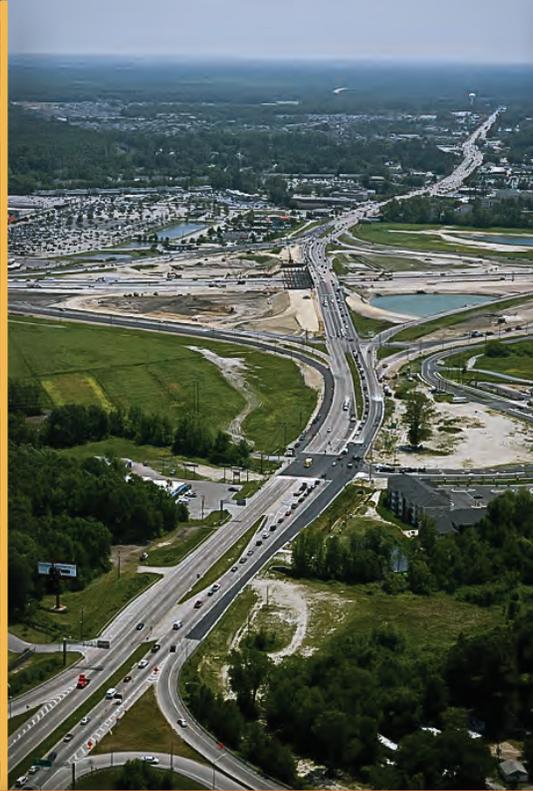
I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of April 25, 2017.

Signed and sealed at the City of Hartford.



*Kevin Heckman*

Kevin Heckman, Assistant Vice President



## 3.2.10 SCC AND DPOR INFORMATION TABLES

SUBMITTED TO:



SUBMITTED BY:



**ATTACHMENT 3.2.10**

**State Project No. 0064-965-229, Contract ID: C00106689DB97**

**SCC and DPOR Information**

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

<b>SCC &amp; DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)</b>							
<b>Business Name</b>	<b>SCC Information (3.2.10.1)</b>			<b>DPOR Information (3.2.10.2)</b>			
	<b>SCC Number</b>	<b>SCC Type of Corporation</b>	<b>SCC Status</b>	<b>DPOR Registered Address</b>	<b>DPOR Registration Type</b>	<b>DPOR Registration Number</b>	<b>DPOR Expiration Date</b>
<b>Flatiron Constructors, Inc.</b>	<b>F178756-5</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>385 Interlocken Crescent, Suite 900 Broomfield, CO 80021</b>	<b>Class A Contractor Classifications H/H</b>	<b>2705142856</b>	<b>09-30-2017</b>
<b>Branch Civil, Inc.</b>	<b>0295618-3</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>PO Box 40004 Roanoke, VA 24022-0004</b>	<b>Class A Contractor Classifications H/H</b>	<b>2701029434</b>	<b>03-31-2019</b>
<b>A. Morton Thomas and Associates, Inc.</b>	<b>F049431-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>100 Gateway Centre Parkway, Suite 200 Richmond, VA 23235</b>	<b>LS, ENG</b>	<b>0411000587</b>	<b>02-28-2018</b>
<b>A. Morton Thomas and Associates, Inc.</b>	<b>F049431-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>One Jadip Lane, Suite 111, Fredericksburg, VA 22405</b>	<b>ENG</b>	<b>0411000758</b>	<b>02-28-2018</b>
<b>A. Morton Thomas and Associates, Inc.</b>	<b>F049431-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>14555 Avion Pkwy, Ste. 150 Chantilly, VA 20151</b>	<b>ENG, LS</b>	<b>0411000586</b>	<b>02-28-2018</b>

**ATTACHMENT 3.2.10****State Project No. 0064-965-229, Contract ID: C00106689DB97****SCC and DPOR Information**

<b>A. Morton Thomas and Associates, Inc.</b>	<b>F049431-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>800 King Farm Blvd, 4<sup>th</sup> Floor Rockville, MD 20850</b>	<b>ENG, LA</b>	<b>0407003077</b>	<b>12-31-2017</b>
<b>A. Morton Thomas and Associates, Inc.</b>	<b>F049431-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>1520 Breezeport Way, Ste. 500 Suffolk, VA 23435</b>	<b>ENG</b>	<b>0411000693</b>	<b>02-28-2018</b>
<b>STV Incorporated</b>	<b>F025345-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>2722 Merrilee Dr. Suite 350 Fairfax, VA 22031</b>	<b>ARC, ENG</b>	<b>0411000661</b>	<b>02-28-2018</b>
<b>STV Incorporated dba STV Group Incorporated</b>	<b>F025345-2</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>10800 Midlothian Tnpk., Suite 302 Richmond, VA 23235</b>	<b>ENG</b>	<b>0411000462</b>	<b>02-28-2018</b>
<b>Bowman Consulting Group, Ltd.</b>	<b>0448198-2</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>3951 Westerre Parkway, Ste. 150, Richmond, VA 23233</b>	<b>ENG, LS</b>	<b>0411000610</b>	<b>02-28-2018</b>
<b>NXL Construction Services, Inc.</b>	<b>0349742-7</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>114 E. Cary St., Suite 200, Richmond, VA 23219</b>	<b>ENG, LS</b>	<b>0407003031</b>	<b>12-31-2017</b>
<b>Schnabel Engineering, LLC</b>	<b>S088912-3</b>	<b>Limited Liability Corporation</b>	<b>Active/ Good Standing</b>	<b>9800 Jeb Stuart Pkwy., Ste. 200, Glen Allen, VA 23059</b>	<b>ENG</b>	<b>0407004386</b>	<b>12-31-2017</b>

**ATTACHMENT 3.2.10**

**State Project No. 0064-965-229, Contract ID: C00106689DB97**

**SCC and DPOR Information**

<b>Geotechnical Environmental and Testing Solutions, Inc.</b>	<b>0541847-0</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>204-B Grayson Rd., Virginia Beach, VA 23462</b>	<b>ENG</b>	<b>0407004018</b>	<b>12-31-2017</b>
<b>Geotechnical Environmental and Testing Solutions, Inc.</b>	<b>0541847-0</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>1592 Penniman Road, Suite E Williamsburg, VA 23185</b>	<b>ENG</b>	<b>0411000366</b>	<b>02-28-2018</b>
<b>Harris Miller Miller &amp; Hanson Inc.</b>	<b>F145185-7</b>	<b>Foreign Corporation</b>	<b>Active/ Good Standing</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Kerr Environmental Services Corp.</b>	<b>0578235-4</b>	<b>Corporation</b>	<b>Active/ Good Standing</b>	<b>1008 Old Virginia Beach Rd., Suite 200, Virginia Beach 23451</b>	<b>ENG</b>	<b>0407005065</b>	<b>12-31-2017</b>
<b>Circa-Cultural Resource Management, L.L.C.</b>	<b>S161603-8</b>	<b>LLC</b>	<b>Active</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Seventh Point, Inc.</b>	<b>0267541-1</b>	<b>Corporation</b>	<b>Active</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

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

<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>
<b>A. Morton Thomas and Associates, Inc.</b>	<b>Harold Judson Dyson</b>	<b>Richmond, VA</b>	<b>106 Buckingham Drive Colonial Heights, VA 23834</b>	<b>ENG</b>	<b>0402040771</b>	<b>06-30-2017</b>

**ATTACHMENT 3.2.10****State Project No. 0064-965-229, Contract ID: C00106689DB97****SCC and DPOR Information**

<b>A. Morton Thomas and Associates, Inc.</b>	<b>Laura Michelle Mehiel</b>	<b>Chantilly, VA</b>	<b>901 Dulaney Valley Road, Ste. 710, Towson, MD 21204</b>	<b>ENG</b>	<b>0402034707</b>	<b>04-30-2019</b>
<b>NXL Construction Services, Inc.</b>	<b>Michael William Saunders</b>	<b>Richmond, VA</b>	<b>4500 Litchfield Drive, Chesterfield, VA 23832</b>	<b>ENG</b>	<b>0402041295</b>	<b>12-31-2017</b>
<b>STV Incorporated dba STV Group Incorporated</b>	<b>Ronald C. Briggs</b>	<b>Richmond, VA</b>	<b>14413 Clipper Cove Ct., Midlothian, VA 23112</b>	<b>ENG</b>	<b>0402011415</b>	<b>06-30-2017</b>
<b>Bowman Consulting Group, Ltd.</b>	<b>Richard David Stuchell</b>	<b>Richmond, VA</b>	<b>10012 Shadowridge Court, Fredericksburg, VA 22407</b>	<b>Certified General Real Estate Appraiser</b>	<b>4001011856</b>	<b>11-30-2018</b>
<b>Schnabel Engineering, LLC</b>	<b>Edward G. Drahos, P.E.</b>	<b>Richmond, VA</b>	<b>14410 Galloway Ct., Midlothian, VA 23113</b>	<b>ENG</b>	<b>0402015605</b>	<b>07-31-2017</b>
<b>Schnabel Engineering, LLC</b>	<b>Evan Bradley Morris</b>	<b>Richmond, VA</b>	<b>9800 Jeb Stuart Parkway, Suite 100 Glen Allen, VA 23259</b>	<b>ENG</b>	<b>0402037983</b>	<b>06-30-2017</b>
<b>Geotechnical Environmental and Testing Solutions, Inc.</b>	<b>Phillip Alexander Wunderly</b>	<b>Williamsburg, VA</b>	<b>141 Great Glen Williamsburg, VA 23188</b>	<b>ENG</b>	<b>0402047135</b>	<b>06-30-2018</b>
<b>Geotechnical Environmental and Testing Solutions, Inc.</b>	<b>James Robert Wheeler</b>	<b>Williamsburg, VA</b>	<b>11800 Cumberland Estates Road, New Kent, VA 23124</b>	<b>PG</b>	<b>2801002096</b>	<b>08-31-2017</b>
<b>Kerr Environmental Services Corp.</b>	<b>Robert Parnell Kerr</b>	<b>Virginia Beach, VA</b>	<b>1008 Old Virginia Beach Rd., 200, Virginia Beach, VA 23451</b>	<b>Professional Wetland Delineator</b>	<b>3402000060</b>	<b>10-31-2018</b>

## Virginia State Corporation Commission Registrations

## Commonwealth of Virginia



## State Corporation Commission

## CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That Flatiron Constructors, Inc., a corporation incorporated under the law of Delaware, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on April 16, 2009; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:*

*July 14, 2016*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

CISECOM

Document Control Number: 1607146051



Commonwealth of Virginia  
**State Corporation Commission**

V

CISM0180

CORPORATE DATA INQUIRY

04/28/17

11:25:35

CORP ID: F178756 - 5 STATUS: 00 ACTIVE STATUS DATE: 05/08/14  
 CORP NAME: Flatiron Constructors, Inc.

DATE OF CERTIFICATE: 04/16/2009 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: DE DELAWARE STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:  
 1111 EAST MAIN STREET

CITY: RICHMOND STATE : VA ZIP: 23219-0000

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 10/22/13 LOC : 216  
 ACCEPTED AR#: 216 15 5350 DATE: 10/19/16 RICHMOND CITY

CURRENT AR#: 216 15 5350 DATE: 10/19/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	100.00					1,000

# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That Branch Civil, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is November 25, 1986;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
January 16, 2017*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

CISECOM  
Document Control Number: 1701165302



Commonwealth of Virginia  
**State Corporation Commission**

V

CISM0180

CORPORATE DATA INQUIRY

04/28/17

11:26:31

CORP ID: 0295618 - 3 STATUS: 00 ACTIVE STATUS DATE: 11/25/86  
CORP NAME: **Branch Civil, Inc.**

DATE OF CERTIFICATE: 11/25/1986 PERIOD OF DURATION: INDUSTRY CODE: 00  
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
MERGER IND: S SURVIVOR CONVERSION/DOMESTICATION IND:  
GOOD STANDING IND: Y MONITOR INDICATOR:  
CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:  
R/A NAME: MELANIE F WHEELER

STREET: 442 RUTHERFORD AVE NE AR RTN MAIL:

CITY: ROANOKE STATE : VA ZIP: 24016-0000  
R/A STATUS: 2 OFFICER EFF. DATE: 01/11/08 LOC : 217  
ACCEPTED AR#: 216 16 7579 DATE: 11/14/16 ROANOKE CITY  
CURRENT AR#: 216 16 7579 DATE: 11/14/16 STATUS: A ASSESSMENT INDICATOR: 0  
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES  
16 100.00 5,000

# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That A. MORTON THOMAS & ASSOCIATES, INC., a corporation incorporated under the law of Maryland, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on November 26, 1997; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
September 26, 2013*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

CISECOM

Document Control Number: 1309265678



Commonwealth of Virginia  
**State Corporation Commission**

**CISM0180**

CORPORATE DATA INQUIRY

06/01/16

10:58:27

CORP ID: F049431 - 2 STATUS: 00 ACTIVE STATUS DATE: 12/15/09  
 CORP NAME: **THOMAS & ASSOCIATES, INC., A. MORTON**

DATE OF CERTIFICATE: 11/26/1997 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: MD MARYLAND 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: NATIONAL CORPORATE RESEARCH, LTD.

STREET: 250 BROWNS HILL COURT

AR RTN MAIL:

CITY: MIDLOTHIAN

STATE : VA ZIP: 23114-0000

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 09/30/15 LOC : 120

ACCEPTED AR#: 215 15 3245 DATE: 10/05/15 CHESTERFIELD CO

CURRENT AR#: 215 15 3245 DATE: 10/05/15 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
15	400.00					52,000

# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That STV GROUP INCORPORATED (USED IN VA. BY: STVINCORPORATED), a corporation incorporated under the law of New York, is authorized to transact business in the Commonwealth of Virginia;

That it obtained a certificate of authority to transact business in Virginia from the Commission on August 9, 1999; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
February 17, 2012*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

CISECOM  
Document Control Number: ·1202175574



Commonwealth of Virginia  
**State Corporation Commission**

V

CISM0180

CORPORATE DATA INQUIRY

04/28/17

11:28:45

CORP ID: F025345 - 2 STATUS: 00 ACTIVE STATUS DATE: 09/27/16  
 CORP NAME: STV GROUP INCORPORATED (USED IN VA. BY: STV INCORPORATED)

DATE OF CERTIFICATE: 08/09/1999 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: NY NEW YORK STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:  
 1111 EAST MAIN STREET  
 CITY: RICHMOND STATE : VA ZIP: 23219-0000  
 R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 01/08/15 LOC : 216  
 ACCEPTED AR#: 216 53 9584 DATE: 10/25/16 RICHMOND CITY  
 CURRENT AR#: 216 53 9584 DATE: 10/25/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
16	100.00	10.00				2,000

# Commonwealth OF Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That BOWMAN CONSULTING GROUP, LTD. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is June 7, 1995;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
October 21, 2016*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

CISECOM

Document Control Number: 1610215341



## STATE CORPORATION COMMISSION

*Richmond,* June 7, 1995

*This is to Certify that the certificate of incorporation of*

*Bowman Consulting Group, P.C.*

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

June 7, 1995



*State Corporation Commission*

*William J. Bridge*  
Clerk of the Commission



Commonwealth of Virginia  
**State Corporation Commission**



**CISM0180**

CORPORATE DATA INQUIRY

04/28/17

11:29:15

CORP ID: 0448198 - 2 STATUS: 00 ACTIVE STATUS DATE: 08/04/16  
 CORP NAME: BOWMAN CONSULTING GROUP, LTD.

DATE OF CERTIFICATE: 06/07/1995 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 700.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: CORPORATION SERVICE COMPANY

STREET: BANK OF AMERICA CENTER, 16TH FLOOR AR RTN MAIL:  
 1111 E. MAIN STREET

CITY: RICHMOND STATE : VA ZIP: 23219-0000

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 08/17/16 LOC : 216

ACCEPTED AR#: 216 53 9571 DATE: 10/25/16 RICHMOND CITY

CURRENT AR#: 216 53 9571 DATE: 10/25/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	1,700.00				1,700.00	360,000

# Commonwealth of Virginia



## State Corporation Commission

*I Certify the Following from the Records of the Commission:*

NXL Construction Co., Inc. is a corporation existing under and by virtue of the laws of Virginia, and is in good standing.

The date of incorporation is November 17, 1989.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:  
July 10, 2007*



*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

# Commonwealth OF Virginia



## State Corporation Commission

*I Certify the Following from the Records of the Commission:*

A duly attested copy of a certificate setting forth that NXL Construction Co., Inc. conducts business in Virginia under the assumed or fictitious name of NXL CONSTRUCTION SERVICES, INC. was filed in the Clerk's Office of the Commission on September 16, 1992.

Nothing more is hereby certified.

*Signed and Sealed at Richmond on this Date:  
July 29, 2009*



*Joel H. Peck*

Joel H. Peck, Clerk of the Commission

CIS0357



Commonwealth of Virginia  
**State Corporation Commission**

Vi

**CISM0180**

CORPORATE DATA INQUIRY

04/28/17

11:30:01

CORP ID: 0349742 - 7 STATUS: 00 ACTIVE STATUS DATE: 11/17/89  
 CORP NAME: **NXL Construction Co., Inc.**

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

STREET: 9606 GEORGE'S BLUFF RD AR RTN MAIL:

CITY: RICHMOND STATE : VA ZIP: 23229-0000

R/A STATUS: 2 OFFICER EFF. DATE: 10/08/98 LOC : 143

ACCEPTED AR#: 216 14 8475 DATE: 10/03/16 HENRICO COUNTY

CURRENT AR#: 216 14 8475 DATE: 10/03/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
16	100.00					5,000

# Commonwealth OF Virginia



## State Corporation Commission

### CERTIFICATE OF FACT

*I Certify the Following from the Records of the Commission:*

That Schnabel Engineering, LLC is duly organized as a limited liability company under the law of the Commonwealth of Virginia;

That the date of its organization is December 19, 2002; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
August 3, 2016*

*Joel H. Peck*

*Joel H. Peck, Clerk of the Commission*

CISECOM

Document Control Number: 1608035657



Commonwealth of Virginia  
**State Corporation Commission**



04/28/17

LLCM3220

LLC DATA INQUIRY

11:32:50

LLC ID: S088912 - 3 STATUS: 00 ACTIVE STATUS DATE: 11/15/10

LLC NAME: Schnabel Engineering, LLC

DATE OF FILING: 12/19/2002 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF FILING: VA VIRGINIA MERGER INDICATOR: S SURVIVOR

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 9800 JEB STUART PARKWAY

SUITE 200

CITY: GLEN ALLEN STATE: VA ZIP: 23059-0000

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

R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX ROAD, SUITE 285

RTN MAIL:

CITY: GLEN ALLEN STATE: VA ZIP: 23060-0000

R/A STATUS: 5 ENTITY AUTHORIZ EFF DATE: 10/04/13 LOC: 143 HENRICO COUNTY

YEAR	FEES	PENALTY	INTEREST	BALANCE
------	------	---------	----------	---------

16	50.00			
----	-------	--	--	--

# Commonwealth of Virginia



## State Corporation Commission

### *CERTIFICATE OF GOOD STANDING*

*I Certify the Following from the Records of the Commission:*

That Geotechnical Environmental and Testing Solutions, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is June 16, 2000;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
March 31, 2017*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

CISECOM

Document Control Number: 1703315445



Commonwealth of Virginia  
**State Corporation Commission**

V

CISM0180

CORPORATE DATA INQUIRY

04/28/17

11:30:51

CORP ID: 0541847 - 0 STATUS: 00 ACTIVE STATUS DATE: 08/04/04  
 CORP NAME: **Geotechnical Environmental and Testing Solutions, Inc.**

DATE OF CERTIFICATE: 06/16/2000 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: TERENCE MURPHY

STREET: KAUFMAN & CANOLES PC AR RTN MAIL:  
 150 W MAIN ST STE 2100

CITY: NORFOLK STATE : VA ZIP: 23510-1609

R/A STATUS: 4 ATTORNEY EFF. DATE: 07/17/02 LOC : 212

ACCEPTED AR#: 216 09 5472 DATE: 06/09/16 NORFOLK CITY

CURRENT AR#: 216 09 5472 DATE: 06/09/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	100.00				<b>100.00</b>	5,000

# Commonwealth of Virginia



## STATE CORPORATION COMMISSION

*Richmond, December 6, 2000*

*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*

**Harris Miller Miller & Hanson Inc.**

*a corporation organized under the laws of MASSACHUSETTS 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:*

*Joel H. Peck*

*Clerk of the Commission*



Commonwealth of Virginia  
**State Corporation Commission**

**V**

**CISM0180**

CORPORATE DATA INQUIRY

04/28/17

11:31:23

CORP ID: F145185 - 7 STATUS: 00 ACTIVE STATUS DATE: 01/31/06  
 CORP NAME: Harris Miller Miller & Hanson Inc.

DATE OF CERTIFICATE: 12/06/2000 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: MA MASSACHUSETTS STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 600.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: C T CORPORATION SYSTEM

STREET: 4701 COX RD STE 285 AR RTN MAIL:

CITY: GLEN ALLEN STATE : VA ZIP: 23060-0000

R/A STATUS: 5 B.E. AUTH IN VI EFF. DATE: 06/12/15 LOC : 143

ACCEPTED AR#: 216 17 4971 DATE: 12/01/16 HENRICO COUNTY

CURRENT AR#: 216 17 4971 DATE: 12/01/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
16	1,700.00					300,000

# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

*I Certify the Following from the Records of the Commission:*

That KERR ENVIRONMENTAL SERVICES CORP. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is May 28, 2002;

That the period of its duration is perpetual; and

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

Nothing more is hereby certified.



*Signed and Sealed at Richmond on this Date:  
September 15, 2016*

*Joel H. Peck*  
Joel H. Peck, Clerk of the Commission

CISECOM

Document Control Number: 1609155950



Commonwealth of Virginia  
**State Corporation Commission**

**V**

**CISM0180**

CORPORATE DATA INQUIRY

04/28/17

11:51:45

CORP ID: 0578235 - 4 STATUS: 00 ACTIVE STATUS DATE: 06/04/07  
 CORP NAME: **KERR ENVIRONMENTAL SERVICES CORP.**

DATE OF CERTIFICATE: 05/28/2002 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: 50.00 MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: MARK R BAUMGARTNER

STREET: PENDER & COWARD PC AR RTN MAIL:  
 222 CENTRAL PARK AVE STE 400  
 CITY: VIRGINIA BEACH STATE : VA ZIP: 23462-3026  
 R/A STATUS: 4 ATTORNEY EFF. DATE: 03/22/12 LOC : 228  
 ACCEPTED AR#: 216 07 1145 DATE: 04/21/16 VIRGINIA BEACH  
 CURRENT AR#: 216 07 1145 DATE: 04/21/16 STATUS: A ASSESSMENT INDICATOR: 0

YEAR	FEES	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	100.00				<b>100.00</b>	5,000



## STATE CORPORATION COMMISSION

*Richmond, August 4, 2005*

*This is to certify that the certificate of organization of*

**Circa-Cultural Resource Management, L.L.C.**

*was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: August 4, 2005*



*State Corporation Commission*

*Attest:*

*Joel H. Peck*  
Clerk of the Commission



Commonwealth of Virginia  
**State Corporation Commission**

V

04/28/17

LLCM3220

LLC DATA INQUIRY

11:33:21

LLC ID: S161603 - 8 STATUS: 00 ACTIVE STATUS DATE: 08/04/05

LLC NAME: Circa-Cultural Resource Management, L.L.C.

DATE OF FILING: 08/04/2005 PERIOD OF DURATION: 12/31/2035 INDUSTRY CODE: 00

STATE OF FILING: VA VIRGINIA MERGER INDICATOR:

CONVERSION/DOMESTICATION INDICATOR:

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

STREET: 453 MCLAWS CIRCLE, SUITE 3

CITY: WILLIAMSBURG STATE: VA ZIP: 23185-0000

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

R/A NAME: CAROL D. TYRER

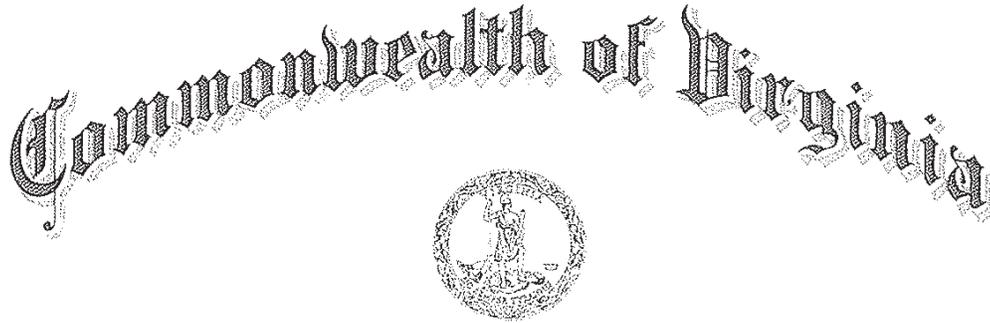
STREET: 453 MCLAWS CIRCLE, SUITE 3

RTN MAIL:

CITY: WILLIAMSBURG STATE: VA ZIP: 23185-0000

R/A STATUS: 2 O/D OF CORP M/M EFF DATE: 10/08/10 LOC: 147 JAMES CITY COUN

YEAR	FEES	PENALTY	INTEREST	BALANCE
16	50.00			



STATE CORPORATION COMMISSION

*Richmond,* March 4, 1935

*This is to Certify that the certificate of incorporation of*  
 HAMBRIGHT, CALCAGNO & DOWNING, INC.

*was this day issued and admitted to record in this office  
 and that the said corporation is authorized to transact its  
 business subject to all the laws of the State applicable to the  
 corporation and its business.*



*State Corporation Commission*

*George M. [Signature]*  
 Clerk of the Commission

ARTICLES OF AMENDMENT  
FOR THE ARTICLES OF INCORPORATION OF  
HAMBRIGHT, CALCAGNO & DOWNING, INC.

I.

The name of the corporation is Hambright, Calcagno & Downing, Inc.

II.

The Amendment adopted is to change Article I of the Articles of Incorporation to change the corporation's name such that Article I, as amended, will read that: The name of the corporation is Seventh Point, Inc.

III.

The foregoing amendment was adopted on January 24, 2008.

IV.

The amendment was adopted by the unanimous consent of the shareholders and directors.

V.

This Certificate of Amendment shall become effective at the time such Certificate is issued by the State Corporation Commission.

The undersigned President declares that the facts herein stated are true as of the 24th day of January, 2008.

HAMBRIGHT, CALCAGNO & DOWNING, INC.

By: \_\_\_\_\_

Christopher A. Calcagno, President

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

AT RICHMOND, FEBRUARY 1, 2008

The State Corporation Commission has found the accompanying articles submitted on behalf of  
Seventh Point, Inc. (formerly HAMBRIGHT, CALCAGNO & DOWNING,  
INC. )

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

## CERTIFICATE OF AMENDMENT

be issued and admitted to record with the articles of amendment in the Office of the Clerk of the  
Commission, effective February 1, 2008.

The corporation is granted the authority conferred on it by law in accordance with the articles,  
subject to the conditions and restrictions imposed by law.

STATE CORPORATION COMMISSION

By



Commissioner

08-01-28-0084  
AMENACPT  
CIS0436



Commonwealth of Virginia  
**State Corporation Commission**

**V**

**CISM0180**

CORPORATE DATA INQUIRY

04/28/17

11:31:49

CORP ID: 0267541 - 1 STATUS: 00 ACTIVE STATUS DATE: 04/17/06  
 CORP NAME: **Seventh Point, Inc.**

DATE OF CERTIFICATE: 03/04/1985 PERIOD OF DURATION: INDUSTRY CODE: 00  
 STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK  
 MERGER IND: CONVERSION/DOMESTICATION IND:  
 GOOD STANDING IND: Y MONITOR INDICATOR:  
 CHARTER FEE: MON NO: MON STATUS: MONITOR DTE:  
 R/A NAME: ALBERT H POOLE

STREET: 4705 COLUMBUS ST AR RTN MAIL:

CITY: VIRGINIA BEACH STATE : VA ZIP: 23462-6749  
 R/A STATUS: 4 ATTORNEY EFF. DATE: 03/24/98 LOC : 228  
 ACCEPTED AR#: 217 05 8559 DATE: 03/27/17 VIRGINIA BEACH  
 CURRENT AR#: 217 05 8559 DATE: 03/27/17 STATUS: A ASSESSMENT INDICATOR: 0  

YEAR	FEE	PENALTY	INTEREST	TAXES	BALANCE	TOTAL SHARES
17	100.00					3,000

# Virginia Department of Professional and Occupational Regulations Licenses Offices

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

EXPIRES ON  
09-30-2017

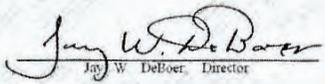
NUMBER  
2705142856

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



**FLATIRON CONSTRUCTORS INC**  
 385 INTERLOCKEN CRESCENT  
 900  
 BROOMFIELD, CO 80021



  
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (05/2015)

(DETACH HERE)

**DPOR COMMONWEALTH of VIRGINIA**  
 Department of Professional and Occupational Regulation

**CLASS A BOARD FOR CONTRACTORS  
 CONTRACTOR**

**\*CLASSIFICATIONS\* H/H**

**NUMBER: 2705142856 EXPIRES: 09-30-2017**

**FLATIRON CONSTRUCTORS INC  
 385 INTERLOCKEN CRESCENT  
 900  
 BROOMFIELD, CO 80021**



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
03-31-2019

NUMBER  
2701029434

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



BRANCH CIVIL INC  
PO BOX 40004  
ROANOKE, VA 24022-0004



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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)  
(DETACH HERE)



CLASS A BOARD FOR CONTRACTORS  
CONTRACTOR

\*CLASSIFICATIONS\* H/H  
NUMBER: 2701029434 EXPIRES: 03-31-2019

BRANCH CIVIL INC  
PO BOX 40004  
ROANOKE, VA 24022-0004



(FOLD)

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

DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
02-28-2018

NUMBER  
0411000587

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

PROFESSIONS: ENG, LS



A MORTON THOMAS AND ASSOCIATES INC  
100 GATEWAY CENTRE PKWY  
SUITE 200  
RICHMOND, VA 23235



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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000587 EXPIRES: 02-28-2018  
PROFESSIONS: ENG, LS

A MORTON THOMAS AND ASSOCIATES INC  
100 GATEWAY CENTRE PKWY  
SUITE 200  
RICHMOND, VA 23235



(FOLD)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
02-28-2018

NUMBER  
0411000758

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

PROFESSIONS: ENG



A MORTON THOMAS AND ASSOCIATES INC  
ONE JADIP LANE  
SUITE 111  
FREDERICKSBURG, VA 22405



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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000758 EXPIRES: 02-28-2018  
PROFESSIONS: ENG  
A MORTON THOMAS AND ASSOCIATES INC  
ONE JADIP LANE  
SUITE 111  
FREDERICKSBURG, VA 22405



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
02-28-2018

NUMBER  
0411000586

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

PROFESSIONS: LS, ENG



A MORTON THOMAS AND ASSOCIATES INC  
1455 AVION PKWY STE 150  
CHANTILLY, VA 20151



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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000586 EXPIRES: 02-28-2018  
PROFESSIONS: LS, ENG  
A MORTON THOMAS AND ASSOCIATES INC  
1455 AVION PKWY STE 150  
CHANTILLY, VA 20151



(FOLD)

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

DPOR-PC (05/2015)

### COMMONWEALTH of VIRGINIA

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

**EXPIRES ON**  
12-31-2017

**NUMBER**  
0407003077

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

PROFESSIONS: ENG, LA



A MORTON THOMAS AND ASSOCIATES INC  
800 KING FARM BLVD, 4TH FLOOR  
ROCKVILLE, MD 20850



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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

COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407003077 EXPIRES: 12-31-2017  
PROFESSIONS: ENG, LA  
A MORTON THOMAS AND ASSOCIATES INC  
800 KING FARM BLVD, 4TH FLOOR  
ROCKVILLE, MD 20850



### COMMONWEALTH of VIRGINIA

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

**EXPIRES ON**  
02-28-2018

**NUMBER**  
0411000693

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

PROFESSIONS: ENG



A MORTON THOMAS AND ASSOCIATES INC  
1520 BREEZEPORT WAY  
STE 500  
SUFFOLK, VA 23435



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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

COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000693 EXPIRES: 02-28-2018  
PROFESSIONS: ENG  
A MORTON THOMAS AND ASSOCIATES INC  
1520 BREEZEPORT WAY  
STE 500  
SUFFOLK, VA 23435



COMMONWEALTH of VIRGINIA

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

EXPIRES ON

02-28-2018

NUMBER

0411000661

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

PROFESSIONS: ARC, ENG



STV INCORPORATED  
STV GROUP INCORPORATED  
2722 MERRILEE DR SUITE 350  
FAIRFAX, VA 22031



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000661 EXPIRES: 02-28-2018  
PROFESSIONS: ARC, ENG  
STV INCORPORATED  
STV GROUP INCORPORATED  
2722 MERRILEE DR SUITE 350  
FAIRFAX, VA 22031



(FOLD)

RECEIVED

FEB 26 2016

STV Incorporated

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON

02-28-2018

NUMBER

0411000462

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

PROFESSIONS: ENG



STV INCORPORATED DBA STV GROUP INC  
STV GROUP INC  
10800 MIDLOTHIAN TNPK SUITE 302  
RICHMOND, VA 23235



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000462 EXPIRES: 02-28-2018  
PROFESSIONS: ENG  
STV INCORPORATED DBA STV GROUP INC  
STV GROUP INC  
10800 MIDLOTHIAN TNPK SUITE 302  
RICHMOND, VA 23235



(FOLD)

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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
02-28-2018

NUMBER  
0411000610

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

PROFESSIONS: ENG, LS



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



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

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

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



COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000610 EXPIRES: 02-28-2018  
PROFESSIONS: ENG, LS  
BOWMAN CONSULTING GROUP LTD  
3951 WESTERRE PKWY  
SUITE 150  
RICHMOND, VA 23233



(FOLD)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
12-31-2017

NUMBER  
0407003031

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

PROFESSIONS: ENG, LS



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



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

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DPOR-LIC (05/2015)  
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COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407003031 EXPIRES: 12-31-2017  
PROFESSIONS: ENG, LS  
NXL CONSTRUCTION CO INC  
NXL CONSTRUCTION SERVICES INC  
114 E CARY ST STE 200  
RICHMOND, VA 23219



(FOLD)

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DPOR-PC (05/2015)

### COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
12-31-2017

NUMBER  
0407004386

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

PROFESSIONS: ENG



SCHNABEL ENGINEERING ,LLC  
9800 JEB STUART PKWY STE 200  
GLEN ALLEN, VA 23059



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COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407004386 EXPIRES: 12-31-2017  
PROFESSIONS: ENG  
SCHNABEL ENGINEERING ,LLC  
9800 JEB STUART PKWY STE 200  
GLEN ALLEN, VA 23059



(FOLD)

### COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
12-31-2017

NUMBER  
0407004018

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

PROFESSIONS: ENG



GEOTECHNICAL ENVIRONMENTAL & TESTING  
SOLUTIONS INC  
204-B GRAYSON ROAD  
VIRGINIA BEACH, VA 23462



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COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407004018 EXPIRES: 12-31-2017  
PROFESSIONS: ENG  
GEOTECHNICAL ENVIRONMENTAL & TESTING SOLUTIONS INC  
204-B GRAYSON ROAD  
VIRGINIA BEACH, VA 23462



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COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
02-28-2018

NUMBER  
0411000366

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

PROFESSIONS: ENG



GEOTECHNICAL ENVIRONMENTAL TESTING SOLUTIONS  
INC  
1592 PENNIMAN RD STE E  
WILLIAMSBURG, VA 23185



*Jay W. DeBoer*  
Jay W. DeBoer Director

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COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APPLSCIDLA  
BUSINESS ENTITY BRANCH OFFICE REGISTRATION  
NUMBER: 0411000366 EXPIRES: 02-28-2018  
PROFESSIONS: ENG  
GEOTECHNICAL ENVIRONMENTAL TESTING SOLUTIONS INC  
1592 PENNIMAN RD STE E  
WILLIAMSBURG, VA 23185



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DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
12-31-2017

NUMBER  
0407005065

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

PROFESSIONS: ENG



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



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

*Jan W. DeBoer*  
by W. DeBoer, Director

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**DPOR** COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR APPLICANTS  
BUSINESS ENTITY REGISTRATION  
NUMBER: 0407005065 EXPIRES: 12-31-2017  
PROFESSIONS: ENG  
KERR ENVIRONMENTAL SERVICES CORP  
1008 OLD VIRGINIA BEACH RD  
STE 200  
VIRGINIA BEACH, VA 23451



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DPOR-PC (05/2015)

### Key Personnel

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

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

EXPIRES ON  
06-30-2017

NUMBER  
0402040771

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

HAROLD JUDSON DYSON  
106 BUCKINGHAM DRIVE  
COLONIAL HEIGHTS, VA 23834

  
  
Jay W. DeBoer, Director

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**COMMONWEALTH OF VIRGINIA**  
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS  
PROFESSIONAL ENGINEER LICENSE  
NUMBER: 0402040771 EXPIRES: 06-30-2017

HAROLD JUDSON DYSON  
106 BUCKINGHAM DRIVE  
COLONIAL HEIGHTS, VA 23834



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

**COMMONWEALTH of VIRGINIA**  
Department of Professional and Occupational Regulation

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

EXPIRES ON  
04-30-2019

NUMBER  
0402034707

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



LAURA MICHELLE MEHIEL  
901 DULANEY VALLEY ROAD  
SUITE 710  
TOWSON, MD 21204



  
Jay W. DeBoer, Director

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DPOR LIC (02/2017)

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

**EXPIRES ON**

12-31-2017

**NUMBER**

0402041295

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



**MICHAEL WILLIAM SAUNDERS**  
 4500 LITCHFIELD DRIVE  
 CHESTERFIELD, VA 23832



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 Jay W. DeBoer, Director

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**Non-APELSCIDLA Personnel**

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

**EXPIRES ON**

06-30-2017

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

**NUMBER**

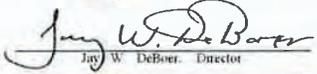
0402011415

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

**RONALD C BRIGGS**  
 14413 CLIPPER COVE CT  
 MIDLOTHIAN, VA 23112



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

**EXPIRES ON**  
11-30-2018

**NUMBER**  
4001011856

**REAL ESTATE APPRAISER BOARD**

**CERTIFIED GENERAL REAL ESTATE APPRAISER**



**RICHARD DAVID STUCHELL**  
10012 SHADOWRIDGE COURT  
FREDERICKSBURG, VA 22407

  
Jay W. DeBoer, Director

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## DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION COMMONWEALTH OF VIRGINIA

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

**EXPIRES ON**  
07-31-2017

**NUMBER**  
0402015605

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

**EDWARD GEORGE DRAHOS**  
14410 GALLOWAY CT  
MIDLOTHIAN, VA 23113

  
Jay W. DeBoer, Director

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COMMONWEALTH OF VIRGINIA

EXPIRES ON  
06-30-2017

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

NUMBER  
0402037983

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

EVAN BRADLEY MORRIS  
SCHNABEL ENGINEERING ASSOC  
9800 JEB STUART PARKWAY  
SUITE 100  
GLEN ALLEN, VA 23259



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COMMONWEALTH of VIRGINIA

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

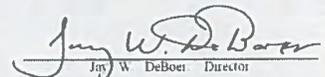
EXPIRES ON  
06-30-2018

NUMBER  
0402047135

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



PHILIP ALEXANDER WUNDERLY  
141 GREAT GLEN  
WILLIAMSBURG, VA 23188



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COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
08-31-2017

NUMBER  
2801002096

BOARD FOR PROFESSIONAL SOIL SCIENTISTS, WETLAND PROFESSIONALS & GEOLOGISTS  
CERTIFIED PROFESSIONAL GEOLOGIST



JAMES ROBERT WHEELER  
11800 CUMBERLAND ESTATES ROAD  
NEW KENT, VA 23124



*Jay W. DeBoer*  
Jay W. DeBoer, Director

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

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COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR PROFESSIONAL SOIL SCIENTISTS, WETLAND  
PROFESSIONALS & GEOLOGISTS  
CERTIFIED PROFESSIONAL GEOLOGIST  
NUMBER: 2801002096 EXPIRES: 08-31-2017

JAMES ROBERT WHEELER  
11800 CUMBERLAND ESTATES ROAD  
NEW KENT, VA 23124



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

DPOR-PC (05/2015)

COMMONWEALTH of VIRGINIA

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

EXPIRES ON  
10-31-2018

NUMBER  
3402000060

BOARD FOR PROFESSIONAL SOIL SCIENTISTS, WETLAND PROFESSIONALS & GEOLOGISTS  
PROFESSIONAL WETLAND DELINEATOR CERTIFICATION



ROBERT PARNELL KERR  
KERR ENVIRONMENTAL SERVICES  
1008 OLD VIRGINIA BEACH RD 200  
VIRGINIA BEACH, VA 23451



*July W. DeBoer*  
July W. DeBoer, Director

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

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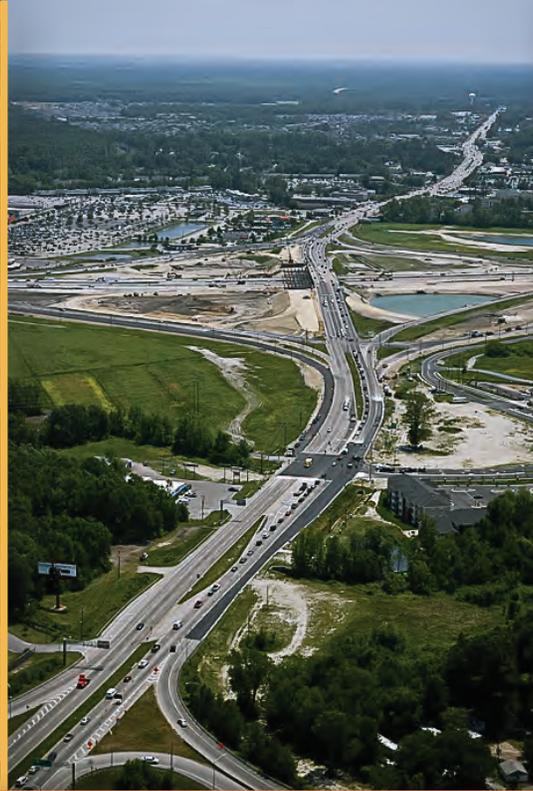
COMMONWEALTH of VIRGINIA  
Department of Professional and Occupational Regulation

BOARD FOR PROFESSIONAL SOIL SCIENTISTS, WETLAND  
PROFESSIONALS & GEOLOGISTS  
PROFESSIONAL WETLAND DELINEATOR CERTIFICATION  
NUMBER: 3402000060 EXPIRES: 10-31-2018

ROBERT PARNELL KERR  
KERR ENVIRONMENTAL SERVICES  
1008 OLD VIRGINIA BEACH RD 200  
VIRGINIA BEACH, VA 23451



(FOLD)



## 3.3.1 KEY PERSONNEL RESUME FORMS

SUBMITTED TO:



SUBMITTED BY:





**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>									
a. Name & Title: <b>TED KIRK, Vice President – Southeast Region</b>									
b. Project Assignment: <b>Design-Build Project Manager (DBPM)</b>									
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>Flatiron Constructors, Inc.   Full-Time Employment</b>									
<p>d. Employment History: With this Firm <b>10</b> Years With Other Firms <b>34</b> Years          Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p><b>FLATIRON, VICE PRESIDENT OF OPERATIONS FOR SOUTHEAST CIVIL, 2014 – PRESENT:</b> Ted manages all design-build and traditional bid-build projects throughout the Mid-Atlantic region ensuring the overall quality and timeliness of the work. He also manages various teams of design professionals, construction managers, subcontractors, and subconsultants to complete projects on-time and within budget. Ted oversees contract administration, material procurement, subcontractor including DBE/WBE firm selection and contracts; planning; scheduling including manpower and equipment requirements; submittals and pay estimates. Throughout his tenure, Ted has brought his knowledge and experience to provide innovative solutions to many projects. He has proactively worked with owners and other stakeholders to mitigate issues during projects as well as coordination of public outreach and relations. The majority of projects under Ted’s control are well in excess of \$100 million.</p> <p><b>FLATIRON, DIVISION MANAGER, 2007 – 2014:</b> By developing strong partnerships with Mid-Atlantic Transportation Owners, including NCDOT, Ted built Flatiron’s Southeast Regional operations through traditional bid-build and alternative delivery projects. He was responsible for all project aspects including management of design professionals, construction managers, subcontractors, and subconsultants, contract administration, material procurement; planning and scheduling including manpower and equipment requirements; submittals and pay estimates from start to final closeout of the project. In addition, Ted led the teams for various projects such as the NCDOT I-85 Yadkin River Crossing DB Project, I-35W DB Emergency Bridge Replacement in Minneapolis, and the Johns Pass Bascule Bridge for FDOT. Contract values ranged from \$40 million to \$240 million.</p> <p><b>ARCHER WESTERN CONTRACTORS, LTD, OPERATIONS MANAGER, 1997 – 2007:</b> Ted oversaw all North Carolina Transportation projects including contract administration (including resolution of disputes), material procurement, subcontractors, project schedule, and construction quality. This included the I-40 Greensboro Western Loop that rebuilt eight miles of interstate highway with complete maintenance of traffic in an area of high AADT, 20 bridges, five million CY of earthwork, collaboration with all primary and third party stakeholders and a strong public outreach program. He also oversaw two projects for the Charlotte Light Rail track work, bridges, and stations. Additionally Ted was in charge of the outfall project in Virginia Beach for the US Army Corps of Engineers. Contract values under Ted’s direct control ranged between \$25 Million and \$100 Million.</p> <p><b>SUMMARY OF RELEVANT EXPERIENCE</b></p> <table border="0"> <tr> <td>• 44 Years Quality Experience</td> <td>• High Profile Design-Build Structure/Bridge Construction</td> </tr> <tr> <td>• Local Expertise in the Mid-Atlantic Region</td> <td>• Large, Environmentally Sensitive Design-Build Projects</td> </tr> <tr> <td>• Interstate Widening and Reconstruction</td> <td>• Dispute Avoidance and Resolution</td> </tr> <tr> <td>• Stakeholder Coordination</td> <td>• Full Control and Authority Over Large Design-Build Projects</td> </tr> </table>		• 44 Years Quality Experience	• High Profile Design-Build Structure/Bridge Construction	• Local Expertise in the Mid-Atlantic Region	• Large, Environmentally Sensitive Design-Build Projects	• Interstate Widening and Reconstruction	• Dispute Avoidance and Resolution	• Stakeholder Coordination	• Full Control and Authority Over Large Design-Build Projects
• 44 Years Quality Experience	• High Profile Design-Build Structure/Bridge Construction								
• Local Expertise in the Mid-Atlantic Region	• Large, Environmentally Sensitive Design-Build Projects								
• Interstate Widening and Reconstruction	• Dispute Avoidance and Resolution								
• Stakeholder Coordination	• Full Control and Authority Over Large Design-Build Projects								
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Military Institute   Lexington, VA   Bachelor of Science in Civil Engineering   1973</b>									
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <b>N/A</b>									
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> <li><i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li><i>Note whether experience is with current firm or with other firm.</i></li> <li><i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>									

**NCDOT I-85 Yadkin River Widening & Bridge Replacement, Salisbury, NC (\$140M)**

1. Ted, in his role as Vice President of the Southeast Region, was responsible for the overall project design and construction for the widening and reconstruction of 3.3-miles of I-85. In conjunction with the DBPM, he served as primary liaison between NCDOT and the design-build project team. He also oversaw project staffing and hiring practices; administered contractual matters; and was responsible for the quality, schedule, and performance of the project team. Ted's leadership not only delivered a successful project that was substantially completed eight months ahead of schedule, it was also recognized with a Design-Build Institute of America Award. He ensured that the design-build team met all of its contractual obligations and worked with NCDOT to mitigate a utility easement issue that could have led to major claims and significantly delayed the project.
2. Flatiron Constructors, Inc.; Design-Build Project Manager
3. May 2010 – April 2014

**Relevance to the Project**

- ✓ Design-Build Project
- ✓ Interstate Roadway and Bridge Widening
- ✓ Interstate Bridge Replacement Over Water and Wetlands
- ✓ High AADT
- ✓ Interstate Interchange Reconfiguration
- ✓ Environmentally Sensitive Location
- ✓ Complex MOT/TMP
- ✓ Phased Construction
- ✓ Utility Coordination and Relocation
- ✓ Public Coordination and Outreach

**MnDOT I-35W (St. Anthony Falls) Replacement Bridge, Minneapolis, MN (\$234M)**

1. Ted led the design-build team for the emergency replacement of the I-35W Bridge, which collapsed in August 2007, with a 1,216-foot-long precast segmental bridge over the Mississippi River. He provided the necessary experience to supervise and control the highly accelerated proposal phase and start of the project. Ted's leadership as the DBPM at the start of the project ensured that the bridge would open three months ahead of the 14 month replacement schedule. He oversaw scheduling, subcontractor and material procurement and the construction planning and design coordination. This extremely high profile project required close coordination with the stakeholders to avoid issues and disputes along with a large project outreach.
2. Flatiron Constructors, Inc.; Design-Build Project Manager
3. August 2007 – January 2008

**Relevance to the Project**

- ✓ Design-Build Project
- ✓ Interstate Bridge Construction
- ✓ Complex MOT
- ✓ Opened Three Months Ahead of Schedule
- ✓ Utility Coordination
- ✓ Significant Public Outreach

**NCDOT Washington Bypass, Washington, NC (\$199M)**

1. Ted oversaw the team that built the 6.8-mile, four-lane U.S. 17 Bypass around Washington and Chocowinity, NC for NCDOT. This included construction of two major interchanges and a three mile bridge over the Pamlico-Tar River and environmentally sensitive wetlands. To ensure minimal disturbance to the surrounding environment, Flatiron used launching gantry to perform a totally top-down construction (including pile driving) approach to the project to ensure minimal disturbance of the surrounding wetland environment. Ted's duties included the supervision and authority for all design and construction including quality. He directly worked with the Department and other stakeholders to mitigate issues as they arose. Ted oversaw the project schedule to ensure that equipment, qualified personnel and materials were available as needed to ensure an early completion. Additionally, he was responsible for public outreach including coordination with the historic town of "Little" Washington to keep all third party stakeholders apprised of project progress.
2. Flatiron Constructors, Inc.; Division Manager
3. November 2007 – March 2009

**Relevance to the Project**

- ✓ Design-Build Project
- ✓ Interchange Construction
- ✓ Completed Eight Months Early
- ✓ Environmentally Sensitive Location
- ✓ Innovative Construction Techniques
- ✓ Public Outreach

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

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

**Ted is not required to be on-site full-time for the duration of construction.**



**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>HAROLD DYSON, P.E., Associate</b>	
b. Project Assignment: <b>Responsible Charge Engineer</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>A. Morton Thomas and Associates, Inc.   Full-Time Employment</b>	
d. Employment History: With this Firm <u>4</u> Years With Other Firms <u>34</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):  <b>A. MORTON THOMAS AND ASSOCIATES, INC., ASSOCIATE, 2013 – PRESENT:</b> As an Associate with AMT, Harold specializes in the construction management and oversight of major transportation projects with an emphasis on construction or rehabilitation of roadways, bridges, and structures. He applies advanced engineering planning and project scheduling principles to projects, conducts constructability reviews, oversees contractor work, and provides resolution of construction issues.  <b>VIRGINIA DEPARTMENT OF TRANSPORTATION, VARIOUS POSITIONS, 2001 – 2013:</b> Over a 12-year timeframe, Harold served in various positions that included: <ul style="list-style-type: none"> <li>• From 2008-2013, Harold served as Richmond District Construction and Materials Engineer. He was responsible for a construction program valued at more than \$350 million. Additionally, Harold managed the District’s materials section and was responsible for QC/QA/IA/IV program for construction materials, geotechnical and pavement designs and troubleshooting of materials issues.</li> <li>• From 2005-2007, Harold served as Architect Engineer II - Responsible Charge Engineer / Project Manager. He was Responsible Charge Engineer for design and construction of a major water crossing and associated roadway. Also, served as Area Construction Engineer in Richmond District’s Northern Region responsible for the delivery of all construction and maintenance contracts in a five-county area.</li> <li>• From 2004-2005, Harold served as Architect Engineer II - Professional Engineer. Additionally, Harold served as Program Manager (Responsible Charge) for various projects during the design phase. Developed scope, schedule and budget. Coordinated design and delivery to advertisement.</li> <li>• From 2001-2004, as Transportation Engineer Senior, Harold assisted the District Administrator and District Construction Engineer in effectively managing the construction program throughout the Virginia Department of Transportation’s Richmond District.</li> </ul>	
<b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"> <li>• 38 Years of VDOT experience managing numerous construction and maintenance projects</li> <li>• Design-Build construction issue resolution</li> <li>• Developed, reviewed and approved QA/QC Plan development, review and coordination</li> <li>• VDOT DBPM for five (5) projects since 2014</li> <li>• VDOT coordination for identified design/construction issues</li> <li>• Third party coordination</li> <li>• Permitting / Environmental</li> </ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Tech   Blacksburg, VA   Bachelor of Science in Civil Engineering   1979</b>	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <ul style="list-style-type: none"> <li>• <b>2005   Professional Engineer   Virginia   #040771</b></li> <li>• <b>Also registered in NC</b></li> </ul>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>	

### VDOT I-95 Bridge Replacements, *Richmond, Virginia* (\$98M)

1. Replacement of 11 bridges on I-95. This \$98 million project included the superstructure replacement and substructure rehabilitation of 11 bridges on I-95 in the City of Richmond using accelerated bridge construction and drilled shafts. Responsibilities: Harold was responsible for construction management including contractor oversight, resolution of construction issues, staffing, field decision making, material testing, resolution of materials quality issues, contract changes and coordination of a complex traffic management plan. The project required close coordination with a number of project stakeholders including the City of Richmond. In addition, the project involved a massive public outreach program to keep the public informed of detours, closures and lane limitations.
2. Virginia Department of Transportation; Responsible Charge Engineer
3. June 2010 – February 2013

#### *Relevance to the Project*

- ✓ *Large, Complex Interstate Project*
- ✓ *Major Bridge Construction*
- ✓ *Extensive Traffic Management Plan*
- ✓ *Coordination Between Designer and Contractor*
- ✓ *Regular Communication with VDOT*

### VDOT Huguenot Memorial Bridge Replacement, *Henrico, Virginia* (\$54M)

1. Replacement of Route 147 over the James River. This \$38 million project included construction of a new 54-foot-wide, 0.57-mile-long structure with bike lanes, demolition of the existing bridge, major utility work and reconstruction of 0.5 miles of roadway in an urban environment. Responsibilities: Harold was responsible for construction management including contractor oversight, resolution of construction issues, contractor payments, staffing and resolution of utility relocation conflicts and material testing. This project required very close coordination with localities during utility relocations to avoid potential outages. In addition, this project involved an extensive public outreach campaign to keep stakeholders informed of project activities and progress. The project opened to traffic three months ahead of schedule.
2. Virginia Department of Transportation; Responsible Charge Engineer / Project Engineer
3. October 2010 – May 2013

#### *Relevance to the Project*

- ✓ *Major Bridge Construction*
- ✓ *Bridge Over Water*
- ✓ *Urban Environment*
- ✓ *Management of Major Traffic Impacts*
- ✓ *Management of Schedule and Budget*
- ✓ *Regular Communication with VDOT*

### VDOT Route 5 Bridge Replacement, *Charles City, Virginia* (\$35M)

1. Construction of a one-half mile long bridge, realignment and construction of over one-half mile of approaches along with the demolition of the existing bridge in an environmentally sensitive location. Responsibilities: Harold was responsible for all construction activities for the replacement of the Route 5 Bridge over the Chickahominy River. Pre-award responsibilities included project management, constructability/bid ability reviews, cost estimating, development of the construction schedule and development of the contract document and Special Provisions. Post award responsibilities included conducting the pre-construction meeting and monthly progress meetings, schedule analysis, responding to all contractor inquiries, working with the design team to develop plan revisions as needed, coordination with local governments, review and approval of pay documents and coordinating review and approval of shop drawings. Ensured that construction was completed in accordance with all contract documents.
2. Virginia Department of Transportation; Responsible Charge Engineer / Project Manager
3. January 2007 – March 2010

#### *Relevance to the Project*

- ✓ *Widening of Roadway*
- ✓ *Bridge Over Water*
- ✓ *Major Bridge Construction*
- ✓ *Management of Schedule and Budget*
- ✓ *Coordination Between Design Team and Builder*
- ✓ *Regular Communication with VDOT*

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

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

**Harold is not required to be on-site full-time for the duration of construction.**



## ATTACHMENT 3.3.1

### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>			
a.	Name & Title: <b>MICHAEL SAUNDERS, P.E., CCM, DBIA, VP, Director of Construction</b>		
b.	Project Assignment: <b>Quality Assurance Manager</b>		
c.	Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>NXL Construction Services, Inc.   Full-Time Employment</b>		
d.	<p>Employment History: With this Firm <u>5</u> Years With Other Firms <u>15</u> Years            Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p><b>NXL CONSTRUCTION SERVICES, INC., VICE PRESIDENT AND DIRECTOR OF CONSTRUCTION MANAGEMENT, 2011 – PRESENT:</b> Michael currently manages and coordinates the workload of in-house staff and sub-consultants including four prime VDOT district-wide contracts. He provides consistency and coordination across all assigned tasks, coordinates progress meetings, established regular communications with clients, provides project review, and quality control/quality assurance management. As Quality Assurance Manager (QAM), he provides services for the Route 3 Widening contract in Culpepper. He was previously been the QAM on the Route 36 BRAC Improvements in Richmond, Virginia and the I-64/I-264 Pavement Rehabilitation in Norfolk, Virginia.</p> <p><b>VIRGINIA DEPARTMENT OF TRANSPORTATION, VARIOUS POSITIONS, 2001 – 2011:</b></p> <ul style="list-style-type: none"> <li>● In 2011, Project Control Engineer/Area Construction Engineer for DB and LAP. Mike coordinated constructability reviews; performed district-wide NOI and claims analysis; day-to-day activities as directed by the District Construction Engineer; and acted as Responsible Charge Project Manager for various design-build projects in the Richmond District.</li> <li>● From 2007-2011, Area Construction Engineer in the Richmond District/Southern Area Construction. Mike executed a six-year program to include managing all aspects of construction and maintenance contracts safely (i.e. safety, quality, on-time, within budget); supervised all phases of multi-operational roadway and structural projects; performed responsible charge duties on various contracts; and assisted the Fredericksburg District with the administration of a regional design-build bridge replacement project.</li> <li>● From 2005-2007, Construction Project Manager for the Salem District/Southern Area Construction. Mike supervised all phases of multi-operation roadway and structural construction projects.</li> <li>● In 2005, Permits/Subdivision Supervisor for the Christiansburg Residency. Mike supervised and oversaw administration of the subdivision, rural streets, and land use permits programs. He managed the performance and development of three staff members.</li> <li>● From 2004-2005, Architect/Engineer I for the Salem and Bedford Residencies. Mike assisted land development and maintenance program operations along with performing Acting Assistant Resident engineering duties and construction project management.</li> <li>● From 2001-2004, a Transportation Engineer Associate for the Christiansburg Residency. Michael completed the Associate Engineer Program in the Salem District.</li> </ul> <p><b>SUMMARY OF RELEVANT EXPERIENCE</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>● 16 Years VDOT Quality Experience</li> <li>● Local Expertise with VDOT Hampton Roads District</li> <li>● Developed QA/QC Plans based on VDOT DB Manual</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>● QAM on 4 DB Projects</li> <li>● Active Virginia P.E., CCM, and DBIA Certifications</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>● 16 Years VDOT Quality Experience</li> <li>● Local Expertise with VDOT Hampton Roads District</li> <li>● Developed QA/QC Plans based on VDOT DB Manual</li> </ul>	<ul style="list-style-type: none"> <li>● QAM on 4 DB Projects</li> <li>● Active Virginia P.E., CCM, and DBIA Certifications</li> </ul>
<ul style="list-style-type: none"> <li>● 16 Years VDOT Quality Experience</li> <li>● Local Expertise with VDOT Hampton Roads District</li> <li>● Developed QA/QC Plans based on VDOT DB Manual</li> </ul>	<ul style="list-style-type: none"> <li>● QAM on 4 DB Projects</li> <li>● Active Virginia P.E., CCM, and DBIA Certifications</li> </ul>		
e.	Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>Virginia Tech   Blacksburg, VA   Bachelor of Science in Civil Engineering   2001</b>		
f.	Active Registration: Year First Registered/ Discipline/VA Registration #: <ul style="list-style-type: none"> <li>● <b>2005   Professional Engineer   Virginia   #041295</b></li> <li>● <b>Design-Build Institute of America</b></li> <li>● <b>Certified Construction Manager</b></li> </ul>		
g.	<p>Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>		

**VDOT Route 3 Widening, Culpeper, Virginia (\$24M)**

1. As QAM, Mike prepared and oversaw project quality assurance to improve 5.1-miles of Route 3. In accordance with VDOT's design-build guidelines, he was responsible for performance and coordination of QA testing and inspection and ensured that all materials, work, testing are in conformance with the approved for construction plans and specifications. Additionally, his duties included monitoring the Contractor's (Branch) QC program. He approved QC inspection, project staffing assignments, and the QC frequency testing plan before submission to VDOT. Mike handled the preparation, maintenance, and submission of associated project documentation including diaries, EEO, materials/notebook/documentation, as-built sketches, approval of monthly pay packages, and preparation/ submission of final records. He also manages project QA staff to ensure sufficient staff is provided for compliance with the contract, plans, and specifications.
2. NXL Construction Services, Inc.; Quality Assurance Manager
3. April 2015 – September 2017

- Relevance to the Project**
- ✓ VDOT DB Project
  - ✓ Widening Route 3 with a Total of Six Phases
  - ✓ Constructed Two Additional Lanes
  - ✓ Removal of Existing Pavement Structure
  - ✓ Replacement of Pavement
  - ✓ Significant Stormwater Management
  - ✓ Box Culverts
  - ✓ Utility Relocations

**VDOT Route 36 BRAC Improvements Richmond, Virginia (\$9M)**

1. As QAM for improvement of 1.5 miles of Route 36 and Route 44 near Fort Lee, Mike was responsible for preparing the QA/QC Plans; ensured that QA procedures and plan were followed; managed and coordinated QA testing and inspection in accordance with VDOT's design-build guidelines throughout the project. During the project, he monitored the contractor's QC program and served as liaison with the VDOT in respect to project compliance to perform IA/IV testing. In his roles as QAM, he approved QC inspection, project staffing assignments, and the QC testing plan prior to submission to VDOT. Other specific job duties included the preparation, maintenance, and submission of associated project documentation including diaries, EEO, materials/notebook/documentation, as-built sketches, approval of monthly pay packages, and preparation/submission of final records. He also managed the project QA staff to provide sufficient staffing in compliance with the contract, plans, and specifications.
2. NXL Construction Services, Inc.; Quality Assurance Manager
3. November 2011 – December 2012

- Relevance to the Project**
- ✓ VDOT DB Project
  - ✓ Additional Eastbound Thru Lane
  - ✓ Turn Lanes
  - ✓ Complex Traffic Management Plan Due to Proximity to Fort Lee
  - ✓ Box Culverts
  - ✓ Stormwater Management Basin

**VDOT I-64/I-264 Pavement Rehabilitation, Norfolk, Virginia (\$36.5M)**

1. As QAM, Mike prepared the project QA/QC plan and was responsible for implementing the QA procedures and plan. He performed and coordinated QA testing and inspections in accordance with VDOT's project design-build guidelines and project specifications, monitored the contractor's QC program ensuring the quality of the work and materials, and served as liaison between the contractor and VDOT for project compliance to perform IA/IV testing. He approved QC inspection, project staffing assignments, and QC frequency testing prior to submission to VDOT and handled the preparation, maintenance, and submission of associated project documentation including diaries, EEO, materials/notebook/documentation, as-built sketches, approval of monthly pay packages, and preparation/submission of final records. Mike managed QA staffing so that sufficient resources and manpower were always available in compliance with the contract, plans, and specifications.
  2. NXL Construction Services, Inc.; Quality Assurance Manager
  3. April 2014 – November 2015
- \* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

- Relevance to the Project**
- ✓ VDOT Design-Build
  - ✓ Major Restoration and Pavement Rehabilitation of I-64
  - ✓ Extensive Concrete Patching and Additional Pavement
  - ✓ Drainage Improvements
  - ✓ Remediation of Settling Bridge Approaches
  - ✓ Traffic Control and MOT on a High ADT Roadway

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

**Mike is not required to be on-site full-time for the duration of construction. Mike is currently assigned as QAM to the Route 3 project that is expected to be complete in September 2017. He has also been proposed as QAM part-time on one of the shortlisted team for the I-64 Widening from 200 to 205.**



### ATTACHMENT 3.3.1

#### KEY PERSONNEL RESUME FORM

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>LAURA MEHIEL, P.E., Associate</b>	
b. Project Assignment: <b>Design Manager</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>A. Morton Thomas and Associates, Inc.   Full-Time Employment</b>	
d. Employment History: With this Firm <b>6</b> Years With Other Firms <b>25</b> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): <b>A. MORTON THOMAS AND ASSOCIATES, INC., 2011 – PRESENT:</b> Senior Project Manager and Associate in Charge of mega projects and innovative delivery projects. Oversees highway development/design teams for transportation projects throughout the Commonwealth of Virginia, including design Quality Control (QC) responsibilities. Design Project Manager for design-build and other innovative contracting techniques. <b>HNTB CORPORATION, 1998 – 2011:</b> Senior Project Manager/Operations Manager who oversaw highway development/design teams for transportation projects including design/build throughout Virginia, Maryland, and Washington D.C. including QC role. Engineer-in-Charge of the Columbia, MD office, supervising a staff of highway, hydraulics, traffic, and construction professionals. Held operational, business development, and technical oversight roles. <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"> <li>● 19 Years VDOT Quality Experience</li> <li>● Design Manager on four Design-Build Projects</li> <li>● Developed QA/QC Plans based on VDOT DB Manual</li> <li>● Active Virginia P.E. Certification</li> </ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>University of Delaware   Newark, DE   Bachelor of Civil Engineering (BCE)   1986</b>	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <ul style="list-style-type: none"> <li>● <b>1992   Professional Engineer   Virginia #034707</b></li> <li>● <b>Also registered in D.C., DE, MD, NC, PA, and TN.</b></li> </ul>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List only three (3) relevant projects for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>	
<b>US Route 1 at Fort Belvoir Design-Build, FHWA-Eastern Federal Lands/VDOT, Fairfax County, Virginia (\$82M)</b>	
<p><b>1.</b> As Design Manager, Laura was responsible for managing a multi-disciplinary team, of in-house staff and seven subconsultants, ensuring QC compliance, for widening of 3.68 miles of U.S. 1 from four lanes undivided to a six-lane divided facility. This includes roadway widening; safety and capacity improvements; bridges and major culverts; new trail and sidewalk; retaining walls; five ponds; sound walls; and pile-stabilized slopes. Laura’s involvement helped facilitate schedule by obtaining wetland permits within seven months and negotiating with the agencies to remove time-of-year restrictions for five waters of the U.S. and allow sand bag diversions in four others. Additionally, her team minimized property impacts on Fort Belvoir by creative SWM design and vertical alignment bifurcation.</p> <p>Two intersections of the project carry an average of more than 62,000 vehicles per day during construction, requiring well planned maintenance of traffic (MOT) design to keep traffic safely moving through the work zone. Laura and her team designed the project in three stages with seven sub-phases, generally by widening to the west, shifting traffic to the new pavement, then completing the reconstruction of the existing lanes to serve as northbound. Extensive temporary drainage measures were required to carry drainage across the existing roadway while carrying traffic. A total of 24 separate “release for construction packages” were prepared, including two advance grading packages to initiate grading early to facilitate utility relocations.</p> <p>Laura managed all design including geometric alignments, intersection improvements, traffic analysis, bridge and wall design, MOT plans/ transportation master plans, drainage and stormwater management design, wetland/stream</p>	<p><b>Relevance to the Project</b></p> <ul style="list-style-type: none"> <li>✓ Virginia Design-Build Project</li> <li>✓ Bridge Over Water</li> <li>✓ &gt;60,000 vehicles per day</li> <li>✓ Adjacent Military Installation</li> <li>✓ Complex TMP/MOT</li> <li>✓ Utility Coordination/Relocation</li> <li>✓ Sound Walls</li> <li>✓ Goal to Minimize Footprint</li> <li>✓ Environmental Permitting</li> <li>✓ ROW Acquisition</li> </ul>

permits, topographic and utility surveys, geotechnical explorations, right-of-way (ROW) plans and acquisition. She ran the design public hearing and conducted stakeholder design workshops. She has been involved in the construction phase, providing design support such as refined MOT sequencing, shop drawing reviews, pardon our design meetings, and partnering. Laura also managed the property acquisition process, with her direct team preparing all ROW plans, and her subconsultant providing appraisals, negotiations, COTs, and relocations.

2. A. Morton Thomas and Associates, Inc. 3. June 2013 – March 2017

**VDOT Southgate Drive / US 460 Bypass Interchange, Blacksburg, Virginia (\$46.7M)**

1. Ranked as the #1 priority project for the Salem District, the project is adjacent to Virginia Tech and will eliminate the existing signalized at-grade T-intersection to relieve a source of major congestion and improve safety on US 460 Bypass. The project included traffic analysis and highway design for over three miles of roadway improvements, including a 70 MPH national highway (US 460). The project will provide the third diverging diamond interchange (DDI) in the Commonwealth. The new interchange design was accompanied by the relocation of nearby campus roads, a regional trail, and was developed in coordination with an adjacent airport expansion project. The trail is grade separated in three locations, and the project includes gateway aesthetic treatments on walls and abutments. The DDI was designed to allow for future widening of Route 460 and Southgate Drive, and will allow for a future fourth leg to the interchange to complete a Prices Fork Road bypass. Laura managed consensus from the many diverse stakeholders (particularly Virginia Tech), and led her team’s design to minimize impacts to both Tech property, and environmentally sensitive areas including wetlands, old-growth tree stands, rare, threatened, and endangered species; and an archaeological site.

**Relevance to the Project**

- ✓ VDOT Project
- ✓ Bridge and Interchange Construction
- ✓ >50,000 vehicles per day
- ✓ NHS Highway and Interchange
- ✓ Complex TMP/MOT
- ✓ Utility Coordination/Relocation
- ✓ Goal to Minimize Footprint
- ✓ Environmental Permitting
- ✓ ROW Acquisition

As Design Manager, Laura oversaw a cutting-edge design that incorporated multiple innovative intersections including two roundabouts, and the DDI interchange. She managed a multi-discipline team of 25 in-house staff and five subconsultants to provide extensive alternatives analyses, public hearing/design approval, and 100% plans, specifications and estimate, in a period of 19 months. She provided technical leadership for the design of highway, interchange, and shared-use path geometrics, roundabout design, stormwater management, and drainage facilities, and managed the production team performing traffic modeling of multiple intersection and interchange alternatives, bridge and retaining wall design, geotechnical investigations, TMP/SOC, ROW plans, design waivers, and environmental permit support. Laura organized and facilitated a stakeholder outreach plan which included alternative workshops, design charrettes, graphics, and simulations. A first for the VDOT Salem District, Laura and her team provided “turn-key” project management support as an extension of VDOT staff.

2. A. Morton Thomas and Associates, Inc. 3. November 2012 – December 2014 (Advertisement)

**I-495 HOT (Express) Lanes, Fluor-Lane/VDOT, Fairfax County, Virginia (\$270M)**

1. The Area 1 portion of project for which Laura served as Design Manager included I-495 mainline widening for approximately 4.5 miles, and four interchanges from south of Braddock Road to north of US 50. It was part of a \$2 billion effort to expand and improve a 14-mile section the I-495 Capital Beltway in Fairfax County. As Design Manager, Laura was responsible for managing a multi-disciplinary team of in-house staff and three subconsultants. She oversaw design production of over fifty staff and subconsultants to produce 55 design packages for grading/drainage, erosion control, final grading/roadway, noise and retaining walls, 13 bridges, utility relocations, and ROW plans, 80% of which was completed in a 10-month period. Laura ensured QC procedures were followed, and utilization of VDOT CAD Standards. She worked closely with the Contractor and GEC reviewers daily by use of over-the-shoulder reviews, comment resolution meetings, and discipline-specific design sessions to maintain production schedule and meet the project construction goals.

**Relevance to the Project**

- ✓ VDOT Design-Build Project
- ✓ Major Bridge Construction
- ✓ Interstate Widening/Interchanges
- ✓ >90,000 vehicles per day
- ✓ Complex TMP/MOT
- ✓ Utility Coordination/Relocation
- ✓ Sound Walls
- ✓ Goal to Minimize Footprint
- ✓ Environmental Permitting

Laura and her team prepared a complex MOT staging plan for interchange ramp reconstruction, which required traffic modeling for each phase, to maintain existing interchange movements and property access throughout construction. The project provided retaining walls to mitigate impacts to Accotink Creek, and designed outfall improvements at degraded outfalls throughout Wakefield Park meeting MS-19. Wetland and stream permits were obtained for unavoidable environmental impacts. Laura assisted with extensive utility coordination and ROW plans for property acquisition. Sound walls were also designed and constructed in Laura’s segment of the project, following VDOT requirements.

2. HNTB Corporation 3. September 2007 – June 2010

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

**Laura is not required to be on-site full-time for the duration of construction.**



**ATTACHMENT 3.3.1**

**KEY PERSONNEL RESUME FORM**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title: <b>Greg Suttle Construction Manager</b>	
b. Project Assignment: <b>Construction Manager</b>	
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time): <b>Branch Civil, Inc.   Full Time Employment</b>	
d. Employment History: With this Firm <b>26</b> Years With Other Firms <b>2</b> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):  <b>BRANCH CIVIL, INC., CONSTRUCTION MANAGER, 1998 – PRESENT</b> Greg is responsible for project construction including Quality Control (QC), executes work in accordance with “approved for construction” plans/specifications, and is accountable for compliance with material and construction requirements. Additional responsibilities include planning, scheduling, and allocation of manpower/equipment resources. He also manages owner, subcontractor, and supplier contracts. Greg supports EEO compliance, enforcement, and adheres with corporate safety regulations and training. Greg has performed similar work on three design-build and multiple design-bid-build widening projects, including interstate, primary and secondary road widening/relocations, as well as interchange work for various state and local departments of transportation, federal agencies, and private corporations. On the I-95 HOT/HOV Express Lanes Project, Greg’s role included coordination of all Maintenance of Traffic (MOT) and construction access activities in an area of high Average Daily Trips (ADT) volumes and a complex traffic management plan. Additionally, Greg was responsible for resolving challenging geotechnical concerns and working around environmentally sensitive areas. Greg places an emphasis on workplace safety and training while meeting or exceeding owner’s expectations. His daily involvement with the project operations creates a solid foundation for his understanding and working knowledge of the impacts associated with geotechnical challenges, MOT, environmental concerns, and utility relocation issues.  <b>SUMMARY OF RELEVANT EXPERIENCE</b> <ul style="list-style-type: none"> <li>● 28 Years VDOT Project Experience</li> <li>● VDOT Projects with High ADT Volume</li> <li>● 3 Design-Build Projects</li> <li>● Complex MOT Projects</li> <li>● Utility Relocations</li> <li>● Geotech / Environmental Resolution</li> </ul>	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: <b>West Virginia Institute of Technology   Montgomery, West Virginia   Bachelor of Science in Mining Engineering   1987</b>	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: <ul style="list-style-type: none"> <li>● <b>2003   Virginia Dept. of Environmental Quality (DEQ) Responsible Land Disturber (RLD)   # RDL03021</b></li> <li>● <b>1995   VDOT Erosion &amp; Sediment Control Contractor Cert. (ESCCC)   Contract Certification #1-01135</b></li> <li>● <b>1999   Virginia Blaster – Unrestricted   E269250</b></li> <li>● <b>2013   ACI Concrete Certification   01273969</b></li> </ul>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none"> <li>1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i></li> <li>2. <i>Note whether experience is with current firm or with other firm.</i></li> <li>3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i></li> </ol> <p><b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b></p>	
<b>VDOT Route 3 Widening Design-Build, Culpeper, VA (\$24M)</b>	
<b>1.</b> During the design phase of this five-mile section of road widening from a two to a four-lane divided highway on Route 3, Greg worked with the design team to perform constructability reviews, provided input on MOT design, presented guidance for working around environmentally sensitive areas, and contributed to the development of solutions to geotechnical issues. During construction, Greg worked closely with VDOT and their project staff to coordinate scheduling and work flow as various stages of the project became accessible for construction activities. One critical responsibility has been the coordinating of extensive utility relocations throughout the entire corridor, including Verizon, AT&T, Level 3, Qwest, Century Link, Dominion Virginia Power, Transco/Williams Gas, and Columbia Gas. Greg successfully led the construction team in working around	<b>Relevance to the Project</b> <ul style="list-style-type: none"> <li>✓ VDOT Design-Build Project</li> <li>✓ Road Widening/ Reconstruction</li> <li>✓ Complex MOT</li> <li>✓ Utility Relocations</li> <li>✓ Environmentally Sensitive Areas</li> <li>✓ Geotechnical Constraints</li> </ul>

the stream impacts (1,500lf+) and wetland areas. Substantial geotechnical issues resulting from unsuitable soils, rock, and highly plastic clays and the mitigation strategy have been one of Greg’s primary focuses. Maintaining effective communication with residents and local commercial, agricultural, and industrial businesses has also been an important consideration in Greg’s strategy to effectively manage shareholder impacts. It can be anticipated that Greg’s Construction Manager duties on the I-64 Capacity Improvements – Segment III Project will be similar to the Route 3 Widening Project including managing MOT and multiple traffic shifts, ensuring environmental compliance and stewardship, providing timely resolution of geotech concerns, managing overall construction and complying with QA/QC requirements.

2. Branch Civil, Inc. ; Construction Manager
3. October 2015 – September 2017 (anticipated completion)

**VDOT I-95 HOT/HOV Express Lanes Segment 1 Design-Build, Prince William & Stafford Counties, VA (\$46M)**

1. Branch was a key subcontractor for the concessionaire and Greg functioned as the Construction Manager for the project which included coordinating all roadway activities (including Branch’s self-perform work and other roadway subcontractors) for the concessionaire over the nine miles of new I-95 HOT Lanes, including 1.5+ miles of interstate widening. Greg and the Branch Project Team successfully mitigated similar geotechnical, environmental, and MOT challenges as can be expected on the I-64 Capacity Improvements – Segment III Project. Greg was involved with developing the construction sequencing, MOT plans, interstate widening access points, and laydown areas within the I-95 corridor. A significant part of Greg’s focus was spent on managing the MOT plan to maintain a safe separation between the traveling public and construction as well as Incident Management. Greg’s involvement with the placement of access points for construction in the median of I-95 along with areas for acceleration and deceleration were critical to the timely delivery of construction materials and efficient movement of vehicles through the work zone. The scope of work Greg oversaw consisted of clearing and grubbing, over 550,000cy of on-site excavation, 400,000cy of borrow material, storm drainage and erosion control installation and maintenance. Greg coordinated all roadway activities with the other trades which included construction of five new bridges, three widened bridges, 15 bridge/ramp repairs, more than 1,000,000sf of sound walls, retaining walls, box culvert extensions, and ITS installation.

2. Branch Civil, Inc. ; Construction Manager
3. August 2011 – May 2015

**Relevance to the Project**

- ✓ VDOT Design-Build Project
- ✓ Interstate Median Widening
- ✓ Complex MOT
- ✓ Coordination of Median Access
- ✓ Similar ADT volume
- ✓ Incident Management
- ✓ Mainline and Median Bridge Construction in an existing interstate
- ✓ Interchange
- ✓ Environmental and Geotechnical Constraints

**VDOT I-64 Bridge Replacement and Interstate Improvements, Covington, VA (\$12M)**

1. Greg served as the Construction Manager for the 2.2 mile upgrade of I-64 which included replacement of dual bridges over the Jackson River. Greg coordinated all roadway activities including earthwork, storm drainage, erosion control, MOT, construction in environmentally sensitive areas, and addressing geotech concerns. Greg worked with Branch’s bridge crews to integrate the installation of causeways and cofferdams in the Jackson River with roadway construction. Two new 7-span bridges were constructed to replace the existing structures. Greg was integral in managing the MOT required to move traffic around to accommodate the demolition and construction of the bridges. Greg was responsible for ensuring that the project was staffed appropriately and schedule milestone dates were met.

2. Branch Civil, Inc. ; Construction Manager
3. July 2002 – February 2005

**Relevance to the Project**

- ✓ Interstate Widening
- ✓ Full Depth Roadway Reconstruction
- ✓ Complex MOT
- ✓ Bridge Construction Over Water
- ✓ Environmental and Geotechnical Constraints

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

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

**As Construction Manager, Greg is currently 100% dedicated to the Route 3 Widening Project which is scheduled to be completed in September 2017. He will be available and 100% dedicated to the construction of the I-64 Capacity Improvements – Segment III Project prior to commencement of construction.**

<b>Brief Resume of Key Personnel anticipated for the Project.</b>	
a. Name & Title:	<b>RICHARD BENNETT, Director of Right-of-Way and Utility Coordination Services</b>
b. Project Assignment:	<b>Lead Utility Coordination Manager</b>
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote the type of employment (Full time/Part Time):	<b>Bowman Consulting   Full-Time Employment</b>
d. Employment History: With this Firm <u>2.5</u> Years With Other Firms <u>48</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):	<p><b>BOWMAN CONSULTING, DIRECTOR OF RIGHT-OF-WAY AND UTILITY COORDINATION SERVICES, 2008 – PRESENT:</b> Richard currently manages right-of-way (ROW) acquisition efforts, relocation consulting, utility coordination and railroad coordination. He has extensive knowledge in federal and state laws, rules, regulations and procedures regarding right-of-way acquisition, relocation assistance, utility relocations, and accommodation.</p> <p><b>VIRGINIA DEPARTMENT OF TRANSPORTATION, STATE DIRECTOR OF RIGHT-OF-WAY AND UTILITIES, 2008 - 2014:</b> Richard oversaw statewide ROW, utility relocation, and railroads throughout Virginia for the Virginia Department of Transportation. He managed and directed a staff of approximately 160 specialists and was responsible for project delivery of these specific programs.</p> <p><b>GREENHORNE AND O’MARA, INC., PROJECT AND BRANCH MANAGER, 1999 - 2008:</b> Richard’s primary responsibility was to oversee ROW acquisitions, utility relocation coordination, and construction engineering services for transportation projects. He managed and directed a staff of approximately 50 specialists. Richard also provided services on major and locally administered projects.</p> <p><b>SUMMARY OF RELEVANT EXPERIENCE</b></p> <ul style="list-style-type: none"> <li>• Over 46 Years in the Transportation and Utility Sectors</li> <li>• Extensive knowledge in Federal and State Laws, Rules, Regulations, and Procedures</li> <li>• 37 Years Serving VDOT in Various Capacities</li> </ul>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	<p><b>Old Dominion University   Norfolk, VA   Course Studies in Engineering Technology   1967</b></p> <p><b>Virginia Commonwealth University   Richmond, VA   Course Studies in Real Estate and Appraisals   1980</b></p>
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	<b>N/A</b>
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <b>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</b>	<p><b>VDOT Route 495 Capital Beltway Hot Lanes (I-95 to Dulles Access Road), Fairfax County (\$1.2B)</b></p> <p>1. Lead Utility Project Manager for this 14-mile interstate widening project which included the addition of HOT lanes in the median of I-495. The project included the reconstruction of seven interchanges and the accompanying crossroads. The Utility Team coordinated the utility relocations with each project, which included an interchange, and for the multiple construction phases developed by the design-build contractor. The affected utilities included both electrical distribution and transmission facilities, gas distribution facilities, multiple telecommunication and cable companies’ facilities and water and sanitary sewer facilities owned by the Authority, City and County. Richard and his team verified utilities affected by the project, suggested design changes to minimize conflicts, determined relocation concepts, determined cost responsibilities, conducted a UFI, coordinated utility designs, reviewed and authorized utility relocation construction, monitored the utility relocation construction and process billings.</p> <p>2. Greenhorne &amp; O’Mara, Lead Utility Coordination Manager</p> <p>3. June 2004 – September 2008</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p><i>Relevance to the Project</i></p> <ul style="list-style-type: none"> <li>✓ VDOT Design-Build Project</li> <li>✓ Roadway Widening</li> <li>✓ Interstate Project</li> <li>✓ Utility Crossings</li> </ul> </div>

**VDOT Route 95 and Route 1 Interchange, City of Alexandria and Fairfax County, Virginia (\$285M)**

1. Lead Utility Project Manager for this 1.7-mile interstate widening project which included a multi-directional interchange and the widening of over 1/2-mile Route 1 which is a major urban thoroughfare. The Utility Team coordinated the utility relocations with the multi-phase road and bridge construction contracts. The affected utilities included both electrical distribution and transmission facilities, gas distribution facilities, telecommunication and cable facilities and water and sanitary sewer facilities owned by the Authority, City and County. Richard and his team determined potential utility conflicts and suggested design changes to minimize conflicts, determined relocation concepts, determined cost responsibilities, conducted a UFI, coordinated utility designs with the utility companies, reviewed and authorized utility relocation construction and monitored the utility relocation construction. The team also designed relocation plans for the underground relocation of over one mile of electrical distribution system which was built by the Highway Contractor. The utility relocations costs were in excess of \$20 million.
2. Greenhorne & O'Mara, Lead Utility Coordination Manager
3. January 2000 – June 2005

**Relevance to the Project**

- ✓ VDOT DB Project
- ✓ Roadway Widening
- ✓ Interstate Project
- ✓ Utility Crossings

**VDOT Jamestown Road Widening at the Intersection of Route 199, City of Williamsburg, Virginia (\$7M)**

1. Utility Project Manager for this project widening of Jamestown Road and improving its signalized intersection with Route 199. The Utility Team coordinated the utility relocations with the design-build contractor's operations. The affected utilities included electrical distribution, telecommunication and cable facilities and water and sanitary sewer facilities owned by the City. The Utility Coordination Team verified utilities affected by the project, determined relocation concepts, determined cost responsibilities, conducted a UFI, coordinated utility designs, reviewed and authorized utility relocation construction, monitored the utility relocation construction and process billings. The team also designed plans for the adjustment/ relocation of the City's water and sanitary sewer facilities.
2. Greenhorne & O'Mara, Lead Utility Coordination Manager.
3. December 2003 – May 2006

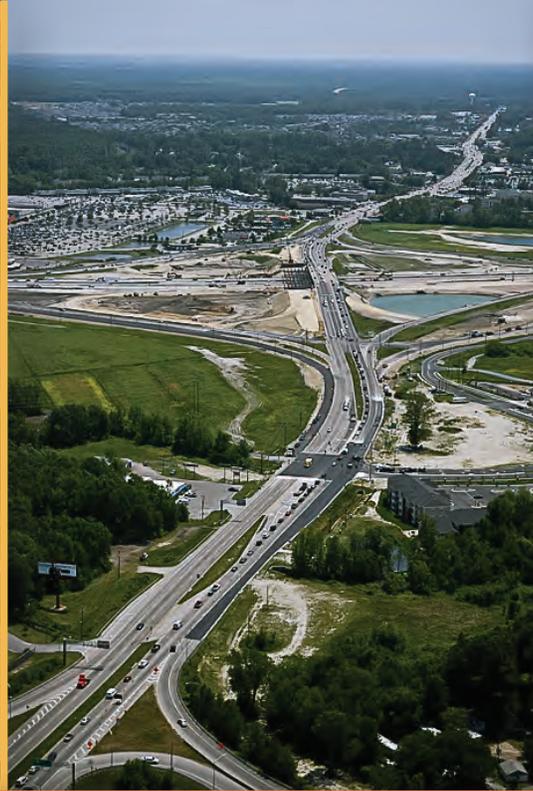
**Relevance to the Project**

- ✓ VDOT DB Project
- ✓ Roadway Widening
- ✓ Coordination with the Same Utilities as I-64

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

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

**Richard is not required to be on-site full-time for the duration of construction.**



## 3.4.1 WORK HISTORY FORMS

SUBMITTED TO:



SUBMITTED BY:





**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: <b>I-85 Yadkin River Widening &amp; Bridge Replacement</b> Location: <b>Salisbury, NC</b>	Name: <b>STV Incorporated</b> <b>(Formerly known as STV/Ralph Whitehead and Associates)</b>	Name of Client/ Owner: <b>North Carolina Department of Transportation (NCDOT)</b> Phone: <b>877-368-4968</b> Project Manager: <b>S. Pat Ivey, PE</b> Phone: <b>336-703-6500</b> Email: <b>pivey@ncdot.gov</b>	<b>01/2013</b>	<b>04/2013 Substantial</b> <b>05/2014 (Actual*)</b> * Final date extended per Owner due to railroad ROW issues	<b>\$136,020</b>	<b>\$140,482*</b>  *Owner Directed Changes to Scope of Work	<b>\$140,482</b>  (Dollar value Based on JV Percentage)

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

<p><b>COMPLETED AHEAD OF SCHEDULE AND UNDER BUDGET</b></p> <p><b>SIMILARITIES TO I-64</b></p> <ul style="list-style-type: none"> <li>✓ Design-Build Project</li> <li>✓ Full Depth Pavement Replacement and Widening of Roadway and Bridges</li> <li>✓ Dual Mainline Bridges over Water/Wetlands</li> <li>✓ Extensive MOT/Traffic Management Plan on a High ADT Interstate with minimal Alternative Routes</li> <li>✓ Incident Management Plan with Pre-Defined Detour Routes</li> <li>✓ Owner, Local Communities, and Stakeholder Coordination</li> <li>✓ Difficult Foundation Materials within a Major, Environmentally Sensitive River</li> <li>✓ Aggressive Schedule</li> <li>✓ Coordination with Adjoining Projects</li> <li>✓ Interchange Reconfiguration</li> <li>✓ Permitting and Environmental</li> <li>✓ Noise Analysis/Abatement</li> </ul>	<p><b>PROJECT NARRATIVE:</b> Flatiron/Lane, a Joint Venture widened and improved 3.3 miles of I-85 in central North Carolina including new dual mainline bridges and replacement of the US29/70 bridge over the Yadkin River. This included construction of two other bridges on I-85 over an active railroad; the removal and reconfiguration of the I-85/U.S. 29/70 interchange; and a new NC 150 Bridge over I-85. A single work platform between the new parallel I-85 Bridges over the Yadkin River was used to allow rapid construction in the environmentally sensitive river basin while providing safe access to the work site away from vehicular traffic. Although the majority of these bridges were built using pre-stressed concrete girders, crews at the north end of the bridges set 200-foot-long, 10-foot-deep steel girders each day during short four-hour railroad closure windows. Upon completion of the southbound lane (SBL) bridge, traffic was separated and placed in its northbound and southbound patterns. Additionally, the project included replacing the adjacent U.S. 29/70 bridge spanning the Yadkin River, dual bridges located south of the river over the Duke Power Industrial Spur and dual bridges located north of the river over the North Carolina Railroad; widening of approximately three miles of the four-lane I-85 to eight lanes with full depth pavement replacement; and design and construction of storm drainage systems, noise walls, and guardrails.</p> <p><b>PROJECT SCOPE</b></p> <ul style="list-style-type: none"> <li>• To submit high quality design submittals to NCDOT, STV conducted their own quality control process with design criteria, had the DBPM review for quality control and constructability, and then submitted to NCDOT.</li> <li>• Full depth pavement replacement and widening of 3.3 miles of a four-lane interstate to an eight-lane freeway with a 46-foot median.</li> <li>• Replacement of the adjacent U.S. 29/70 bridge over the Yadkin River using top-down construction. Using each completed section of the bridge as the work platform for the next section, this eliminated the need for a temporary work bridge and reduced impacts to the environment.</li> <li>• Replacement of two 2,900-foot-long parallel bridges spanning the Yadkin River, wetlands, and railroad tracks for Norfolk Southern and the North Carolina Railroad.</li> <li>• Rehabilitation of the historic Wilcox bridge.</li> <li>• Design and construction of noise walls, storm drainage systems, and guardrails.</li> <li>• Major reconstruction of the U.S. 29/70 and NC 150 interchange.</li> <li>• Other services includes roadway design, public relations, permitting, drainage, geotechnical investigation and design, maintenance of traffic, intelligent transportation system, signage, utility design, extensive utility coordination, and railroad coordination.</li> <li>• Use of innovative techniques to minimize environmental impacts as well as compliance with National Environmental Policy Act commitments and permit requirements.</li> <li>• Complex utility coordination included construction adjacent to Duke Energy's main transmission line across the Yadkin River.</li> <li>• As a unique aspect of the safety program, Flatiron teamed with OSHA to share information and prevent workers from</li> </ul>	<p>getting injured. As part of the partnership, OSHA conducted quarterly walk-throughs of the jobsite, which enabled OSHA employees learn best practices in the construction industry and be better able to identify hazards on a construction site. The partnership also helped familiarize our team's employees with OSHA's role in the construction process</p> <ul style="list-style-type: none"> <li>• Significant attention to traffic safety through this dangerous corridor, including a proactive Incident Management Plan (IMP) that addressed items such as communications with state troopers relative to highway accidents. Additionally, MUTCD standards were followed to implement traffic control during off-peak hours and the project was phased to construct away from traffic until subsequent phases were complete to minimize traffic impacts.</li> </ul> <p><b>FLATIRON'S ROLE:</b> As the lead contractor of Flatiron/Lane, a fully integrated joint venture for this design-build project, Flatiron oversaw all aspects of the project. This included reconstructing and widening 3.3 miles of interstate, two major mainline bridges approximately 2,900-foot-long each, replacement of a parallel bridge on U.S. 29/70, other bridges, interchanges and sound walls. Construction began in late 2010 and was completed ahead of schedule with substantial completion in April 2013. Flatiron performed \$77,265,000 proportional share of the project work.</p> <p><b>VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:</b></p> <ul style="list-style-type: none"> <li>• <b>Six National Awards received</b> including Design-Build Institute of America Award of Merit In Transportation in 2014 and Roads and Bridges - Top 10 Roads (#3) in 2012</li> <li>• The I-85/Yadkin River Bridge was built successfully – <b>ahead of schedule, under budget, with quality, and safety.</b> The team <b>met all of NCDOT's goals</b> for this very high-profile project.</li> <li>• <b>Exceeded the project DBE requirement of 10.4% with a 12.2% actual.</b></li> <li>• Erosion Control and Environment Protection Success for this project have been <b>recognized by various state and local agencies such as NCDOT and North Carolina Department of Environmental and Natural Resources.</b></li> <li>• Use of a single half-mile long construction access work platform between the new mainline bridges instead of separate platforms for each bridge to minimize disturbance to the river/wetlands and to accelerate construction.</li> <li>• <b>To reduce future maintenance, special materials were used</b> such as concrete bridge girders and ashlar stone finish on walls. <b>Other special design and construction methods included</b> shortening the Belmont Road Bridge for less maintenance on a smaller bridge surface. Integral end bents were also used on bridges to eliminate joint replacement and to provide superior protection to bearing assemblies.</li> </ul>
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*Completed new dual bridge over the Yadkin River*



*Construction of the new dual rivers over the Yadkin River using a single temporary construction access work platform.*

*"The efforts put forth by Flatiron personnel were instrumental to the success of this vital transportation facility and your team demonstrated an appreciation, willingness, and an eager approach to provide NCDOT with innovative solutions."*  
 – Rodger Rochelle, Director of Transportation Program Management, North Carolina Department of Transportation



**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: <b>I-405 Tolled Express Lanes</b>  Location: <b>Kirkland, Washington</b>	Name: <b>URS Corporation</b>	Name of Client/ Owner: <b>Washington State Department of Transportation (WSDOT)</b> Phone: <b>360-705-7000</b> Project Manager: <b>Lisa Hodgson</b> Phone: <b>206-437-7242</b> Email: <b>hodgsol@wsdot.wa.gov</b>	<b>09/30/15</b>	<b>09/30/15 (Actual)</b>	<b>\$155,501</b>	<b>\$158,000*</b>  * Difference due to owner-directed scope changes	<b>\$158,000</b>

**h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.**

<p><b>PARTNERED WITH WSDOT TO MITIGATE DELAYS WHILE STILL ACHIEVING TOLL INFRASTRUCTURE MILESTONE</b></p> <p><b>SIMILARITIES TO I-64</b></p> <ul style="list-style-type: none"> <li>✓ Design-Build Project</li> <li>✓ Widening of Interstate Highway and Bridges</li> <li>✓ Extensive, Multi-Phased Construction Traffic Management Plan and Stakeholder Coordination to Ensure Safety of Crews and Traveling Public</li> <li>✓ Working within a Confined Space Along an Active Interstate</li> <li>✓ Installation of ITS Infrastructure</li> <li>✓ Geotechnical Challenges for Foundations</li> <li>✓ Use of Noise Walls to Reduce Traffic Noise</li> <li>✓ Minimized Environmental Impacts</li> <li>✓ Management of the utility relocation process</li> <li>✓ Implementation of a comprehensive Environmental Compliance Monitoring Program</li> </ul>	<p><b>PROJECT NARRATIVE:</b> Flatiron was responsible for the full-depth replacement of pavement to widened and install express toll lanes from Bellevue to Lynnwood, Washington, on Interstate 405 (I-405), a major artery running along the east side of Lake Washington near Seattle to relieve congestion along 17-miles of interstate by adding tolling infrastructure and an additional lane in each direction. Crews also constructed a braided ramp bridge to separate vehicles entering and exiting I-405 at the interchange with State Route 522, further easing congestion and increasing safety. Other work included a new Intelligent Transportation System (ITS) network, widening and retrofitting an existing bridge, advanced storm water treatment systems, adding noise walls, upgrading barriers, and resurfacing much of the existing freeway. To provide quality design submittals to WSDOT, design task force groups (including WSDOT) worked together for each discipline to establish a QC process and deliverable. A Design QA/QC plan was implemented with QA/QC audits throughout the project. To deliver the 17-mile portion of Interstate 405 under a design-build contract, Flatiron converted High Occupancy Vehicle lanes to High Occupancy Toll (HOT) lanes and added two HOT lanes in each direction along a portion of the interstate, under average traffic in excess of 200,000 vehicles per day. Major work elements include bridge structures at an interchange, significant drainage, retrofitting the existing system, milling and overlaying the entire existing facility, paving, and constructing the complete ITS backbone and electrical illumination system. Work also included noise walls, landscaping, three mitigation sites (streambed and two wetlands), and ADA improvements (curve ramps and sidewalks). Flatiron designed protections in place for every utility except one (only one relocation required), and our team was responsible for managing those agreements and designs.</p> <p><b>PROJECT SCOPE</b></p> <ul style="list-style-type: none"> <li>• Design and construction of new managed toll lanes, bridges, major intersections, and connector roads.</li> <li>• Widening and installation of 17-miles of two express toll lanes from Bellevue to Lynwood, Washington.</li> <li>• Widening of an existing mainline bridge over a median to accommodate three girder lines of widening and a seismic retrofit of a bridge underneath interchange ramp with steel column jackets and girder stops to meet earthquake code.</li> <li>• Major excavation and construction for a new braided ramp which reconfigured the project to avoid significant impact to the hillside, avoid congestion, and reduced the amount of bridges and roadway required.</li> <li>• A maintenance of traffic (MOT) plan was developed to eliminate night work which eliminated noise impacts to the residential neighborhood.</li> <li>• Retrofit roadway with advanced storm water treatment systems which includes installation of 15,000 linear feet of new media filter drains, and, for the first time on a WSDOT project, 10,000 linear feet of a more advanced version called a compost-amended bio-filtration swale.</li> <li>• Coordination with the toll vendor during the pre-rollout phase to run a series of test over a 120-day period.</li> <li>• Installation of tolling and ITS infrastructure, including toll cabinets, toll reader boxes, and toll gantries to accommodate 21 new toll zones.</li> <li>• Extensive MOT activities that included more than 20 closures per night with up to six MOT crews and development of over 200 individual traffic control and detour plans.</li> <li>• Flatiron staff performed onsite QC and used an independent QA firm to oversee the entire QA/QC program for the project.</li> </ul>	<ul style="list-style-type: none"> <li>• Use of noise berms instead of sound wall eliminated need for future maintenance of concrete.</li> <li>• Management of the utility relocation process, entering into more than 20 separate relocation agreements and working closely with utility owners to design protect-in-place measure for every single utility except for one.</li> <li>• Implementation of a comprehensive Environmental Compliance Monitoring Program that included noise and air quality monitoring; permitting, implementing three separate mitigation sites; erosion and sedimentation control and water quality monitoring; and wildlife management.</li> </ul> <p><b>FLATIRON'S ROLE:</b> As Prime Contractor, Flatiron was responsible for management and oversight of all aspects of construction including roadway, bridges, maintenance of traffic, utility coordination, and public relations. Self-performed work included bridge structures, noise walls, temporary erosion and sediment control, and traffic control. The work was performed on a heavily traveled interstate with over 200,000 vehicles per day passing through the project. During construction, no incidents occurred since the project went smoothly, was well-planned, and executed.</p> <p><b>VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:</b></p> <ul style="list-style-type: none"> <li>• Flatiron <b>earned 98% of a \$600,000 environmental incentive payment</b> for maintaining water quality throughout duration of the project.</li> <li>• Once the toll system passed the required tests, <b>Flatiron and WSDOT performed a live rollout, during a 54-hour weekend</b>, during which all 35 miles of roadway were restriped, the buffer zone was installed, and the tolling system was turned on. Flatiron also assisted WSDOT to help mitigate issues that arose with toll payments.</li> <li>• An interim milestone for toll infrastructure completion was included for this project. When WSDOT's procurement of the I-405 toll vendor was delayed, <b>Flatiron's design-build have enough float to accommodate a significant delay from the toll vendor. The toll vendor task force allowed work to continue although an established vendor was not in place until six months after the project began. WSDOT planned on numerous scope changes, but Flatiron's plan eliminated the need for any.</b></li> <li>• Since a toll vendor was not selected until five months after design began, the design and construction team had already completed half of the design and begun construction by that point. The chosen vendor's technology had limitations, including a maximum allowable distance from the toll cabinet to the toll gantry. Flatiron redesigned some elements and reconstructed part of the project to accommodate limitations, including moving gantries and toll cabinets. Since construction had already begun, design was broken into smaller packages so that design could keep up with construction.</li> </ul>
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**I-405 New Managed Toll Lanes**



**Construction of Braided Ramp**

*"Flatiron is leading the design build team to add new toll lanes along one of Washington's busiest corridors. The team successfully accommodated a late toll vendor on board by repackaging the design, keeping the project on schedule."*  
 — Lisa Hodgson, Project Manager, Washington State Department of Transportation

**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: <b>I-64 / Battlefield Boulevard</b>  Location: <b>Chesapeake, VA</b>	Name: <b>Kimley Horn &amp; Associates, Inc.</b>	Name of Client/ Owner: <b>Virginia Department of Transportation (VDOT)</b> Phone: <b>757-494-5470</b> Project Manager: <b>Michael Johnson</b> Phone: <b>757-494-5470</b> Email: <b>Michael.Johnson@vdot.virginia.gov</b>	<b>July 2009</b>	<b>April 2009</b>	<b>\$98,000</b>	<b>\$103,815*</b>  * Difference due to owner-directed scope changes	<b>\$103,815</b>

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

<p><b>AWARD-WINNING PROJECT THAT WAS THE FIRST VDOT PROJECT TO USE SUSTAINABLE CONSTRUCTION TECHNIQUES</b></p> <p><b>SIMILARITIES TO I-64</b></p> <ul style="list-style-type: none"> <li>✓ Interstate Mainline and Median Widening</li> <li>✓ Widening of Bridges and Roadway (Mainline and Median)</li> <li>✓ Repair of Major Box Culverts and Stormwater</li> <li>✓ Maintain Existing Lanes and Bridge Capacity</li> <li>✓ Extensive Maintenance of Traffic</li> <li>✓ 100,000+ ADT Volume</li> <li>✓ Coordination of Median Access</li> <li>✓ Survey</li> <li>✓ Environmental Permitting</li> <li>✓ Geotechnical Constraints</li> <li>✓ Traffic Control Devices and ITS</li> <li>✓ Utility Relocation</li> <li>✓ Stakeholder Coordination</li> <li>✓ Public Involvement/Relations</li> </ul>	<p><b>PROJECT NARRATIVE</b></p> <p>The I-64 / Battlefield Boulevard Project included the widening of I-64 to eight lanes, complete reconstruction of the interstate, median widening, constructed new mainline and median bridges, MSE walls, sound barrier walls and installation of ITS. The Project also included the construction of the first braided collector-distributor lanes in the Hampton Roads area which eliminated the existing weave condition between the Greenbriar Parkway and Battlefield Boulevard interchanges.</p> <p><b>PROJECT SCOPE</b></p> <ul style="list-style-type: none"> <li>• <b>Bridges:</b> Widening of two mainline interstate bridges, as well as construction of five new bridges consisting of two structural steel box girder braided ramp structures, two pre-stressed concrete bridges over CSX Railroad, and a phased replacement of the Battlefield Blvd. Overpass Bridge. Additional major elements of work included 30,000 storm drain pipe, 697 CY Class A-4 concrete for box culverts and box culvert extensions, 400,000 CY borrow, and 350,000 CY regular excavation.</li> <li>• <b>Roadway Widening:</b> Four miles of I-64 was widened from four to eight lanes at the braided bridges and cloverleaf interchange. Full pavement reconstruction of mainline pavement included 13-inches of continuous reinforced concrete over cement treated aggregate. Feeder lanes consisted of full-depth asphalt paving over cement treated aggregate. The existing number of lanes was maintained except for night operations, as well as bridge capacity while adding to existing structures or phased replacement of the existing structures. Similar to the I-64 Capacity Improvements – Segment III, this project included 120,000 tons of base material and 194,000 tons of asphalt.</li> <li>• <b>Design-Build Element:</b> Similar to a design-build project, the owner retained the designer to attend progress meeting throughout construction. This allowed a free flow of suggested project improvements including deleting one phase of construction, adding an additional lane on I-64 at the westbound I-64/Rt. 168 merge, and recycling the concrete pavement as cement treated aggregate (CTA) within the median to improve motorist safety.</li> <li>• <b>Public Relations:</b> VDOT Public Relations, Branch, and VDOT Project Management worked with third-party stakeholders to keep the public informed of project progress, changes, and successes that may impact the area.</li> <li>• <b>Maintenance of Traffic and Traffic Management Plan (TMP):</b> High traffic volume, similar to the I-64 Capacity Improvements – Segment III Project, which increases during peak vacation and holidays created the importance of safe and well-marked access and egress points. Safety and flow of the motoring public were critical elements as the TMP was revised. Trained traffic control crews worked seamlessly with the State and local Police, emergency responders, and local Traffic Operations Center to minimize impacts to the motoring public.</li> </ul> <p><b>BRANCH'S ROLE:</b></p> <p>Branch was the prime contractor on this large scale urban highway project which included substantial value engineering and additions to scope to improve functionality. The project scope, similar to I-64 Capacity Improvements – Segment III,</p>	<p>included widening and reconstruction of four miles of I-64, reconfigured a standard cloverleaf intersection to include adding Collector Distributor roadways for the entire length of the project, installed several mechanically-stabilized earth retaining walls, designed/constructed sound barrier walls, installed traffic management systems, and incorporated large stormwater management facilities within the footprint of the I-64 corridor.</p> <p><b>VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:</b></p> <ul style="list-style-type: none"> <li>• This project was awarded the <b>2010 Engineering Excellence Honor Award</b> from the American Council of Engineering Companies.</li> <li>• Revision of the TMP and phasing plans helped develop <b>an updated TMP approach that eliminated the original proposed temporary loops and ramps, was safer for motorists, created project savings, and resulted in a three month acceleration of the project.</b> Branch collaborated with VDOT and the designer to improve a portion of the roadway design resulting in reconfiguring a major tie-in and adding an enhancement of an additional collector-distributor (CD) lane at the Rt. 168 interchange. <b>This additional scope of work of constructing the CD lane, was constructed concurrently with the original design and the project was completed 3 months early.</b></li> <li>• <b>First large project in Virginia to use sustainable construction techniques</b> to demolish the existing concrete pavement, crush it, and use the crushed material as aggregate for CTA. A well was drilled in the median and a concrete batch plant was set up to produce the CTA base material for the new concrete pavement for the project and then later was used to generate the concrete pavement. This eliminated the removal of 6,700 truckloads of broken concrete pavement from the median as well as the delivery of 6,700 loads of CTA into the median.</li> </ul>
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**Phased construction along I-64.**



**Full pavement reconstruction on I-64.**

*“The Battlefield Boulevard Project met all the performance metrics (on-schedule, on-budget, environmental compliance, and quality) not an easy task on a complex \$100,000,000 interstate interchange and widening project. The contractor reduced the complexity through innovation and creativity. By sequencing construction based on cost, schedule, and safety the team eliminated most of the traffic shifts in the original traffic management plan. Isolating the work zone for the construction of the inner six lanes was brilliant. Setting up a crushing plant and recycling the existing concrete pavement as base material inside this isolated work zone, then erecting a concrete batch plant and placing the concrete pavement in this isolated zone brought this project in on time and on budget. The incident hazards eliminated and the congestion mitigated by this innovative idea was a great service to the traveling public.”*

- Mark E. Cacamis, PE, CC, State Construction Engineer, Virginia Department of Transportation

**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 Start Date	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)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>New Interchange and Roadway Improvements at Southgate Drive and US 460 Bypass</b> Location: <b>Blacksburg, VA</b>	Name: <b>Branch Civil, Inc.</b>	Name of Client: <b>VDOT Salem District</b> Phone: <b>540-387-5320</b> Project Manager: <b>Phillip Hammack, P.E.</b> Phone: <b>540-378-5041</b> Email: <b>Phillip.Hammack@VDOT.Virginia.gov</b>	<b>04/23/15</b>	<b>12/31/18</b> (Estimated)	<b>\$46,700</b>	<b>\$46,700</b> (Estimated)	<b>\$4,916</b>

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

**COMPLETED PAC MILESTONE WITHIN 19 MONTHS**

**SIMILARITIES TO I-64**

- ✓ VDOT Project, GS-5 criteria meeting 70 MPH (US 460)
- ✓ High Traffic / High Profile
- ✓ Median Widening, Outside Shoulder Widening
- ✓ Minimized Environmental Impact
- ✓ Creative SWM to Minimize Property Impacts
- ✓ Bridges with Pier Protection
- ✓ Retaining Walls to Minimize Footprint
- ✓ Upgrades to Proper Design Speed
- ✓ Extensive Traffic Management and Stakeholder Coordination
- ✓ Utility Relocation/Coordination
- ✓ New Overhead Sign Structures

**PROJECT NARRATIVE:** AMT provided full design services on this critical roadway improvement and interchange design project including a total of 3.6 miles of roadway alignment, adjacent to Virginia Tech in Blacksburg. The purpose was to eliminate the existing signalized at-grade T-intersection at the heaviest used, primary entrance to Virginia Tech campus. The intersection experiences significant backups during the morning and evening peak hours as well as during major/special events and hampers through movements along the 460 Bypass, also creating a safety concern due to rear-end collisions. The project provides a grade separated interchange in a new location southeast of the existing intersection to accommodate current and planned traffic movements and realignment of Route 314 from US 460 to the Virginia Tech campus.

As the Lead Designer, AMT provided services as an extension of VDOT staff, performing many reporting and management functions that VDOT would typically self-perform. Key challenges of the project included an aggressive schedule of 18 months from the start of the alternatives phase to completion of 100% design documents, managing consensus from the many diverse stakeholders (particularly Virginia Tech), and minimizing impacts to: wetlands; old-growth tree stands; rare, threatened, and endangered species; and other environmentally sensitive areas.

**PROJECT SCOPE**

- Traffic Analysis, including traffic/crash data collection and analysis, traffic operation analysis, no-build and build forecasts, origin/destination study, safety analysis, and travel time study.
- Interchange Alternatives and Final Diverging Diamond Interchange Design, which included an IJR for alternative interchange configurations to assess: meeting purpose and need, geometrics, traffic operations (LOS) and sensitivity analysis, safety, right of way impacts, environmental impacts, construction cost, hydraulics, bridge and structure options, utilities, and constructability.
- Roadway Design and Trail Relocation Design, for a total of 3.6 miles of roadway alignment and two reconfigured at-grade intersections (new roundabouts), and one mile of "off-line" trail including two grade separated trail crossings
- Correcting existing deficient elements to meet design speed, including cross slope of US 460 and trail geometry
- Traffic Engineering, including signing plans with eight (8) new Overhead Sign Structures, signal design, lighting design, maintenance of traffic plans, Transportation Management Plan, and pavement marking plans.
- Hydraulic Design including drainage, erosion and sediment control, and stormwater management following VDOT and DEQ requirements (VSMP and SWPPP).
- Bridge Design and Retaining Wall Design for one new bridge structure, and 1,100 feet of retaining walls, including soil nail and MSE/Reinforced Earth

- Public and Stakeholder Outreach including development of a tailored coordination/communication plan for each stakeholder. Included full Public Hearing support including brochure, displays, simulations, and renderings
- Landscape Architecture/Aesthetic Design to provide a gateway design for the entrance to the University
- Geotechnical Engineering to support bridge foundation design, wall design, and pavement design. Prepared alternative foundation designs as "bid options" due to presence of shallow rock found at some boring locations. Options included drilled shafts, and driven piles in combination with socketed piles.
- Right of Way plans per VDOT requirements.
- Utility relocation design per Municipality/Owner Requirements

**AMT'S ROLE:** As the Lead Designer, AMT was responsible for management and oversight of all aspects of engineering design including roadway, bridges, traffic engineering and maintenance of traffic, hydraulics, utility coordination, and public relations. The work was performed on a heavily traveled NHS highway with more than 40,000 vehicles per day passing through the project. Office locations where work was performed included Chantilly, Richmond and Suffolk.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:**

- **Completed PAC milestone within 19 months of NTP**
- **Conducted successful public hearings with positive feedback** from Virginia Tech, Blacksburg and District Administrator
- **Award-winning**



*Interchange Structure under Construction*



*Rendering of US 460 Bypass Widening at Interchange with Southgate Drive*



*Rendering of Route 314, Southgate Drive, US Route 460, Roundabout, and Huckleberry Trail*



**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 Start Date	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)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>US Route 460 Phase I</b>  Location: <b>Buchanan County, VA</b>	Name: <b>Bizzack Construction, LLC</b>	Name of Client: <b>VDOT Bristol District</b> Phone: <b>276-669-6151</b> Project Manager: <b>Amanda Cox, PMP</b> Phone: <b>276-669-6151</b> Email: <b>Amanda.Cox@VDOT.Virginia.gov</b>	<b>09/01/09</b>	<b>09/15/15</b>	<b>\$113,000</b>	<b>\$113,000</b>	<b>\$5,922</b>

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

<p align="center"><b>RECOGNIZED BY VDOT'S PROJECT MANAGER FOR EXCELLENT PERFORMANCE</b></p> <p><b><u>SIMILARITIES TO I-64</u></b></p> <ul style="list-style-type: none"> <li>✓ VDOT Design-Build</li> <li>✓ Roadway Design</li> <li>✓ Survey/SUE/Right-of-Way</li> <li>✓ Structures and Bridges</li> <li>✓ Environmental Considerations</li> <li>✓ Geotechnical</li> <li>✓ Hydraulics &amp; SWM</li> <li>✓ Right-of-Way Acquisition</li> <li>✓ Permitting</li> <li>✓ TCD/TMP</li> <li>✓ Public Involvement/Relations</li> <li>✓ Context Sensitive Solutions</li> <li>✓ QA/QC</li> <li>✓ Third Party Coordination</li> </ul>	<p><b><u>PROJECT NARRATIVE:</u></b> AMT was the lead highway designer and construction quality assurance manager for this \$113 million design-build project in southwestern Virginia linking federal highways in Virginia and Kentucky along a route known as "Corridor Q," a part of the Appalachian Development Highway System. AMT provided and oversaw all highway design services of this four-lane Rural Principal Arterial with connections to local routes and other local roadway improvements.</p>  <p align="center"><i>Connector Roadway Pavement Placement</i></p> <p>AMT provided design services for the US 460 Connector and realignment of Route 80 connecting the current roadway with the new US Route 460 Connector Phase I project. The project included one mile of new Connector roadway and 0.56 miles of widening and realignment of Route 80. Services included roadway design, hydraulic design and erosion and sediment control plan development. The project also includes three bridges: twin 1,733-foot-long cast-in-place hollow box concrete structures crossing Grassy Creek and Route 610 at a maximum height of 267 feet, and a 300-foot-long bulb-T girder bridge crossing Hunts Creek. The widening of the shoulders and clear zone of Route 80 for safety improvements was included. MSE retaining walls were designed in areas where right of way or environmental features were a concern.</p> <p>To address the extensive earthwork needs, approximately 2.6 million cubic yards of excavated material were placed in an engineered waste area on the project site. Stormwater management facilities and erosion control features were designed to minimize impacts to sensitive local streams and to control increases in stormwater runoff as a result of the large footprint of the project.</p> <p>AMT provided roadway design and coordinated closely with members of the structural engineering team throughout the project. More than 50 construction packages were developed to address the roadway, drainage, utility and traffic control related needs under our purview. AMT prepared the Transportation Management Plan, and also provided construction quality assurance for testing and/or inspection of items of construction work for conformance with the contract plans and specifications. Another aspect of AMT's scope included leading the preparatory meetings for several items of construction, including erosion/sediment control, clear and grub, permanent re-vegetation, traffic control and drainage installation.</p>	<p><b><u>PROJECT SCOPE</u></b></p> <ul style="list-style-type: none"> <li>• A 0.8-mile four-lane divided highway (US Route 460) starting at the Kentucky State Line.</li> <li>• An access ramp to Route 80, improving access to Breaks Interstate Park. This includes the construction of a bridge crossing Route 768.</li> <li>• Secondary connections to Routes 609 and 693 from Route 80, including:             <ul style="list-style-type: none"> <li>- Connection to existing Route 80</li> <li>- Overlay and improvement along existing Route 80</li> <li>- Relocation of existing Route 693</li> <li>- Relocation of existing Route 768</li> <li>- Relocation of existing Route 609</li> <li>- New connection of Route 768 with relocated Route 609</li> </ul> </li> </ul> <p>Twin high-level bridges, 1,700 linear feet in length, located over Conaway Road (Route 610) and Grassy Creek (the tallest in Virginia).</p> <p><b><u>AMT'S ROLE:</u></b> AMT was the lead highway designer and provided the construction quality assurance manager (QAM). AMT provided and oversaw all highway design services (roadway, drainage, phasing/traffic control, signing, stormwater management, erosion and sediment control, and utilities). Office locations where work was performed included Abingdon and Richmond.</p> <p><b><u>VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:</u></b></p> <ul style="list-style-type: none"> <li>• AMT received a letter of recognition from VDOT's Project Manager, Amanda Cox, PMP, for excellent performance</li> </ul>  <p align="center"><i>Connector Roadway Base Asphalt &amp; Temporary Guardrail</i></p>
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**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 Start Date	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)
					Original Contract Value	Final or Estimated Contract Value	
Name: <b>Design-Build US Route 1 Improvements at Fort Belvoir</b> Location: <b>Fairfax County, VA</b>	Name: <b>Corman Construction, Inc. / Wagman, Inc. Joint Venture</b>	Name of Client: <b>Eastern Federal Lands Highway Div. / VDOT NOVA District</b> Phone: <b>800-367-7623</b> Project Manager: <b>Timothy Hartzell</b> Phone: <b>703-259-2749</b> Email: <b>Timothy.Hartzell@VDOT.Virginia.gov</b>	<b>06/16/13</b> (Design Build)	<b>06/01/17</b> (Substantial Completion)	<b>\$69,300</b>	<b>\$82,000</b> (Owner directed changes)	<b>\$9,907</b>

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects with multiple phases, segments, elements, and/or contracts shall not be considered a single project. If a project listed includes multiple phases, segments, elements, and/or contracts, the SOQ may be rendered non-responsive. In any case, only the first phase, segment, element, and/or contract listed will be evaluated.

**EXCELLENT COMMUNITY FEEDBACK ON SOCIAL MEDIA**

**SIMILARITIES TO I-64**

- ✓ VDOT Project, GS-5 criteria
- ✓ High Traffic / High Profile
- ✓ Design-Build Project
- ✓ Corridor adjacent to Military Installation (Fort Belvoir)
- ✓ Archaeological Sites in Corridor
- ✓ Minimized Environmental Impact
- ✓ Creative SWM to Minimize Property Impacts
- ✓ New noise walls meeting VDOT requirements
- ✓ Bridges and Retaining Walls
- ✓ Upgrades to Proper Design Speed
- ✓ Extensive Traffic Management and Stakeholder Coordination
- ✓ Utility Relocation/Coordination
- ✓ Right-of-Way Acquisition
- ✓ Public Outreach and Communication

**PROJECT NARRATIVE:** AMT was the Lead Designer and Construction Quality Control Manager for this \$82 million design-build project in northeastern Virginia, which provides traffic relief and safety for the ongoing BRAC consolidation occurring in the vicinity of Fort Belvoir. The Route 1 Improvements project implements a series of enhancements along Route 1 from the Telegraph Road intersection north to Mt. Vernon Memorial Highway for a distance of 3.68 miles. These improvements generally widen Route 1 from four to six lanes, provide a one-mile new alignment to avoid major property impacts, improve intersection safety, operations and capacity with new traffic signals and acceleration/deceleration lanes, and provide parallel pedestrian and bicycle facilities for the entire length. In addition, this project has new bridges over Accotink Creek, several wildlife crossing structures under Route 1, and removal of an existing military railroad crossing.

AMT's design of improvements utilizes the existing pavement to the maximum extent possible. Through the use of milling, overlay, and build-up in area where allowable, proposed maintenance of traffic was greatly simplified requiring smaller shifts in traffic to address grade changes at the curb line and provide widening as needed. In areas of complete reconstruction, AMT developed a bifurcated roadway profile to help minimize earthwork and limit impacts on the adjacent Fort Belvoir and other historic properties. AMT also provided phase drainage/culvert construction plans, creative stormwater management approach to minimize the number of facilities (using the "1 percent rule" and nutrient banking), and advance grading packages to facilitate early utility pole relocations.

The project is coordinated with several projects administered by others - North Post Access Control Point (Fort Belvoir), Lyndam Hill Development, and Mulligan Road. Twenty-five parcels required either partial or total acquisition, and more than 100 tenants were provided relocation as part of the design-build project, under the management of AMT.

Highway design services (roadway, drainage, phasing/traffic control, signing, stormwater management, erosion and sediment control, and utilities) are provided by AMT. Utility protection/relocation including designation and test holes for the existing utilities are also provided by AMT. AMT is also providing the Construction Quality Control Manager for the project. This includes managing/providing quality control inspection and testing services.

**PROJECT SCOPE**

- An improved 3.68-mile six-lane divided NHS highway, including a widened raised median to accommodate future transit. Corrected existing deficient cross slope on US 1 to meet current AASHTO standards, and provided improved acceleration and deceleration lanes
- Twin bridges, 332 linear feet in length, lifting the existing roadway out of the Accotink Creek Floodplain

- Extensive TMP with 3 major phases and 5 sub-phases to provide safe and efficient traffic flow during construction
- Five SWM ponds, 300+ drainage structures, five miles of storm drain pipe, and E/S control phased with MOT
- Utility relocation/coordination, including relocating utility poles along entire alignment
- Permits for multiple impacts to stream channels (3,500 LF) and wetlands (approximately 2.3 acre), with jurisdiction by VMRC, Army COE Norfolk, and Virginia DEQ. In-stream time of year restrictions applied to two channels.
- New noise walls adjacent to Inlet Cove community. Two other noise walls were found reasonable and feasible, but voted down by the communities.
- Extensive right-of-way acquisitions

**AMT'S ROLE:** AMT is the Lead Designer and Construction Quality Control Manager, responsible for management and oversight of all aspects of engineering design including highway design services (roadway, drainage, phasing/traffic control, signing, stormwater management, erosion and sediment control, and utilities). Office locations where work was performed included Chantilly and Richmond.

**VERIFIABLE EVIDENCE OF GOOD PERFORMANCE:**

- AMT structured its delivery of the project to provide parts of the project immediately available for construction and delaying portions of the project to allow for adequate time for outreach and community input while obtaining the necessary approvals.
- **Excellent community feedback on social media**, for example: "Thank you so very much for the work efforts made in the design and construction of U.S. Route 1. You have provided posters, maps, and scale models to allow us to understand ... the proposed infrastructure changes. Project Team members have shared information and answered questions at scheduled meetings and programs in communities like mine. There have been creative and safe detours and temporary closures with signs providing news regarding current and future changes. Use of the orange cones/barrels and construction vehicles has been exceptional!"





SUBMITTED TO:



COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION

Central Office Mail Center  
Loading Dock Entrance  
1401 East Broad Street  
Richmond, VA 23219

SUBMITTED BY:

