

STATEMENT OF QUALIFICATIONS SUBMITTED | AUGUST 21, 2018

ALBEMARLE INTERSECTION BUNDLING A DESIGN-BUILD PROJECT





SUBMITTED BY



UPC (State Project Nos.; Federal Project Nos.) UPC 111814 (0250-002-956, P101, R201, C501; NHPP-002-7(051)); UPC 111727 (0029-002-959, P101, C501; HSIP-5104(269)); UPC 111813 (0029-002-955, P101, R201, C501; NHPP-002-7(050)); UPC 111730 (0250-002-954, P101, R201, C501; HSIP-002-7(049)); UPC 111733 (0020-002-953, P101, R201, C501; STP-5104(267)); UPC 109397 (9999-002-941, P101, R201, C501) Contract ID Number: C00111814DB103





3.2

Letter of Submittal





August 21, 2018

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

Re: Albemarle Intersection Bundling | Albemarle County, Virginia | Contract ID Number: C00111814DB103 | Section 3.2 Letter of Submittal

Dear Mr. Stevenson,

Branch Civil, Inc. (Branch), as the Offeror, hereby submits to the Virginia Department of Transportation (VDOT) this Letter of Submittal and accompanying Statement of Qualifications in response to the Request for Qualifications dated July 11, 2018 and Addendum #1 dated August 2, 2018 for the above-referenced project. For this pursuit, Branch has once again partnered with Whitman, Requardt & Associates, LLP (WRA) to furnish a product that exceeds expectations with respect to design, cost, and schedule.

- 3.2.1 Full legal name and address of the Offeror: Branch Civil, Inc. | 442 Rutherford Ave, NE, Roanoke, VA 24016
- 3.2.2 Point of Contact for the Offeror: Mr. Jason Hoyle, Vice President of Design-Build/Special Projects Address: 442 Rutherford Ave, NE, Roanoke, VA 24016 Tel: (540) 982-1678 | Fax: (540) 982-4217 | Email: jason.hoyle@branchcivil.com
- 3.2.3 Principal Officer of the Offeror: Mr. Patrick Bartorillo, President Address: 442 Rutherford Ave, NE, Roanoke, VA 24016 Tel: (540) 982-1678 | Fax: (540) 982-4217 | Email: patrick.bartorillo@branchcivil.com
- **3.2.4** Corporate Structure of the Offeror: Branch is a registered corporation in the Commonwealth of Virginia. Branch will take full financial responsibility for the Project, and has no known liability limitations. Branch will provide a single 100% performance bond and single 100% payment bond.
- 3.2.5 Lead Contractor: Branch Civil, Inc. | Lead Designer: Whitman, Requardt and Associates, LLP
- 3.2.6 Affiliated and/or Subsidiary Companies Table (Attachment 3.2.6) is in the Appendix.
- 3.2.7 Certifications Regarding Debarment (Attachments 3.2.7(a) and 3.2.7(b)) are in the Appendix.
- 3.2.8 VDOT Prequalification: Branch's Vendor ID is B319; status is Active. See Appendix for Evidence.
- 3.2.9 Surety Letter is in the Appendix.
- 3.2.10 SCC and DPOR information are in Attachment 3.2.10 and supporting documentation is in the Appendix.
- 3.2.11 **DBE Participation Goal:** Branch is committed to achieving a nine percent (9%) DBE participation goal for the entire value of the contract.

Branch and WRA are well-versed and respected within the Heavy Civil Construction industry, specifically with regard to Design-Build projects. Our team eagerly anticipates yet another successful delivery with this endeavor.

Respectfully Submitted,

Branch Civil, Inc.

Patrick K. Bartorillo, President

branchcivil.com HEADQUARTERS | P.O. Box 40004 | Roanoke VA 24022 | 540.982.1678 A BRANCH GROUP COMPANY | BUILDING LEGACIES FOR A THRIVING FUTURE





3.3

Offeror's Team Structure





3.3 OFFEROR'S TEAM STRUCTURE

Branch Civil, Inc. (Branch) will be responsible for managing the design and construction of all project elements, supervising the design, construction, and performing major elements of the construction. Additional subcontractors for scopes of work including asphalt pavement as well as various specialty items such as signage, guardrail, and pavement striping will also be under direct subcontract to Branch. *Whitman,* **Requardt & Associates, LLP (WRA)** will lead the design effort for all aspects of the project and will be responsible for the design QA/QC. The Branch | WRA Design-Build Team includes highly qualified subconsultants that bring specific expertise to enhance the Team and ensure a quality project for VDOT. A listing of the Team follows below, and an organizational chart of the Team is included in Section 3.3.2.

Branch Civil, Inc. (Branch) - Offeror, Legal Entity, Lead Contractor

BRANCH Branch is committed to continuing its 75-year tradition of building enduring infrastructure projects in the Mid-Atlantic and Southeastern United States through Design-Builds, civil construction, and site development. Branch is an employee-owned (ESOP) company based out of Roanoke, Virginia, with regional divisions in Northern Virginia, Virginia Beach, and North Carolina. Branch continuously ranks as a Top 400 Contractor (#229) 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/monitoring on numerous successful VDOT Design-Build and PPTA projects. Branch has completed more than \$600M in Design-Build projects including several relevant projects with similar size and scope to the Albemarle Intersection Bundling Project. Other similar projects include the \$25M Route 3 Widening Design-Build Project (Culpeper District), the \$18M I-81 Exit 150 Improvement Design-Build Project (Salem District), and the \$38.7M Southgate Drive Interchange Design-Bid-Build Project (Salem District).

Whitman, Requardt & Associates, LLP (WRA) – Lead Designer

WRA

WRA is a full service architectural and engineering firm that was founded 103 years ago primarily serving state and local governments in the Mid-Atlantic region of the United States. WRA will serve as the Lead Designer for this project and will be responsible for the design

QA/QC. In the last 3.5 years, WRA has worked on <u>eleven</u> Design-Build projects in Virginia valued at over **\$268M** and has been a Design-Build leader in the Mid-Atlantic region working on over 50 Design-Build projects for Federal, State, and Local government entities and private Design-Build projects.

Branch and WRA have recently worked together on <u>multiple</u> successful Design-Build/PPTA projects:

- *I-95 Express Lanes Southern Terminus Extension Design-Build (\$36.7M)* Branch recently completed constructing the 2.2 mile extension of the I-95 Express lanes through the Garrisonville Road interchange with I-95 *9 months early*. WRA was the lead designer for the project and provided QAM services.
- *I-95 Safety Improvements at Route 3 Design-Build in the City of Fredericksburg (\$18.2M)* WRA is the lead designer and QAM for this project that is currently being constructed by Branch. It is scheduled to finish *3 months early*.
- *I-64 Widening Exit 200-205 in Henrico and New Kent Counties (\$43.3M) –* WRA recently completed final roadway and bridge plans for this Corman-Branch Joint Venture project. Construction of the 5 mile widening project is scheduled to be complete in August 2019.
- George Mason University (GMU) Campus Connector Design-Build (\$15.6M) Branch was the Lead Contractor for this project. WRA and RDA worked as a team to design the Connector roadway including the Route 123 bridge and overpass along with recreational facilities for the University. WRA also provided geotechnical engineering and QAM services for the project.
- *Route 636 Extension over CSXT Augusta County PPTA (\$14M)* WRA designed the Route 636 Bridge over CSXT, performed geotechnical engineering and provided QAM services for this Branch project.

This combined Design-Build experience and our goal to prioritize quality and schedule has proven to be successful on previous Design-Build projects and will be for the Albemarle Intersection Bundling project.





Subconsultants and Subcontractors

The Branch | WRA Design-Build Team is comprised of highly qualified design and QA/QC testing subconsultants that are extensively knowledgeable of VDOT policies and procedures and experienced with similar VDOT Design-Build projects. The following subs have been carefully selected based on their relevant experience and proven, successful work history with VDOT, Branch, and WRA:



Rinker Design Associates (RDA) a Virginia-Certified Small Business (SWaM) has experience on more than 14 Design-Build projects in the past 5 years. As a major subconsultant, RDA will fully complement WRA's roadway, drainage, and utility

design/coordination services as well as perform all right of way acquisition for the project. RDA will also provide Surveying services for three of the bundle elements. WRA and RDA have a long history of teaming on Design-Build projects including the George Mason University Campus Connector (constructed by Branch), Route 7 over the Dulles Toll Road, and the Route 29 Solutions Design-Build Project. Adding a major design subconsultant with extensive Design-Build experience such as RDA to the team brings another significant set of design resources to ensure the successful delivery of the six elements included in the Albemarle Intersection Bundling project.



H&B Surveying and Mapping, LLC (H&B) a Virginia-Certified, DBE/WBE (Woman-Owned Business) founded in 2009 will provide Surveying and Subsurface Utility Locating services on three of the bundle elements. Since 2010, H&B Surveying and Mapping, LLC has teamed with WRA to provide surveying services on over 75 VDOT projects throughout Virginia and they have provided similar services on 11 separate VDOT Design-Build projects for WRA.

McDonough Bolyard Peck, Inc. (MBP) will provide the Quality Control Manager and QC Inspection for the Branch | WRA Team. MBP has provided inspection services for VDOT on Branch's Southgate Drive Interchange Project. They have performed QA and IA/IV inspection on many Design-Build Projects including the Zion Crossroads DDI in the Culpeper District.



CTI Consultants, Inc. (CTI) will provide QC Testing & Lab Services for the Branch | WRA Team. CTI Consultants, Inc. (CTI) is a full service professional engineering consulting firm with over 34 years of experience in the industry. CTI has the expertise and ability to support

this project team with a fully AASHTO Accredited Laboratory and trained and certified personnel. CTI has served on many VDOT Design-Build Projects such as the Zion Crossroads Interchange, the Route 29 Solutions Project in Charlottesville, Virginia, and the Route 61 Town of Narrows Bridge in Narrows, Virginia.



Froehling & Robertson, Inc. (F&R), a SWaM-certified firm founded in 1881, will provide the Quality Assurance Lab services for the project that is separate and independent from the construction QC lab. F&R's in-house soil, materials, and asphalt laboratories are accredited by AASHTO (AMRL/CCRL), the US Army Corps of Engineers (USACE), and WACEL.

PDA Land Planning and Design Associates, Inc.'s (LPDA), Mark Lieberth will lead all Landscape Architecture design services for the project. WRA and SWaM-certified LPDA have an extensive work history and recently collaborated on the Berkmar Drive Extension element of the Route 29 Solutions Design-Build project.

Seventh Point, Inc. (SP), specializes in providing public relations and communication SEVENTH POINT TRANSPORTATION PR expertise on high profile projects for VDOT including the Military Highway and I-64 Widening Exit 200 to 205 projects with Branch. Windy Campbell will lead this effort as a Value-Added team member bringing her 20 years of experience and will report to the DBPM. Windy is currently performing this same role with Jeff Humphreys on the I-64 Widening Design-Build project in the **Richmond District as noted above.**





3.3.1 KEY PERSONNEL

The Branch | WRA Design-Build Team identifies and provides information about the Key personnel below. The job duties and responsibilities of Key Personnel will not be delegated to others for the duration of the Design-Build Contract. The resumes for the individuals identified as Key Personnel are included in **Attachment 3.3.1**. Each of these individuals are well respected in the transportation industry and have extensive experience in the delivery of Design-Build projects for the Department. Additional information about each is further highlighted in the organizational chart narrative provided in Section 3.3.2.

Key Personnel	Team Member	Company
Design-Build Project Manager (DBPM)	M. Jeff Humphreys Jr., DBIA	Branch
Quality Assurance Manager (QAM)	Lenny Coleman, PE, CCM, LEED AP	WRA
Design Manager (DM)	Mike Russell, PE, DBIA	WRA
Construction Manager (CM)	Greg Suttle	Branch

The Branch | WRA team has learned from previous Design-Build projects that a highly successful team requires more than just the Key Personnel required by the RFQ. For this reason our team offers several **Value-Added** positions that enhance the efficiency of the team's organizational structure and strengthens the team to successfully deliver the projects on time and on budget. All of these individuals have extensive Design-Build Experience and are well known in their respective disciplines both inside and outside of the Department.

Value-Added Role	Team Member	Company
WRA Design Team Lead	Mark Vasco, PE	WRA
RDA Design Team Lead	John Giometti, PE	RDA
Design Construction Integrator (DCI)	Justin Campbell	Branch
Public Relations Manager	Windy Campbell	Seventh Point
Utility Manager	Paul Martin	WRA
Right of Way Manager	James Street	RDA
Field Operations Manager	Raymond Bruce	Branch

3.3.2 ORGANIZATIONAL CHART

The Branch | WRA Design-Build Team Organizational Chart on the following page identifies key personnel members and depicts the reporting structure of the entire Team. **Solid lines** identify the **direct lines** of reporting relationships of our Team members from the DBPM to the Design, Construction and QA leads. **Dashed lines** represent **indirect** reporting relationships and obligations to the DBPM and the team members. Furthermore, the reporting structure shows a clear separation between the Construction Quality Control duties and the Quality Assurance (QA) duties. Each function will have independent materials testing laboratory services. A narrative further defines the roles and functional relationships of the main team members immediately following the Organizational Chart.

The DB symbol on both the organizational chart and the narrative denotes those Team members that have previous Design-Build experience.





3.3.2 ORGANIZATIONAL CHART



3.3 Offeror's Team Structure





Organizational Chart Narrative

Design-Build Project Manager: M. Jeff Humphreys, Jr, DBIA (Branch – 38 years of experience)

DB *M. Jeff Humphreys Jr., DBIA (DBPM)* will be responsible for the overall Project design and construction and has the expertise and experience required to supervise and exercise a degree of control of the work and will ultimately be the point of contact for VDOT and stakeholders. Jeff will oversee the Project, to include the Design-Builder's design, construction, quality management, contract administration and other services required by the Contract Documents. This will include procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents in a timely manner. Jeff will answer questions/inquiries relevant to the project and will be responsible for meeting the Design-Builder's obligations under the Contract while avoiding and resolving disputes. Jeff, along with Windy Campbell, our <u>Value-Added</u> position from Seventh Point, will coordinate public outreach and public meetings. In addition, he will facilitate partnering within the team and ensure that appropriate and consistent communication is maintained between all parties. The Design Manager, Design / Construction Integrator, Construction Manager, Right-of-Way Manager, Safety Manager, Quality Assurance Manager (QAM), and Lead Utility Coordinator, will all report directly to Jeff. He is currently serving in a similar role, as the DBPM for the \$43M I-64 Widening from Exit 200-205 in the Richmond District.

Quality Assurance Manager: Lenny Coleman, PE, CCM, LEED AP (WRA – 14 years of experience)

DE Leonard (Lenny) Coleman, PE, CCM, LEED AP (QAM) will report directly to the DBPM and will have direct, independent access to VDOT. He recently filled the role of the QAM for the I-95 Express Lanes Southern Terminus Extension and is currently the QAM on the I-95 Safety Improvements at Route 3 for Branch. He served as Assistant QAM on the Fairfax County Parkway Interchange and Widening Design-Build project and held the role of QC Manager on the Fall Hill Avenue & Mary Washington Boulevard Extension VDOT Design-Build project in Fredericksburg, VA, and the Walney Road Widening VDOT Design-Build Project in Fairfax, VA. Lenny's experience includes QA level oversight as Prince William County's Construction Manager for the Capital Improvement Program which involved managing projects similar to the elements included in the Albemarle Interchange Bundling Project. Lenny will be responsible for the Quality Assurance program and will coordinate with VDOT, supervise project QA inspection staff, and coordinate with the QA Testing firm, F&R. He will ensure conformance of all work and materials, testing, and sampling are in accordance with the Contract Documents including the "Approved for Construction" plans and specifications. Lenny will have overall responsibility for the development of and adherence to the Design-Build QA/QC Plan including coordination with the Design QA/QC Manager, Brad Stipes, PE. Lenny will report to the DBPM and will function completely independent from the Construction QC, auditing and monitoring Branch's Quality Control Program. He will have the authority to stop construction activities, to ensure compliance with the specifications, and issue Non-Compliance Reports (NCRs) if necessary. In addition, Lenny will submit monthly written reports on the QA Program to both VDOT and the Branch | WRA Design-Build Team. Lenny's current assignments, role, and duration are included on the resume in section 3.3.1.

Design Manager: Mike Russell, PE, DBIA (WRA – 29 years of experience)

DB Mike Russell, PE, DBIA (DM) will also report directly to the DBPM. Mike has 29 years of experience designing and managing major transportation projects for VDOT. He spent 14 years serving VDOT in various roles, most recently as the District Engineer of VDOT's Bristol District. He is currently the Design Manager on VDOT's I-81 Halls Bottom Road Bridge Replacement Design-Build project in Washington County, Virginia and Design Manager on the I-64 Widening from Exit 200-205 in the Richmond District (with Branch). Design efforts are complete on both of those projects with construction well underway. He was also the Design Element Lead for the Berkmar Drive Extension element of the Route 29 Solutions Design-Build





project. Mike also worked closely with Branch on the I-95 Express Lanes Southern Terminus Extension and the I-95 Safety Improvements at Route 3. Mike will be responsible for establishing and overseeing a QA/QC program for all pertinent disciplines involved with the design of the Project, including review of design, working plans, shop drawings, specifications, and constructability of the project. He will be responsible for providing a quality product while meeting all design milestones, continual Design-Build Team coordination, and ensuring the oversight of *Brad Stipes, PE - Design QA/QC Manager* throughout the design phase. Mike will be responsible for ensuring the design is in conformance with the Contract Documents, current VDOT Policies, Procedures and Guidelines and the requirements of the VDOT Request for Proposals. He will manage all aspects of project design. He will assign resources as needed, oversee the design subconsultants, coordinate design and review schedules, develop and implement corrective measures if necessary, and ensure environmental compliance measures are integrated into the design. He will coordinate the design with the *Value-Added Design / Construction Integrator (DCI), Justin Campbell,* and will remain involved in the project throughout construction to oversee any plan modifications and shop drawing reviews, as well as review construction activities as work progresses.

Construction Manager: Greg Suttle (Branch – 28 years of experience)

DB Greg Suttle will report to the DBPM and manage all on-site construction as well as scheduling, safety, environmental compliance, utilities, and MOT. Greg will supervise the Project Controls Manager, QC Manager, Field Operations Manager, superintendents, and field staff. He will also manage the construction process, to include all Quality Control (QC) activities to ensure the materials used and work performed meet contract requirements and the "approved for construction" plans and specifications. He will play a key role in conjunction with the DCI and Design Manager in design constructability reviews, utility coordination, and MOT. Greg holds a Virginia Department of Environmental Quality (DEQ) Responsible Land Disturber (RLD) Certification and a VDOT Erosion and Sediment Control Contractor Certification (ESCCC). He will also work with WRA in coordinating the design and construction forces with respect to environmental commitments. Aided by his staff, Greg will ensure construction is performed safely. Together with the QC Manager, Greg will confirm that materials and work activities are in conformance with the approved plans and contract documents. He will coordinate with the DM during construction for the accurate and timely issuance and review of any RFIs and shop drawings, as well as field visits, preparation of as-builts and plan revisions. He will be assigned to the Project and be *on-site full-time* during construction. Greg recently served in a similar role for the \$25M Route 3 Widening Design-Build Project (Culpeper District) and will be fully dedicated and available for this project prior to Notice to Proceed. Greg's current assignments, role, and duration are included on the resume in section 3.3.1.

Value Added Positions

WRA Design Team Lead: *Mark Vasco, PE* will report to the DM and lead the roadway design efforts for the I-64/Rte. 250 DDI, the Route 250/151 Roundabout, and the Rio Mills/Berkmar Connector elements of the Project. Mark has 34 years of experience in the design of transportation projects. Mark recently served as the lead designer of the Fairfax County Parkway Interchange at Fair Lakes Parkway in Fairfax County, Virginia and supported RDA on the GMU Campus Connector Design-Build with Branch. Mark will manage three separate design teams that include roadway leads Gail Kuttesch, PE, Alix Warren, PE, and Andrew Koser, PE, all of whom have extensive Design-Build experience.

DB RDA Design Team Lead: *John Giometti, PE* will report to the DM and lead the roadway design efforts for the Route 20/649 Roundabout, the I-64 Exit 118 Improvements, and the Route 29/Fontaine Avenue Ramp Improvement elements of the Project. John has 30 years of experience in the management and design of major transportation projects. He spent 13 years with VDOT, most recently as the Culpeper District L&D Engineer. He has led many of RDA's successful Design-Build projects including the Route 29 Widening element of the





Award-Winning Route 29 Solutions Project as well as playing a significant role in the Award-Winning I-66/Route 15 DDI Project in Loudon County. John will be supported by Brandon Shock, PE, DBIA and Andrew Knowlton, PE as roadway leads for the Route 20/649 Roundabout and the I-64 Exit 118 Improvements which will include the Route 29 Fontaine Ramp Improvement into a single work package.

Design/ Construction Integrator (DCI): *Justin Campbell* has 11 years of experience in the heavy civil construction industry. He is currently serving as Assistant Construction Manager and Project Controls Manager on the I-64 Widening from Exit 200-205 Design-Build in the Richmond District where he is working with Jeff Humphreys. Justin is well versed in the process of managing the design-construction process that is exclusive to Design-Build projects. Justin will report to the DBPM and will support the timely review of plan submissions and advance construction activities.

DE Utility Coordination Manager, John Myers with 19 years of experience will report directly to the DBPM. John will coordinate all utility relocations. John will verify conflicts; determine cost responsibilities; conduct utility field inspections; coordinate utility relocation design; review and recommend approval of utility relocation plans and estimates, and ensure inspection of utility relocation construction. Additionally, John will review utility relocation designs for in-plan utility relocations, and verify/recommend modifications as needed. John has been similarly responsible for more than 10 DB projects over the past 5 years. These projects include Route 29 Solutions, I-66/Route 15 DDI, I-64 Segment II, and Military Highway CFI.

DE Public Relations Manager: *Windy Campbell* has 20 years of experience leading outreach on major transportation projects and ensuring robust public affairs, community outreach, marketing, advertising, and strategic public communications programs. Windy is currently serving in a similar role on the Corman-Branch JV's I-64 Widening from Exit 200 to 205 Design-Build project and will report to the DBPM.

DE Right-of-Way Manager: James (Jimmy) Street has 42 years of experience and will report directly to the DBPM. Jimmy will oversee and manage the entire right-of-way acquisition process for all 6 project elements. Jimmy has experience on numerous Design-Build projects, including the Route 29 Solutions Design-Build project in Albemarle County.

DE Field Operations Manager: *Raymond Bruce* has 42 years of experience and served in a similar role for two segments of the Route 58 Corridor Improvements Design-Build Projects in Hillsville, VA. Raymond provided oversight and scheduled resources for the widening of existing Route 58 for 16 miles. Raymond will report to the CM and manage the field crews and assist the element supervisors in constructing the project.

Traffic Management Task Force: A Task Force dedicated to traffic management is an effective method to manage the risks. This group will consist of Branch, WRA project staff, Windy Campbell of Seventh Point, VDOT, and Third Party Stakeholders. The Task Force will meet routinely, at least monthly to review the current MOT plan and determine if any changes need to be made to address current concerns or upcoming activities.

DB Executive Committee: Jason Hoyle, Vice President of Branch, and John Maddox, Senior Vice President of WRA, will provide support for the project Team to ensure adequate resources are available for successful project completion. Both Jason and John fully understand the desire of the Department to keep the key members of the team in place during the project and are fully committed to this.







3.4

Experience of Offeror's Team





3.4 EXPERIENCE OF TEAM

Please refer to Attachment 3.4.1 (a) Lead Contractor Work History Forms and Attachment 3.4.1 (b) Lead Designer Work History Forms, located in the Appendix of the SOQ for relevant project experience.

RATIONALE FOR WORK HISTORY PROJECT SELECTION

As Lead Contractor and Offeror, Branch is proud to present the following projects that demonstrate experience and success with scope, magnitude, risks and associated mitigation that are similar to the Albemarle Intersection Bundling Project.

I-81 at Exit 150 Safety Improvements: This \$18M VDOT Design-Bid-Build Project consisted of improvements to Route 11 at Exit 150 on I-81. These improvements included constructing additional lanes to Route 11 as well as a roundabout. One of the legs of the roundabout is the new on-ramp to I-81 northbound while a second leg of the roundabout is the I-81 northbound off-ramp. The construction of the roundabout was made while existing traffic was efficiently maintained. Phased construction of the roundabout allowed for continuous traffic flow.

Route 3 Widening Design-Build: Branch has recently completed this \$23M, 5.1 mile widening of Route 3 in Culpeper District. The rural setting and daily traffic counts associated with the Route 3 Widening project is similar to the Albemarle Intersection Bundling Project. There was heavy coordination with property owners and project stakeholders to address driveways, sight distance, and drainage issues. Greg Suttle served as Construction Manager for this project and was involved in all of these coordination issues. For the Albemarle project, Greg will also spend the time necessary to resolve similar issues on each project element.

Southgate Drive Interchange: This \$38.7M VDOT project in Blacksburg included the construction of a Diverging Diamond Interchange and two roundabouts serving as the primary entrance to Virginia Tech and the Corporate Research Center. The intersection of US 460 and Southgate Drive experienced significant queues, rear end collisions, and an overwhelming need for an increased Level of Service. The recently completed improvements allow traffic to flow freely along US 460 while Southgate Drive accesses US 460 via a DDI elevated above US 460. Traffic along US 460 and Southgate Drive was maintained throughout construction. Southgate Drive was upgraded with a roundabout near the new interchange to keep traffic flowing and reduce the original traffic queue. Branch and WRA collaborated on this project to develop a successful Value Engineering proposal that resulted in total cost savings of \$1.4M.

As Lead Designer, WRA is pleased to present the following three projects to showcase definitive experience with *Diverging Diamond Interchange* Design, *Roundabout* Design, and *Design-Build* expertise. This experience is supplemented by our DDI design experience at the *I-64 Zion's Crossroads DDI Interchange*. WRA prepared the Design Build Conceptual Design for VDOT and performed final design reviews of the Design-Builder's plans and design.

SR0322/SR0222 Diverging Diamond Interchange – This project in Lancaster County, Pennsylvania is virtually identical in scope and complexity to the I-64/Rte 250 DDI that is being proposed as part of the Albemarle Intersection Bundling project. WRA is the lead designer on the project and is currently finalizing the plans for advertisement. A roadway safety audit recommended the existing diamond interchange be replaced with a DDI to reduce the number of conflict points and eliminate the mainline left turn/through conflict. The project includes multimodal accommodations by improving sidewalk connectivity along SR322 and provides provisions for bicycles.

Route 29 Solutions Design-Build – Berkmar Drive Extension: WRA was Design Lead for the \$34.6M Berkmar Drive Extension Element of the Route 29 Solutions Design-Build project in Albemarle County. The project included a single lane roundabout at the intersection of Berkmar Drive and Hilton Heights Road. The design included providing supporting data including speed profiles and a turning movement analysis for each maneuver to ensure that vehicles and heavy truck traffic could maneuver the roundabout safely.

Fall Hill Avenue Widening and Mary Washington Boulevard Extension Design-Build: This \$31M project in the City of Fredericksburg included widening Fall Hill Avenue to a four-lane divided highway from Carl D. Silver Parkway to an extension of Mary Washington Boulevard from Route 1 with a roundabout at the Fall Hill Avenue and Mary Washington Boulevard intersection. Detailed maintenance of traffic plans ensured that the impact to the travelling public would be minimized. The project also required extensive utility relocation and coordination before and during construction.







3.5

Project Risks





3.5 PROJECT RISKS

The Branch | WRA Design-Build Team has 175+ years of combined industry experience, including \$868M on Design-Build projects. This experience will be drawn upon to refine our skills in anticipating risks and identifying and implementing mitigation strategies to manage/eliminate risks.

Our risk assessment and mitigation procedure is described in the diagram below; it is based on concepts in the Breakthrough Project Leadership Institute created by well-known construction management consultants Mike Casten (founder of Construction Concepts) and Dave Peterson (founder of Sage Limited):



Our risk management process begins with assembling partners that complement corporate strengths and offer diverse, experience-based perspectives. We work constantly as a Team to evaluate the project criteria and assess risks, which leads to effective solutions that we implement into the project design. This continual implementation has resulted in a systemic, cultural process that permeates through our project cycle of *identifying, evaluating, adjusting*, and *performing*. The Branch | WRA Design-Build Team has proven its value in managing risks to VDOT on major projects such as the I-95 Express Lane Southern Terminus Extension, the I-95 Safety Improvements at Route 3, and currently on the I-64 Widening from Exit 200 to 205. Our strong, proven partnering approach with VDOT on these projects will be successfully incorporated to meet the challenges of the Albemarle Intersection Bundling project. The three most critical risks identified by our team are highlighted in this section.

RISK #1: MAINTAINING TRAFFIC SAFELY AND EFFICIENTLY

A. Why this Risk is Critical

Maintaining traffic safely and efficiently is a key risk for this project. Each of the six proposed intersection improvements has its own unique operational and site characteristics. In carefully studying the conceptual project designs provided in the RFQ and performing detailed site reviews at each intersection, our Team has identified the following key Maintenance of Traffic (MOT) considerations that must be fully addressed during project design and construction:

Major Construction at Highway Intersections with High-Volume, High-Speed Traffic: At most of the intersection improvement sites for this project, a variety of heavy construction activities must be carried out near high-volume, high-speed traffic. Safety risks increase as the space between construction and traffic decreases. The nature of the



intersection improvements is that multidirectional traffic and associated improvements all need to occupy the same space. A prime example of this is the I-64 Exit 124 DDI, where high volume and/or high-speed traffic approaching the interchange along Route 250 and from the ramp connections will be maneuvering through a work zone with extensive construction activities and constrained work spaces.

Traffic Delays and Queueing Traffic delays and queueing can lead to a variety of negative outcomes including driver frustration and increased accident rates. A majority of traffic accidents are related to speed differentials and queued traffic that directly translates into a less safe work zone for both the travelling public and for construction and inspection personnel. Two representative examples of this are the roundabout intersection elements (Route 151/250 and Route 20/649), where approach roadway





segments include horizontal curves that can limit sight distance and result in safety risk when traffic is queued. The Route 20/649 Roundabout may require extensive approach work to accommodate existing grade differences in the approach roadway segments, adding an additional level of consideration to avoid/mitigate traffic delays and queueing.

B. Impacts the Risk Will Have on the Project

Safety: Safety is of the highest consideration for the public and safety of the workers. Traveling through a work zone, in and of itself, introduces hazards to both the traveling public and construction workers. Add to this the complexities of potentially reducing speeds, lane shifts, and sight distance constraints, and safety becomes an even greater concern. MOT plans that meet minimum requirements but lack the proper advance warnings and clear, positive guidance through the work zones tailored to each specific location pose increased safety risks to the traveling public and to construction workers. Impeded sight distance can also occur when equipment is not properly staged during construction operations.

Mobility: Inadequate MOT plans and/or inadequate implementation of the MOT control devices during construction will directly impact mobility. When traffic is excessively or unnecessarily delayed, driver frustration increases. As driver frustration increases, so does risky and/or aggressive driving behaviors.

Cost and Schedule: Incidents that occur in the work zone adversely impact production which results in schedule delays and cost increases.

C. Mitigation Strategies

The Branch | WRA Design-Build Team has extensive design and construction experience with each of the six proposed intersection improvement types. We will mitigate the safety and mobility risks by developing and implementing sound, logical Transportation Management Plans (TMP) and Temporary Traffic Control Plans (TTCP) that comprehensively reflect each project element constructability; the safe and efficient navigation of the traveling public through the work zones; and special design features to facilitate timely and responsive Incident Management Strategies. We understand the importance of regularly reviewing and refining these strategies during construction to reflect unanticipated traffic and/or site conditions, special construction activities that arise, and specific requests by VDOT. Note the following specific Mitigation Strategies:

✓ Develop, Monitor, and Refine an Effective MOT Plan: All temporary traffic maintenance strategies and controls must provide for adequate room for construction workers to safely prosecute their work, and provide the traveling public with clear, positive guidance to navigate the work zone. Our Team will develop a broad, multi-faceted MOT plan for each of the six intersection improvement elements by reviewing the identified MOT/public safety challenges and determining how each intersection can be constructed to reduce or minimize these issues. Our MOT/TMP plan will exceed the minimum requirements where possible to ensure that extraneous factors that add risk are specifically mitigated (i.e. lane shifts for construction of a roundabout and ultimately shaping traffic into the roundabout movement may require an increased number of warning signs to allow drivers to adjust to an unfamiliar and unexpected traffic pattern).

We will also prepare a detailed TMP that will include a TTCP, Public Communications Plan and a Transportation Operations Plan. During construction, each MOT plan will be developed and refined by the design team based on continual input from construction operations and the Traffic Management Task Force (see below) to ensure that each one fully addresses public safety and construction operations at each location. Simply put, the MOT plan for each intersection improvement will be a dynamic plan that is refined regularly during construction to ensure that it reflects optimal traffic operations and safety.

✓ Traffic Management Task Force: Just before the commencement of construction, the Branch | WRA Design-Build Team will assemble a Traffic Management Task Force (TMTF) comprised of representatives from Branch, WRA, RDA, Seventh Point, VDOT and affected Third Party Stakeholders. The TMTF will meet monthly to review current MOT considerations/concerns at each intersection





construction location for improvement. We will document and incorporate input from all parties into the refined MOT plan. Greg Suttle's experience dealing with similar MOT issues on the Route 3 Widening project and the I-95 at Route 3 Safety project has enabled him to be prepared for these situations.

- Phased Construction and Adequate Separation Between Traveling Public and Construction: Phased traffic control plans will be required to construct proposed improvements at each of the six intersections. During the constructability reviews of the phased traffic control plan, special attention will be given to limit the number of traffic shifts required to construct the project. A focus will also be placed on making any traffic shifts as gradual as possible. Where applicable, temporary barrier systems will be provided to allow for a distinct separation between traffic and construction. As mentioned previously, as separation between traffic and construction activities increases, so does safety. This concept has always been a guiding principle in preparing and improving MOT plans and phasing.
- ✓ Use of Lane Closures: The Branch | WRA Design-Build Team will evaluate current traffic volumes to determine when a lane closure will have the least impact on traffic. This data will then be used to develop the project schedule to minimize the mobility impacts to the traveling public and provide guidance for construction activities. The appropriate use of lane closures also provides the buffer necessary between vehicular traffic and work zone activities to significantly improve safety.
- ✓ Incident Management: Our design and Transportation Operations Plan of the TMP will account for Incident Management scenarios, including accident access, vehicle maneuvering and storage, and traffic restoration strategies to name a few. Having an effective Incident Management Plan will reduce the time required to clear the incident and subsequently minimize the impact to mobility and safety.
- ✓ Public Awareness: The Branch | WRA Design-Build Team will work closely with the VDOT Culpeper District Public Affairs staff to provide regular project updates through distribution of traditional paper media, social media, VDOT's project website, stakeholder meetings, etc. Traffic pattern changes, delays, and lane closures will be coordinated with the Regional Traffic Operations Center to provide motorists with real-time travel information through the Virginia 511 traffic information web site and mobile app. Our Team will also develop a comprehensive Public Awareness Plan to communicate project work zone information, updates on construction sequencing, construction activities that may impact traffic, and congestion notifications. This plan may incorporate *active* Driver Awareness measures approaching, and within, the work zone and may include the following:



D. Role of VDOT or Other Agencies

Our Team will work closely with VDOT to address concerns through coordination meetings and reviews. We anticipate VDOT will play an active partnership role with our Team in communicating progress and real-time travel information that affect motorists and stakeholders during construction.





RISK #2: SIMULTANEOUS DESIGN AND CONSTRUCTION OF MULTIPLE PROJECTS

A. Why this Risk is Critical

Simultaneous Design and Construction of Multiple Intersection Improvement Projects introduces inherent risks of its own, particularly with respect to timely project completions and construction cost overruns. These inherent risks are based on the variety of existing site conditions; proposed improvements; traffic characteristics; environmental issues; and right-of-way impacts/acquisitions that each project must address at the same time. Our Team is extremely well versed in both the design and construction of each of the proposed intersection improvement types as well as the terrain, traffic operations, and environmental considerations associated with each one, so we fully understand the critical nature of this risk. In carefully studying the conceptual project designs provided in the RFQ and performing detailed site reviews at each intersection, our Team has identified the following key considerations that must be fully addressed during project design and construction to effectively manage and deliver six different intersection improvements simultaneously:

- ✓ Understanding the Project Goals and Varying Site Conditions of Each Intersection Improvement: Without a firm understanding of each of the proposed intersection improvements, and the existing conditions and constraints associated with each, a Design-Build team is at a distinct disadvantage for delivering multiple projects in a timely and cost-effective manner. Such is not the case with the Branch | WRA Design-Build Team.
- ✓ Understanding the VDOT Design-Build Process: Lack of understanding VDOT's Design-Build process, particularly with respect to the submission of work packages, right-of-way acquisition, and environmental reviews and permitting, a Design-Build team is at a disadvantage for delivering multiple projects in a timely and cost-effective manner.
- Managing Construction Coordination and Resource Allocation: Inefficient coordination of the team, VDOT, stakeholders, etc. during design and construction will likely result in multiple project delays that cumulatively can have a significant and detrimental impact on the overall project schedule.

B. Impacts the Risk Will Have on the Project

- ✓ Schedule: Failure to successfully manage the design, environmental review, right-of-way acquisition, and construction processes simultaneously on the six different intersection improvements will jeopardize the project delivery schedules for one or more of the projects elements.
- ✓ Environmental Permitting: Failure to fully understand the environmental reviews and permitting processes necessary to construct the proposed intersection improvements will result in project delays and unnecessary involvement and oversight by VDOT during construction.
- ✓ Right-of-Way Acquisition: As mentioned previously, and to a point of emphasis, lack of experienced and effectual right-of-way acquisition could result in project delays and unnecessary involvement and oversight by VDOT during construction. This is especially true when you add the complexity associated with obtaining right-of-way or easements from a property encumbered by a Virginia Outdoor Foundation (VOF) conservation easement. This is such a critical component of the project that we have elaborated on the specific issue as our Risk #3.
- ✓ **Construction:** Delays related to the inadequate coordination and resource allocation between the six project elements can result in several undesirable outcomes including but not limited to the following:
 - Difficulty scheduling equipment and materials
 - o Impact to construction quality
 - Negative public perception
 - Attempts to accelerate the work may lead to increased risk of accidents





C. Mitigation Strategies

The Branch | WRA Design-Build Team understands the design and construction of each intersection improvement type, as well as the existing conditions and constraints based on our extensive design and construction experience on projects with similar terrain, environmental, and right-of-way considerations. Each of our Team members is extensively familiar with VDOT's Design-Build process. This experience has been gained working on a wide variety of successful VDOT Design-Build projects, both as a Team and as individual firms. Based on this extensive experience, we also understand the importance of regularly reviewing and refining strategies during design and construction to address unanticipated site conditions, environmental challenges, and acquiring right-of-way under a wide variety of circumstances. Note the following specific Mitigation Strategies:

- ✓ Identify Critical Path Items for Each Intersection Element and Schedule : Our Team will perform a detailed assessment of each intersection element's key construction components and identify the key Critical Path items for each element's construction. The final product of this exercise will be the development of a *preliminary construction schedule* for each element. The preliminary construction schedule will account for environmental risks by scheduling tree clearing and in-stream work outside of time-of-year restrictions. The schedule will also allow for the installation of mitigation measures (e.g., signage, tree plantings, etc.) to offset any potential impacts to the *Rockfish Gap Country Store* and The Riggory property. Our Team will then use these construction schedules to allocate design staff on construction plan development and work package submissions to keep construction on schedule (see next step below for further detail). Value-Added team members Mark Vasco and John Giometti will effectively accomplish the coordination of the multiple elements by focusing on the key components for each element.
- ✓ Develop Schedules & Work Packages to Ensure Critical Path Items are Constructed on Schedule: Utilizing the preliminary construction schedules and Critical Path Items identified above, our Team will develop construction plan design schedules, environmental permitting schedules, and *Work Plan Submission* schedules for each intersection improvement. Special emphasis will be given to Critical Path Items that will ensure that necessary construction is accomplished on each of the six elements in a fashion that guarantees timely completion.
- Respond, Revise and Adapt During Construction: During construction, there are commonly issues that arise related to unanticipated site conditions, environmental considerations, etc. When this happens, our Team has the experience and good judgement to address these concerns in a timely and comprehensive manner. We will do this from both design and construction perspectives, keeping VDOT and stakeholders informed of any adjustments necessary to construct the various intersection improvements. We will also make these adjustments in a timely fashion to ensure the elements are completed according to the prescribed schedules. Branch and WRA worked together on the I-95 Southern Terminus Extension and the I-95 at Route 3 Safety project where unanticipated site and environmental conditions were experienced, and solutions evaluated and implemented in an efficient manner. Our team will bring this experience and lessons learned to this project.

D. Role of VDOT or Other Agencies

Our Team will work closely with VDOT to address concerns through coordination meetings and reviews. We anticipate VDOT will play an active partnership role with our Team in reviewing Work Package submissions, reviewing and approving construction revisions, reviewing and approving right-of-way acquisitions, and generally being accessible to our DBPM and Key Personnel throughout the Design-Build process for support and/or input as needed.





RISK #3: VIRGINIA OUTDOORS FOUNDATION CONSERVATION EASEMENT

A. Why this Risk is Critical

The property in the Northwest quadrant of the intersection for UPC 111733 – Route 20 and Route 649 Roundabout (shown in the graphic to the right) is incumbered by an easement for the Virginia Outdoors Foundation (VOF) under the Open Space Land Act of 1966. The easement significantly restricts the uses and elements that can be constructed on the encumbered property. As such, it eliminates the ability to use eminent domain for the acquisition. Impacts to the easement for the VOF will require extended negotiation timeframes to allow for Agency review and, if agreeable, review and approval by the Office of the Attorney General (OAG) of all legal documents. Furthermore, since eminent domain cannot be used, there are no timeframe cutoffs to ensure that the project can move forward without unnecessary delays.



B. Impacts the Risk Will Have on the Project

Ultimately, the lack of eminent domain and a clear off-ramp could delay construction activities on the VOF parcel if negotiations stall. A worst-case scenario could be an inability to acquire the necessary rights-of-way and result in a significant redesign of the intersection thereby losing time and increasing costs.

C. Mitigation Strategies

There are several options to mitigate this risk. Relocating the intersection to the south as presented at the Project Information Meeting held July 20, 2018, reduces the risk by minimizing the impact to the parcel. However, this solution presents new challenges due to excessive grades that will be generated along Riggory Ridge Road as well as environmental impacts (i.e. wetlands, streams, Water Protection Ordinance Buffers, viewshed impacts to the potentially eligible Riggory property, etc.).

A second option is to evaluate the existing intersection for improvements that reduce the required footprint over that of a roundabout. Turn lane improvements similar to those envisioned during the original Smart Scale assessment would accomplish this goal and may minimize costs.

A third mitigation strategy would be to begin discussions with the VOF and property owner immediately after NTP. Depending on how these discussions progress, a decision would be made to continue down the path of developing improvements consistent with the layout shown in the RFQ Information Package or proceeding with one of the two previous options. In order to give this option the greatest chance of success, design and construction schedules would need to be tied to the required project completion date of 03/30/2023. This would allow appropriate time for early discussions while maintaining a cutoff date by which a new approach would need to be implemented should this one not have a high probability of success. RDA's Staff Counsel (Chris Eib) formerly worked in the Office of the Attorney General (OAG) and is very knowledgeable of this negotiation process, reducing the time needed for review and approval.

D. Role of VDOT or Other Agencies

The VOF will need to review and approve the conveyance and execute any legal documents associated with the transfer of title. The OAG will need to review and approve all legal documents prior to execution by the VOF. VDOT's participation in discussions with, and assistance in, coordinating the actions of the various state agencies will be of great assistance.





3.6

Approach to Executing Work on Multiple Elements





3.6 APPROACH TO EXECUTING WORK ON MULTIPLE ELEMENTS

A. UNDERSTANDING EACH ELEMENT

Each element of this bundle has its own challenges that our team understands in order to effectively manage our approach to executing the work. We have reviewed the preliminary information to determine right-of-way, utility, and environmental needs for each element. These conditions are shown below:

Element	Right-of-Way	Permits and Other Environmental Issues	Utility Relocations	Potential Early Start
I-64 Exit 124 DDI	Yes (Minimal)	Nationwide 23	Yes	No
I-64 Exit 118	None Anticipated	No Permits Anticipated	None	Yes
Fontaine Avenue Ramp at US 29 Bypass (NB)	None Anticipated	Nationwide 23	None	Yes
U.S. Route 250 & Route 151 Roundabout	Yes	Nationwide 23 Cultural Resource	Yes	No
Route 20 & Route 649 Roundabout	Yes (Potential Virginia Outdoor Foundation Issue)	Nationwide 23 Cultural Resource	Yes	No
Rio Mills Road & Berkmar Drive Connector	Yes (Anticipated to be by donated)	No Permits Anticipated	Minimal	Yes

From this information, we have developed a preliminary determination of which design and preconstruction activities are required before construction can begin. Some of the elements of the bundling project have the potential to begin work early. The graphic below generally describes design and construction operations showing our plan to advance construction for certain elements:

PROJECT DEVELOPMENT FLOW

1. VDOT Notice to Proceed Execute contract and escrow documents.	2. Scope Validation Preliminary survey, geotechnical investigation, & resolve any outstanding issues.	3. Project Design Roadway, drainage, MOT, & erosion control.	4. Potential Early Start of Construction I-64 Exit 118, Route 29/Fontaine Ramp & Rio Mills/Berkmar Connector.	5. Construction Start after Permits, ROW, and Utilities ROW acquisitions, utility relocation & permits acquired. I-64/Route 250 DDI, Route 250/151 Roundabout & Route 20/649 Roundabout.	6. All Elements under Construction Roadway construction, erosion control, MOT, design support and public relations.	7. Project Completion Final paving and pavement markings, signal burn-in (where needed), punch list, and project closeout.
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B. COORDINATION, RESOURCES, AND APPROACH

As we described in the previous Section 3.5, Risk #2 (Simultaneous Design and Construction of Multiple Projects), we have identified the following Mitigation Strategies as the foundation of our approach to delivering all project elements on schedule:

- Identify Critical Path Items for Each Intersection Project and Schedule to Accomplish
- Develop Schedules & Work Packages to Ensure Critical Path Items are Constructed on Schedule
- Respond, Revise and Adapt During Construction





With these strategies in place and a fully developed resource driven schedule, our team will confidently distribute and accomplish both design and construction activities safely and efficiently.

Design: WRA has proven, over the last 65 years of continuous service to VDOT, its ability to meet demanding and competing project schedules on VDOT Design-Build, Design-Bid-Build, and multiple Location

WRA is recognized by VDOT as a **"go-to" firm** for delivering critical projects on **accelerated schedules**.

& Design (L&D) Term assignments. This commitment and dedication ensures that VDOT's schedules become a reality. As a result, WRA is recognized by VDOT as a "Go To" firm for delivering critical projects on accelerated schedules. Specifically, WRA's task managers and discipline leads assigned to the Albemarle Intersection Bundling Project have routinely worked together on numerous Design-Build and Design-Bid-Build contracts delivering VDOT projects on aggressive schedules. WRA design teams are extremely dynamic with <u>no boundaries</u> established by corporate organizational charts. Under the direction of senior management, the resources shift as needed to consistently deliver the tasks at hand. For example, during a recent single year, WRA provided services on over 60 projects simultaneously on the L&D On-Call contract alone. The success on several Design-Build contracts, project specific Design-Bid-Build contracts, and L&D Term contract assignments proves WRA has the resources necessary to deliver multiple projects on aggressive schedules.

We understand VDOT's interest and concerns with how each Offeror will assure overall project delivery of the bundled intersection improvements in accordance with the proposed schedule. What better way to meet this challenge than to bring in a design partner that has been the Lead Designer on eight Design-Build projects in the past 5 years – Rinker Design Associates (RDA). As an added benefit WRA and RDA have an extensive history of working together, including three recent Design-Build projects. The most notable of these is the Route 29 Solutions project where WRA and RDA each led a project element – Berkmar Road Extension and Route 29 Widening, respectively. Either WRA or RDA could have easily performed this project alone. However, our combined complement of resources provides added assurance to the Department that our team is fully capable of, and committed to, delivering the entire bundle of project elements on time.

To further emphasize the **Organizational Chart** in **Section 3.3**, our Team has strategically assigned specific design teams from WRA and RDA to develop the construction plans for each individual intersection improvement, as well as right-of-way, environmental, and utility considerations. This approach provides for each of these elements to have Approved for Construction Plans delivered as quickly as possible. Specifically, under the direction of the Design Manager, WRA's Design Team Lead (Mark Vasco, PE) will be responsible for managing the following three elements, *each of which will be accomplished by a separate design team*:

- I-64/Route 250 DDI
- Route 250/151 Roundabout
- Rio Mills/Berkmar Connector

Similarly, RDA's Design Team Lead (John Giometti, PE), under the direction of the Design Manager, will be responsible for managing the remaining three project elements that will be accomplished by two *separate design teams*. We feel that the I-64 Exit 118 Improvements and the Route 29 Fontaine Ramp Improvements elements can be *more efficiently* delivered as a single work package both from a design and construction perspective:

- I-64 Exit 118 Improvements and the Route 29/Fontaine Ramp Improvements
- Route 20/649 Roundabout





These design teams will be closely integrated through weekly design meetings and will also serve as independent QA and QC reviewers through both intra- *and* inter-firm design team reviews. This will further ensure consistency and quality across all project elements.

Construction: Branch will set up the field operations to manage the Albemarle Intersection Bundling project similar to managing recently completed projects where multiple areas can be constructed at the same time. To better manage the construction, certain elements will be paired together and others will be independent. Based on the opportunity to begin construction of certain elements early, proximity to each other, and type of construction, we plan on breaking the construction of the project down into these four segments:

- I-64/Route 250 DDI
- Rio Mills/Berkmar Connector and Route 20/Route 649 Roundabout
- I-64 Exit 118 Improvements and Route 29/Fontaine Ramp Improvements
- Route 250/151 Roundabout

Raymond Bruce, Field Operations Manager, will work with Greg Suttle to manage the field crews. Raymond will balance the need of labor and equipment resources between each element to ensure each are staffed appropriately. Each of these four segments will have a dedicated superintendent to oversee the construction. Raymond performed these duties in a similar role on the Route 3 Widening Project.

Jim Freeman, Superintendent, will supervise the I-64/Route 250 DDI. Jim is the superintendent on the Southgate Drive project that is scheduled for completion in the next 30 days. The Southgate Drive project features a DDI interchange as well as two roundabouts.

I-64 Exit 118 Improvements and Route 29/Fontaine Ramp Improvements have the potential to start construction early. Both projects will not require right-of-way to be acquired or utilities to be relocated. I-64 Exit 118 Improvements will not need a Nationwide 23 permit but Route 29/Fontaine Ramp Improvements may. Due to the possibility to begin both of the projects early and the I-64/Route 250 DDI project requiring right-of-way, utilities to be relocated, and environmental permits to be acquired, Jim Freeman will also serve as Superintendent for these projects. While design and preconstruction activities are underway for the I-64/Route 250 DDI project, work will begin on I-64 Exit 118 Improvements and the Route 29/Fontaine Ramp Improvements projects. This approach should allow these two projects to be well underway before work begins on the DDI.

Greg Montgomery, Superintendent, will oversee the Rio Mills/Berkmar Connector and Route 20/Route 649 Roundabout projects. Greg recently completed the Exit 150 Bid-Build Project (Salem District) where a roundabout was constructed on Route 11. Similar to the Albemarle Intersection Bundling project, Greg maintained traffic while constructing the roundabout in stages. Greg will also oversee the Route 250/151 Roundabout element. The Rio Mills/Berkmar Connector has the potential to begin construction early allowing for right-of-way, utility relocates, and permit acquisition to have ample time to be completed before construction begins on the Route 20/Route 649 and Route 250/151 Roundabout projects.

Branch has over 150 people and 200 pieces of equipment within 75 miles of the project. These resources will be readily available to fulfill the requirements the project will have.

Both Jim and Greg will have separate crews dedicated to their respective segments in order to give the elements the necessary manpower and equipment they need to complete as early as possible. Branch has over 150 people and 200 pieces of equipment within 75 miles of the project. These resources will be readily available to fulfill the requirements the project will have.





Attachment 3.1.2

SOQ Checklist



ATTACHMENT 3.1.2

Project: 0250-002-956 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

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

ATTACHMENT 3.1.2

Project: 0250-002-956 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	Appx. 3.2.10
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appx. 3.2.10
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appx. 3.2.10
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appx. 3.2.10
Full size copies of DPOR Registration (Non- APELSCIDLA)	NA	Section 3.2.10.4	no	Appx. 3.2.10
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 1
Offeror's Team Structure				Pages 2 - 8
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	Pages 4, 6-7
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appx. 3.3.1
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appx. 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appx. 3.3.1
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appx. 3.3.1
Key Personnel Resume – Utility Coordination Manager	Attachment 3.3.1	Section 3.3.1.5	no	
Key Personnel Resume – Right of Way Manager	Attachment 3.3.1	Section 3.3.1.6	no	
Key Personnel Resume – Lead Roadway Engineer	Attachment 3.3.1	Section 3.3.1.7	no	

ATTACHMENT 3.1.2

Project: 0250-002-956 STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Organizational chart	NA	Section 3.3.2	yes	Page 5
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 6 - 8
Experience of Offeror's Team				Page 9
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appx. 3.4.1
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	
Project Risk				Pages 10 - 15
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 10 - 15

Note: Section 3.6 - Approach to Executing Work on Multiple Elements was left off the Checklist but has been included on Pages 16 - 18



Form C-78-RFQ

Attachment 2.10

Acknowledgement of RFP Revision and/or Addenda



Form C-78-RFQ

ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

RFQ NO.	C00111814DB103
PROJECT NO .:	0250-002-956

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 – July 11, 2018	
		(Date)	
2	. Cover letter of	RFQ Addendum #1- August 2, 201	8
		(Date)	
3	. Cover letter of		
		(Date)	
1	1 1 11		
V the k	Datoillo		August 16, 2018
10000	SIGNATUR	E	DATE
	Patrick K. Bart	torillo	Président
	PRINTED NA	ME	TITLE



Attachment 3.2.6

List of Affiliated and Subsidiary Companies



ATTACHMENT 3.2.6

State Project No. 0250-002-956

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Affiliate (Parent Company to Branch)	The Branch Group, Inc.	P.O. Box 40004 Roanoke, VA 24022
Affiliate	Branch and Associates, Inc.	P.O. Box 40051 Roanoke, VA 24022
Affiliate	G.J. Hopkins, Inc.	P.O. 12467 Roanoke, VA 24025
Affiliate	Corman – E.V. Williams, a Joint Venture	12001 Guilford Road Annapolis Junction, MD 20701
Affiliate	Balfour Beatty Infrastructure, Inc./ E.V. Williams, Inc. JV	430 Eastwood Road Wilmington, NC 28403
Affiliate	Flatiron Branch, a Joint Venture	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Affiliate	Flatiron Branch II, a Joint Venture	385 Interlocken Crescent, Suite 900 Broomfield, CO 80021
Affiliate	Corman – Branch, a Joint Venture	442 Rutherford Ave., NE Roanoke, VA 24016
Affiliate	Branch-Flatiron, Joint Venture	442 Rutherford Ave., NE Roanoke, VA 24016



Appendix 3.2.7

Debarment Forms



ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT PRIMARY COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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.

K Bartoullo

Signature

August 16, 2018 Date President Title

Branch Civil, Inc. Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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

August 21, 2018 Date Vice President

Title

Whitman, Requardt & Associates, LLP Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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.

ignature

7/31/2018 Date Director of Transportation/Principal Title

Rinker Design Associates, P.C. Name of Firm
CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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.

August 2, 2018 Executive Vice President/Practice Leader Signature Date Title MBP

Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project No.: 0250-002-956

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 proposal.

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

08/14/2018 Date

AP, BUSILES HOLUMSTRATION Title

OTI CONSULTATS, The.

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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.

July 31, 2018 **Branch Manager** Signature Date Title

Froehling & Robertson, Inc. Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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 proposal.

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.

Insilo Signature

August 21, 2018 Date Vice President Title

H&B Surveying and Mapping, LLC Name of Firm

<u>CERTIFICATION REGARDING DEBARMENT</u> <u>LOWER TIER COVERED TRANSACTIONS</u>

Project No.: 0250-002-956

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 proposal.

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.

URMachnide

Signature

August 13, 2018 Date

President Title

Land Planning and Design Associates, Inc.

Name of Firm

CERTIFICATION REGARDING DEBARMENT LOWER TIER COVERED TRANSACTIONS

Project No.: 0250-002-956

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

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

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

7.31.18 Date

President

Title

Seventh Point

Name of Firm



Appendix 3.2.8

Offeror's VDOT Prequalification Certificate





Date Printed: 08/10/2018

Department's List of Prequalified Vendors12:00 AMIncludes All Qualified Levels As Of 8/10/2018Page71- B ---

Vendor ID:B319Vendor Name:BRANCH CIVIL, INC.Prequal Level:PrequalifiedPrequal Exp:02/28/2019

-- PREQ Address --

P. O. BOX 40004 ROANOKE, VA 24022-0004 Phone: (540)982-1678 Fax: (540)982-4217

002 - GRADING 003 - MAJOR STRUCTURES 045 - UNDERGROUND UTILITIES

Work Classes (Listed But Not Limited To)

 Bus. Contact:
 COLBERT, MICHAEL ANDREW

 Email:
 MICHAEL.COLBERT@BRANCHCIVIL.COM

-- DBE Information --

DBE Type:N/ADBE Contact:N/A

Vendor ID: B850 Vendor Name: BRANSCOME INC. Prequal Level: Prequalified Prequal Exp: 02/28/2019

-- PREQ Address --

432 MCLAWS CIRCLE WILLIAMSBURG, VA 23185 Phone: (757)229-2504 Fax: (757)220-0390

Bus. Contact: HEDRICK, BOBBY AARON Email: LEAGUEB@BRANSCOME.COM

Work Classes (Listed But Not Limited To)

- 002 GRADING 004 - ASPHALT CONCRETE PAVING
- 011 CLEARING AND GRUBBING
- 013 ROADWAY MILLING
- 045 UNDERGROUND UTILITIES

-- DBE Information --

DBE Type:N/ADBE Contact:N/A



Appendix 3.2.9

Surety Letter





Business Insurance Employee Benefits Auto Home

August 14, 2018

Mr. Bryan W. Stevenson, P.E. Alternative Project Delivery Division Virginia Department of Transportation 1401 East Broad Street Richmond, VA 23219

Re: Branch Civil, Inc. – Design-Build RFQ Albemarle Intersection Bundling, Albemarle County, VA Contract ID Number: C00111814DB103 <u>UPC (State Project Nos.; Federal Project Nos.)</u>: UPC 111814 (0250-002-956, P101, R201, C501; NHPP-002-7(051)); UPC 111727 (0029-002-959, P101, C501; HSIP-5104(269)); UPC 111813 (0029-002-955, P101, R201, C501; NHPP-002-7(050)); UPC 111730 (0250-002-954, P101, R201, C501; HSIP-002-7(049)); UPC 111733 (0020-002-953, P101, R201, C501; STP-5104(267)); UPC 109397 (9999-002-941, P101, R201, C501)

Dear Mr. Stevenson:

The Hartford, through its operating entities, has issued surety bonds to Branch Civil, Inc. since 1995. During this time we have favorably considered projects up to \$150,000,000 with an aggregate program of \$850,000,000. Our experience with Branch Civil, Inc. has been excellent, and we highly recommend them to you.

As surety for Branch Civil, Inc., The Hartford, is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this project, subject to acceptable review of the contract documents and bond forms, financing, availability of reinsurance, and Branch Civil, Inc. continuing to satisfy other underwriting considerations at the time the bonds are requested.



Business Insurance Employee Benefits Auto Home

Please understand that any arrangement for any bonds is a matter between Branch Civil, Inc. and The Hartford and we assume no liability to third parties or you if, for any reason, we do not issue requested bonds.

Branch Civil, Inc. bonds are issued through Hartford Fire Insurance Company which is listed on the U.S. Treasury Department List and has an A.M. Best Rating of "A+" with Financial Size Category: XV (\$2 Billion or greater). They are licensed to do business in the Commonwealth of Virginia.

This letter will expire one hundred and eighty (180) days from the above date.

Very Truly Yours,

idam

Attorney-In-Fact The Hartford



POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: JAMES A SCOTT & SON INC Agency Code: 14-731912

ĽX	Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
X	Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
X	Hartford Accident and Indemnity Company, a compration 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, (hereina fter collectively referred to as the "Companies") do hereby make, constitute and appoint up to the amount of Unlimited :

Christi Horn, E. Jones III of Franklin TN; Stephen B. Dolin, Joanna M. Carson, Barbara Dawn Martin, Melissa L. Viar, Madeleine Skorcz, Kelly Mundy of Lynchburg VA; Robert M. Coon of Greensboro NC; Windy Lovelady of Raleigh NC; Sherrie B. Denison, Bethany Murphy, Deanna W. Sparks, Theresa S. Stump of Roanoke, VA; Stacey W. Hall, Nancy L. Adams, James J. Roberts, III of RICHMOND, Virginia

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, Assistant Secretary

SS.

Hartford

STATE OF CONNECTICUT

COUNTY OF HARTFORD

On this 5th day of January, 2018, 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



Packlan T. Maynard

Kathleen T. Maynard Notary Public My Commission Expires July 31, 2021

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





Appendix 3.2.10

SCC and DPOR Information



ATTACHMENT 3.2.10

State Project No. 0250-002-956

SCC and DPOR Information

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that

their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
Business Name	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Branch Civil, Inc.	0295618-3	Corporation	Active/ Good Standing	PO Box 40004 Roanoke, VA 24022-0004	Class A Contractor Classifications H/H	2701029434	03/31/2019
	K000382-4 Liabili Partners	Limited Liability	Limited Liability Active Partnership	801 South Caroline St. Baltimore, MD 21231	Business Entity, ENG, LS, LA, ARC	0407001676	12/31/2019
				9300 Stony Point Pkwy, Suite 220 Richmond, VA 23235	Business Entity Branch Office, ENG	0411000133	02/29/2020
Whitman, Requardt & Associates, LLP				1700 Kraft Dr., Suite 1200, Blacksburg, VA 24060	Business Entity Branch Office, ENG	0411000608	02/29/2020
(WRA)		Partnership		1705 Enterprise Dr., Ste 100, Lynchburg, VA 24502	Business Entity Branch Office, ENG	0411000774	02/29/2020
				3701 Pender Drive, Suite 450 Fairfax, VA 22030	Business Entity Branch Office, ENG	0411000134	02/29/2020
				100 5 th St, Suite L2000 Bristol, TN 37620	Business Entity Branch Office, ENG	0411001228	02/29/2020

ATTACHMENT 3.2.10

State Project No. 0250-002-956

SCC and DPOR Information

	02270627	Corporation	Active	9385 Discovery Blvd, #200, Manassas, VA 20109	ENG, LS	0405000502	12/31/2019
				927 Maple Grove Dr., #105, Fredericksburg, VA 22407	ENG	0410000156	02/29/2020
Rinker Design				4301 Dominion Blvd, #100, Glen Allen, VA 23060	ENG	0410000220	02/29/2020
(RDA)				9385 Discovery Blvd, #200, Manassas, VA 20109	REA	4008001684	02/28/2019
				927 Maple Grove Dr, #105, Fredericksburg, VA 22407	REA	4008001739	04/30/2020
				4301 Dominion Blvd, #100, Glen Allen, VA 23060	REA	4008001801	04/30/2020
McDonough Bolyard Peck, Inc (MBP)	03518008	Corporation	Active	7401 Beaufont Spring Dr, Boulders VI, Suite 301, Richmond, VA 23225	ENG	0411000604	02/29/2020
C.T.I. Consultant, Inc.	02527604	Corporation	Active	11038 Lakeridge Pkwy, Ashland, VA 23005	ENG	0407002768	12/31/2019
Froehling & Robertson, Inc.	00272112	Corporation	Active	6185 Rockfish Gap Tpke, Crozet, VA 22932	ENG	0411001433	02/29/2020
H & B Surveying and Mapping, LLC	S2905604	Limited Liability Company	Active	612 Hull St, Suite 101B, Richmond, VA 23224	LS	0407005432	12/31/2019

ATTACHMENT 3.2.10

State Project No. 0250-002-956

SCC and DPOR Information

Land Planning and Design Associates, Inc. (LPDA)	01425545	Corporation	Active	1006 E. Jefferson St, #B, Charlottesville, VA 22902	LA	0407001789	12/31/2019
Seventh Point, Inc.	02675411	Corporation	Active	N/A	N/A	N/A	N/A

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)							
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date	
Whitman, Requardt & Associates, LLP (WRA)	Michael A. Russell	100 5 th Street, Suite L2000, Bristol, TN 37620	17282 Cleveland Rd Abingdon, VA 24211	Professional Engineer	0402024814	02/29/2020	
Whitman, Requardt & Associates, LLP (WRA)	Leonard Keelon Deshae Coleman	3701 Pender Drive, Suite 450 Fairfax, VA 22030	12764 Lockleven Lane Woodbridge, VA 22192	Professional Engineer	0402051494	05/31/2019	
Whitman, Requardt & Associates, LLP (WRA)	Taylor Sigmund Sprenkle	9030 Stony Point Parkway, Suite 220 Richmond, VA 23235	1233 Windsor Avenue, Richmond, VA 23227	Professional Wetland Delineator	3402000097	09/30/2018	



Branch Civil, Inc.

SCC and DPOR





Commonwealth F Hirginia



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: August 15, 2018

Joel H. Peck, Clerk of the Commission





Whitman, Requardt & Associates, LLP

SCC and DPOR



Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF FACT

I Certify the Following from the Records of the Commission:

On August 10, 2000, Whitman, Requardt & Associates, LLP, a Maryland partnership, filed in the Clerk's Office of the Commission a statement of registration as a foreign registered limited liability partnership.

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

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date: August 9, 2018

Joel H. Peck, Clerk of the Commission



COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

Office of the Clerk

June 27, 2018

LINDSAY MAHONEY CSC - WILMINGTON 251 LITTLE FALLS DR WILMINGTON, DE 19808

RECEIPT

RE: WHITMAN, REQUARDT & ASSOCIATES, LLP

- ID: K000382 4
- DCN: 18-06-27-0502

Dear Customer:

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

The annual continuation report was filed on June 27, 2018.

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

Sincerely,

Joel H. Peck Clerk of the Commission

GPACCEPT CIS0509



COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

VIRGINIA OR FOREIGN REGISTERED LIMITED LIABILITY PARTNERSHIP

UPA-134-GP (04/13) 2018 ANNUAL CONTINUATION REPORT

Filing Due Date:

July 01, 2018

Filing Fee: \$50

The undersigned, on behalf of the partnership set forth below, pursuant to Title 50, Chapter 2.2, Article: 9.1 of the Code of Virginia, states as follows:

1. The name of the partnership, which is registered as a registered limited liability partnership in Virginia, is:

WHITMAN, REQUARDT & ASSOCIATES, LLP

180627 0502

- 2. The partnership's SCC ID number is K000382 4.
- 3. The jurisdiction in which the partnership is registered as a registered limited liability partnership is MARYLAND.
- 4. The principal office address of the partnership according to the records of the Commission is:

801 S CAROLINE ST BALTIMORE, MD 21231

(Mark the appropriate box.)

- **D** The address listed above is the current address of the partnership's principal office.
- The address listed above is not the current address of the partnership's principal office. The current address, including the street and number, if one is associated with the location, is:

	•	
(number/street)	(a post office box is not accept	table – see instructions)
	, , , ,	
(city or town)	(state)	(zip)
Mail 11		
ned on penal of the partnership by the fo	ollowing partner, receiver or tr	rustee:
		6.22.18
(signature)	a kan k paga menant	(daté).
DOLLO B Machine		48 B/ 216 P
LIBVID P NOLUMICK		(alaphana number (antianal))
		(telephone number (optional))
PARTNER		
(title)		

Personal Information, such as a social security number, should NOT be included in a business entity document submitted to the Office of the Clerk for filing with the Commission. For more information, see Notice Regarding Personal Identifiable Information at www.scc.virginla.gov/clk/index.aspx.

SEE INSTRUCTIONS ON THE REVERSE







)













*Mr. Sprenkle is no longer with EEE - current DPOR records reflect this and screen capture of the updated records follow on the next page.

DPOR License Lookup License Number 3402000097

License Details

Name	SPRENKLE, TAYLOR SIGMUND
License Number	3402000097
License Description	Professional Wetland Delineator Certification
Rank	Professional Wetland Delineator
Address	RICHMOND, VA 23227
Initial Certification Date	2008-09-05
Expiration Date	2018-09-30

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

DPOR License Lookup build 1,198 (built 2017-07-13 02:34:41).



Rinker Design Associates, P.C.

SCC and DPOR




Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Rinker Design Associates, P.C. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is February 24, 1982;

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: June 8, 2018

Joel H. Peck, Clerk of the Commission















McDonough Bolyard Peck, Inc.





Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That McDonough Bolyard Peck, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is December 29, 1989;

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 12, 2018

Joel H. Peck, Clerk of the Commission





C.T.I. Consultants, Inc.





Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That C.T.I. Consultants, Inc. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is February 27, 1984;

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 13, 2017

Joel H. Peck, Clerk of the Commission





Froehling & Robertson, Inc.





Commonwealth F Hirginia



State Corporation Commission

CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That FROEHLING & ROBERTSON, INCORPORATED is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is October 11, 1924;

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 30, 2018

Joel H. Peck, Clerk of the Commission



40 1



H & B Surveying and Mapping, LLC







STATE CORPORATION COMMISSION

Richmond, April 27, 2009

This is to certify that the certificate of organization of

H & B Surveying and Mapping, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: April 27, 2009



State Corporation Commission Attest:

SCC ID: S2905604



(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)



Land Planning and Design Associates, Inc.







STATE CORPORATION COMMISSION

Richmond, March 24, 2008

This is to certify that the certificate of incorporation of

LAND PLANNING AND DESIGN ASSOCIATES, INC.

was 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: December 21, 1972



State Corporation Commission Attest:





Seventh Point, Inc.

SCC







STATE CORPORATION COMMISSION

Richmond, March 4, 1985

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

Chong Ni my ut of the forminission

ARTICLES OF AMENDMEN'T FOR THE ARTICLES OF INCORPORATION OF HAMBRIGHT, CALCAGNO & DOWNING, INC.

Ĩ.

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.

AGNO & DOWNING, INC. HAMBRIGHT. 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

Christie Βv

Commissioner

08-01-28-0084 AMENACPT CIS0436



Appendix 3.3.1

Key Personnel Resumes



ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title:
- M. Jeff Humphreys, Jr., DBIA Project Executive
- b. Project Assignment:
 - Design-Build Project Manager

c. Name of all Firms with which you are employed at the time of submitting SOQs. In addition, please denote the type of employment (Full time/Part time)

- Branch Civil, Inc. (Full Time)
- d. Employment History: With this Firm <u>>1</u> Years With Other Firms <u>37</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):

Branch Civil, Inc. – Project Executive, 2017 – Present

General Responsibilities: As Project Executive, Jeff works with the Project Team prior to beginning work in order to develop a plan of operation to ensure success for each project. Jeff's involvement with the project continues throughout construction until project completion. Jeff's responsibilities include oversight of the relationship with the owner, subcontractors, and suppliers. Jeff monitors each project to ensure construction is in accordance with the schedule and contract. When change orders or revisions to the contract occur, Jeff oversees the Project Manager and Superintendent on needed actions and ultimately ensures communication lines with all appropriate stakeholders. Additionally, Jeff ensures that construction schedules are developed, base-lined, monitored and updated. Jeff establishes an appropriate construction budget for each project, and ensures that all materials meet contract requirements and quality standards.

Allan Myers – Design-Build Project Manager / Senior Estimator, 2009 – 2017

General Responsibilities: As Design-Build Project Manager, Jeff's responsibilities consisted of overall management of the design and construction process, including project planning, scheduling work activities, engineering, submittals, pay estimates, profit and loss, and safety. Jeff was responsible for coordination with owners, subcontractors, suppliers and other stakeholders. Jeff monitored quality control to ensure the materials used and work performed met contract requirements as well as the "approved for construction" plans and specifications.

Joseph B. Fay Company – Senior Estimator/ General Superintendent, 2005 – 2009

General Responsibilities: Jeff was responsible for project procurement, estimating, project management, scheduling, negotiations, recruitment, owner and public relations, and the safe and successful project delivery for the Mid-Atlantic Division.

Gemini Drilling & Foundations – District Superintendent, 2005 – 2005

General Responsibilities: As District Superintendent, Jeff was responsible for the safe and successful development, operation and profit of all corporate projects. He successfully completed drilled shaft construction activities on various VDOT, NCDOT, and SCDOT projects.

Key Constructors, Inc. – Vice President, Structures Division Manager, 2003 – 2005

General Responsibilities: Jeff's role included overseeing procurement and construction of all bridge projects. He estimated and managed safe and successful bridge construction projects in Virginia and North Carolina.

D.W. Lyle Corporation - Vice President, Construction, 1998 - 2003

General Responsibilities: Jeff managed all field operations and personnel on various VDOT, NCDOT, and private projects ranging in scope and size. Jeff participated in estimating and managed the safety program for the company.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Nelson County High School | Lovingston, VA | 1980 | General Studies and Building Trades Penn State University | State College, PA | 1986 | 2 CEU's in Supervisor Training
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1994 | VDOT Erosion & Sediment Control Contractor Cert. (ESCCC) | Contract Certification #1-04983 2013 | Designated Design-Build Professional "DBIA" | #D-1534
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

DESIGN-BUILD I-64 WIDENING, EXIT 200 TO 205 | RICHMOND, VA

Project Role: Design-Build Project Manager Dates: Aug. 2017 – Present

With Current Firm?: Yes

Responsibility/Specific Job Duties: As **Design-Build Project Manager**, Jeff is responsible for overall design and construction of the project. This includes serving as the authorized representative for the contractor, design, construction quality, coordination, ROW acquisitions, utility relocation activities, permitting and environmental monitoring, QA/QC procedures and implementation and construction management. Similar to the Albemarle Intersection Bundling project, this project will improve the serviceability and safety of the I-64 corridor for the traveling public by widening the existing roadway while maintaining the existing travel lanes. Jeff leads the project team in partnering with VDOT and third-party stakeholders and additionally is responsible for subcontractor and supplier procurement, project tracking and reporting. Jeff is currently working with WRA on this project.

Client: VDOT | Cost: \$43.3 million

Relevancy: VDOT Design-Build; roadway ; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; public involvement/relations; QA/QC; construction engineering and inspection; project management

DESIGN-BUILD I-581/ELM AVENUE INTERCHANGE IMPROVEMENTS | ROANOKE, VA

Project Role: Design-Build Project Manager Dates: Aug. 2012 – Aug. 2015 With Current Firm?: No Responsibility/Specific Job Duties: As Design-Build Project Manager, Jeff oversaw the overall design and construction of the project and was responsible for the construction quality management, contract administration, overall estimating, constructability review of plans, and overall safety of the project. Jeff led the Project Partnering efforts early in the project design and throughout construction. Jeff also led the Public Relations efforts and kept all stakeholders informed while working with designers and field personal to ensure constructability and safe operations while widening and reconstructing two bridges. The project consisted of the construction of the Elm Ave. bridges over I-581 and Norfolk Southern, I-581 off-ramp improvements, and improvements to Elm Ave. Bridges required phased construction to allow motor and pedestrian traffic on Elm Ave. to continue during construction. Jeff worked with the designer to build retaining walls that required minimal support of excavation and limited disruption to the traveling public. Jeff also led the effort to reconfigure the two overhead sign structure improved site distance for motorists and reduced confusion with limited signage. Jeff worked closely with RDA on this project as they were the lead designer.

Client: VDOT | Cost: \$20.4 million

Relevancy: VDOT Design-Build; roadway; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; ITS; construction engineering and inspection; project management

DESIGN-BUILD MIDDLE GROUND BOULEVARD EXTENSION | NEWPORT NEWS, VA

Project Role: Assistant Design-Build Project Manager Dates: May 2011 – Dec. 2014 With Current Firm?: No Responsibility, and specific job duties: As Assistant Design-Build Project Manager, Jeff was responsible for the management of design and preconstruction activities. Jeff was heavily involved in developing the MOT plans which led to minimizing traffic shifts and reduced the traffic control measures required to construct the project. Jeff performed constructability reviews to prevent delays during construction. Jeff's involvement in the project startup phase expedited the start of construction to include operations on the critical path helping to reduce impacts to the project schedule. Jeff worked with the environmental team to coordinate soil and water sampling in order to determine the potential for hazardous materials early in the design process to mitigate potential risk. Jeff coordinated partnering relationships with USACE and VA DEQ to provide early stream and wetland delineation in order to support roadway design. The project consisted of construction of a 1.2 mile connector road from Warwick Blvd. to Jefferson Ave. which included a bridge over CSX. Jeff worked closely with RDA on this project as they were the lead designer

Client: VDOT | Cost: \$32.5 million

Relevancy: VDOT Design-Build; roadway; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; QA/QC; project management

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

h. For Key Personnel required to be on-site full-time for the duration of construction and for the QAM, provide a current list of assignments, role, and the anticipated duration of each assignment. Not applicable.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

- a. Name & Title:
- Leonard (Lenny) Coleman, PE, CCM, LEED AP | Associate
- b. Project Assignment:
 - Quality Assurance Manager

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) :

- Whitman, Requardt & Associates, LLP (Full Time)
- d. Employment History: With this Firm <u>3.5</u> Years With Other Firms <u>10.5</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):

Whitman, Requardt & Associates, LLP – Associate, October 2014 - Present

General Responsibilities | Manages Quality Assurance and Quality Control staff, leading quality management teams on Design-Build and Design-Bid-Build roadway, brige and utility projects. Serves as Quality Assurance Manager and Quality Control Manager on over \$100 million worth of VDOT Design-Build projects, and manages QA inspection staff on over \$70M worth of construction and maintenance for both ferally and state funded VDOT and Locally Administered projects. Develops and implements QA/QC plans and ensures compliance with plans and specifications.

Prince William County DOT – Construction Manager, March 2012 – October 2014

General Responsibilities | Served as County's Project Construction Manager for the Capital Improvement Division on two PPTA projects valued at over \$90 million and two Design-Bid build projects valued at over \$75M. In an Independent Assurance role, oversaw QA staff and the quality program, and ensured testing and inspection frequencies in accordance with QA/QC Plan.

McDonough Bolvard Peck, Inc. – Lead Engineer, January 2006 – March 2012

General Responsibilities | Assistant Quality Assurance Manager on \$150M VDOT Design-Build project, assisting in developing and implementing the quality management program, including overseeing QA staff and testing and inspection frequencies. Also served as Project Controls Engineer on multiple projects, including constructability review, cost estimating, CPM schedule review, claim analysis, material testing review and overseeing project record keeping systems.

Engineering Groupe – Land Development Engineering Intern, May 2005 – December 2005

General Responsibilities | Computed hydraulic grade lines, conducted construction estimates, calculated storm water management pond volumes, calculated elevations spot shots for retaining walls, created numerous storm sewer and waterline profiles, and performed field inspections of construction sites for bond reductions.

FHWA – Eastern Federal Lands Division – Engineering Student Trainee, November 2004 – May 2005 General Responsibilities | Bridge Inspection Program member performing load ratings and inspections of structures.

English Construction, Inc. – Engineering-In-Training, June 2004 – November 2004 General Responsibilities | Project Engineer performing grade work, carpentry work, and other construction tasks.

- e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
- George Mason University Fairfax County, Virginia | B.S. | 2009 | Civil Engineering
- f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2013 | Professional Engineer | VA Registration #0402051494; Certified Construction Manager (#3392); LEED AP; VDOT Certifications: Adv. WZ Traffic Control w/ LEO (4/2020), Soil/Aggr. Field Compaction (12/2018), Asphalt Field Level I & II (12/2018), Hyd. Cement Concrete Field (12/2022), Pavement Marking (12/2018), GRIT Inspector (4/2019), Slurry Seal (12/2018), Surface Treatment (12/2018); ACI Grade I Testing Tech (2/2023); DEQ E&SC Inspector (5/2019); Nuclear Gauge Safety Training; OSHA 10-Hour Safety
- g. Document the extent and depth of your experience and qualifications relevant to the Project.
 - 1. Note your role, responsibility, and specific job duties for each project, not those of the firm.
 - 2. Note whether experience is with current firm or with other firm.
 - 3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)


I-95 SAFETY IMPROVEMENTS AT ROUT 3 DB | FREDERICKSBURG, VA **Project Role: Quality Assurance Manager Dates: March 2017 – Present** With Current Firm? Yes Responsibility/Specific Job Duties: Quality Assurance Manager for the \$18.7 M VDOT Design-Build Project to enhance safety at I-95 Exit 130 (Route 3) by reducing crashes and reducing the risk of injuries and fatalities. Elements of the project include multi-phase MOT, utility relocations and betterments, traffic signals, overhead sign structures, retaining walls, sound barrier wall, and asphalt paving. Responsible for overseeing the quality assurance and quality control program for the project by certifying that all work is performed in conformance with the contract requirements, the approved QA/QC Plan, and the "approved for construction" plans and specifications. He is responsible for developing and maintaining the QA/QC Plan in accordance to VDOT's Minimum Requirements for QA/QC on Design-Build Projects manual, conducting all Preparatory and Hold-Point Meetings, oversight of QA/QC inspection staff(s), maintaining project as-built drawings, issuing non-conformance reports (NCR) for deficiencies, reviewing Contractor submittals for compliance with the QA/OC Plan, and certifying monthly payment applications. He is responsible for the compliance of the project Materials Book to VDOT standards, approval of inspector reports and test results, material certifications (DBT), developing the punchlist and coordination with VDOT and the Contractor. CQIP score: 92.81% Client: VDOT | Cost: \$18.7 million

Relevancy: Quality Assurance Manager on a VDOT Design-Build project, major project with extensive traffic control, mass excavation, Quality Assurance Manager duties, preparing and maintaining QA/QC Plan, Non-compliance reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Control and VDOT; Materials Book certification and oversight; superior DBPE scores; high CQIP score; working with Branch.

I-95 EXPRESS LANES SOUTHERN TERMINUS EXTENSION DB | STAFFORD, VA

Project Role: Quality Assurance Manager Dates: May 2016 – December 2017 With Current Firm? Yes Responsibility/Specific Job Duties: Quality Assurance Manager for the \$36.7 Million VDOT Design-Build Project to construct a 2.2 mile reversible lane from the current southern end of the I-95 Express Lanes. Project includes the creation of new northbound and southbound ramps between the express lanes and the general purpose lanes. The project includes mass excavation, deep drainage structures, intelligent traffic systems (ITS), overhead sign structures, guardrail, "green" retaining wall, sound barrier wall, lime stabilization, cement treated aggregate subbase, and asphalt paving. Responsible for overseeing the QA/QC program for the project by certifying that all work and materials, testing, and sampling were performed in conformance with the contract requirements, the approved QA/QC Plan, and the "approved for construction" plans and specifications. He was responsible for developing and maintaining the QA/QC Plan in accordance to VDOT's Minimum Requirements for QA/QC on Design-Build Projects manual, conducting all Preparatory and Hold-Point Meetings, oversight of QA/QC inspection staff(s), maintaining project as-built drawings and ITS submittals for operation and maintenance, issuing non-conformance reports (NCR) for deficiencies, reviewing Contractor submittals for compliance with the QA/QC Plan, certifying monthly payment applications, overseeing the punchlist completion, and certifying the project for recommendation of final acceptance to VDOT. He was responsible for the compliance of the project Materials Book to VDOT standards, approval of inspector reports and test results, material certifications (DBT), and coordination with VDOT, Transurban, and the Contractor. DBPE score: 4.0. Client: VDOT | Cost: \$36.7 million

Relevancy: Quality Assurance Manager on a VDOT MegaProjects Design-Build project, major project with extensive traffic control, mass excavation, Quality Assurance Manager duties, preparing and implementing QA/QC Plan, Non-compliance reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Control and VDOT; Materials Book certification and oversight; superior DBPE scores; working with Branch.

FAIRFAX COUNTY PARKWAY INTERCHANGE & WIDENING DB | FAIRFAX COUNTY, VA

Project Role: Assistant Quality Assurance Manager Dates: August 2009 - March 2012 With Current Firm? No Responsibility/Specific Job Duties: Assistant Quality Assurance Manager providing Quality Assurance oversight on an Eastern Federal Lands (EFLHD) Design-Build project for 2 miles of new roadway, six new bridges, widening of an existing bridge and three interchanges. The project included gravity retaining walls, overhead sign structures, roadway lighting, soundwalls, stormwater management facilities, pedestrian facilities, major excavation and filling of embankment, subgrade stabilization, in-plan utility relocations, rock blasting, and earthwork for the future Saratoga Park and Ride Lot. He assisted the QAM in overseeing the QA/QC program for the project by ensuring that all work and materials, testing, and sampling were performed in conformance with the contract requirements, the QA/QC Plan, and the "approved for construction" plans and specifications. He verified QC and QA staff frequencies of inspection and material testing were performed in accordance to the approved project QA/QC Manual. He conducted hold-point and preconstruction meetings, reviewed Contractor submittals, identified and created non-conformance reports (NCR) for deficiencies, and maintained Issue and NCR Logs. He maintained all project documentation records including a Materials Book to VDOT standards, issuing Design-Build Tracking (DBT) numbers, as-built project records, and material test result data. Responsible for reviewing and approving contractor C-25s, monitoring site activities on a daily basis, review and initial approval of all inspector daily diaries, creating and maintaining a project punchlist, reviewing contractor quantities for owner's review of pay applications, and coordination with FHWA, EFLHD, and VDOT. Client: VDOT | Cost: \$150 million

Relevancy: VDOT Design-Build project, major project with extensive traffic control, Quality Assurance Manager duties, implementing QA/QC Plan, Non-compliance reports and resolving quality issues, managing staff; coordination with Design-Builder, Quality Control and VDOT; Materials Book certification and oversight.

* 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 and for the QAM, provide a current list of assignments, role, and the anticipated duration of each assignment. **QAM on the I-95 Safety Improvements at Route 3 DB, Fredericksburg, VA – Completion Nov. 2018**

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title:

Mike Russell, PE, DBIA, Vice President

- b. Project Assignment:
- Design Manager (DM)

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) :

- Whitman, Requardt & Associates, LLP (Full Time)
- d. Employment History: With this Firm <u>3.5</u> Years With Other Firms <u>26</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):

Whitman, Requardt & Associates, LLP – Vice President, December 2014 – Present

General Responsibilities: Mr. Russell is currently a Vice-President with Whitman, Requardt & Associates, LLP where he is primarily responsible for managing transportation projects in Central and Western Virginia. He serves as Design Manager on Design-Build projects and Project Manager on interstate and other transportation projects in the region.

Virginia Department of Transportation – District Administrator, January 2011 – December 2014

General Responsibilities: Mr. Russell became the Bristol District Administrator in 2011 and provided executive leadership and direction to the Department's 623 employees in the 12 county Bristol District including 87 miles of I-81. He served as an extension of the Commissioner's Office with direct oversight of a Six-Year construction program valued at over \$500M and an annual maintenance and operation budget averaging \$170M per year. He maintained a high level of involvement in the oversight and design of key projects in the District providing design guidance and construction claim resolution. He worked proactively with staff to resolve design and construction issues to ensure the advancement of the District's program. The major highlights of the construction program were the \$2.8B Coalfields Expressway and Corridor Q programs.

Virginia Department of Transportation – PE Manager/PIM, December 2007 – January 2011

General Responsibilities: Mr. Russell became the Salem District Assistant District Administrator for Preliminary Engineering, Planning, and Investment Management in 2008 and led the District's Preliminary Engineering staff including Location & Design, Environmental, and Right-of-Way sections. He was responsible for all engineering functions to ensure compliance with all state and federal transportation and environmental standards and policies and led several projects on I-81 during this timeframe. In addition to the P.E. Manager role, he led the District's Planning & Investment Management staff including Land Use, Land Development, Planning, and Programming.

Virginia Department of Transportation - Location & Design Engineer, November 2004 - December 2007

General Responsibilities: Mr. Russell became the Salem District Location & Design Engineer in 2005 and subsequently led and managed design staff responsible for the preparation of highway, right-of-way and construction plans, including survey, roadway and hydraulic design. He coordinated with right-of-way, environmental, bridge, traffic, and materials sections to ensure a cohesive and collaborative design for all projects. He provided engineering oversight to ensure projects were developed in accordance with applicable state and federal standards. As District L&D Engineer he was responsible for the design of multiple projects, from small projects costing less than \$1 million to very complex projects costing \$100 million including multiple projects on the I-81 corridor. His collaborative and hands-on approach to project management and design guided the design teams to significantly improve the on-time and on-budget performance of the District's projects performance measures while maintaining a problem-solving mindset of the team.

Virginia Department of Transportation - Resident Engineer, November 2003 - November 2004

General Responsibilities: Mr. Russell became the Wytheville Resident Engineer in 2003. He was responsible for all construction and maintenance activities in Wythe and Grayson Counties. In addition to having geographic responsibility for all VDOT activities in Wythe and Grayson counties, he served as the Department's Responsible Charge Engineer for construction activities and ensured compliance with plans, specifications, environmental requirements and contract documents. He reviewed and accepted independent work order estimates and analysis while focusing on successful field resolution of disputes by providing technical analyses of issues and negotiating and implementing partnering with contractors to settle conflicts.

Virginia Department of Transportation – Transportation Engineer, Sr., July 2000 – November 2003 General Responsibilities: Mr. Russell joined VDOT in 2000 as a Transportation Engineer, SR where he served as project manager and lead designer for a number of major projects in the Salem District.



 e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University, Virginia | B.S. | 1989 | Civil Engineering

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

1994 | Professional Engineer | #0402024814

2016 | Design-Build Professional (DBIA) | 175396 Document the extent and depth of your experience and qualifications relevant to the Project.

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

(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)

I-81 HALLS BOTTOM ROAD BRIDGE REPLACEMENT DESIGN BUILD, WASHINGTON COUNTY, VA Project Role: Design Manager Dates: Mar. 2016 – Sept. 2018 With Current Firm? Yes Responsibility/Specific Job Duties: As Design Manager, Mr. Russell is responsible for all design elements of the replacement of two bridges on I-81 over Halls Bottom Road in Washington County, Virginia. He is responsible for roadway design, coordinating all individual design elements, ensuring that the design conforms with contract requirements and delivering the project in accordance with the project's QA/QC plan. With design complete, the project is currently under construction within an existing right-of-way requiring a complex MOT plan utilizing the existing median to temporarily carry north and southbound traffic while the existing bridges are replaced. The efficient design replaces the twin 4-span 220' long bridges with 140' single span structures utilizing a "true MSE" abutment design. Mr.

Russell managed an aggressive design schedule allowing construction to begin only 3.5 months after NTP.

Client: Orders Construction Company, Inc. | Cost: \$11.3 million

Relevance to Albemarle Intersection Bundle Design-Build: VDOT Design-Build; roadway; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; public involvement/relations; Design QA/QC; construction engineering and inspection; project management.

ROUTE 29 SOLUTIONS DESIGN BUILD – BERKMAR AVENUE EXTENSION, ALBEMARLE COUNTY, VA

Project Role: Project Manager/Element Design Lead Dates: Dec. 2014 – Oct. 2017 With Current Firm? Yes Responsibility/Specific Job Duties: As **Project Manager and Element Design Lead, Mr. Russell** was responsible for coordinating all design elements of the Berkmar Avenue Extension portion of the Route 29 Solutions Design-Build Project. His role on the project was Design Element Lead responsible for the design of the 2.5-mile Urban Connector roadway including a new roundabout at the Hilton Heights intersection with Berkmar and a 716' long bridge over the South Fork of the Rivanna River. The Design-Build project was delivered on an accelerated schedule with right-of-way plans completed in just six months. Mr. Russell accelerated design efforts needed to advanced right-of-way approvals and VSMP permits to allow clearing activities to occur before the time of year restrictions of the Northern Long-Eared Bat, which was listed as endangered after the award of the contract. All design activities were delivered in accordance with the project's QA/QC plan and Construction Engineering support included review of all shop drawings. The Route 29 Solutions project was the 2017 Overall Winner of the VTCA Transportation Engineering Awards.

Client: Rummel Klepper & Kahl, LLP | Cost: \$34.6 million

Relevance to Albemarle Intersection Bundle Design-Build: Eastern terminus of the Rio Mills Element; VDOT Design-Build; roadway; roundabout; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; public involvement/relations; Design QA/QC; project management.

I-64 WIDENING – MP 200 TO 205 HENRICO AND NEW KENT COUNTIES, VA – VDOT – Design Manager Project Role: Design Manager Dates: August 2017 – August 2019 With Current Firm? Yes **Responsibility/Specific Job Duties:** As **Design Manager, Mr. Russell** was responsible for the roadway design and coordination of all design disciplines for the project, which includes 4.5 miles of improvements to the existing I-64, Widening and rehabilitation of the existing two-lane bridges over the Chickahominy River with three-lane bridges in each direction. The I-64 bridges are approximately 263 feet long utilizing concrete beams and are supported by concrete piles. I-64 is being widened to provide additional capacity from I-295 to the Bottoms Bridge exit. A very detailed MOT plan and TMP were required as part of the project and were delivered as an advanced work package to facilitate the initial construction operations and advance the schedule for the project. Mr. Russell is continuing to provide oversight and coordination for all design elements and management of subconsultants while the project is under construction. **Client: Corman|Branch Joint Venture | Cost: \$43.4 million**

Relevance to the Albemarle Intersection Bundle Design-Build: VDOT Design-Build project, roadway; survey; environmental; geotechnical; hydraulics; traffic control devices; TMP; ROW; utilities; public involvement/relations; Design QA/QC; project management.

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

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title:
Greg Suttle, Construction Manager
b. Project Assignment:
Construction Manager
c. Name of all Firms with which you are employed at the time of submitting SOQ. In addition, please denote
Branch Civil Inc. (Full Time)
 d. Employment History: With this Firm <u>26</u> Years With Other Firms <u>2</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):
Branch Civil, Inc. – Construction Manager, June 1998 to Present
General Responsibilities: 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 been in a similar role on three Design-Build and multiple Design-Bid-Build widening projects, including interstate, primary and secondary road widening/relocations, as well as intersection construction for various state and local departments of transportation, federal agencies, and private corporations. Greg's role includes partnering with VDOT to address Public Outreach and stakeholder concerns. Additionally, Greg is responsible for resolving challenging maintenance of traffic issues, 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.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
West Virginia Institute of Technology Montgomery, West Virginia BS 1987 Mining Engineering
1. Active Registration: Year First Registered/ Discipline/VA Registration #: 2003 Virginia DEO Bespansible Land Disturber DDI 03021
2005 VIrginia DEQ Responsible Land Disturber KDL05021 1995 VDOT Frosion Sediment Control Contractor Certification (FSCCC) 1-01135
1999 Virginia Blaster – Unrestricted E269250
2013 ACI Concrete Certification 01273969
 g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. Note your role, responsibility, and specific job duties for each project, not those of the firm. 2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each project; projects older than fifteen (15) years will not be
(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.)
ROUTE 3 WIDENDING, DESIGN-BUILD CULPEPER, VA
Project Role: Construction ManagerDates: Oct. 2015 – Sept. 2017With Current Firm?: YesResponsibility/Specific Job Duties: 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. Two critical responsibilities have been the acquisition of right of way and 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 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 Albemarle Intersection Bundling Project will be similar to the Route 3 Widening Project including managing MOT and multiple traffic shifts, working with our public relations team to keep the community informed, ensuring environmental compliance and stewardship, providing timely resolution of geotech concerns, managing overall construction and complying with QA/QC requirements.

Client: VDOT | Cost: \$25 million

Relevancy | VDOT Design-Build, FHWA guidelines and requirements, primary roadway widening, ROW acquisition, utility relocations, environmental permitting and monitoring, geotechnical challenges/mitigation including unsuitable materials, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination.

ROUTE 3 AT I-95 SAFETY IMPROVEMENTS, DESIGN-BUILD | STAFFORD COUNTY, VA

Project Role: Construction Manager Dates: Aug. 2017 - Present With Current Firm?: Yes Responsibility/Specific Job Duties: Branch was the prime contractor for this VDOT Design-Build project and Greg served as the Construction Manager. This project improved ramps at the Route 3 interchange with I-95 as well as widened the existing lanes on Route 3 effectively constructing the safety improvements. Greg and the Branch Project Team successfully mitigated similar MOT challenges, public involvement, and stakeholder coordination as can be expected on the Albemarle Intersection Bundling Project. Greg was involved with developing the construction sequencing, MOT plans and laydown areas within the project corridor. Greg's involvement with the placement of access points for construction along the ramps and Route 3 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, borrow material, undercut excavation, storm drainage and erosion control installation and maintenance as well as the Quality Control program. Greg coordinated all roadway activities as well as subcontractors. This project is scheduled to be complete in October of 2018, finishing 3 months ahead of the original complete date.

Client: VDOT | Cost: \$18 million

Relevancy | VDOT Design-Build, FHWA guidelines and requirements, roadway alignment/widening, ROW acquisition, utility relocations, environmental monitoring, geotechnical challenges/mitigation, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination.

ROUTE 15, JAMES MADISON HIGHWAY DESIGN-BUILD | HAYMARKET, VA

Project Role: Construction Manager

Dates: Feb. 2007 – Dec. 2009

With Current Firm?: Yes

Responsibility/Specific Job Duties: As Construction Manager/Project Superintendent for this project, Greg directed the project team, including three area superintendents along with foremen, project engineers and staff. Greg's duties included constructability reviews during the design phases for the five distinct roadway segments adjacent to the I- 66/US-15 Interchange, including five bridge structures, which comprised this project. He was also instrumental in developing and enforcing the Quality Control Program prior to and during construction, much as he will do for the Albemarle Intersection Bundling Project. Coordinating with DEQ and USACE, Greg created and executed Construction Sequencing Plans that allowed for early starts to construction activities in each segment of the project. These plans included MOT coordination with VDOT and Prince William County. This 22 lane-mile project had utility relocations throughout. Greg scheduled Branch crews and clearing to expedite initial critical relocation activities, such as pole installations and underground conduits/trenching. Another similar feature of this project in certain areas to the Albemarle Intersection Bundling Project, involves geotechnical challenges and associated remedies. There were intermittent segments of highly plastic, light and/or saturated soils and rock in all five segments and each required a unique approach for mitigation. These approaches included removal and replacement, mechanical manipulation and chemical stabilization. Greg's duties also required him to meet with local businesses, communities and developers through public outreach and simple face-to-face communications to address concerns and create a team atmosphere with shareholders. Client: PRINCE WILLIAM COUNTY | Cost: \$55 million

Relevancy | Design-Build, roadway alignment/widening, ROW acquisition, utility relocations, environmental permitting and monitoring, stream mitigation, geotechnical challenges, Traffic Management Plan development and execution, public involvement/communications, QA/QC coordination

* 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 and for the QAM, provide a current list of assignments, role, and the anticipated duration of each assignment.

Greg is currently the Construction Manager on the Route 3 at I-95 Safety Improvements Project anticipated to be complete in November of 2018. He will be available and 100% dedicated to the construction of the Albemarle Intersection Bundling Project prior to commencement of construction.



Appendix 3.4.1

Work History Forms



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 Va Original Contract Value	lue (in thousands) Final or Estimated Contract Value	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Name: I-81 Exit 150 Improvement Project Location: Cloverdale, VA	Name: AECOM	Name of Client/ Owner: VDOT Phone: (540) 387-5360 Project Manager: Robert Williams Phone: (540) 387-5345 Email: Robbie.Williams@vdot.virginia.gov	06/2018	06/2018	\$18,000	\$18,000	\$18,000

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the work performed only by the Offeror's firm.

INTERSECTION IMPROVEMENTS AND

ROUNDABOUT PROJECT

Relevancy to the Albemarle

Intersection Bundling

Maintenance of Existing Lanes

Interstate Ramp Improvements

Safety, Congestion Concerns

Roundabout Construction

Stakeholder Coordination

Multiple Areas Of Work

Public Involvement/Relations

Traffic Control Devices

High Traffic Volumes

Complex MOT

Road Widening

Overhead Signs

Concurrently

 \checkmark

The I-81 Exit 150 improvement project has been designed to improve the safety and traffic flow at the existing intersection and associated northbound movements from and to Interstate 81 that have a direct impact on routes 11, 220 and 220A. Improvements included widening of existing and build new ramps, construct new roundabout, and widening Route 11.

Project Scope

Project Narrative

- I-81 NB Entrance Ramp | Relocated the northbound I-81 entrance ramp (from northbound Route 220 onto northbound I-81) to a new location adjacent to the Exit 150B off-ramp.
- New I-81 NB Exit Ramp | Created a dedicated I-81 Exit 150B exit ramp with NB Route 220 to improve traffic flow at the Route 11/220/220A intersection.
- **Right Turn Onto Route 11** | Modified Exit 150A to allow right turns onto Route 11 southbound only and eliminating merge/weave condition.
- Roundabout | Constructed a new roundabout at the Exit 150B/Route 11 intersection to improve traffic flow, enhance safety, and increase capacity.
- New Roadway | A new road was constructed, Gateway Crossing, to connect the new Route 11 roundabout to Route 220A.
- Business Access | Business access along Route 11 was modified by installing a raised median in order to reduce the number of entrances and limited access to be right-in/right-out only.
- Public Relations | Branch partnered with VDOT and the surrounding community to keep the public informed of planned improvements and current progress.

Branch's Role

Branch is the Prime Contractor for the project which includes overseeing all aspects of construction. Branch self-performed all activities associated with erosion control, mass grading, fine grading, storm drain, water/sewer, base stone, and traffic control installation and Branch maintenance. worked with VDOT to stage the construction and opening of the roundabout on Route 11 in order to minimize the impacts to existing traffic.



Verifiable Evidence of Good Performance

- presented by the variations in rock along the I-81 and the associated ramps as well as Route 11.
- challenge and complete the project on time.



Public and Stakeholder Outreach | Many businesses were impacted by the improvements. Branch took an active role in partnering with VDOT and the surrounding community to keep everyone informed of upcoming construction activities.

Geotechnical Challenges | Branch proactively worked with VDOT to mitigate impacts from the differing site conditions

Meeting Milestone Dates | The existing survey and proposed design for the improvements along Route 11 presented a challenge to the team. Branch worked with VDOT to re-establish the baseline survey along Route 11, redesign sections of roadway and storm drain, and construct the improvements without impacting traffic. The team was able to overcome this

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime	c. Contact information of the Client or	d. Contract	e. Contract	f. Contract Va	alue (in thousands)	g. Dollar Value of Work
	design consulting firm	Owner and their Project Manager who	Completion Date	Completion Date	Original Contract Value	Final or Estimated Contract	Performed by the Firm
	responsible for the overall	can verify Firm's responsibilities.	(Original)	(Actual or		Value	identified as the Lead
	project design.			Estimated)			Contractor for this
							procurement.(in thousands)
Name: Route 3 Widening Design-Build Location: Culpeper, VA	Name: Johnson, Mirmiran & Thompson, Inc.	Name of Client/ Owner: VDOT Phone: (434) 906-7979 Project Manager: Greg Cooley, PE Phone: (434) 906-7979 Email: gregory.cooley@vdot.virginia.gov	05/2017	09/2017 (Completion Date Extended by Owner)	\$23,593	\$25,028 *Increased due to owner directed scope changes	\$25,028

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.

VDOT DESIGN-BUILD PROJECT IN CULPEPER DISTRICT

BRANCH

Relevancy to the Albemarle Intersection Bundling

- VDOT Design-Build Project
- Located in Culpeper District
- High Traffic Volumes
- Project Divided Into Areas In
- Order to Better Manage
- Complex MOT
- Road Widening
- Maintenance of Existing Lanes
- Phased Construction Plan
- Safety, Congestion Concerns
- **Environmental Permitting**
- Traffic Control Devices
- **Utility Relocations**
- Stakeholder Coordination
- Public Involvement/Relations
- Similar Size of Project

The Route 3 Widening project is located in Culpeper, VA and is a VDOT Design-Build project that reconstructs and widens approximately 5 miles of existing Route 3 to a four-lane divided highway between Culpeper and Lignum, VA. This construction marked the final section of a large improvement plan aimed to increase the capacity and safety along the Route 3 corridor between Culpeper and Fredericksburg by increasing the size of the existing two-lane highway to four lanes. This project was constructed in phases and consisted of moving 140,000cy of material on site, hauling in 90,000cy of borrow material, removing 180,000cy of unsuitable material, installing over 13,000lf of storm drain and placing 80,000tn of asphalt. Utility coordination includes relocation of Verizon communication lines throughout the project corridor as well as four individual fiber communication lines which are grouped into a single ductbank within the right-of-way and a Columbia gas line.

Project Scope

Project Narrative

- . **Roadway Widening** | The construction of the project was divided into three areas in order to manage the design and construction as well as right-of-way acquisition and utility relocation. Careful coordination of right-of-way acquisition and utility relocation was required to allow for road widening to begin and maintain progression.
- Geotechnical Concerns | A substantial portion of the subgrade was within stratums of existing soil which has CBR values below minimum requirements. In order to achieve a suitable subgrade, multiple solutions to improve the existing soil conditions were utilized: undercut and backfill, use of geosynthetics and borrow material, and chemical stabilization. The CH/MH type soils within the excavation were then restricted in their use within the roadway prism, which forced the project team to utilize offsite borrow when necessary. A substantial amount of borrow material was obtained from overburden from the nearby quarry.
- Utility Coordination | Overhead and underground utilities need to be relocated to accommodate the improvements. Right-of-way coordination was prioritized based on the utility conflicts with construction. A 4" gas line owned by Columbia Gas was relocated along with several large diameter casings that were extended for gas transmission lines owned by Williams. Power and communication lines were relocated throughout.
- Maintenance of Traffic and Traffic Management Plan (TMP) | Two lanes of traffic need to be maintained during construction therefore, multiple traffic shifts are required to construct the improvements. A phased construction plan has been developed to allow appropriate space to make the improvements, maintain traffic, and keep the traveling public safe.



Branch's Role

Branch was the prime contractor for this design-build project overseeing all aspects of design and construction. Branch selfperforming all activities associated with erosion control, mass grading, fine grading, storm drain, base stone and traffic control. With 58 parcels impacted by construction, Branch took an active role in working with the adjacent property owners to let them know when construction operations would affect them. Branch partnered with VDOT to keep the travelling public informed of upcoming traffic shifts and construction activities.

Verifiable Evidence of Good Performance

- desired wetland condition at completion of the project.
- Widening project will perform in the same role for this Albemarle Intersection Bundling Project.
- AT&T, and Level3 will be valuable while working on the Albemarle Intersection Bundling Project.

Successful Environmental Stewardship During the Project | Within the project limits, 12 distinct wetland areas (4.99 acres in total) were identified as being impacted due to construction. The project team worked within the tight constraints to ensure that the temporary impacted areas were not damaged during construction and were returned or converted to the

Working with Culpeper District | Branch worked with VDOT to address the local citizens and property owner issues. Branch partnered with VDOT to overcome low CBR values. Several techniques were used to overcome this geotechnical challenge: chemical stabilization, geosynthetics and undercut. Greg Suttle was the Construction Manager on this Route 3

Experience Working with Utility Companies | Branch developed relationships will all of the utility companies having facilities on the project including Columbia Gas and Williams as well as a better understanding of their concerns during design and construction. The experience of the project team in coordinating with companies like Verizon, Fiberlight,

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 Val Original Contract Value	ue (in thousands) Final or Estimated Contract Value	g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
Name: Southgate Drive Interchange Location: Blacksburg, VA	Name: A. Morton Thomas & Associates, Inc.	Name of Client/ Owner: VDOT Phone: (540) 387-5488 Project Manager: Duane Mann, PE Phone: (540) 381-7195 Email: m.mann@vdot.virginia.gov	12/2018	08/2018	\$38,700	\$38,700	\$38,700

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

Project Narrative

NEW GRADE SEPARATED INTERSECTION AND ROUNDABOUTS – PROJECT

Relevancy to the Albemarle Intersection Bundling

- High Traffic Volumes
- Complex MOT
- Road Widening
- Maintenance of Existing Lanes
- Safety, Congestion Concerns
- Grade Separated Interchange
- Roundabout Construction
- Traffic Control Devices
- Stakeholder Coordination
- Public Involvement/Relations
- Overhead Signs \checkmark
- Value Engineering

The existing at-grade intersection of US 460 and Southgate Drive functions as the gateway to Virginia Tech. The intersection experienced significant queues during the AM and PM peak hours as well as during major events on campus. This hampered through movements along US 460 and created a safety concern with rear end collisions. This project provided a grade separated intersection in a new location southeast of the existing intersection. Project improvements included 3.6 miles of roadway improvements, construction of two roundabouts, 175,000cy of excavation, and 163,000cy of borrow embankment. Structure construction included two bridges, three pedestrian underpasses, and two MSE retaining walls.

Project Scope

- Structures | The new intersection was grade separated requiring a diverging diamond bridge design to carry Branch's Role traffic along Southgate Drive over US 460. Over 1,100lf of retaining walls were constructed to keep the improvements within VDOT right-of-way. There were three 3-sided box culvert pedestrian underpasses constructed as part of this project to improve pedestrian safety.
- Roadway Improvements | The new intersection with US 460 and Southgate Drive was constructed • approximately 1,500lf east of the existing intersection along US 460. 3.6 miles of new roadway was built, two at-grade intersections were improved with the introduction of roundabouts, and the existing trail was improved or realigned including two grade-separated trail crossings. Overhead signs were installed to guide drivers through the new intersection.
- Geotechnical Challenges | Extensive adjustments to proposed structure foundation designs were necessary due to the inconsistent competent rock elevations relative to the original plans. As a result, a mixture of driven pile, pre-bored pile, and spread footings were utilized to provide proper bearing.
- Public Relations | Branch partnered with VDOT and Virginia Tech to keep the public informed of planned improvements and current progress.
- Maintenance of Traffic and Traffic Management Plan (TMP) | The existing intersection at US 460 and Southgate Drive remained active during construction. A phased traffic control plan was followed to maintain traffic on US 460, which carries 40,000VPD, and Southgate Drive. Time restrictions were in place to limit disruptions to the travelling public. Intermediate completion dates and durations were in place to construct the project in areas where new construction overlaps with existing.



Branch is the Prime Contractor for the project which includes overseeing all aspects of construction. Branch self-performed all activities associated with erosion control, mass grading, fine grading, storm drain, water/sewer, base stone, and traffic control installation and maintenance. Branch managed all subcontractors on the project including the construction of the diverging diamond bridge, box culverts, overhead signs and asphalt paving. Branch partnered with VDOT and Virginia Tech to participate in Public Outreach and education opportunities about the construction and the diverging diamond intersection.

Verifiable Evidence of Good Performance

- constructed.
- viable path forward to maintain scheduled progress.
- complete this month, effectively finishing the project 4 months ahead of schedule.
- wall with a cut slope resulting in \$1.4M in project savings.



Public and Stakeholder Outreach | Branch took an active role in partnering with VDOT and Virginia Tech. Branch hosted public outreach meetings to educate the industry, general public, and Virginia Tech affiliates on the improvements being

Geotechnical Challenges | Branch proactively worked with VDOT to mitigate impacts from the differing site conditions presented by the variations in rock discovered at all major structure locations and is assisting with establishing the most

Meeting Milestone Dates | Branch successfully constructed two roundabouts at Research Center Drive and Duck Pond Drive. Branch worked with VDOT to reduce the number of phases to construct the Duck Pond Drive roundabout effectively reducing the overall schedule and improving the quality and constructability. The project is currently scheduled to be

Value Engineering | Branch and WRA have teamed up to provide a Value Engineering Proposal that replaced a soil nail

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

WRA

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Val	ue
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	(
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	(
				Date (Actual	(Original)	(
				or Estimated)]
Name: SR 0322/SR0222	Name: N/A	Name of Client: PennDOT				
Interchange Improvement		Phone: (717) 705-6176				
Diverging Diamond		Project Manager: Dave Fratangeli	9/2019	12/2020	\$8,000	
Location: Lancaster		Phone: (717) 705-6176	(Estimated)	(Estimated)	(Estimated)	
County, PA		Email: dfratangel@pa.gov	· · · · ·			
-						

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Relevancy to the Albemarle Intersection Bundling

- ✓ Diverging Diamond Interchange
- ✓ Roadway
- ✓ Utility Relocations
- Bike/Ped Accommodations
- Traffic Analyses
- Traffic Signal Design
- ✓ Hydraulics & Stormwater Mgt.
- Complex MOT
- Public Involvement and Communications
- ✓ OA/OC
- ✓ Construction Engineering & Inspection

WRA's Role: WRA is currently finalizing the design of a Diverging Diamond Interchange (DDI) for the Pennsylvania Department of Transportation. The project is being managed out of our York, PA office with support from WRA's offices in Baltimore (headquarters) and Pittsburgh. The interchange improvements are located at SR 0322 and SR 0222 in Ephrata and West Earl Townships in Lancaster County, PA.

Project Description/Narrative: State Routes 0322 and 0222 is an existing standard diamond configuration interchange with signals located at the ramp terminals with SR 0322 – virtually identical to the conditions that exist today at the I-64/Rte 250 interchange. The project's primary goal is increasing safety with secondary goals of improving traffic operations and accommodating non-motorized modes of transportation. WRA performed an initial alternative analysis for eight alternative interchange configurations, three of which were advanced for further engineering study. Reconfiguring the interchange to a DDI was determined to be best approach to meet the project's goals achieving a benefit to cost ratio of 13:1 and subsequently advanced to final design.

Roadway: Similar to what is planned at the interchange of I-64 and Route 250, the DDI configuration will be situated beneath the existing bridges without requiring improvements to the structure,

resulting in significant cost savings. Traffic in both directions of SR 0322 will cross to the left side of the road at signalized crossover intersections prior to SR 0222, allowing for direct left turns to/from the SR 0222 ramps. After passing SR 0222, traffic in both directions of SR 0322 will cross back to the right side of the road at the far side signalized crossover intersections. The DDI configuration reduces the number of conflict points substantially (from 26 to 14) compared to the standard diamond interchange, particularly for the left turning movements which frequently result in higher severity crashes. Also similar to what exists at the I-64/Rte. 250 interchange, adjacent businesses and connecting roadways are present within and in close proximity to the footprint of the SR 0322/0222 DDI, which required traffic signal modifications to adjacent signals that are coordinated with the primary signals of the DDI.

Traffic Analysis: In addition to collecting traditional traffic volume data at the interchange, WRA collected origin-destination data using Bluetooth technologies to better understand and model traffic operations at the interchange. This allowed WRA's traffic engineers to identify O-D pairs with the greatest traffic demand. WRA utilized VISSIM microsimulation software to perform detailed traffic analyses of the no-build and three build scenarios advanced for further study. From this analyses, the DDI resulted in a 43% reduction in travel time for the heaviest movements and a 25% overall reduction in travel time when compared to the no-build scenario. WRA performed safety analyses following *Highway Safety Manual (HSM)* methodologies to evaluate the predicted safety performance of alternatives. Based on the analysis, the DDI is predicted to reduce fatal/injury crashes by 31% and total crashes by 25% at the interchange. WRA converted these results into operational, environmental, and safety

benefits in terms of dollars to support implementing the project. WRA is the lead designer for the traffic signals, signing and pavement markings, highway lighting, and ITS components for the project. The traffic signal design includes emergency pre-emption, radar detection, and flashing yellow arrow designs at adjacent intersections.

Multi-Modal Accommodations: A unique feature of the project is that not only are pedestrians accommodated via a sidewalk adjacent to the roadway, but bicycles and horse and buggy modes are also being accommodated. Wide shoulders will be maintained through the interchange to enable bicycle and horse and buggy traffic to safely



maneuver the DDI even with a WB-67 design vehicle navigating the tight reverse curves of the DDI.

Drainage and Stormwater Management: Similar to the I-64/Route 250 interchange, there is an existing box culvert that carries a stream completely under the existing interchange. Maintaining the functionality of this structure was critical to the project's success. The location of the box culvert combined with a requirement for a 50% reduction in stormwater quantity and treatment for stormwater quality made stormwater management one of the most complex components of the project. Very low infiltration rates and karst topography further reduced the available options and increased the complexity of the design. The final design ultimately incorporates a combination of wet ponds and bioretention swales.

(in thousands)	g. Design Fee for the Work
Construction	Performed by the Firm identified as
Contract Value	the Lead Designer for this
Actual or	procurement.(in thousands)
Estimated)	
\$8,000 (Estimated)	\$2,043

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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Valu	ıe
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	(
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	(
				Date (Actual	(Original)	(
				or Estimated)		I
Name: Route 29 Solutions	Name:	Name of Client.: VDOT				
Design-Build – Berkmar	LANE/Corman JV	Phone: (434) 529-6310				
Drive Extension		Project Manager: Mr. Dave	02/2017	07/2017 Actual	\$116,746	
Location: Albamarla		Covington		(Design Completed:	(Berkmar: \$34,625)	
County VA		Phone: (434) 529-6310		12/2015)		
County, VA		Email:Dave.Covington@VDOT.Virginia.				

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Relevancy to the Albemarle Intersection Bundling

- ✓ VDOT Design-Build
- Roadway
- Utility Relocations
- **Bike/Ped Accommodations**
- Roundabout Design
- Hydraulics
- MOT
- Public Involvement and Communications
- ✓ QA/QC
- ✓ Construction Engineering ✓ Intimate Familiarity for Rio Mills project

Verifiable Evidence of Good Performance

- Accelerated Design and **VPDES** Permitting to allow grading south of the river to begin in conjunction with Route 29 Widening.
- Quality design allowed roadway and bridge construction to be completed well ahead of schedule.
- VTCA 2017 Overall Winner of Transportation Engineering Awards

WRA's Role: WRA is currently part of the Route 29 Solutions LANE/Corman JV Design-Build Team Hydraulic Analysis and Design: A major contracted by VDOT to design and construct three project elements under one contract in Albemarle County to alleviate congestion on the heavily traveled Route 29 corridor. WRA is designing the Berkmar Drive Extension Project as a subconsultant to the lead design firm. WRA completed approximately 90% of the design services from the Virginia offices.

Roadway: WRA designed the Berkmar Drive Extension, a 2.5-mile Urban Connector roadway on new location. The typical section consisted of two travel lanes with bike lanes, a 5' sidewalk on the west side, a 10' shared use path on the east side and includes extensive landscaping along the corridor. The project provides right-of-way for an ultimate four-lane divided roadway with a 16' raised median. The alignment of Berkmar meanders through a greenfield area, providing a context sensitive curvilinear alignment connecting to the roundabout at Town Center Drive. The final alignment avoided impacts to several cultural resource sites and minimized impacts to wetlands and stream crossings. The earthwork for the project was designed to be balanced, thereby reducing project costs, though embankments and cut slopes exceeded 40 feet in height in some locations.

Roundabout: The project begins at the existing intersection at Berkmar Drive and Hilton Heights and replaces the existing intersection with a single-lane roundabout to allow the free flow of traffic onto the new north/south route, while providing a context sensitive and traffic calming element at the intersection.

Bridge: Structural design services included a three-span continuous structural steel bridge 716 feet long and 53-foot wide, jointless structure using Virginia-Style abutments on a 10-degree skew. Unique design elements include long spans up to 270 ft. in length and 6'-6" diameter drilled shafts supporting the two multi-column piers. Additionally, one abutment utilized an MSE wall to support the Virginia-Style abutment integrated with reinforcing straps in the abutment to resist all overturning forces, with a total abutment height over 35 feet. Designs were closely coordinated with the geotechnical design to ensure overall stability and long-term performance.

element of the project design was the storm drainage and storm water management for a "greenfield" project. WRA designed eight enhanced storm water management basins along the corridor for both water quality and quantity requirements, and utilized the purchase of water quality credits to minimize the environmental impacts of the project. The project is one of the first greenfield project designed to meet the new DEQ Part II-D SWM Regulations requiring an innovative approach to SWM. There are eight stream crossings of the project requiring a detailed H&H analysis to ensure the proposed roadway embankment would not increase the 100-year storm elevation on private property at the crossing.



WRA, as part the Route 29 Solutions Team, designed water main and collection sewer relocations including in-kind replacements of 930 feet of 24-inch diameter water main and 700 feet of 18-inch diameter water main. In addition 8,760 feet of 12-inch diameter water main was upgraded to a 24-inch diameter water main and 240 feet of 8-inch diameter sewer was upgraded to a 12-inch diameter sewer. The water system upgrade was a project betterment for the Rivanna Water and Sewer Authority (RWSA) and the sewer upgrade was a project betterment for the Albemarle County Service Authority (ACSA).

The project was designed on an accelerated schedule for right-of-way plans in six months and construction plans in nine months, which paved the way for construction to stay well ahead of schedule and deliver this long-anticipated project to the region in July of 2017 - 3 months in advance of initial contract completion date.

(in thousands)	g. Design Fee for the Work
Construction	Performed by the Firm identified as
Contract Value	the Lead Designer for this
Actual or	procurement.(in thousands)
Estimated)	
\$116,746 (Berkmar: \$34,625)	\$2,200

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	c. Contact information of the Client and	d. Construction	e. Construction	f. Contract Val	ue
	contractor responsible for overall	their Project Manager who can verify	Contract Start	Contract	Construction	(
	construction of the project.	Firm's responsibilities.	Date	Completion	Contract Value	(
				Date (Actual	(Original)	(
				or Estimated)		I
Name: Fall Hill Avenue Widening and Mary Washington Boulevard Extension Design-Build Location: Fredericksburg, VA	Name: Corman Construction, Inc.	Name of Client.: VDOT Phone: (540) 899-4214 Project Manager: Michael Coffey, P.E. Phone: (540) 899-4214 Email: michaelt.coffey@ vdot.virginia.gov	04/2014	10/2017 (Actual) (Design Completed: 02/2015)	\$30,784	

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/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

Relevancy to the Albemarle Intersection Bundling

- ✓ Design-Build
- ✓ Roundabout
- ✓ Roadway Realignment/Widening
- ✓ New Connector Road
- ✓ Survey
- ✓ Environmental & Geotechnical
- ✓ Hydraulics and SWM
- ✓ Noise analysis and Soundwall design
- ✓ Traffic Control Devices
- ✓ TMP
- ✓ Complex MOT
- ✓ Public Involvement/Communications
- ✓ QA/QC
- ✓ Quality Control Inspection

Verifiable Evidence of Good Performance

- Cost effective and innovative SWM design resulted in significant cost savings for the Department
- Soil nail wall designed to protect civil war trenches
- Structured work packages to accelerate the start of construction activities.

WRA's Role: Prime design firm responsible for the final engineering design documents and approvals for major improvements to the existing Fall Hill Avenue corridor and extension of Mary Washington Boulevard. Existing Fall Hill Avenue was largely a two-lane roadway with no bike facilities and limited pedestrian facilities. Along the project alignment are the Snowden Park, Rappahannock Canal Park, and several historic resources that were impacted by the project construction requiring strict adherence to all commitments in the environmental document. The project was led from the WRA Richmond, VA office and additional design support was performed from the Baltimore, MD office. Services included highway design, hydrologic and hydraulic design, stormwater management (SWM) design, erosion and sediment control design, geotechnical engineering, pavement evaluation and design, noise analysis and soundwall design, maintenance of traffic, signing, lighting, pavement markings, traffic signalization, bridge, retaining walls, park design, utility relocation/coordination, public involvement, permitting and coordination with project stakeholders.

Roadway: The proposed improvements provide for a four-lane divided curb and gutter urban typical section with a 10-foot shared-use path on the north side and a 5-foot sidewalk on the south for a length of 1.5 miles on Fall Hill Avenue. Mary Washington Boulevard was extended on new location for 0.3 miles with an urban section including a sidewalk on the west side and the existing Rappahannock Canal trail network providing for bike and pedestrians to the east and intersects with the roundabout with Fall Hill Avenue. The remaining portion of Mary Washington Boulevard 0.4 miles was widened to a four-lane divided urban section with sidewalks and the intersection with Route 1 was improved for 0.2 miles to provide additional turn lanes at Mary Washington Boulevard. A key element of the project is the roundabout at the Fall Hill Avenue and Mary Washington Boulevard shown in the picture to the left.

Hydraulic Analysis and Stormwater Management: The project included the design and analysis of a tributary to the Rappahannock Canal, which required a 10'x 8' box culvert to ensure the 100-year storm event would have no impact on private property. A complete new storm drainage system was provided for the length of Fall Hill Avenue. WRA's design was able to eliminate one SWM facility on the frontage of a commercial property saving VDOT approximately \$300,000 in right-of-way cost.

Geotechnical Engineering: The project is located in diverse and changing geology. The western portion of the project is located over relatively shallow residual soils of the Piedmont Province, while the eastern portion is more typical of the Coastal Plain Province with over-consolidated Potomac Clays. The bridge over I-95 is supported on driven steel H-piles with MSE wall abutments and were designed to mitigate downdrag forces induced by settlement. The design in the Potomac Clays included 20-foot cuts below the location of the historic civil war trenches. To avoid impacts to the trenches WRA designed a soil nail retaining wall.

TMP and MOT Plans: The two major elements of the TMP were the phased construction of the bridge over I-95 and the three-phase reconstruction of Fall Hill Avenue. The TMP carefully evaluated the impacts to traffic operations on I-95 for placement of concrete barrier, beams and removal of the existing bridge. Work requiring lanes closures on the heavily traveled I-95 was limited to nights and carefully coordinated with the regional traffic operations center and emergency responders.

Traffic Engineering: The project included the design of three traffic signals and three pedestrian crossing using Rectangular Rapid Flash Beacons (RRFBs). A major focus of WRA efforts was to carefully evaluate the high pedestrian movements along the corridor to provide opportunities for residents to access the transit stops along the corridor and access the extensive system of trails in the City.

Public Involvement: A key element of the success of the project is communicating the goals of the project and how the project affects the public. The project included significant access management controls restricting movements to and from developments and the public's concern with the traffic operations at the proposed roundabout. Both issues were a major discussion item at the "Pardon Our Dust" public meeting. Being able to address these concerns quickly and effectively with the VDOT Team resulted in the project moving forward with minimal redesign efforts.

(in thousands)	g. Design Fee for the Work
Construction	Performed by the Firm identified as
Contract Value	the Lead Designer for this
Actual or	procurement.(in thousands)
Estimated)	
\$30,784 (Actual)	\$1,815











