

QUALIFICATIONS SUBMITTAL FOR

I-581/VALLEY VIEW INTERCHANGE PHASE II DESIGN-BUILD PROJECT

STATE PROJECT No.: 0581-128-109, P101, RW201, C501, B627

FEDERAL PROJECT No.: NH-581-5(035)

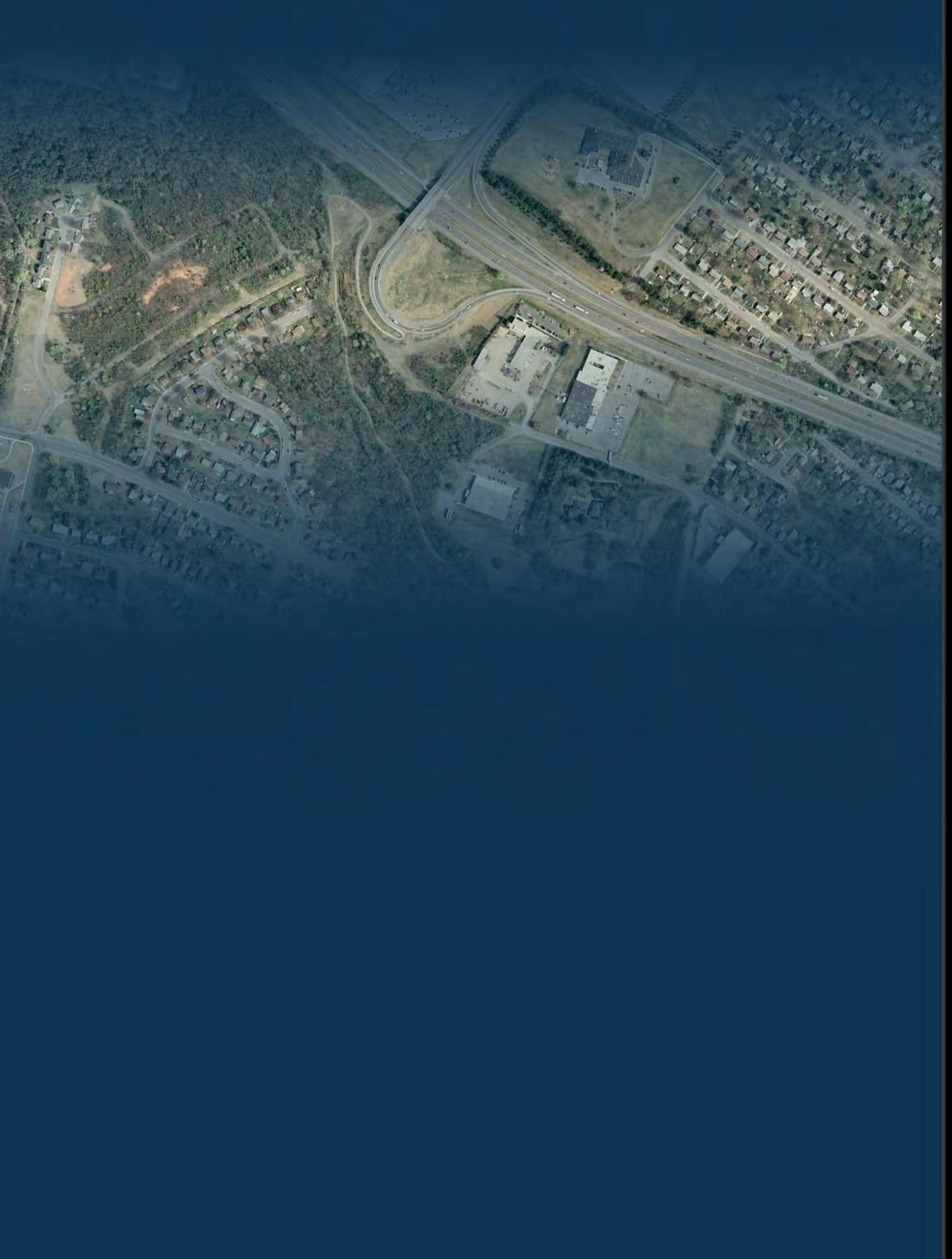
CONTRACT ID NUMBER: C00016595DB45

December 9, 2011

Prepared for



CH2MHILL®





CH2M HILL
8720 Stony Point Parkway
Suite 110
Richmond, VA 23235
TEL 804.320.3848
FAX 804.594.2612

December 9, 2011

Mr. Joseph A. Clarke, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation (VDOT)
1401 East Broad Street
Richmond, VA 23219

**Subject: Statement of Qualifications, I-581/Valley View Interchange Phase II Design-Build;
State Project No. 0581-128-109, P101, RW201, C501, B627; Federal Project No.
NH-581-5(035); Contract ID No. C00016595DB45**

Dear Mr. Clarke:

The I-581/Valley View Interchange Phase II project is critical to enhancing access to the Valley View Mall and other area businesses, and improving the overall connectivity of the interchange to relieve traffic congestion in the vicinity, while achieving effective and safe maintenance of traffic (MOT). Using design-build delivery creates significant opportunities to compress the schedule and provide the best value for a safe and durable facility that can be built within budget.

CH2M HILL understands VDOT's standards and criteria as a result of our work on the I-81 Corridor Safety and Operational Improvements design-build, VA 288 design-build, and Northern Virginia MegaProjects. This experience enables us to understand your goals and challenges for this project. In response, we offer an integrated contractor-designer approach – where builder and designer are team members in the same company, thereby ensuring that both functions have equal ownership, input, and dedication to the project success. This model of equal partnership between the builder and designer eliminates many communication and decision seams that may arise from two independent companies, a contractor working with a designer as a subconsultant. Through our model, we can maximize project success with innovation, efficiency, and collaboration to find value, shorten schedules, and avoid claims and disputes in an environment of stakeholder problem solving. Our nationally proven team of design-builders will mobilize immediately and integrate with our local staff and subconsultants.

This Statement of Qualifications (SOQ) complies with the Request for Qualifications requirements and demonstrates our design-build experience on similar, urban interstate interchange projects involving roadway realignment; bridge widening; right-of-way acquisition and utilities relocation challenges; critical schedules; and MOT and access issues. We will demonstrate that our methods, capacity, and key personnel position CH2M HILL as your best qualified team for this project.

3.2.1 Offeror's Point of Contact

Steve Tyler is CH2M HILL's local point of contact for the SOQ and all project-related inquiries. He can be reached at CH2M HILL Constructors, Inc., 15010 Conference Center Dr., Suite 200, Chantilly, VA 20151, Telephone: 703-376-5214; Fax: 703-376-5010; Cell: 804-400-7210 or via e-mail at steven.tyler@ch2m.com.

3.2.2 Principal Officer of the Legal Entity

Vice President David F. Bird, Jr. (CH2M HILL Constructors, Inc., 9191 S. Jamaica St., Englewood, CO 80112-5946, Phone: 720-286-2648, Fax: 720-286-9221, Cell: 720-883-4316, e-mail: david.bird@ch2m.com) is CH2M HILL's official representative authorized to negotiate and sign a design-build contract with VDOT for the project.

3.2.3 Corporate Structure

CH2M HILL Constructors, Inc., a wholly owned subsidiary of CH2M HILL Companies, Ltd. and a Delaware corporation, is the legal entity that will contract with VDOT to complete the I-581/Valley View Interchange Phase II project and holds financial responsibility to deliver the project. Englewood, Colorado-based CH2M HILL Companies, Ltd. is comprised of multiple business groups that provide full service planning, engineering, design, and construction services. It is a 100 percent employee-owned company with gross revenues of \$6.6 billion in 2010. The firm's bonding capacity currently exceeds \$1.5 billion. There are no limitations on liability that will affect the firm's ability to complete the project when contracted.

3.2.4 Affiliated/Subsidiary Companies

CH2M HILL Companies, Ltd., an Oregon corporation, address at 9191 South Jamaica Street, Englewood, CO 80112, U.S.A., Federal Tax Identification Number 93-0549963, is an employee-owned company, and no individual shareholder directly owns more than 1% of the outstanding shares of the company.

CH2M HILL, Inc., a Florida corporation, address at 9191 South Jamaica Street, Englewood, CO 80112, U.S.A., Federal Tax Identification Number 59-0918189, is a wholly-owned and controlled subsidiary of CH2M HILL Companies, Ltd.

CH2M HILL Constructors, Inc., a corporation organized and existing under the laws of the State of Delaware, address at 9189 South Jamaica Street, Englewood, CO 80112, U.S.A, is a wholly-owned and controlled subsidiary of CH2M HILL Companies, Ltd.

3.2.5 Certification Regarding Debarment Forms

We have included in **Appendix C** an executed Certification Regarding Debarment Form Primary Covered Transactions for CH2M HILL as the Offeror, and Certification Regarding Debarment Form Lower Tier Covered Transactions for Volkert, Inc., our independent Quality Assurance Management subconsultant, and Faulconer Construction Company, our dedicated subcontractor.

3.2.6 Offeror's Pre-qualification Evidence

Appendix D of this Statement of Qualifications contains CH2M HILL's Contractor Pre-qualification Certificate.

3.2.7 Bonding Capability

A letter from CH2M HILL's surety attesting to our ability to obtain project bonds appears on pages 3 and 4 of this Statement of Qualifications.

3.2.8 Professional Services Registration Documentation

We provide the following registration information for team member firms and personnel, as required. Full-size copies of this registration documentation is provided in **Appendix E**.



Aon Risk Services

November 8th, 2011

Mr. Joseph A. Clarke, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1221 East Broad Street
Main Building, 4th Floor
Richmond, VA 23219

**RE: CH2M Hill Constructors, Inc.
I-581 / Valley View Interchange Phase II Project
RFQ # C00016595DB45**

Dear Mr. Clarke:

We are pleased to recommend CH2M Hill Constructors, Inc. (CCI) for the above captioned project. CCI is a highly valued client of the below named sureties. CCI enjoys a reputation for excellence and the commitment to deliver a product precisely within contract terms. The firm is financially sound and technically qualified to complete the work it undertakes.

As surety for CCI, Zurich American Insurance Company (ZAC) provides the company's surety bonds. ZAC has an A.M. Best Financial Strength Rating A+ (Superior) and Financial Size Category XV (\$2 billion or more). CCI 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 on behalf of the contractor, in the event that such firm be the successful bidder and enter into a contract for this project.

This letter is to advise you that CCI is capable of obtaining the customary Bid, Performance and Payment bonds, which will cover the project and any warranty periods, based on the current estimated contract value of \$49,550,000 referenced in Section 2.1 of the Request for Qualifications.

This letter should not be construed as an agreement to provide surety credit for any particular project, but is offered as an indication of our experience and confidence in this firm. The decision to provide bonding is subject to review of the final contract terms and conditions, acceptable bond forms, confirmation of adequate financing, as well as other underwriting conditions that may exist at the time such bonds are requested.

This letter does not constitute an assumption of liability. Any request for bonds in this case and in other cases is a matter solely between CCI and its surety, and they assume no liability to you or any third party if for any reason they do not execute said bonds.

Please consider this letter as a recommendation of this highly regarded client. In the event you have any questions or need additional information, please feel free to contact me at (720) 286-2655.

Sincerely,

Zurich American Insurance Company



Ryan Biegen
Attorney-in-Fact

Aon Risk Insurance Services West, Inc.

4100 East Mississippi Avenue, Suite 1500, Denver, CO 80246 • tel: 303-758-7688 • fax: 303-758-9458

ZURICH AMERICAN INSURANCE COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the ZURICH AMERICAN INSURANCE COMPANY, a corporation created by and existing under the laws of the State of New York does hereby nominate, constitute and appoint Leon F. HILL, Jennifer L. SPERLAK, Scott RONS and Ryan BIEGEN, all of Denver, Colorado, EACH its true and lawful Attorneys-In-Fact with power and authority hereby conferred to sign, seal, and execute in its behalf, during the period beginning with the date of issuance of this power, any and all bonds and undertakings, recognizances or other written obligations in the nature thereof, and to bind ZURICH AMERICAN INSURANCE COMPANY thereby, and all of the acts of said Attorney[s]-in-Fact pursuant to these presents are hereby ratified and confirmed. This Power of Attorney is made and executed pursuant to and by the authority of the following By-Law duly adopted by the Board of Directors of the Company which By-Law has not been amended or rescinded.

Article VI, Section 5. "...The President or a Vice President in a written instrument attested by a Secretary or an Assistant Secretary may appoint any person Attorney-In-Fact with authority to execute surety bonds on behalf of the Company and other formal underwriting contracts in reference thereto and reinsurance agreements relating to individual policies and bonds of all kinds and attach the corporate seal. Any such officers may revoke the powers granted to any Attorney-In-Fact."

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY by unanimous consent in lieu of a special meeting dated December 15, 1998

" RESOLVED, that the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the seal of the Company may be affixed by facsimile on any Power of Attorney pursuant to Article VI, Section 5 of the By-Laws, and the signature of a Secretary or an Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power. Any such power or any certificate thereof with such facsimile signature and seal shall be valid and binding on the Company. Furthermore, such power so executed, sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding on the Company."

IN WITNESS WHEREOF, the ZURICH AMERICAN INSURANCE COMPANY has caused these presents to be executed in its name and on its behalf and its Corporate Seal to be hereunto affixed and attested by its officers thereunto duly authorized, this 16th day of September, A.D. 2008. This power of attorney revokes that issued on behalf of Leon F. HILL, Jennifer L. SPERLAK, Kimberly D. GORDON, Scott C. RONS, dated February 18, 2008.



ZURICH AMERICAN INSURANCE COMPANY

Gregory E. Murray

Frank E. Martin Jr.

STATE OF MARYLAND }
CITY OF BALTIMORE }

SS: *Gregory E. Murray* Secretary *Frank E. Martin Jr.* Vice President

On the 16th day of September, A.D. 2008, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, came the above named Vice President and Secretary of ZURICH AMERICAN INSURANCE COMPANY, to me personally known to be the individuals and officers described in and who executed the preceding instrument and they each acknowledged the execution of the same and being by me duly sworn, they severally and each for himself deposed and said that they respectively hold the offices in said Corporation as indicated, that the Seal affixed to the preceding instrument is the Corporate Seal of said Corporation, and that the said Corporate Seal, and their respective signature as such officers, were duly affixed and subscribed to the said instrument pursuant to all due corporate authorization. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above.



Maria D. Wambler

Notary Public My Commission Expires: July 8, 2011

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

CERTIFICATE

I, the undersigned, a Secretary of the ZURICH AMERICAN INSURANCE COMPANY, do hereby certify that the foregoing Power of Attorney is still in full force and effect, and further certify that Article VI, Section 5 of the By-Laws of the Company and the Resolution of the Board of Directors set forth in said Power of Attorney are still in force.

IN TESTIMONY WHEREOF I have hereto subscribed my name and affixed the seal of said Company

the 8th day of NOVEMBER, 2011

Eric D. Barnes

Eric D. Barnes

Secretary



3.2.8.1 Virginia State Corporation Commission Registration

CH2M HILL Constructors, Inc. No.: F1162322 Type: Foreign Corporation Status: Active	CH2M HILL, Inc. No.: F0227217 Type: Foreign Corporation Status: Active
Volkert, Inc. No.: F1366592 Type: Foreign Corporation Status: Active	Faulconer Construction Co. No.: 00706333 Type: Corporation Status: Active

3.2.8.2 Department of Professional and Occupational Registration (DPOR) Registration for Offices

CH2M HILL Constructors, Inc. , 9191 S. Jamaica St. Englewood, CO 80112, Type: Class A Contractors License – Classification BLD H/H, No. 2705-060064A, Exp.: 5/31/2013
CH2M HILL, Inc. , 8720 Stony Point Pkwy Suite 110, Richmond, VA 23235, Type: Engineering, No.: 0411000603, Exp.: 2/29/2012
CH2M HILL, Inc. , 15010 Conference Center Dr Ste 200, Chantilly, VA 20151, Type: Engineering, No.: 0411000555, Exp.: 2/29/2012
Volkert, Inc. , 5400 Shawnee Road Suite 301, Alexandria, VA 22312, Type: Engineering, No.: 0407002610, Exp.: 12/31/2011
Faulconer Construction Company , 2496 Old Ivy Road, Charlottesville, VA 22906, Type: Class A Contractors License – Classification H/H, No. 2701-003330A, Exp.: 5/31/2012

3.2.8.3 DPOR Licensing for Key Personnel & Project Work Office

Design Manager Stephanie Hart, 8720 Stony Point Pkwy Suite 110, Richmond, VA 23235, Professional Engineer, No.: 0402029309, Exp.: 7/31/2013, Project Work: CH2M HILL’s Richmond Office
Lead Structural Engineer Todd Springer, 8720 Stony Point Pkwy Suite 110, Richmond, VA 23235, Professional Engineer, No.: 0402042790, Exp.: 9/30/2012, Project Work: CH2M HILL’s Richmond Office
QA Manager Ben Lineberry, 423 Kern Street, Woodstock, VA 22664, Professional Engineer, No.: 0402032576, Exp.: 4/30/2012, Project Work: Volkert’s Alexandria Office

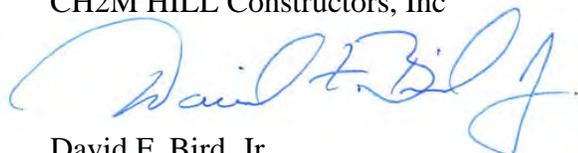
3.2.9 DBE Statement

CH2M HILL commits to achieving a 16 percent DBE participation goal for the design and construction of the I-581/Valley View Interchange Phase II project. When shortlisted, we will identify high-performing DBE consultants and contractors who have a successful work history with CH2M HILL and are interested in bidding on project task elements.

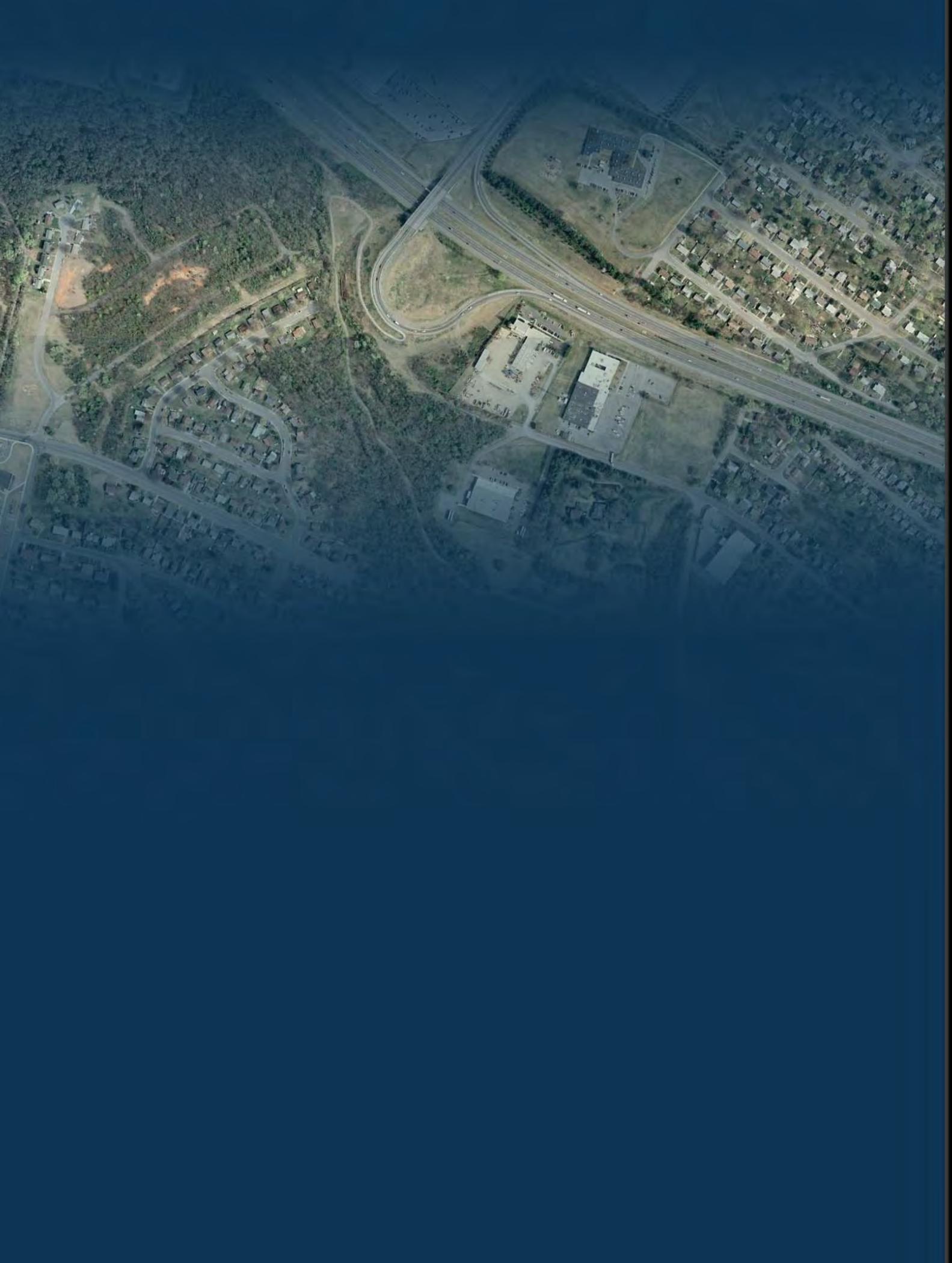
CH2M HILL is committed to working with VDOT, Roanoke County, the Federal Highway Administration, and all stakeholders to make the I-581/Valley View Interchange Phase II project a success.

Sincerely,

CH2M HILL Constructors, Inc



David F. Bird, Jr.
Vice President, CH2M HILL Constructors, Inc.





3.3 OFFEROR'S TEAM STRUCTURE

CH2M HILL matched the experience and capabilities of our key personnel to manage high-profile urban, interstate highway interchange projects with the key issues of roadway realignment, bridge widening, right-of-way acquisition, utility relocation, maintenance of traffic, and access, while minimizing local inconvenience. Our most capable staff—all with experience on highly relevant projects with similar complexity and stakeholder outreach requirements—will lead and support design, construction, quality, and public information for the project. Our qualified team includes staff with detailed knowledge and experience on VDOT criteria and specifications. Our proven organization—with clear reporting and functional relationships—promotes communication among the team, VDOT, and stakeholders. What is the bottom line for VDOT? That we are an experienced, established team that is ready to get to work now!!

3.3.1 Key Personnel

Our key personnel form the core of the I-581/Valley View Interchange project team. As illustrated in Exhibit 3.3.1, each of these staff has delivered highly successful projects with the same types of challenges faced by this project. From that experience, they will bring the same skills to this project.

Design-Build Project Manager Charlie Firman. Charlie will apply more than 37 years of highway/bridge/interchange construction

experience as he manages the overall project design, construction, quality, and contract administration. Charlie will leverage his experience in managing large-scale, multidisciplinary design-build transportation projects to ensure the timely and successful delivery of the I-581/Valley View Interchange project. As project manager on the \$800-million Golden Ears Bridge design-build project in Vancouver, BC, he delivered a realignment of roadways in an urban environment, extensive stakeholder

EXHIBIT 3.3.1
The CH2M HILL team's key personnel have successfully delivered projects with similar scope and challenges as the I-581/Valley View Interchange project.

Key Personnel Member	Assignment	Experience in Key Scope Areas									
		Degree	Registration	Years Exp./with Firm	Interstate Hwy. w/Interchange	Urban Environment	MOT/Access Mgmt./Sched.	Roadway Realignment	Bridge Widening	Utilities Relocation	ROW
Charlie Firman	Design-Build PM	C.T.	-	37/5	✓	✓	✓	✓	✓	✓	✓
Ben Lineberry	Quality Assurance Mgr.	B.S.	PE	20/2	✓	✓	✓	✓	✓	✓	✓
Stephanie Hart	Design Manager	B.S.	PE	25/10	✓	✓	✓	✓	✓	✓	✓
Ed Kitzman	Construction Manager	-	-	21/1	✓	✓	✓	✓	✓	✓	✓
Todd Springer	Lead Structural Eng.	M.A.S.C	PE	18/8	✓	✓	✓	✓	✓	✓	✓



coordination, utility relocations, and MOT/access management requirements on an interstate highway facility with interchanges, all features similar to the I-581/Valley View Interchange project.

He was responsible for overseeing the construction of more than 2.5 miles of viaduct and ramps, related underpass structures, approach roadways, and interchanges. The project involved significant roadway realignment requirements to integrate into the existing roadway network, and extensive utility relocation and coordination.

He served as project manager on two high-profile transportation infrastructure design-build projects, the Canada Line and the New Westminster Line, which involved complicated MOT and access management requirements to minimize impacts on pedestrians and drivers. He piloted an innovative MOT solution that included local residents, businesses, and emergency services to maintain access, minimize inconvenience, and enhance life/safety.

Quality Assurance Manager Ben Lineberry, PE. Ben has more than 20 years of experience in the management of construction inspection, materials testing, and contract administration on interstate highway projects for VDOT and will guard VDOT's interests on the I-581/Valley View Interchange project.

As area construction engineer for VDOT on the I-81/Route 50/Route 522 Interchange Reconstruction project, Ben managed the quality assurance (QA) to verify that the construction of the bridge widening project complied with the specifications, standards, and contract documents. The \$8-million project involved the reconstruction and realignment of the I-81 northbound entrance ramp including a new bridge over Abrams Creek, while maintaining safe MOT and local access. The southbound off-ramp and deceleration lane were rebuilt to eliminate a

dangerous high-speed weave movement on southbound I-81. The project improved the level-of-service of the intersections of Route 50 / Route 522 and I-81 northbound access ramp by constructing multiple turn-lanes, through lanes, and realigned right-turn lanes.

He served in a similar capacity for VDOT on the I-81 Exit 323 Interchange Widening and Reconstruction, where he was responsible for managing the QA to verify that the construction complied with the specifications, standards, and contract documents. Ben's lengthy history of quality project workmanship and materials verification assures VDOT that the I-581/Valley View Interchange project will meet or exceed all contract requirements.

Design Manager Stephanie Hart, PE.

Stephanie has more than 25 years of experience in successfully delivering design services for roadway and interchange projects, including for interstate highway design-build projects for VDOT. As design manager, she is adept at managing a multidisciplinary team of project engineers, routinely oversees design QA/QC, and provides coordination with construction teams during the design and construction phases of design-build projects. Stephanie has a thorough understanding of the interdisciplinary coordination needed to produce constructible plans that meet VDOT requirements. This knowledge will speed the approval process to keep design and construction on schedule.

She was design manager on the Route 288 design-build project for VDOT where she provided design-build integration during construction of more than 17 miles of interstate highway including nine interchanges, which required significant MOT and access management, and utility relocation. As roadway design manager on the I-81 Corridor Safety and Operational Improvements design-build project for VDOT, which involves construction of a truck climbing lane over a 5-mile segment, she is managing the design and services during construction of necessary drainage improvements, replacement of three



bridges, improvement of existing shoulders, upgrading guardrails, retaining walls, and widening and improvements at connections to bridges. Stephanie was design manager on the Sudley Manor Drive/Linton Hall Road design-build projects for Prince William County (and accepted by VDOT) which included design and construction of 3.5 miles of four-lane divided roadway, three signalized intersections, and two bridges in an urban environment.

Construction Manager Ed Kitzman. Ed has more than 22 years of experience as a construction manager and brings a broad background in successfully managing transportation design-build projects. He is the construction manager for the I-10 Americas Interchange design-build project in El Paso, TX, which involves the reconstruction of a major urban interstate highway interchange, including extensive bridge widening, realignment of roadways, and complex utilities relocation requirements. On the I-81 Corridor Safety and Operational Improvements design-build project for VDOT, Ed oversaw the widening of I-81 and the removal and replacement of two bridges. He also worked with Project Manager Charlie Firman on the Golden Ears Bridge design-build project in Vancouver, BC, which involved an interstate highway, extensive realignment of approach roadways in an urban environment, complex MOT, and significant utility relocation requirements.

Lead Structural Engineer Todd Springer, PE. Todd will leverage his more than 18 years of structural engineering experience on transportation projects as the lead structural engineer for the I-581/Valley View Interchange project. Working closely with Design Manager Stephanie Hart and Construction Manager Ed Kitzman, he will oversee all structure and bridge staff and will be responsible for ensuring the successful delivery of all structural services.

On the I-81 Corridor Safety and Operational Improvements design-build project for VDOT, Todd is structures lead responsible for the

design of three bridges on this interstate highway project. As lead bridge engineer on the Sudley Manor Drive/Linton Hall Road design-build projects, Todd led the delivery of the contract package and services during construction for the replacement of an existing bridge with a new bridge. His innovative design included a reduced number of girder lines, and a unique substructure and foundation system to accommodate severe scour depths. During the project, he led coordination with VDOT and continued interface with the construction team. Todd is also the structures and bridge manager for the \$7 billion Northern Virginia MegaProjects Program for VDOT.

Key Personnel Resume Forms

Resume forms (Attachment No. 3.3.1) for our team's proposed Design-Build Project Manager Charles Firman; Quality Assurance Manager Ben Lineberry, PE; Design Manager Stephanie Hart, PE; Construction Manager Ed Kitzman; and Lead Structural Engineer Todd Springer, PE, appear in **Appendix F**. Each brings strong experience in similar assignments to their proposed role for this project.

3.3.2 Organizational Chart

The CH2M HILL team's organizational chart, presented in Exhibit 3.3.2 (next page) shows the chain of command for managing, designing, and constructing the project. It provides VDOT a single point of contact and responsibility for all design- and construction-related issues – our design-build project manager, Charlie Firman.

Our team will operate in an integrated design-build approach – where contractor and designer are within a single company as CH2M HILL employees, thereby ensuring that both design and construction have equal ownership, input, and stake in the project success. This model of equal partnership between the builder and designer eliminates many communication and decision seams that may arise from two independent companies operating with different cultures, priorities, and business interests. From the very

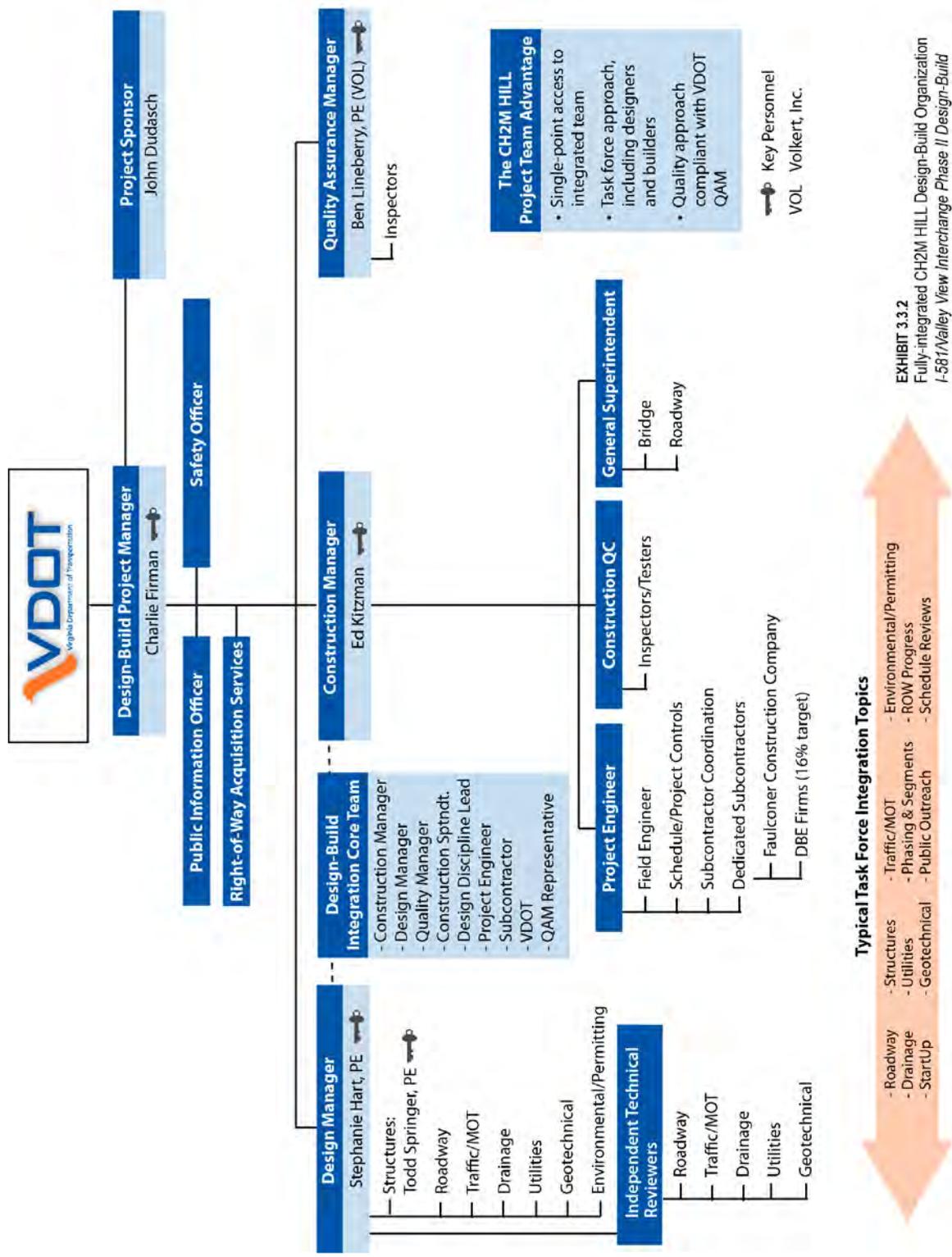


EXHIBIT 3.3.2
Fully-integrated CH2M HILL Design-Build Organization
I-581/Valley View Interchange Phase II Design-Build

CH2MHILL

TUG102011122851.GNV



beginning and throughout the life of the project, our designers and builders sit side by side to provide the best value to VDOT that is technically compliant and eliminates constructibility constraints. Through our model, we can maximize project success with innovation, efficiency, and collaboration to find value, shorten schedules, and avoid claims and disputes in an environment of stakeholder problem solving.

Functional Team Relationships

The reporting relationships in this organization are clearly defined and straightforward. The design, construction, and QA managers all report directly to the design-build project manager, and collectively form the project management team. The health and safety officer, public information officer, and ROW acquisition services also report directly to the design-build project manager. We also provide to VDOT a project sponsor at the company executive level to serve as a liaison to ensure our local project team is performing to your expectations. Other reporting relationships are segregated along these same discipline-specific boundaries, and each discipline manager leads and oversees the work within his/her respective group: design, construction, QA, health and safety, environmental, and QC for design and construction.

Project Management

Design-build Project Manager Charlie Firman leads the team and has total responsibility for all aspects of the project, including design, construction, and QA. Serving as the primary single point of interface with VDOT, stakeholders, and regulatory agencies, Charlie will draw upon his more than 35 years of construction experience in the highway and bridge industry to collaborate with these groups to ensure their views are addressed and the project is delivered on time and within budget. He will be assisted in contract management by the project controls staff to monitor cost, schedule, and resource allocation on the project.

Design

Design Manager Stephanie Hart, PE, will lead design efforts to deliver a technically compliant project design within VDOT's design QC program and ensure constructibility reviews are conducted directly with Construction Manager Ed Kitzman, and Design-build Project Manager Charlie Firman. Stephanie will direct and manage all design elements, ensuring that all design disciplines and field forces are collaborating openly, and that the best value project design is achieved from the onset. Other critical integration, communication, and interdisciplinary coordination will occur at the task lead level for structures, roadway, drainage hydraulics, utilities, and geotechnical. The utilities design coordinator is critical to ensure the project schedule is not impacted and is integrated with timely relocations. All task leads will manage discipline-specific design elements while continuously coordinating with each other, VDOT, and the construction team.

Stephanie will also oversee the design QA/QC program for all project design disciplines. Key staff in the design QC function are the Independent Technical Reviewers who perform a continuous independent check of the design as it progresses.

Construction

Construction Manager Ed Kitzman reports to Design-build Project Manager Charlie Firman, and collaborates directly with Design Manager Stephanie Hart to ensure that all construction activities proceed on schedule and conform to the project plans and specifications, quality, and environmental requirements.

Ed will engage in the design process from an early stage as construction/scope manager, providing constructibility reviews and comments to optimize design and construction efficiencies. He will formulate a Construction Staging Plan and involve field superintendents early in work activity planning to apply knowledge gained from supervising day-to-day field activities.



When construction begins, Ed will manage and coordinate day-to-day work activities performed by subcontractors and self-perform craft labor. He will be onsite full time and communicate directly with the design manager to resolve construction/design issues as they arise. He will oversee and monitor each phase of the project to ensure that critical path schedules are met, the project is constructed as designed, and quality is built in at every step.

Ed will manage all QC construction activities to ensure that materials and workmanship meet VDOT quality standards. Our construction quality team will work closely with the independent QA team to ensure that quality is built into the project.

QA Management

QA Manager Ben Lineberry, PE, from the independent firm of Volkert, Inc., will apply more than 20 years of diversified experience performing QA management services on numerous highway and bridge projects for VDOT. Ben will be supported by QA inspectors with significant VDOT inspection experience for roadways and structures, who will apply discipline- and VDOT-specific knowledge of design and construction specifications that are relevant.

Working as a team, independent of construction operations, these professionals will actively monitor construction QC and engage in QA inspections and audits, and review materials testing reports to document that the project meets VDOT specifications.

Design-Build Integration Core Team

The Integration Core Team is the centerpiece of our integrated approach to design-build that facilitates seamless project delivery through continuous, free-flowing project information between in-house design and construction team members. We will establish an Integration Core Team that identifies task forces staffed with in-house design and construction specialists to focus on critical project elements and issues, and to make prompt decisions on

critical path elements as the project moves through design into construction. These task forces may include startup, utilities, geotechnical, structures, roadway, MOT, drainage, Lick Run and the Lick Run Greenway, and environmental compliance. These task forces will also include VDOT as needed.

Design and Construction Team Interaction Throughout Project

CH2M HILL's integrated design-build delivery model is based on the participation of all project team members during all phases of the project – including our design staff remaining actively engaged during the construction phase. This includes performing services during construction in their discipline/trade. In addition to our lead engineers and architects, we will draw upon our significant resource pool to cost-effectively place engineering staff in the field with our constructors during critical phases of work. This facilitates the routine collaboration to review and clarify all requests for information (RFIs) and other needed design changes, as well as the swift resolution of more critical technical issues when they arise. Specifically, our designer-builders focus on and/or perform the following during the construction phase:

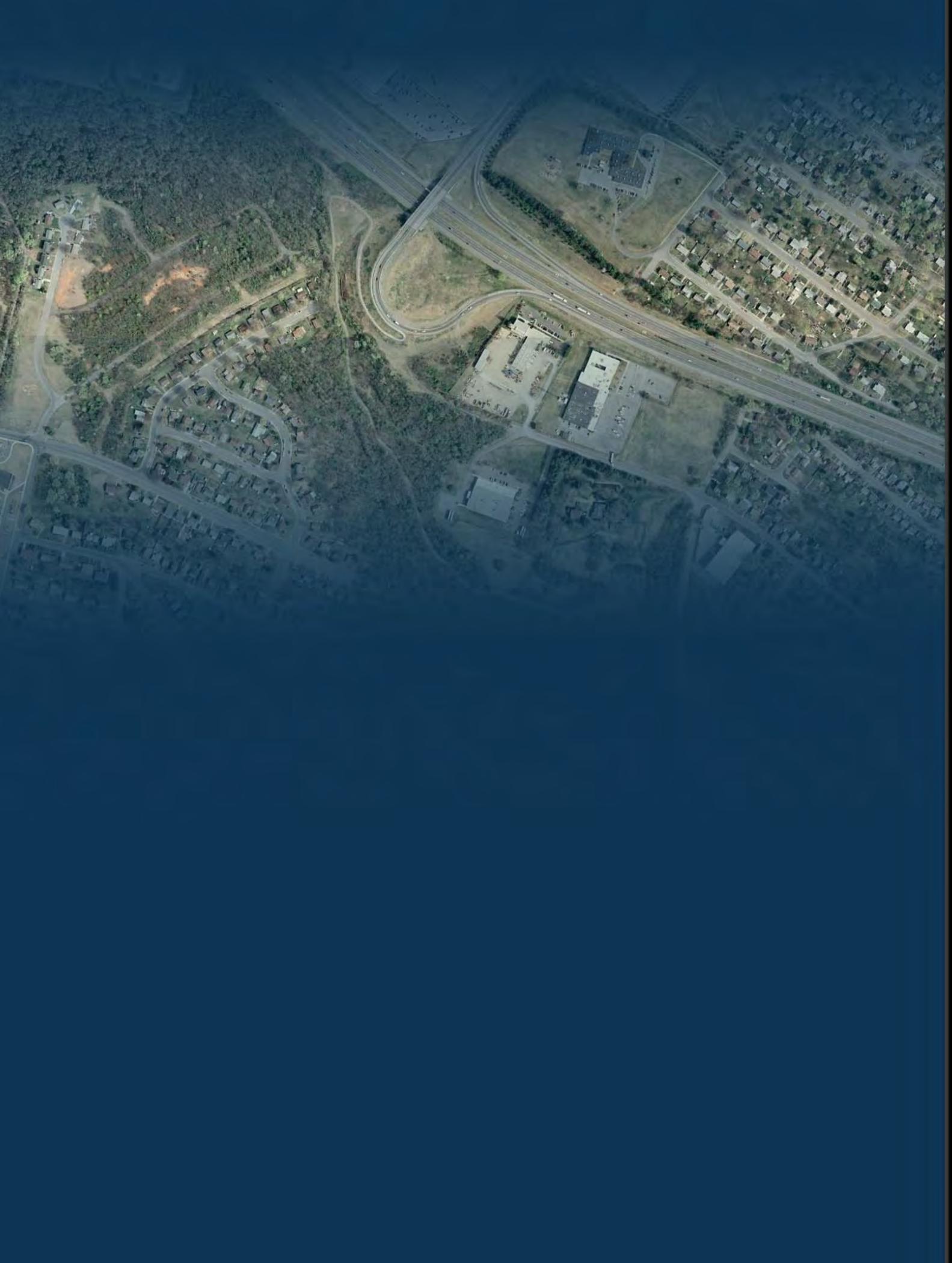
- Provide clarifications and addendums supporting building trade subcontractor bidding.
- Prepare and maintain a complete list of required submittals (i.e., submittal register).
- Prior to submittal to VDOT, check, approve, stamp, sign, and date each submittal consistent with the field-maintained Submittal Register.
- Review and approve all deviations from “Approved for Construction” documents by maintaining our configuration management on the design.



- Review and approve recommended field changes.
- Respond to RFIs.
- Perform shop drawing and specification review and approval.
- Prepare record drawings and as-built documentation.
- Identify and provide immediate technical response to changed conditions or other significant design issues
- Assist construction staff or other technical specialists with any required commissioning.

Our culture of involving our designers during construction greatly facilitates our project team integration and ability to efficiently resolve or clarify issues and design details. This ensures that VDOT-compliant designs are being built.

CH2M HILL ensures involvement of construction expertise from both our self-perform forces and subcontractors early in the design process. These construction personnel will perform constructibility and provide input on the local market for suppliers and labor forces. This input will enable designers to avoid specifying a unique material or detail that is costly to construct or unavailable in the marketplace. It also provides designers with a perspective on means and methods that will result in a VDOT-compliant design. This early involvement by our construction staff and subcontractors allows for early identification of long-lead material items and staging labor/equipment to optimize the project schedule, ensuring on-time completion. Most importantly, this process allows for early mitigation of high-risk areas for the project because of the collaborative nature of problem solving between our designers, builders, and VDOT.





3.4 EXPERIENCE OF OFFEROR'S TEAM

The entire I-581/Valley View Interchange project team, key staff, and subconsultants were selected for their experience on similar projects and history of successful delivery. VDOT benefits from this team of professionals who understand the Department's procedures and preferences and how to collaborate within CH2M HILL's integrated design-build delivery model.

CH2M HILL is able minimize project risks and maximize project benefits to VDOT on the I-581/Valley View Interchange project by:

- Applying the lessons learned and the efficiencies gained on our recent and current VDOT assignments
- Implementing our fully integrated design-build approach with CH2M HILL as both the prime contractor and designer of record.

Our recent and current design-build interchange projects include the I-10 Americas Interchange, I-15 North Corridor, and the I-81 Corridor

Improvements, a project being performed for the VDOT Salem District. The lessons learned on the transportation design-build assignments shown in Exhibit 3.4.1, along with the more than 70 design-build projects CH2M HILL is currently performing around the world, will enable us to maximize the benefit of VDOT involvement to resolve project issues while minimizing this involvement. CH2M HILL's design-build delivery model provides VDOT the benefit of a truly integrated team, as opposed to a design-build Offeror that

is made up of separate entities. Having all resources in-house ensures that both the designers and constructors focus on the success of each project, and less on protecting the interest of separate firms when difficulties arise. **With our in-house, fully integrated team, we are able to perform our projects with continuous interaction between our design and construction staff, on very informal levels.** This results in early identification and elimination of constructibility issues, accurate scheduling and pricing, and swift clarification of technical issues once construction has started.

EXHIBIT 3.4.1

The CH2M HILL team's in-house, integrated design-build model resulted in the delivery of approximately \$2 billion worth of similar relevant transportation design-build projects over the past 10 years.

Project	Similarity in Key Project Areas						
	Interstate Hwy. w/Interchange	Urban Environment	MOT/Access Mgmt./Sched.	Roadway Realignment	Bridge Widening	Utilities Relocation	ROW
I-10 Americas Interchange, TX	✓	✓	✓	✓	✓	✓	✓
Sudley Manor Drive, VA		✓	✓	✓	✓	✓	✓
Linton Hall Road, VA		✓	✓	✓	✓	✓	✓
I-15 North Corridor, NV	✓	✓	✓	✓	✓	✓	✓
I-81 Corridor Improvements, VA	✓		✓	✓	✓	✓	✓
Loop 49, Segment 3B, TX			✓	✓		✓	✓
Runway Replacement, Edwards AFB, CA			✓	✓		✓	
Golden Ears Bridge, BC	✓	✓	✓	✓	✓	✓	✓
I-5 Everett HOV Lane, WA	✓	✓	✓	✓	✓	✓	✓
I-25 Cosmix™, CO	✓	✓	✓	✓	✓	✓	✓
I-5 (Clark's Branch to Tunnel Mill), OR	✓		✓	✓	✓	✓	✓
I-5 (Sutherlin to Roseburg), OR	✓		✓	✓	✓	✓	✓



3.4.1 Lead Contractor and Lead Designer Work History

As a unique provider of design-build services, CH2M HILL serves as both Lead Contractor and Lead Designer. Relevant work experience serving in each of these roles is provided on Attachment 3.4.1(a), Lead Contractor Work History, and Attachment 3.4.1(b), Lead Designer Work History. These forms are located in **Appendix G**.





3.5 PROJECT RISK

CH2M HILL has reviewed the current information available on the I-581/Valley View Interchange Phase II project and has identified several project risk factors drawing on our extensive experience on similar design-build projects and the individual experience of our project team members.

The stated purpose for this project is to complete the current partial I-581 Valley View interchange. This will result in significant access improvements into and out of the economic zone (Wal-Mart, Best Buy, Staples, Target, Petsmart, and the Valley View Mall) from SR 220/Valley View Boulevard and help to relieve the current traffic load on Hershberger Road. Critical for the success of this project will be completing it on or ahead of the required schedule and within VDOT's funding limit while managing and mitigating the critical risk factors to the project. We have selected the following three critical factors that present the most risk to the project for further discussion.

Risk Factor #1 - Access Management/MOT

What is the risk factor?

There are three key limited access/egress conditions for this critical risk factor that drive access management and MOT:

- Northbound off-ramp traffic
- Southbound on-ramp traffic
- Lick Run Greenway pedestrian traffic

Why it is critical for the success of the project and what potential impact does it present to the project?

The northbound off-ramp currently provides the fastest access to the economic zone from I-581. The new configuration of this ramp goes through the current ramp with a significant elevation change. Any shutdown of this ramp during construction of the new ramp will cause limited access to this area by

disrupting traffic flow into the economic zone, which may result in a loss of business to these stores and potentially increase the traffic load on Hershberger Road.

The southbound on-ramp provides the easiest access for southbound I-581 traffic from the economic zone. The new southbound ramp configuration generally follows the existing ramp to the southwest. Any shutdown of this ramp during construction will have a major impact on outbound traffic that may also hinder business to these stores as well as potentially increase the traffic load on Hershberger Road.

Pedestrian use of the Lick Run Greenway must be maintained at all times during its reconfiguration, including handicap access throughout construction across construction access points. Failing to do this will essentially close the Greenway to pedestrians.

What strategies will CH2M HILL implement to mitigate all potential negative impacts to the project?

CH2M HILL will conduct partnering sessions with VDOT and all stakeholders, including the City of Roanoke, Roanoke County, the local Chamber of Commerce, all businesses in the affected area, and homeowners to communicate to all stakeholders in the region that the area economic zone will be open for business throughout the project.

CH2M HILL will avoid any shutdown of the important northbound ramp through construction staging. We will build the southern section of this ramp and the auxiliary



lane first and tie into the existing ramp near the curve with a temporary ramp on the east side of the of the new ramp location connecting to Valley View Boulevard. This will maintain traffic flow from I-581 northbound into the economic zone. This will also facilitate good access for construction deliveries from I-581 while minimizing construction delivery impact on Valley View Boulevard. Exhibit 3.5.1 on the next page shows our planned two phases of construction.

For the southbound on-ramp traffic, we will use the existing bridge and ramp to build the new on-ramp and half of the bridge widening. We will shift traffic to the south side of the existing bridge to allow construction of the new on-ramp and north side widening component of the bridge first. Then, we will shift traffic to the widened north side of the bridge directing all traffic on the new southbound on-ramp. We will also use the northbound off-ramp for construction deliveries for this component of the project.

We will maintain pedestrian access to the Lick Run Greenway throughout construction. CH2M HILL will also maintain all lighting facilities. We will also use the existing bridge and ramp to keep pedestrians flowing across the bridge with temporary cross walks to allow safe passage across construction access points during the widening of the north side of the bridge. We will then provide a temporary switch-back ramp off the north side of the bridge to connect to the existing Greenway down grade of the bridge while the Greenway is reconfigured.

We will also investigate the possibility of not relocating the Greenway through the use of walls at the west end of the new on-ramp. The new extension of the Greenway to the north can still be accommodated by connecting to the existing route near the north side of the ramp.

To mitigate the impact on the economic zone, we will establish a single point of contact

(construction liaison) for all businesses and residents for lines of communication and to facilitate public outreach. The construction liaison will provide monthly construction updates and present our traffic access control plans. He will work with economic zone members to minimize impacts during high volume times and special sales times. We will minimize construction traffic on Valley View Boulevard and develop a construction plan that will open the northbound on-ramp early.

What is the role for VDOT or other agencies in interfacing with CH2M HILL to help mitigate the risk?

For the northbound off-ramp traffic and the southbound on-ramp, we will partner with VDOT to help communicate to all stakeholders in the region that the area economic zone will be open for business throughout the project. Also, for the northbound off-ramp, a quick VDOT turn-around on plan reviews will help facilitate early construction of the auxiliary lane and temporary ramp. For the Lick Run Greenway, we will need VDOT to partner with us to minimize Department of Conservation and Recreation (DCR) impacts to this portion of the work.

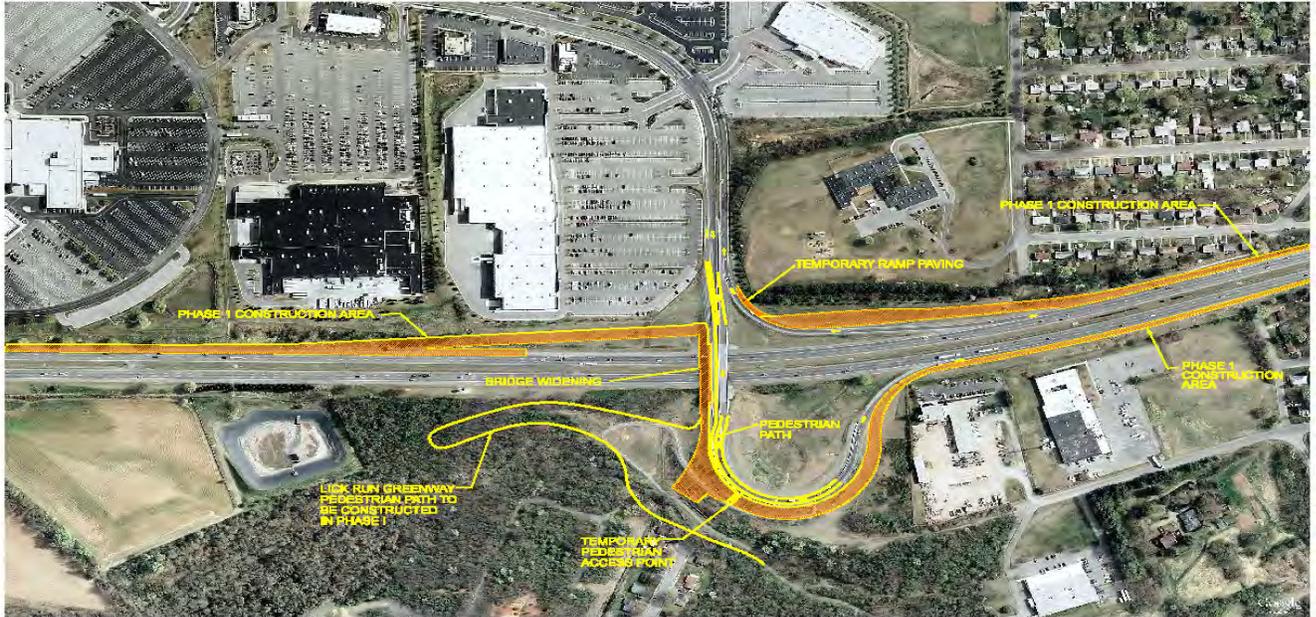
Proof of Performance

CH2M HILL has successfully addressed and mitigated this project risk factor on many of our recent design-build projects including the I-15 North Corridor Design-Build (US 95 to Craig Road) in Las Vegas and North Las Vegas, NV, an award-winning project (the 2011 Marvin M. Black Partnering Award) that is included in the “Experience of Offeror’s Team” in Section 3.4. This project successfully addressed and mitigated project risks for access management and MOT along a 5.8-mile section of a heavily congested portion of I-15 that widened the roadway from two to three lanes in each direction, including many bridge reconstructions, while minimizing impacts to traffic during local events.

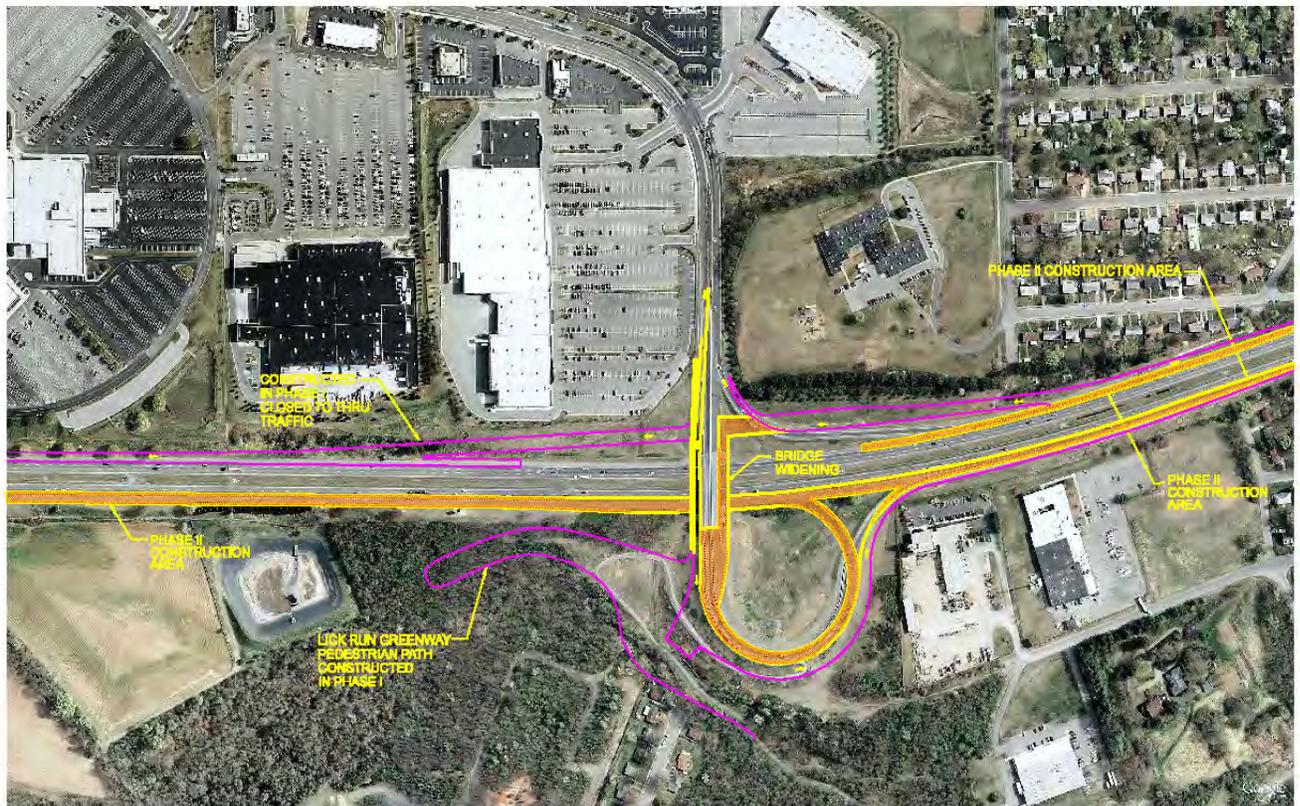


EXHIBIT 3.5.1

CH2M HILL's two-phased construction plan will allow both the northbound and southbound ramps to remain open and maintain pedestrian access to the Lick Run Greenway.



Phase I Construction Plan



Phase II Construction Plan



Risk Factor #2 – Third-Party Approvals

What is the risk factor?

This critical risk factor concerns the review of project components by outside third parties. Currently, we see potential third-party participation for review and approvals by the DCR, the Federal Aviation Administration (FAA) (project is within 10 miles of an active runway), the Federal Highway Administration (FHWA), Virginia Department of Environmental Quality (VDEQ), the U.S. Fish and Wildlife Service (USFWS), the U.S. Army Corps of Engineers (USACE), stormwater management boards, utility service providers, and acquisitions of right-of-way.

Why it is critical for the success of the project and what potential impact does it present to the project?

Lick Run is a tributary water inhabited by federally protected species. Permit coordination and acquisition with state and federal authorities for the relocation of Lick Run may result in cost and schedule impacts. As a condition of permit approval, the USFWS may impose time-of-year restrictions precluding any work within or over Lick Run which will also need to be reflected in the overall project schedule and costs. Additional coordination time may be required to assure the VDEQ that Lick Run is sufficiently protected during construction. Considering the proximity of this project to the nearby airport, FAA needs to know about this project since it is within 10 miles of an active runway. We will need to identify construction equipment such as cranes and concrete pump booms that may be a concern to the FAA.

The acquisition of right-of-way is a concern due to the relocation of Lick Run and the Lick Run Greenway which will require the relocation of property owners on Norris Drive NW; the right-of-way take of property along Pleasant View Avenue NW for noise wall

construction; the potential right-of-way take of property along Hunt Avenue for noise wall construction; and the potential right-of-way take for a slope along the newly constructed southbound on-ramp (if necessary).

What strategies will CH2M HILL implement to mitigate all potential negative impacts to the project?

To help mitigate VDEQ issues concerning the relocation of Lick Run and the Lick Run Greenway, we will prepare early environmental design packages to allow sufficient time for review and approval. We will investigate seasonal Lick Run flows to properly time the construction needed for the relocation of Lick Run and the Greenway.

Another strategy is to remove the need for third-party approvals for the relocation of Lick Run by implementing an innovative design that will avoid relocating Lick Run and provide an acceptable grade transition for the Lick Run Greenway from Valley View Boulevard to its current location along Lick Run.

We will complete noise studies for early consideration by VDOT for all potential noise walls.

We will meet with the local airport, VDOT, and FAA staff to present our work plans for the project including a list of all construction equipment to determine if there are any issues with respect to potential flight path obstructions. If there are any, we will develop work plans that will meet all FAA requirements.

For the potential acquisition of right-of-way, we will identify all potential right-of-way takes needed to meet the conceptual design layouts early in our design effort and then investigate innovative design considerations to minimize the takes. For all required right-of-way takes, we will maintain open communications with affected property owners through community meetings and one-on-one meetings to assist them with their relocation.



What is the role for VDOT or other agencies in interfacing with CH2M HILL to help mitigate the risk?

For right-of-way acquisitions, VDOT can provide budget cost estimates. If necessary, VDOT can help to facilitate any condemnation. VDOT can partner with CH2M HILL to present a positive message to businesses and residents and allow us the flexibility to work with business owners on night time ramp closures, lane closures, etc.

Proof of Performance

CH2M HILL has successfully addressed and mitigated this project risk factor on many of our recent design-build projects including the Sudley Manor Drive and Linton Hall Road Design-Build, Prince William County, VA. This project included design, environmental permitting, utility coordination, and right-of-way acquisition and relocations. The initial estimate of land purchases on this project was within 1 percent of the total appraised value of acquired right-of-way.

Risk Factor #3 – Unknown Existing Conditions

What is the risk factor?

This critical risk factor concerns unknown existing conditions, including subsurface soil conditions, the presence of potential Karst conditions, and the condition and location of underground utilities.

Also, the condition and integrity of the existing bridge is not known at this time. Will the existing bridge elements need to be upgraded to match those of the widened bridge elements?

Why it is critical for the success of the project and what potential impact does it present to the project?

Knowing and understanding all subsurface conditions in the work area is critical for the design of all foundations and any walls that might be needed. The presence of Karst

conditions in the work area will require mitigation strategies early in our design. Actual soil conditions that differ from what is represented in the preliminary geotechnical report in the RFQ may also have a significant impact on the design and cost.

Concerning the bridge widening component of the project, any upgrade of the existing bridge elements to meet current design code will have an impact on both cost and schedule. VDOT does not have a set policy for upgrades of widened bridges. Any repairs needed for undisclosed conditions will have an impact on both cost and schedule.

What strategies will CH2M HILL implement to mitigate all potential negative impacts to the project?

We will implement an early geotechnical investigation to determine subsurface conditions including the presence of Karst conditions. The findings of the investigation will be considered in our design including strategies to mitigate Karst conditions. We will also have geotechnical engineering involvement throughout construction. During the geotechnical investigation, we will survey the existing bridge to assess its condition to identify any repairs for VDOT to consider.

We will use innovative construction techniques for the widened portion of the bridge to minimize adverse impacts to the existing bridge components. We will investigate the elimination of expansion joints at the abutments which would convert the bridge to a deck expansion as well as potentially either overlaying or replacing the existing deck.

What is the role for VDOT or other agencies in interfacing with CH2M HILL to help mitigate the risk?

We will need VDOT to provide all available documentation of the existing bridge including as-built drawings, inspection reports, load rating report, sufficiency ratings,

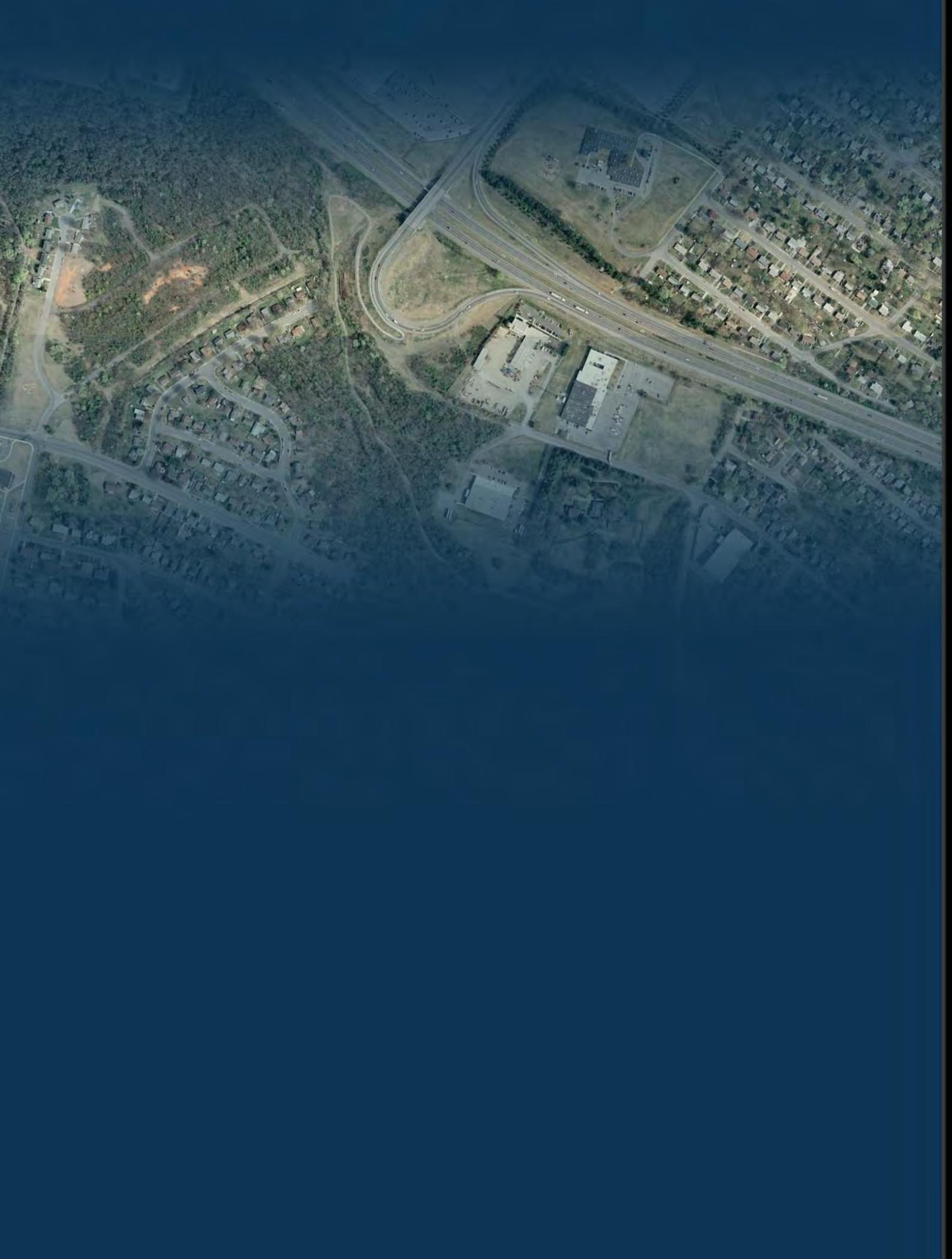


and bridge deck condition surveys. We also need to work with VDOT to have a clear understanding of any upgrades expected by VDOT to existing bridge elements.

Proof of Performance

CH2M HILL has successfully addressed and mitigated this project risk factor on many of

our recent design-build projects including the I-81 Corridor Safety and Operational Improvements design-build project in Salem, VA. CH2M HILL implemented an early geotechnical investigation along with surveys to identify conditions of existing bridges.





ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00016595DB45
PROJECT NO.: 0581-128-109, P101, RW201, C501, B627

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 10/11/2011
(Date)
2. Cover letter of _____
(Date)
3. Cover letter of _____
(Date)

 9 Dec 2011
SIGNATURE DATE



ATTACHMENT 3.1.2

0581-128-109, P101, RW201, C501, B627

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

(Revised December 05, 2011)

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix B
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix A
Letter of Submittal (on Offeror's letterhead)				
Offeror's point of contact information	NA	Section 3.2.1	yes	1
Authorized Representative's signature	NA	Section 3.2.1	yes	5
Principal officer information	NA	Section 3.2.2	yes	2
Offeror's Corporate Structure	NA	Section 3.2.3	yes	2
Affiliated/subsidiary companies	NA	Section 3.2.4	yes	2
Debarment forms	Attachment 3.2.5(a) Attachment 3.2.5(b)	Section 3.2.5	no	Appendix C
Offeror's VDOT prequalification evidence	NA	Section 3.2.6	no	Appendix D
Evidence of obtaining bonding	NA	Section 3.2.7	yes	3
Professional Services Evidence				
Full size copies of SCC and DPOR registration documentation (appendix)	NA	Section 3.2.8	no	Appendix E

ATTACHMENT 3.1.2

0581-128-109, P101, RW201, C501, B627

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

(Revised December 05, 2011)

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20-page limit?	SOQ Page Reference
SCC Registration	NA	Section 3.2.8.1	yes	Appendix E
DPOR Registration (Offices)	NA	Section 3.2.8.2	yes	Appendix E
DPOR Registration (Key Personnel)	NA	Section 3.2.8.3	yes	Appendix E
DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.8.4	yes	Appendix E
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.9	yes	5
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	6
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix F
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix F
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix F
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix F
Key Personnel Resume – Lead Structural Engineer	Attachment 3.3.1	Section 3.3.1.5	no	Appendix F
Organizational chart	NA	Section 3.3.2	yes	9
Organizational chart narrative	NA	Section 3.3.2	yes	8
Experience of Offeror's Team	NA	Section 3.4	yes	13
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix G

ATTACHMENT 3.1.2

0581-128-109, P101, RW201, C501, B627

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

(Revised December 05, 2011)

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 20- page limit?	SOQ Page Reference
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix G
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	15



ATTACHMENT NO. 3.2.5(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0581-128-109, P101, RW201, C501, B627

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.

 December 9, 2011 Vice President

Signature Date Title

CH2M HILL Constructors, Inc.

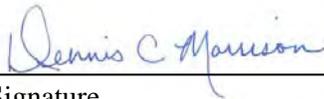
Name of Firm

ATTACHMENT 3.2.5(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project: 0581-128-109, P101, RW201, C-501, B627

- 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.

	November 11, 2011	Senior Vice President
Signature	Date	Title

Volkert, Inc.
Name of Firm



TRANSPORT - E22
LSPPREQ

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
PREQUALIFIED VENDORS SORTED BY VENDOR NAME
THIS LIST INCLUDES ALL PREQUALIFIED LEVELS
AS OF 11/04/2011
- C -

11/04/2011
2:09 PM
PAGE 84

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C317
CH2M HILL CONSTRUCTORS, INC.
EMPLOYER ID: 84-1230545
PREQ. EXP : 03/31/2012

--PREQ ADDRESS -----	-- WORK CLASSES -----
9191 SOUTH JAMAICA STREET	002 - GRADING
ENGLEWOOD, CO 80112-0000	003 - MAJOR STRUCTURES
PHONE : 303-771-0900	007 - MINOR STRUCTURES
FAX : 720-286-2554	045 - UNDERGROUND UTILITIES

BUSINESS CONTACT: STIERITZ, BRIAN CHRISTOPHER
EMAIL: BSTIERIT@CH2M.COM

-----DBE INFORMATION-----

DBE TYPE : N/A
DBE CONTACT: N/A
DBE/WBE EXP: N/A





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- Business Entities
- UCC or Tax Liens
- Court Services
- Additional Services

Welcome to SCC eFile Business Entity Details

CH2M HILL CONSTRUCTORS, INC.

SCC ID: F1162322
Business Entity Type: Foreign Corporation
Jurisdiction of Formation: DE
Date of Formation/Registration: 12/20/1993
Status: Active
Shares Authorized: 100

Principal Office

9189 S JAMAICA STREET
ATTN: TAX DEPT
ENGLEWOOD CO 80112

Registered Agent/Registered Office

CT CORPORATION SYSTEM
4701 COX RD STE 301

GLEN ALLEN VA 23060-6802
HENRICO COUNTY 143
Status: Active
Effective Date: 3/15/2007

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Screen ID: e1000

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CH2M HILL, INC.

SCC ID: F0227217
Business Entity Type: Foreign Corporation
Jurisdiction of Formation: FL
Date of Formation/Registration: 6/9/1970
Status: Active
Shares Authorized: 100000

Principal Office
9191 SOUTH JAMAICA ST
ATTN: TAX DEPT
ENGLEWOOD CO 80112

Registered Agent/Registered Office
CT CORPORATION SYSTEM
4701 COX RD STE 301

GLEN ALLEN VA 23060-6802
HENRICO COUNTY 143
Status: Active
Effective Date: 3/15/2007

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Additional Services

Welcome to SCC eFile Business Entity Details

Volkert, Inc.

SCC ID: F1366592
Business Entity Type: Foreign Corporation
Jurisdiction of Formation: AL
Date of Formation/Registration: 1/21/1999
Status: Active
Shares Authorized: 2250

Principal Office

3809 MOFFETT RD

MOBILE AL 36618

Registered Agent/Registered Office

CORPORATION SERVICE COMPANY

BANK OF AMERICA CENTER,
16TH FLOOR

1111 EAST MAIN ST.

RICHMOND VA 23219

RICHMOND CITY 216

Status: Active

Effective Date: 7/13/2011

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FAULCONER CONSTRUCTION COMPANY, INCORPORATED

SCC ID: 00706333
 Business Entity Type: Corporation
 Jurisdiction of Formation: VA
 Date of Formation/Registration: 12/8/1954
 Status: Active
 Shares Authorized: 17890

Principal Office

2496 OLD IVY ROAD
 CHARLOTTESVILLE VA 22903-4895

Registered Agent/Registered Office

JACK W SANFORD JR
 2496 OLD IVY RD
 CHARLOTTESVILLE VA 22903
 ALBEMARLE COUNTY 101
 Status: Active
 Effective Date: 12/30/1998

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Screen ID: e1000

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
05-31-2013

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

NUMBER
2705 060064A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

CH2M HILL CONSTRUCTORS INC
CH2M HILL CONSTRUCTORS INC
9191 S JAMAICA STREET ATTN CATHY POWE
ENGLEWOOD CO 80112



Gordon N. Dixon
Gordon N. Dixon, Director

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

NUMBER: 2705 060064A EXPIRES: 05-31-2013
CH2M HILL CONSTRUCTORS INC
CH2M HILL CONSTRUCTORS INC
9191 S JAMAICA STREET ATTN CATHY POWE



ENGLEWOOD CO 80112
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COMMONWEALTH OF VIRGINIA

EXPIRES ON

02-29-2012

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

NUMBER

0411000603

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

PROFESSIONS: ENG

CH2M HILL, INC
8720 STONY POINT PKWY STE 110
RICHMOND, VA 23235



Jay W. DeBoer
Jay W. DeBoer, Director

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BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000603 EXPIRES: 02-29-2012
PROFESSIONS: ENG
CH2M HILL, INC
8720 STONY POINT PKWY STE 110
RICHMOND, VA 23235



(DETACH HERE)

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

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EXPIRES ON
02-29-2012

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

NUMBER
0411000555

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

PROFESSIONS: ENG

CH2M HILL INC
15010 CONFERENCE CENTER DR
STE 200
CHANTILLY, VA 20151



Jay W. DeBor
Jay W. DeBor, Director

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DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON

12-31-2011

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

NUMBER

0407002610

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

PROFESSIONS: ENG

VOLKERT INC
5400 SHAWNEE RD
STE 301
ALEXANDRIA, VA 22312-2300



Jay W. DeBoer
Jay W. DeBoer, Director

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COMMONWEALTH OF VIRGINIA

BOARD FOR APPLSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407002610 EXPIRES: 12-31-2011
PROFESSIONS: ENG
VOLKERT INC
5400 SHAWNEE RD
STE 301
ALEXANDRIA, VA 22312-2300



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COMMONWEALTH OF VIRGINIA

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9980 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-8500

NUMBER
2701 003330A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

FAULCONER CONSTRUCTION CO INC
FAULCONER CONSTRUCTION CO INC

PO BOX 7706
CHARLOTTESVILLE VA 22906 7706

CLASSIFICATIONS H/H



Jay W. DeBoer
Jay W. DeBoer, Director

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Telephone: (804) 367-8500

NUMBER
0402029309

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

STEPHANIE DAWN HART
3225 LUDGATE RD
CHESTER, VA 23831



Gordon N. Dixon
Gordon N. Dixon, Director

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EXPIRES ON
09-30-2012

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

NUMBER
0402042790

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

C. TODD SPRINGER
10021 TUXFORD ROAD
RICHMOND, VA 23238



Shelby N. Dineen
Shelby N. Dineen, Director

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COMMONWEALTH OF VIRGINIA

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS,
CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402042790 EXPIRES: 09-30-2012

C. TODD SPRINGER
10021 TUXFORD ROAD
RICHMOND, VA 23238



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COMMONWEALTH OF VIRGINIA

EXPIRES ON
04-30-2012

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

NUMBER
0402032576

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

BEN HARRY LINEBERRY JR
423 KERN STREET
WOODSTOCK, VA 22664



July W. DeBoer
July W. DeBoer, Director

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ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Charles Firman, Design Build Project Manager
b. Project Assignment: Design Build Project Manager
c. Name of Firm with which you are now associated: CH2M HILL
d. Years experience: With this Firm <u>5</u> Years With Other Firms <u>32</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): 2006 – Present: Principal Project Manager, CH2M HILL, Vancouver, BC, managed design and construction of an urban bridge, interchange and underpass project, as well as road construction, utility relocations, realignment and public engagement 2005 – 2006: Project Manager, SNC-Lavalin Inc., Vancouver, BC, oversaw design and construction of a cut-and-cover tunnel that included utility relocation, design concept development, constructability reviews, tunnel alignment and profile, station locations, construction means and methods, procurements, civil construction, including shoring and excavation, dual-box tunnel concrete tunnel construction, and reinstatement 1996 – 2005: Senior Project Manager, Walter Construction Corporation, Richmond, BC, supervised the design concept development, including tunnel alignment and profile, station locations, utility relocation, geotechnical soil studies, and construction means and methods and procurements of this Design Build project that included the construction of 1/3-mile of dual-box cut-and-cover tunnel
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: George Brown College, Toronto, Canada, Bachelor of Applied Technology, 1974, Construction Technology (Graduated with Honors)
f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) Project Manager; Golden Ears Bridge Design Build Finance Operate (DBFO) Project; TransLink; Vancouver, British Columbia; 2006 to 2009. Mr. Firman served as the senior site representative for CH2M HILL on the Golden Ears project. He managed design and construction of the \$800 million urban infrastructure and bridge project, which includes a 2/3-mile-long, six-lane, stay-cable bridge crossing the Fraser River. He oversaw the specifications and drawings that produced more than 2.5-miles of viaduct and ramp construction and related bridge underpass structures and interchange construction as well as road construction and realignment and utility relocations. Mr. Firman oversaw daily technical components of the project including maintenance of traffic, public engagement, and pavement markings, traffic staging, administration, and served as construction liaison. The project was routed through commercial, industrial, residential, and agricultural areas, as well as sensitive environmental sites, and included 10 railway crossings both

elevated and at grade. Numerous overpass, underpass, and bridge structures were designed and constructed to cross and interconnect with existing highways, and cross sensitive habitat and railways. Mr. Firman supervised more than three miles of municipal road improvements to improve traffic flows and he facilitated the integration of the new crossings into the existing roadway network. Because of Mr. Firman's oversight the Golden Ears Bridge and eight-mile road network opened ahead of schedule in June 2009.

Experience Prior to CH2M HILL

Project Manager; Canada Line, Cut-and-Cover Tunnel Segment; SNC-Lavalin Inc.; Vancouver, British Columbia; 2005 - 2006. Mr. Firman was responsible for the design and construction of a 3.75 mile-long section of the Canada Line (Richmond Airport Vancouver Rapid Transit Project), which is located below a main traffic artery along a major urban thoroughfare in Vancouver. The project involved combined side-by-side and stacked tunnels and an approximately 400-foot tunnel from concrete pours. Mr. Firman was directly involved in utility relocation, design concept development, constructability reviews, tunnel alignment and profile, station locations, construction means and methods, procurements, civil construction, including shoring and excavation, dual-box tunnel concrete tunnel construction, and reinstatement. His construction QC functions included excavation areas with depths to 46 feet and early corrective actions for the concrete pours. He also managed the contract administration, which included cost/schedule controls and subcontracting. The Design Build transportation project involved major maintenance of traffic initiatives, and he supervised ongoing interaction with commercial, residential and municipal stakeholders and their access to these properties while minimizing their inconvenience through community consultations; client interfaces; environmental permitting; development and implementation of the project quality and safety programs.

Project Manager; New Westminster Tunnel – SkyTrain Millennium Line; Walter Construction Corporation; New Westminster, British Columbia; 1999 to 2001. Mr. Firman was involved in the design concept development, including tunnel alignment and profile, station locations, utility relocation, geotechnical soil studies, and construction means and methods and procurements of this \$26 million fixed-price, Design Build project that included the construction of 1/3-mile of dual-box cut-and-cover tunnel, 1/6-mile of at-grade guideway, electrical substations, and emergency ventilation systems. Major traffic disruptions were possible since the tunnel was routed under a six-lane approach to a commuter bridge (the project bisected two major urban roadways), requiring construction of a temporary traffic deck. The original concept called for traffic disruptions throughout several weeks and some complete closure periods for cut-and-cover work. Mr. Firman initiated a "top-down" solution, which resulted in minimal street level interference and the tunnel was constructed at night on two weekends, while maintaining traffic flow at all times. He separated several critical utility relocations from work requiring the delayed permits, allowing the project to stay on schedule and remaining work to be performed when permits were issued. The construction and traffic management plans were developed with input from the cities of Vancouver and Richmond prior to construction, contained details on how traffic was controlled to minimize the impact on pedestrians and drivers. He piloted an innovative traffic management solution and was in close contact with local residents, local businesses and emergency services to maintain access to properties, while minimizing inconvenience and maintaining life/safety. A Community Liaison and Notification Program also was implemented during construction. Mr. Firman's daily oversight role included construction QC and contract administration functions, which included posting local business opportunities promoting local disadvantaged business participation. This project received the award for "Excellence in Construction Management" from the project owner.

Project Manager; Annacis Island Wastewater Treatment Plant; Walter Construction Corporation; Delta, British Columbia; 1995 to 1998. The Annacis Island Water Treatment Plant is one of five treatment plants for wastewater throughout the Metro Vancouver area. It is the largest, serving one million residents and is a secondary treatment facility. Mr. Firman's responsibilities included construction and contract administration of eight separately administered prime contracts with an aggregate value of \$220 million, including responsibility for financial and schedule performance, subcontract management, client interface, coordination and liaising with plant operations staff. These included complete secondary treatment facilities, as well as major upgrades to the primary treatment system. The project involved the study, preliminary design, detailed design, and construction of treatment facilities. His oversight included the Construction Quality control program and project safety plans for construction of a fixed-price secondary treatment facilities and primary plant upgrades (Project value: \$220 million.)

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Ben Lineberry, PE, Quality Assurance Manager
b. Project Assignment: Quality Assurance Manager
c. Name of Firm with which you are now associated: CH2M HILL Volkert, Inc.
d. Years experience: With this Firm <u>2.5</u> Years With Other Firms <u>18</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): 2009 – Present: Volkert, Inc., Construction Manager, Mr. Lineberry is responsible for management of construction inspection projects for VDOT and local governments in Virginia, including the supervision of inspection personnel, QA activities including preparatory inspection meetings and resolution of nonconformance issues to assure compliance with VDOT standards and client satisfaction, works collaboratively with clients, designers, and contractors to resolve design, construction, and quality issues. 2004 – 2009: Virginia Dept. of Transportation, Area Construction Engineer, Staunton District, Responsible for the direct oversight and management of contract construction for a wide range of projects related to highways, structures, drainage and maintenance in six counties. 1999 – 2005: Virginia Dept. of Transportation, Assistant Resident Engineer, Staunton District, Oversight of preliminary engineering, right-of-way, and construction of wide range of transportation projects, managed construction inspectors, developed and assisted in administering the Six-Year Secondary Roads Construction Plan, and oversight of Land Development Section. 1998 –1999: Thompson + Litton, Inc., Project Manager and Construction Administrator, Managed construction projects and supervised inspectors. 1996 – 1998: Town of Easton, Maryland, Assistant Town Engineer Managed the design and construction and maintenance projects related to the town’s civil infrastructure, managed the daily operations and personnel of the Department of Public Works, and administered annual operating and capital budgets.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: BS / 1990 / Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1998, Professional Engineer, 032576
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) <i>Experience with Volkert, Inc.</i> Construction Manager, Route 11 / Route 460 Widening, Salem, VDOT, 2010-2013. Mr. Lineberry manages all aspects of construction inspection, materials testing, and contract administration for the widening of a 2.2-mile section of primary roadway from three to five lanes. The \$22.6-million construction project includes a raised median, center- and

right-turn lanes at intersections and crossovers, a 40-foot long bridge, a triple-box culvert, a double-box culvert, and an extensive storm drainage system with stormwater management ponds and outfalls under the Norfolk Southern Railroad (NSRR) tracks into the Roanoke River; more than two miles of water and sewer main installations. Mr. Lineberry also assigns staff and evaluates performance; conducts plan and schedule review; monitors schedule and budget; conducts preparatory, progress, partnering, and utility coordination meetings; and confirms that documents and project records are organized, accurate, and updated and project payments are administered correctly. He works with the contractor to proactively identify potential problems and plans strategies for avoiding them and to resolve field issues and nonconforming work. He coordinated with contractor and Western Virginia Water Authority to resolve numerous utility conflicts and with the NSRR for the micro-tunneling of a 72-inch storm drain and a 66-inch steel casing under the railroad tracks in two locations.

Experience with VDOT

Area Construction Engineer, I-81 / Routes 50/ Route 522 Interchange Reconstruction, City of Winchester, VDOT 2006-2007. Mr. Lineberry managed (on behalf of VDOT) the inspection and reconstruction of an urban cloverleaf interchange to eliminate safety hazards. Managed the QA to verify that the construction of the complete bridge replacement widening project complied with the Specifications, Standards, and Contract Documents. Managed the inspection and testing personnel and conducted preparatory meetings and inspections before major construction activities. Due to scheduling and incentive/disincentive provisions, it was crucial to closely monitor and update the schedule and proactively resolve issues before schedule or cost were affected. He worked closely with the FHWA Area Engineer to gain approval of changes in the construction work and plans. Specifically, he gained approval of changes to the foundation for the bridge pier and modifications to the final traffic configuration and alignment. The approval involved significant detailed analyses and cost estimating to confirm the changes are appropriate and cost effective to FHWA and VDOT. The \$8-million project involved the reconstruction and realignment of the I-81 northbound entrance ramp including a new bridge over Abrams Creek utilizing some of the longest concrete bulb –T beams used in Virginia. The southbound off-ramp and deceleration lane were rebuilt to eliminate a dangerous high-speed weave movement on southbound I-81. The project improved the level-of-service of the intersections of Route 50 / Route 522 and I-81 northbound access ramp by constructing multiple turn-lanes, through lanes, and realigned right-turn lanes. This saved VDOT more than \$100,000 by redesigning the construction of the Northbound on-ramp. In addition, the redesign of the Southbound off ramp connection to Route 50 where significant improvements in flow of traffic and maneuverability by large trucks through the intersection were realized.

Assistant Resident Engineer, I-81 Exit 323 Interchange Widening and Reconstruction, Winchester, VDOT, (2002-2003). Mr. Lineberry managed (on behalf of VDOT) the reconstruction of interstate interchange to increase capacity and eliminate a deficient bridge over the interstate. He managed the QA to verify that the construction with the specifications, standards, and contract documents and managed inspection and testing personnel and conducted preparatory meetings and inspections before major construction activities. He oversaw of materials testing, including density, moisture, slump, and air content of concrete, and compressive strength on concrete and addressed nonconformance issues regarding concrete quality and failed subgrades, monitored corrective actions, and maintained detailed documentation. Due to scheduling and incentive/disincentive provisions, it was crucial to closely monitor and update the schedule and proactively resolve issues before schedule or cost were affected. Mr. Lineberry worked closely with the FHWA Area Engineer to gain approval of changes in the construction work and plans. The \$7-million project involved reconstruction and widening of a two-lane bridge over I-81 to six lanes, the reconstruction and lengthening of all access ramps, and overhead signage and signalization. In addition, the intersection with Route 11 was widened and improved with additional turning lanes and new signalization. The MOT was a significant due to the site's proximity to a large truck stop and the West Virginia state line. The ramps were modified so they could remain in service.

Assistant Resident Engineer, Winchester Medical Center Interchange, Winchester, VDOT, (2003-2005). Mr. Lineberry managed (on behalf of VDOT) the design and construction of a new trumpet interchange on Route 37 to service the Winchester Medical Center and Shenandoah University Medical College. The \$12 million interchange project included a 400-foot bridge with ramps, collector / distributor roads, and access roads to the Medical Center. The bridge included drilled shaft deep foundations for the piers and the abutments. The work included relocations of four-inch sanitary sewer force main and 12-inch water main that was in conflict with the bridge. High voltage transmission overhead power lines created challenges in installing the drilled shafts on one abutment due to the limited overhead clearance. He managed the QA to verify that construction complied with the specifications, standards, and contract documents and managed inspection and testing personnel and conducted preparatory meetings before major construction activities. He oversaw materials testing, addressed noncompliance issues, monitored corrective actions, oversaw schedules, budget, and compliance with work zone safety, environmental, and EEO/DBE regulations.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Stephanie Hart, PE, Design Lead and Design Manager
b. Project Assignment: Design Manager
c. Name of Firm with which you are now associated: CH2M HILL
d. Years experience: With this Firm <u>10</u> Years With Other Firms <u>15</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): 2001 – Present: Design Lead and Deputy Design Manager, CH2M HILL, Virginia, Lead design manager on three Virginia design-build projects. Manages multidiscipline design teams and subconsultants, while providing oversight of designs on roadway widening, new roadway, and intersection improvements for both urban and rural locations. Experienced in design quality assurance and quality control, roadway horizontal and vertical design geometrics, plan detailing and preparation, cross sections, traffic control design, constructibility reviews, right-of-way design, utility coordination, signal plan preparation, signing and pavement marking plan development, quantity take-offs, specifications, and special provision preparation for a variety of roadway and bridge improvement projects. 1994 – 2001: Project Manager, L Robert Kimball and Associates, Virginia, Responsible for managing performance of all design tasks on assigned transportation projects. Duties included supervision of project teams, coordination of roadway and bridge design efforts, and client, agency, and utility coordination. Performed various engineering design tasks for highway construction projects. Major design responsibilities included horizontal and vertical roadway geometry, maintenance of traffic and constructibility reviews, public involvement, right-of-way coordination, utility coordination, design quality assurance and quality control, quantity calculations, and cost estimates.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Pittsburgh, Johnstown, PA, B.S., 1986, Mechanical Engineering Technology
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1997, Professional Engineer, 0402 029309
g. Document the extent and depth of your experience and qualifications relevant to the Project. <ol style="list-style-type: none">1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i>2. <i>Note whether experience is with current firm or with other firm.</i>3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) CH2M HILL Design Manager and Task Leader; Route 288 - PPTA Design-Build Project; Virginia Department of Transportation; Chesterfield, Powhatan, and Goochland Counties, Virginia, 2001 to 2004. Ms. Hart's duties included design-build integration during construction and project work featured design completion of more than 17 miles of interstate standard roadway and eight interchanges. These included: 288/Powwhite Parkway (Rte 76) existing interchange, new bridge to accommodate additional lanes of 288 over six-lane roadway (Rte 76) 288/Lucks Lane existing interchange, widened bridge over 288, ramp work 288/Woolridge Road new interchange Woolridge four-lane roadway over 288

288/Huguenot Trail (Rte 711) - new diamond interchange Rte 711 four-lane roadway over 288
288/Patterson Avenue (Rte 6) – new full cloverleaf interchange 288 over six-lane road (Rte 6)
288/West Creek Parkway - new interchange West Creek Parkway four-lane roadway over 288
288/Ridgefield Parkway – new interchange Ridgefield Parkway six-lane roadway over 288
288/Broad Street (Rte 250) - new diamond interchange 288 over Rte 250
288/I-64 – new interchange with I -64

Ms. Hart managed the preparation of signing, pavement marking, and delineator plans for the Chesterfield and Powhatan portion of the project and she worked with the contractor to improve the engineering design and achieve construction cost savings by modifying components of every interchange. She led design build integration during the critical construction phase of the project. Construction managers relied on the immediate response to required design changes to meet schedule requirements and improve quality.

Roadway Design Manager, I-81 Design-Build Corridor Safety and Operational Improvements, VDOT, Salem, Virginia, 2011 – Ongoing. This project includes the design and construction of a truck climbing lane in the southbound direction of I-81 from Mile Marker 120, where the two-lane section changes to a three-lane section, to Mile Marker 125, where the new lane connects to the existing lane. Ms. Hart is managing the replacement of three bridges located at Route 641 (Den Hill Road), Route 636 (Friendship Road), and Route 636 (Seneca Hollow Road); the improvement of the existing I- 81 southbound shoulders; the upgrading of all guardrails to meet current standards; retaining walls as needed; the widening and improvements at connections to bridges; and the design and construction of necessary drainage improvements. She is overseeing the design approaches to the bridges, which were modified to eliminate any curvature or superelevation transition on the bridges. This is improving safety, eliminating the need for deck drains on the bridge and improving the durability of and maintenance. Integral abutments are being utilized to eliminate joints on the bridge. The design of the I-81 crossing over Den Hill Road and the Norfolk Southern Railroad (NSRR) were completed far ahead of the typical schedule. Because of Ms. Hart’s knowledge of the railroad, AREMA, and NSRR requirements, and close coordination with NSRR, approval of designs was obtained in half the usual time, allowing construction to begin in spring rather than fall, thus taking advantage of the summer construction season.

Design Lead and Deputy Design Manager; Sudley Manor Drive/Linton Hall Road– PPTA Design Build Project; Virginia Department of Transportation; Prince William County, Virginia; 2004 to 2009. Ms. Hart supervised the Sudley Manor Drive project. This included the design and construction of a bridge with MSE walls over the Norfolk Southern Railroad, 3.5 miles of a four-lane divided roadway, including three traffic signals and one box culvert. As design lead and deputy design manager, Ms. Hart's design phase duties included management of signal design, bridge design, traffic engineering, and geotechnical work. She managed maintenance of traffic plan preparation and approval with VDOT to ensure the highest level of safety as well as maintenance of traffic plan development including regular meetings with the construction staff. She managed signing and pavement marking plan preparation and approval, conducted weekly team meetings, and participated in value engineering reviews and constructability reviews. Within one year of project startup, Ms. Hart became Design Manager and was responsible for resolving final VDOT comments and request for information from construction staff.

Design Manager and Deputy Project Manager, Linton Hall Road, Prince William County, Virginia, 2006. The project includes the design and construction of 1.4 miles of roadway valued at \$42 million. Linton Hall Road was reconstructed from two lanes to a four-lane divided roadway, including a new four-lane bridge over Broad Run and modifications to two traffic signals. As design manager, Ms. Hart coordinated with the VDOT project manager to obtain design acceptance. She managed the coordination of maintenance of traffic, utility relocations, signing and striping, right-of-way, road design, drainage design, signal design, structural design, and environmental. The roadway improvements were also synchronized with developers along the corridor. She was also responsible for request for information from construction staff. The agreement with Prince William County included MOT, right-of-way negotiations and acquisition, utility relocation, complete environmental permitting, and stakeholder coordination, all of which she managed. The Linton Hall Road Bridge project was completed with zero deficiencies; this was the first time in VDOT history that a bridge project was completed with no deficiencies and was completed seven months early.

Design Manager, Traffic Safety Improvements, DDOT, Washington, DC Eastern Federal Lands, 2003–2005. Ms. Hart was the design manager for an urban multiple-intersection roadway rehabilitation project with complex traffic management elements and scope that included repaving, new curbs, and relocation of drainage facilities. She redesigned eight high-crash locations within the District of Columbia and led design of safety improvements, including extensive MOT in an urban setting, restriping lanes and crosswalks, construction of new curb ramps, relocation of traffic signals, and resigning. She enlisted and oversaw senior reviewers to quality check the plans and was responsible for multiple plan submittals and final plans, specifications, and estimates. Ms. Hart organized a constructability review prior to submitting the final plans as well as prepared special contract requirements, engineer’s estimate, and quantity computations.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Edward Kitzman, Construction Manager
b. Project Assignment: Construction Manager
c. Name of Firm with which you are now associated: CH2M HILL
d. Years experience: With this Firm <u>1</u> Years With Other Firms <u>21</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): 2011: Construction Manager, CH2M HILL, Responsible for the improvement of a major urban intersection project that includes more than 120 piers and abutments, multiple retained earth walls, and nearly 100 precast and curved structural steel spans, direct connector approach areas, realignment of frontage roads, utility relocation, drainage improvements, landscaping, and aesthetic treatments; also responsible for a Design Build project, which includes the widening of I-81 by excavating and embanking more than 1M cy ³ of rock and the removal and replacement of two structures and the phased construction of another structure over Norfolk Southern Railroad as well as overseeing work including MOT, a roadway, modeling, drainage, marking and right of way, relocation and various other planning activities. 2004 – 2011: Project Manager / Technical Manager / Superintendent, Fru-Con Construction Co., Provided all preconstruction planning, directed the construction engineering effort, oversaw shop drawing development, daily management of the project, dealt with the owner on all issues, and monitored job costs and production and coordinated all engineering efforts and construction sequences, identified and corrected nonproductive work methods, and managed operations of launching gantries, underslung trusses, erection on false work, and main span cantilever erection 2003 – 2004: Bridge Division Manager, E.S. Wagner Construction, Ohio and South Carolina, Responsible for company Bridge Divisions in Ohio and South Carolina, including the management of multiple bridge projects, preparation of estimates and schedules, financial reporting for division, subcontractor negotiation and management, and safety and quality control compliance 2001 – 2003: Project Manager, C.J. Mahan Construction, Ohio, Responsible for the daily management of a major cable stayed bridge project, technical management of two small cable stayed structures, and estimating additional bridge projects 1999 – 2001: Project Manager, S.E. Johnson Companies, Ohio, Responsible for the management of several projects, including a fast track design build Interstate roadway reconstruction project from preconstruction through completion and the schedule recovery of multiple structures associated with an Interstate third lane widening project 1989 – 1999: Service & Development Unit Chief, Illinois Department of Transportation, Illinois, Managed the data processing and automation equipment systems; coordinated budget contracts; provided administrative, personnel, and training services; coordinated word processing activities; and maintained and enhanced the automated filing and record retrieval system of project files, personnel files, structural design library
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Mr. Kitzman has completed two years toward an engineering degree from Southwestern Illinois College.
f. Active Registration: Year First Registered/ Discipline/VA Registration #: N/A
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i>

3. *Provide beginning and end dates for each assignment.*

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

Construction Manager, CH2M HILL, Zachry Construction JV, Americas Gateway Interchange, El Paso, Texas, October 2001 – Present. Mr. Kitzman is managing this Design Build project that involves the improvement of a major intersection between the US and Mexico. He is supervising the construction, which includes more than 120 piers and abutments, multiple retained earth walls, and nearly 100 precast and curved structural steel spans, all without significant traffic interruptions of this major urban interchange. Mr. Kitzman is managing the initial phase of the project: This includes the design and construction of three new ramps in the existing interchange at I-10 and Loop 375. An additional option may be exercised by the Camino Real Regional Mobility Authority that would add a fourth connector ramp. In addition to the ramp construction, the scope of work consists of: widening of I-10 and Loop 375 at the direct connector approach areas; realignment of frontage roads; utility relocation; drainage improvements, landscaping, and aesthetic treatments, all of which Mr. Kitzman is currently supervising.

Structures Manager, CH2M HILL, Faulconer Construction JV, I-81 Truck Climbing Lanes, Christiansburg, Virginia, March 2010 – Present. This project includes the design and construction of a truck climbing lane in the southbound direction of I-81 from Mile Marker 120, where the two-lane section changes to a three-lane section, to Mile Marker 125, where the new lane connects to the existing lane. Mr. Kitzman is overseeing the Design Build project, which includes the widening of I-81 by excavating and embanking more than 1M cy³ of rock and the removal and replacement of two structures and the phased construction of another structure over Norfolk Southern Railroad (NSRR) tracks. Mr. Kitzman is providing construction design support of I-81 over NSRR: The total project length is roughly five miles, including transitions and tapers. He is overseeing work including MOT, a roadway, modeling, drainage, marking and right of way. As construction lead, he also is responsible for the utility relocation and various other planning activities.

Experience Prior to CH2M HILL

Fru-Con Construction Co., Bilfinger Berger Civil Inc., BB Canada Inc, Project Manager/Technical Manager/Superintendent, Napoleon, Ohio, 2004 – 2011. Mr. Kitzman oversaw the construction of **Perry Street Bridge**, a fast track bridge replacement project that required removal and reconstruction within 250 calendar days utilizing precast, post-tensioned, spliced, concrete I girders, a first in the US. He provided all preconstruction planning, directed the construction engineering effort, oversaw shop drawing development, daily management of the project, dealt with the owner on all issues, and monitored job costs and production. In addition to completing the project 30 days ahead of schedule, the project overcame an underbid amount of \$3M and more than \$ 1M in bid errors to post a 5 percent margin. This project won the 2007 Engineering Excellence “Grand Award” from the American Council of Engineering.

Fru-Con Construction Co., Bilfinger Berger Civil Inc., BB Canada Inc, Project Manager/Technical Manager/Superintendent, Maumee River Crossing, Toledo, Ohio, 2004 – 2011. Mr. Kitzman supervised the Maumee River Crossing project, a major precast segmental cable stay bridge project with more than 150 approach and ramp spans, a unique single pylon, and a 1,250-foot cantilever constructed main span. As Superstructure Erection Superintendent/Manager, he coordinated all engineering efforts and construction sequences, identified and corrected nonproductive work methods, and managed operations of launching gantries, underslung trusses, erection on false work, and main span cantilever erection, completing nearly 80 percent of the project superstructure in less than 12 months. As Project Manager, he completed an independent cost analysis to determine project status, halted inefficient work practices, and reorganized work effort to complete the project more efficiently.

Fru-Con Construction Co., Bilfinger Berger Civil Inc., BB Canada Inc, Project Manager / Technical Manager / Superintendent, Golden Ears Bridge, Vancouver, British Columbia, 2004 – 2011. – The Golden Ears project included a signature design, six-lane cable stay bridge across the environmentally sensitive Fraser River with an overall length of 3,300 feet. Mr. Kitzman oversaw the construction of more than eight miles of new four- and six-lane controlled access arterial roads on both sides of the Fraser River. He managed teams of engineers who designed and constructed numerous overpasses, underpasses, and bridge structures that crossed and interconnected with existing highways, and crossed sensitive habitats and railways. More than three miles of municipal road improvements were undertaken to improve traffic flows and facilitate the integration of the new crossing into the existing roadway network. The Golden Ears Bridge and eight-mile road network opened ahead of schedule in June 2009.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.
a. Name & Title: Todd Springer, PE, Lead Structural Engineer
b. Project Assignment: Lead Structural Engineer
c. Name of Firm with which you are now associated: CH2M HILL
d. Years experience: With this Firm <u>8</u> Years With Other Firms <u>10</u> Years Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years. (NOTE: If you have less than 15 years of experience, please list all of your experience for those years you have worked.): 2003–Present: Lead Bridge Engineer, CH2M HILL, Virginia, structural design, maintenance of traffic, roadway construction, 3-D modeling, drainage, signing and pavement marking, installation of foundation structures and design review, requests for information, design changes, shop drawing reviews, coordination with VDOT and continued communications with the construction team, concepts for bridges and retaining walls, constructability, and utility conflicts 2002–2003: Lead Bridge Engineer, Parsons Brinckerhoff, Michigan, oversaw the geometric evaluations, alternatives development, traffic analysis, and preparation of an EIS, public involvement, developed a web page, and coordinated a technical advisory and project steering committees 1997–2002: Senior Structural Engineer & Project Manager, LEA Consulting Ltd., Ontario, Responsible for day-to-day coordination of bridge engineers in the development of contract packages (plans, specifications, quantities, cost estimates, etc.) for new bridges or complete bridge replacements; bridge rehabilitations and widenings; retaining walls, and related structures for numerous bridge and major interchange projects. Work included development of bridge concepts, preliminary design (type, size and location), final design and support during construction 1994–1997: Structural Engineer & Project Engineer, TSH Associates Ltd., Ontario; Responsible for day-to-day coordination of bridge engineers in the development of contract packages (plans, specifications, quantities, cost estimates, etc.) for new bridges or complete bridge replacements; bridge rehabilitations and widenings; retaining walls, and related structures for numerous bridge and major interchange projects.
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Waterloo, Ontario, Canada, M.A.S.C., 1998, Civil Engineering, (Structural Focus) University of Waterloo, Ontario, Canada, B.A.Sc., 1993, Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2006, Professional Engineer, 0402 042790
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your specific responsibilities and authorities for each assignment, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each assignment.</i> (List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.) CH2M HILL Structures Lead, I-81 Design-Build Corridor Safety and Operational Improvements, VDOT, Salem, Virginia, 2011–Ongoing. This project includes the design and construction of a truck climbing lane in the southbound direction of I-81 from Mile Marker 120, where the two-lane section changes to a three-lane section, to Mile Marker 125, where the

new lane connects to the existing lane. Mr. Springer is providing structural design of I-81 over Norfolk Southern Railroad, Den Hill Road, Friendship Road, and Seneca Hollow Road. The total project length is roughly five miles, including transitions and tapers. He is overseeing work including MOT, roadway construction, 3-D modeling, drainage, signing and pavement marking. As structures lead, he also is responsible for the installation of foundation structures and review of the design, based on his review of site conditions and construction activities.

Lead Bridge Engineer, Sudley Manor Drive/Linton Hall Road PPTA Design-Build Project, Prince William County, Virginia, 2004–2007. Mr. Springer led the delivery of contract package and services during construction while minimizing inconvenience to the traveling public on this project. During construction, he oversaw the dismantling and removal of parts of existing structures, and installation of foundation structures. The project involved replacing an existing bridge with new dual bridges. He provided ongoing collaboration with construction team to address requests for information, design changes, and shop drawing reviews and ensured that construction conformed to required design criteria. He directed coordination with VDOT and continued communications with the construction team as well as managed the value engineering for the bridge and created a 25 percent reduction in the original \$4.9 million bridge construction cost. Mr. Springer was responsible for innovations including a reduced number of girder lines and a unique substructure and foundation system involving a single row of drilled shafts at the piers and abutments to accommodate severe scour depths. He managed road design, environmental permitting, and geotechnical teams to ensure that all construction conformed to initial design. Mr. Springer led coordination with VDOT, continued interface in construction, and led the value engineering redesign of the bridge to reduce the original \$3.3 million bridge cost by \$200,000. His innovative actions included changing from concrete girders to steel girders supplied by a steel fabricator located within walking distance of the site, and reducing approval time from the Norfolk Southern Railroad by modifying foundation type.

Structures and Bridge, Northern Virginia MegaProjects Program, VDOT, 2007–Ongoing. ATCS/CH2M HILL is the general engineering consultant for VDOT's Regional Program, involving five MegaProjects with a total construction cost of \$7 billion. As structure and bridge manager for the GEC program, Mr. Springer oversees all structure and bridge staff and works with the project managers for each project to serve their needs and also modifies project designs, when necessary.

Lead Bridge Engineer/Bridge Task Manager, I-295/11th Street Bridges, District of Columbia Department of Transportation, Washington DC, 2005–Ongoing. This project scope includes preparing a final environmental impact statement and developing functional plans. As lead bridge engineer, his responsibilities include developing structural concepts for bridges and retaining walls, and working with other disciplines on maintenance of traffic, constructability, and utility conflicts. The project involves two interdependent roadway networks with more than 23 new bridges and 35 new retaining walls. It also includes main bridges carrying regional traffic over the Anacostia River to connect I-295/DC-295 and I-695 and a new bridge that carries 11th Street over the Anacostia River. As the lead bride engineer and bridge task manager, Mr. Springer is responsible for the structural design of the bridges and retaining walls. He also managed erecting the bridge girders and review of the design on this urban interchange project.

Project Manager, I-94 Jackson Freeway Modernization, University Region, Michigan Department of Transportation, Jackson, Michigan, July 2002–2007. Mr. Springer's responsibilities included conceptual design of 18 bridges. The project involved improvement of nine miles of freeway with eight interchanges, including two freeway-to-freeway system interchanges and associated quality assurance/quality control activities. Mr. Springer oversaw the study phase of this project, which included geometric evaluation, alternatives development and evaluation, traffic analysis, and preparation of an EIS. Public involvement activities were extensive on this project and were facilitated by conducting three informal public meetings and a public hearing, developing a web page, and coordinating a technical advisory and project steering committees, which fell under his purview as well.



ATTACHMENT 4.3.1.5(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Designer.	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(1) I-10 Americas Interchange Design-Build, El Paso, TX	<p>Lead Designer: Americas Gateway Builders (CH2M HILL Joint Venture)</p> <p>PROJECT ACHIEVEMENTS: Designed and implemented innovative traffic control measures and temporary detours to allow completion of construction and minimize traffic and construction delays for this major interstate highway interchange. • Incorporated the project aesthetic requirements into the substructure design requirements and construction approach to minimize the overall schedule.</p> <p>The Camino Real Regional Mobility awarded Americas Gateway Builders the Americas Interchange Project based on the best value criterion - a balance of capital cost, construction schedule, and traffic impacts. This \$109 million design build project is centered on an ultimate four level, fully directional interstate highway interchange located in an urban environment within limited geographical constraints. This phase of the project includes the construction of three new direct connector ramps within the existing interchange with an option that the Authority may exercise to add a fourth connector. Primary work includes:</p> <ul style="list-style-type: none"> • Widening of I-10 and Loop 375 to accommodate the interchange improvements • Construction of three elevated direct connector ramps, including curved steel ramps • Access ramp relocation • Realignment of roadways • Design and relocation of 13 impacted utilities • Drainage improvements • Maintenance of traffic and access management <p>The best value solution included long-span curved-plate girder ramps over I-10 and Loop 375. Our design team worked with our construction team to provide a solution for the superstructure which incorporated the engineering design requirements while addressing construction approach which minimized construction impacts and long-term maintenance. Our substructure design incorporated the project aesthetic requirements as well as the design requirements and construction approach to minimize the overall schedule. New alignments were required for the frontage roads to accommodate the new direct connect ramps. We designed and implemented innovative traffic control measures and temporary detours to allow completion of construction and minimize traffic and construction delays.</p> <p>The El Paso area can have large storms producing significant runoff within short time periods. The project incorporated detailed modeling of existing and proposed drainage condition, extensive drainage improvements, including eliminating the existing overflow onto frontage roads, outlet sumps and energy dissipaters to minimize downstream sediment and water velocity.</p> <p>Our team created work plans, provided site support, scheduled service interruptions, and reviewed invoices for all utility relocations. We led electrical, gas, and fiber optic foremen analyzing plans, ordering materials, and directing construction changes due to field conditions.</p> <p>RELEVANCE TO I-581/VALLEY VIEW INTERCHANGE PROJECT:</p> <ul style="list-style-type: none"> • Major interstate highway interchange • Located in urban environment • Roadway realignment • Bridge widening • Relocation of utilities • MOT/access management 	Raymond Telles Camino Real Regional Mobility Authority 2 Civic Center Plaza El Paso, TX 79901 915-541-4986	January 2014	January 2014	TOTAL: \$108,000	TOTAL: \$108,000	TOTAL: \$108,000

ATTACHMENT 4.3.1.5(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Designer.	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(2) Sudley Manor Drive/Linton Hall Road Design-Build, Manassas, VA	<p>Lead Designer: CH2M HILL</p> <p>PROJECT ACHIEVEMENTS: All phases completed ahead of schedule. ● Design and construction of four-lane divided roadway in an urban environment with a new bridge over Broad Run, and intersection improvements.</p> <p>CH2M HILL was the prime contractor and lead designer responsible for delivering these projects to Prince William County (PWC) and final acceptance by VDOT into the state highway system. Sudley Manor Drive and Linton Hall Road are two primary arterials located in one of the fastest growing areas of the country. Improvements to these facilities enhanced regional mobility and safety, and supported continued economic development in the area.</p> <p>Sudley Manor Drive. The project was constructed as a four-lane divided roadway on new alignment. This 2-mile segment provides signalized intersections at four locations to enhance access from nearby residential subdivisions. The project was broken into three separate phases. Work began in all three phases simultaneously with the main focus of construction activities concentrated on phase two due to the right of way in this phase being proffered. At the same time, right of way acquisition for phases two and three were advanced with a concentration on areas where utility relocations were required in order to perform these relocations as quickly as possible.</p> <p>Based on a preliminary field survey, the most significant environmental impacts caused by the proposed project were impacts to wetlands and sensitive waterways. The project required general water protection permits from the Virginia Department of Environmental Quality and statewide general or individual permits from the U.S. Army Corps of Engineers. Wetland surveys were conducted to delineate and survey wetlands in support of permitting activities.</p> <p>A new 82-lineal-foot bridge with MSE wall abutments was built over the Norfolk Southern Railroad (NSRR) and provided sufficient horizontal clearance to add another track in the future. This work was performed adjacent to the NSRR with up to 12 trains passing through the construction area daily. The MSE walls were constructed in close proximity to environmental permitted areas, which were flagged and monitored on a daily basis to ensure permit compliance. An existing sanitary sewer was relocated from within the proposed roadway footprint and included a jack and bore underneath the railroad.</p> <p>Linton Hall Road. Based on our outstanding performance on the \$30 million base contract, CH2M HILL was awarded a \$42 million change order to the initial contract to design and construct four lanes on the remaining two-lane section of Linton Hall Road from Broad Run to Route 28. Our team took the plans, which were at the 30 percent stage, and finalized the design. In addition to constructing a four-lane divided section of roadway, this project includes a new 204-lineal-foot integral abutment bridge over Broad Run and improvements to two signalized intersections. Other professional services that CH2M HILL provided to PWC on this project included:</p> <ul style="list-style-type: none"> ● Traffic studies ● Access control studies and approval ● Hydraulic and hydrologic analyses ● Geotechnical investigations and design ● Environmental mitigation, permitting, and monitoring ● Purchasing wetland mitigation and stream mitigation credits from local mitigation banks ● Right-of-way acquisition ● Utility relocations, including identifying all affected utilities and coordinating utility designs and relocation <p>RELEVANCE TO I-581/VALLEY VIEW INTERCHANGE PROJECT:</p> <ul style="list-style-type: none"> ● Located in urban environment ● Roadway realignment ● Bridge widening ● Relocation of utilities ● MOT/access management 	Tom Blaser, Director of Transportation Prince William County 1 County Complex Court Prince William County, VA 22192 703-792-6824	May 2009	May 2009	\$30,000	\$72,000 (The client added a \$42 million amendment)	\$72,000

ATTACHMENT 4.3.1.5(a)
LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Contractor - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Designer.	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(3) I-15 North Corridor Design-Build Project – US 95 to Craig Road, Las Vegas, NV	<p>Lead Designer: CH2M HILL</p> <p>PROJECT ACHIEVEMENTS: Constructed in a tight urban footprint with heavy traffic and under a tight schedule. ● Innovative MOT implementation during construction enhanced safety by reducing traffic incidents. ● Winner of the 2011 Marvin M. Black Partnering Award. ● Delivered 7.5 months early. ● Named the Safest Contractor of the Year for 2009 by the Nevada Contractor Association and earned \$860,000 in quality control incentives.</p> <p>CH2M HILL managed and completed a complex design-build highway project of I-15 in northern Las Vegas. The project involved a major widening of a 5.8-mile section in an urban environment from 2 to 3 lanes in each direction, including bridge widenings, while minimizing impacts to traffic. The project was located within a tight urban footprint with extensive MOT requirements for heavy traffic conditions and constricted right-of-way, roadway realignment, ramps and auxiliary lanes, bridge and intersection design and construction, extensive utility relocations and coordination under a tight schedule, and collocation of design and construction staff to increase cooperation, partnering, integration, and optimize project delivery. This project is the first transportation design-build project led by NDOT. The project scope included design and construction of the following elements: new freeway ramps; roadway widening and new auxiliary lanes; 406,000 tons of new asphalt pavement surface; 17 miles of new concrete barrier rail; reconfiguration of the Lake Mead Drive interchange; 14 new bridges and 2 bridge widening; 2 miles (137,000 square feet) of new soundwalls; drainage system improvements; 180,000 square feet of pre-cast mechanically stabilized earth retaining walls; and high-mast lighting, traffic signals, local street improvements, landscaping, and ITS.</p> <p>CH2M HILL's project innovation was key to the team's best value project solutions. After reviewing the roadway geometry, our designers modified curvature and centerline location to eliminate a complex widening under a rail bridge and a utility bridge carrying a high-pressure gas line. Our Lake Mead Drive interchange design eliminated 3 bridges proposed in the basic configuration to simplify construction while improving operations through increased capacity, utility, and safety for local and interstate traffic. The introduction of pre-cast girder bridges (not commonly used in the Las Vegas area), coupled with a post-selection innovation allowing two-phase versus three-phase construction, resulted in increased worker and public safety, improved MOT, reduced public inconvenience, and increased access to the work zone, reducing project duration by 5 months.</p> <p>Of the 14 new bridges and 2 bridge widenings, 11 bridges and 1 bridge widenings were constructed within 1 mile of highly congested right-of-way. NCC came into the project with an aggressive target delivery date and using design-build delivery, shortened the project duration through collaboration and communication with NDOT. The design was completed in the first 17 months with an overlapping 22-month construction duration, for a total project duration of just 28 months. NCC finished the job 7½ months ahead of schedule.</p> <p>Effective and safe MOT has been a major factor in our success to-date. At a recent review, the Nevada Highway Patrol and Las Vegas Metro Police Department reported that the number of traffic incidents has actually decreased on I-15 within the project limits and on surface streets since construction started.</p> <p>Acceptance of the project quality plan by all project participants was accomplished through daily 1-on-1 interactions geared to keep client personnel informed and involved; joint, routinely scheduled, and well managed meetings; maintaining transparent processes (NCR, RFI, etc.); and easily accessible project records/documentation (most notably via web-based Sharepoint).</p> <p>RELEVANCE TO I-581/VALLEY VIEW INTERCHANGE PROJECT:</p> <ul style="list-style-type: none"> ● Interstate highway with interchanges ● Located in urban environment ● Roadway realignment ● Bridge widening ● Relocation of utilities ● MOT/access management 	Mary Martini Nevada Department of Transportation 123 East Washington Avenue Las Vegas NV 89101 702-385-6501	August 2010	December 2009	\$242,000	\$252,000 (\$10,000 owner added)	\$252,000

ATTACHMENT 4.3.1.5(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Contractor.	c. Client/Owner/ Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(1) I-81 Design-Build Corridor Safety and Operational Improvements, Salem, VA	<p>Lead Contractor: CH2M HILL</p> <p>PROJECT ACHIEVEMENTS: Significant construction cost reductions achieved through the use of innovative retaining walls and reducing span lengths. • Parallel design efforts reduced the design schedule by 50 percent.</p> <p>CH2M HILL's integrated design-build team is leading the design and construction of a truck climbing lane in the southbound direction of I-81 for 5 miles, including transitions, tapers, and drainage improvements; replacement of 3 bridges; shoulder improvements; upgrading all guardrails; retaining walls; and widening and improvements at bridge connections. The scope of work includes design; environmental permits; right-of-way; roadway; bridges; signage, and QA/QC. The design concepts accommodate future expansion, including widened bridge decks, longer bridge spans and retaining walls; and a longer bridge to accommodate additional railroad tracks under I-81 at the bridge over Norfolk Southern Railway.</p> <p>Roadway Design: Our team delivered the appropriate roadway design concept at the preliminary phase and is executing that design concept through final design, which has been key to staying on schedule. Our understanding of VDOT and diligence in ensuring that all standards are met as a part of our quality process.CH2M HILL used risk analysis and projection tools to identify, evaluate, rate, and mitigate risks to the design-build team and to VDOT. For example, the approaches to the bridges were modified to eliminate curvature or superelevation transition to improve safety, eliminate the need for deck drains, and improve the durability of the bridge.</p> <p>Structural Design: The project includes two road crossings over I-81. CH2M HILL performed the preliminary and final design for the bridges. Both bridges used similar designs with identical details, and the substructures and superstructures were designed in parallel with close and careful coordination between the designers and other disciplines; ultimately, reducing the design schedule by 50 percent. Integral abutments were used to eliminate bridge joints to further reduce VDOT's maintenance requirements.</p> <p>Drainage Design: Particular attention was given to hydraulics and hydrology drainage and low-impact development. CH2M HILL utilized drainage elements that are low-impact and mostly non-structural in nature. Vegetated Swale was installed parallel to the highway and uses amended soils underneath to treat the water coming off the road. Bio-filters, specific areas of porous bio-retention soil media, were implemented to filter out pollutants. Constructed wetlands were placed in low and flat areas to treat stormwater and allow for increased runoff drainage into an area without the fear of negative impacts due to flooding. Natural vegetation was utilized to sustain the wetlands and filter the waste water. The constraints of space in the mountainous region of Southwestern Virginia necessitated two extended detention ponds to detain and then drain significant amounts of water in the difficult terrain. In addition to the steep terrain, CH2M HILL encountered significant challenges presented by the karst geology, which has a tendency to create sinkholes, permeated much of the project area. To prevent over-saturation, the karst was factored into absorption equations and the design had to demonstrate adequate outfall. In full compliance with MS-19 of the Virginia Erosion and Sediment Control Law, CH2M HILL is ensuring that all properties and receiving waterways downstream of the project will be protected from erosion as well as damages from increases in volume, velocity, and peak flow rate of stormwater runoff.</p> <p>Utility Relocation: CH2M HILL worked closely with utility owners to overcome challenges and make changes to the preferred alignment. The team coordinated and discussed conflicts and relocations with the Transmission and Distribution offices of Appalachian Power Company, a division of American Electric Power, Verizon Virginia, Inc, Spectra Energy, Comcast Cable, NTELOS (cell towers), Montgomery County Public Service Authority, and the Town of Christiansburg Utilities and Public Works departments. CH2M HILL shared design plans with utility companies, then reviewed and addressed their comments, working together with these companies to avoid utilities when possible or relocate. A major relocation of a Verizon Fiber Optic Aerial Line immediately adjacent to the old Friendship Road Bridge was accomplished by designing and constructing a new underground cable system that was placed into new conduits beneath the new bridge.</p> <p>Environmental Compliance: We led the environmental documentation and permitting, interstate design, design of 3 bridges (including railroad coordination that was completed 120 days ahead of schedule), development of pioneering low impact development measures for stormwater management, and detailed construction phasing and traffic control plans. The project had complex geotechnical issues and the environmental permitting needed to account for waste and borrow areas during construction. Our staff led the coordination of utility relocations, which was achieved 90 days ahead of schedule, and the acquisition of right-of-way, both part of CH2M HILL's schedule risk. We also led an aggressive 8-month design schedule and gained approval to begin construction on time and under budget. CH2M HILL obtained approvals and gained necessary environmental permits to begin initial construction activities 3 months after NTP and full construction activities 7 months after NTP.</p> <p>MOT/Access: The primary MOT goal is to maintain capacity and normal traffic speed on I-81 throughout construction. During peak hours, two southbound lanes were always kept open, focusing on maintaining safety for commuters and area residents. The high amount of blasting and rock-moving required some daytime closures, such as rolling closures conducted with special attention to safety of motorists. During bridge construction, east/west connectivity is maintained both over and under I-81 for bridge replacements, and all access to private drives have been retained throughout construction. An emergency detour route has been established.</p>	Robert Phlegar, P.E. Program Manager Virginia Department of Transportation 731 Harrison Avenue, Salem, VA 24153 540-378-5083	2013	2013	TOTAL: \$75,370	TOTAL: \$75,370	TOTAL: \$75,370

ATTACHMENT 4.3.1.5(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Designer.	c. Client/Owner/Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(2) Sudley Manor Drive/Linton Hall Road Design-Build, Manassas, VA	<p>Lead Contractor: CH2M HILL</p> <p>PROJECT ACHIEVEMENTS: All phases completed ahead of schedule. ● Design and construction of four-lane divided roadway in an urban environment with a new bridge over Broad Run, and intersection improvements.</p> <p>CH2M HILL was the prime contractor and lead designer responsible for delivering these projects to Prince William County (PWC) and final acceptance by VDOT into the state highway system. Sudley Manor Drive and Linton Hall Road are two primary arterials located in one of the fastest growing areas of the country. Improvements to these facilities enhanced regional mobility and safety, and supported continued economic development in the area.</p> <p>Roadway Design: The Sudley Manor Drive project was designed and constructed as a four-lane divided roadway on new alignment. This 2-mile segment provides signalized intersections at four locations to enhance access from nearby residential subdivisions. Based on our outstanding performance on the \$30 million base contract, CH2M HILL was awarded a \$42 million change order to the initial contract to design and construct four lanes on the remaining two-lane section of Linton Hall Road from Broad Run Creek to Route 28. Our team took the plans, which were at the 30 percent stage, and finalized the design. In addition to constructing a four-lane divided section of roadway, this project includes a new 204-lineal-foot integral abutment bridge over Broad Run Creek and improvements to two signalized intersections.</p> <p>Drainage Design: We used wetland and stream delineation information, where possible, to make minor adjustments to road alignment to minimize wetland and stream impacts. For example, on the Sudley Manor Drive project, we implemented an alternative culvert design that significantly reduced stream impacts caused by traditional culverts. These alternative culverts matched the natural stream channel cross-section, provided the same flow capacity and provided the additional flood control volume in the floodplain at an equivalent cost to traditional culverts, while reducing the erosion that commonly occurs immediately upstream and downstream of road crossings.</p> <p>Utility Relocation: CH2M HILL provided utility coordination and relocation services on both projects, including utility relocations, identifying all affected utilities, and coordinating utility designs and relocation. The team coordinated and discussed conflicts and relocations with utility owners and municipal public works departments. CH2M HILL shared design plans with utility companies, then reviewed and addressed their comments, working together with these companies to avoid utilities when possible or relocate.</p> <p>Environmental Compliance: Based on a preliminary field survey, the most significant environmental impacts caused by the proposed project were impacts to wetlands and sensitive waterways. The project required general water protection permits from the Virginia Department of Environmental Quality and statewide general or individual permits from the U.S. Army Corps of Engineers. Wetland surveys were conducted to delineate and survey wetlands in support of permitting activities.</p> <p>Structural Design: A new 82-lineal-foot bridge with MSE wall abutments was built over the NSRR and provided sufficient horizontal clearance to add another track in the future. This work was performed adjacent to the NSRR with up to 12 trains passing through the construction area daily. The MSE walls was constructed in close proximity to environmental permitted areas, which were flagged and monitored on a daily basis to ensure permit compliance. An existing sanitary sewer was relocated from within the proposed roadway footprint.</p> <p>MOT/Access: Our phased construction plan was developed with the goal of minimizing the impacts to the traveling public and adjacent residential subdivisions during construction. We included in our schedule milestone activities such as community events and minimized the number and duration of traffic shifts needed to accommodate the work. The detailed MOT Plan integrates phasing schemes with the design and construction schedules to minimize the duration of construction impacts and staggers construction to minimize impacts on area stakeholders.</p>	Tom Blaser, Director of Transportation Prince William County 1 County Complex Court Prince William County, VA 22192 703-792-6824	May 2009	May 2009	\$30,000	\$72,000 (The client added a \$42 million amendment)	\$72,000

ATTACHMENT 4.3.1.5(b)
LEAD DESIGNER - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)

Work by Lead Designer - three (3) projects which best illustrates current qualifications relevant to this Project.							
a. Project Name & Location	b. Narrative describing nature of Firm's Responsibilities; Identify the Lead Contractor.	c. Client/Owner/ Project Manager who can verify Firm's responsibilities. Include address and current phone number.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Estimated Value (in Thousands)		
					Original Contract Value	Final or Estimated Contract Value	Dollar Value of Work for Which Firm Was/Is Responsible
(3) I-15 North Corridor Design-Build Project – US 95 to Craig Road, Las Vegas, NV	<p>Lead Contractor: CH2M HILL</p> <p>PROJECT ACHIEVEMENTS: Constructed in a tight urban footprint with heavy traffic and under a tight schedule. • Innovative MOT implementation during construction enhanced safety by reducing traffic incidents — Named the Safest Contractor of the Year for 2009 by the Nevada Contractor Association and earned \$860,000 in quality control incentives. • Delivered 7.5 months early. • Winner of the 2011 Marvin M. Black Partnering Award.</p> <p>CH2M HILL managed and completed a complex design-build highway project of I-15 in northern Las Vegas. The project involved a major widening of a 5.8-mile section in an urban environment from 2 to 3 lanes in each direction, including bridge widenings, while minimizing impacts to traffic. The project was located within a tight urban footprint with extensive MOT requirements for heavy traffic conditions and constricted right-of-way, roadway realignment, ramps and auxiliary lanes, bridge and intersection design and construction, extensive utility relocations and coordination under a tight schedule, and collocation of design and construction staff to increase cooperation, partnering, integration, and optimize project delivery. This project is the first transportation design-build project led by NDOT. The project scope included design and construction of the following elements: new freeway ramps; roadway widening and new auxiliary lanes; 406,000 tons of new asphalt pavement surface; 17 miles of new concrete barrier rail; reconfiguration of the Lake Mead Drive interchange; 14 new bridges and 2 bridge widening; 2 miles (137,000 square feet) of new soundwalls; drainage system improvements; 180,000 square feet of pre-cast mechanically stabilized earth retaining walls; and high-mast lighting, traffic signals, local street improvements, landscaping, and ITS.</p> <p>Roadway Design: CH2M HILL's project innovation was key to the team's best value project solutions. After reviewing the roadway geometry, our designers modified curvature and centerline location to eliminate a complex widening under a rail bridge and a utility bridge carrying a high-pressure gas line. Our Lake Mead Drive interchange design eliminated 3 bridges proposed in the basic configuration to simplify construction while improving operations through increased capacity, utility, and safety for local and interstate traffic. The introduction of pre-cast girder bridges (not commonly used in the Las Vegas area), coupled with a post-selection innovation allowing two-phase versus three-phase construction, resulted in increased worker and public safety, improved MOT, reduced public inconvenience, and increased access to the work zone, reducing project duration by 5 months.</p> <p>Structural Design: Of the 14 new bridges and 2 bridge widening, 11 bridges and 1 bridge widenings were constructed within 1 mile of highly congested right-of-way. CH2M HILL came into the project with an aggressive target delivery date and using design-build delivery, shortened the project duration through collaboration and communication with NDOT. The design was completed in the first 17 months with an overlapping 22-month construction duration, for a total project duration of just 28 months.</p> <p>Drainage Design: The stormwater collection and conveyance facilities are being constructed to intercept and remove surface runoff from the I-15 corridor. The drainage facilities are being designed and constructed to limit drainage-related hazards within and outside the right-of-way, while minimizing future operation and maintenance costs, public inconvenience, flood damages, and water quality impacts. CH2M HILL has developed a Stormwater Pollution Prevention Plan and an accompanying Erosion and Sediment Control Plan that incorporate best management practices for environmental compliance.</p> <p>Environmental Compliance: Construction phasing and staging was designed to minimize the disturbed ground area. The team provided training for dust control and mitigation to all field staff, and water or dust palliative was applied to minimize dust.</p> <p>MOT/Access: Our phased Project Specific Construction Staging Plan was developed with the goal of minimizing the impacts to the traveling public and adjacent public during construction. We included in our schedule milestone activities such as NASCAR events and community activities and minimized the number and duration of ramp closures and associated traffic shifts needed to accommodate the work. The detailed MOT Plan integrates phasing schemes with the design and construction schedules to minimize the duration of construction impacts and staggers interchange and ramp construction to minimize impacts on local streets.</p>	Mary Martini Nevada Department of Transportation 123 East Washington Avenue Las Vegas NV 89101 702-385-6501	August 2010	December 2009	TOTAL: \$242,000	TOTAL: \$252,000 (\$10,000 owner added)	TOTAL: \$252,000