

I-64 GAP SEGMENT A WIDENING STATEMENT OF QUALIFICATIONS

VIRGINIA DEPARTMENT OF TRANSPORTATION

January 26, 2023



A DESIGN-BUILD PROJECT

State Project No.: 0064-063-623

Contract ID Number: C00122166DB119

kokosing
CONSTRUCTION COMPANY, INC.

6235 WESTERVILLE ROAD
WESTERVILLE, OH 43081

3.2 | Letter of Submittal



12001 GUILFORD ROAD | ANNAPOLIS JUNCTION, MD 20701
PHONE 301.953.0900

**3.2 | LETTER OF SUBMITTAL
VIA BID EXPRESS**

January 26, 2023

Commonwealth of Virginia
Department of Transportation (VDOT)
Virginia Dept. of Transportation
1401 East Broad Street
Richmond, VA 23219
Attention: Suril R. Shah, P.E., DBIA (APD Division)

RE: Request for Qualifications | Design-Build | I-64 GAP Segment A Widening | New Kent County, VA | State Project No.: 0064-063-623 | Contract ID Number: C00122166DB119

Dear Suril:

3.2.1 Kokosing Construction Company, Inc. (Kokosing), 6235 Westerville Road, Westerville, OH 43081 is the legal entity who will execute the contract with VDOT.

3.2.2 Point of Contact	Secondary Point of Contact	3.2.3 Kokosing Principal Officer
Ryan Gorman, PE, DBIA Vice President of Alternative Delivery Kokosing Construction Co., Inc. 16500 Happy Hill Road South Chesterfield, VA 23834 804-400-4521 Cell 301-953-2611 Fax rgorman@kokosing.biz	Chris Rutkai, PE Sr. Area Manager Kokosing Construction Co., Inc. 16500 Happy Hill Road South Chesterfield, VA 23834 804-400-9400 Cell 301-953-2611 Fax crutkai@kokosing.biz	Gregory A. Hamilton, PE, DBIA Regional Sr. Vice President Kokosing Construction Co., Inc. 12001 Guilford Road Annapolis Junction, MD 20701 614-207-0716 Cell gah@kokosing.biz

3.2.4 Kokosing is a corporation titled in Ohio who will hold all financial responsibility for the contract with no liability limitations.

3.2.5 Lead Contractor: Kokosing Construction Company, Inc. | Lead Designer: Rummel, Klepper & Kahl, LLP (RK&K).

3.2.6 Affiliated and Subsidiary Companies Table (**Attachment 3.2.6**) is in the Appendix.

3.2.7 Certification Regarding Debarment Forms (**Attachments 3.2.7(a) and (b)**) are signed and in the Appendix.

3.2.8 Kokosing’s VDOT prequalification (K1805-Active) evidence is in the Appendix.

3.2.9 Surety letter is in the Appendix.

3.2.10 SCC/DPOR information are in **Attachment 3.2.10** and supporting documentation are in the Appendix.

3.2.11 Kokosing is committed to achieving a 10% DBE participation goal for the entire value of the contract.

Sincerely,

KOKOSING CONSTRUCTION COMPANY, INC.

Gregory A. Hamilton, PE, DBIA
Regional Sr. Vice President

3.3 | Team Structure

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3.3 TEAM STRUCTURE

3.3.1 Key Personnel

The Kokosing Team has assembled highly-qualified individuals with extensive experience widening I-64 in the Richmond District and structured them for successful Project delivery. Our Key Personnel were chosen based on experience with design-build transportation projects with similar complexity and size. They were also selected based upon their proven strengths and experience working together successfully delivering VDOT projects which minimizes VDOT’s risk and staffing requirements. Although our task leaders and technical staff are responsible for individual assignments, such as design, public involvement, and/or construction, everyone is responsible for Project success. Our Key Personnel are listed below:

.1 Design-Build Project Manager	Ryan Gorman, PE, DBIA	Kokosing
.2 Quality Assurance Manager	Michael Saunders, PE, CCM, DBIA	Century Engineering
.3 Design Manager	Owen Peery, PE	RK&K
.4 Construction Manager	John “Jake” Leffler	Kokosing

3.3.2 Organizational Chart

Our organizational chart on Page 5 illustrates our chain of command of all companies, including individuals responsible for pertinent disciplines, and notes our Key Personnel. Solid lines identify the reporting relationships of our team members in managing, designing, and constructing the project and illustrate clear reporting lines from the project manager to the design, pre-construction, quality assurance (QA), right-of-way (ROW) and construction teams. Dashed lines represent indirect reporting/communication and obligations to VDOT and/or corporate management. Our chart also shows a clear separation and independence between the Quality Control (QC) and Quality Assurance (QA) programs for construction operations.

Functional Relationships

Design-Build unites VDOT, the contractor, the designer, and other participants more than just contractually. It integrates innovative design and construction management techniques that benefit Project schedule and cost. Our design-build project manager (DBPM) will set the vision for this integrated team approach and has the credentials/experience to oversee the design and construction. We will create a foundation that ensures functional relationships with our key personnel, VDOT, and third-party stakeholders throughout design and construction. We will have inter-disciplinary design reviews to ensure design disciplines are coordinated, constructability reviews of designs, weekly design coordination meetings, and weekly *Hot Topics* meetings with VDOT, and periodic partnering meetings with stakeholders.

Key Personnel

Design-Build Project Manager (DBPM) Ryan Gorman, PE, DBIA (Kokosing), who reports to our Executive Committee, will manage the design, construction, quality management, contract administration, material/equipment procurement, labor, and other contract services. He will coordinate stakeholders, public outreach and/or public meetings, will work with VDOT and others to resolve any disputes and meet Kokosing’s obligations under the Contract. Ryan is an invaluable asset to our team and brings 27 years of design-build experience, including previously widening 19 miles of I-64 and successfully delivering dozens of VDOT projects in the Richmond District on time/on budget. He has extensive local knowledge of the Richmond area including the stakeholders and traffic patterns of this Project.

Quality Assurance Manager (QAM) Michael Saunders, PE, CCM, DBIA (Century Engineering) reports to our DBPM and has direct, independent access to VDOT and the Executive Committee. He will ensure/certify work is performed in conformance with the contract, Minimum Requirements for QA and

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QC on Design-Build and Public-Private Transportation Act Projects, and approved for construction plans/specifications. Michael will be responsible for development/adherence to the Design-Build QA/QC Plan and QA inspection/testing of materials used and work performed. As an independent entity, he will audit/monitor our Construction QC Program, can stop construction, enforce specification compliance, and issue/require resolution of Non-Conformance Reports. Michael will manage the QA program, maintain Project quality records, certify monthly Applications of Payment, and submit monthly reports to VDOT. QA will be coordinated with, but be independent of, daily QC and construction. He will also ensure adherence to environmental permits/commitments. With 19 years of experience, Michael is no stranger to Kokosing and RK&K and was our QAM on VDOT's I-64 Widening MM 200 to 205 design-build project.

Design Manager (DM) Owen Peery, PE (RK&K), who reports to our DBPM, will be responsible for managing/coordinating all design disciplines and ensuring the Project design conforms to the specifications. He will provide VDOT with design plans for review/approval and establish/oversee the QA/QC Program for design, including design reviews, VDOT review coordination, specifications, and constructability. Owen will oversee any plan modifications, ensure field changes/modifications meet the approved design(s), confirm revisions are documented in As-Built plans, respond to Requests for Information (RFIs), and review shop drawings. He has 40 years of experience designing and managing transportation projects on interchange, interstate and other facilities requiring extensive, coordinated MOT with construction phasing and transportation management plans. Owen was DM on VDOT's I-64 Widening and Route 623 Intechange design-build project in Short Pump, VA with Kokosing which widened a median and replaced two bridges.

Construction Manager (CM) John "Jake" Leffler (Kokosing) who reports to our DBPM, will be onsite full-time during construction and will manage construction, including safety and QC activities, to ensure materials used and work performed meet contract requirements and *approved for construction plans/specifications*. He will participate in constructability reviews and provide input on means and methods associated with the design. With 18 years of experience, all in Virginia, Jake has served in this role on VDOT projects, including the adjacent I-64 Widening MM 200 to 205 design-build project which gives him the advantage of already knowing the area, existing traffic conditions and site constraints. He was also the Deputy CM and Construction QC Manager on the I-64 & Route 623 Widening and Improvements design-build project in Short Pump, VA with RK&K.

Value-Added Personnel

The Kokosing Team has added the following value-added personnel to enhance our expertise in delivering a quality project on time and on budget:

Roadway Engineer Ryan Masters PE, DBIA (RK&K) has 24 years of experience and will report to the DM, lead the roadway design and coordinate roadway elements with the other discipline lead engineers to ensure compliance with VDOT standards/specifications, environmental, and permit requirements. Ryan has progressively increased responsibility and experience on roadway projects ranging from interstates and interchanges to urban and rural roadways. He has worked on fast-track projects in the Richmond Metropolitan Area and can see the *big picture* beyond engineering and construction to meet project

Not only do our key personnel live and work in Virginia, they have been in key roles delivering VDOT design-build projects in the Richmond District.



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objectives. Experience includes serving as the lead roadway engineer on VDOT design-build projects, including I-64 Widening in Short Pump, VA and Route 29 Solutions US 29/Rio Road Grade-Separated Interchange, both with Kokosing.

Drainage Engineer Mike Hogan, PE (RK&K) is a design leader and project manager with 25 years of advanced technical roadway and drainage training and experience on rural and urban design projects. His experience includes the design and management oversight of drainage design, hydrologic studies, hydraulic stream studies, and bridge scour analysis for many VDOT endeavors, including various types of freeway and urban roadway design projects on new location, reconstruction and widening, and major drainage improvement projects. He was the lead drainage engineer on VDOT's I-64 Widening and Route 623 Interchange Improvements design-build project with Kokosing, where over a mile of water quality swales were constructed. He has also led many multiple projects under RK&K's Statewide VDOT On-Call Drainage and River Mechanics contract.

Geotechnical Engineer Jennifer Trimble PE, D.GE (RK&K) reports to our DM and will lead the geotechnical explorations and design, is responsible for planning and directing subsurface exploration and laboratory testing programs, analyzing and incorporating the data for determining the properties of the soils and developing mitigation strategies to minimize the risk associated with expected geotechnical conditions. Her experience working in similar conditions includes Blue Plains Advanced Water Treatment Plant – DC Water Floodwall Segment C design-build project with Kokosing, SR 1 widening and construction of a new interchange with SR 273 in Wilmington, DE, and MDOT SHA's I-695 from I-70 to MD 43 Transportation Systems Management and Operations design build.

Design/Construction Integrator (D/CI) Andrew Heigl (Kokosing), who reports to our DBPM, will coordinate and enhance communication between the construction and designer staff which benefits VDOT by having a cohesive team working towards delivering a quality, compliant project. With over 13 years of VDOT experience, Andrew is currently working with DBPM Ryan Gorman overseeing design and construction QC ensuring compliance with the Project Quality Plan on VDOT's Bridges over I-95 Bundle design-build project. On the \$445 Million Design-Build Harry W. Nice/Thomas "Mac" Middleton Bridge project over the Potomac River between MD and VA he managed the MOT, earthwork, drainage, and roadway elements from design through successful construction completion.

Kokosing Support Services

Kokosing Support Services are process-oriented teams that are ready, willing, and able to support our onsite Project Construction Management personnel in successfully delivering projects. The following support services members/groups, among others, will be contributing to this Project:

- Our project controls team led by Ahmad Aladallah, PE who routinely develops budgets and provides scheduling support with different scenarios to analyze the *what-ifs* and avoid any unexpected surprises to ensure we develop the most advantageous route.
- Our Safety Department with over 35 safety professionals led by a dedicated Vice President of Safety and our boots-on-the-ground safety professional, Aaron Rife, GSP, CHST.
- Our Payroll/Compliance Manager Adam Flowers will ensure EEO/DBE compliance.
- Environmental Manager Chuck Mull confirms our projects and facilities meet local, federal, and state requirements and provides support to our on-site environmental monitor.
- Bill Clifford, LS who leads our Survey Department with a full-time office staff that supports 12 field survey crews fitted with machine control, drone capabilities, and 3D scanning capability.
- In-house Construction Engineering services led by Ali Hosseini, Ph.D, PE who will engineer innovative concrete formwork, demolition and erection plans, and support of excavation designs.

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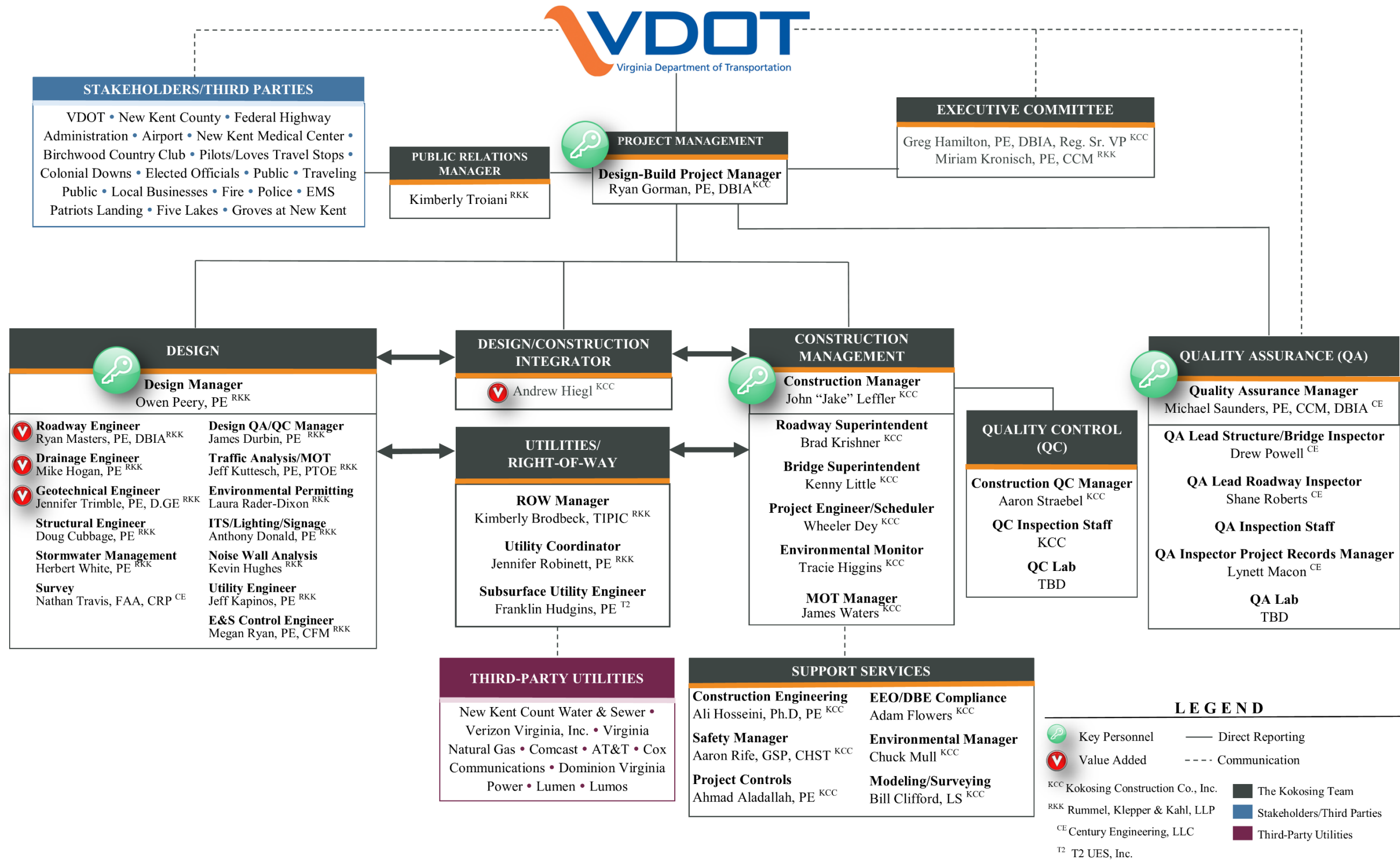


Figure 1: Organizational Chart

3.4 | Team Experience

3.5 | Project Risks

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3.5 PROJECT RISKS

The Kokosing Team will employ the Construction Management Association of American (CMAA) endorsed approach to risk management through a risk register which includes a list of identified risks, potential impacts, and mitigation for each. A robust risk management plan considers risks throughout the project’s life and delivery processes. Our plan has already begun, will evolve throughout design and construction, and positions us to respond to changes as issues unfold. The following is our five-step Risk Management Plan:

RISK MANAGEMENT PLAN

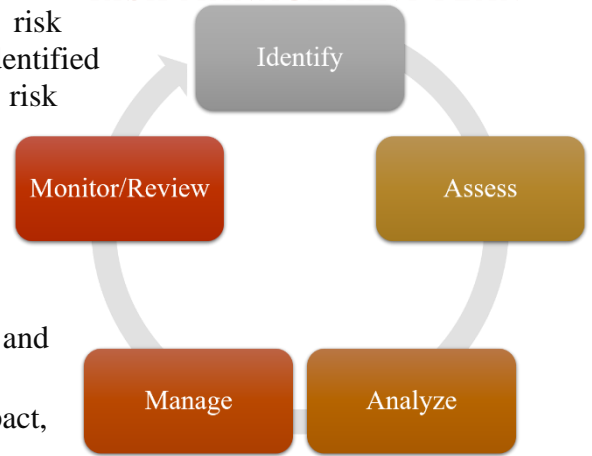


Figure 2: Risk Management Plan

1. **Identify:** Names risks, determines cause and effect, and categorizes.
2. **Assess:** Assigns probability of occurrence, severity of impact, and determines response.
3. **Analyze:** Quantifies severity, determines exposure, establishes tolerance level, and determines mitigation and / or contingency
4. **Manage:** Implements pre-determined response plans and actions and manages response.
5. **Monitor/Review:** Monitors/reviews/updates risks, monitors response plans, updates exposure, analyzes trends, and produces reports.

3.5.1 Three Unique Risks

We have reviewed the available information, visited the site, and collectively discussed unique risks. With the mindset of a project risk being an issue that can impact safety, operations, schedule, future maintenance or budget, we have identified/assessed three unique risks to this Project.

RISK #1 | INGRESS/EGRESS INTO WORKZONE

Construction ingress/egress to the median work zone is not only critical, it is one of the most dangerous risks on this Project. Having construction vehicles on a busy interstate corridor adds to the congestion and distracts motorists as they draw their attention to the roadway construction vs. reading the signs and focusing on the MOT devices nearby. Slowing down traffic abruptly as large heavily-loaded trucks decelerate to access work zones at ingress locations (or slowly accelerate when leaving work zone egress locations) causes bottlenecks and increases the chance of a rear end or sideswipe collision.

WHY CRITICAL: Interstate capacity improvements, such as widening I-64 from MM 204.9 to 215.6, involves high speed traffic interacting with slow moving construction vehicles entering/exiting a work zone can create a perfect storm where motorists and construction workers clash. The average annual daily traffic volume on this segment of I-64 ranges from 60,000 to 74,000 vehicles, which includes nearly 6,000 heavy trucks, raising the potential for significant safety impacts if a well-defined Traffic Management Plan (TMP) is not in place. And statistics confirm the severity. From 2017 to 2021, there were over 300 crashes within the Project area, resulting in five fatalities and 28 severe injuries. While rear-end collisions due to traffic jams are most prevalent at this location, fixed object off-road crashes are also common with high speed traveling motorists.

Commuters resist changing their driving habits or routes as they feel taking an alternate route impacts their way to work. Most stay on their regular trek and then quickly feel the frustration when stuck in traffic due to roadway construction. This section of I-64 is also a destination route, such as Historic Williamsburg,

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Busch Gardens, Norfolk, Virginia Beach, and North Carolina's Outer Banks. Motorists will enter the work zone unaware of the construction activity and the perils of driving in the left lane. The combination of added commute time, distractions caused by construction, vacation travelers and the abrupt slowing down of traffic caused by 60,000 to 75,000 lb. Gross Vehicle Weight (GVW) trucks decelerating in the left lane to access the construction area and accelerating when leaving, increases the chance of auto accidents, especially rear-end collisions.

Having fast moving interstate traffic and slow moving construction vehicles share the road can create safety hazards, motorist delays and frustration, and negative press for VDOT/local officials. Traffic slowed down by construction vehicles and narrow shoulders during construction, crashes, and other incidents can also interfere with first responders rushing to an incident. Merging traffic at the west end of the westbound lanes and Route 33, Route 609, Safety Rest Areas, and Route 155 on and off ramps can further complicate first responders arriving to a scene, particularly if they are coming from New Kent County Fire and Rescue Station, just south of I-64 on Route 155.

IMPACTS: Rear end, sideswipe and other collisions due to interstate travelers and construction equipment entering/exiting the median construction zones, can bring traffic to a screeching halt, which impacts – among other things – roadway construction. Then there is the threat of public backlash if these become commonplace. Slowed down or stopped traffic also inhibits getting workers, equipment and material to the Project, which can significantly impact Project schedule and cost. It also hinders VDOT operation personnel who may have to detour traffic onto Route 60 putting the planned Arterial Improvements to the test.

MITIGATION: The Kokosing Team has already taken these impacts into consideration. First and foremost, a TMP with well-defined traffic control devices and oversight will diminish this risk. To mitigate, we will incorporate Kokosing and RK&K's experience from similar interstate widening projects, including *lessons learned* on the adjacent I-64 inside widening MM 200 to 205 project and Kokosing's experience on the I-64 Short Pump inside widening project. These proven traffic systems facilitated safe, effective transportation management through ALL phases of construction. Proposed mitigation strategies include:

→ **Work Zones with Internal Areas for Trucks to Turn Around:** We will divide the Project into three work zones from the western end of the Project to Route 106 (Emmaus Church Road), then from there to Route 155 (N. Court House Road), and from Route 155 to the eastern end of the Project.

Within each area there will be an internal traffic plan for construction trucks to turn around within the work zone, possibly using existing median U-turn crossovers at MP 206.1, MP 211.8, MP, MP 214.2, and MP 215.5. If required, we will coordinate with the State Police and VDOT to construct temporary authorized vehicle turn arounds should the existing be blocked or made unusable. This eliminates them from exiting a work zone and merging across traffic to access the closest exit ramp and *loop around* to reverse direction. Work area ingress/acceleration access points will be near the center of the work zones which provides the longest possible merge area from the intersecting roadway on and off ramps to the construction access points. Our access/egress points will comply with the VDOT Work Area Protection Manual.

Constructing the Project this way may demand accelerating extending drainage features, similar to the water crossing near MP 204.8 on the adjacent section of I-64 that we widened, without adding another ingress/egress point.

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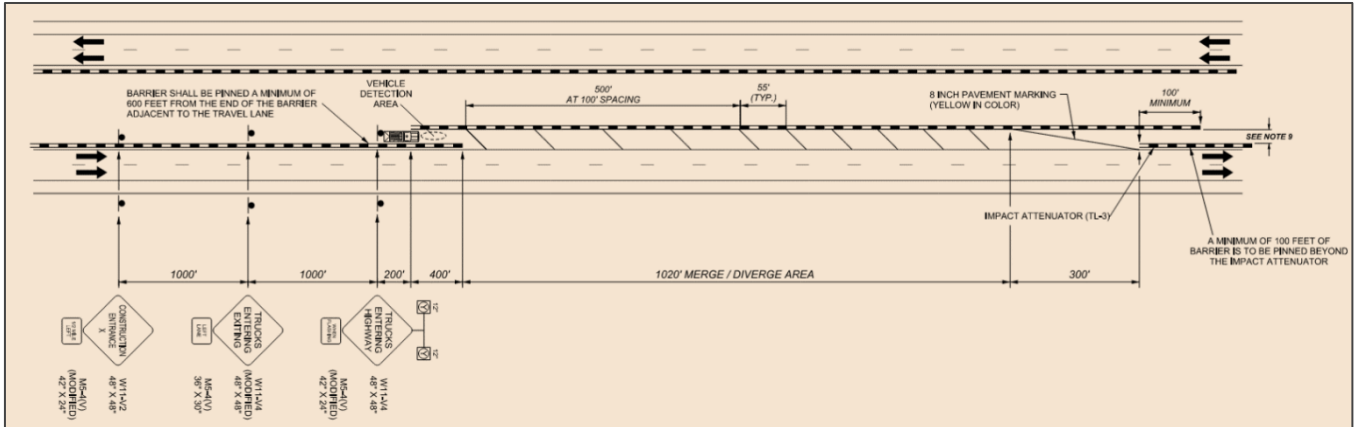


Figure 3: Construction Entrance Detail

We will grade locations to create slopes to develop compliant clear zones within each access or egress area. If this is not feasible, we will install temporary barrier within the work area to allow long enough access/egress openings in the temporary barrier to give construction vehicles enough acceleration length to safely merge with interstate traffic. As a part of our temporary access/egress lane, we will slightly offset the attenuator barrier away from traffic at the beginning of barrier runs as we have found that significantly reduces attenuator hits, which puts motorist safety first. In addition, the ingress/egress lanes will be built to the final pavement section to minimize additional work adjacent to traffic.

Our initial review suggests both eastbound and westbound access points will be near the center of the individual work areas which appear to have acceptable verticle/horizontal sight distances and coordinate with our proposed *loop arounds*. We will evaluate the best locations for the emergency pull offs to work in conjunction with, and not impact, the proposed ingress/egress points and where grade allows without existing guardrail in the way.

Note that these initial access/egress scenarios are preliminary. Further study of all safety considerations, such as confirming distance to existing on/off ramps from the interstate and provisions for safe merging of construction vehicles to/from those ramps, as well as sight lines are needed before finalizing our TMP.

- **Minimize Over-the-Road Haulings:** Our design and construction phasing will be laid out efficiently, including taking construction means and methods into consideration during the design phase. On VDOT's I-64 widening design-build project in Short Pump, our design maximized using existing suitable material in the median by creating berms and filling in low areas that were not environmentally sensitive. This helped keep the earthwork volume balanced, significantly reduced the number of construction vehicles interacting with the traveling public, and reduced the time/cost for construction.
- **Constructability Review (TMP-based):** Before finalizing our technical proposal design and plans, the Kokosing Team conducts a constructability review solely dedicated to traffic safety during construction. Examples of design/plan features to be scrutinized include locating construction ingress/egress at points most visible to motorists and a safe distance from cross roadway on/off ramps, locations of crossovers, ways to minimize traffic phasing shifts, providing safe separation from work zones, and promoting a design and sequence of construction that is sensitive to commuter and seasonal vacation travelers.

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- **Optimizing Traffic Phasing:** The Kokosing Team has proven experience at optimizing traffic phasing. Since changes in traffic patterns, such as construction ingress/egress points, can cause auto accidents, we will dive deeper at ways to minimize lane shifts and/or locate crossovers at points where high visibility is most prevalent. ***Pavement strengthening and/or widening work on the outside of the interstate will be completed as early as possible to bring these added safety features on line early on.*** Our team will also need to coordinate our ingress/egress point with the future I-64 widening to the west.
- **Accelerate Construction:** Putting construction on the fast track will significantly reduce hazards to motorists and our construction team members. RK&K’s design team has extensive experience on the Richmond District I-64 corridor designing projects that focus on accelerating construction similar to VDOT’s I-64 Short Pump inside widening project with Kokosing. The individuals that worked on the adjacent I-64 and I-64 Short Pump projects – including our DBPM and CM, will guide the design team as to lessons learned on those similar local projects for the Richmond District.
- **Safety Training:** Our construction forces receive VDOT certified in-house training on maintaining a safe work zone, starting with safety hazard awareness caused by mixing highway and construction traffic. Daily morning and weekly safety meetings will be mandated for construction team members. Our team will schedule daily pre-event meetings with all truckers entering or exiting the median to explain ingress/egress locations and procedures for use prior to hauling. We will monitor the operation of the ingress/egress points and make adjustments as needed.
- **Public Awareness/Incident Management Plan:** Our TMP will optimize advance warning signs and variable speed limit signs, and our MOT Manager will regularly patrol the Project corridor to confirm traffic devices are highly visible and functioning, especially at access points. A robust public campaign will raise awareness prior to and during construction. Our TMP will detail emergency detours consistent with the planned I-64 Arterial Improvement strategy with pre-staged material for detouring traffic to Route 60 in the event the corridor-wide rerouting guide signs are not yet installed and operational. Will have tow service available to quickly clear disabled vehicles and minimize congestion.



Figure 4: Dynamic Speed Limit Sign

ROLE OF VDOT AND/OR OTHER AGENCIES: None from VDOT other than what is expected on a typical design-build project. Other agencies, such as the State Police, first responders, and the New Kent Safety Rest Area staff, will be coordinated with to provide the highest level of safety possible for stakeholders and motorists.

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RISK #2 | STORMWATER MANAGEMENT (SWM)

Based on our review of the information provided by VDOT and our Team's broad experience in the Coastal Plain region of New Kent County, we have identified the design and construction of stormwater management facilities as a critical Project risk. Specifically, the high-groundwater table, predominant project hydrologic soil type, flat terrain, FEMA floodplains, absence of grandfathering under the old Part IIC stormwater regulations, and permitting issues present significant challenges during the design and construction phases combine into a risk to be minimized.

WHY CRITICAL? The seasonable high-groundwater table in this region is known to be less than 2-ft. below existing ground in some areas. This is a challenge since commonly used infiltration-type stormwater management best management practice (SWM BMP) facilities (i.e., bioretention basins, dry swales) contain an engineered soil media layer, including underdrain systems, that must be at least 1-ft. above the seasonal high-groundwater elevation. These type of SWM BMPs provide highly efficient runoff load reduction and water quality treatment in the range of 60% to 90% removal. If the seasonal high water table elevation is not accounted for in the selection and design of SWM BMPs, the SWM BMP can be compromised due to functionality, problematic construction, increased SWM BMP maintenance requirements, ROW expansion, and potential DEQ Virginia Stormwater Management Program (VSMP) violations.

Our review of Natural Resources Conservation Service (NRCS) Project soils by hydrologic soil group (HSG) type confirms Type D soil accounts for approximately 65% of all soils within the Project limits. Soils in this group have low infiltration rates resulting in high runoff potential when thoroughly wet. Water movement through the soil is classified as "restricted to very restricted". Group D soils typically have greater than 40% clay, less than 50% sand, and have clayey textures. In some areas, they also have high shrink-swell potential. This contributes to the high-groundwater table concern and will likely limit the menu of SWM BMP types to those with lower removal rates which typically require a larger footprint.

The flat terrain of the area limits the ability to efficiently drain the Project and the drainage areas that can be diverted to each SWM BMP facility. For ditches, the flat terrain makes it difficult to maintain adequate positive ditch flow over significant distances. For storm drain systems, it is challenging to maintain VDOT required minimum pipe cover, minimum 3-ft. per second velocity requirements, and suitable outfall location. Improper consideration of these factors during design result in Project impacts by insufficient treatment of drainage areas in the proposed SWM BMPs, deficient storm conveyance system capacities, increased maintenance requirements and potentially the need for additional ROW. During construction, the minimum elevation drop requires very tight tolerances on ditch and pipe construction.

These SWM BMPs must be discharged to contiguous waters in a safe and nonerosive way. For this Project, many locations will discharge to FEMA floodplains. Our Team must ensure that Project floodplain impacts from these SWM outfalls, if any, to possibly eight approximated floodplains (i.e., Zone A) are compliant with VDOT and FEMA policies. Since all FEMA floodplains within the Project limits are FEMA Zone A, models must be developed to quantify benefits/impacts, which can impact schedule. Determination and minimization of floodplain impacts due to expanded SWM BMP footprints is critical because of potential schedule delays associated with a FEMA Floodplain Letter of Map Revision (LOMR), and approval of the County's Floodplain Manager prior to securing VMRC wetlands/water permit within floodplain areas. If the floodplain mapping and permitting scheduling issues are not properly managed, the Project can experience considerable time delays and increased mitigation requirements that will impact Project schedule and budget.

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IMPACT: Each of the issues above correlates to the ability of the Kokosing Team to:

- Complete a design within VDOT criteria.
- Construct the Project within the existing ROW.
- Construct the Project in a wet environment to tight tolerances.
- Manage the permitting review and approval process.

Failing to consider these issues will jeopardize our ability to design, obtain permits and complete construction timely, resulting in costly schedule delays.

MITIGATION: To mitigate, regarding the water table elevation and consequences to infiltration SWM BMPs, our geotechnical experts will review available groundwater/boring data, obtain additional groundwater readings, and use historical trends to assess groundwater conditions and develop the seasonal high water table elevations for potential SWM BMP locations. SWM BMP locations and types will then be selected for the right placement relative to the seasonal high-water table. For example, we will consider filtration SWM BMP basins which have shallower soil media depths than bioretention BMP facilities.

***Kokosing Team Firsthand Experience:** On VDOT's I-64 Widening and Route 623 Interchange Improvements design-build project in Henrico/Goochland Counties, we used water quality swales with soil mix media designed to minimum standard depths to avoid shallow pockets of existing rock. These swales were constructed within the median space where the roadway fill is typically higher than surrounding existing ground, or on the outside of the roadway on top of the fill slope. Swales will also reduce maintenance and provide efficient stormwater conveyance.*

To accommodate the flat terrain and limited drainage areas, we will consider using filtration basins, which are highly efficient at providing pollutant removal and runoff reduction within limited footprint. Where the drainage area exceeds the maximum allowable limits, we will investigate wet pond facilities which can also use the groundwater table as a source for the permanent water surface elevation. Our design team is using this type of design on the VDOT I-81 widening project in Harrisonburg, Virginia, which has similar water table issues in some locations along the corridor.

As we have done for other VDOT projects, we will also purchase phosphorous nutrient credits from a DEQ-approved mitigation bank to satisfy the maximum allowable of 25% of the Project phosphorous pollutant removal requirement. This strategy reduces the number of BMPs and VDOT's long term maintenance. Because this Project crosses three separate HUC boundaries (Higgins, Toe Ink Swamp and the Rumley Marsh), all within the Lower James River Watershed, we will coordinate with nutrient banks in each watershed. Currently, there are six available banks within the Lower James River watershed showing available credits with two additional banks pending approval. Collectively, these banks show a 313-lbs. phosphorous credit available as of January 2023.

Our approach to mitigating the impact associated with the FEMA floodplain analysis and compliance issues caused by the high ground water includes: researching if existing hydraulic models exists prior to beginning our analysis to streamline the floodplain; obtaining field surveys to supplement existing models to ensure accurate, early and consistent coordination with the VDOT District River Mechanics Engineer and the New Kent County's Floodplain Manager.

VDOT OR OTHER AGENCY ROLE(S): None from VDOT, and other reviewing and approving agencies, other than what is expected on a typical design-build project.

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RISK #3 | EXISTING SUBSURFACE CONDITIONS

Based on our review of the information provided by VDOT and our Team's extensive experience within the coastal plains geological region, tertiary deposits of the Chesapeake Group, and Bacons Castle formations, we have identified the existing subsurface conditions as a critical Project risk. We are extremely familiar with the coastal plain physiographic province and the challenges this geologic region brings from our Team's work on the adjacent section of I-64 (MM 200 to 205).

WHY CRITICAL? The anticipated existing subsurface conditions consist of soils with the potential to cause settlement and stability of new fill, and soft/loose soils causing issues for deep foundations. They place financial and schedule impacts on the Project and can affect the long-term serviceability if left unmitigated leading to falling pavement subgrade, embankment instability, settlement of the roadway/structures, and public safety concerns. which can lead to pavement failures, increased maintenance, safety issues and negative impacts to future traffic. At present, no site-specific subsurface information besides the as built information dated 1968 was provided as part of the RFQ. We assume a Geotechnical Data Report accompanies the RFP for us to review and incorporate into our proposal design.

IMPACTS: Based on our review of the as built plans and other available data, we identified the following existing subsurface conditions that likely will impact the Project:

- Unsuitable (Alluvium) Material which are soft organic clays and silts.
- Tertiary marine clays have a high clay content, liquefy without the addition of water when shaken or disturbed and collapse.
- Cohesive soils associated with foundation issues and slope failures.
- Swamp and Floodway: Portions of the Project are within the floodway, swamp, or creek crossing known to have poor soils to support embankment and conveyance construction.
- Condition of existing shoulders to support traffic during MOT shifts.
- Construction of existing embankment slopes with unsuitable materials from the as-built roadway plans dated Sept. 1968 (See Figure 5).

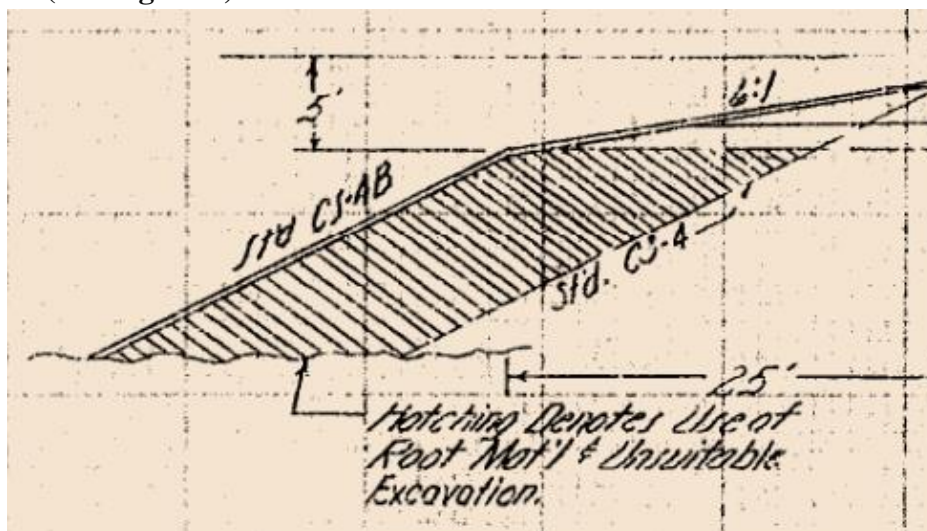


Figure 5: As Builts, Sept. 1968-Unsuitable Soil used for Embankment Side Slopes

- Unsuitable Mainline Material: As-built plans from roadway plans dated Sept. 1968 show undercutting was required to reach suitable material for I-64 mainline construction (See Figure 6).

DESIGN-BUILD

I-64 GAP Segment A Widening

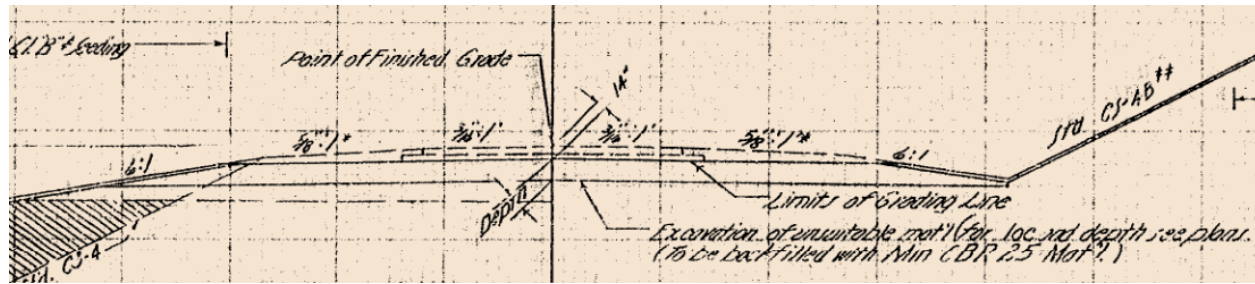


Figure 6: As Builts, Sept. 1968-Limits of Unsuitable Soil removal along Mainline

Failing to recognize and mitigate will impact traffic, public safety, schedule (including critical path items), and construction cost and quality, which will create future serviceability impacts. The following potential existing subsurface conditions have been identified:

- **Embankment on Soft Soils:** The approach embankments for the proposed bridge abutment widening and portions of the roadway are expected to be constructed on soft fine-grained soils extending to significant depths. If existing conditions remain unmitigated, the following construction and serviceability issues may result:
 - Foundation instability.
 - Slope embankment instability.
 - Lateral squeeze.
 - Settlement, including primary consolidation and secondary consolidation (creep).
- **Bridge Abutments and Negative Skin Friction on Deep Foundations:** Stabilizing subgrade soils for bridge embankment fill is expected. It is critical to determine the time-dependent consolidation settlement for design of the bridge foundation elements to minimize negative skin friction issues on foundation elements. Estimating and monitoring settlements are key components of effective and economical foundation designs. The impacts of not estimating settlement properly include:
 - Installing undersized piles that settle under the combination of structure and downdrag loads.
 - Future maintenance costs to repair or mitigate public safety hazards.
 - Additional public impacts during construction due to delay of constructing foundation, setting girders, and final paving.
- **Extended Drying Time Materials:** Based on our experience with the adjacent I-64 MM 200 to 205 widening project, road-building activities may have to deal with the compounding issues of:
 - A relatively high water-table, especially at the stream/box culvert crossings.
 - Low profile slopes of the roadway, limiting the drainage profile.
 - Relatively high clay contents, which dry/drain much slower than the sandy soils found at similar elevations towards the east.
 - Water draining from under existing I-64 pavements causing excessive subgrade moisture and pumping during compaction. This was experienced when constructing VDOT's I-64 Widening, MM 200 to 205, which is just west of this Project.
 - Excessive water in roadway edge drains. This was also experienced when constructing the I-64 Widening, MM 200 to 205 project, which caused excessive removal of saturated soils and backfill.

DESIGN-BUILD

I-64 GAP Segment A Widening

These issues, when combined, often had the direct effect of a single rain event shutting down road building operations for days or even weeks at a time.

→ **Unsuitable Soils used for constructing Mainline Side Slopes:** As noted on the provided as-built plans, soils below the future widened embankment may have used unsuitable material at elevations 5-ft. below the existing roadway. Existing shoulders may need to be strengthened before vehicles can use during MOT shifts due to the poor subsurface conditions and potential for settlement expected due to the original embankment slope construction. For the I-64 Widening, MM 200 to 205 project, strengthening the shoulder using 4-in. mill/fill did not maintain its integrity throughout the MOT shift and needed significant patching, especially at the contact of the shoulder/mainline.

Mitigation: The geotechnical existing conditions impacts above will be accounted for in our schedule and design.

→ **Conduct a Subsurface Exploration and Laboratory Testing Program:** To reduce impacts during excavation, we will conduct an extensive subsurface exploration and laboratory testing program in accordance with, or exceeding if necessary, the VDOT Manual of Instructions Chapter III. Results will be used to characterize the subsurface conditions, including material classification, index properties, organic and moisture content, shear strength parameters, and consolidation properties. Using in-situ testing, such as Cone Penetration Test (CPT) with pore pressure dissipation, Dilatometer (DMT) and/or Pressure Meter Testing (PMT), will estimate settlement rates, magnitudes and anticipated settlement monitoring durations to develop our Project schedule.

→ **Construction Phase Instrumentation Monitoring:** For areas with consolidation settlement concerns, we will develop/implement a construction phase instrumentation monitoring program. This has been used by the team successfully in completing VDOT's Route 29 Solutions design-build project and the nearby I-64 Widening, MM 200 to 205 project.

We will explore using step-frequency ground penetrating radar and/or falling weight deflectometer as required to estimate the existing shoulder pavement section, including thickness of graded aggregate base and in situ Resilient Modulus (M_R) for the design of the pavements in areas where shoulder and subgrade strengthening will be required for use during MOT shifts. By further exploring the existing pavement section, structural integrity, and subgrade strength, we can maximize public safety and minimize impacts to the public while the shoulder is a travel lane during construction for maintenance repairs.

→ **Evaluate using Larger Piles:** For deep foundations at the bridge widening, we will evaluate using larger piles that can accommodate downdrag (negative skin friction) using lightweight fill materials to reduce embankment loading, staged construction with quarantine periods to obtain strength gain of the existing embankment fill before pile driving. Existing foundation elements will be evaluated to confirm new construction will not cause lateral squeeze or downdrag. The existing embankment will be evaluated to confirm satisfactory global stability during design, impacts from vibrations, and verified during construction.

→ **Work Sequencing:** For wet soils, work will be sequenced to occur during summer months, and may require enhanced underdrains or temporary erosion and sediment controls to help manage subgrade moisture levels. Typical road-building means and methods, such as *boxing in*, may need to be avoided with unfavorable local drainage conditions. The design will develop options to mitigate wet soils for Kokosing to use during construction and to build into these conditions based on the Project

DESIGN-BUILD

I-64 GAP Segment A Widening

schedule. Mitigation options to eliminate impacts from wet soils will include conditions actually encountered using lime/cement stabilization, Full Depth Reclamation (FDR) using milled out shoulder material, or undercut/replacement with stone or structural fill, and incorporating geotextile or geogrid. to name a few.

→ ***Develop a Soils Remediation Plan:*** Where unsuitable material is encountered, mitigation includes delineating the lateral and vertical extent of the material and removal in early stages of earthwork. A soils remediation plan will be developed and approved by VDOT's geotechnical and materials engineers prior to construction. Based on our experience with the I-64 Widening, MM 200 to 205 project, our remediation plan will include options, such as a combination of undercut/replacement, using geotextiles/geogrids, in place drying/scarification, or lime, lime/cement stabilization augmentation of the soils.

If borrow material is required, we will identify the source of suitable fill and provide to VDOT before starting construction.

VDOT or other Agency Role(s): We expect VDOT's role to be no more than as required on a normal design-build project, including required reviews of our geotechnical boring plans, geotechnical investigations, geotechnical engineering reports, plans, and design.

Appendix

ATTACHMENT 3.1.2

Project: 0064-063-623

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

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

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	16-18
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	19-20
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	1
Offeror's point of contact information	NA	Section 3.2.2	yes	1
Principal officer information	NA	Section 3.2.3	yes	1
Offeror's Corporate Structure	NA	Section 3.2.4	yes	1
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	1
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	21-22
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	23-26
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	27
Evidence of obtaining bonding	NA	Section 3.2.9	no	28-30

ATTACHMENT 3.1.2

Project: 0064-063-623

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	31-32
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	33-36
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	37-41
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	42-43
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	N/A
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	1
Offeror's Team Structure				
Identity of and qualifications of Key Personnel	NA	Section 3.3.1	yes	2-3
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	44-45
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	46-47
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	48-49
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	50-51
Organizational chart	NA	Section 3.3.2	yes	5
Organizational chart narrative	NA	Section 3.3.2	yes	2-4

ATTACHMENT 3.1.2

Project: 0064-063-623

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Experience of Offeror's Team				
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	52-54
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	55-57
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	6-15

ATTACHMENT 2.10

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

RFQ NO. C00122166DB119
PROJECT NO.: 0064-063-623

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 – December 16, 2022
(Date)
- 2. Cover letter of RFQ Addendum #1 – December 27, 2022
(Date)
- 3. Cover letter of RFQ Addendum #2 – January 12, 2023
(Date)



SIGNATURE

1/19/23

DATE

Gregory A. Hamilton, PE, DBIA

PRINTED NAME

Regional Sr. Vice President

TITLE

ATTACHMENT 3.2.6

State Project No. 0064-063-623

Affiliated and Subsidiary Companies of the Offeror

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

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

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
Subsidiary	Corman Kokosing Real Estate Holdings, LLC	12001 Guilford Road, Annapolis Junction, MD 20701
Subsidiary	CK-TV, LLC	12001 Guilford Road, Annapolis Junction, MD 20701
Subsidiary	CK-CCI, LLC	12001 Guilford Road, Annapolis Junction, MD 20701
Subsidiary	KCC Supply, LLC	17531 Waterford Road, Fredericktown, OH 43019
Affiliate	Kokosing Industrial, Inc.	6235 Westerville Road, Westerville, OH 43081
Affiliate	CK-CMI, LLC	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate	The Olen Corporation	4755 S High Street, Columbus, OH 43207
Affiliate	Area Aggregates, LLC	659 Anderson Road, Woodville, OH 43469
Affiliate	Kokosing Materials, Inc.	17531 Waterford Road, Fredericktown, OH 43019
Affiliate	Sciotto Materials	6187 Westerville Road, Westerville, OH 43081
Affiliate	Cuyahoga Asphalt Materials, Inc.	14946 Mayfield Road, East Claridon, OH 44033
Affiliate	Corman Kokosing Construction Company	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate	McGraw Kokosing, Inc.	101 Clark Boulevard, Monroe, OH 45044
Affiliate	Corna Kokosing Construction Company	6235 Westerville Road, Westerville, OH 43081
Affiliate	Integrity Kokosing Pipeline Services	17531 Waterford Road, Fredericktown, OH 43019

ATTACHMENT 3.2.6

State Project No. 0064-063-623

Affiliated and Subsidiary Companies of the Offeror

Affiliate	Kokosing, Inc.	6235 Westerville Road, Westerville, OH 43081
Affiliate	Oak Tree Equity, LLC	6235 Westerville Road, Westerville, OH 43081
Affiliate	Third Gen, Inc.	6235 Westerville Road, Westerville, OH 43081
Affiliate	Kokosing-McLean JV	12001 Guilford Road, Annapolis Junction, MD 20701
Affiliate	Granite-Parsons-Corman Joint Venture	c/o Granite Construction Northeast, Inc., 120 White Plains Road, Suite 310, Tarrytown, NY 10591
Affiliate	Skanska-Corman-McLean Joint Venture	295 Bendix Road, Suite 400, Virginia Beach, VA 23452
Affiliate	Whiting-Turner Kokosing Joint Venture	6235 Westerville Road, Westerville, OH 43081
Affiliate	Kokosing Mosser Joint Venture	6235 Westerville Road, Westerville, OH 43081
Affiliate	Kokosing Alberici Joint Venture	6235 Westerville Road, Westerville, OH 43081
Affiliate	Kokosing Alberici Traylor Joint Venture	6235 Westerville Road, Westerville, OH 43081

ATTACHMENT 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-063-623

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.

	<u>11/6/23</u>	Regional Sr. Vice President
Signature	Date	Title

Kokosing Construction Company, Inc.

Name of Firm

ATTACHMENT 3.2.7(b)


CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-063-623

- 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.

	1-3-2023	Partner
_____ Signature	_____ Date	_____ Title

Rummel, Klepper & Kahl, LLP

Name of Firm

ATTACHMENT 3.2.7(b)


CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-063-623

- 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.

 _____	1/18/2023 _____	Sr. Vice President _____
Signature	Date	Title

Century Engineering, LLC.

Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-063-623

- 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.



1/23/2023

Branch Manager

Signature

Date

Title

T2 UES, Inc.

Name of Firm



Department's List of Prequalified Vendors
Includes All Qualified Levels As Of 1/11/2023

- K -

Vendor ID: K1006
Vendor Name: KMX PAINTING, INC.
Prequal Level: Prequalified (Currently Inactive)
Prequal Exp: 06/30/2023

-- PREQ Address --
4328 MCCARTNEY RD
LOWELLVILLE, OH 44436
Phone: (330)536-6760
Fax: (330)536-2228

Work Classes (Listed But Not Limited To)
028 - PAINT BRIDGES AND STRUCTURES
182 - BRIDGE CLEANING

Bus. Contact: KOULLIAS, DESPINA THELMA
Email: KMXPAINTING@AOL.COM

-- DBE Information --

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

Vendor ID: K1805
Vendor Name: KOKOSING CONSTRUCTION COMPANY, INC.
Prequal Level: Prequalified
Prequal Exp: 06/30/2023

-- PREQ Address --
6235 WESTERVILLE ROAD
WESTERVILLE, VA 43081
Phone: (614)228-1029
Fax: (614)228-7065

Work Classes (Listed But Not Limited To)
003 - MAJOR STRUCTURES
022 - INCIDENTAL CONCRETE
179 - H.C.C. PAVEMENT

Bus. Contact: BODENHORN, RYAN
Email: RMB@KOKOSING.BIZ

-- DBE Information --

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



Cathy L. Woodruff

Marsh USA Inc.
200 Public Square
Suite 3760
Cleveland, OH 44114
(216) 937-1379
Cathy.L.Woodruff@marsh.com
www.marsh.com

Suril R. Shah, PE, DBIA
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street, Richmond, VA 23219

January 18, 2023

Subject: Kokosing Construction Company, Inc.
A Design-Build Project
I-64 GAP Segment A Widening From: I-64 MM 204.9 To: I-64 MM 215.6, New Kent County, Virginia
State Project No.: 0064-063-623 Contract ID Number: C00122166DB119

This letter will confirm that Kokosing Construction Company, Inc. is highly regarded by and prequalified with its surety companies, Liberty Mutual Insurance Company (A.M. Best Rating A, XV) and Travelers Casualty and Surety Company of America (A.M. Best Rating A++, XV), co-sureties for Kokosing Construction Company, Inc. Kokosing Construction Company, Inc. is capable of obtaining performance and payment bonds based on the current estimated contract value of \$212,000,000 for this project with aggregate contracts exceeding \$3 billion. These single project size and aggregate capacity levels are by no means meant to imply a maximum capacity level and should larger capacity amounts be necessary the underwriters are favorable toward providing Kokosing Construction Company, Inc. with higher support levels.

This letter also confirms that Kokosing Construction Company, Inc. is capable of providing 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction and said bonds will cover the Project and any warranty periods as provided for in the contract documents on behalf of Kokosing Construction Company, Inc., in the event they are the successful bidder and enter into a contract for this project.

This pre-qualification is conditioned on acceptable underwriting considerations such as final contract terms and condition, bond forms and final project details.

We are proud to be a part of the Kokosing Construction Company, Inc. risk management and surety team. Should you have any questions or if you need any clarification, please do not hesitate to contact me.

Sincerely,

Cathy L. Woodruff, Attorney-in-Fact
Liberty Mutual Insurance Company
Travelers Casualty and Surety Company of America



SOLUTIONS...DEFINED, DESIGNED, AND DELIVERED.





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

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

Certificate No: 8204866

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Cathy L. Woodruff

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of February, 2021.

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



By: David M. Carey

David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 15th day of February, 2021, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

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

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.

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

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

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

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

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

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, of Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company do hereby certify that this power of attorney executed by said Companies is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 18th day of January, 2023.



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

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

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.



Travelers Casualty and Surety Company of America
 Travelers Casualty and Surety Company
 St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Cathy L. Woodruff of Cleveland, Ohio, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021**.



State of Connecticut

By: 
 Robert L. Raney, Senior Vice President

City of Hartford ss.

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**




 Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

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

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

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

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

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 18th day of January, 2023.




 Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
 Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

ATTACHMENT 3.2.10

State Project No. 0064-063-623

SCC and DPOR Information

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

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
Kokosing Construction Co., Inc.	11287375	Stock Corporation	Active	6235 Westerville Rd., Westerville, OH 43081	Class A Contractor	2705181948	12/31/2023
Rummel, Klepper & Kahl, LLP (RK&K)	K0004178	LLP	Active	2100 East Cary St., Suite 309 Richmond, VA 23223	ENG	0411000271	2/29/2024
Century Engineering, LLC	11379136	LLC	Active	7400 Beaufront Springs Dr., Suite 505, Richmond, VA 23225	LS, ENG	0411001489	2/29/2024
T2 UES, Inc.	F2133587	Stock Corporation	Active	*7217 E 87 th St., Indianapolis, IN 46256	ENG	0407007771	12/31/2023

**Note: Per T2 UES, Inc. although the DPOR license displays their Indianapolis, IN office address, it is for their Ashland, VA office. Because company license renewals are sent to their Indiana office, DPOR listed that address on the license. T2 UES, Inc. work for this project will be out of the Ashland, VA office.*

ATTACHMENT 3.2.10
State Project No. 0064-063-623
SCC and DPOR Information

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)						
Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Rummel, Klepper & Kahl, LLP (RK&K)	Owen Peery	Richmond/VA	2100 East Cary St., Suite 309 Richmond, VA 23223	PE	0402046882	10/31/2023
Century Engineering, LLC	Michael Saunders	Richmond/VA	4500 Litchfield Dr., Chesterfield, VA 23832	PE	0402041295	12/31/2023

Entity Information

Entity Information

Entity Name: Kokosing Construction Company, Inc.
Entity ID: 11287375

Entity Type: Stock Corporation
Entity Status: **Active**

Series LLC: N/A
Reason for Status: Active and In Good Standing

Formation Date: 01/16/1981
Status Date: 09/28/2021

VA Qualification Date: 09/28/2021

Period of Duration: Perpetual

Industry Code: 0 - General
Annual Report Due Date: N/A

Jurisdiction: OH
Charter Fee: \$250.00

Registration Fee Due Date: Not Required

Registered Agent Information

RA Type: Entity
Locality: HENRICO COUNTY

RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO
TRANSACTION BUSINESS IN VIRGINIA

Name: C T CORPORATION SYSTEM
Registered Office Address: 4701 Cox Rd Ste 285, Glen Allen, VA, 23060 - 6808,
USA

Principal Office Address

Privacy Policy (<https://www.scc.virginia.gov/privacy.aspx>) | Contact Us
Address: (https://www.scc.virginia.gov/clk/clk_contact.aspx)

Entity Information

Entity Information

Entity Name: RUMMEL, KLEPPER & KAHL, LLP

Entity ID: K0004178

Entity Type: General Partnership

Entity Status: **Active**

Series LLC: N/A

Reason for Status: GP - LLP Status Only

Formation Date: N/A

Status Date: 09/25/2001

VA Qualification Date: 09/25/2001

Period of Duration: N/A

Industry Code: 0 - General

Annual Continuation Report Due Date: N/A

Jurisdiction: MD

Charter Fee: N/A

LLP Status: Yes

Registration Fee Due Date: Not Required

Registered Agent Information

RA Type: Entity

Locality: HENRICO COUNTY

RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO
TRANSACTION BUSINESS IN VIRGINIA

Name: C T CORPORATION SYSTEM

Registered Office Address: 4701 Cox Rd Ste 285, Glen Allen, VA, 23060 - 6808,
USA

State Corporation Commission Clerk's Information System

Entity Information

Entity Name: Century Engineering, LLC	Entity ID: 11379136
Entity Type: Limited Liability Company	Entity Status: Active
Series LLC: No	Reason for Status: Active
Formation Date: 11/18/1996	Status Date: 04/27/2022
VA Qualification Date: 04/27/2022	Period of Duration: Perpetual
Industry Code: 0 - General	Annual Report Due Date: N/A
Jurisdiction: DE	Charter Fee: N/A
Registration Fee Due Date: Not Required	

Registered Agent Information

RA Type: Entity	Locality: HENRICO COUNTY
RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACTION BUSINESS IN VIRGINIA	
Name: C T CORPORATION SYSTEM	Registered Office Address: 4701 Cox Rd Ste 285, GLEN ALLEN, VA, 23060 - 6808, USA

Principal Office Address

Address: 10710 Gilroy Rd, HUNT VALLEY, MD, 21031 - 1310,
USA

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Entity Information

Entity Information

Entity Name: T2 UES, Inc.
 Entity ID: F2133587
 Entity Type: Stock Corporation
 Entity Status: **Active**
 Series LLC: N/A
 Reason for Status: Active and In Good Standing
 Formation Date: 06/11/2019
 Status Date: 09/29/2022
 VA Qualification Date: 08/23/2019
 Period of Duration: Perpetual
 Industry Code: 0 - General
 Annual Report Due Date: N/A
 Jurisdiction: DE
 Charter Fee: \$50.00
 Registration Fee Due Date: Not Required

Registered Agent Information

RA Type: Entity
 Locality: CHESTERFIELD COUNTY
 RA Qualification: BUSINESS ENTITY THAT IS AUTHORIZED TO
 TRANACT BUSINESS IN VIRGINIA
 Name: COGENCY GLOBAL INC.
 Registered Office Address: 250 Browns Hill Ct, MIDLOTHIAN, VA, 23114 -
 9510, USA

Principal Office Address

Address: 7217 F/87th St, Indianapolis, IN 46256, USA

(https://www.scc.virginia.gov/clk/clk_contact.asp)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2023

NUMBER

2705181948

BOARD FOR CONTRACTORS
CLASS A CONTRACTOR
CLASSIFICATIONS H/H



KOKOSING CONSTRUCTION COMPANY INC
6235 WESTERVILLE ROAD
WESTERVILLE, OH 43081



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

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

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DPOR-LIC (02/2017)

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DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

CLASS A BOARD FOR CONTRACTORS
CONTRACTOR

CLASSIFICATIONS H/H
NUMBER: 2705181948 EXPIRES: 12-31-2023

KOKOSING CONSTRUCTION COMPANY INC
6235 WESTERVILLE ROAD
WESTERVILLE, OH 43081



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DPOR-PC (02/2017)

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-29-2024

NUMBER

0411000271

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

PROFESSIONS: ENG



RUMMEL KLEPPER & KAHL LLP
RK&K
2100 EAST CARY ST
SUITE 309
RICHMOND, VA 23223



Demetrios J. Mells
Demetrios J. Mells, Director

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

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DPOR-LIC (02/2017)

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COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APPLSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411000271 EXPIRES: 02-29-2024
PROFESSIONS: ENG
RUMMEL KLEPPER & KAHL LLP
RK&K
2100 EAST CARY ST
SUITE 309
RICHMOND, VA 23223



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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

02-29-2024

NUMBER

0411001489

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

PROFESSIONS: LS, ENG



CENTURY ENGINEERING, LLC
CENTURY ENGINEERING INC A MARYLAND BASED CORPORATION
7400 BEAUFONT SPRINGS DRIVE
SUITE 505
RICHMOND, VA 23225



Demetrios J. Mellis
Demetrios J. Mellis, Director

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

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DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY BRANCH OFFICE REGISTRATION
NUMBER: 0411001489 EXPIRES: 02-29-2024
PROFESSIONS: LS, ENG
CENTURY ENGINEERING, LLC
CENTURY ENGINEERING INC A MARYLAND BASED CORPORATION
7400 BEAUFONT SPRINGS DRIVE
SUITE 505
RICHMOND, VA 23225



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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2023

NUMBER

0407007771

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

PROFESSIONS: ENG



T2 UES INC
7217 E 87TH ST
INDIANAPOLIS, IN 46256



Mary Brock-Vaughan
Mary Brock-Vaughan, Director

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

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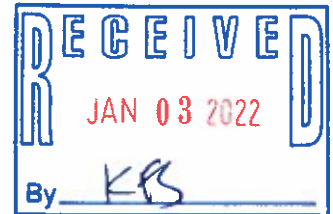


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Department of Professional and Occupational Regulation

BOARD FOR APELSCIDLA
BUSINESS ENTITY REGISTRATION
NUMBER: 0407007771 EXPIRES: 12-31-2023
PROFESSIONS: ENG
T2 UES INC
7217 E 87TH ST
INDIANAPOLIS, IN 46256



(FOLD)



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DPOR-PC (02/2017)

DPOR License Lookup License Number 0407007771

License Details

Name	T2 UES INC
License Number	0407007771
License Description	Business Entity Registration
Rank	Business Entity
Address	10988 RICHARDSON RD, ASHLAND, VA 23005
Initial Certification Date	2019-11-01
Expiration Date	2023-12-31

Related Licenses ¹

License Number	License Holder Name	License Type	Relation Type	License Expiry
0402023292	HUDGINS, MAYWOOD FRANKLIN JR	Professional Engineer License	Engineering	2023-03-31

Showing 1 to 1 of 1 entries

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COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

10-31-2023

NUMBER

0402046882

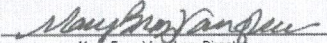
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
PROFESSIONAL ENGINEER LICENSE



OWEN LEE PEERY
2100 EAST CARY STREET
SUITE 309
RICHMOND, VA 23223



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Mary Broz-Vaughan, Director

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DPOR-LIC (02/2017)

42

COMMONWEALTH of VIRGINIA

Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400, Richmond, VA 23233

Telephone: (804) 367-8500

EXPIRES ON

12-31-2023

NUMBER

0402041295

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



MICHAEL WILLIAM SAUNDERS
4500 LITCHFIELD DRIVE
CHESTERFIELD, VA 23832



Mary Broz-Vaughan
Mary Broz-Vaughan, Director

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COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR APPLSCIDLA
PROFESSIONAL ENGINEER LICENSE
NUMBER: 0402041295 EXPIRES: 12-31-2023

MICHAEL WILLIAM SAUNDERS
4500 LITCHFIELD DRIVE
CHESTERFIELD, VA 23832



(FOLD)

VOID

**ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Ryan Gorman, PE, DBIA Regional Vice President, Alternative Delivery	
b. Project Assignment: Design-Build Project Manager	
c. Name of the Firm with which you are employed at the time of submitting SOQ.: Kokosing Construction Company, Inc.	
d. Employment History: With this Firm 26 Years With Other Firms 1 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Kokosing Construction Company: Start Date: 2016 End Date: Present Position: Vice President, Alternative Contracting: Manages design-build projects from procurement to final execution. Served as design/construction integrator on two VDOT design-build projects where he streamlined integration with design and construction teams. Start Date: 2015 End Date: 2016 Position: Design-Build Manager: Involved on an executive level on design-build procurements and projects. Start Date: 2012 End Date: 2015 Position: Business Development Manager/Sr. Estimator: Managed Design-Build, Estimating, and Marketing Departments in Corman Kokosing's office near Richmond, VA. Start Date: 1996 End Date: 2012 Position: Project Engineer/Superintendent/Project Manager/Operations Manager: Continuous progression of roles/responsibilities on road, bridge, and utility projects for VDOT, the City of Richmond, and counties in Virginia. Managed onsite personnel, developed/reviewed QA/QC plans/programs, outlined project plans, inspected/reviewed projects for safety/quality compliance, and ensured projects were completed on time. Organization: Virginia Transportation Construction Alliance (VTCA): Immediate Past President	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Clarkson University, Potsdam, NY BS 1995 Civil Engineering Virginia Polytechnic Institute & State University 2001 Transportation Construction Management Leadership Training	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2002 Professional Engineer VA Registration #0402033522	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
Design-Build I-64 Widening Exits 200-205, Henrico & New Kent Counties, VA, \$46.6 Million, VDOT	
With Current Firm? Yes	Project Role: Deputy Design-Build Project Manager Design/Construction Integrator
Start Date: Aug. 2017	End Date: Aug. 2019
Deputy Design-Build Project Manager. Ryan assisted/ensured design, construction, quality management, contract administration and other services, including procuring/furnishing materials, equipment, services and labor timely. He ensured ROW, environmental permits, and utility relocations were completed on time, made engineering designs and evaluated for any project impacts, made/approved engineering decisions during construction, attended public meetings, had the authority to stop work and ensured safe, constructible, functional project delivery. After a record setting wet construction season, critical path construction activities were accelerated to complete the project ahead of schedule. As Design/Construction Integrator , Ryan managed the designer and integrated the design-build process with the construction teams for contract conformance, compiled the final Released for Construction plans/specifications/final work packages, performed design quality and constructability reviews, confirmed owner's requirements were met, held the designer to the project schedule, coordinated design reviews with reviewing agencies, and resolved potential hazards. He managed the lead designer, coordinated the design, led design coordination meetings, tracked outstanding items, performed value engineering, and coordinated interaction between lead designer, design-builder joint venture, and owner to meet design schedules, build in innovation, and vet opinions. Widened five miles of I-64 from two to three travel lanes in each direction, including adding a 12-ft. wide travel lane and a 10-ft. wide inside shoulder within the median in both directions of the existing roadway, widened eastbound/westbound 264-ft. bridges by 26-ft. to the inside over Chickahominy River, rehabilitated the concrete deck, and constructed sound walls. There was an extremely narrow space in the median when widening the bridges. Since there	

was not enough width between the bridges for cranes, the foundations, piers, and girders, they were constructed from the middle out. PTFE bearings reduced the live loads to the existing foundations to remove the joints; to support the new substructure, deep foundations were used. The critical path ran through bridge structures, so phased demolition and construction plans were synchronized to take advantage of the available access, crews and equipment. Re-used the existing substructure and girders vs. replacing them which accelerated the second phase. Project relieves traffic congestion, enhances safety, adds capacity to the I-64 corridor and was completed ahead of schedule.

Relevancy: *VDOT Design-Build; Interstate Roadway; Survey; Structures/Bridges; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/MOT; ROW Acquisition; Utility Coordination/Relocation; Public Involvement/Relations; QA/QC; ITS Components; Construction Engineering/Inspection; Project Management*

Design-Build Route 29 Solutions, Albemarle County, VA, \$129 Million, VDOT	
With Current Firm? Yes	Project Role: Interim Design-Build Project Manager Deputy Design-Build Project Manager Responsible Charge Engineer
Start Date: Jan. 2015	End Date: July 2017

As **Interim Design-Build Project Manager** during preconstruction and **Deputy Design-Build Project Manager** during construction, Ryan assisted/ensured the design, utility relocations, ROW acquisition, environmental permitting, construction, quality management, contract administration, material procurement, and equipment services were performed timely and per contract. He attended public meetings and answered questions pertaining to the project. Ryan played a vital role in the structural engineering of the Rio Road Grade Separated Intersection via a design method never constructed in Virginia. The abutments were integrally placed on top of the soldier pile retaining wall to minimize the bridge’s footprint and keep Route 29 open to traffic throughout construction. The bridge superstructure was designed to act as a strut to support the retaining walls horizontally while supporting truck/road traffic vertically. This design concept was chosen due to the limited space in the intersection and mandate to keep traffic open at all times. The bridge/retaining walls were built in the congested intersection without acquiring additional ROW in an extremely tight schedule.

This project improves mobility/reduces congestion on Route 29, a major regional traffic corridor that runs parallel to I-81 and I-95, connecting Washington, DC/Northern Virginia and Greensboro/Raleigh/Durham, NC. The Route 29 widening roadway design and MOT were considered simultaneously to eliminate costly retaining walls and minimize temporary pavement while staying within the existing ROW. Widened/improved Route 29 from four to six lanes for 1.8 miles to complete a six-lane roadway section. After switching northbound traffic onto the new pavement in the former median area, crews graded the original northbound lanes to create a third lane for northbound traffic. Replaced/ rehabilitated most of the older culverts. Constructed two bridges: Rio Road Bridge is a single span overpass of the new Route 29 thru lanes constructed with concrete box beams and a cast-in-place deck on top which is three times wider than long. Fast-tracked construction with most of the substructure built under live traffic; Berkmar Drive Bridge was a 716-ft. long steel girder bridge with a concrete deck and parapet walls spanning a river. Project was completed ahead of schedule.

Relevancy: *VDOT Design-Build; Roadway; Survey; Structures/Bridges; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/MOT; ROW Acquisition; Utility Coordination/Adjustments/Relocations; Public Involvement/Relations; QA/QC; ITS; Soundwalls; Construction Engineering/Inspection; Project Management*

Design-Build Bridges over I-95 Bundle, Richmond, VA, \$38.9 Million, VDOT	
With Current Firm? Yes	Project Role: Design-Build Project Manager
Start Date: Nov. 2021	End Date: Nov. 2024

Design-Build Project Manager. Ryan oversees design/construction and manages the project team, including Design, Construction, and QA Managers, equipment and material procurement, establishes objectives/goals, work plans, budgets and resources, procures/coordinates subcontractors, develops/reviews designs, QC and QA plans, oversees selection and contractual terms with the QC and QA testing firms, developed the project-specific safety program with the project team, including training needs, monitors schedules, conducts progress meetings, evaluates/minimizes exposures and risks, mitigates issues, reviews/approves deliverables, RFIs, change orders, administers contracts, and oversees budget, safety, and quality compliance. During pre-proposal, Ryan was vital in optimizing VDOT’s design while maximizing clearance over I-95. This project includes five bridges over I-95 in downtown, Richmond, VA with heavy pedestrian movement and reconfigures traffic. Designing/replacing the bridge superstructures, including substructure repairs, demolishing the bridge deck and steel girders, replacing girders, deck and parapets, lighting, drainage, modifying traffic signals, and stormwater management. Widening the inside median of 4th Street to accommodate traffic crossovers to reconstruct the bridge over I-95 in two phases. Widening outside of 7th Street northbound to optimize alignment with I-95 on-ramp. Through coordination with VDOT, Virginia Commonwealth University (VCU), and City of Richmond, widening 7th Street southbound for an additional turn lane into VCU parking garage and widening I-64/I-95 on-ramp for an additional lane to accommodate exit from the parking garage.

Relevancy: *VDOT Design-Build; Roadway; Survey; Bridges, Environmental; Geotechnical; Traffic Control Devices; TMP/MOT; ROW; Utilities; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management*

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

**ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title:	Michael Saunders, PE Senior Vice President
b. Project Assignment:	Quality Assurance Manager
c. Name of the Firm with which you are employed at the time of submitting SOQ.:	Century Engineering, LLC
d. Employment History: With this Firm 11 Years With Other Firms 10 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):	<p>Century Engineering, LLC Start Date: 2011 End Date: Present Position: Senior Vice President. Mike manages and coordinates the workload of our in-house staff and subconsultants, including overseeing our Prime VDOT District-Wide Contracts. By being the central point of contact for all Virginia operations, he provides consistency and coordination across all assigned tasks. His primary focus is establishing regular communications with clients, as well as continuing to provide project review and Quality Assurance/Quality Control (QA/QC) management.</p> <p>Virginia Dept. of Transportation-Richmond District Start Date: 2011 End Date: 2011 Position: Project Controls Engineer. Mike coordinated constructability reviews to include developing pre-advertisement schedules and sequence of construction, as well coordinating post award schedule reviews and district wide schedule impact analysis. He also performed District-Wide Notice of Intent (NOI) and claims analysis. Mike was assigned as the Responsible Charge Project Manager for Design-Build Projects throughout the Richmond District. This assignment included serving on the selection panel in the procurement phase and serving as project manager of the construction phase. He attended weekly progress meetings and multiple design meetings, and ultimately served as the responsible charge engineer acting on behalf of the owner.</p> <p>Virginia Dept. of Transportation-Richmond District Start Date: 2007 End Date: 2011 Position: Area Construction Engineer. Mike executed a six-year program to include managing construction/maintenance contracts safely, with quality, on time, and within budget; to include providing responsible charge supervision and technical guidance to Construction Managers and Inspectors. He supervised all phases of multi-operational roadway and structural construction projects to ensure work was performed in accordance with project plans, specifications, and special provisions. Mike produced a three-year outlook manpower plan for VDOT and Consultant Inspectors needs on upcoming projects. He coordinated with staff in preparing/reviewing work orders, NOIs, and claims to validate the necessity of work and level of federal participation if the Federal Highway Administration is involved. Performed Responsible Charge duties on no plan projects, minimum plan projects, and full plan projects of varying complexity ranging up to multi-million-dollar contracts. Assisted the Fredericksburg District with the administration of a Regional Design-Build Bridge Replacement project. Duties included making responsible charge decisions and coordinating activities for projects that are in the Richmond District.</p> <p>Virginia Dept. of Transportation-Salem District Start Date: 2005 End Date: 2007 Position: Construction Project Manager. Mike supervised all phases of multi-operational roadway and structural construction projects to ensure work was performed in accordance with project plans, specifications, and special provisions. He supervised multiple construction inspectors' work and career development and resolved contractual disputes with contractors. Mike prepared/presented the project showings and preconstruction conferences, prepared/submitted work orders, and tracked project cost to assure projects remained within the designated budget, on multiple complex projects. He coordinated with staff in preparing/reviewing work orders, NOIs, and claims to validate the necessity of work.</p>
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:	Virginia Polytechnic Institute and State University, Blacksburg, VA BS 2001 Civil Engineering
f. Active Registration: Year First Registered/ Discipline/VA Registration #:	2005 Professional Engineer VA Registration #0402041295
g. Document the extent and depth of your experience and qualifications relevant to the Project.	<ol style="list-style-type: none"> <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> <i>Note whether experience is with current firm or with other firm.</i> <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>
Design-Build I-64 Widening, Exits 200-205, Henrico & New Kent Counties, VA, \$46.6 Million VDOT	

With Current Firm? Yes	Project Role: Quality Assurance Manager
Start Date: March 2017	End Date: Dec. 2019
<p>Quality Assurance Manager. Mike prepared the project's QA/QC plan and oversaw the QA procedures and plans. He was responsible for the performance and coordination of QA testing and inspection in accordance with VDOT's Design-Build guidelines. Mike monitored contractor's QC program and was liaison with the Department with respect to project compliance to ensure that IA/IV testing was being performed. He approved QC inspection, staffing assignments, and the QC frequency testing plan before submission to VDOT. Mike prepared, maintained and submitted project documentation including, diaries, EEO, materials notebook and documentation, as-built sketches, the approval of monthly pay packages, and the preparation/submission of final records. He managed the QA staff and enforced sufficient staffing for compliance with the contract, plans, and specifications.</p> <p>Widened five miles of I-64 from two to three travel lanes in each direction, including adding a 12-ft. wide travel lane and a 10-ft. wide inside shoulder within the median in both directions of the existing roadway, widened eastbound/westbound 264-ft. bridges by 26-ft. to the inside over the Chickahominy River and rehabilitated the concrete deck, and constructed sound walls. There was an extremely narrow space in the median when widening the bridges. Since there was not enough width between the bridges for cranes, the foundations, piers, and girders, they were constructed from the middle out. PTFE bearings reduced the live loads to the existing foundations to remove the joints; to support the new substructure, deep foundations were used. The critical path ran through bridge structures, so the phased demolition and construction plans were synchronized to take advantage of the available access, crews and equipment. Our ABC technique was to re-use the existing substructure and girders vs. replacing them which accelerated the second phase of the project. This project was completed ahead of schedule. It relieves traffic congestion, enhances safety, and adds capacity to the I-64 corridor.</p> <p>Relevancy: <i>VDOT Design-Build; Interstate Roadway; Survey; Structures/Bridges; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/MOT; ROW Acquisition; Utility Coordination/Relocation; Public Involvement/Relations; QA/QC; ITS Components; Soundwalls; Construction Engineering/Inspection; Project Management</i></p>	
Design-Build Route 3 Widening, Culpepper, VA, \$25 Million, VDOT	
With Current Firm? Yes	Project Role: Quality Assurance Manager
Start Date: May 2014	End Date: May 2017
<p>Quality Assurance Manager. Mike improved a 5.1-mile section of Route 3 from two lanes to a four-lane divided highway to increase capacity and safety for drivers. He prepared the project's QA/QC plan, and oversaw the project's QA procedures and plan. Mike was responsible for the performance and coordination of QA testing and inspection in accordance with VDOT's Design-Build guidelines. He monitored the contractor's QC program and was the liaison with the Department with respect to project compliance to ensure that IA/IV testing was being performed. Mike approved QC inspections, staffing assignments, and the QC frequency testing plan before submission to VDOT. He handled the preparation, maintenance, and submission of documentation, including diaries, EEO, materials/notebook/documentation, as-built sketches, the approval of monthly pay packages, and the preparation/submission of final records. Mike managed the project's QA staff and ensured there was sufficient staffing for compliance with the contract, plans, and specifications.</p> <p>Relevancy: <i>VDOT Design-Build; Roadway; Survey; Structure/Box Culverts; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP; ROW; Utilities; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management</i></p>	
Design-Build I-64/I-264 Pavement Rehabilitation, Norfolk, VA, \$36.5 Million, VDOT	
With Current Firm? Yes	Project Role: Quality Assurance Manager
Start Date: April 2014	End Date: Nov. 2015
<p>Quality Assurance Manager. Michael prepared the Quality Assurance/Quality Control Plan and oversaw QA procedures and plan for this project that included major restoration and pavement rehabilitation of roadway on I-64 and I-264 totaling 10 miles or 67 lane-miles. He was responsible for the performance and coordination of QA testing and inspection per VDOT's Design-Build guidelines, monitored the contractor's QC program and was the liaison with the Department regarding compliance to ensure IA/IV testing was being performed. Approved QC inspection, staffing assignments, and the QC frequency testing plan before submitting to VDOT. Michael managed the QA staff, including sufficient staffing, for contract, plan, and specification compliance. He handled the preparation, maintenance, and submission of documentation, including diaries, EEO, materials/notebook/documentation, as-built sketches, the approval of monthly pay packages, and preparation/submission of final records.</p> <p>Relevancy: <i>VDOT Design-Build; Interstate Roadway; Survey; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP; ROW; Utilities; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management</i></p>	
<p>h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.</p>	

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: Owen L. Peery, PE, Director, Transportation	
b. Project Assignment: Design Manager	
c. Name of the Firm with which you are employed at the time of submitting SOQ.: RK&K	
d. Employment History: With this Firm 36 Years With Other Firms 4 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): RK&K, Director, Transportation, 2002 – Present: Owen leads RK&K’s transportation efforts throughout Virginia and has been the project manager and/or the lead project engineer for many transportation and civil engineering projects. His responsibilities include management of in-house engineering and administrative staff, client and owner/agency coordination, the direction of design by in-house staff and subconsultant personnel, public interaction including public hearings and workshops, and the management of budgets and schedules. Owen’s specific design experience includes the layout and design of urban and rural interstates, roadways, streets, interchanges, at-grade intersections, civil-site plan coordination and design, drainage and stormwater design, erosion, and sediment control quantities, estimates and specifications. His specialized experience is in the design of urban and freeway, interstate facilities and the extensive inter-agency, stakeholder, utility, and owner coordination required with urban improvements. He has also been RK&K’s Design Manager on several design-build projects and assisted VDOT preparing Design-Build and P3 contract documents. Most of his work has been widening and rehabilitation of existing facilities. Owen has managed approximately 150 VDOT projects or assignments over the past 15 years. Additionally, he was a former member of the Engineering Consultant Leadership Committee (ECLC) of the VTCA and is currently Vice Chair of the ACEC Transportation Committee and Chair of the Transportation Procurement Subcommittee.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Military Institute, Lexington, VA/BS/1983/Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2009/Professional Engineer/VA #0402046882	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project	
Design-Build Route 29 Solutions Albemarle County, VA, \$129 Million, VDOT	
With Current Firm? Yes	Project Role: Design Manager
Start Date: Jan. 2015	End Date: July 2017
Design Manager. Owen led/oversaw the design and construction engineering for this project which included Route 29 widening from four lanes to six lanes for 1.8 miles; Route 29/Rio Road Grade Separated Intersection (GSI); and Berkmar Drive, an extension of 2.3 miles on new alignment and included a 716-ft. long steel girder bridge over the South Fork of the Rivanna River. Owen managed/coordinated a large multi-discipline design team that included major subconsultant partners each assigned the lead on the individual project elements. He coordinated/managed the discipline leaders for the design elements, including bridge/roadway designs, drainage/stormwater management, utilities, right-of-way, maintenance of traffic and environmental permitting/compliance, each of which reported directly to him. Owen coordinated between the project elements to ensure each work element stayed on budget/on schedule and served as Design QC Manager establishing/overseeing the design QA/QC Program. The Route 29/Rio Road GSI consisted of a complex SPUI grade separated intersection for traffic to move efficiently on the Route 29 corridor Owen coordinated the structural engineering design with other project elements, including roadway, stormwater, and maintenance of traffic. The innovative bridge design, the first of its kind in Virginia, was designed with the superstructure functioning as a compression strut, allowing the bridge abutments to be an integral part of the retaining walls below the bridge and reducing the length of the bridge. He led/coordinated the individual design disciplines, including coordination of bridge/roadway designs, drainage, utilities, right-of-way, and environmental permitting/compliance, which reported directly to him. He worked with the project’s DBPM to complete the project design in accordance with the contract documents. Through construction, Owen coordinated the review/response to shop drawings, RFIs and field questions. He coordinated with adjacent project elements to ensure that project stayed on	

budget/on schedule. He was also the Design QA/QC Manager where he established/oversaw the QA/QC program for design review, VDOT review coordination, specifications, and constructability. Design innovations led to early completion and opening the intersection along with improved safety and mobility in this congested corridor.

Relevancy: *VDOT Design-Build; Roadway; Survey; Structures/Bridges; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP; ROW; Utilities; Public Involvement/Relations; QA/QC; ITS;; Construction Engineering/Inspection; Project Management*

Design-Build I-64 & Route 623 Widening & Improvements, Short Pump, VA, \$34.7 Million, VDOT	
With Current Firm? Yes	Project Role: Design Manager Design Quality Manager
Start Date: Oct. 2013	End Date: Nov. 2015

Design Manager. Owen led a multi-disciplined team through design and construction. Traffic was maintained through this busy corridor while constructing additional through lanes to the median and widening both directions of I-64. Upgraded the traffic signal, widened the I-64 westbound ramp to Route 623 for an additional turn lane, added a left turn lane on Route 623 to I-64 eastbound, and widened the I-64 eastbound off ramp to Route 623 for an additional turn lane. In addition to managing the team that developed those elements, Owen coordinated with other design disciplines maintaining the submittal schedule and integrating their work into phased construction packages. He also served as Design Quality Manager establishing/overseeing the Quality Assurance/Quality Control (QA/QC) Program for design, including design review, VDOT review coordination, specifications, and constructability. Through construction, Owen coordinated the review/response to shop drawings, RFIs and field questions.

This project involved inside widening 4.5 miles of I-64 from a four lane to a six-lane divided highway, including two replacement bridges and I-64/Route 623 interchange improvements. The original scope widened/replaced the bridge superstructure and widened/repared the substructure. Given the inefficient span arrangement of the current bridges and concerns about overloading the existing piers, a complete bridge replacement was chosen. Twin replacement bridges were designed/constructed for I-64 over Little Tuckahoe Creek. The new 130-ft. simple span pre-stressed concrete girder bridges replaced the three-span steel girder bridges using pre-stressed concrete Bulb T girders and a deck slab extension which provided VDOT with new, low maintenance structures accompanied by a 75-year design life at a lower cost than the original scope rehabilitation option. Upgraded the pier protection barrier at overpasses to increase drive safety and collision protection to the bridge substructure.

Relevancy: *VDOT Design-Build; Interstate Roadway; Survey; Structure/Bridge; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/MOT; ROW; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management*

I-84 Exit 14, Town of Abingdon, VA, \$29 Million, VDOT	
With Current Firm? Yes	Project Role: Design Manager
Start Date: Aug. 2015	End Date: Nov. 2018

Design Manager. Owen led a multi-disciplinary team for the development of right-of-way and construction plans for improvements for I-81 Exit 14 and approximately two miles of the I-81 mainline north/south of the interchange. Interchange improvements consisted of two completely new bridges on the I-81 mainline, reconstructed the northbound exit ramp and eliminated the northbound entrance ramp to eliminate the existing weaving issues due to the cloverleaf configuration and replace that with a partial cloverleaf, eliminating the weave. He managed/oversaw all aspects of the planning and design, including roadway, drainage/SWM, and traffic engineering. Owen worked with VDOT and led the project team through a comprehensive screening process to identify the appropriate interchange improvements during the design phase. He led the project team in evaluating alternatives for the Dennison Drive realignment and vertical profile changes and balanced the project technical constraints with stakeholder needs and minimized impacts to adjacent property owners. The relocation of Dennison required constructing a 584-ft long MSE wall with a maximum exposed height of 9-ft. which had to be located on a potential slip plain consisting of soft residual soils on bedrock. Multiple alternatives were evaluated, including a counter berm, lightweight fill, reinforced soil slope, stone columns or geopiers in addition to the retaining wall that was selected. Designed the wall's external stability to include bearing resistance, settlement and eccentricity. Owen coordinated the various elements of the project team's efforts and supported VDOT's project leadership to deliver the project on budget/on schedule.

Relevancy: *Roadway; Survey; Structure/Bridge; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/ROW; Utilities; Public Involvement/Relations; Design QA/QC; ITS; Project Management.*

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

**ATTACHMENT 3.3.1
KEY PERSONNEL RESUME FORM**

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: John “Jake” Leffler Project Manager	
b. Project Assignment: Construction Manager	
c. Name of the Firm with which you are employed at the time of submitting SOQ.: Kokosing Construction Co., Inc.	
d. Employment History: With this Firm 13 Years With Other Firms 5 Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Kokosing Construction Company, Inc. Start Date: 2009 End Date: Present Position: Project Engineer/Sr. Project Engineer/Project Manager. Jake has been assigned to Design-Build/Design-Bid-Build bridge, roadway, and utility projects throughout Virginia as construction manager, construction QC manager, project manager, and project engineer. He manages project teams, schedule, budget, safety, and quality control, attends onsite progress meetings, negotiates change orders, provides material procurement, coordinates subcontractors, oversees field crews, identifies issues, and performs troubleshooting with minimal cost/schedule impacts. Manhattan Construction Company Start Date: 2005 End Date: 2009 Position: Project Engineer. Jake coordinated materials, labor, schedules, and methods to optimize construction on two vertical construction projects. He worked with subcontractors, clients, and architects to resolve issues timely/cost-effectively. Jake prepared, reviewed, and processed RFIs/submittals, submitted client billings, reviewed subcontractor payment applications, reviewed drawings for constructability/resolved conflicts, performed QC inspections and oversaw punch list operations.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Virginia, School of Engineering and Applied Sciences, Charlottesville, VA BS 2005 Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2009 VDOT Erosion & Sediment Control Contractor Certification #1-05007 2009 VA DEQ Responsible Land Disturber RLD12161	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List only three (3) relevant projects* for which you have performed a similar function. If additional projects are shown in excess of three (3), the SOQ may be rendered non-responsive. In any case, only the first three (3) projects listed will be evaluated.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
Design-Build I-64 Widening Exits 200-205, Henrico & New Kent Counties, VA, \$46.6 Million, VDOT	
With Current Firm? Yes	Project Role: Construction Manager
Start Date: Aug. 2017	End Date: Aug. 2019
Construction Manager. Jake supervised field operations, ensured construction was per drawings, maintained as-built documents, conducted preconstruction staff meetings establishing goals/responsibilities, evaluated safety exposures/risks, participated in developing the project-specific safety program, work plans, and Job Hazard Analyses, reviewed scope to identify any specialized safety training needs, reviewed Toolbox Talks, Take Fives, Morning Huddles, and Site Inspections weekly, conducted weekly safety inspections, submitted weekly Safety Inspection Reports, coordinated labor, equipment, and subcontractors, schedules, oversaw quality control compliance and project close out. Widened five miles of I-64 from two to three travel lanes in each direction, including adding a 12-ft. wide travel lane and a 10-ft. wide inside shoulder within the median in both directions of the existing roadway, widened eastbound/westbound 264-ft. bridges by 26-ft. to the inside over Chickahominy River, rehabilitated the concrete deck, and constructed sound walls. There was an extremely narrow space in the median when widening the bridges. Since there was not enough width between the bridges for cranes, the foundations, piers, and girders, they were constructed from the middle out. PTFE bearings reduced the live loads to the existing foundations to remove the joints; to support the new substructure, deep foundations were used. The critical path ran through bridge structures, so phased demolition and construction plans were synchronized to take advantage of the available access, crews and equipment. Re-used the existing substructure and girders vs. replacing them which accelerated the second phase. Project was completed ahead of schedule and it relieves traffic congestion, enhances safety, and adds capacity to the I-64 corridor. Relevancy: VDOT Design-Build; Interstate Roadway; Survey; Structures/Bridges; Environmental; Geotechnical;	

Hydraulics; Traffic Control Devices; TMP/MOT; ROW Acquisition; Utility Coordination/Relocation; Public Involvement/Relations; QA/QC; ITS Components; Construction Engineering/Inspection; Project Management

Design-Build I-64 & Route 623 Widening & Improvements, Short Pump, VA, \$34.7 Million, VDOT

With Current Firm? Yes

Project Role: Deputy Construction Manager | Construction QC Manager

Start Date: May 2014

End Date: Dec. 2015

Deputy Construction Manager. Jake managed construction, equipment and material procurement, work plans, budgets, and resources, coordinated subcontractors, monitored schedules, led progress meetings, minimized exposures/risks, mitigated issues, reviewed/approved deliverables, RFIs, and change orders, administered subcontractor contracts, oversaw budget, safety, and quality compliance, and ensured project was completed per contract. He coordinated issue resolutions, managed submittal procedures and material procurement, was a secondary contact for operations/procedures, and participated in design development/reviews. As **Construction QC Manager**, Jake oversaw the QC team to assure work was compliant with VDOT’s Minimum Requirements for QA/QC on design-build and P3 Projects. He managed QC activities and ensured materials used/work performed met the contract and approved for construction plans/specifications. Jake provided QC inspection/testing and assessed construction processes relative to standards/specifications. He assured QA/QC inspections and testing of materials documentation were maintained in the project records. Jake managed scheduling inspection/testing, held weekly QC meetings, coordinated preparatory meetings with the QAM, and maintained QC records for submission to the QAM monthly.

This project involved inside widening 4.5 miles of I-64 from a four lane to a six-lane divided highway, added a 12-ft. through lane and 12-ft. paved shoulder constructed to the inside of I-64 east/westbound. Traffic was maintained through this busy corridor while constructing the additional through lanes to the median and widening both directions of I-64. I-64/Route 623 interchange improvements included widening both off ramps from I-64 to Route 623 for additional turn lanes, adding a left turn lane on Route 623 to access I-64 eastbound, and upgrading the traffic signal. The additional through lane in each direction reduces congestion/travel time. The original scope widened/replaced the bridge superstructure and widened/repared the substructure. Given the inefficient span arrangement of the current bridges and concerns about overloading the existing piers, a complete bridge replacement was chosen. Twin replacement bridges were designed/constructed for I-64 over Little Tuckahoe Creek. The new 130-ft. simple span pre-stressed concrete girder bridges replaced the three-span steel girder bridges using pre-stressed concrete Bulb T girders and a deck slab extension which provided VDOT with new, low maintenance structures accompanied by a 75-year design life at a lower cost than the original scope rehabilitation option. Upgraded the pier protection barrier at overpasses to increase drive safety and collision protection to the bridge substructure.

Relevancy: *VDOT Design-Build; Interstate Roadway; Survey; Structure/Bridge; Environmental; Geotechnical; Hydraulics; Traffic Control Devices; TMP/MOT; ROW; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management*

Design-Build Bridges over I-95 Bundle, Richmond, VA, \$38.9 Million, VDOT

With Current Firm? Yes

Project Role: Construction Manager

Start Date: Nov. 2021

End Date: Nov. 2024

Construction Manager. Jake supervises field operations, ensures construction is per drawings, maintains as-built documents, conducts pre-construction staff meetings establishing goals and responsibilities, evaluates safety exposures and risks, participates in developing the project-specific safety program, work plans, and Job Hazard Analyses, reviews scope to identify any specialized safety training needs, reviews Toolbox Talks, Morning Action Plans (MAP), and Morning Huddles, conducts weekly safety inspections with the project manager/project engineer, submits weekly Safety Inspection Reports, coordinates labor, equipment, and subcontractors, schedules, and oversees quality control compliance.

This project includes five bridges over I-95 in downtown, Richmond, VA with heavy pedestrian movement and reconfigures traffic. Designing/replacing the bridge superstructures, including substructure repairs, demolishing the bridge deck and steel girders, replacing girders, deck and parapets, lighting, drainage, modifying traffic signals, and stormwater management. Widening the inside median of 4th Street to accommodate traffic crossovers to reconstruct the existing bridge over I-95 in two phases. Widening outside of 7th Street northbound to optimize alignment with I-95 on-ramp. Through coordination with VDOT, Virginia Commonwealth University (VCU), and the City of Richmond, widening 7th Street southbound for an additional turn lane into VCU parking garage and widening I-64/I-95 on-ramp for an additional lane to accommodate exit from the parking garage.

Relevancy: *VDOT Design-Build; Roadway; Survey; Bridges, Environmental; Geotechnical; Traffic Control Devices; TMP/MOT; ROW; Utilities; Public Involvement/Relations; QA/QC; ITS; Construction Engineering/Inspection; Project Management*

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

Project	Role	Anticipated Duration
Design-Build Bridges over I-95 Bundle	Construction Manager	Nov. 2021-Nov. 2024

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Design-Build I-64 Widening, Exits 200-205 Location: Henrico & New Kent Counties, VA	Name: Whitman, Requardt & Associates, LLP (WRA)	Name of Client/ Owner: VDOT, Richmond District Phone: 804-720-4229 Project Manager: R. Shane Mann, PE, District Construction Engineer Phone: 804-720-4229 Email: shane.mann@vdot.virginia.gov	08/2019	08/2019 <i>Completed ahead of schedule (See below)</i>	\$43,385	\$46,656 <i>Owner-initiated change orders and added scope and incentive payment</i>	\$46,656

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

<p align="center">RELEVANCY</p> <p>VDOT Design-Build Interstate Roadway Supplemental Survey/Utility Test Pits Structures/Bridges Environmental Geotechnical Hydraulics Traffic Control Devices TMP/MOT Right-of-Way Acquisition Utility Coordination/Relocations Public Involvement/Relations Design/Construction QA/QC ITS Components Construction Engineering/Inspection Project Management</p> <p align="center">TEAM MEMBERS</p> <table border="0"> <tr> <td>Ryan Gorman</td> <td>Aaron Straebel</td> </tr> <tr> <td>Jake Leffler</td> <td>Wheeler Dey</td> </tr> <tr> <td>Mike Saunders</td> <td>Drew Powell</td> </tr> <tr> <td>Aaron Straebel</td> <td></td> </tr> </table>	Ryan Gorman	Aaron Straebel	Jake Leffler	Wheeler Dey	Mike Saunders	Drew Powell	Aaron Straebel		<p>Kokosing Role/Project Description: Kokosing, was a JV partner in Corman-Branch, a Joint Venture as design-builder and was responsible for design/construction. Self-performed bridge construction, road widening, drainage, tunnel construction, culvert extensions, and MSE walls. This project widened five miles of I-64 from two to three travel lanes in each direction, including adding a 12-ft. wide travel lane and a 10-ft. wide inside shoulder within the median in both directions of the existing roadway, widened eastbound/westbound 264-ft. bridges by 26-ft. to the inside over the Chickahominy River, rehabilitated the concrete deck, and constructed sound walls.</p> <p>Design-Build Experience: Instead of replacing the bridge, the project team rehabilitated it. Kokosing's Deputy DBPM (Ryan Gorman) coordinated interface between designers and the construction team, including design and constructability reviews, scheduling meetings, weekly progress meetings and partnering meetings. The existing bridge was converted to jointless structure with concrete deck slab extensions and buried approach slabs. We matched the existing pier type and geometry for an aesthetically-pleasing structure.</p> <p>Finishing Contract Earlier than the Original Contract Fixed Completion Date: Although VDOT added a significant amount of work to the scope and changed the final completion date to October 2019, they actually wanted the project completed by Labor Day weekend in order to have all lanes open for the heavy traffic anticipated to/from Virginia Beach. The project was completed two days ahead of the original schedule in August 2019 despite historic river flooding and rain which affected the in-river substructure work on the bridge and roadway activities and increasing the sound wall square footage by 50%.</p> <p>Innovative Design Solutions and Construction Techniques: The critical path ran through bridge structures, so the phased demolition and construction plans were synchronized to take advantage of the available access, crews and equipment. We re-used the existing substructure and girders vs. replacing them which accelerated the second phase of the project. Designed/constructed temporary sediment basins where they could remain during earthwork operations and then could either be removed or converted to a permanent stormwater management basin. The project was divided into four quadrants (eastbound/westbound bridges and each side of the river), with all constructed simultaneously. Since there was an extremely narrow space in the median when widening the bridge; not enough to accommodate the cranes following construction, the foundations, piers, and girders were constructed from the middle out, with the cranes backing up as each span was constructed.</p> <p>Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: This project started at the connection point of two major interstate highways (I-295 and I-64) where there was heavy merging volumes. Traffic was regularly backed up even before construction, requiring us to strategically plan the sequencing and maintenance of traffic to minimize further disruptions. Lane closures were only allowed at night. There was a tow truck onsite 24/7 to quickly clear any accidents. Emergency pull offs were provided for motorists. Strategically placed Variable Message Boards communicated traffic conditions giving motorists an opportunity to divert to other routes before approaching the project.</p>	 <p align="right"><i>I-64 widening and bridge</i></p>	<p align="center"><i>“DB has been doing a great job. We have had a wet construction season and I am impressed with the progress that they are making. Jake Leffler is doing an outstanding job and his staff should be commended as well. Jeff Humphreys and I made great progress with the Noise wall change order. Jeff and I have developed a good working relationship that has developed into a solution /goal-oriented approach to issues. Mike Saunders has been doing a fantastic job as the QAM and his QA inspector Drew Powell should be commended for his detailed/thorough inspection and record keeping.”</i></p> <p align="center"><i>-VDOT comments from a design-build evaluation</i></p>
Ryan Gorman	Aaron Straebel										
Jake Leffler	Wheeler Dey										
Mike Saunders	Drew Powell										
Aaron Straebel											
<p>Successful Project Delivery: Delivered ahead of schedule, this project relieves traffic congestion, enhances safety, and adds capacity to the I-64 corridor. An additional travel lane in each direction accommodates current/future traffic volumes on I-64.</p>											


 2020 Heavy Construction Contractors Association (HCCA) Infrastructure Award | 2019 DBIA Mid-Atlantic Merit Award

ATTACHMENT 3.4.1(a)

**LEAD CONTRACTOR - WORK HISTORY FORM
(LIMIT 1 PAGE PER PROJECT)**

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: Design-Build I-64 to Route 623 Widening & Improvements Location: Short Pump, VA	Name: RK&K	Name of Client/ Owner: VDOT, Richmond District Phone: 804-720-4229 Project Manager: R. Shane Mann, PE Phone: 804-720-4229 Email: shane.mann@vdot.virginia.gov	11/2015	12/2015 <i>Time extended due to VDOT added scope</i>	\$33,238	\$34,782 <i>VDOT approved change order for the additional mainline slope correction</i>	\$34,782

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

<p>RELEVANCY</p> <ul style="list-style-type: none"> VDOT Design-Build Interstate Roadway Survey Structure/Bridge Environmental Geotechnical Hydraulics Traffic Control Devices TMP/MOT Right-of-Way Public Involvement/Relations QA/QC ITS Construction Engineering/Inspection Project Management <p>TEAM MEMBERS</p> <table border="0"> <tr><td>Ryan Gorman</td><td>Jeff Kapinos</td></tr> <tr><td>Jake Leffler</td><td>Mike Hogan</td></tr> <tr><td>Owen Peery</td><td>James Durbin</td></tr> <tr><td>Mike Saunders</td><td>Jeff Kuttesch</td></tr> <tr><td>Ryan Masters</td><td>Herbert White</td></tr> </table>	Ryan Gorman	Jeff Kapinos	Jake Leffler	Mike Hogan	Owen Peery	James Durbin	Mike Saunders	Jeff Kuttesch	Ryan Masters	Herbert White	<p>Kokosing Role/Project Description: Kokosing was the Design-Build Contractor who managed the design, construction, quality, safety, DBE, environmental compliance, owner coordination/communication, budget, and schedule. We self-performed the excavation, grading, sub-base installation, site drainage and water quality swales, constructed the five MSE walls and structural work on the two new bridges. This project involved inside widening of 4.5 miles of I-64 from a four lane divided highway to a six-lane divided highway, two replacement bridges, and improvements to the I-64/Route 623 interchange. Added a 12-ft. through lane and a 12-ft. paved shoulder constructed to the inside of I-64 east and westbound. Outside shoulder upgrades included full depth reconstruction for a portion of the project, and 2-in. mill/overlay of the existing travel lanes and remaining shoulder. I-64/Route 623 interchange improvements included widening both off ramps from I-64 to Route 623 for additional turn lanes, adding a left turn lane on Route 623 to access I-64 eastbound, and upgrading the traffic signal. I-64 is anticipated to be 73,900 ADT by 2036 with trucks making up 13% of the total traffic volume. The additional through lane in each direction reduces congestion/travel time.</p> <p>Finishing Contract on Time: At the start of the project, our design-build project manager and design manager (RK&K) developed a design submission schedule based on the construction start date. Team members were advised of the schedule which was reviewed at every design meeting. Kokosing's QC Manager was involved in reviewing designs as they progressed. This kept the project on schedule as it avoided time-consuming re-designs and reducing Kokosing review time before submitting to VDOT. As part of a scope change, VDOT agreed to a shortened review period which also kept the project moving forward.</p> <p>During the Scope Validation period, the Design-Build Team worked with VDOT to resolve a slope correction issue on the existing I-64 lanes. Early in the design, it was discovered that some segments did not have the minimum 2% cross-slope required to meet state/federal guidelines. For the 2% cross-slope, variable-depth milling/overlay was required, which would impact the schedule/budget. This mill/overlay work were done under night-time lane closures, and with the intricacies involved with variable-depth milling, only a fraction of the area could be covered in a single night as compared to straight 2-in. mill. The Design-Build Team met with VDOT/FHWA to determine a course of action, and a change order was issued to complete the slope correction. To keep the project on schedule, crews were added. The project was completed on schedule and on budget.</p> <p>Innovative Design Solutions and Construction Techniques: There were culverts below I-64 at five locations that were not continuous through the median area. With the widening occurring to the inside, the additional width of these new travel lanes and fill needed resulted in having to extend the culverts further into the median area. MSE walls were proposed to support the widened roadway. Because there was no stream diversion or work in the wet, additional stream/wetland impacts were avoided and they reduced loading on the existing culvert. MSE walls also reduced cost and took less time to construct than culvert extensions.</p> <p>Design-Build Experience: Design work included submitting Advanced Work Packages, such as median clearing and grubbing and bridge foundation, so that construction elements could begin before all design work was completed. During construction, monthly progress meetings were held with the Design-Build Team and VDOT, where everyone was kept informed of the schedule and issues. Design and construction activities were tracked monthly within the CPM schedule until completion. Throughout design, the design team held formal weekly meetings to update the team as designs progressed. This also involved frequent communication and regular meetings with Kokosing's QC Manager, where he provided input in the design development and reviewed designs for constructability prior to submission. This kept designers aware of budget impacts when making design decisions.</p> <p>Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: Kokosing worked with VDOT to communicate with stakeholders. Our team gave advance notice for each construction phase through the media and Portable Changeable Message Signs announcing traffic pattern changes, lane closures, and provided timely updates to VDOT for the project website and email alerts.</p> <p>Successful Project Delivery: Original scope widened/replaced the bridge superstructure and widened/repared the substructure. The Kokosing/RK&K Team investigated repair/replacement options; given the inefficient span arrangement of the current bridges and concerns about overloading the existing piers, a complete bridge replacement was chosen. Twin replacement bridges were designed/constructed for I-64 over a creek with the added capacity of the third lane. The new 130-ft. simple span prestressed concrete girder bridges replaced the three-span steel girder bridges using pre-stressed concrete Bulb T girders and a deck slab extension which provided VDOT with new, low maintenance structures accompanied by a 75-year design life at a lower cost than the original scope rehabilitation option. Due to an effective Quality Assurance and Quality Control Plan, this project earned the second highest CQIP score for a design-build project.</p>	 <p align="center"><i>I-64 median widening to add additional interior lane</i></p>
Ryan Gorman	Jeff Kapinos											
Jake Leffler	Mike Hogan											
Owen Peery	James Durbin											
Mike Saunders	Jeff Kuttesch											
Ryan Masters	Herbert White											

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


ATTACHMENT 3.4.1(a)


LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm's responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: I-95 / I-495 Telegraph Road Improvements, Woodrow Wilson Bridge Location: Alexandria, VA	Name: Potomac Crossing Consultants (GEC), RK&K (GEC JV Partner)	Name of Client/ Owner: VDOT Phone: 703-259-0243 Project Manager: John Lynch, PE, Northern District Engineer Phone: 571-238-2970 Cell Email: John.Lynch@VDOT.Virginia.gov	06//2013	06//2013 <i>Completed ahead of schedule even with unforeseen utility relocation.</i>	\$236,393	\$268,622 <i>Due to owner authorized changes (unforeseen utility relocation and MOT safety upgrades) and earned incentive payments</i>	\$268,622

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form. If the Offeror chooses to submit work performed as a Joint Venture or Partnership, identify how the Joint Venture or Partnership was structured and provide a description of the portion of the work performed only by the Offeror's firm.

<p align="center">RELEVANCY</p> <ul style="list-style-type: none"> VDOT Design-Build Elements Interstate Roadway Survey Structure/Bridge Environmental Geotechnical Hydraulics Traffic Control Devices Traffic Management/MOT Right-of-Way Utilities Public Involvement/Relations Quality Control ITS Fiber Installation Four Sound Barrier Walls (220,000 SF) Construction Engineering/Inspection Project Management <p align="center">TEAM MEMBERS</p> <p>Mimi Kronisch</p>	<p>Kokosing Role/Project Description: Kokosing, was lead partner in CK Constructors, a Joint Venture as Lead Contractor was responsible for construction, including highways/structures, MOT, environmental permits/protection, public relations, coordination with adjacent contractors, and utility protection/ relocations. This project was a fast-track reconfiguration/reconstruction of an interchange and widening/reconstruction of 2.5 miles of I-95/I-495 (Capital Beltway) and Telegraph Road for traffic to enter/exit Virginia by crossing the new Woodrow Wilson Bridge. Widened interstate from six lanes to two Express Lanes, four local lanes in each direction, and auxiliary lanes thru the interchange. Bridge construction included widening four piers with two 48-in., 60-ft - 90-ft. caissons per pier and replaced the deck and structural steel on a five-span steel girder bridge that carried Telegraph Road over Mill Road. This project increases capacity of I-95/I-495 by widening and adding lanes and separating local traffic from through traffic. The interchange improves interstate and local traffic flow in a highly congested area and eliminates complex mergers for safer and more efficient travel through connecting bridges and ramps. It expands 2½ miles of lanes on I-495 to tie into the corridors through and local lane configuration. This configuration continues for 7.5 miles on the Capital Beltway, from Telegraph Road in Virginia to MD 210 in Maryland.</p> <p>Finishing Contract Earlier than the Original Contract Fixed Completion Date: The project commanded major interim milestone coordination from a demanding schedule with incentive/disincentive clauses. All six incentive interim milestones were achieved; Interim Milestone 6 was completed 29 days ahead of the full incentive date and substantial completion was achieved 112 days early. The project was completed three days ahead of schedule, even with \$30 million in owner directed changes.</p> <p>Innovative Design Solutions and Construction Techniques: We revised Maintenance of Traffic Plans, greatly <i>reducing the original design of six phases to three phases and from 12 traffic shifts to six shifts</i>. This positioned the team to meet all major interim milestones/incentives, while improving public travelling conditions. Team partnering identified and resolved issues early in the planning stages. Contract drawings showed no utility conflicts; however, as work began, it was clear many existed. Rather than wait to discover them, Kokosing identified and recorded existing utility locations for the entire project and recorded the conflicts. As a result, the original schedule was maintained with extensive relocations coordinated with the schedule.</p> <p>Design-Build Experience: There were design-build MSE and sound wall requirements which were designed per VDOT specifications and special provisions. The project team reviewed the designs and submitted to VDOT for approval. Eleven MSE walls and four sound walls were designed and constructed.</p> <p>Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: This complex project had an aggressive schedule as it was linked with existing traffic patterns and the other Woodrow Wilson Bridge projects that had to be accommodated while working on the Capital Beltway, and over water and rail systems. Coordinated progress meetings every week with the owner, as well as meetings dealing with MOT, scheduling and lane closures to discuss coordination with the other projects. Also coordinated work with the City of Alexandria, hotels, retail stores, local city police, fire, and other emergency responders. Due to excessive traffic congestion, Kokosing proposed maintenance of traffic revisions to improve traffic flow which eliminated four phases of traffic and reduced traffic shifts from 12 to six. These revisions were implemented with VDOT's approval resulting in improved public traveling. Maintained traffic involving a 160,000 ADT. Six lanes; three lanes in each direction of I-95, were maintained at all times during construction. Constructed a section of roadway, switched traffic to the new lanes and began improvements to the old roadway. Traffic control and safety were huge concerns, with most construction completed at night and during off-peak hours.</p> <p>Successful Project Delivery: Completed the project ahead of schedule, motorists benefit from smoother traffic flow on Telegraph Road and Huntington Avenue, new and improved bridges, traffic lights, drainage systems, and retaining noise walls. Pedestrians have improved walking paths and safer access to the bridge.</p>	 <p align="center"><i>I-95/I-495 Telegraph Road Improvements</i></p> <div style="border: 1px solid orange; padding: 10px; margin-top: 10px;"> <p align="center"><i>“Scoring 95.3% for a project of the enormity and complexity of our VB 236 contract (the largest VDOT construction contract awarded to-date), is truly a significant positive achievement. It reflects our meeting the partnering mission statement commitments. I would like to extend my sincere appreciation to the VDOT/PCC/CKC partnership team for their steadfastness and resolve. I congratulate the team for having met the challenges in achieving this score, and thank them again. Let’s keep up the good work.”</i></p> <p align="center"><i>-Jalal Masumi, VDOT’s Deputy Project Manager</i></p> </div>
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 2013 VTCA Transportation Engineering Overall Winner


ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Design-Build I-64 to Route 623 Widening & Improvements Location: Short Pump, VA	Name: Kokosing Construction Company, Inc. (formerly under Corman Construction)	Name of Client: VDOT, Richmond District Phone: 804-720-4229 Project Manager: R. Shane Mann, PE Phone: 804-720-4229 Email: shane.mann@vdot.virginia.gov	10/2013	12/2015 <i>Time extended due to VDOT added scope</i>	\$33,238	\$34,782 <i>VDOT approved change order for the additional mainline slope correction</i>	\$2,500

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

<p align="center">RELEVANCY</p> <ul style="list-style-type: none"> VDOT Design-Build Interstate Roadway Survey Structure/Bridge Environmental Geotechnical Hydraulics Traffic Control Devices TMP/MOT Right-of-Way Public Involvement/Relations QA/QC ITS Construction Engineering/Inspection Project Management <p align="center">TEAM MEMBERS</p> <table border="0"> <tr><td>Owen Peery</td><td>James Durbin</td></tr> <tr><td>Ryan Masters</td><td>Jeff Kuttesch</td></tr> <tr><td>Jeff Kapinos</td><td>Ryan Gorman</td></tr> <tr><td>Herbert White</td><td>Jake Leffler</td></tr> <tr><td>Mike Hogan</td><td>Mike Saunders</td></tr> </table>	Owen Peery	James Durbin	Ryan Masters	Jeff Kuttesch	Jeff Kapinos	Ryan Gorman	Herbert White	Jake Leffler	Mike Hogan	Mike Saunders	<p>RK&K Role/Project Description: RK&K's Richmond office served as Lead Designer for this project involving inside widening of 4.5 miles of I-64 from a four-lane divided freeway to a six-lane divided freeway, including two replacement bridges and I-64/Route 623 interchange improvements. This I-64 segment provides a critical link between downtown Richmond and Richmond's West End with nearly 50,000 vehicles per day and is the primary connection between Richmond and Charlottesville. The I-64 interchange with Route 288 is also within the project limits. This project is an excellent match to the I-64 Gap project in scope/complexity. Design/construction of this freeway, with a 75-mph design speed, included widening I-64 to provide one 12-ft. wide lane in each direction of the median; and adding a 12-ft. wide paved shoulder in each direction. Outside shoulder upgrades included full depth reconstruction for a portion of the project, and 2-in. mill/overlay of the existing travel lanes and remaining shoulder. I-64/Route 623 interchange improvements widened both off ramps from I-64 to Route 623 for additional turn lanes, added a left turn lane on Route 623 to access I-64 eastbound, and upgraded the traffic signal. Structures design included 130-ft. simple span prestressed concrete girder bridges for I-64 over a creek to replace the three-span steel girder bridges and included foundations, substructure, and superstructure. Special considerations were significant skew, extreme scour conditions, and staged construction to support MOT during bridge replacement. The two replacement bridges provided VDOT with new structures that have a longer lifespan and fewer maintenance issues than rehabilitating/maintaining the existing bridges, and at a lower cost. Also designed foundations for signal and sign structures, and upgrades to pier protection barriers to meet current standards at existing overpasses. RK&K provided environmental design/permitting, including wetland delineations and stream assessments; determination of wetlands/stream mitigation requirements; securing rare/threatened/endangered species clearances; securing cultural resource clearances from the Virginia Dept. of Historic Resources; acquiring water quality permit authorizations/modifications; securing Clean Water Act Individual Permit, State Programmatic General Permit, Water Protection General Permit, and Virginia SWM Permit from the VDEQ; and compliance with environmental commitments contained in the NEPA document. RK&K performed a Hydrologic and Hydraulic Analysis for bridge crossings over a creek, including HEC-RAS modeling and scour analysis. We determined a replacement bridge with a smaller hydraulic opening than the original bridge was feasible and saved money. Designed SWM facilities, erosion & sediment controls, bridge deck drainage, outfall analysis, underdrains, storm sewer systems, and design of temporary drainage needs for MOT sequencing. Finishing Contracts on Time: At the start of the project, our design manager and design-build project manager (Kokosing) developed a design submission schedule based on the construction start date. Team members were advised of the schedule which was reviewed at every design meeting. Kokosing's QC Manager was involved in reviewing designs as they progressed. This kept the project on schedule as it avoided time-consuming re-designs and reducing Kokosing review time before submitting to VDOT. As part of a scope change, VDOT agreed to a shortened review period which also kept the project moving forward. During the Scope Validation period, worked with VDOT to resolve a slope correction issue on the existing I-64 lanes. Early in the design, it was discovered some segments did not have the minimum 2% cross-slope required to meet state/federal guidelines. For the 2% cross-slope, variable-depth milling/overlay was required, which would impact the schedule/budget. This mill/overlay work were done under night lane closures, and with the intricacies involved with variable-depth milling, only a fraction of the area could be covered in a single night. The Design-Build Team met with VDOT/FHWA to determine a course of action, and a change order was issued to complete the slope correction. Crews were added and the project was completed on schedule and on budget. Innovative Design Solutions and Construction Techniques: The bridges used an innovative abutment design of rock-socketed steel H-piles with MSE-type straps carrying a portion of the lateral loads, reducing the number of augured piles for lateral stability of the abutments. Designed/constructed five MSE retaining walls at existing culvert locations which reduced cost, review times, and construction durations.</p> <p>Design-Build Experience: Designed to release Advanced Work Packages, including median clearing and grubbing and bridge foundation. This advanced median work and allowed construction to start before completing the design. RK&K worked with the construction team and marked permit-sensitive areas for protection and allowed work in upland areas to begin before receiving final permits. These design activities allowed construction elements to begin before all design work was completed. The construction manager and construction bridge and roadway leaders were integrated into the design QA/QC so that design elements were reviewed for constructability at all phases of design and for all design packages. Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: RK&K developed a TMP and MOT plan to manage traffic during construction, which included traffic operations, temporary traffic control, and public communications plans. Maintained access to entrance/exit ramps at all three interchanges while completing improvements. Using MSE walls in lieu of culvert extensions resulted in reduced construction durations and limiting traveling public impacts. We also kept suitable excavation onsite within the median area resulting in less construction traffic entering/exiting the construction area, improving traveling public safety. Designed sequence of construction for two-phase construction while maintaining two traffic lanes in each direction. TMP was designed in accordance with the allowable work hours and holiday/weekend restrictions implemented by VDOT. WZTIA evaluated traffic impacts associated with construction activities and refined the MOT to minimize congestion during construction. Successful Project Delivery: Original scope widened/replaced the bridge superstructure and widened/repared the substructure. The Kokosing/RK&K Team investigated repair/replacement options; given the inefficient span arrangement of the current bridges and concerns about overloading the existing piers, a complete bridge replacement was chosen. Twin replacement bridges were designed/constructed for I-64 over a creek with the added capacity of the third lane. The new 130-ft. simple span prestressed concrete girder bridges replaced the three-span steel girder bridges using pre-stressed concrete Bulb T girders and a deck slab extension which provided VDOT with new, low maintenance structures accompanied by a 75-year design life at a lower cost than the original scope rehabilitation option. Due to an effective Quality Assurance and Quality Control Plan, this project earned the second highest CQIP score for a design-build project.</p>	 <p align="center"><i>I-64 median widening to add additional interior lane</i></p>
Owen Peery	James Durbin											
Ryan Masters	Jeff Kuttesch											
Jeff Kapinos	Ryan Gorman											
Herbert White	Jake Leffler											
Mike Hogan	Mike Saunders											

"I travel this road several times a day and am very pleased with the traffic safety and direction signage. The travel through this area is very smooth and hope that the work is completed soon. Thank you very much for a job well done."

- Ron Brady, Goochland Resident


ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Design-Build I-5111 & I-4739: I-40 Widening & Improvements Location: Wake/Johnston Counties, NC	Name: S.T. Wooten Corporation	Name of Owner: North Carolina Dept. of Transportation Project Manager: Malcolm Watson, PE Phone: 919-707-6614 Email: mcwatson@ncdot.gov	07/2018	05/2025 <i>NCDOT added a new interchange</i>	\$360,175	\$408,000 <i>NCDOT added a new interchange</i>	\$24,914

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

<p align="center">RELEVANCY</p> <ul style="list-style-type: none"> Design-Build Interstate Roadway Widening Survey Structure/Bridge Environmental Geotechnical Hydraulics Traffic Control Devices TMP/MOT ROW Utilities Public Involvement/Relations QA/QC ITS Sound walls Coordination with Adjacent Projects 	<p>RK&K Role/Project Description: RK&K is the Lead Designer for this widening/improvements of I-40 project from the I-40 / I-440 / US 64 interchange in Wake County to just north of SR 1525 in Johnston County. As one of the most heavily-traveled and congested transportation facilities in this area, this 12.8-mile long project relieves current/ future I-40 congestion and consists of ten-, eight-, and six-lane sections designed to meet 70/ 75 mph design speed and upgrades to meet current freeway interstate standards. There are six interchanges (partial cloverleaf, freeway to freeway, diamond, and diverging diamond), 15 bridges, replacing/extending box culverts, retaining walls, and sound barriers.</p> <p>Finishing Contracts on Time: After over four years of design and construction, this project is currently scheduled to finish on the updated completion date of May 2025, which was revised by the Owner due to COVID supply chain and labor challenges, as well as owner directed changes which increased the scope, including adding a new interchange to accommodate a newly-built, massive Amazon distribution center.</p> <p>Innovative Design Solutions and Construction Techniques. Unique innovations included using temporary ramp from an existing bridge to the median, temporary ramps on the outside of I-40 from the asphalt/concrete plans, and a conveyor system to the median of I-40 to allow earthwork, asphalt, Type I stone, and ABC to the median from a local roadway crossing. The temporary ramp is located strategically at the quarry, asphalt plant, and concrete plant on the north side of the job. The conveyor system is in the southern part of the project and at the other onsite asphalt plant. In the same area of the temporary median access ramp, the team used outside ramps from the asphalt plant and concrete plant to deliver materials for the outside widening. Using these systems greatly minimizes traffic impacts by eliminating 42,375 truckloads of materials from entering/exiting I-40 traffic, and specifically the median, which was a significant safety concern due to the impacts of slow moving traffic merging/exiting I-40's fast lane.</p> <p>When COVID-19 struck, our team had to instantly change tactics to complete the project and tapped into our extensive design-build experience to innovate and shift priorities to keep the project moving. When the right-of-way process was impacted due to revised court procedures that hindered meeting with owners face-to-face, our team used the CPM to track parcel availability and adjust design and construction work to areas as right-of-way was obtained.</p> <p>Our decision to use enhanced interdisciplinary reviews resulted in improving process and schedule. During the review for early bridge designs, the design-builder noted areas where construction may be challenging. A separate meeting was held to discuss and design changes were made for constructability. Our team worked closely with NCDOT and the agencies to determine if large retaining walls adjacent to streams/wetlands could be eliminated due to the likelihood of future scour and maintenance issues. After coordination and consideration of this forward thinking, the walls were removed with the agencies' blessing. For all submittals, existing and proposed utilities, and storm drainage were checked for conflicts. It was important to check that there were no conflicts for any type of foundations (sign, bridge, lighting, etc.).</p> <p>Design-Build Experience: For initial design effectiveness, design submittals (including those from subconsultants) went through an Interdisciplinary Review process where all disciplines reviewed the submittal and provided comments. At the same time, the plans were sent to the design-builder for a constructability review. This minimized conflicts between the design disciplines and gave the design-builder a chance to assess constructability, thus avoiding time consuming plan resubmittals and costly constructability issues in the field. To monitor our progress against the design schedule, RK&K prepared a CPM schedule on Microsoft Project and updated it regularly to include actual submittal dates vs. projected.</p>	 <p align="center"><i>Temporary Median Construction Access Ramp to I-40</i></p>
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Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: The temporary median ramp, temporary outside ramps, and conveyor systems significantly minimized impacts to the traveling public by limiting truck traffic on I-40. A total of 42,375 trucks were eliminated from I-40 traffic with these systems. The team has a self-imposed penalty to open the most congested area of traffic from the beginning of the project to the US 70 bypass. By getting this section of I-40 open early, a significant traffic issues will be eliminated while still being able to finish the remainder of the project.



Successful Project Delivery: With an innovative design concept and aggressive construction schedule, RK&K and the design-build team received the highest technical score of 95 during the design-build selection process.

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm's responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Design-Build I-4744: I-40 Widening & Improvements Location: Wake Co., NC	Name: S.T. Wooten Corporation	Name of Owner: North Carolina Dept. of Transportation Project Manager: Malcolm Watson, PE Phone: 919-707-6614 Email: mcwatson@ncdot.gov	06/2009	06/2011	\$49,000	\$49,000	\$3,900

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. The Work History Form shall include only one singular project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be considered a single project. Projects/contracts with multiple phases, segments, elements (projects), and/or contracts shall not be claimed as a single project on this form.

RELEVANCY

- Design-Build
- Interstate Widening
- Survey
- Structure/Bridge
- Environmental
- Geotechnical
- Hydraulics
- Traffic Control Devices
- TMP/MOT
- Utilities
- QA/QC
- ITS
- Soundwalls
- Project Management

RK&K Role/Project Description: RK&K's Raleigh office served as the Lead Designer for this project with support from RK&K's Richmond office. As one of the last I-40 segments in the area to be improved/widened to six-lanes, this highly anticipated project alleviated congestion that previously led to significant rush-hour traffic. The Team widened I-40 from four to six lanes for 6.4 miles, and widened dual bridges over US 1 and dual bridges over eastbound Wade Ave. while maintaining roughly 130,000 vehicles per day throughout construction.

RK&K designed the median widening using a 70mph design speed and interstate standards to provide one additional 12-ft. wide lane in each direction of I-40, an additional 12-ft. wide paved shoulder in each direction.

We used RK&K's standard design QA/QC plan, tailored to this project, which required design quality checks, peer, constructability and environmental reviews, and cross-discipline coordination. Coordinated erosion and sediment control plans with the design-builder making plans/procedures easy to follow during construction resulting in minimal impacts to adjacent natural resources.

Structure design included widening the bridges at Wade Ave. and US 1/64 to accommodate the additional traffic lanes, plus an additional future lane. The Team was also responsible for the design/construction of two sound barrier walls needed due to the increased capacity and noise levels of the widened roadway.

RK&K led the utility coordination and obtained Level "A" S.U.E. data, developed the utility conflict matrix, and coordinated utility relocations.

Finishing Contract Earlier than the Original Contract Fixed Completion Date: By implementing innovative designs and creative construction techniques, including a traffic management task force and a unique conveyor system to supply raw materials to the median widening, *the team completed the project nearly a full year ahead of the initial scheduled completion date.*

Innovative Design Solutions and Construction Techniques: Project success hinged on the many creative techniques our team brought to the project. One unique innovation was installing an overhead conveyor system to deliver asphalt/aggregate to the median from the design-builder's staging area adjacent to the project. This not only saved time and taxpayer money, but also provided significant safety benefits for the traveling public/construction personnel. This conveyor system minimized conflicts with high speed traffic by eliminating over 12,000 truckloads hauling materials to/from the median. It also eliminated over 237 lane closures that would have been required to deliver the 85,000 tons of subgrade material and 135,000 tons of asphalt material to the median.

Design-Build Experience: This project is only one transportation facility that illustrates RK&K's extensive design-build experience. RK&K has completed design for over 60 alternative delivery transportation projects worth nearly \$4.0B throughout the Mid-Atlantic and Southeastern US. This demonstrates RK&K's expertise in the design-build process and our ability to seamlessly work with our contractor partners, clients, and specialized subconsultants.

Limiting Impacts to the Traveling Public and Affected Communities, including Commitments to Effective Strategies to Minimize Congestion during Construction: Widening to the median presented construction access challenges, including safety issues resulting from slow moving construction traffic entering/exiting the high speed travel lanes. To alleviate, we used the conveyor system to eliminate over 12,000 truckloads of material being hauled on public roadways and 237+ lane closures on I-40. Since construction near active traffic lanes can cause delays, RK&K conducted additional traffic studies to evaluate the best times and days construction activities could be completed adjacent to active travel lanes to minimize traveling public impacts. Where phasing allowed, sound barriers were constructed early on to reduce construction noise to a nearby community.

Successful Project Delivery: Successful project delivery can be seen in the final product, innovative design focused on MOT, and by its early completion.



This project was recognized at the 2013 Grand Award for Engineering Excellence in Transportation reception. The award was presented by the American Council of Engineering Companies of North Carolina (ACEC) which was based on innovation, future value to the Engineering profession, social and economic considerations, and complexity.

2011 AGC Pinnacle Award for Best Highway Project in the Carolinas

2011 NAPA Safety Innovation Award



I-40 Median Widening with Conveyor System

"I commend RK&K and the entire Design-Build Team for completing this project quickly, safely, and cost-effectively. The team did an outstanding job of orchestrating simultaneous design and construction efforts while ensuring the safety of the traveling public. The Design-Build Team's efforts exceeded NCDOT's expectations in innovation during both design and construction. Despite the numerous and complicated traffic control, schedule, subgrade, and public information challenges of the project, the total team approach and responsiveness to the NCDOT contributed to one of North Carolina's finest transportation achievements.."
- Roger Rochelle, PE, NCDOT