



Statement of Qualifications



Carolina Crossroads Phase 3C Widening and Saluda River and CSX Bridge Replacements Design-Build Project

Project ID P043325

Lexington County, SC

June 19, 2024



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Narrative





3.2 INTRODUCTION

Crowder Construction Company (Crowder) and our design partner, **Rummel, Klepper & Kahl, LLP (RK&K)**, are extremely familiar with the project. Our intimate knowledge is based on our firms' in-depth involvement in all phases of the Carolina Crossroads project, which began with Phase 1 in April of 2020. Focused on SCDOT's desire of establishing smaller design-build teams, combined with members of our Team shortlisted on all three of the previous phases, we have strategically formed this design-build Team to effectively and efficiently deliver this Phase 3C - I-20 Widening and Bridge Replacement Project.

Crowder will serve as the Contracting Entity and be ultimately responsible for its successful delivery. Crowder is a wholly-owned subsidiary of Crowder Constructors Inc. (parent), both incorporated in the state of North Carolina. As a prequalified prime contractor with SCDOT, Crowder will self-perform most of the project's key elements and has enlisted local resources and expertise of dedicated subcontractor **CR Jackson, Inc.** to provide asphalt paving. Crowder has once again teamed with Lead Designer RK&K, who will serve as the prime design consulting firm and be responsible for the overall design. **RK&K** will be supported by trusted local subconsultants that specialize in various disciplines. **Greenman-Pedersen, Inc. (GPI)** will serve as our Team's Independent Quality Firm and will ensure all workmanship and materials are in compliance with the contract requirements.

3.2.1 Contracting Entity | 3.2.2 Points of Contact | 3.2.3 Full Legal Name of Lead Contractor & Lead Designer | *Please see table above.*

3.2.4 Unique Entity IDs | *Please see table above.*

3.2.5 Commitment of Key Individuals | Our Key Individuals are fully committed to this project, driven to exceed SCDOT's quality and schedule expectations, and will be available for the duration of the project. Our Team is also committed to providing all resources and personnel required to successfully deliver the Project.

Table 3.2.1 | 3.2.2 | 3.2.3

Contracting Entity, Project Office, and Representative

Crowder Construction Company
PO Box 30007, Charlotte, NC 28230

Authorized Representative
George Franklin Ellis, PE
704.995.4757 | gellis@crowderusa.com

Legal Name of Firms & Points of Contact

Lead Contractor
Crowder Construction Company (Crowder)

☎ **POC - Christopher Alan Boyd, PE, DBIA**
PO Box 30007, Charlotte, NC 28230
704.942.6580 | cboyd@crowderusa.com

Lead Designer
Rummel, Klepper & Kahl, LLP (RK&K)

☎ **POC - Christopher Eric Jordan, PE, DBIA**
1201 Main Street, Suite 1400, Columbia, SC 29201
803.766.7240 | cjordan@rkk.com

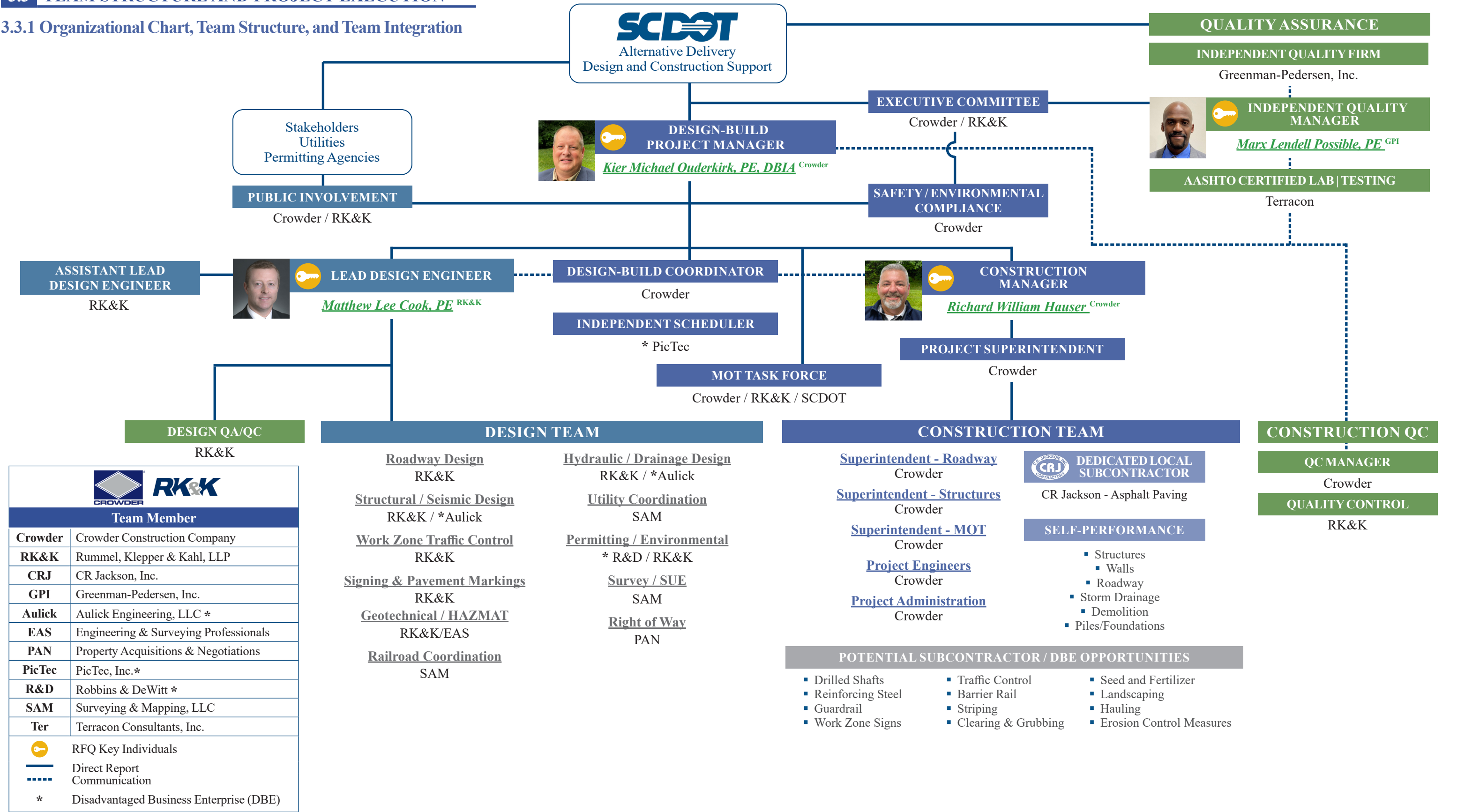
Table 3.2.4 | Unique Entity IDs

Firm	Unique ID No.
Crowder Construction Company	K7HXCACGATE5
Rummel, Klepper & Kahl, LLP	H65ZV5HPXEE8



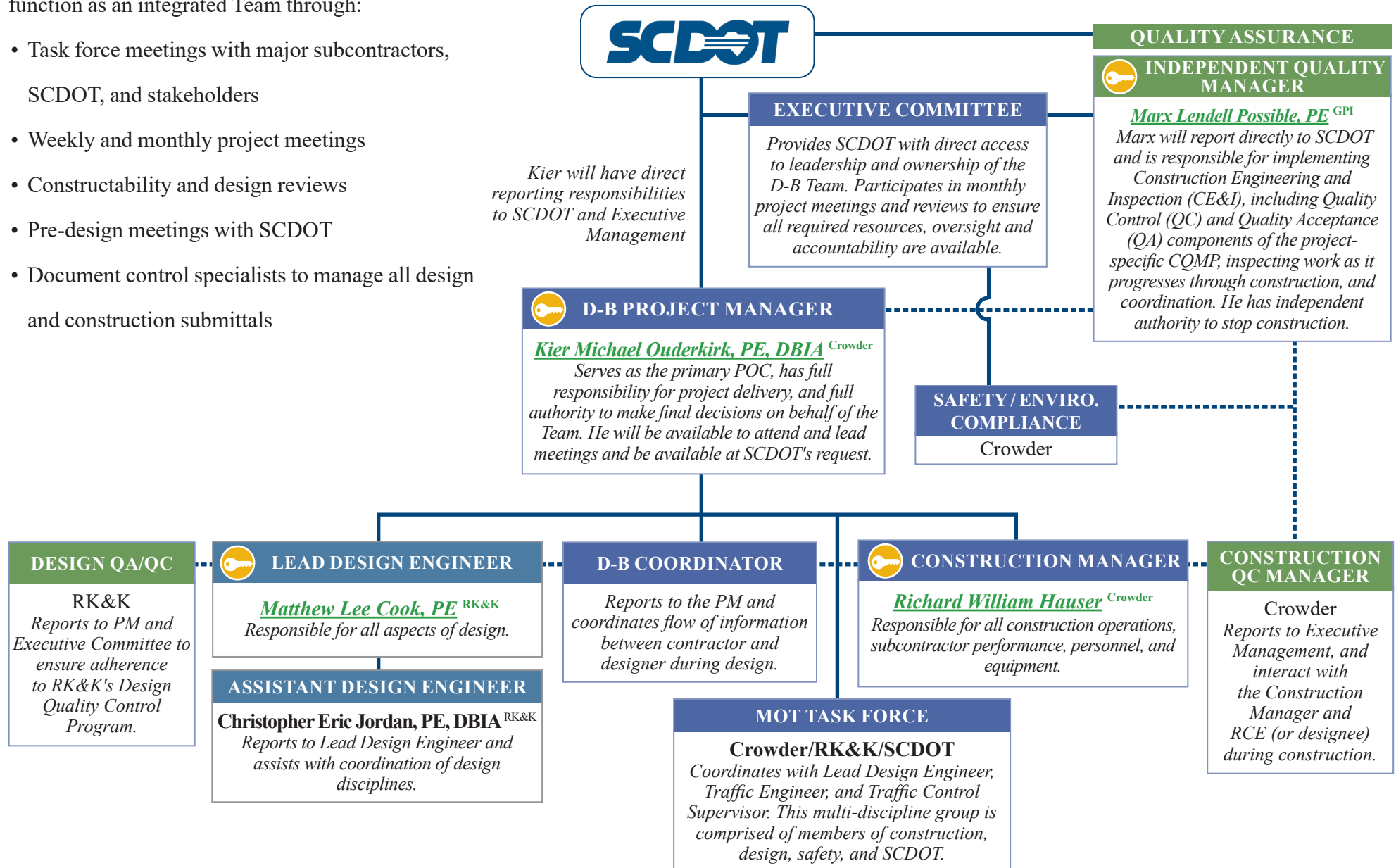
3.3 TEAM STRUCTURE AND PROJECT EXECUTION

3.3.1 Organizational Chart, Team Structure, and Team Integration



Functional Relationships and Team Integration | The following chart illustrates functional relationships and how our proposed organization will seamlessly function as an integrated Team through:

- Task force meetings with major subcontractors, SCDOT, and stakeholders
- Weekly and monthly project meetings
- Constructability and design reviews
- Pre-design meetings with SCDOT
- Document control specialists to manage all design and construction submittals





Firms and Key Individuals Working Together

and Teaming Success | The construction strengths and experience of Crowder combined with the design expertise of RK&K provides SCDOT and this project with the ideal design-build Team. As demonstrated by the table to the right, Crowder and RK&K have worked together on several projects and maintain a successful working relationship. Through our joint experiences, our firms' cultures, assets, and focus on client service has provided the foundation for our outstanding partnership.

Project Name & Location	Team Role	Years	Reference
City of Raleigh, Crabtree Creek West Greenway project, Raleigh, NC	Crowder: Prime Contractor RK&K: CEI/CA services	2021-2023	Benjamin Possiel, Sr. Eng. Tel: 919.996.4057 benjamin.possiel@raleighnc.gov
NCDOT, Emergency Express Design-Build, Liberty Hill Road, SR 1651 Bridge 136 over the South Yadkin River	Crowder: Prime Contractor RK&K: CEI	2021-2022	Rodney Gantt Tel: 980.552.4204 rwgantt@ncdot.gov
VDOT, Bridge replacement on Route 671 over overflow Nottoway River, \$22M. RK&K investigated a broken pile and provided repair plans, calculations, and pile wall thickness report.	Crowder: Prime Contractor RK&K: Pile repair design	2021	Miranda Kidd, PE Tel: 757.996.3342 miranda.kidd@vdot.virginia.gov
NCDOT, Piedmont Rail Corridor Improvement Program, Harrisburg to Charlotte, 10 miles, \$25M, which included the Grier Rd. grade separation.	Crowder: Prime Contractor RK&K: Corridor Utility Coordination, Design - Grier Road grade separation	2013-2016	Eric K. Swanson, PE, LEED AP Rail Construction Manager Tel: 919.707.4111 ekswanson@ncdot.gov
SCDOT, CLRB 2020-1 - District 2 Design-Build Bridge Package	RK&K: Lead Designer SAM: Utility Coordination	2020-2022	Brad Reynolds Tel: 803.347.1440 ReynoldsBS@scdot.org

3.3.2 Critical Risks | Our Team has a thorough understanding of the project and we understand that there are inherent risks associated with any project of this type. As illustrated by the following table, we have investigated the critical risks and have identified avoidance strategies to mitigate and eliminate these risks.

Critical Risk	Mitigation / Avoidance Strategies	Expected Role of SCDOT/Agencies
Limitations on in-water and over-water construction and demolition <ul style="list-style-type: none"> Varying water level due to Lake Murray Hydro Dam operation The water depth may not be sufficient to use barges Demolition debris entering waterway Demolition and effects on migratory bird nest 	<ul style="list-style-type: none"> Coordinate with Lake Murray Dam operators so the Team can expect higher flows and river levels. Use USGS gauges for current and historic water levels on the Saluda River. Establish the elevation of drilled shaft casings above high-water levels as a preventive measure against submerged casings, which could potentially impede construction progress. Maintain/increase horizontal and vertical clearances to avoid permit delays. Evaluate use of trestle versus barges, and avoid complete blockage of the river for personal watercraft Ensure proposed final structure and roadway alignments provide access for cranes, materials, and workers. Perform sawcutting for removal of existing bridge spans over the river in lieu of hammer demo. Utilize strategies such as demo shields to catch slurry from sawcutting. Team will conduct surveys for bird nesting indications and suspend operations in the area if any evidence is detected. In the absence of nesting evidence, approved nesting deterrents will be employed by the Team. 	<ul style="list-style-type: none"> SCDOT Coordination, Assessment Analysis, and Timely Review of Plans
Limited site access <ul style="list-style-type: none"> Work in the median Access to site for bridge work 	<ul style="list-style-type: none"> Temporary roads beneath bridge structures, will be established and kept in good condition throughout the construction process. We will utilize existing access road from the back of CR Jackson's asphalt plant to I-20. Design vehicle acceleration specifications for ingress and egress to the median. 	<ul style="list-style-type: none"> SCDOT Coordination, Assessment Analysis, and Timely Review of MOT and Access Plans







Critical Risk	Mitigation / Avoidance Strategies	Expected Role of SCDOT/Agencies
<ul style="list-style-type: none">▪ Difficult median access for new bridge(s) construction between existing EB and WB▪ Accessing and exiting the site from and onto I-20, especially with trucks, can impact the safety of both workers and the traveling public.▪ Working within the median presents challenges, particularly due to restricted storage, laydown, and staging areas.	<ul style="list-style-type: none">▪ Acquire right of entry from adjacent landowners to access the project site along the river.▪ Create dedicated acceleration and deceleration lanes along the shoulders, safeguarded by barriers and attenuators.▪ Sequence staging and structure construction schedule to minimize or eliminate crossovers between adjacent structure construction thereby maintaining work zone space and access.▪ Temporary roads beneath bridge structures, will be established and kept in good condition throughout the construction process.▪ Develop comprehensive work plans that designate access points, as well as locations for crane and equipment laydown and staging, specifically tailored for the constrained working areas at the bridge approaches.▪ Non-traditional methods such as accessing worksite from a temporary overpass, median crossovers, and barges, and temporary work bridges.	<ul style="list-style-type: none">▪ SCDOT Coordination, Assessment Analysis, and Timely Review of MOT and Access Plans
Utility Relocations <ul style="list-style-type: none">▪ Gas lines▪ Wastewater lines▪ Telecommunications	<ul style="list-style-type: none">▪ The critical facility is the sewer line in prestressed concrete pipe that runs parallel to the railroad and under the existing bridge. This relocation is a priority and will be in an early works package to be moved at the onset of the project.▪ There are telecommunications lines on the railroad bridge (west side only) and the Saluda River bridge (both sides). The Team will coordinate early on a plan to move the fibers out of the way and start the relocation as soon as possible especially if the fiber has to be bored under the Saluda River. Staging the bridges will also take into consideration how to possibly phase the relocation of the fibers to the newly constructed section of bridge.▪ Specialty Subs will be on the Team to ensure gas and telecommunications lines are designed and relocated expeditiously.▪ Work approaching the Bush River Rd. will be minimized to ensure the DOA line will remain in place and will be relocated in a future CCR Phase.	<ul style="list-style-type: none">▪ Facilitate coordination with utility companies during the design phase and construction phase to ensure timely relocation of facilities.
Geotechnical subsurface conditions <ul style="list-style-type: none">▪ Rock at bridges▪ Scour at Saluda River▪ Poor Soil▪ Sand Layer near Saluda abutment	<ul style="list-style-type: none">▪ Additional drilling will be completed to determine rock type at bridges, soil types in embankments, and to gather additional information for the noise wall.▪ Because of possible scour concerns at the Saluda River Bridge, drilled shafts will be the probable foundation using a rock socket.▪ Poor soils will be studied, and a mitigation plan implemented to ensure there are no long-term consolidation settlement issues.▪ There is a potentially liquefiable sand stratum at the Saluda River north abutment. Earthquake drains will be considered to mitigate issues in this area.	<ul style="list-style-type: none">▪ Review and approve the geotechnical reports▪ Coordinate with IQF during construction
Railroad Coordination <ul style="list-style-type: none">▪ Schedule delays based on design reviews▪ Schedule delays based on labor for construction activities	<ul style="list-style-type: none">▪ Mark Attaway of SAM, LLC, will provide railroad coordination and rely on his relationship with CSX, which is built on years of engaging CSX early and coordinating plan progress.▪ Crowder is familiar with CSX policies and procedures which will help with scheduling for inspections and flaggers.▪ Crowder's past experience includes I-85 bridge over CSX, Sumter County Bridge over CSX, Greene Street Bridge over CSX and Norfolk Southern, and the current US17A-21 over CSX emergency bridge replacement. This experience is invaluable to navigate CSX required procedures.	<ul style="list-style-type: none">▪ Facilitate coordination with CSX and advocate for timely decisions▪ Encourage early agreements to facilitate the sewer relocation



Critical Risk	Mitigation / Avoidance Strategies	Expected Role of SCDOT/Agencies
Skilled Labor availability <ul style="list-style-type: none">Availability of craft laborAvailability of DBE participationChanging supplier termsMaterial pricing volatilitySupply chain issues affecting availability of material suppliers, fabricators, and precast providersUnexpected material and shop labor shortages	<ul style="list-style-type: none">Ability to hire and retain craft labor by offering competitive compensation, training, growth opportunities, and a safe environment ensures skilled labor remains consistent and available.Controlled, intentional growth that never stretches forces.Leverage existing DBE relationships built over many years and continue to build on our DBE's skill sets and trades. Tap our other markets to assist other minority businesses who are potential SCDOT DBEs. Talk through the schedule at bid time with DBEs and provide iterative updates as the project progresses to assist DBEs in appropriately planning their resources. Consider planning added DBE assistance during construction if needed.In-depth discussions with material suppliers/subcontractors during the estimating phase to assess price stability.Detailed and frequently updated scheduling.Suppliers may add a price hold date or give information on escalations, if not use historical pricing/projected trendlines to anticipate costs 12-18 months in the future.Write Purchase Orders as soon as possible to lock in pricing and avoid potential future increases.Early work design packages to finalize quantities quickly and hold weekly schedule updates.Delivery agreements with multiple haulers for precast elements to ensure delivery schedules.Coordinate multiple purchase orders for ready mix suppliers.Use of standardized designs (like standard girders) and off the shelf products. Minimize customized design features that add complexity and time to the submittal process.	<ul style="list-style-type: none">Expedited award once apparent low bidder is announcedExpedited design reviews and approval of early work design packagesTimely response to proposed schedule adjustments designed to address materials delays and shortagesPrice indexing of key material components that experience market volatility
Maintenance of traffic <ul style="list-style-type: none">Limited construction accessImpacts to Traveling Public	<ul style="list-style-type: none">MOT Manager will lead a task force including Crowder, RK&K, and SCDOT personnel to proactively discuss MOT events. This task force will also discuss MOT issues, public input, etc. and adjust as necessary to ensure safety to traveling public and workers.Develop MOT plans to limit shifts in the work zone.The Team will respond quickly to incidents and also maintain temporary traffic devices.The MOT plan will be developed to allow safe access to work areas at bridges for workers and the traveling public. Design will be coordinated with construction staff to minimize access points as much as practical.	<ul style="list-style-type: none">Review MOT phasing planIntegrate with Task ForceProvide clear and effective public communication

3.3.3 Project Resources, Strategies, and Execution | Crowder has both the financial and resource strength (craft labor, equipment, and materials) to complete this project without any limitations due to market conditions. Our Lead Designer also maintains extensive resources. The following **matrix** demonstrates our Team's extensive amount of resources, equipment, and our strategies to successfully execute this project.

TEAM CAPACITY, AVAILABLE RESOURCES and STRATEGY FOR IMPLEMENTATION		
		
Capacity	<ul style="list-style-type: none">Headquartered in Charlotte, NC900+ full-time employees in multiple divisions including: structures, crane operators, laborers, pile driving, equipment operators, carpenters, and othersHeavy Civil Div. Maintains 10 structures crews and 3 grading/drainage crewsCrowder's backlog is currently \$671 million with a total bonding capacity of \$1 billion	<ul style="list-style-type: none">400 staff in the Carolinas, 1,600+ firm-wideTop 20 Transportation Design Firm (ENR)Columbia design office – supported by Charleston, Charlotte, and RaleighKey Team members in Columbia, Charleston, and Raleigh282 D-B bridges in the Carolinas, including water and railroad crossings\$4.2 billion in design-build awards as lead designer in the Carolinas



Strategies to Implement Resources	<ul style="list-style-type: none"> Plan the project in detail with Project Manager, Construction Manager, Superintendent(s), and overall Division Management to include safety, subconsultants needs, materials deliveries, subcontractor schedules, and project limitations to assure mitigation strategies are discussed and reviewed in the plan throughout design and construction. Two crews are ready to mobilize and begin upon NTP. Crowder will self-perform major work scopes, including: Structures, Walls, Roadway, Storm Drainage, Demolition, Piles/Foundations, Utility Coordination. Asphalt paving will be subcontracted to dedicated subcontractor CR Jackson. 	<ul style="list-style-type: none"> Lead Design Engineer/ Structural Engineer Matthew Cook will be complete with current commitments and will be immediately available for this project. Experienced Lead Design Engineer/Structural Engineer and in-house staff. Available resources to meet and accelerate the design schedule, as needed. Fully refined design and QC process for delivering large transportation projects. Intimate understanding of SCDOT design process, policies, and procedures. Ability to self-perform all critical design functions, including: Bridge/seismic, Geotechnical, Roadway, Hydraulic/Drainage, Work zone traffic control, Signing and Pavement Markings, and Permitting/environmental.
Environmental coordination, utilities, public relations support, and permitting	<ul style="list-style-type: none"> Environmental compliance plan will be developed prior to construction. Crowder will provide signage and message boards ahead of time Crowder will schedule construction around peak traffic times. Crowder will maintain constant communication with CSX, SCDOT, and DHEC Signage and barriers will be erected to protect wetlands where needed Site crews will hold daily PTPs to discuss regulations/requirements 	<ul style="list-style-type: none"> Robbins and Dewitt has a wealth of knowledge in all aspects of environmental design. They are very familiar with the corridor and will develop the necessary permit modification. Mark Attaway with SAM has contacts with all of the utility owners in the corridor. RK&K has worked on many large projects that impact the public and is familiar with the information needed keep the public informed. This information will be provided to SCDOT to use in support of keeping the public informed.
Communication, issue resolution and project execution	<ul style="list-style-type: none"> Risk assessments performed at multiple phases of project. Executive management will hold monthly reviews to allocate appropriate resources as needs arise. Policies/procedures will be reviews with all subcontractors and work crews 	<ul style="list-style-type: none"> Chris Jordan and Brandon McInnis have been heavily involved with all phases of the CCR procurement and our Lead Design Engineer Matthew Cook was extremely involved with the previous CCR Phase 3. Their previous experience provides detailed project insight and will assist in mitigating challenges. The design team will work closely with the contract and provide design revisions for any issues during construction.

Ideal Geographical Location | Crowder will manage the project from our Charlotte office, located 1.5 hours from the project site, as well as a large mobile office that will serve as the **Construction Manager's** office. The office will have workspace for the project manager and assistant project manager, RK&K designers as needed, and a room for meetings and training. Crowder currently has bridge and grading crews located near the SC Midlands and Charlotte, with at least two crews ready to mobilize and begin construction. **Our dedicated asphalt subcontractor C.R. Jackson is conveniently located adjacent to the project site.** RK&K will coordinate the design from their Columbia, SC, office, only 30 minutes from the site. Our Team's proximity to the site and SCDOT headquarters provides enhanced communication and collaboration.



Our dedicated asphalt subcontractor **C.R. Jackson (CRJ)** is conveniently located on the project site.

DBE Participation | We recognize the importance of DBE participation and providing subcontracting opportunities. As a standard operating procedure, Crowder has personnel, processes, and practices in place to encourage DBE participation. Crowder is committed to meeting the 14% DBE participation goal, and our DBE professional services partners participation will exceed the 0.2% goal by including the expertise of **Aulick Engineering, LLC (structural/hydraulics)**, **Robbins & DeWitt (environmental/permitting)**, and **PicTec (independent scheduler)**.

3.3.4 Quality Assurance Program | Crowder's Quality Assurance Program (QAP) includes:

- **Independent Quality Firm (IQF):** Greenman-Pedersen, Inc. (GPI) will oversee quality acceptance, led by Marx Possible, who will ensure all work meets contract requirements through inspections and testing. GPI has extensive experience with the IQF model of Quality Assurance.
- **Quality Control (QC):** RK&K will oversee construction quality control, aligning with SCDOT standards, and ensure work is completed correctly the first time. The QC manager will have weekly meetings with representatives of the Contractor's QC, the IQF, the OVF, and the Construction Engineer from SCDOT's DB Group.
- **Owner Verification Firm (OVF):** CDM Smith will perform owner verification on behalf of the Department.
- **Independent Assurance (IA):** SCDOT's Office of Materials and Research will conduct independent assurance using a systematic approach.

The IQF team has extensive experience, including work on the Canton Viaduct project. They will coordinate with Crowder to ensure compliance with all contract requirements. RK&K's QC plan integrates regular communication with all project teams to address issues proactively. Crowder's Quality Management Plan (CQMP) will detail specific QA and QC responsibilities, including sampling, testing frequencies, and hold points. We will ensure all requirements are satisfied by the CQMP in alignment with the SCDOT's CCR QAP. An Engineering Judgement (EJ) procedure, developed with the Department, ensures exceptional cases are managed effectively. Regular quality meetings will facilitate collaboration among all stakeholders. Laboratory testing, managed by Terracon, based out of Columbia, SC and in close proximity to the project, ensures robust support for the project. Crowder recognizes the distinct roles of QC and IQF and empowers both to stop work if necessary. GPI ensures rigorous document control to meet SCDOT expectations. The entire Independent Quality Team has SCDOT CEI experience and fully understands all requirements for material and product acceptance.



DOCUMENT CONTROL STRATEGIES

All QC/QA documents will be loaded into the Appia (infotech) document management system. This will provide SCDOT and the Team with real time access to inspections, tests, non-conformance reports, and all other QC/QA documents.

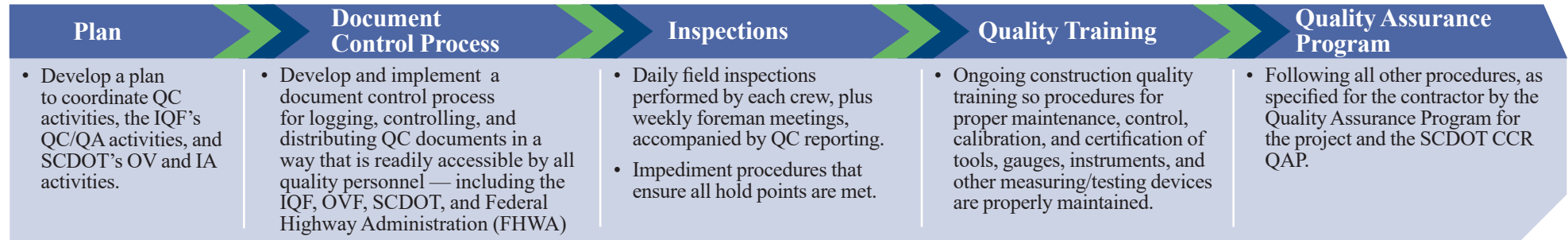


AASHTO ACCREDITED LABORATORY CAPABILITIES

GPI will use Terracon to perform Laboratory testing for the project. Terracon's credentials include AASHTO, AMRL, CCRL, COE, CMEC, A2LA, and NVLAP certifications. Terracon has 147 employees in SC and is uniquely qualified to handle the high volume of required testing.



Our Construction Quality Process



3.4 EXPERIENCE OF KEY INDIVIDUALS ■ 3.4.1 - Licensed ■ 3.4.2 - Roles ■ 3.4.3 - Resumes ([Appendix A](#))

3.4.4 - Project Management Team



KIER MICHAEL OUDERKIRK, PE, DBIA | PROJECT MANAGER ([Kier's Resume](#))

- 27 years of progressive experience managing large structure projects | SC PE #37939
- Successfully managed SCDOT structures projects involving interstate and design-build construction.
- Exceptional communicator who partners with our clients, suppliers, subcontractors, and other agencies to deliver successful projects.

3.4.5 - Design Engineering Team



MATTHEW LEE COOK, PE | LEAD DESIGN ENGINEER ([Matthew's Resume](#))

- Veteran manager and engineer with 26 years of experience delivering complex transportation projects | SC PE #34544
- Resume of 47 design-build transportation projects in the Southeast, including high traffic roadway widenings, bridge replacements, and railroad crossings.
- Expertise in water resources/hydraulics, roadway drainage, stormwater management, erosion and sediment control, and permitting.

3.4.6 - Construction Management Team



RICHARD WILLIAM HAUSER, PE | CONSTRUCTION MANAGER ([Richard's Resume](#))

- 30 years of progressive construction experience.
- Experience managing segments of large design-build projects with complex MOT involving interstate and large bodies of water.
- Successful record of coordinating and managing craft workers, equipment, subcontractors, and supplies on large projects at the jobsite.



MARX LENDELL POSSIBLE, PE | INDEPENDENT QUALITY MANAGER ([Marx's Resume](#))

- 19 years of progressive experience, including serving as Area Engineer for the Delaware Department of Transportation | SC PE #39400
- Excels in construction quality management and inspection, maintenance of traffic, and material testing on highway and bridge projects.
- Extensive design-build experience on large and complex interstate projects with high traffic volumes.

Additional Primary Staff



**GEORGE RANDALL MUNGO, PE
LEAD HYDRAULIC ENGINEER**

33 years experience | SC PE #19843; CEPSCI
Former SCDOT Hydraulic Design Support Engineer

- Water resources expert in drainage, erosion control, culvert, and bridge survey reports, permit drawings, stormwater management, bridge backwater analyses, and scour analyses.



**KELLY STAPLETON HAWKINS, PE
LEAD BRIDGE/SEISMIC ENGINEER**

12 years experience | SC PE #32015

- SCDOT structural design and D-B experience in compliance with AAHSTO, FHWA, & SCDOT criteria, specifications, and policies.



**STUART MICHAEL SAMBERG, PE, PTOE,
DBIA | LEAD TRAFFIC ENGINEER**

19 years experience | SC PE #32724
Professional Traffic Operations Engineer, #3870

- More than a decade of design-build traffic related experience on interstate improvement projects with high traffic volumes.



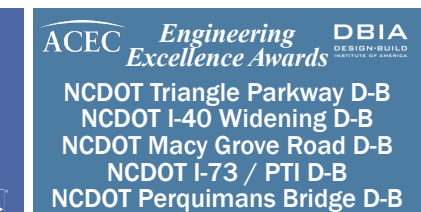
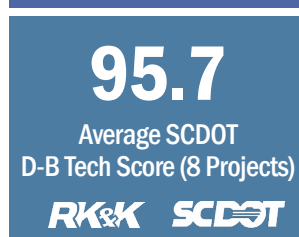


3.5 PAST PERFORMANCE OF TEAM | 3.5.1 Experience of Proposer's Team

In addition to our example projects provided in [Appendix B](#), the table below further demonstrates our Team's qualifications and similar project experience.

Relevant Experience		Delivery Method	Included in Work History Forms	Riverine Environment	Railroad	Interstate MOT	Demolition Over Water / Railroad	Limited Site Access	Interstate / High Volume Traffic	Construction Approach	On Schedule/ On Budget	Multi-Bridge Replacement	Multi-Agency Coordination
Crowder and RK&K maintain impressive resumes of similar project experience													
Interstate Widening ■ Rail and Riverine Bridges ■ High Traffic Volumes													
Project	Project Features												
Crowder	Rainbow & Leaphart Bridges over I-26 West Columbia, SC (\$19.9M)	Interstate, demolition, 125,000 CY embankment, MSE walls.	DBB	✓		✓		✓	✓	Detour/ shut down	✓	✓	✓
	Charlotte Gateway Station Charlotte, NC (\$57M)	Multi-bridge replacement, large concrete platform with egress.	DBB	✓		✓		✓	✓	Detour/ shut down	✓	✓	✓
	I-85 Rehabilitation and bridge repair Mecklenburg County, NC (\$25M)	81 lane miles of concrete rehabilitation and bridge joint repairs	DBB			✓		✓	✓	Nightly closures	✓		✓
	US 17A/21 over CSX Railroad Emergency Bridge Replacement Beaufort & Hampton Counties, SC (\$14M)	Replace existing 120' long bridge on US 17A/21 over three CSX lines which was hit by a train.	DB			✓	✓	✓	✓	Detour	✓		✓
	SCDOT I-85 Widening, CSX Bridge Replacement Spartanburg, SC (\$20M)	CSX bridge replacement as part of interstate widening, retaining wall over active interstate.	DB			✓	✓	✓	✓	Off alignment 3 stages w/ causeway	✓		✓
RK&K	I-40 over the Yadkin River Forsyth County, NC (\$72M)	4 miles of interstate widening, 1,104' interstate bridge, pedestrian bridge crossing interstate	DB	✓	✓	✓	✓	✓	✓	Staged	✓	✓	✓
	I-40 Widening and Improvements, Wake & Johnston Counties, NC (\$408M)	12.8 miles of interstate widening, 15 bridges (two riverine and one NSRR crossing), 6 interchanges	DB	✓	✓	✓	✓	✓	✓	Staged	✓	✓	✓
	I-95 Widening and Improvements Cumberland & Harnett Cos., NC (\$410M)	16 miles of interstate widening, 12 Bridges (3 riverine crossings), 7 interchanges	DB		✓	✓	✓	✓	✓	Staged	✓	✓	✓
	NC 540 Triangle Expressway Wake County, NC (\$287.3M)	5.5 miles of interstate, 13 bridges (NCRR/NS RR crossing), 3 interchanges	DB		✓	✓		✓	✓	Causeway	✓	✓	✓
	I-66 Outside the Beltway Fairfax County, VA (\$2.2B)	22.5-miles of interstate corridor, 9 interchanges, complex MOT	DB			✓	✓	✓	✓	Staged	✓	✓	✓

3.5.2 Quality of Past Performance | As award-winning firms, we are committed to being responsible partners with the stakeholders and are prepared to provide a quality product in a timely manner. No individuals or firms have been suspended, debarred, disqualified from bidding, or declared ineligible within the last five years.



Appendix A

Key Individual Resume Forms



KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title: Kier Ouderkirk, PE, DBIA, Senior Project Manager
- b. Role of Key Individual for this Project: Project Manager
- c. Name of Firm with which you are now associated: Crowder Construction Company



- d. Years of Experience: With this Firm: 9 Years With Other Firms: 18 Years
- Firm 1:** Crowder Construction: Sr. Project Manager (2015 – Current)
Responsible for successful contract delivery
- Firm 2:** Lane Construction: Field Engineer (1995 - 2000), Project Engineer (2000 - 2012)
Project Manager (2012 - 2015)
Entry level to Project Management team leader on heavy roadway design build projects

- e. Education: Name & Location of Institution(s)/Degree(s)/Year(s)/Specialization(s) :
- State University of New York Institute of Technology at Utica/Rome, Utica, NY
Bachelor of Science / 1997 / Civil Technology
 - State University of New York at Canton, Canton, NY
Associates in Applied Science / 1995 / Civil Engineering Technology

- f. Active Registrations: Year First Registered/State/Discipline/All Active Registration #s:
2015 / NC / Civil / 041212 | 2020 / SC / Engineering / 37939

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

Old Dowd Road Relocation (City of Charlotte - Charlotte Douglas International Airport)

Key Personnel Role: Senior Project Manager

Experience with Current Firm: Firm 1

Project/Assignment Duration: Project - 2022-2025
Assigned - 2022-Ongoing

Owner Contact Information: James H. Wally, PE
980-307-2335
james.wally@cltairport.com

Design/Construction Value: \$38 Million



Project Description: Grading, drainage, paving, utility and bridge construction of a new section of road off Wilkinson Boulevard — spanning the Norfolk Southern tracks and connecting to the existing Old Dowd Road alignment on Airport property. Utility work includes approximately 4,500 feet of 36-inch and 6,500 feet of 24-inch water line, as well as 1,400 feet of 18-inch gravity sewer with trenchless installations including one under Norfolk Southern tracks. Responsibilities included supervision and management of foreman, subcontractors, engineers, safety, scheduling, quality, design and cost control.

Greene Street Improvements - Phase II & Bridge over Railroads (Columbia, SC)

Key Personnel Role: Senior Project Manager

Experience with Current Firm: Firm 1

Project/Assignment Duration: Project - 2020-2023
Assigned - 2020-2023

Owner Contact Information: Richland County, Michael J. Maloney, PE
803-576-2401
maloney.michael@richlandcountysc.gov

Design/Construction Value: \$16.5 Million



Project Description: Construction of a new bridge over the Norfolk Southern and CSX railroads to close two at-grade crossings. Work included 23,000 SF of MSE walls, 5000 LF of new storm drainage, 5000 LF of curb and gutter, 6000 SY of sidewalks, and a stainless-steel shade structure mounted on bridge overhangs as well as a signalized intersection on Huger Street, bike lanes and landscaping. Responsibilities included managing the budget, schedule, submittals, materials acquisition, and site team.

SCDOT File 3283411 Rainbow & Leaphart Drive Bridges over Interstate 26 (West Columbia, SC)

Key Personnel Role: Senior Project Manager
Experience with Current Firm: Firm 1
Project/Assignment Duration: Project - 2016-2019
Assigned - 2016-2019
Owner Contact Information: SCDOT, Jeremy Yuhas
803-360-7235
yuhasjd@scdot.org
Design/Construction Value: \$17.4 Million



Project Description: Leaphart bridge over I-26 was originally planned to be an offline replacement; however, a significant, tractor-trailer truck strike required emergency demolition of portions of this bridge over I-26; the Rainbow bridge, also spans I-26 and the demo was systematic with minimal impact to traffic. Significant work on this project included: Maintenance of Traffic, construction over and around a busy interstate highway, demolition over a temporarily detoured interstate at a time and in a duration least likely to interrupt traffic flow.

NCDOT I-485/I-85 Interchange Design-Build No. NC R-2123CE (Mecklenburg County, NC)

Key Personnel Role: Project Manager
Experience with Current Firm: Firm 2
Project/Assignment Duration: Project - 2013-2015
Assigned 2013-2015
Owner Contact Information: NCDOT, Andy McManus
704-906-1614
amcmanus@ncdot.org
Design/Construction Value: \$97 Million



Project Description: This \$97 million design-build project included 19 bridge structures, box culverts and numerous MSE walls all connected with new concrete pavement on the new alignment. The interchange uses a turbine design and was constructed under traffic. Responsibilities included supervision and management of foreman, subcontractors, engineers, safety, scheduling, quality, design and cost control.

NCDOT, I-85 Widening I-85 Widening, Concord, C202522 Design-Build (Cabarrus County, NC)

Key Personnel Role: Assistant Project Manager
Experience with Current : Firm 2
Project/Assignment Duration: Project - 2012-2013
Assigned 2012-2013
Owner Contact Information: NCDOT, Andy McManus,
amcmanus@ncdot.gov
704.906.1614
Design/Construction Value: \$125 Million



Project Description: Design-build project consisted of an 8-lane concrete divided freeway on I-85 from Bruton Smith Boulevard to north of NC 73 (7.0 miles) and interchange modifications. Work includes four pre-stressed concrete beam bridges, soundwall, erosion control, lighting, signing, traffic control, ROW and utility relocation, storm drainage, excavation and embankment. Responsibilities included supervision of foreman, safety scheduling, cost control.

- 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.
- Kier Ouderkirk is currently assigned to the Charlotte Douglas International Airport NEAT Overlook Design-Bid-Build in Charlotte, NC, as Project Manager. The project is scheduled to be complete by July 1, 2024.
 - Kier Ouderkirk is currently assigned to the City of Charlotte Old Dowd Road Relocation CLT in Charlotte, NC, as Senior Project Manager. The project is scheduled to be complete by February 20, 2025.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.		
a.	Name & Title: Matthew Lee Cook, PE – Senior Project Delivery Leader	
b.	Role of Key Individual for this Project: Lead Design Engineer	
c.	Name of Firm with which you are now associated: Rummel, Klepper & Kahl, LLP	
<div style="text-align: right; font-weight: bold; font-size: 1.2em;">RK&K</div>		
d.	Years of Experience: With this Firm <u>24</u> Years With Other Firms <u>2</u> Years RK&K: Senior Project Delivery Leader – With a management career that includes 47 design-build projects throughout the Southeast, he provides oversight, management, and engineering for complex design-build and design-bid-build projects. He has extensive experience developing construction sequencing for bridge construction over water as it is needed for permitting and hydraulic modeling. He also assists with staged construction of bridges, as spread must be considered during temporary patterns. Matt manages in-house experts specializing in water resources/hydraulics, roadway, and structural design. His expertise focuses on hydraulic design, roadway drainage, stormwater management, bridge and culvert design, hydrologic modeling, and erosion and sediment control. 2000-Present. MA Engineering Consultants: Hydraulic Design Engineer – Provided hydraulic design, roadway drainage, and erosion and sediment control plans for transportation projects. 1998-2000	
e.	Education: Name & Location of Institution(s)/Degree(s)/Year(s)/Specialization(s): North Carolina State University/ Raleigh, North Carolina / Bachelor of Science / 1998 / Civil Engineering	
f.	Active Registrations: Year First Registered/State/Discipline/All Active Registration #s: 2017 / SC / Professional Engineer / 34544; 2002/ NC / Professional Engineer / 027434; 2017/ GA / Professional Engineer / PE042144; 2020/ TN / Professional Engineer / 123680	
g.	Document the extent and depth of your experience and qualifications relevant to the Project.	
1. <u>NCTA NC 540 Triangle Expressway Design-Build, Wake County, NC</u>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> <p>Key Personnel Role: Assistant Design Manager/Water Resources Manager</p> <p>Experience with Current Firm: Yes, RK&K</p> <p>Project/Assignment Duration: Project: 2023 – 2029, Assigned: 2023 – 2029</p> <p>Owner Contact Information: NCTA, Ron McCollum, remccollum@ncdot.gov, 919.707.2708</p> <p>Design/Construction Value: \$287 Million</p> <p>Project Description: RK&K is serving as the Lead Designer for final segment of Raleigh's 540 outer loop. This 5.5 mile long, new location facility is being designed and constructed as a 70 mph, six-lane facility with a 70-foot median. The project reduces congestion on the existing roadway network and improves system linkage in the regional roadway network by extending the 540 outer loop around the greater Raleigh area. Providing management and design services in every major engineering discipline, this project includes the design of 13 bridges, three interchanges, two grade separations, NCRR/NS railroad crossing, and extensive aesthetic features. Two sets of dual bridges (300' and 500') were needed for water crossings.</p> <p>Matthew's responsibilities include assisting with all aspects of management, coordination, and oversight for the entire project. He is also responsible for coordination and collaboration with multi-discipline design teams preparing hydraulic design, erosion control, stormwater management plan, and jurisdictional impacts including permit drawings, and coordination with the environmental agencies to obtain the necessary permits.</p> </div> <div style="width: 15%; text-align: center;">  </div> </div>		
2. <u>NCDOT – I-40 Widening & Improvements Design-Build, Wake & Johnston Counties, NC</u>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> <p>Key Personnel Role: Water Resources Manager</p> <p>Experience with Current Firm: Yes, RK&K</p> <p>Project/Assignment Duration: 2018-Present, Assigned 2018-Present</p> <p>Owner Contact Information: NCDOT, Malcolm Watson, PE, mcwatson@ncdot.gov, 919.707.6614</p> <p>Design/Construction Value: \$408 Million</p> <p>Project Description: RK&K is Lead Designer for this I-40 project along an extremely congested corridor in the Raleigh area. The project widens 12.8 miles of I-40, includes six (6) interchanges and replaces 15 (one RR) bridges along I-40. The widening consists of ten-lane, eight-lane, and six-lane sections. The project included railroad coordination for an underpass of the railroad bridges and several water crossings located in environmentally sensitive areas.</p> <p>Matthew's responsibilities include coordination and collaboration with multi-discipline design teams as he supervises and manages the hydraulics and erosion control designs, hydraulic surveying, hydraulic bridge and RCBC FEMA modeling (four locations), stormwater management plan and permit, jurisdictional impacts permit drawings, and coordination with the environmental agencies to obtain the necessary permits.</p> </div> <div style="width: 15%; text-align: center;">   </div> </div>		

3. NCDOT – I-40 over the Yadkin River Design-Build, Davie & Forsyth Counties, NC

Key Personnel Role: Water Resources Manager
Experience with Current Firm: Yes, RK&K
Project/Assignment Duration: 2017-2021, Assigned 2017-2021
Owner Contact Information: NCDOT, Malcolm Watson, PE,
mcwatson@ncdot.gov, 919.707.6614
Design/Construction Value: \$72 Million



Project Description: RK&K served as the Lead Designer for the widening of 3.8 miles of I-40 to a six-lane divided facility with a major FEMA bridge crossing over the Yadkin River. The bridge was 1,104 foot long, 8-span structure constructed in three stages to minimize traffic impacts. The precast concrete girders were 78" precast Florida I-Beams that allow for longer than typical spans to minimize the total number of spans. The interior bents consisted of 30" and 24" diameter battered steel pipe pile bents with reinforced concrete caps on land and 4.5 ft diameter drilled shaft bents with reinforced concrete caps in the water way.

Matthew's responsibilities included coordination and collaboration with multi-discipline design teams as he supervised and managed the hydraulics and erosion control designs, hydraulic surveying, hydraulic bridge FEMA modeling, stormwater management plan and permit, jurisdictional impacts permit drawings, and coordination with the environmental agencies to obtain the necessary permits. Modeling of the 1,104' Yadkin River bridge included an extensive analysis of existing bents and proposed bents both in place during construction, and causeway design in the river in order to build the proposed interior bents.

4. NCTA - Monroe Connector/Bypass Design-Build, Mecklenburg & Union Counties, NC

Key Personnel Role: Water Resources Engineer
Experience with Current Firm: Yes, RK&K
Project/Assignment Duration: 2010-2019, Assigned 2010-2019
Owner Contact Information: NCDOT, Malcolm Watson, PE,
mcwatson@ncdot.gov, 919.707.6614
Design/Construction Value: \$364 Million



Project Description: RK&K served as Lead Designer for this 19.7-mile new alignment toll road from US 74 in Mecklenburg County to US 74 in Union County. The project included eight interchanges, 37 bridges (26 sites with 11 duals), one railroad grade separation, 45 culverts, three sound barriers, electronic tolling, extensive right-of-way acquisition, permitting, traffic control, signing, signals, stormwater design, and utility relocation.

Matthew's responsibilities included coordination and collaboration with multi-discipline design teams preparing hydraulic design, erosion control, stormwater management plan, hazardous spill basin design, and jurisdictional impacts including permit drawings, and coordination with the environmental agencies to obtain the necessary permits.

5. NCDOT - I-95 Widening & Interchange Reconstruction Design-Build, Cumberland/Harnett Cos., NC

Key Personnel Role: Water Resources Manager
Experience with Current Firm: Yes, RK&K
Project/Assignment Duration: 2021-2024, Assigned 2021-Present
Owner Contact Information: NCDOT, Michael Penney, PE,
mpenney@ncdot.gov, 919.707.6619
Design/Construction Value: \$430 Million



Project Description: RK&K is serving as the Lead Designer for this 18.3-mile-long widening project on one of the most heavily traveled segments of I-95. The project widens I-95 from four lanes to eight lanes, redesigns/reconstructs seven interchanges, and improves all side roads and service roads from south of I-95 Business/US 301 (Exit 56) to north of SR 1002. This project also replaces and upgrades 14 bridges and adds roundabouts at interchanges, 20 retaining walls, and 3,400 LF of sound barriers.

Matthew's responsibilities include assisting with aspects of management, coordination, and oversight for the project. He is also responsible for managing the hydraulics and erosion control design, hydraulic surveying, hydraulic bridge modeling (3 bridges and 9 RCBCs) with FEMA coordination and modeling, stormwater management plan and permit, jurisdictional impacts permit drawings, and coordination with the environmental agencies to obtain the necessary permits. During construction, he is responsible for supervising erosion control inspection.

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.

Matthew is not required to be on-site during construction. However, he will attend all routine project meetings in person.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.

a. Name & Title: Richard William Hauser, Superintendent

b. Role of Key Individual for this Project: Construction Manager

c. Name of Firm with which you are now associated: Crowder Construction Company

d. Years of Experience: With this Firm: 27 Years With Other Firms: 3 Years

Firm 1: Site Superintendent (2010 to Present); Structure Superintendent (2006-2010); Foreman (2003-2006); Leadman/Expeditor (1997-2003).

Firm 2: Concrete form work, computer clean room work and some residential framing (1994-1997)

e. Education: Name & Location of Institution(s)/Degree(s)/Year(s)/Specialization(s) : N/A

f. Active Registrations: Year First Registered/State/Discipline/All Active Registration #s: N/A

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

SCDOT I-85 WIDENING, CSX BRIDGE REPLACEMENT

Key Personnel Role: Site Superintendent

Experience with Current Firm: Firm 1

Project/Assignment Duration: Project - 2019-2023

Assigned - 2020-2023

Owner Contact Information: SCDOT, Shane Parris, RCE
864-490-0466

parrisSL@scdot.org

Design/Construction Value: \$20 Million



Project Description: The CSX Bridge replacement was part of a large interstate widening project by the Blythe/Zachry JV Team. Crowder subcontracted to the JV Team to construct The CSX bridge, which is the only portion of the project that is not design build, however Crowder was responsible for the design and construction of Retaining Wall 3. Crowder constructing a new 3 span RR bridge capable of handling 2 lines of track, with the second line for future expansion. There was a fifth retaining wall Crowder constructed which retained the new track embankment (by JV Team) from a retention pond. The 4 large girders were delivered by rail and have a lift weight of 328,000 lbs. At least one of the spans with the large girders was set above active lanes of I-85. The CSX bridge had about 300' LF of shoring next to an active CSX rail line.

Significant to this project: Site on a primary route and required coordination with SCDOT and other SC agencies.

SCDOT 5485020-SC-9/49, Lockhart - Chester/Union County

Key Personnel Role: Construction Manager

Experience with Current Firm: Firm 1

Project/Assignment Duration: Project - 2017-2020,

Assigned - 2017-2020

Owner Contact Information: SCDOT, Melanie Mobley
803-385-4233 O / 803-246-0065 C

MobleyMF@scdot.org

Design/Construction Value: \$25.2 Million



Project Description: Replacing four bridges; the larger of bridges is the 700' long SC 9/49 bridge over the Broad River. The second is a bridge over the Lockhart Canal, which Lockhart Power uses to make power for small portion of the state, and the last two bridges are over local Town of Lockhart roads. Responsibilities include project safety, contract compliance, communication with client, budget, materials procurement and subcontracting, schedule and project success.

Significant to this project: Multi-bridge construction and coordination with SCDOT and other SC agencies.



SCDOT Design-Build Package 6

Key Personnel Role: Site Superintendent
Experience with Current Firm: Firm 1
Project/Assignment Duration: Project - 2016-2017
Assigned - 2016-2017
Owner Contact Information: SCDOT, Robert Power, RCE
803-769-9540
PowerRW@scdot.org
Design/Construction Value: \$5.8 Million



Project Description: Design-Build project to replace three flood damaged bridges. Design and Construction of The Back Swamp Bridge included the demolition of the existing 120' bridge, driving 1120 LF of H-Pile and constructing two end bents of 30 CY cast-in-place concrete. It also required installation of 6000 LF of earthquake drains. The superstructure included 800 LF of 54" modified bulb tee girders, with an SIP metal deck base for the 200 CY concrete bridge deck. The Bridge over Cedar Creek included demo of the existing 150' bridge, 1120 LF of driven H Pile, and 1440 LF of driven 24" Precast Concrete Pile. There are six each, cast-in-place, 30 CY bents. The bridge deck was constructed utilizing Flat Slab forms and 500 CY cast-in-place concrete and is 170' long. The Dry Branch bridge included demolition of the existing 100' bridge, and was founded on 1120 LF of driven H-Pile and 720 LF of driven 24" Precast Concrete Pile. We installed another 6000 LF of Earthquake drains, cast-in-place four, 30 CY bents. The bridge deck was constructed utilizing Flat Slab forms and 300 CY of cast-in-place concrete and is now 170' long standard bridge.

Significant to this project: This was a Multi-site project with an accelerated schedule and primary route.

SCDOT 10.037903AR1 - Charleston County US 78 and SC 7

Key Personnel Role: Project Superintendent
Experience with Current Firm: Firm 1
Project/Assignment Duration: Project - 2013-2016
Assigned - 2013-2016
Owner Contact Information: SCDOT, M. Kevin Turner
843-740-1665
TurnerMK@scdot.org
Design/Construction Value: \$34.4 Million





Project Description: A+B multi bridge replacement – one was 1,200 feet long and 44 feet wide. It contained 13 drilled shafts, two of which were 175 feet long, as well as 36-inch diameter stone columns at each approach and a 24-inch pile at each end bent. Demolition of this bridge was completed over Meeting Street and multiple existing CSX and Norfolk Southern railroad tracks. The second bridge was 860 feet long and 72 feet wide and contains 20 drilled shafts, all 100 feet long. It also included 42-inch diameter stone columns at each approach, along with earthquake drains, and HP14x73 pile at each end bent. Demo of the bridge was completed over Meeting Street and existing CSX and Norfolk Southern railroad tracks, and through the middle of an active concrete plant.

Significant to this project: Multi-bridge construction and coordination with SCDOT and other SC agencies.

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.

- Structure Superintendent on City of Charlotte Old Dowd Road Relocation. (Contract Completion date 02/17/2025 / Structure to be completed by second quarter of 2024).
He is available to transition to this project and be fully dedicated upon award.

KEY INDIVIDUAL RESUME FORM

Brief Resume of Key Individual anticipated for the Project.	
a. Name & Title: Marx Lendell Possible, PE, Senior Project Manager	
b. Role of Key Individual for this Project: Independent Quality Manager	
c. Name of Firm with which you are now associated: Greenman-Pedersen, Inc. (GPI)	
d. Years of Experience: With this Firm: 6 Years With Other Firms: 13 Years Firm 1: Greenman-Pedersen, Inc.: Senior Project Manager (2020 – present); Construction quality management & inspection, office engineering, maintenance of traffic control and material testing on highway and bridge projects. Resident Engineer / Project Manager (2018-2020); Responsible for ensuring that all workmanship and materials were in compliance with the contract requirements and the owners quality assurance plan (QAP). Firm 2: Delaware Department of Transportation: Area Engineer (2015-2017); Project Resident (2007-2015); Construction Inspector (2005-2007); Responsible for ensuring that all workmanship and materials were in compliance with the contract requirements. Coordinated quality acceptance activities as the owners representative for verification testing and inspection, responsible for inspection and assurance of all contractor work in compliance with plans.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year(s)/Specialization(s) : <ul style="list-style-type: none"> • Bachelor of Science, Civil Engineering, 2025, New Jersey Institute of Technology 	
f. Active Registrations: Year First Registered/State/Discipline/All Active Registration #s: <div style="display: flex; justify-content: space-between;"> <ul style="list-style-type: none"> • 2021 / SC / Professional Engineer No. 39400 • 2024 / FL / Professional Engineer No 98567 <ul style="list-style-type: none"> • 2016 / DE / Professional Engineer No 18692 • 2021 / MD / Professional Engineer No 58144 </div>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. <div style="display: flex;"> <div style="flex: 1;"> <p><u>I-895 Canton Viaduct, Baltimore Harbor Tunnel, Baltimore, MD</u></p> <p>Key Personnel Role: Lead Construction Quality Manager</p> <p>Company: Firm 1</p> <p>Project/Assignment Duration: 2018-2020</p> <p>Owner Contact Information: Maryland Transportation Authority, Bill Randow, 410-537-8200, wrandow@mdta.state.md.us</p> <p>Design/Construction Value: \$189 Million</p> </div> <div style="flex: 1; text-align: center;">  </div> </div> <p>Project Description: Design-bid-build project to replace the I-895 Canton Viaduct bridge structure and Baltimore Harbor Tunnel (BHT) deck as well as making improvements to roadway and MDTA Maintenance facilities. Tunnel repair tasks include replacement of deck with Latex Modified Concrete, repair of retaining walls and install wall drainage system as well as replacement and repair storm drain system. Other task assignments include relocation of Baltimore City 16" watermain, repairs to Baltimore City Sewer line, storm water management ponds and facility construction, erosion and sediment control, disposal of contaminated materials, water supply utility relocation, lighting & ITMS communication construction and guardrail installation. Possible coordinated quality acceptance activities with MDTA for owner verification testing and inspection, managed inspection staff, managed construction budget, resolved design and constructability issues, monitored and tracked CPM schedule, assisted in contractor disputes and claims and coordinate utility construction with Baltimore City Water and Sewer, MDTA Communication and ITS lines, Canton Rail Road, CSX/Consol Rail Road.</p>	

Thompsonville Grade Separated Interchange, Milford, DE

Key Personnel Role: Chief Quality Manager
Company: Firm 2
Project/Assignment Duration: 2016-2018
Owner Contact Information: Delaware Department of Transportation,
Brad Saborio, 302-853-1331
saborio@delaware.gov
Design/Construction Value: \$13.1 Million



Project Description: Design-bid-build project to replace the existing traffic signal on State Route 1 with a bridge overpass and on/off ramp system interchange. Simple span bridge construction tasks consisted of drilled shaft concrete foundation construction, reinforced concrete foundation and deck and steel girders. Construction task assignments included WMA paving and roadway construction, embankment construction and maintenance of traffic control. Possible was responsible for construction project administration and inspection staff management, assuring project conforms with plans, specification, and safety requirements. He also managed communication and coordination with contractors, and state and federal agencies including FHWA, DNREC, and Army Corps of Engineer.

Prime Hook Road Improvement, Milton, DE

Key Personnel Role: Chief Quality Manager
Company: Firm 2
Project/Assignment Duration: 2016
Owner Contact Information: Delaware Department of Transportation,
Brad Saborio, 302-853-1331,
saborio@delaware.gov
Design/Construction Value: \$1.7 Million



Project Description: Design-bid-build project to provide a bridge crossing and channel to help stabilize and mitigate tidal flows through the Prime Hook National Wildlife Area. The simple span bridge construction services included pre-cast concrete pile installation, reinforced concrete foundation, double T (NEXT) beams, Ultra-High-Performance concrete applications, high friction surface treatment, WMA paving and roadway construction as well as erosion and sediment control. Possible was I was responsible for construction project administration and inspection staff management, assuring project conforms with plans, specification, and safety requirements.

Indian River Inlet Park Enhancement, Rehoboth Beach, DE

Key Personnel Role: Lead Quality Manager
Company: Firm 2
Project/Assignment Duration: 2013-2015
Owner Contact Information: Delaware Department of Transportation,
Brad Saborio, 302-853-1331
saborio@delaware.gov
Design/Construction Value: \$10.7 Million



Project Description: Design-bid-build project to restore and provide enhanced park facilities for the Indian River Inlet State Park servicing RVs, camping, and day beach access. The restoration enhancement of the bathhouse and buildings included masonry and wood frame, sewer, water, electrical and HVAC. Assigned task work included electrical, water, sewer utility construction; RV hook-up, camping and playground facilities, WMA paving and roadway/parking construction, ADA sidewalks/ramps, Decorative landscaping as well as erosion and sediment control. Responsibilities included coordination of quality acceptance activities as the owners representative for verification testing and inspection, and inspection and assurance of all contractor work in compliance with plans, specifications, and safety regulations.

- 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.
- Marx Possible is currently a project director for GPI overseeing Maryland DOT Construction Management and Inspection contracts and Supplemental Engineering contracts. MDOT Construction Management and Inspection contracts end in 2025. MDOT Supplement Engineering contracts end in 2027.

Appendix B



Work History and Quality Forms

(Section 3.5.1)





WORK HISTORY AND QUALITY FORM – CONTRACTOR

Crowder Construction Company



a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)
Name: SC 9/49 Multi-Bridge Replacement (Chester/Union County) Delivery Method: Design-Bid-Build Location: Lockhart, SC	Name: Mead & Hunt	Name of Owner: SCDOT Project Manager: Melanie Mobley, PE Phone: 803-385-4233 Email: MobleyMF@scdot.org	Construction completed 09/2020	\$25,232	\$25,232
g. Narrative describing the work performed by Crowder. If submitting work completed by an affiliated or subsidiary company of A, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether B was the lead designer or a sub-consultant.					
<div><div><p>This CAGC Pinnacle Award-Winning Project consisted of replacing four bridges; the largest of bridges was the 700’ long SC 9/49 bridge over the Broad River. The second was a bridge over the Lockhart Canal, which Lockhart Power uses to make power for small portion of the state. The entire project was built with continuous traffic flow utilizing both new alignment and phased construction. The 4 interior bent caps for the Broad River Bridge were all mass concrete. Each was 53’ long x 5’6” tall x 6’ deep and 65 CY of concrete. Mass Concrete Pour Analysis was performed by KCI. The team used a combination of concrete blankets and tents, and cooling of the concrete while poured to keep the differential within the mass concrete design plan. As for the ½ mile of roadway, it included substantial temporary traffic shifts, two large MSE walls, and large temporary shoring walls; approximately 800’ 6” & 8” DIP reinforced joint water lines, DIP reinforced joint sewer force main, as well as storm drain installation 15” to 48”, catch basins, drop inlets, and manholes. Finally, Crowder completed erosion control, grading, and paving. Homes were monitored for vibration and foundation needs to maintain the integrity of historic structures.</p></div><div><ul style="list-style-type: none">• MAJOR COMPONENTS OF WORK• 75,000 CY of Borrow Material• 4200 LF of 74” MBT Girders for 5 Span Bridge• 5700 SF of MSE Wall to Resemble Existing Stone Wall• 90” Drilled Shafts for Broad River Bridge Foundation• 1200 LF Drilled Shafts• Stamped and painted precast concrete MSE walls• Mass Concrete means and methods• Utility Construction including jack and bore pipe installation• Inter-agency communication/coordination</div><div></div><div><p>WORK SELF-PERFORMED</p><ul style="list-style-type: none">• Structural Concrete• MSE Walls• Grading• Drainage• Demolition<p>RELEVANCE:</p><ul style="list-style-type: none">• Structure design & construction• Construction over water• Mass concrete pours<p>KEY TEAM MEMBERS: John Tushack - Executive Committee George Ellis - Executive Committee Rich Hauser - Construction Manager</p></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of Crowder’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
Crowder closed the job with an excellent relationship with the SCDOT office of the resident engineer, as well as Lockhart Power, Mead & Hunt, and area residents. Crowder successfully value engineered the broad river and canal bridges by mitigating the environmental risk and FERC involvement with alternate plans for substructure construction methods. Canal pile driving and demolition of the old bridge coordinated during annual drawdowns for Lockhart Power did not adversely affect power operations. Our project management team worked in partnership to keep change orders to a minimum, to manage through the changed conditions that affected permitting and schedules. The project had quantity overruns, particularly with rock excavation of drilled shafts and sand fills in the canal zone. The project was completed safely within contract time and budget with no liquidated damages and in partnership with SCDOT, Lockhart Power, FERC, SHPO, and area residents.					
i. Quality Initiatives. Discuss Crowder’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
There are no claims on the project. With the ongoing shortage of skilled craftsmen and the actions required for protection of our workforce during a pandemic, Crowder had the manpower ready, willing, and able to complete all aspects of our projects meeting our high-quality expectations. Crowder removed a historic rock wall and delivered to the town for use in town signage, and replaced with a similar stamped concrete wall.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, A or B shall provide a detailed explanation below.					
All answers to the questions in Section 3.5.2. are “No” for this project.					

Crowder Construction Company

a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)
Name: SC File 3283411 Lexington Delivery Method: Design-Bid-Build Location: Rainbow & Leaphart Bridges over I-26, West Columbia	Name: Crowder Construction Company	Name of Owner: SCDOT Project Manager: Jeremy Yuhas, RCE Phone: 803-206-4812 Email: yuhasjd@scdot.org	Construction completed May 2019	\$19,852	\$8,444
g. Narrative describing the work performed by A or B. If submitting work completed by an affiliated or subsidiary company of A, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether B was the lead designer or a sub-consultant.					
Construction of replacement bridges on Rainbow Road and Leaphart Road to widen shoulders and raise the bridges to provide additional clearance for traffic underneath on I-26 in West Columbia. Both bridges were built in the 1950’s and were too low for new interstate standards. Both have been hit multiple times by traffic on I-26. The 2018 average daily traffic counts for I-26 in this area was just under 95,000 per day. Work involved demolition and new bridge construction over the interstate along with 125,000 CY of embankment placed for new approaches. The Rainbow Road Bridge was completely shut down for the new construction. The original plan was to maintain traffic on the Leaphart Avenue bridge and build the new bridge in phases with a new alignment; however, a significant strike by a tractor trailer truck required emergency demolition which was completed during a single night shut-down with traffic back on the interstate in less than four hours. Project perimeter boundaries were homes and businesses and local travel was affected. A utility relocation in the middle of the project also affected the schedule, which was re-sequenced to accommodate overall time.		<ul style="list-style-type: none">• MAJOR COMPONENTS OF WORK• Drilled Shafts• Driven Pile• 125,000 CY embankment placed• Spread Footers• Concrete Girders• Precast Box Culvert• MSE Walls• Heavy Volume Interstate Traffic Control• Strengthened shoulders for Interstate traffic shifts		 	WORK SELF-PERFORMED <ul style="list-style-type: none">• All bridge work Substructure, and super structure• Retaining MSE walls• Demo Bridge• Pile driving• Box Culvert• Concrete Median barrier RELEVANCE: <ul style="list-style-type: none">• Structure Design & Construction• Location Proximity• Bridge work• High volume traffic area• MOT services KEY TEAM MEMBERS: Kier Ouderkirk, PE – Project Manager George Ellis – Division Manager
h. Self-Assessment. The information provided in this section should be a self-assessment of A’s or B’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
This project is on one of the most congested areas of Interstate in South Carolina. Crowder partnered with SCDOT to complete the systematic demolition of Rainbow Bridge and in depth planning of the emergency demolition of the Leaphart Bridge. This project completed on-time and near budget. The budget overrun was primarily associated with the emergency demolition of the Leaphart Avenue bridge. Project completed without LD’s, but a one year utility delay significantly impacted the schedule.					
i. Quality Initiatives. Discuss A’s or B’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
This project was completed with the highest quality. Weekly meetings between Crowder, SCDOT, and major subcontractors serve as a means to collaborate on the project and address issues that could negatively affect the project.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, A or B shall provide a detailed explanation below.					
All answers to the questions in Section 3.5.3. are “No” for this project.					




WORK HISTORY AND QUALITY FORM – DESIGNER

Crowder Construction Company



a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)																																				
Name: Charlotte Gateway Station Delivery Method: Design-Bid-Build Location: Charlotte, NC	Name: Crowder Construction Company	Name of Owner: NCDOT Rail Division Project Manager: Eric Swanson Phone: 919-707-4111 Email: ekswanson@ncdot.gov	Construction completed 03/2022	\$57,000	\$57,000																																				
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<div><div><p>A multi-staged progressive project to move the intercity passenger rail station from the current undersized, flood-prone, and poorly connected location in the Norfolk Southern general classification freight yard to a location in Uptown Charlotte, closer to Charlotte’s employment center and within blocks of the City’s major sporting facilities. The project was approximately three quarters of a mile long and includes grading, drainage, 8 bridges, 1,100 LF Amtrak passenger platform, 7 retaining walls, rock plating, utility re-locations, sub-ballast installation, bridge plumbing systems, paving, egress stairs, tunnel and walkways, caissons, micro-piles, temporary pedestrian walkway enclosures, bridge demolition, and temporary shoring. Crowder also relocated and replaced approximately 555 LF of 6” to 20” diameter waterline and approximately 650’ of 12” to 24” in diameter sanitary sewer main. We built bridges over 6th, 5th, Trade, and 4th Streets, as well as the Panther walkway located at the old P&N railroad Bridge, and demolished the 6th street bridge, P&N Bridge and the Old Greyhound Bus Station. This project was constructed in an extremely busy section of uptown Charlotte. A definite challenge during construction was pedestrians entering the project site despite barriers and signage. Construction would have to halt until they were removed. An additional challenge was contractor coordination. In the same area as this project were four different contractors working on four separate projects with very different objectives and schedules. Crowder initiated coordination meetings with all the contractors to work through the conflicts and rework/prioritize big activities so that we all benefited. Access to the Greyhound Station was delayed 286 days creating the need to reschedule the entire project to maintain the contract completion date. Crowder developed a shoring plan in the area of the station to prevent undermining of the structure and parking lot while allowing platform construction to continue.</p></div><div></div><div><div>WORK SELF-PERFORMED<ul style="list-style-type: none">• Multi-Bridge Construction and large concrete platform for future train station• Pile driving• Concrete form and place• Demolition• Traffic control• Safety</div><div>RELEVANCE:<ul style="list-style-type: none">• Multi-Bridge• Multi-Agency Involvement – Railroad/Charlotte Water/CDOT• Limited Site Access• Drilled Shafts near active Railroad Track• Auger Cast Pile Panel Retaining Wall• Utility Relocation• Cast-in-place concrete</div><div>KEY TEAM MEMBERS:<p>George Ellis – Division Manager</p><p>John Tuschak, DBIA, Operation Manager</p></div></div></div> <tr><td colspan="6">h. Self-Assessment. The information provided in this section should be a self-assessment of A’s or B’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.</td></tr> <tr><td colspan="6">Crowder completed this complex project with inner city vehicular and pedestrian traffic in the work zone area within contract time. Crowder successfully worked with multiple agencies, managed through rescheduling of the project due to availability of work in conflict with the contract documents and managed through coordination of four other contracts/contractors in the area of this project.</td></tr> <tr><td colspan="6">i. Quality Initiatives. Discuss A’s or B’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.</td></tr> <tr><td colspan="6">There were no claims on the project. Crowder had the manpower ready, willing, and able to complete all aspects of our project and meet our high-quality expectations despite the shortage of skilled craftsmen and additional safety parameters during the pandemic. Crowder managed through constructability and schedule issues, surrounding the concrete platform construction, presented by a significant delay in access to the Greyhound Station. The platform design required constructa-bility considerations and Crowder proposed a design change which was accepted allowing linear construction from Trade St. to 4th Street.</td></tr> <tr><td colspan="6">j. 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WORK HISTORY AND QUALITY FORM – DESIGNER



Crowder Construction Company

a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)
Name: US 78 & SC 7 Bridge Replacements Delivery Method: Design-Bid-Build Location: US78 &SC7, North Charleston, SC	Name: Crowder Construction Company KCI designed the demolition plan	Name of Owner: SCDOT Project Manager: M. Kevin Turner Phone: TurnerMK@scdot.org Email: 843-740-1665	Construction Completed 09/2016	\$34,424	\$20,000
g. Narrative describing the work performed by A or B. If submitting work completed by an affiliated or subsidiary company of A, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether B was the lead designer or a sub-consultant.					
<div><div><p>Two bridge replacements — one at US 78 at Rivers Avenue, the other at SC 7 at Cosgrove Avenue in North Charleston. The US-78 bridge was 1,200 feet long and 44 feet wide with curved structural steel with integral bents. It contains 13 drilled shafts (two of which are 175 feet deep), as well as 36-inch diameter stone columns at each approach and 24-inch pipe pile at each end bent. Demolition was completed over Meeting Street and multiple existing CSX and Norfolk Southern railroad tracks. The new bridge was constructed to span over five future tracks going into the Charleston Port. The concrete portion also includes two large crash walls to protect the bridge foundation from derailed trains.The SC-7 bridge was 860 feet long and 72 feet wide and contains 20 drilled shafts — all 100 feet deep. It also included 42-inch diameter stone columns at each approach, along with earthquake drains, and HP14x73 pile at each end bent. Crowder partially demolished the SC7 bridge over Meeting Street and existing CSX and Norfolk Southern railroad tracks and through the middle of an active concrete plant. The new bridge was constructed in two phases to keep Cosgrove Avenue operational during the replacement. It was also built for future tracks going into the Charleston port. The mass concrete at the US 78 and SC 7 bridges consisted of 25 mass concrete pours, mostly concrete caps and then two columns.</p></div><div></div><div><div><div>WORK SELF-PERFORMED<ul style="list-style-type: none">• Pile driving• Formed and poured substructure• Set structural steel girders• Formed and poured concrete deck• Poured the parapet wall</div><div>RELEVANCE:<ul style="list-style-type: none">• Structure Design & Construction• Multi-Bridge Construction• Massive concrete pours• Bridge work over railroad</div><div>KEY TEAM MEMBERS:<p>George Ellis – Division Manager</p><p>Rich Hauser - Superintendent</p></div></div></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of A’s or B’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>This project had many obstacles to overcome. Each bridge had travelling public, active rail lines and close proximity to homes and businesses. Crowder bid the project as an A+B project and completed it without any liquidated damages.</p> <p>Crowder finished this 3-year project with a final contract amount less than originally bid without any claims, dispute proceedings, litigation, or arbitration.</p>					
i. Quality Initiatives. Discuss A’s or B’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>This was a very complex project with an aggressive schedule involving work around many obstacles. From the beginning of the project, a CPM schedule was created, maintained, and adhered to throughout the project. Through partnering with all stakeholders, we were able complete the project on-time, avoid claims, and complete the project under-budget.</p>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, A or B shall provide a detailed explanation below.					
All answers to the questions in Section 3.5.3. are “No” for this project.					



WORK HISTORY AND QUALITY FORM – CONTRACTOR/DESIGNER
Lead Designer – Rummel, Klepper & Kahl, LLP (RK&K)

a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify RK&K’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by RK&K (in thousands)
Name: I-40 Widening and Improvements Design-Build Location: Wake and Johnston Counties, NC	Name: S.T. Wooten Corporation - Contractor RK&K – Lead Designer	Name of Owner: NCDOT Project Manager: Malcolm Watson, PE Phone: 919.707.6614 Email: mcwatson@ncdot.gov	Design Completed: Ongoing Anticipated Completion: 06/2025 Construction: Ongoing Anticipated Completion: 06/2025	\$408,000	\$22,514
g. Narrative describing the work performed by RK&K. Include the office location(s) where the design work was performed and whether RK&K was the lead designer or a sub-consultant.					
<div><div></div><div><p>RK&K is the Lead Designer for this urban widening project that improves I-40 from the I-40 / I-440 / US 64 interchange in Wake County to just north of SR 1525 (Cornwallis Road) in Johnston County. As one of the most heavily traveled and congested transportation facilities in the Raleigh area, this project provides a higher level of service on I-40 and relieves present and future congestion. The 12.8-mile-long project consists of ten-lane, eight-lane, and six-lane sections and is designed to meet 70 and 75 mph for freeway interstate standards. Improvements include six interchanges (partial cloverleaf, system to system, diamond, and diverging diamond), 15 bridges, one culvert repair, one culvert extension, 350K+ square feet of sound barrier, and railroad coordination and agreements for the NSRR/NCRR Railroad crossing. The flyover ramp bridge at the I-40/I-440 interchange is a complex bridge design - horizontally curved steel girders (radial bents) with span lengths exceeding 200 feet in length. RK&K also completed a detailed Interchange Alternatives Assessment for modifications at the I-40/Jones Sausage Road interchange.</p><p>To ensure the initial design is effective all design submittals (including those from subconsultants) went through an Interdisciplinary Review process where all disciplines review the submittal and give comments. At the same time the plans were sent to the contractor for a constructability review. This process minimized the likelihood of conflicts between the different design disciplines and gives the contractor a chance to assess constructability, thus avoiding time-consuming resubmittals of the plans and costly constructability issues in the field.</p></div><div><p><i>I-40 Widening and Improvements under NSRR/NCRR</i></p></div><div><p>Design Location Raleigh, NC</p><p>Key Team Members Matthew Cook, PE – Water Resources Mgr.</p><p>Relevancy</p><ul style="list-style-type: none">✓ Design-Build Delivery✓ Urban Widening✓ Freeway/Interstate/Complex MOT✓ Interstate Interchanges✓ Interchange Alternatives Assessment✓ Bridges/structures✓ Railroad Coordination & Agreements✓ Diverging Diamond Interchange✓ Staged Construction✓ Demolition✓ Environmental Permitting✓ Right of Way Acquisition✓ Construction over Active Traffic✓ Utility Conflicts✓ Noise Barrier Walls</div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of RK&K’s performance on the project to identify RK&K with firms or personnel that have successfully completed projects on time and on or under budget, and to identify RK&K’s record of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>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. One of the most unique innovations includes the utilization of an overhead conveyor system to deliver Asphalt, Type I Stone, and ABC to the median from the contractor’s local Asphalt Plant site on Cleveland Road. The use of this system greatly minimizes traffic impacts by eliminating approximately 7,600 truckloads of materials from entering / exiting the roadway median. The design-build team also utilizes the NCDOT-owned Smart Workzone System to monitor traffic flow and provide advanced notice to motorists to utilize alternate routes when there are delays. The team is modifying the existing system specifically for this project. The CPM schedule is a valuable tool and is used to identify the critical path for the project. This allows the design team to allocate resources to the critical tasks to ensure they are completed on time. This tool has been especially important as the final design and right-of-way acquisition ramped down for this project as COVID-19 occurred and impacted the project. This includes the design team working remotely and unable to meet in person. Right-of-way has been impacted due to revised court procedures that hinder meeting with owners face to face, etc. The Team has been able to identify problem areas using the CPM to track parcels and adjust design and construction work areas to accommodate where the right-of-way is obtained.</p>					
i. Quality Initiatives. Discuss RK&K’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>Quality improvements from interdisciplinary reviews: 1) During the review process at the bridges, the contractor noted areas where construction may be difficult. A separate meeting was held to discuss these areas and specific design changes were made to ensure constructability. 2)</p> <p>The Team also worked closely with NCDOT and the Agencies to determine if large retaining walls adjacent to streams/wetlands were needed because of the possibility of scour and maintenance issues. After coordination, the walls were removed with the Agencies blessing which reduces possible maintenance issues in the future. 3) For all submittals, existing and proposed utilities, as well as storm drainage are checked for conflicts. It is important to check that there are not conflicts for any type of foundations (sign, bridge, lighting, etc.).</p>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RK&K shall provide a detailed explanation below.					
N/A					



WORK HISTORY AND QUALITY FORM – CONTRACTOR/DESIGNER
Lead Designer – Rummel, Klepper & Kahl, LLP (RK&K)


a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify RK&K’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by RK&K (in thousands)
Name: I-40 over the Yadkin River Design-Build Location: Davie and Forsyth Counties, NC	Name: Flatiron Constructors, Inc. – Contractor RK&K – Lead Designer	Name of Owner: NCDOT Project Manager: Malcolm Watson, PE Phone: (919) 707-6614 Email: mcwatson@ncdot.gov	8/2018 - Design 11/2021 – Construction	\$72,000	\$5,319
g. Narrative describing the work performed by RK&K. Include the office location(s) where the design work was performed and whether RK&K was the lead designer or a sub-consultant.					
<div><div></div><div><p>RK&K served as the Lead Designer for the reconstruction and urban widening of 3.8-miles of I-40 West of NC 801 in Davie County to East of SR 1101 in Forsyth County. I-40 was widened from a four-lane divided, to a six-lane facility with a minimum 26-foot median and continues to meet the 70-mph freeway design speed.</p><p>The project also included the design and construction of dual bridges over the Yadkin River and a pedestrian bridge over I-40. This eight-span, 1,104-foot-long bridge was constructed in three stages to to accommodate three 12-foot travel lanes with two 10-foot shoulders. This minimized traffic impacts and combined the east and west bound bridges into one structure. The existing Bert’s Way Bridge within the Town of Bermuda Run was reconstructed as a pedestrian bridge that crossed over the newly rehabilitated six-lane I-40. RK&K worked closely with the Town ensure the look of the new bridge fits in with the historic area.</p><p>There were many environmental and community impacts considered while designing the roadway improvements. The Team designed the Yadkin River Bridge to reduce impacts to the riverbanks and 100-year storm elevation, while keeping the river open for recreational use during construction. RK&K proposed a shift in the alignment of the roadway design eliminating impacts from the roadway widening to the Twin City Youth Soccer Association Property and the Win-Mock Farm Complex, a historic property on the south side of I-40 just west of the Yadkin River.</p><p>Careful design measures were implemented for traffic maintenance during project construction, as this section of I-40 regularly supports a high traffic volume, ADT 2017: 58,600 ADT 2037: 74,800. Careful coordination of MOT, roadway, structures, and hydraulics ensured that the project was completed safely with optimal constructability. The project was completed with minimal lane and ramp closures, keeping traffic moving during peak travel times.</p></div><div><p><i>1,104’ I-40 bridge over the Yadkin River</i></p></div><div><p>Design Location Raleigh, NC</p><p>Key Team Members Matthew Cook, PE – Water Resources Mgr.</p><p>Relevancy</p><ul style="list-style-type: none">✓ Design-Build Delivery✓ Urban Widening✓ Freeway/Interstate/Complex MOT✓ Bridges/structures✓ Railroad Crossing✓ Demolition of existing bridge✓ Limitations on in-water and over-water construction✓ Limited site access, use of causeway for 3-stage construction✓ Environmental Permitting✓ Right of Way Acquisition✓ Construction over Active Traffic✓ Utility Conflicts✓ Noise Barrier Walls</div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of RK&K’s performance on the project to identify RK&K with firms or personnel that have successfully completed projects on time and on or under budget, and to identify RK&K’s record of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<ul style="list-style-type: none">• The structure plans for the bridge over the Yadkin River were broken up into multiple submittals to provide plans to the contractor more efficiently during the various construction stages than could be achieved by submitting the entire set at once.• RK&K coordinated with the contractor to streamline the design process. We focused design efforts to fit with the contractors preferred design and construction methods.• RK&K responded to RFIs within 48 hours and collaborated with the contractor and NCDOT to find common solutions. For example, when a battered steel pipe pile walked outside the limits of an interior bent cap during driving, RK&K and the contractor worked together to produce alternative solutions and then presented the options to NCDOT. RK&K then performed engineering checks to verify the chosen alternative and issued revised RFC plans.					
i. Quality Initiatives. Discuss RK&K’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
<p>The team mentality between RK&K, the contractor, and NCDOT helped to solve problems, reduce costs, and provide a quality final product.</p> <ul style="list-style-type: none">• Quality initiatives, ATCs• Management <p>Weekly meetings between the contractor and the various design leads at RK&K were held during the design. These meetings continued monthly during construction after design was complete.</p>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RK&K shall provide a detailed explanation below.					
N/A					



WORK HISTORY AND QUALITY FORM – CONTRACTOR/DESIGNER
Lead Designer – Rummel, Klepper & Kahl, LLP (RK&K)

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Name: Monroe Bypass Design-Build Location: Union and Mecklenburg Cos., NC	Name: Monroe Bypass Constructors (United Infrastructure Group, Boggs Paving, & Anderson Columbia JV) - Contractor RK&K – Lead Designer	Name of Owner: NCDOT Project Manager: Malcolm Watson, PE Phone: (919) 707-6614 Email: mewatson@ncdot.gov	Professional Services: 2017 Construction: 2019	\$464,000	\$19,000
g. Narrative describing the work performed by RK&K. Include the office location(s) where the design work was performed and whether RK&K was the lead designer or a sub-consultant.					
<div><div></div><div><p>RK&K served as the Lead Designer for this 19.7-mile new alignment toll road, which included urban widening within one section. The project included eight (8) interchanges (partial cloverleaf, diamond, tight diamond, and trumpet), 37 bridges (26 sites with 11 dual structures), 45 culverts, and three sound barriers. The project included four dual bridges over water and railroad coordination for dual bridges over CSX Railroad. The spans ranged from one to six and total bridge lengths varied from 130 to 718 feet. The Bypass improves mobility and capacity by providing a facility that allows for high-speed regional travel while maintaining access to properties along existing US 74. The project consisted of providing all design, construction, and quality functions for this toll facility that extended from US 74 near I-485 in Mecklenburg County to US 74 in Union County. For a one-mile section of mainline along existing US 74 on the west end, the project is an elevated six-lane divided, controlled access toll road with two-lane frontage roads located along each side of the mainline. The remaining portion of the project consists of a four-lane divided, controlled access toll road with a 46-foot median. The project included a major interchange at its western end with existing US 74 and full movement interchanges with Indian Trail-Fairview Road, Unionville-Indian Trail Road, Rocky River Road, US 601, NC 200, and Austin Chaney Road. The interchange at existing US 74 on the eastern end of the project accommodates the Forest Hills School Road traffic movements with the addition of a “Superstreet U-turn” located on US 74. Aesthetics were a significant consideration in the design. As part of the design, RK&K provided all utility coordination for private utilities, as well as utility design for water and sewer.</p></div><div></div><div><div>Design Location Raleigh, NC</div><div>Key Team Members Matthew Cook, PE – Water Resources Mgr.</div><div>Relevancy<ul style="list-style-type: none">✓ Design-Build Delivery✓ Urban Widening✓ Freeway/Interstate/Complex MOT✓ Bridges/structures✓ CSX Railroad Crossing✓ Interstate Interchanges✓ Diverging Diamond Interchange✓ Staged Construction✓ Demolition✓ Environmental Permitting✓ Right of Way Acquisition✓ Construction over Active Traffic✓ Utility Conflicts✓ Noise Barrier Walls</div></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of RK&K’s performance on the project to identify RK&K with firms or personnel that have successfully completed projects on time and on or under budget, and to identify RK&K’s record of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
Exceptional performance on this project began with RK&K’s impressive technical score of 93 during the design-build selection process. The RK&K design team remained committed to the project through two delays that stopped design work for a total of three years. Throughout the delays, which were due to an environmental lawsuit, our team remained engaged in the project. RK&K worked as a partner with NCDOT/NCTA to resolve all issues that resulted from the delays. These issues included changes in existing conditions; new policies, standards, and specifications; and significant changes to NCDOT and NCTA leadership. From the initial stages, RK&K identified alternative designs to reduce cost and save time. During the proposal process, the Team proposed 24 innovative Alternative Technical Concepts (ATCs). With approval by NCTA, many of these ATCs were implemented into our final design. These ATCs assisted in the reduction of cost and time, as well as helped secure the award of the project. The design was optimized to minimize cost by balancing earthwork on the job in sections, reducing bridge lengths, minimizing noise walls, etc.					
i. Quality Initiatives. Discuss RK&K’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
A key aspect of maintaining schedules and budgets on all projects is the preparation of an effective initial design in order to avoid the delays and additional costs created by redesign. RK&K prepared a Design Quality Management Plan (DQMP) specifically for the project. A major element of this plan was that all design submittals (including those from subconsultants) would go through an Interdisciplinary Review process. This process minimized the likelihood of conflicts between the different design disciplines, thus avoiding time-consuming resubmittals of the plans and costly constructability issues in the field. Another major element of the DQMP was the use of “check prints,” requiring every sheet to be checked, revised, backchecked, and approved prior to being submitted for review. In addition, internal audits were performed to ensure the plan was followed. To monitor our progress against the design schedule, RK&K prepared a CPM schedule utilizing Microsoft Project and updated it regularly to include actual submittal dates versus projected. This allowed our team to see if an activity was becoming critical well in advance of it becoming an emergency. Also, when the project was delayed due to an environmental lawsuit, a document was developed to memorialize the status of the project. During the delay, the Team met with NCTA to check on the status of the project and also to discuss items that have changed that could impact the project. Once the delay was over, the document was a valuable tool to help the design get restarted and gave a good summary to all new personnel for the project including staff at NCTA.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RK&K shall provide a detailed explanation below.					
N/A					

WORK HISTORY AND QUALITY FORM – CONTRACTOR/DESIGNER
Lead Designer – Rummel, Klepper & Kahl, LLP (RK&K)

a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify RK&K’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by RK&K (in thousands)
Name: Macy Grove Road Design-Build Guilford County, NC	Name: Blythe Development Company - Contractor RK&K – Lead Designer	Name of Owner: NCDOT Project Manager: Byron Kyle Phone: 919.707.6621 Email: btkyle@ncdot.gov	Design Complete: 2012 Construction Complete: 2015	\$38,000	\$2,684
g. Narrative describing the work performed by RK&K. Include the office location(s) where the design work was performed and whether RK&K was the lead designer or a sub-consultant.					
<div><div></div><div><p>RK&K served as the Lead Designer for this award-winning design-build project that included the urban widening, extension, and reconstruction of Macy Grove Road (SR 2601) to a multi-lane roadway from south of I-40 Bus./US 421 to north of East Mountain Street. The project included the design of two interchanges and three bridges. Providing multi-discipline services, RK&K’s scope of work included structure design; roadway design; hydraulic design; traffic control and pavement markings; signing, ITS, and signal design; permit preparation; utility coordination and relocation; public involvement; railroad coordination; erosion and sedimentation control; surveys and SUE; and right-of-way acquisition. Structure Design: This project included the design and construction of three bridges: (1) Macy Grove Road over I-40 Business: 156-foot long, one-span, tangent bridge. (2) Macy Grove Road over the Norfolk Southern Railroad: 117-foot long, one-span, tangent bridge. (3) Macy Grove Road over East Mountain Street: 111-foot long, one-span, tangent bridge. Roadway Design: The team designed and constructed a basic four-lane divided curb & gutter facility with additional specifics and features including: new Macy Grove Road/I-40 Business interchange; a two-lane bridge over I-40 Business / US 421 was replaced with a Compressed Diamond Interchange (CDI) with a seven-lane bridge; 1.6 miles of existing I-40 Business/US 421 was milled, resurfaced and improved; removed EB exit ramp on I-40 Business, removed 1,000-feet of existing WB I-40 Bus./US 421 roadway and bridge east of NC 66, and reconstructed 1,000-feet of WB I-40 Bus./US 421 roadway; removed existing WB entrance ramp and roadway between I-40 Business and East Mountain Street; added cul-de-sac on Old Greensboro Road; a partial interchange with two-way ramps in the Northwest quadrant of East Mountain Street with a roundabout at the ramp terminal; a new 1,355-foot long two-lane access road from Macy Grove Road to Whitt Road; and a 500-foot long two-lane access road from Industrial Park Road northward.</p></div></div> <div><p><i>Macy Grove Road over Norfolk Southern Railroad</i></p></div> <div><p>Design Location Raleigh, NC</p><p>Key Team Members Matthew Cook, PE – Water Resources Mgr.</p><p>Relevancy</p><ul style="list-style-type: none">✓ Design-Build Delivery✓ Urban Widening✓ Freeway/Interstate/Complex MOT✓ Interstate Interchanges✓ Interchange Alternatives Assessment✓ Bridges/structures✓ Railroad Coordination & Agreements✓ Diverging Diamond Interchange✓ Staged Construction✓ Demolition✓ Environmental Permitting✓ Right of Way Acquisition✓ Construction over Active Traffic✓ Utility Conflicts</div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of RK&K’s performance on the project to identify RK&K with firms or personnel that have successfully completed projects on time and on or under budget, and to identify RK&K’s record of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
Demonstrating outstanding performance on the project, RK&K received the Pinnacle Carolinas AGC Partner Award. As the most prestigious recognition in the Carolinas’ construction industry, this award honors the work of contractors and their key partners. Also illustrating RK&K’s innovative and creative design, the design-build team received the highest technical score of 90% during the design-build selection process. The design for the project was completed on time and within budget. We also collaborated with the owner and contractor when there were unexpected changes to the project such as when we had to minimize slopes on a large gas line (third party risk) by using reinforced soil slopes and adding additional drainage pipes to minimize cuts over the lines.					
i. Quality Initiatives. Discuss RK&K’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
A key aspect of maintaining schedules and budgets on all projects is the preparation of an effective initial design in order to avoid the delays and additional costs created by redesign. To ensure the initial design is effective all design submittals (including those from subconsultants) would go through an Interdisciplinary Review process where all disciplines would review the submittal and give comments. This process minimized the likelihood of conflicts between the different design disciplines, thus avoiding time-consuming resubmittals of the plans and costly constructability issues in the field. To monitor our progress against the design schedule, RK&K prepared a CPM schedule utilizing Microsoft Project and updated it regularly to include actual submittal dates versus projected. Below are a few examples of design changes resulting from above procedures. The design for this project included adding an interchange at an existing overpass. The RFP allowed closure road of the existing overpass, but our Team developed a design that allowed the road to remain open at all times during construction. Another design change that increased the quality of the project was to use a 1-span bridge over I-40 Bus. This minimized work in the median of a busy interstate, eliminated a bent in the bridge, minimized maintenance cost, and allowed for a more consistent median along I-40 Bus. The Team also designed the project to minimize impacts to environmental features and worked closely with the Agencies to develop a Nationwide Permit instead of the Individual Permit that was anticipated in the RFP. This helped to accelerate receiving the Permit and allowed the Team to begin construction earlier than initially anticipated					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RK&K shall provide a detailed explanation below.					
N/A					

WORK HISTORY AND QUALITY FORM – DESIGNER					
Greenman-Pedersen, Inc. (GPI)					
a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)
Name: Tappan Zee Bridge Replacement Delivery Method: Design-Build Location: South Nyack, Tarrytown, NY	Name: HDR	Name of Owner: Tappan Zee Constructors Project Manager: Terry Towle Phone: 914-789-2300 Email: terry.towle@tzc-llc.com	Professional Services completed 09/2018 Construction completed 12/2020	\$3,140,000	\$124,400
g. Narrative describing the work performed by A or B. If submitting work completed by an affiliated or subsidiary company of A, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether B was the lead designer or a sub-consultant.					
<p>Greenman-Pedersen, Inc. (GPI) provided Independent Quality Firm services for both design and construction of the \$3.14 Billion Tappan Zee Bridge Replacement project, which included a signature three-mile crossing over the Hudson River.</p> <p>As the Independent Quality Firm for design and construction, GPI was responsible for providing a quality review of the work being performed, and overseeing and/or performing quality audits of the Design-Builder’s management, design and construction activities, the Design-Builder’s Quality Control procedures, Verification Sampling and Testing and the quality of the final product, utilizing ISO 9001 standards.</p> <p>Tappan Zee Constructors, the winning bid consortium, included Fluor Enterprises, American Bridge Co., Granite Construction Northeast and Traylor Bros. HDR, headquartered in Omaha, NE, was the lead designer.</p> <p>The Tappan Zee Constructors project approach addressed major concerns of the aging bridge that had a high accident rate, lengthy traffic jams and complete lack of mass transit capability. Key features include: Twin spans with a total of eight general traffic lanes, plus emergency lanes and extra-wide shoulders for immediate bus service when opened; Unique towers that tilt outward for additional strength and also eliminate the need for cross beams; A first-ever dedicated bicycle and pedestrian path with safe, scenic spots and cultural information about the region’s heritage, as well as capability for bus rapid transit, light rail or commuter rail; A new night light display with potentially changing patterns.</p>			<div></div> <p>RELEVANCE:</p> <div><ul style="list-style-type: none">• Structure design• Design-build• Construction over water• High volume traffic</div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of A’s or B’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
GPI fully understood the requirements of the project’s QMP and GPI’s role in performing QA services. Our reviews were completed in a timely manner to minimize overall contract delays.					
i. Quality Initiatives. Discuss A’s or B’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
GPI provided highly qualified staff and committed the resources necessary to perform quality audits of the DB’s design and construction activities in accordance with the project’s Quality Management Plan.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, A or B shall provide a detailed explanation below.					
All answers to the questions in Section 3.5.3. are “No” for this project.					

WORK HISTORY AND QUALITY FORM – DESIGNER					
Greenman-Pedersen, Inc. (GPI)					
a. Project Name, Delivery Method (DBB, DB, etc.), & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify A’s or B’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by A or B (in thousands)
Name: Indian Inlet River Bridge Project (IRIB) Delivery Method: Design-Build Location: Rehoboth, DE	Name: Delaware Department of Transportation	Name of Owner: Delaware Department of Transportation Project Manager: Brad Saborio Phone: 302-853-1331 Email: bradford.saborio@delaware.gov	Construction completed 07/2015 Professional Services completed 07/2015	\$150,000	\$7,126
g. Narrative describing the work performed by A or B. If submitting work completed by an affiliated or subsidiary company of A, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether B was the lead designer or a sub-consultant.					
<div><div><p>The Indian River Inlet Bridge Design-Build was a Best Value Design-Build project that replaced the existing steel girder bridge with a 2,600-foot-long signature cable stayed bridge due to deep scour in the inlet. The new bridge consists of a 950-foot main span, 400-foot back spans, and 850 feet of pre-stressed precast concrete girder approach spans. GPI performed on-site QA inspection under DelDOT Agreement 1312 on many unique structural elements, materials, and techniques, including deep prestressed concrete pile foundations, precast pre-stressed concrete floor beams, 248-foot tall concrete pylons, steel anchor boxes, post tensioning, segmental superstructure constructing using a form traveler, stay cables, HDPE stay cable piping, epoxy grout, polyester polymer concrete overlay, large bearings and finger joints, cold weather and mass concrete procedures, and the sand bypass system. The GPI QA team also provided support for dispute resolution, QA survey during segmental construction, and provided support to the University of Delaware for installation of the Structural Health Monitoring systems.</p><p>The GPI Quality Assurance team performed Survey Verification of the Contractor’s layout and its monitoring and profiling information played a vital role in DelDOT’s evaluation and decision to remove a large portion of the bridge approach embankment fills and associated MSE Wall system. The design-build project was part of a ten-year project consisting of five major construction contracts totaling over \$200M. GPI provided construction management and inspection for all of it.</p></div><div><div><p>RELEVANCE:</p><ul style="list-style-type: none">• Structure design• Design-build• Construction over water• Collaboration with DOT<p>KEY TEAM MEMBERS:</p><p>Marx Possible - Lead Quality Manager</p></div></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of A’s or B’s performance on the project to identify As or Bs with firms or personnel that have successfully completed projects on time and on or under budget, and to identify As or Bs that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
GPI worked directly for the owner, DelDOT. GPI Construction Management and Inspection staff managed the project to mitigate delays and claims by partnering with the contractor, designers and DelDOT staff to keep open clear lines of communication, address project issues at the appropriate level, track project milestones and critical path items.					
i. Quality Initiatives. Discuss A’s or B’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
GPI followed DelDOT’s standard specifications for construction and DelDOT’s construction quality program. As the lead quality firm, GPI managed the project schedule, tracked project item costs to avoid overruns, assigned quality staff to insure a high standard of quality construction, and used partnering to ovoid claims and delays.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, A or B shall provide a detailed explanation below.					
All answers to the questions in Section 3.5.3. are “No” for this project.					

Appendix C



Work History and Quality Forms

(Section 3.5.2)





Quality of Past Performance (Section 3.5.2)

Number	Question	Crowder 	RK&K 
3.5.2 (a)	Has the Lead Contractor or any member of the joint venture been declared delinquent or placed in default on any Project?	No	N/A
3.5.2 (b)	Has the Lead Contractor or any member of the joint venture submitted a claim on a project that was litigated? If litigated, explain the results.	No	N/A
3.5.2 (c)	Have any design-build projects or projects of similar scope involving the Lead Contractor or Lead Designer been delayed more than 30 days such that liquidated damages were assessed?	No	No
3.5.2 (d)	Has the Lead Contractor been cited by OSHA for violations deemed serious, willful, or repeated?	No	N/A
3.5.2 (e)	Have any projects under contract with the Lead Contractor or any member of the joint venture been subject to remediation actions, stop work orders, or project delays in excess of 30 days as a result of Section 404/Section 401 permit violations?	No	N/A
3.5.2 (f)	Has an owner, a Lead Contractor, or any member of a joint venture pursued compensation from the Lead Designer due to errors and omissions?	No	Yes
3.5.2 (g)	Has the Lead Designer filed legal proceedings against the Lead Contractor, or vice versa, on a design-build contract?	No	No

In response to **3.5.2 (f)** above, RK&K offers the following response and provides details within Appendix C.

RK&K, Delaware River & Bay Authority (DRBA), Bridge 6	The owner and RK&K engaged in the dispute resolution process of the contract regarding alleged design errors and omissions. The parties were able to resolve this matter at mediation.
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WORK HISTORY AND QUALITY FORM – CONTRACTOR/DESIGNER

Lead Designer – Rummel, Klepper, & Kahl, LLP (RK&K)

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design or construction	c. Contact information of the Client & their Project Manager who can verify RK&K’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by RK&K (in thousands)
Name: DRBA Bridge 6 Location: New Castle County, DE	Delaware River & Bay Authority	Name of Owner: Delaware River & Bay Authority Project Manager: David Hoppenjans Phone: 302-571-6300 Email: david.hoppenjans@drba.net	Construction: 02/2020 Professional Services: 12/2019	\$35,000	\$2,600
g. Narrative describing the work performed by RK&K. If submitting work completed by an affiliated or subsidiary company of RK&K, identify the full legal name of the affiliate or subsidiary and their role on the Project. Include the office location(s) where the design work was performed and whether RK&K was the lead designer or a sub-consultant.					
RK&K was the Lead Designer. The overall project intent was to add another lane to SB I-295. The design of Bridge 6 was a replacement and widening of the steel superstructure and concrete deck of the bridge with strengthening and widening of the existing concrete piers. The design was performed in RK&K’s Baltimore office.					
h. Self-Assessment. The information provided in this section should be a self-assessment of RK&K’s performance on the project to identify RK&K with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designer that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
N/A					
i. Quality Initiatives. Discuss RK&K’s quality initiatives including, but not limited to, cost control, schedule management and adherence, avoidance of claims, and other pertinent initiatives enhancing quality on the project.					
N/A					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, RK&K shall provide a detailed explanation below.					
3.5.2 (f) Has an owner, a Lead Contractor, or any member of a joint venture pursued compensation from the Lead Designer due to errors and omissions? The owner and RK&K engaged in the dispute resolution process of the contract regarding alleged design errors and omissions. The parties were able to resolve this matter at mediation.					



Appendix D

Legal and Financial



PO Box 30007 (28230-0007)
6409 Brookshire Boulevard (28216)
Charlotte, NC
Telephone: 704.332.8184 Fax 704.372.9946



www.crowderusa.com

CROWDER CONSTRUCTION COMPANY
Heavy Civil Division

PROPOSER'S AFFIDAVIT OF FINANCIAL CAPACITY

Crowder Construction Company has the financial capacity and resources necessary to complete the Carolina Crossroads Phase 3C I-20 Widening and Saluda River and CSX Bridge Replacements Design-Build Project, Project ID P043325 , Lexington County, SC, as proposed herein. A letter from our bonding company attesting to our good standing and bond capacity is attached.


George F. Ellis, Executive Vice President

June 12, 2024

Date

Subscribed and witnessed before me this 12th day of June, 2024


Notary Public

My Commission Expires: 4/24/2029





USI Insurance Services
6100 Fairview Drive
Suite 1400
Charlotte, NC 28210
www.usi.com
Tel: 704.543.0258

June 10, 2024

Mr. Nick Pizzuti
Mr. Brian Gambrell, Mr. Brian Klauk
Office of Local Government Services
South Carolina Department of Transportation
955 Park Street, Room 108
Columbia, South Carolina 29201

RE: Our Client: Crowder Construction Company
Project: SCDOT Carolina Crossroads Phase 3C-I-20 Widening and Saluda River and CSX Bridge
Replacements
Design-Build Project
Project ID P043325

Dear Mr. Pizzuti, Mr. Gambrell, and Mr. Klauk:

Liberty Mutual Insurance Company has met the bonding needs of Crowder Construction Company since 1996; they have always performed exceptionally. Crowder has a single bonding capacity of \$350,000,000 and their aggregate bonding capacity is \$1,000,000,000.

Based on Crowder Construction Company's prior experience and based on present circumstances and bonding capacity, Liberty Mutual Insurance Company will be willing to provide bid, performance and payment bonds on requested projects Crowder Construction Company undertake.

Subject to the normal underwriting considerations, including, but not limited to current financial information, final contract terms, conditions and construction financing, we would be most willing to work with them on a 100% Performance and Payment Bond requirement, in the event that they are awarded a contract and enter into a contract which is satisfactory to all parties. We assume no liability to third parties or to you if for any reason we do not execute said bonds.

Liberty Mutual Insurance Company is on the U.S. Department of Treasury's Listing of Approved Sureties (Department Circular 570) Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies, carries an A.M. Best Rating of A (Excellent) with a Financial Size Category of XV (\$2 Billion or greater), and is licensed to act as surety in all fifty states.

If I may provide any additional information, please don't hesitate to let me know.

Sincerely,

Liberty Mutual Insurance Company

A handwritten signature in blue ink that reads "Amy Daugherty".

Amy Daugherty
Attorney-In-Fact



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: 8209659-969489

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, Amy Daugherty, Angela D. Ramsey, Elizabeth D. Drum, G. Timothy Wilkerson, J. David Pollack, Jr., Jennifer C. Hoehn, Katherine Fowler, Laura W. Dennison all of the city of Charlotte state of NC 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 22nd day of March 2023.

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 22nd day of March, 2023, 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 Plymouth Meeting, 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 10th day of June 2024



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

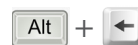
Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

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



3.6.3 | Organizational Agreements

Not applicable - Our Team is not a partnership, limited partnership, joint venture, or other association.



Appendix E

Organizational Conflicts of Interest



DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

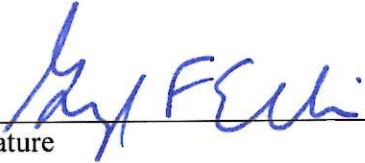
 X Determined that no potential organizational conflict of interest exists.

 Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):

2. Describe measures proposed to mitigate the potential conflict(s):



Signature

June 12, 2024

Date

George F Ellis, Executive Vice President

Print Name

Crowder Construction Company

Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

☒ Determined that no potential organizational conflict of interest exists.

☐ Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):
2. Describe measures proposed to mitigate the potential conflict(s):


Signature

6/12/2024
Date

H. Benji Vinson
Print Name

C.R. JACKSON, Inc
Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

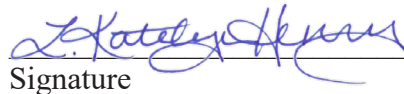
 X Determined that no potential organizational conflict of interest exists.

 Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):

2. Describe measures proposed to mitigate the potential conflict(s):


Signature

May 29, 2024
Date

Linda Katelyn Henry
Print Name

Aulick Engineering, LLC
Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

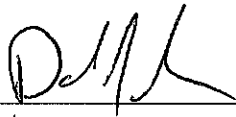
 x Determined that no potential organizational conflict of interest exists.

 Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):

2. Describe measures proposed to mitigate the potential conflict(s):



Signature

05-29-2024

Date

Daniel Stiles

Print Name

EAS Professionals, Inc.

Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

- ☒ Determined that no potential organizational conflict of interest exists.
☐ Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):
2. Describe measures proposed to mitigate the potential conflict(s):

David S. Link
Signature

5/31/24
Date

David S. Link
Print Name

Property Acquisitions and Negotiations, Inc.
Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION


PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

☒ Determined that no potential organizational conflict of interest exists.

☐ Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):
2. Describe measures proposed to mitigate the potential conflict(s):


Signature

Brooke Lenan
Print Name

PicTec
Company

6/11/24
Date

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

 X Determined that no potential organizational conflict of interest exists.

 Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):

2. Describe measures proposed to mitigate the potential conflict(s):

Heather M. Robbins
Signature

June 12, 2024
Date

Heather M. Robbins
Print Name

Robbins & DeWitt, LLC
Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST CERTIFICATION

PROPOSER hereby indicates that it has, to the best of its knowledge and belief has:

☒ Determined that no potential organizational conflict of interest exists.

☐ Determined a potential organizational conflict of interest as follows:

Attach additional sheets as necessary.

1. Describe nature of the potential conflict(s):

2. Describe measures proposed to mitigate the potential conflict(s):

Patrick A Smith

Digitally signed by Patrick A Smith
DN: C=US, E=psmith@sam.biz,
O="Surveying And Mapping, LLC",
OU=Executive, CN=Patrick A Smith
Date: 2024.05.31 12:46:31-05'00'

Signature

05/31/2024

Date

Patrick A. Smith, Principal/VP

Print Name

Surveying And Mapping, LLC

Company

If a potential conflict has been identified, please provide name and phone number for a contact person authorized to discuss this disclosure certification with Department of Transportation contract personnel.

Name

Phone

Company

Appendix F

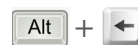
Confidential or Proprietary Information Summary List





Appendix F - Confidential or Proprietary Information Summary List

Crowder Construction Company and Rummel, Klepper & Kahl, LLP (RK&K) (Lead Designer) do not hold any of the information in this submittal as confidential or proprietary.





Appendix G

Addendum Receipt Forms



NOTICE OF RECEIPT

**Carolina Crossroads Phase 3C – I-20 Widening and Saluda River and CSX Bridge
Replacements**

**Design-Build – Project ID P043325
Lexington County**

Addendum 1

The information in this addendum shall be made part of the contract documents. PROPOSERS are instructed to incorporate the information into the previously provided RFQ documents.

PROPOSERS are required to sign this document and enclose it with their Statement of Qualifications. Receipt of this signed document by The South Carolina Department of Transportation serves as confirmation that the PROPOSER has received and incorporated this Addendum into the contract documents.

Confirmation Statement:

I, the PROPOSER confirm that I have received this addendum package and have incorporated the information provided in the addendum into the contract documents.



PROPOSER's Signature

June 12, 2024

Date

George F Ellis

Printed Name

For: Crowder - RK&K

Design-Build Team Name



Appendix H

Key Individual and Contractor/Designer Reference Forms



Email	First Name	Last Name	Key Individual Name	Project Name	Role of Key Individual	Team
References from Key Individual Resume Forms						
james.wally@cltairport.com	James	Wally	Kier Michael Ouderkirk	Old Dowd Road Relocation (City of Charlotte - Charlotte Douglas International Airport)	Senior Project Manager	Crowder
maloney.michael@richlandcountysc.gov	Michael	Maloney	Kier Michael Ouderkirk	Greene Street Improvements - Phase II & Bridge over Railroads, Columbia, SC	Senior Project Manager	Crowder
yujasjd@scdot.org	Jeremy	Yuhass	Kier Michael Ouderkirk	SCDOT File 3283411 Rainbow & Leaphart Bridges over Interstate 26	Senior Project Manager	Crowder
amcmanus@ncdot.gov	Andy	McManus	Kier Michael Ouderkirk	NCDOT I-485/I-85 Interchange Design-Build No. NC R-2123CE	Project Manager	Lane
amcmanus@ncdot.gov	Andy	McManus	Kier Michael Ouderkirk	NCDOT, I-85 Widening I-85 Widening South of SR-2894 to North of SC-73, Concord, C202522 Design-Build, Cabarrus County, NC	Asst. Project Manager	Lane
remccollum@ncdot.gov	Ron	McCollum	Matthew Lee Cook	NC 540 Triangle Expressway Design-Build, Wake County, NC	Assistant Design Manager / Water Resources Manager	S.T. Wooten/RK&K
mcwatson@ncdot.gov	Malcolm	Watson	Matthew Lee Cook	NCDOT, I-40 Widening & Improvements Design-Build, Wake & Johnston Counties, NC	Water Resources Manager	ST Wooten/RK&K
mcwatson@ncdot.gov	Malcolm	Watson	Matthew Lee Cook	NCDOT, I-40 over the Yadkin River Design-Build, Davie & Forsyth Counties, NC	Water Resources Manager	Flatiron/RK&K
mcwatson@ncdot.gov	Malcolm	Watson	Matthew Lee Cook	NCTA, Monroe Connector/Bypass Design-Build, Mecklenburg & Union Counties, NC	Water Resources Manager	Monroe Bypass Constructors/RK&K
mpenney@ncdot.gov	Michael	Penney	Matthew Lee Cook	NCDOT, I-95 Widening & Interchange Reconstruction Design-Build, Cumberland/Harnett Cos., NC	Water Resources Manager	S.T. Wooten/RK&K
parrisSL@scdot.org	Shane	Parris	Richard William Hauser	SCDOT I-85 WIDENING, CSX BRIDGE REPLACEMENT	Construction Manager	Crowder
mobleymf@scdot.org	Melanie	Mobley	Richard William Hauser	SCDOT 5485020-SC-9/49, Lockhart - Chester/Union County	Construction Manager	Crowder
PowerRW@scdot.org	Robert	Power	Richard William Hauser	SCDOT Design-Build Package 6	Site Superintendent	Crowder
TurnerMK@scdot.org	Kevin	Turner	Richard William Hauser	SCDOT 10.037903AR1 - Charleston County US 78 and SC 7	Project Superintendent	Crowder
wrandow@mdta.state.md.us	Bill	Randow	Marx Lendell Possible	I-895 Canton Viaduct, Baltimore Harbor Tunnel, Baltimore, MD	Lead Construction Quality Manager	Greenman-Pedersen, Inc.
saborio@delaware.gov	Brad	Saborio	Marx Lendell Possible	Thompsonville Grade Separated Interchange, Milford, DE	Chief Quality Manager	Delaware Department of Transportation
saborio@delaware.gov	Brad	Saborio	Marx Lendell Possible	Prime Hook Road Improvement, Milton, DE	Chief Quality Manager	Delaware Department of Transportation
saborio@delaware.gov	Brad	Saborio	Marx Lendell Possible	Indian River Inlet Park Enhancement, Rehoboth Beach, DE	Lead Quality Manager	Delaware Department of Transportation



Email	First Name	Last Name	Company Name	Project Name	Team
References from 3.3.1 - Not shown in Work History					
benjamin.possiel@raleighnc.gov	Benjamin	Possiel	City of Raleigh	Project C-5604-OD Crabtree Creek West Greenway project	Crowder/RK&K
rwgantt@ncdot.gov	Rodney	Gantt	NCDOT	Emergency Express Design-Build, Liberty Hill Road, SR 1651 Bridge 136 over the South Yadkin River	Crowder/RK&K
miranda.kidd@vdot.virginia.gov	Miranda	Kidd	VDOT	VDOT C00101495B62 -Replacement of bridge on Route 671 over overflow Nottoway River	Crowder/RK&K
ekswanson@ncdot.gov	Eric	Swanson	NCDOT	NCDOT C203206 Piedmont Rail Corridor Improvement Program, Harrisburg to Charlotte Project	Crowder/RK&K
ReynoldsBS@scdot.org	Brad	Reynolds	SCDOT	SCDOT, CLRB 2020-1 - District 2 Design-Build Bridge Package	RK&K/SAM
References from 3.5.1 - Not shown in Work History					
jchinson@ncdot.gov	Jon	Hinson	NCDOT	I-85 Concrete Rehab - Exit 36 to Moore's Chapel Road	Crowder
greenfk@scdot.org	Keith	Green	SCDOT	US 17A/21 over CSX Railroad Emergency Bridge Replacement	Crowder
parrisSL@scdot.org	Shane	Parris	SCDOT	SCDOT I-85 Widening - CSX Bridge Replacement	Crowder
mpenney@ncdot.gov	Michael	Penney	NCDOT	I-95 Widening and Improvements Design-Build	S.T. Wooten/RK&K
remccollum@ncdot.gov	Ron	McCollum	NCTA	NC 540 Triangle Expressway Design-Build, Wake County, NC	S.T. Wooten/RK&K
rclifton@fam66.us	Richard	Clifton	VDOT	I-66 Outside the Beltway Design-Build	FAM Construction/RK&K
References from Work History Forms and 3.5.1					
mobleymf@scdot.org	Melanie	Mobley	SCDOT	SC File 5485020 SC9/49 Multi-Bridge replacements over Broad River, Lockhart Canal, Canal Road, and Lockhart Drive, Chester/Union Counties	Crowder
YuhasJD@scdot.org	Jeremy	Yuhas	SCDOT	Rainbow & Leaphart Bridges over I-26	Crowder
ekswanson@ncdot.gov	Eric	Swanson	NCDOT	NCDOT C204058 - Gateway Station, Charlotte, NC	Crowder
TurnerMK@scdot.org	Kevin	Turner	SCDOT	US 78 & SC 7 Bridge Replacements	Crowder
mcwatson@ncdot.gov	Malcolm	Watson	NCDOT	I-40 overYadkin River D-B - Davie and Forsyth Cos., NC	Flatiron/RK&K
mcwatson@ncdot.gov	Malcolm	Watson	NCDOT	I-40 Widening & Improvements D-B, Wake & Johnston Cos., NC	S.T. Wooten/RK&K
mcwatson@ncdot.gov	Malcolm	Watson	NCTA	Monroe Bypass D-B - Union & Mecklenburg Cos., NC	Monroe Bypass Constructors /RK&K
btkyle@ncdot.gov	Byron	Kyle	NCDOT	Macy Grove Road D-B - Guilford County, NC	Blythe Development/RK&K
terry.towle@tzc-llc.com	Terry	Towle	Tappan Zee Constructors	Tappan Zee Bridge Replacement	Greenman-Pedersen
bradford.saborio@delaware.gov	Brad	Saborio	DelDOT	Indian Inlet River Bridge Project (IRIB)	Greenman-Pedersen





 PO Box 30007, Charlotte, North Carolina 28230
 704.332.8184  www.crowderusa.com

