



STATEMENT OF QUALIFICATIONS

# Carolina Crossroads

## Phase 1 - Colonial Life Blvd.

Project ID: P039718








## NAVIGATION PAGE

This document includes several links for ease of reference.

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is placed on items with links to various items in the appendix.

In order to return to your **PREVIOUS VIEW**, click **ALT + left arrow**. You can also set your PDF viewing preferences by following these steps: Click on 1)View 2)Show/Hide 3)Toolbar Items, 4)Show Page Navigation Tools 5)Check “Previous View”. A  button will appear on your toolbar and can be used to go directly to your previous view.



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## INTRODUCTION (RFQ 3.2)

### Contracting Entity (RFQ 3.2.1):

The **Archer-United JV** (AUJV) will be the contracting entity and combines two of SCDOT's most respected and experienced design-build contractors; Archer Western Construction, LLC (AWC) and United Infrastructure Group, Inc. (UNITED). **Stephen P. Carter, Jr.**

and/or **James E. Triplett** are authorized to sign all contracts on behalf of the JV (see Article 11, JV Teaming Agreement in [Appendix D](#)). Infrastructure Consulting & Engineering, PLLC (ICE), a trusted and innovative professional design services firm, will lead AUJV's design team. The Team referred to as the "**AUJV Team**" will provide all services necessary to complete the Carolina Crossroads Phase 1 – Colonial Life Boulevard Design-Build Project in Richland and Lexington Counties (referred to as "CCR PH I" hereinafter). The AUJV Team was assembled to specifically address SCDOT's long term needs for the entire Carolina Crossroads program (all phases) including unparalleled successful SCDOT DB experience, unmatched local resources (design and construction), added value of the long-term and sole commitment of Project Executive, Jim Ewart, to complete CCR PH 1 and the upcoming CCR phases, and a strategy to transition these resources from current SCDOT projects while meeting all current commitments.

#### CONTRACTING ENTITY CONTACT INFO.

**Archer-United JV - Andrew Douglas, PE**

**Email:** [adouglas@walshgroup.com](mailto:adouglas@walshgroup.com)

**Mobile Phone:** 703-863-0365

11000 Regency Parkway, Ste 100, Cary, NC 27518

#### PROJECT MANAGEMENT OFFICE

**Design:** 1021 Briargate Circle, Columbia, SC 29210

**Construction:** Onsite trailer or storefront near project

### Proposer's Point of Contact for Procurement (RFQ 3.2.2):



**David Pupkiewicz, FDBIA**  
2839 Paces Ferry Rd SE, Ste 1200  
Atlanta, GA 30339  
(P) (404) 926-0757  
[dpupkiewicz@walshgroup.com](mailto:dpupkiewicz@walshgroup.com)



**Chris Gossett, PE**  
1021 Briargate Circle  
Columbia, SC 29201  
(P) (803) 995-8241  
[chris.gossett@ice-eng.com](mailto:chris.gossett@ice-eng.com)

### Full Legal Name of Lead Contractor and Lead Designer (RFQ 3.2.3):

- The full legal name of the Lead Contractor: **Archer-United JV**
- The full legal name of the Lead Designer: **Infrastructure Consulting & Engineering, PLLC**

### Commitment Statement (RFQ 3.2.4):

The Key Personnel in the organizational chart are committed to meeting SCDOT's quality and schedule expectations and each person is available for the duration of CCR PH 1.

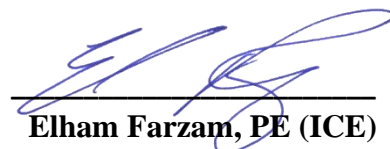
#### COMMITMENT SIGNATURES



**Andrew Douglas, PE (AWC)**



**James E. Triplett, PE (UIG)**

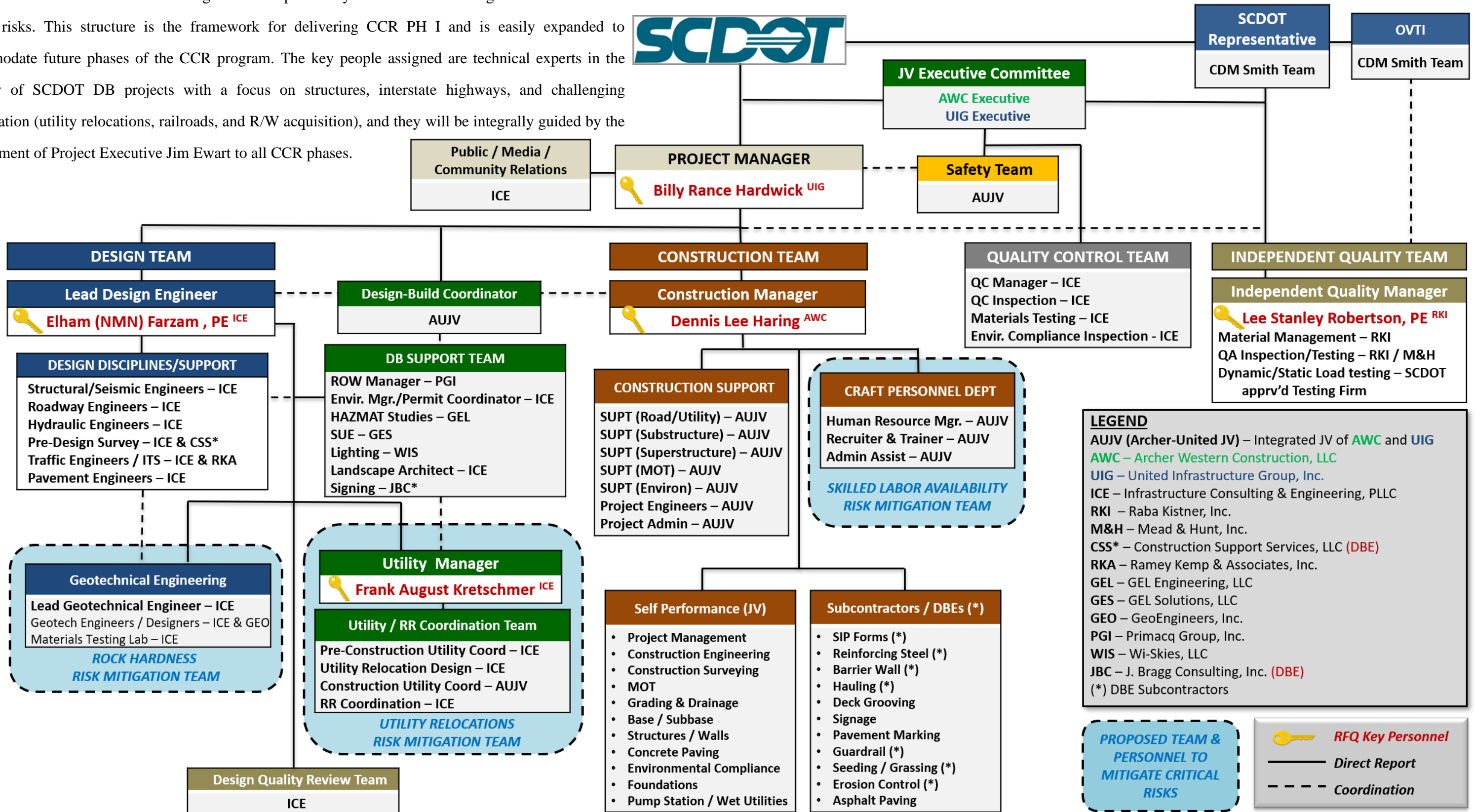


**Elham Farzam, PE (ICE)**

## TEAM STRUCTURE AND PROJECT EXECUTION (RFQ 3.3)

### Organizational Chart, Team Structure & Team Integration (RFQ 3.3.1)

a) **Organizational Chart** / The AUJV TEAM Organizational Chart illustrates the functional structure and “chain of command” and includes suborganizations specifically focused on addressing SCDOT’s identified critical risks. This structure is the framework for delivering CCR PH I and is easily expanded to accommodate future phases of the CCR program. The key people assigned are technical experts in the delivery of SCDOT DB projects with a focus on structures, interstate highways, and challenging coordination (utility relocations, railroads, and R/W acquisition), and they will be integrally guided by the commitment of Project Executive Jim Ewart to all CCR phases.





**b) Significant Functional Relationships & Working as an Integrated Design-Build Team** | Our organization is structured to place the most qualified people in key positions while fostering a partnering atmosphere with SCDOT, FHWA, and the local community. Lines of communication begin with our Project Manager, then run between the Lead Design Engineer and the Construction Manager in conjunction with the Design-Build Coordinator (DBC). A JV Executive Committee comprised of executives from AWC and UNITED provides assurance to SCDOT that our project team meets its objectives of delivering a high-quality project, safely, and within our budget and schedule commitments.

### INTEGRATED DESIGN-BUILD TEAM STRATEGIES

- ✓ Value Added Design-Build Coordinator position facilitating cross discipline communication
- ✓ Discipline Task Teams with AUJV, SCDOT and Designer participation
- ✓ Construction pre-task planning and activity work plan development that involves design, construction, safety, and quality control staff



**c) Team Members' Prior Working Relationship** | The personal and professional relationships of AUJV date back over 25 years and have resulted in the successful delivery of more SCDOT DB and bid-build projects than any other team.


**Table 3.3.1.i – Firms/Key Individuals Prior Working Relationship**

Project Type (DB: Design-Build or DBB: Bid-Build) Project Owner & Project Name Project Duration	REF *	Firms			Key Individuals			
		AWC Prime	UIG Prime	ICE Lead design	PM BH	LDE EF	UM GK	CM DH
DB: SCDOT SC 150 Emergency Bridge   2011	1		✓	✓				
DB: MODOT Safe & Sound Bridge (554 Bridges)   2008-2012	2		✓	✓		✓	✓	
DB: CHS CTY Palmetto Commerce Parkway   2010-2012	3		✓	✓		✓		
DB: NCDOT NC 540 Western Wake Freeway   2008-2013	4	✓		✓		✓	✓	✓
DB: CHS CTY   Johnnie Dodds Blvd.   2010-2013	5		✓	✓	✓	✓		
DB: SCDOT Package C Bridge Replacements   2012-2014	6		✓	✓		✓		
DB: SCDOT Package D Bridge Replacements   2012- 2014	7		✓	✓		✓		
DB: SCDOT Package E Bridge Replacements   2015-2018	8		✓	✓		✓	✓	
DB: SCDOT US 176 Bridge over Cannons Creek   2015-2016	9		✓	✓		✓		
DB: SCDOT Emergency Bridge Package 4   2016	10		✓	✓		✓		
DB: BFT CTY Perryclear Bridge Replacement   2016	11		✓	✓		✓	✓	
DB: PennDOT Rapid Bridge Replacement Program   2014 -2016	12	✓		✓		✓	✓	
DB: GDOT Northwest Corridor Express Lanes   2013-2018	13	✓		✓ <sup>1</sup>		✓	✓	✓
DB: SCDOT I-77 Widening / Rehabilitation   2015-2018	14	✓	✓ <sup>2</sup>	✓		✓	✓	
DB: NCDOT Monroe Bypass   2014 - 2018	15		✓	✓ <sup>2</sup>	✓	✓		
DB: SCDOT US 21 Bridge over Harbor River   2018-2021	16		✓	✓	✓	✓	✓	
DBB: SCPA HLT – Wall Remediation & Site Work   2015-2020	17	✓ <sup>2</sup>	✓	✓		✓		
DBB: CITY N. CHS - Future Dr. / N. Side Dr.   2014-2016	18		✓ <sup>2</sup>	✓ <sup>3</sup>		✓		
DBB: BERK CTY Nexton Parkway / I-26 Widening   2015-2018	19		✓	✓		✓		
DB: NCDOT I-77 Pavement Rehabilitation (I-5912)   2018-2020	20	✓		✓		✓		✓
DBB: SCDOT I-85 Widening (MM 69-77)   2017-2019	21	✓		✓ <sup>2</sup>		✓		
DB: SCDOT SC 277 Bridge Replacement   2018-2020	22	✓	✓ <sup>2</sup>	✓		✓	✓	
DB: SCDOT I-26 Reconstruction (MM 85-101)   2019-2023	23	✓	✓	✓		✓	✓	

\* References are provided in [Appendix H](#) ✓ Indicates ICE personnel experience while with a previous firm.

<sup>1</sup>Lead Design Reviewer <sup>2</sup> Subcontractor/Subconsultant <sup>3</sup> Value Engineering

## Critical Risks (RFQ 3.3.2)

RISK 1	Archer-United JV Team's Risk Mitigation Strategies <a href="#">See Org Chart for Risk Mitigation Team</a>		Role of SCDOT & Other Agencies
UTILITY RELOCATIONS	<b>Ability to respond to design &amp; construction schedules (delayed relocations)</b> Minimize design iterations and provide utility relocation alignments accounting for all utility company relocations. Segment and prioritize utility relocation areas.		Provide formal access to utilities during RFP to discuss the scope and schedule of relocations
	<b>Additional R/W/easement and utility permitting for impacts not secured</b> - Ensure logical start/stop relocations points to coincide with Phase III and within Phase I early R/W acquisitions. Advance and facilitate individual utility permitting for Saluda River crossings and other impacts not included in overall permit.		SCDOT/Permitting agencies streamline review for advance utility relocations SCDOT Property file to include all utility easements for prior right verification
	<b>Private Easement acquisition may delay relocation</b> - Identify easement needs early and "piggyback" on SCDOT's R/W acquisition.		Share all R/W information and consider maintaining prior rights within R/W, when reasonable
	<b>Lengthy review and approval process of MOAs, Utility Agreements, Encroachment Permits</b> - Provide final details (quantities & estimates) to finalize agreements and implement a utility submittal tracking system		Provide executed MOAs, US, EP and outline utility work authorization approval process
	<b>Redesigns and schedule delays caused by unknown utilities</b> – Use supplemental SUE services during both RFP and post-award to avoid/minimize impacts to major utility facilities and depict recently installed facilities		Provide recent encroachment permits within project limits
RISK 2	Archer-United JV Team's Risk Mitigation Strategies <a href="#">See Org Chart for Risk Mitigation Team</a>		Role of SCDOT & Other Agencies
SKILLED LABOR AVAILABILITY	<ul style="list-style-type: none"> <li>✓ AWC has been developing their SC workforce since 2015 (I-77 DB project) with the intent of ensuring local resources remain local</li> <li>✓ United's local prominence/reputation since 1924 attracts skilled workers such that no meaningful shortage has occurred, and numerous construction workers approach United for employment each month.</li> <li>✓ Regionally AUJV has access to over 1,000 skilled workers</li> </ul> 		SCDOT keep CCR Program prominent in media releases, community events, etc.
	<ul style="list-style-type: none"> <li>✓ AUJV has a dedicated Risk Mitigation Team led by a <b>full-time, local, HR recruiter</b></li> <li>✓ AUJV will adopt and tailor our I-26 Recruitment and training program to the needs of the CCR Program</li> </ul>		Local workforce development agencies promote project and benefits of construction trades
	<ul style="list-style-type: none"> <li>✓ Recruitment program that includes SC Dept of employment/workforce, SC Vocational Rehabilitation, Telamon Corp, 10 minority organizations, seven private organizations (CAGC, SC Works, etc.), and multiple secondary schools and community colleges</li> <li>✓ Training program in Certified by NCCER for the development of our craft workers</li> <li>✓ Aggressive advertising program using Social Media, Flyers, Job/Career Fairs and Education Institutions</li> </ul>		Local educational institutions (High Schools, Community Colleges, Vocational Schools) allow AUJV to attend career fairs, make presentations, sponsor events.
RISK 3	Archer-United JV Team's Risk Mitigation Strategies <a href="#">See Org Chart for Risk Mitigation Team</a>		Role of SCDOT & Other Agencies
ROCK HARDNESS	<b>Available Rock Information and Historical Team Knowledge</b>   <i>The available geotechnical investigation data encountered apparent boulders at shallow depth in the area of the I-26/I-126 interchange. The presence of boulders is consistent with the AUJV's experience with previous highway construction work in the Greystone Boulevard interchange area. A review of the Geologic Map of the Columbia North Quadrangle 1972 shows a rock unit consistent with the baseline findings in the area of the I-26/I-126 interchange that could impact design solutions along several miles of roadway and multiple bridge foundations.</i>		
	<ul style="list-style-type: none"> <li>• <b>Risk Mitigation Strategies</b> – Expanded geotechnical investigation program developed and implemented by our Geotechnical Engineering team to identify intact, in-place, bedrock and boulders. The information gathered will influence our roadway and structure designs, as well as determine planned construction techniques.</li> <li>• <b>Blasting Near traffic can cause vehicle and personal damage</b> – Should blasting be required, a highly qualified experienced blasting firm will be used to minimize the risk to safety. Each blast will be designed with sufficient burden, appropriate stemming, and blast mats/soil overburden to prevent fly rock. Mechanical wedge or chemical expansion technology will be utilized to break rock in critical areas where blasting poses too many risks.</li> <li>• <b>Blasting near structures can cause vibration damage</b> - Our team will perform Preconstruction Condition Assessments and Vibration Monitoring within the required distance from blasting activities. Blasting will be designed using appropriate scaled distance factors and maximum explosive charge per delay to limit ground peak particle velocity at adjacent structures to below contract requirements. Mechanical wedge or chemical expansion technology will be utilized to break rock in critical areas where blasting poses too many risks.</li> </ul>		<p>Provide Adequate Traffic Control windows (lane closures) for rock removal activities</p> <p>Review and comment on AUJV rock removal plan</p>



## **Project Resources, Strategies, and Execution (RFO 3.3.3)**

**a) Team's Capacity and Available Personnel Resources** | AUJV offers a fully integrated Design Team led by ICE whose extensive in-house design resources are experts in their field, have provided designs on similar projects, and will be transitioning from the I-26 MM 85-101 DB Project as the design of Segments 1 and 3 were completed May 8, 2020.

The AUJV has been building our local skilled labor pool since


AUJV TEAM RESOURCES				
Design Resources		Construction Resources		
<b>Rafi Jamaluddin, PE   Structural Lead</b>		<b>ROLE</b>	<b>Need</b>	<b>Available</b>
Available Structural Engrs / Designers	21	Proj Mgr	1	5
<b>Freddy Kicklighter, PE   Roadway Lead</b>		Assist PM	2	8
Available Hwy / Road Engrs / Designers	28	Proj Engrs	5	16
<b>Jonathan Scarce, PE   Hydraulic Lead</b>		Const Mgr	1	6
Available Hydro/Hydraulic Engrs / Designers	17	Supts	5	14
<b>Michael Valiquette, PE   Geotechnical Lead</b>		Foreman	15	35
Available Geotech Engrs / Geologists	9	Craft	90	185

2015 (I-77 DB Widening project) with the intent of ensuring our local resources remain local. These construction resources are currently assigned to the I-26 DB Project and will transfer to CCR Phase I. Construction on Segments 1 and 3 on I-26 will be completed by Fall 2022, at which time approximately 50% of the craftworkers and 10 administrative staff will be available to transfer to CCR PH I. If necessary, AUJV can mobilize additional resources from other South Carolina regions (Lowcountry and upstate), North Carolina, and Georgia.

**b) Strategy for Implementation of Resources & Tasks Team Members will Self-perform** | AUJV is an integrated JV functioning as a single entity without division of work between the members (identical to the I-26 DB project). AUJV will self-perform all major construction tasks (see [org chart](#) on page 2 for details) except for asphalt paving for which Eurovia Atlantic Coast will be used. We have used Eurovia on all the DB interstate projects in Columbia delivered by this team. ICE will self-perform all the major design tasks with minor support from specialty subconsultants.

**c) Innovative Approaches to DBE Participation** | On every SCDOT DB project we partner with the SCDOT Supportive Services & Business Development Division of Minority & Small Business Affairs to hold a “meet and greet” event pairing DBE firms with our estimators and managers to discuss opportunities for DBE participation. This will be supplemented by a project specific AUJV event that explains in detail our bidding process, required forms, our design, our schedule, and information on how to apply for DBE status through SCDOT contacts. Follow-up one-on-one meetings with DBEs will be held to review quotes and scopes, provide administrative support (plans, specs, form completion, etc.), and address any specific questions.

**d) Approach to Environmental Coordination, Utilities, Public Relations, and Permitting.**

 **d.1) Environmental Coordination and Approach to Honoring Environmental Commitments** | The AUJV Team will provide a comprehensive review of all environmental commitments and requirements which will be implemented throughout final design and construction. The environmental team led by Barrett Stone, Environmental

Manager/Permit Coordinator, will actively participate throughout the design and construction phases to ensure the implementation and compliance with all environmental commitments.



#### d.2) Utility Coordination & Approach to Efficient Management | The **AUJV** will have a Utility Coordination

Team (UCT) comprised of the Utility Manager (**Gus Kretschmer**), three coordinators, a RR coordinator and Utility QA/QC, designers experienced with Columbia Water, AT&T, Dominion SC Electric & Gas, SEGRA, Charter and other utilities, and a

Construction Utility

Coordinator integrated with

the design team to assist with

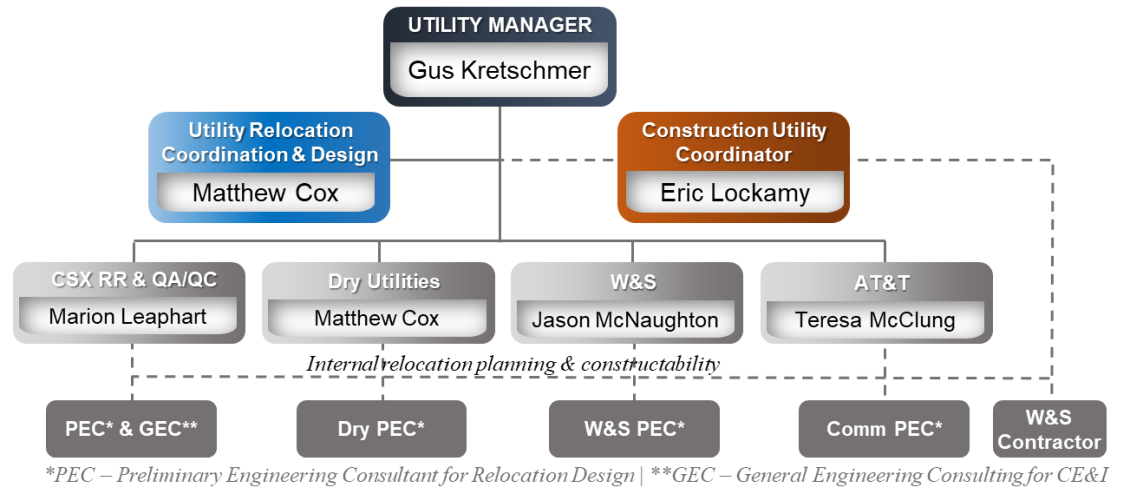
constructability reviews. **Gus**

will be responsible for the

UCT and brings his personal

experiences from I-26 DB

Project to provide a seamless transition.



The UCT will schedule an initial Joint Utility Kickoff Meeting and standing re-occurring group/individual meetings to keep all parties updated with design progression/changes and construction activities. Utility engineering and construction personnel will be included in the meetings to enhance coordination efforts. The UCT will implement a dedicated utility tracking system for the coordination of files, plans, schedules, and recommendation submittals to allow for quick review and work authorization approvals. To further expedite utility relocations, we will segment relocation areas based on construction phasing, R/W availability, logical begin/end points, and prioritize the construction of the relocations.



#### d.3) Public Community Relations | The AUJV Team will work closely with its internal public relations staff

to assist SCDOT in maintaining a positive public image by developing a plan for addressing critical events and to provide direction for public involvement activities and public information dissemination for the DB Team. It will contain objectives and techniques that will be used to ensure good relationships with the public officials and community. An aggressive campaign to harvest public concerns and maintain public awareness will be of utmost importance, especially as it relates to routine informative updates, community involvement, access to businesses, and early notification of traffic pattern changes, lane closures, nighttime construction activities (if any), and emergency service vehicle routes.





**d.4) Securing all Permits** | SCDOT is obtaining a conditional 404 permit including a compensatory mitigation plan to cover the wetland and stream impacts for this Project. The environmental team will be responsible for early and accurate identification of USACE permit modification(s) which will ultimately reduce the overall number of modifications, reduce schedule risks, and maintain regulatory compliance. Routine coordination with SCDOT will ensure permits are modified well in advance of construction to allow adequate planning with the regulatory agencies. The SCDHEC NOI will be coordinated similarly throughout design development and submitted upon signed RFC plans.

***e) Describe the approach to communication, issue resolution and project execution relative to the following:***

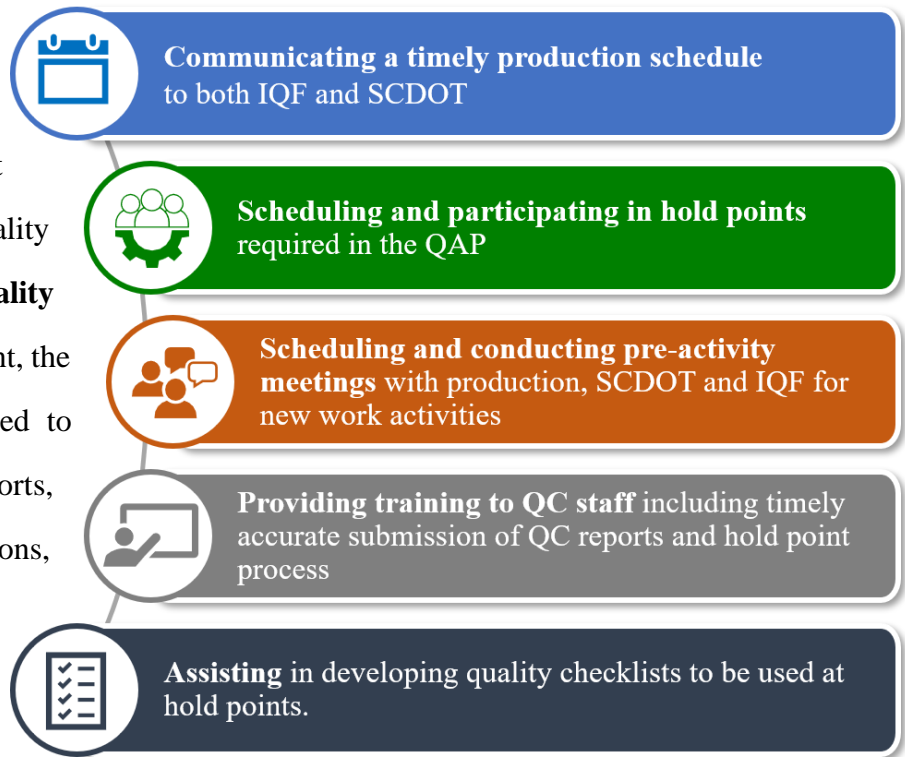
- **SCDOT's proposal to acquire all right of way in advance of the project** – AUJV will work to develop a technical solution that resides within the SCDOT acquired R/W for this project. We will work closely with SCDOT's R/W team during our design process on any parcels yet to be acquired including sharing our construction schedule, providing a preferred priority list and being flexible with our construction sequence should any challenges arise.
- **OVTI process** – Our approach will integrate the OV Team into our quality program; keeping SCDOT informed of all construction activities and providing access to real-time Project quality information; blending cutting-edge IQF practices from highway mega projects around the United States with local SCDOT Construction Engineering and Inspection (CEI) best practices. See page 8 for a detailed discussion of our Weekly Quality Meetings designed to enhance communication among the Quality Team and SCDOT's OV Team.
- **In-contract third party utility relocation** – We will engage utility designers and contractors at the earliest of stages to minimize relocation efforts, include these activities in our CPM schedule, identify critical R/W or replacement easements, and identify areas of joint work opportunities to accelerate the relocations.
- **USACE permit modifications** – Refer to **Section d.4 Securing all Permits** above for a detailed discussion.

**Quality Assurance Program (RFQ 3.3.4)**

We have reviewed SCDOT's draft Quality Assurance Program (QAP) for the Carolina Crossroads Project document and understand the framework that the QAP is comprised of two major components. The acceptance program includes quality acceptance (QA) performed by AUJV's independent quality firm (IQF) and owner verification (OV) performed by SCDOT. The QAP allows the use of IQF's QA as part of the acceptance program when QA results are verified by OV results performed by SCDOT (or their designee). Raba Kistner, Inc. (RKI) will serve as our IQF (with integrated local staff from Mead & Hunt) and is the market leader for providing quality services on large DB projects throughout the United States. RKI has an extensive history executing the IQF role in accordance with state approved QAPs like the SCDOT Draft QAP and in accordance with FHWA requirements.

**Quality Control** | AUJV will refine our proven Quality Control (QC) plan with lessons learned from DB projects like I-77 and SC 277 which emphasizes doing the work right the first time. This QC plan will define processes and procedures to achieve compliance with the Contract. The IQF will also define processes and procedures for QA materials testing and product inspection which will be used in acceptance decisions as described in this Program. QC Testing will be performed at ICE’s new 8,000 SF state-of-the-art AASHTO-accredited lab, which will also be available to the QA Team, and will be able to meet all geotechnical testing needs of the Project. Additional local AASHTO-accredited laboratories may be used if needed for specific specialized testing.

**Interaction of Quality Control Manager, IQF, and SCDOT** | The QMP will establish formal requirements for regular Project communication and reporting for the quality program, which will include a **weekly quality meeting** with QCM and production management, the IQF, and SCDOT. This meeting will be used to discuss project issues, non-conformance reports, design changes, submittals, certifications, validation, and other quality-related items. A quarterly management review meeting will be established, during which senior management



from SCDOT and the AUJV Executive Committee will discuss the status of the quality program with the QCM and the Independent Quality Manager (IQM). In addition to the communication outlined in the QMP, our QCM will be co-located with the IQM and SCDOT oversight staff to facilitate daily interaction and communication.

**Document Control Strategies** | All QC/QA documents will be loaded into the Electronic Laboratory and Vital Information System (ELVIS), which is RKI’s electronic data management system. ELVIS will provide SCDOT and the Team with real time access to inspection, test, non-conformance and other AASHTO-accredited Laboratory Capabilities. Because of the size and rapid turnaround time required for test results, RKI will establish a dedicated AASHTO-accredited laboratory onsite.

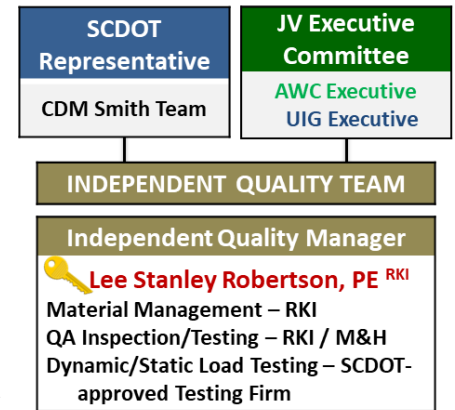
**Understanding of Hold Points** | We have reviewed the defined hold points in the SCDOT Draft QAP. Our Team will work collaboratively with RKI and SCDOT to implement procedures and ensure all field personnel stay informed.



Three-week look ahead schedules will be provided to our IQF and SCDOT, (updated weekly) to include all associated hold points for each of the work activities listed. Work will not be incorporated until accepted by RKI and/or SCDOT.

**Quality Acceptance** | As the IQM, **Lee Robertson, PE** will lead the IQF efforts based on his numerous years of experience on SCDOT and national mega projects. He will be supported by a Materials Manager, QA Inspection and Testing team, and an SCDOT-approved Dynamic / Static Load Testing team. The entire Independent Quality Team has SCDOT CEI experience and understands requirements for material and product acceptance.

**Role and Interaction of IQM, the Proposer's Team and SCDOT** | As shown in Team Organization Chart, Lee will report jointly to SCDOT and the AUJV's Executive Committee. Lee will participate and lead the **weekly quality meetings** with AUJV staff, QCM, and SCDOT OV staff. Quarterly quality reports will be generated and presented at the Senior Management Review meeting. At Project startup, RKI will hold QAP training to ensure that our Team including the quality staff understand their roles and responsibilities. Because this is the first-time implementing an IQF in South Carolina, initial training will include SCDOT, IQF, and OV staff alignment meetings. Refresher training will be held when significant changes to the QMP are made.



**Engineering Judgement** | During the QMP development phase, RKI will work with the SCDOT to develop a procedure for use of Engineering Judgement (EJ) on the Project. A key element of the procedure will be the list of delegated items for which IQF can use EJ. RKI has successfully used delegated EJ on several projects. Examples include an Owner-approved list of EJ work items; log of all instances the IQF has exercised EJ, an automated email notification when IQF exercises EJ, and regular review and coordination with SCDOT regarding the use of EJ.

**Anticipated Staffing Levels for SCDOT-certified Testing and Inspection** | During the RFP stage, RKI review AUJV's Project schedule to develop a base-level IQF Staffing Plan. During the development of the QMP, RKI will work with SCDOT to define the levels of inspection coverage for the anticipated work activities. Based on past IQF projects of similar size, Figure 3.3.4a displays the typical staffing levels required to perform the IQF role. Actual staffing will be based on the IQF scope defined in the RFP, AUJV's schedule, and the approved QMP. During construction, the IQM will meet regularly with SCDOT and AUJV to monitor the IQF staffing levels to ensure that adequate inspection coverage is maintained and to make necessary adjustments if the schedule requires.






**Figure 3.3.4a**

Licensed Engineers	2
Field Engineers	2
Document Control/Office	3
Laboratory	2 to 3
Inspectors / Testers	4 to 8

## EXPERIENCE OF KEY INDIVIDUALS (RFQ 3.4)

*Resumes demonstrating relevant experience of our Key Individuals, are included in [APPENDIX A](#).*

### 3.4 EXPERIENCE OF KEY INDIVIDUALS

Role Name	Featured Project Experience
 <b>Billy Hardwick (UIG) – Project Manager</b>   With more than four decades in the heavy highway/bridge construction industry, Billy has an exceptional record of delivering large and complex projects on time, within budget and in an environment of cooperation through hands-on experience, managerial know-how and proven leadership skills.	<ul style="list-style-type: none"> <li>• \$472M Monroe Bypass</li> <li>• \$194M I-520 Palmetto Pkwy Ph. I &amp; II</li> <li>• \$215M Greenville Southern Connector</li> <li>• \$83M US 17/Johnnie Dodds Boulevard</li> </ul>
 <b>Elham Farzam, PE (ICE) - Lead Design Engineer</b>   Elham has more than 38 years of experience in the pursuit and execution of DB project delivery with a combined value of over \$10 billion since 1995. His technical, “hands on” approach to pursuit and project management allows him to provide lead design engineering on the pre-construction phases of complex, urban, and interstate DB projects.	<ul style="list-style-type: none"> <li>• \$421M I-26 Widening (MM 85-101)</li> <li>• \$90M I-77 Widening &amp; Rehabilitation (MM 15-27)</li> <li>• \$444M I-77 Express Lanes</li> <li>• \$208M I-15/I-215 Devore Interchange</li> </ul>
 <b>Gus Kretschmer (ICE) - Utility Manager</b>   Since 1990, Gus has provided utility coordination services for managing the remediation of utility facilities in conflict with roadway, drainage, and structures. He has managed various types of utility facilities employing “utility” context-sensitive design principles to develop the most economical plan for adjusting or relocating.	<ul style="list-style-type: none"> <li>• \$421M I-26 Widening (MM 85-101)</li> <li>• \$800M I-285/SR 400 Reconstruction</li> <li>• \$90M I-77 Widening &amp; Rehabilitation (MM 15-27)</li> </ul>
 <b>Dennis Haring (AWC) - Construction Manager</b>   With over 40 years in the construction industry Dennis has distinguished himself as a Construction Manager who can deliver challenging projects in urban environments. Over the last 12 years he has delivered multiple award-winning DB projects.	<ul style="list-style-type: none"> <li>• \$647M DB Northwest Corridor Express Lanes</li> <li>• \$468M DB NC 540 Western Wake Fwy.</li> <li>• \$50M DB I-77PCC Rehabilitation</li> </ul>
 <b>Lee Robertson (RKI) - Independent Quality Manager</b>   Lee has been managing heavy highway and bridge projects for more than 24 years. His experience as IQM has provided him the ability to identify potential issues before they arise and coordinate with the project team and stakeholders until the most viable solution is achieved.	<ul style="list-style-type: none"> <li>• \$1.5B I-495 HOT Lanes Project</li> <li>• \$1.0B Loop 202 South Mountain Fwy.</li> <li>• \$870M CRM West Program</li> <li>• \$19M SR-89 Hell Canyon Bridge</li> </ul>

## PAST PERFORMANCE OF THE TEAM (RFQ 3.5)

**Experience of the Proposer’s Team (RFQ 3.5.1):** Completed *Work History and Quality Forms* are included in [APPENDIX B](#).

**Quality of Past Performance (RFQ 3.5.2):** A full table of questions and *Work History and Quality Forms* are included in [APPENDIX C](#) for applicable projects. Neither AWC nor UNITED have been suspended, debarred, disqualified from bidding, or declared ineligible for work by any entity within the last five years, nor are any such actions pending against them.

## LEGAL AND FINANCIAL (RFQ 3.6)

**Financial Capacity, Bonding Capacity, Organizational Agreements, & DUNS Numbers** | A notarized affidavit from the *AUJV* declaring financial capacity, a bond letter on behalf of *the AUJV*, a table with DUNS numbers for all firms, and the JV teaming agreement are in [APPENDIX D](#).

## ORGANIZATIONAL CONFLICTS OF INTEREST (RFQ 3.7)

**APPENDIX E** – Contains the requested information for Conflict of Interest.





## APPENDIX A: Resumes

1. *Project Manager - Billy Hardwick*
2. *Lead Design Engineer - Elham Farzam*
3. *Utility Manager – Gus Kretschmer*
4. *Construction Manager – Dennis Haring*
5. *IQM – Lee Robertson*

## KEY INDIVIDUAL RESUME FORM

### Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:  
**Billy Rance Hardwick, Project / Construction Manager**

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

c. Name of Firm with which you are now associated:  
**United Infrastructure Group, Inc.**



d. Years of Experience: With this Firm **43** Years With Other Firms **0** Years

#### **Employment History:**

**United Infrastructure Group, Inc.:** Project/Construction Manager – Billy is responsible for project and construction management of major bridge and design-build projects throughout the Southeast. 1977 - Present

e. Education:  
High School Diploma

f. Active Registrations:  
NA

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

#### **1. US 21 over Harbor River Bridge Replacement – Beaufort County, SC**

**Key Personnel Role:** Project Manager  
**Experience with Current Firm:** United Infrastructure Group, Inc.  
**Project/Assignment Duration:** Project 2017- Sept. 2021 (est.), Assigned 2018- Mar. 2021  
**Owner Contact Information:** SCDOT, Daniel Burton, PE, 843-688-6240, [burtond@scdot.org](mailto:burtond@scdot.org)  
**Design/Construction Value:** \$54.7 Million



**Project Description:** This Design-Build project consists of replacing the existing swing-span bridge over a tidal waterway / navigable channel which serves as the only means for vehicular transportation from the mainland to Harbor and Fripp islands. The replacement bridge is a fixed high-level structure (3,340' long) with two 12' lanes with 10' paved shoulders, providing 90' of horizontal and 65' vertical clearance for river navigation. Billy is responsible overseeing the overall performance of the DB Team, meeting all project goals and delivering the project in accordance with contract requirements. He is the primary contact for communications with SCDOT and attends/leads all scheduled meetings. He is responsible for the management of the construction, scheduling, subcontractors, and cost estimates.



**Similarities to CCR PH I:** Bridge and Roadway construction, Bridge demolition, drainage systems, signing, utility relocations, multi-phase MOT while maintaining traffic, and same Lead Design Firm, ICE.

#### **2. Monroe Bypass – Union County, NC**

**Key Personnel Role:** Structural Manager  
**Experience with Current Firm:** United Infrastructure Group, Inc.  
**Project/Assignment Duration:** Project 2014-2019, Assigned 2014- 2018  
**Owner Contact Information:** NCDOT/NCTA, Rick Baucom, 704-983-4400, [rwbaucom@ncdot.gov](mailto:rwbaucom@ncdot.gov)  
**Design/Construction Value:** \$472 Million



**Project Description:** This DB project involved the design, construction and quality assurance of a controlled-access toll road beginning just east of the US 74/I-485 Interchange, following the existing US 74 for approximately one mile, then proceeding on new alignment from east of Stallings Road to its tie in with US 74. The project is 19.7 miles long and consists of 5M CY of excavation, 1M CY of embankment, 133,000 LF of storm drainage, 99,000 LF of water and sewer utilities, 37 bridges, 31 box culverts, an open road tolling system and an aesthetics package for the structures. Billy served as the Structural Manager and was responsible for overseeing all structural construction activities which consisted of bridges, culverts, MSE walls, sound walls, etc. His duties included planning/scheduling, management of structural construction staff and subcontractors, cost estimates and all duties associated with the structural construction of this project.



**Similarities to CCR PH I:** Interchange construction, sideroad bridges, MSE walls, sound walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad coordination, and multi-phase MOT while maintaining traffic at existing interchanges.



### 3. Columbia Airport Expressway (formerly John N. Hardee Expressway) – Lexington County, SC

**Key Personnel Role:** Project Manager  
**Experience with Current Firm:** Yes (United Contractors, Inc.)  
**Project/Assignment Duration:** Project 2001-2004, Assigned 2001-2004  
**Owner Contact Information:** SCDOT, Robert Dickinson, [dickinsoRC@scdot.org](mailto:dickinsoRC@scdot.org), 803-737-2026  
**Design/Construction Value:** \$19 Million

**Project Description:** This project consisted of a new 2.5 mile access road and interchange with concrete pavement leading to the Columbia Airport and a 190' long simple span bridge with multi-level ornate MSE walls, decorative retaining walls, extensive landscaping, and hydrologic improvements. Even though the hydrology presented several difficult issues, innovative ideas including enlargement and reshaping of the existing pond/storage facility were development in concert with DOT and Resource Agency personnel to deliver the best solution. An extensive amount of re-design was incurred and there were several directive scope changes to enhance the corridor and structures however, the project was completed on schedule and within budget due to the tremendous partnering efforts of the stakeholders, the experience of the managers involved, and the innovation provided by the overall team.

**Similarities to CCR PH I:** Interchange construction, MSE walls, sound walls, drainage systems, signing, utility relocations, and multi-phase MOT while maintaining traffic.



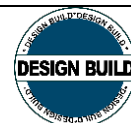
### 4. US 17/Johnnie Dodds Boulevard Improvements – Charleston County, SC

**Key Personnel Role:** Project Manager  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project 2010-2013, Assigned 2010-2013  
**Owner Contact Information:** Charleston County, Steve Thigpen, PE, [sthigpen@charlestoncounty.org](mailto:sthigpen@charlestoncounty.org),  
**Design/Construction Value:** \$63 Million

(843) 202-6146

**Project Description:** Billy served as Project Manager for this project that consisted of improving approximately 3 miles of US 17 (Johnnie Dodds Blvd.) corridor with redesigned intersections, roadways, drainage facilities, pedestrian/bike lanes, and landscaping. The road was also widened from 2 to 3 lanes in each direction, the frontage roads was widened to include bike lanes and a sidewalk. A 161' single span plate girder bridge with MSE wall system was constructed at Bowman Rd and US 17. Billy's specific responsibilities included planning/scheduling, management of construction staff and subcontractors, cost estimates, meeting with business owners, speaking at public meetings, and all duties associated with the construction of this complex project.

**Similarities to CCR PH I:** Interchange construction, bridge demolition, sideroad bridge, MSE walls, culverts, drainage systems, signing, lighting, signalization, continuous communication with commercial and residential properties, utility relocations including sewer and potable water, multi-phase MOT while maintaining traffic, and same Lead Design firm, ICE.



### 5. I-520 Palmetto Parkway Phases I & II – North Augusta, SC

**Key Personnel Role:** Project Manager  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project: 2004-2009, Assigned 2004-2009  
**Owner Contact Information:** DOT, Leland Colvin, PE, [colvinld@scdot.org](mailto:colvinld@scdot.org), 803-737-4034  
**Design/Construction Value:** \$194 Million

**Project Description:** Billy's served as the Project Manager on both phases and his specific responsibilities included management and supervision of approximately 80 employees, scheduling, management of subcontractors and all duties associated with the construction.

Phase I (Bridge was DB) consisted of a 5-mile parkway extension with 1,700,000 CY of earth moving and six Design-Build bridges totaling 3000 LF and 284,000 SF of structural steel and prestressed concrete bridges including bridges over the Savannah River and Norfolk Southern Railroad. This project was delivered ahead of schedule and under budget in 22 months.

Phase II (DB) consisted of a 5.5-mile grade separated divided parkway extension with six miles of side roads/ramps and five interchanges, 4.5M cubic yards earthwork, 200,000 square yards concrete pavement, 250,000 tons asphalt pavement, 140,000 square feet retaining walls, culverts, noise walls and 12 interchange/overpass/underpass bridges totaling 2,280 linear feet/121,000 square feet with major woven interchange at I-20 and US 25. This project was delivered on schedule in 36 months with no claims.

**Similarities to CCR PH I:** Interchange construction, sideroad bridges, MSE walls, culverts, drainage systems, signing, utility relocations, railroad coordination, and multi-phase MOT while maintaining traffic at existing interchanges.



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. Billy is the Project Manager on the Harbor River Bridge Replacement project. Bridge construction will be complete by March 31, 2021 and Billy will be fully available on the Carolina Crossroads Project upon award which is anticipated April 2021.



# KEY INDIVIDUAL RESUME FORM

## Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:  
**Elham Farzam, PE, Sr. Project Manager (Major Projects)**

b. Role of Key Individual for this Project:  
**Lead Design Engineer**

c. Name of Firm with which you are now associated:  
**Infrastructure Consulting & Engineering, PLLC**



d. Years of Experience: with this Firm **7** Years with Other Firms **29** Years

### Employment History:

**Infrastructure Consulting & Engineering, PLLC:** Sr. Project Manager (Major Projects) – Elham is responsible for the overall execution of projects, leading the pursuit of major projects by taking active role on major projects and oversees the execution of the contracted services (Jan 2013 – Present).

**United Infrastructure Group:** VP - Project Development – Elham worked closely with internal engineering staff, outside engineering firms, estimating group and construction contractor partners, pursuing, executing and managing design-build and P3 projects throughout the Mid-Atlantic and Southeast US (Jan 2011 – Dec 2012)

**The LPA Group Incorporated** – Senior Vice President – Elham began as Project Engineer designing structures, highways, and aviation projects and rose through the ranks into project management, business line manager and ultimately as the senior vice president responsible for marketing, management and pursuit of nearly \$75-100 Million. He also worked major program management, construction management, as well as, pursuit and execution of design-build and P3 Projects ranging in size from \$2 Million to over \$1 Billion+ (June 1984 – Dec 2010).

e. Education:  
NC State University / Raleigh, NC / Master of Science / May 1984 / Civil Engineering - Structures  
NC State University / Raleigh, NC / Bachelor of Science / Dec 1981 / Civil Engineering

f. Active Registrations:  
1985 / South Carolina / Professional Engineer / PE #10535

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

### **1. I-77 Widening & Rehabilitation (MM 15-27), Richland County, SC**

**Key Personnel Role:** Lead Design Engineer and Sr. Pavement Engineer  
**Experience with Current Firm:** Infrastructure Consulting & Engineering, PLLC  
**Project/Assignment Duration:** Project June 2015 – Dec 2018, Assigned June 2015 – March 2017  
**Owner Contact Information:** SCDOT, Tyke Redfearn, PE | [RedfearnWT@scdot.org](mailto:RedfearnWT@scdot.org) | (803) 737-1430  
**Design/Construction Value:** \$90 Million



**Project Description:** This project consists of widening NB and SB I-77 with an additional lane in each direction. The SB lanes from MM 22-27 was rehabilitated along with an overpass bridge over US 21. All the mainline bridges (5 sites) were widened including several over highways and two over streams. A comprehensive Traffic Control Plan / MOT was developed by the both the design and construction team during the procurement phase and was further refined during final design phases. A comprehensive FWD program was used to assess the strength of the outside shoulder for use in the early phases of the MOT Plans. Elham served as the Lead Design Engineer and senior pavement engineer responsible for the pursuit design alternative strategies, ATCs and ultimate award of the Project. He led all of the preconstruction activities including final design, permitting, utility relocations and construction support of this major urban widening and pavement rehabilitation project in NE Columbia.

**Similarities to CCR PH I:** Interstate road and bridge widening, complex drainage systems, new signing, utility relocations, railroad coordination, multi-phase MOT while maintaining traffic, and design-build delivery with same contractor (AWC).

### **2. I-26 Widening (MM 85-101), Richland, Lexington & Newberry Counties**

**Key Personnel Role:** Lead Design Engineer and Sr. Pavement Engineer  
**Experience with Current Firm:** Infrastructure Consulting & Engineering, PLLC  
**Project/Assignment Duration:** Project June 2018-Dec 2023 / Assigned June 2018 – April 2021  
**Owner Contact Information:** SCDOT, Brad Reynolds, PE | [ReynoldsBS@scdot.org](mailto:ReynoldsBS@scdot.org) | (803) 737-1440  
**Design/Construction Value:** \$421 Million



**Project Description:** Approximately 16-mile long of widening and pavement reconstruction of I-26 from MM 85 to 101 including 3 interchange upgrades (at Exit 85, 91 and 97). The widening of I-26 from four lanes to eight lanes will be from approximately Exit 101 (US 176) to Exit 97 (US 176) and from four lanes to six lanes from just west of Exit 97 (US 176) to just west of Exit 85 (SC 202) in Richland, Lexington, and Newberry Counties. Overpass bridges will be replaced at Koon Road, Shady Grove Road, Mt. Vernon Church Road, Old Hilton Road, Peak Street, Holy Trinity Church Road, and Parr Road. Elham is the Lead Design Engineer and senior pavement engineer responsible for the pursuit design alternative strategies, ATCs and ultimate award of the Project to the Archer-United, JV. He is leading all of the preconstruction activities including final design, permitting, utility relocations and right-of-way acquisition of this challenging project.

**Similarities to CCR PH I:** New Interchange roadway widening and pavement construction (Asphalt and PCC), bridge demolition, interstate and sideroad bridges, retaining walls, culverts, complex drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad coordination, multi-phase MOT while maintaining traffic, and design-build delivery with same contractor (AWC)

### 3. I-15/I-215 Devore Interchange - San Bernardino, CA

**Key Personnel Role:** Procurement Advisor / VE Consultant  
**Experience with Current Firm:** The LPA Group Incorporated  
**Project/Assignment Duration:** Project, 2011-2016, Assigned, 2011  
**Owner Contact Information:** Caltrans, Raymond Tritt, PE | [tritt@dot.ca.gov](mailto:tritt@dot.ca.gov) | (916) 653-3348,  
**Design/Construction Value:** \$208 Million



**Project Description:** The proposed Devore Interchange Improvement project limits extend along I-15 from approximately 0.8 miles south of the Glen Helen Parkway Undercrossing to 1.4 miles north of the Kenwood Ave Undercrossing, and along I-215 from 1.2 miles south of the Devore Road Overcrossing to the I-15 junction. Elham led the preparation of the design-build RFP and value engineering (VE) studies for an alternative interchange layout which became the baseline interchange layout. The VE studies developed three (3) additional interchange alternatives. The VE recommended and Caltrans accepted and incorporated over \$20M of cost saving.



**Similarities to CCR PH I:** New Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, utility relocations including sewer and potable water, railroad coordination, and multi-phase MOT while maintaining traffic.

### 4. Hugh Leatherman Sr. Container Terminal (HLT) - Site Contract (Phase 1)

**Key Personnel Role:** Project Manager / Senior Pavement Engineer  
**Experience with Current Firm:** Infrastructure Consulting & Engineering, PLLC  
**Project/Assignment Duration:** Project June 2017 – Dec 2021 / Assignment (June 2017 – Dec 2019)  
**Owner Contact Information:** SC Ports Authority | Butch Weber, PE, [bweber@scpa.com](mailto:bweber@scpa.com) | (843) 290-7538  
**Design/Construction Value:** \$187 Million

**Project Description:** The Phase 1 of new container marine terminal (HLT) site is being constructed on the site of the old Naval Base. The construction of the terminal began in August 2019 and includes the construction of the site improvements including grading, drainage, asphalt and concrete paving, and the reinforced runway beams for 25 rubber tired gantry (RTG) travel lifts. Elham led the design of the grading, drainage, erosion control and provided extensive value engineering and pavement design evaluation and alternative design to support the mission of the new container terminal.



**Similarities to CCR PH I:** Complex drainage system, permitting, alternate pavement design, fast track design schedule, noise and vibration impact and monitoring to nearby Federal Law Enforcement Training Center recruits and US Passport Office.

### 5. I-77 Express Lanes, Charlotte, NC

**Key Personnel Role:** Design Manager / Sr. Pavement Engineer  
**Experience with Current Firm:** UIG (Pursuit) / ICE (Construction Support)  
**Project/Assignment Duration:** Pursuit 2012 – 2014 | Construction Support 2016-2019  
**Client Contact Information:** Sugar Creek Construction, LLC | Jeff Mosher, PE (704) 408-3963  
**Design/Construction Value:** \$444 Million [jmosher@sugarcreekllc.us](mailto:jmosher@sugarcreekllc.us)



**Project Description:** The I-77 Express Lanes Project is the first PPP for NCDOT which will add 26 miles of variably priced managed lanes (HOT Lanes) along I-77 and I-277 in Charlotte, NC north through Mecklenburg and Iredell Counties. The project will provide two 17.1-mile HOT lanes in both directions from I-277 (Brookshire Freeway) near Charlotte Center City to Catawba Ave in Cornelius and one HOT lane per direction for an additional 8.8 miles from to NC 150 in Mooresville. Elham led the pursuit of the PPP/Design-Build procurement and generated over \$20 Million in ATC and cost savings. He developed a 30-year flexible and rigid pavement design alternates for the General Purpose Lanes and a 30-year and 60-year pavement flexible and rigid pavement alternate design for the HOT Lanes. Since the award of the contract to an opposing team (Cintra/Ferrovial), he and ICE was retained to assist the DB Contractor on variety of elements of the project by providing alternate design or providing design work.

**Similarities to CCR PH I:** Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad coordination, and multi-phase MOT while maintaining traffic.

- 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.

Not applicable for Lead Design Engineer.

# KEY INDIVIDUAL RESUME FORM

## Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title:  
**Frank August Kretschmer, Utility Relocation Coordination Manager**
- b. Role of Key Individual for this Project:  
**Utility Manager**



- c. Name of Firm with which you are now associated:  
**Infrastructure Consulting & Engineering, PLLC**



- d. Years of Experience: With this Firm 7 Years With Other Firms 23 Years

### Employment History:

**Infrastructure Consulting & Engineering, PLLC:** Utility Relocation Coordination Manager – Responsible for overseeing and providing utility coordination services of utility facilities in conflict with roadway, drainage, and structures during project planning, design, and construction phases, and supervises five utility coordinators and one utility designer, 2013-Present

**Michael Baker Corporation:** Utility Relocation Manager – Responsible for two supervising utility coordinators, CADD technicians and subconsultants for design of utility relocations, wet utility plans and SUE services, 2005-2013

**MA Engineering Company:** Utility Coordinator – Responsible for identifying and coordinating affected utilities with various utility companies, 2004-2005

**The LPA Group:** Utility Relocation & Right of Way Coordinator – Responsible for identifying properties located within the existing right of way and coordinating with utility companies, 1999-2004

**Rea Construction Group:** Project Engineer – Responsible for supervising subcontractors for water & sewer, erosion control, storm drainage, electrical, grading; develop & update project CPM schedule, coordinate utility relocations wet & dry, prepare monthly estimates conduct quarterly estimate reconciliations; administer DOT CDL requirements, equipment maintenance manager for Columbia SC office, 1990-1999

### e. Education:

Appalachian State University / Boone, North Carolina / Bachelor of Science / 1978 / Parks, Recreation & Business

### f. Active Registrations:

ASCE-UESI

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

#### 1. I-26 Widening (MM 85-101) – Richland, Lexington, and Newberry Counties, SC

**Key Personnel Role:** Utility Relocation Manager  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project 2020 (est.) – 2024 (est.), Assigned 2020 (est.) – 2024 (est.)  
**Owner Contact Information:** SCDOT, Brad Reynolds, PE, [ReynoldsBS@scdot.org](mailto:ReynoldsBS@scdot.org), (803) 737-1440  
**Design/Construction Value:** \$421 Million



**Project Description:** This DB project includes 16 miles of widening and reconstruction, three new interchanges, and eight overpasses north of Columbia from mile marker 85 to 101. This project will reconstruct pavement, increase capacity, and upgrade interchanges and overpass bridges to meet state and federal design requirements. Gus is serving as the Utility Relocation Manager responsible for supervising four utility coordinators and one utility designer for coordination with 18 utility owners; integrating with roadway structure designers; and construction scheduling. His responsibilities also include assisting SCDOT with ACT36/BILL 401 Memorandum of Agreement (MOA) for water and sewer “in-contract” for design, material take off, and estimating for two water owners and three sewer owners.

**Similarities to CCR PH I:** DB Interstate with utility relocation coordination for the same utility owners: AT&T, Dominion Energy Electric Transmission/Distribution & GAS Transmission/Distribution, Charter, Columbia Water, SEGRA, includes ACT36/BILL401 MOA In-Contract water and sewer relocations, and design-build delivery with same contractor (AUJV).

#### 2. I-285 / SR 400 Reconstruction P3 Project (DBF) – Fulton & Dekalb Counties, GA

**Key Personnel Role:** Utility Coordinator  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project 2016 – 07/2020 (est.), Assigned 2015-2017  
**Owner Contact Information:** GDOT, Butch Welch, Jr., PE, [awelch@dot.ga.gov](mailto:awelch@dot.ga.gov), (404) 772-6969  
**Design/Construction Value:** \$800 Million (includes ROW, Utility, and all Engineering)



**Project Description:** This project will aid in reducing traffic congestion and to improve safety in the area surrounding the I-285/SR 400 interchange in metro Atlanta. Improvements include new flyover ramps, new collector-distributor lanes, and other facilities. Gus’s responsibilities consisted of the preparation of the Utility Adjustment Plan including the collection and verification of all relevant utility information and making contact with utilities and reviewing existing conditions. After interviewing all major utility infrastructure owners, Conflict Matrices were developed for all proposed roadway, structure, grading, and walls. Recommendations were subsequently made for avoiding and/or minimizing impact/conflict with concept/design changes. He also assisted the prime contractor in the development of the utility adjustment cost estimate and provided a detailed CPM schedule for all relocation/adjustment items.

**Similarities to CCR PH I:** DB-Finance Interstate with utility relocation coordination and construction for all utilities; GA Power Transmission/Distribution/Network, all telecoms, all water & sewer, GAS Transmission/Distribution, and RR coordination with MARTA.





### 3. I-77 Widening & Rehabilitation (MM 15-27) – Richland County, SC

**Key Personnel Role:** Utility Coordinator  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project 04/2017-12/2018, Assigned 04/2017-12/2018  
**Owner Contact Information:** SCDOT, Tyke Redfearn, PE, [RedfearnWT@scdot.org](mailto:RedfearnWT@scdot.org), (803) 737-1430  
**Design/Construction Value:** \$91 Million



**Project Description:** This project consisted of widening the interstate by adding one lane in the median in each direction for seven miles to include widening of 10 mainline bridges over roadways and streams, rehabilitation of an asphalt overlay with a concrete base and cross slope verification/correction, eight additional miles of pavement rehabilitation, and cross slope verification/correction of southbound lanes. Gus served as a Utility Coordinator responsible for preparing utility agreements and relocation reports as well as identifying all horizontal location of all existing and relocated utility lines and structures that are within the right of way. His reports included utility agreements, no cost/no conflict letters, and encroachment permits. He also coordinated with the railroad agency on the replacement of the RR bridge over the interstate.



**Similarities to CCR PH I:** Design-Build Interstate Project with utility relocation coordination for the same utility owners; AT&T, Dominion Energy Electric Transmission/Distribution & GAS Distribution, DECTG GAS Transmission, Charter, Columbia Water, Lower Richland Utility Sewer, SEGRA, railroad coordination with Norfolk-Southern RR, and design-build delivery method with same contractor (AWC).

### 4. I-85 Widening Project (MM 80 to 96) – Spartanburg and Cherokee Counties, SC

**Key Personnel Role:** Utility Coordinator  
**Experience with Current Firm:** Yes  
**Project/Assignment Duration:** Project 2014-2016, Assigned 2014-2016  
**Owner Contact Information:** SCDOT, Brad Reynolds, PE, [ReynoldsBS@scdot.org](mailto:ReynoldsBS@scdot.org), (803) 737-1440  
**Design/Construction Value:** \$435 Million



**Project Description:** This project consisted of widening approximately 16 miles of interstate. Along the 16-mile project area, interchanges at Exit 83 – Battleground Road (SC 110), Exit 87 – Green River Road (S-39), Exit 95 – Pleasant School Road (S-82), and Exit 96 – Shelby Highway (SC 18) were modified to bring them into compliance with state and federal design requirements. The project included adding a travel lane in each direction, improving various interchanges and exit ramps, and replacement of overpass bridges. Mr. Kretschmer served as a Utility Coordinator for this project responsible for providing limits for SUE, providing QLC and QLB limits, coordinating with adjacent CSX bridge replacement project, and providing a preliminary utility report for the bid package.

**Similarities to CCR PH I:** Design-Build Interstate Project involving similar utility owners for electric transmission/distribution, communications (CATV, local, toll/data), gas distribution, water & sewer.

### 5. 85 / 385 Gateway Project – Greenville, SC

**Key Personnel Role:** Utility Coordinator  
**Experience with Current Firm:** No, Michael Baker International, Inc. - Formerly The LPA Group  
**Project/Assignment Duration:** Project 2013-2019, Assigned 2013-2016  
**Owner Contact Information:** SCDOT, Robert Ryggs, [ryggsre@scdot.org](mailto:ryggsre@scdot.org), (864) 239-6042  
**Design/Construction Value:** \$231 Million



**Project Description:** This project consists of improvements to the I-85/I-385 system interchange, widening I-385 through the interchange area and rehabilitating portions of I-85 just north and south of the interchange area. Gus's responsibilities included identifying major utilities, easements, and railroads within the project limits that were applicable to the I-85/I-385 interchange modification, and the I-85 Auxiliary Lanes. Consideration was given to the location of these utilities in the development of plans and in the formulation of cost estimates. Gus prepared the preliminary utility reports for both the I-85/I-385 interchange modification, and the I-85 Auxiliary Lanes, and prepared a separate final report in order to certify the project for letting relative to utilities.



**Similarities to CCR PH I:** Design-Build Interstate Project involving similar utility owners for electric transmission/distribution, communications (CATV, local, toll/data), gas distribution, water & sewer, and railroad coordination with Carolina Piedmont RR.

- 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.  
Not applicable for Utility Manager.

## KEY INDIVIDUAL RESUME FORM

### Brief Resume of Key Individual anticipated for the Project.

- a. Name & Title:  
**Dennis Lee Haring – Construction Manager**
- b. Role of Key Individual for this Project:  
**Construction Manager**
- c. Name of Firm with which you are now associated:  
**Archer Western Construction, LLC**



- d. Years of Experience: With this Firm **28** Years      With Other Firms **14** Years

#### Employment History:

**Archer Western Construction, LLC** | Construction Manager | As Construction Manager, Dennis is responsible for overseeing construction operations on all projects on which he works. He is the main point of contact for the owner's operations personnel. His duties include developing work plans, scheduling work, tracking job costs, managing daily field operations and coordinating with the owner's engineers. He is also responsible for on-site safety management, subcontractor coordination and ensuring all construction work is completed to the owner's satisfaction. 1991 – Present.

**Moseman Construction** | Superintendent | As superintendent, Dennis worked on the Metropolitan Atlanta Rapid Transit Authority (MARTA) rapid transit system in Atlanta, GA. His project work focused on building MARTA stations and line sections. 1985 - 1991.

**Malta Construction** | Foreman | As a project foreman, Dennis worked on the construction of the I-675 Bypass in Atlanta, GA. 1984-1985.

**Northwest Indiana Carpenters Union #1005** | Carpenter | As a carpenter, Dennis worked on a variety of commercial and residential projects in the northern Indiana and Chicago, IL areas. 1978-1984.

- e. Education:

N/A

- f. Active Registrations:

N/A

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

#### **1. GDOT Northwest Corridor (I-75/I-575) – Atlanta, GA**

**Key Personnel Role:** Construction Manager  
**Experience with Current Firm:** Archer Western Construction, LLC  
**Project/Assignment Duration:** Project 2013-2018 | Assigned 2013-2018  
**Owner Contact Information:** GDOT, Stephen Lively | [slively@dot.ga.gov](mailto:slively@dot.ga.gov) | (404) 631-1828  
**Design/Construction Value:** \$647 Million

**Project Description:** This project involved the design and construction of 30 miles of managed lanes within the corridor of I-75 and I-575 for GDOT. The work included 39 bridge structures (4 with complex geometry), interstate highway widening, asphalt and concrete paving, over 300 utility relocations, 1.6 million cyds of earthwork, 140,000 lf of drainage, 650,000 sf of retaining walls, ITS and tolling. Dennis was responsible for all aspects of construction on this DBIA Award winning project.

**Similarities to CCR PH I:** Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad coordination, and multi-phase MOT while maintaining traffic.



#### **2. NCTA NC-540 Western Wake Expressway – Raleigh, NC**

**Key Personnel Role:** Construction Manager  
**Experience with Current Firm:** Archer Western Construction, LLC  
**Project/Assignment Duration:** Project 2008-2013 | Assigned 2010-2013  
**Owner Contact Information:** Former NCTA Proj Mgr, Shannon Sweitzer | [ssweitzer@smeinc.com](mailto:ssweitzer@smeinc.com) | (919) 872-2660  
**Design/Construction Value:** \$468 Million

**Project Description:** The project involved design and construction of a new 13-mile, toll highway. The scope included five million cyds of earthwork, construction of 34 bridges (4 over wetlands, 1 new CSX RR bridge), three major interchanges, extensive reconstruction of 15 existing sideroads, approximately 100 utility relocations, drainage, SWM facilities, MSE/sound walls, ITS and tolling. Also included was the demolition of commercial and residential properties as R/W acquisition was a part of the DB scope. Dennis was responsible for all aspects of construction on this CAGC Pinnacle Award winning project.

**Similarities to CCR PH I:** Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad bridge construction and coordination, and design-build delivery with members of same engineer (ICE)



### 3. NCDOT I-77 PCC Rehab – Jonesville, NC

**Key Personnel Role:** Construction Manager  
**Experience with Current Firm:** Archer Western Construction, LLC  
**Project/Assignment Duration:** Project 2018-Present | Assigned 2018-2019  
**Owner Contact Information:** NCDOT, Randall Miles, [rmiles@ncdot.gov](mailto:rmiles@ncdot.gov) | 336-530-6000  
**Design/Construction Value:** \$50 Million



**Project Description:** This project included concrete pavement replacement along I-77 from approximate mile marker 78.4 (just south of US 21-Exit 79) in Yadkin County to mile marker 83.4 in Surry County, NC. Median paved shoulder widths are 4-foot minimum. Existing outside paved shoulder widths were maintained. This unique project partnered in OSHA's "Build Star" program in NC. Dennis was responsible for all aspects of construction.

**Similarities to CCR PH I:** Interstate construction, design-build delivery with same engineer (ICE), multi-phase MOT while maintaining traffic, and limited site access.



### 4. City of Atlanta/H-JAIA I-285 Bridge Structures – Atlanta GA

**Key Personnel Role:** Construction Manager  
**Experience with Current Firm:** Archer Western Construction, LLC  
**Project/Assignment Duration:** Project 2002-2006 | Assigned 2003-2004  
**Owner Contact Information:** Former HJAIA. Proj Mgr - Frank Rucker, [frucker@itsmarta.com](mailto:frucker@itsmarta.com) | 404-848-5219  
**Design/Construction Value:** \$158 Million



**Project Description:** As part of the City of Atlanta's development program for the Hartsfield-Jackson Atlanta International Airport, this project consisted of the bridge structures that suspend the fifth runway across 10 lanes of interstate traffic (I-285). The two bridge structures are the longest highway crossing on any airport runway in the United States. The first structure is approximately 1,200 feet in length and 500 feet wide. The second bridge is over 500 feet long and 220 feet wide. As a part of the MOT plan I-285 was relocated twice to allow for construction to occur. Dennis was responsible for all aspects of construction.



**Similarities to CCR PH I:** Interstate highway realignment (2x), reconstruction of sideroads, bridge demolition, interstate bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, utility relocations including sewer and potable water, railroad coordination, multi-phase MOT while maintaining traffic, and limited site access.

- 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.

Dennis is currently serving as Senior Superintendent at the NAVFAC P235 Flightline Utility Modernization project at Marine Corps Air Station Cherry Point in North Carolina. His assignment to the Cherry Point project will be complete prior to the start of work on the Carolina Crossroads Phase I – Colonial Life Boulevard at I-26 Interchange project.



## KEY INDIVIDUAL RESUME FORM

### Brief Resume of Key Individual anticipated for the Project.

a. Name & Title:  
**Lee Stanley Robertson, PE, Senior Project Manager**

b. Role of Key Individual for this Project:  
**Independent Quality Manager (IQM)**

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

**Raba Kistner, Inc. (RK)**



d. Years of Experience: With this Firm 3 Years With Other Firms 22 Years

#### **Employment History:**

**Raba Kistner Infrastructure, Inc:** Construction IQF Manager – Responsible for managing the project’s IQF staff on the \$1.7B South Mountain Freeway project in Phoenix, AZ, 2017-present. (IQF Manager on a project of similar magnitude and complexity and Senior QA role).

**URS (AECOM):** Senior Resident Engineer / Team Leader – Responsible for overseeing heavy highway and bridge construction projects as assigned. Managing a staff of up to 30 and growing AECOM’s CEI business in the southwest, 2008-2016. (Experience in a senior QA role).

**Fluor Corporation:** Resident Construction Manager – Responsible for overseeing heavy and bridge construction projects as assigned, 2001-2008. (Experience in a Senior QA role).

**Cobb Engineering Company:** Resident Engineer– Responsible for overseeing highway and bridge construction projects as assigned, 2000-2001. (Experience in a Senior QA role).

**Oklahoma DOT:** Project Inspector / Supervisor– Responsible for inspections of roadway projects as assigned, 1995-2000. (Experience in a QA role).

#### **e. Education:**

Clemson University / Clemson, South Carolina / Bachelor of Science / 1994 / Civil Engineering – Structural Emphasis

#### **f. Active Registrations:**

2001 / SC / Civil / 21549

2008 / AZ / Civil / 49002

2013 / NM / Civil / 21949

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

#### **1 Loop 202, South Mountain Freeway – Phoenix, AZ**

**Key Personnel Role:** Construction IQF Manager (CIQM)

**Experience with Current Firm:** Yes

**Project/Assignment Duration:** Project 2016-2020 (scheduled completion date), Assigned 2017-2019

**Owner Contact Information:** ADOT, Julie Gadsby, [JGadsby@azdot.gov](mailto:JGadsby@azdot.gov), (602) 768-2167

**Design/Construction Value:** \$1 Billion Construction Value

**Project Description:** This project includes 22 miles of construction with 41 new bridges and 1.2M tons of HMAC paving in Phoenix, AZ. As CIQM, Lee’s specific responsibilities included leading a staff of 57 PE’s, EIT’s, inspectors and lab technicians to provide Quality Assurance oversight and construction materials testing. He also is tasked with reviewing / modifying the project’s Construction Quality Management Plan as necessary and providing applicable training to IQF staff. He interprets plans and specifications and provides guidance based on the findings. He authors Technical Bulletins as required which are used project wide when further clarification is needed within the Project Team regarding IQF’s acceptance requirements, inspection methods, and QA procedures. Lee resolves disputes on behalf of the IQF for issues that rise to the top level of the Project Escalation Ladder. He provides guidance and mentors the PE’s and EIT’s on his staff. He is responsible for the overhead budgets, training, and staffing for this project.

**Similarities to CCR PH I:** Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, railroad coordination, multi-phase MOT while maintaining traffic.



## 2. CRM-West – Greenville, SC

**Key Personnel Role:** Resident Construction Manager  
**Experience with Current Firm:** Fluor Corp  
**Project/Assignment Duration:** Project 2000-2008, Assigned 2001-2006  
**Owner Contact Information:** SCDOT, Joseph Fowler, [Fowlerjm@scdot.org](mailto:Fowlerjm@scdot.org), (864) 285-7720  
**Design/Construction Value:** \$870.5 Million

**Project Description:** As RCM on the CRM West Project, Lee was the person of responsible charge on assigned projects in Greenville, Spartanburg, and Anderson counties. One of the projects that Lee administered during this time was the I-585/US-176 widening and reconstruction project. The work included in the project included 194,000 tons HMAC paving on I-585 and side roads, 7 bridges, 60 retaining walls, 416,000 CY of earthwork. This project was awarded the 2007 CAGC Pinnacle Award for Best Heavy Highway Project. One of Lee's primary responsibilities on this very politically charged project was to continually coordinate construction operations with USC Upstate officials, businesses, and landowners to minimize impacts to the college and businesses. Lee worked closely with internal design groups to provide schedule and cost estimates. He negotiated change orders as warranted. He verified pay quantities and verified all materials were tested per the required testing frequency. There were many issues with groundwater on this project that needed to be addressed in addition to the fact that the recommended sequence of construction was not possible due to traffic concerns. When these and other issues arose on the project, he met with the contractor and directed the solution after verifying with the EOR's that the design would not be impacted due to these directives that Lee provided. He coordinated with his designed utility relocation personnel to direct the utility relocations in the most logical manner with the anticipated construction schedule. He reviewed and approved traffic control plans. He redesigned drainage plans in order to avoid potential impacts to construction.



**Similarities to CCR PH I:** Interchange construction, bridge demolition, interstate and sideroad bridges, retaining walls, culverts, drainage systems, signing, lighting, signalization, demolition of commercial and residential properties, utility relocations including sewer and potable water, multi-phase MOT while maintaining traffic.

## 3. SR-89, Hell Canyon Bridge – Prescott, AZ

**Key Personnel Role:** Senior Resident Engineer / Team Leader  
**Experience with Current Firm:** AECOM  
**Project/Assignment Duration:** Project 2015-2016, Assigned 2015-2016  
**Owner Contact Information:** ADOT, Del Whittington, [DWhittington2@azdot.gov](mailto:DWhittington2@azdot.gov), (928) 580-2022  
**Design/Construction Value:** \$19 Million Construction Value

**Project Description:** This project includes building a 665ft steel girder bridge over Hell Canyon which measures over 135ft in depth. This project would ultimately be submitted for Roads & Bridges Top Ten Bridges in the US that were built in 20016 by ADOT due to the challenges that were faced and overcome by the team. In addition, this project won the AGC Partnering Award. One of the obstacles to overcome on this project was to provide access to the bottom of Hell Canyon for the 600- and 900-ton cranes that would be used. Lee determined the forces on the existing bridge's abutments and pier to verify that the required global stability factor of the existing cliff and access roads were maintained throughout the project. There were several instances where he had to direct additional fill to be placed due to the contractor's over excavation of the area. While constructing the access roads, the contractor was required to blast the existing basalt rock that was estimated to have a strength of 35,000psi. This blasting occurred as close as 55ft to the existing abutments which were already extremely deteriorated. Lee was tasked with examining the condition of the abutment(s) for structural stability prior opening the bridge to traffic each time. He also oversaw the pressure grouting operations where the new abutments would be built as one of the concerns of this project was to ensure there were no voids in the existing rock. He reviewed and approved a complicated bridge demolition plan that included line charges being placed in strategic locations on the steel truss bridge to be detonated at precise times in order to reduce the environmental impacts to the canyon floor. He also coordinated with the local forest officials in order to direct the reconstruction of the canyon once the bridge was built and the canyon was to be restored.

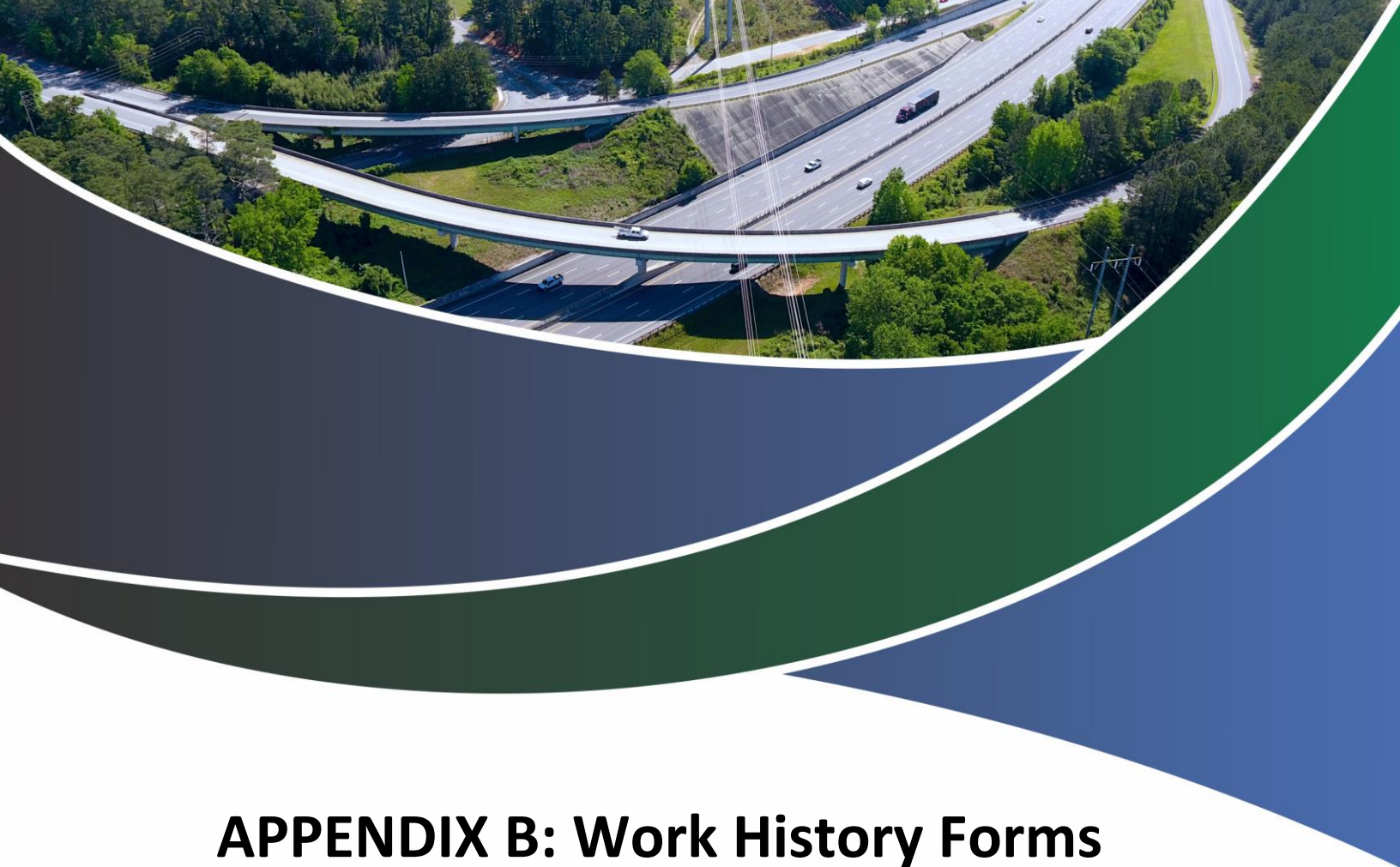


**Similarities to CCR PH I:** bridge demolition, highway bridge construction, retaining walls, culverts, drainage systems, signing, utility relocations, multi-phase MOT while maintaining traffic, using Partnering Principles with all stakeholders to overcome massive constructability issues encountered in the field that would lead to a very successful project.

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

Lee Robertson is currently assigned to a design-build project in Phoenix, AZ as the Construction IQF Manager. Final Acceptance of this project is scheduled on or before September 23, 2020.







## **APPENDIX B: Work History Forms**

1. *I-77 Widening & Rehabilitation (AWC)*
2. *Northwest Corridor (AWC)*
3. *I-95 Overland (AWC)*
4. *I-77 Express Lanes (UIG)*
5. *Monroe Bypass (UIG)*
6. *I-26 Widening, MM85-101, Segments 1 & 3 (ICE)*
7. *I-77 Widening & Rehabilitation (ICE)*
8. *SC 277 over I-77 (ICE)*
9. *I-85 Widening MM80-96 (ICE)*
10. *I-285 @ SR 400 Interchange (ICE)*







WORK HISTORY AND QUALITY FORM – CONTRACTOR

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 AWC’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 AWC (in thousands)
Name: <b>I-77 Widening &amp; Rehab. (MM 15-27)</b>  Location: <b>Richland County, SC</b>	Name: <b>Infrastructure Consulting &amp; Engineering, PLLC</b>	Name of Owner: <b>SCDOT</b> Project Manager: <b>John Burns</b> Phone: <b>803-699-5068.</b> Email: <a href="mailto:burnsjm@scdot.org">burnsjm@scdot.org</a>	Construction: <b>December 2018</b>  Design: <b>March 2017</b>	<b>\$90,931</b>	<b>\$58,707</b>
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p><b>Project Description:</b> Archer Western was the Design Builder and Prime Contractor for this design-build project consisting of widening NB and SB I-77 in Richland County with one additional lane in each direction beginning between SC12 (Percival Road) and I-20 and terminating near the S-52 (Killian Road) interchange, a distance of approximately 6.5 miles. There are 10 bridges along the project site that were rehabilitated and widened including the mainline bridges (5 dual bridges), two of which are stream / lake crossings. Finally, the project included 12 miles of interstate rehab along SB I-77 from Percival Road to S-59 (Blythewood Road) and interstate rehabilitation along NB I-77 to S-52 (Killian Road).</p> <p><b>Key Individual name/role/time on the project:</b></p> <p>Elham Farzam/Lead Design Engineer/ June 2015-March 2017</p> <p>Gus Kretschmer/Utility Manager/ April 2017-December 2018</p>		<p><b><u>SIMILIARITIES to CCR PH I:</u></b></p> <ul style="list-style-type: none"><li>✓ Design-Build with same Engineer (ICE)</li><li>✓ Interstate bridge construction/demolition</li><li>✓ Interstate widening in urban setting</li><li>✓ Work in a riverine environment (bridge over lake)</li><li>✓ Multiphase MOT while maintaining traffic</li><li>✓ Limited site access (used dedicated median access)</li><li>✓ Working adjacent to environmentally sensitive areas</li><li>✓ UIG performed bridge construction over I-20</li></ul>	 		
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractor/Major Sub-contractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractor/Major Sub-contractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
AWC started construction on time with USACE and SCDHEC NOI permits in hand, the latter of which was acquired early due to partnering with SCDOT. AWC managed all issues that arose promptly to minimize delays and continued to partner with the SCDOT throughout the construction duration to eliminate claims, disputes, and litigation. There are no existing or pending claims, disputes or litigation/arbitration on this project.					
i. Quality Initiatives. Discuss AWC’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 initiatives included:</p> <ul style="list-style-type: none"><li>• <b>Schedule Control</b> – AWC used their standard schedule monitoring protocols (3-week look ahead, 90 day look ahead, monthly updates), weekly review of upcoming activities kept critical activities in forefront</li><li>• <b>QC/QA of Design</b> – All submittals went through comprehensive QC review by design production squads and discipline leads. ICE used QA Review Team that included Peter Graf (structures), Larry Cook (Roadway), Jonathan Scarce (Hydro) and Michael Valiquette (Geotech)</li><li>• <b>Constructability Reviews</b> - AWC’s project management provided constructability reviews of all submittals prior to their submission to the SCDOT</li><li>• <b>QC Team:</b> Quality Manager and the senior inspector were involved during the design process providing input on the inspection process, ensuring that all testing requirements were met or exceeded. Same QC team lead inspection on the project for the duration of construction. The QC team participated in all owner and project schedule meetings to verify correct inspection coverage, plans, and appropriate documentation were provided to the SCDOT.</li><li>• <b>Work Plan Preconstruction Meetings:</b> AWC instituted work plan review meetings prior starting major activities. Also included SCDOT (including staff from headquarters), the QC and QA teams, and safety personnel, these meetings aided in successfully identifying risks related to quality, safety, and schedule prior to the start of work</li></ul>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					





WORK HISTORY AND QUALITY FORM – CONTRACTOR

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 AWC’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 AWC (in thousands)
Name: <b>Northwest Corridor Express Lanes</b>  Location: <b>Atlanta, GA</b>	Name: <b>Parsons</b>	Name of Owner: <b>GDOT</b> Project Manager: <b>Mr. John Hancock</b> Phone: <b>678-784-7050</b> Email: <b>jhancock@dot.ga.gov</b>	Construction: <b>December 2018</b>  Design: <b>March 2014</b>	<b>\$647,156</b>	<b>\$388,294</b>
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p><b>Project Description:</b> Archer Western was the managing member of the joint venture (Northwest Express Roadbuilders) that served as Design Builder and Prime Contractor for this 29.7-mile, design-build-finance project involves the addition of reversible managed express lanes along I-75 (17 miles) and I-575 (12 miles) in Atlanta, Georgia. The scope of work includes R/W acquisition (property demolition), design, permitting, utility relocation of private and municipal facilities, and construction of all infrastructure including dynamic open-road tolling. The project includes 39 bridges (lengths range from 52’ to 4,964’). The majority of bridges are precast concrete girders however, there are four bridges made of curved steel plate girders with complex geometry. Also included are approximately 650,000 sf of retaining walls, 1.4 million sf of noise walls, 313,000 sy of concrete paving, 140,000 lf of storm drainage, and 1.6 million cy of earthwork. The project was divided into six segments with concurrent construction along the 29-mile corridor to meet the aggressive three-year construction schedule.</p> <p><b>Key Individual name/role/time on the project:</b></p> <p>Dennis Haring/Construction Manager/May 2013 – December 2018</p>			<div><p><b><u>SIMILIARITIES to CCR PH I::</u></b></p><ul style="list-style-type: none"><li>✓ Design-Build delivery</li><li>✓ Interstate bridge construction/demolition</li><li>✓ Interstate widening in urban setting</li><li>✓ Bridges with complex geometry</li><li>✓ Bridge over RR (RR coordination)</li><li>✓ Multiphase MOT while maintaining traffic</li><li>✓ Limited site access (used dedicated median access)</li><li>✓ Reconstructing adjacent service (CD) roads</li><li>✓ Municipal and private utility relocations</li><li>✓ R/W acquisition</li><li>✓ Demolition of commercial and residential properties</li><li>✓ Highway signing, lighting, signalization and ITS</li></ul></div> 		
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractors/Major Subcontractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractors/Major Subcontractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>This was GDOT’s most visible and largest design-build project to date which AWC delivered on time, on budget and with <b>zero claims</b>. The project won multiple awards including <b>DBIA’s Award of Merit -Transportation and Award of Excellence - Transportation</b></p> <p>The project was segmented geographically, each with its own supervisory staff (specifically, MOT supervisors, Structures Superintendents, and Roadway Superintendents) providing greater oversight and the ability to plan for, recognize, and react to potential issues.</p> <p>AWC self-performed all of the items of work that were on the critical path (concrete paving, bridge reconstruction/widening, storm drainage, concrete barrier wall). This provided greater schedule and quality control contributing to the project’s on time delivery.</p>					
i. Quality Initiatives. Discuss AWC’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 initiatives included:</p> <ul style="list-style-type: none"><li>• <b>Schedule Control</b> – AWC used their standard schedule monitoring protocols (3-week look ahead, 90 day look ahead, monthly updates), weekly review of upcoming activities kept critical activities in forefront</li><li>• <b>QC/QA of Design</b> – All submittals went through comprehensive QC review by design production squads and discipline leads. Our Engineer used a QA process that used separate designers and involved interdisciplinary reviews.</li><li>• <b>Constructability Reviews</b> - AWC’s project management, design-build coordinator, and Construction Managers provided constructability reviews on all submittals prior to their submission to the GDOT and their CEI firm.</li><li>• <b>QC Team:</b> AWC had an internal QC team that worked with the independent CQAM (Construction Quality Assurance Manager) and the senior inspectors coordinating the inspection process, ensuring that all testing requirements were met or exceeded. The entire QC team participated in all owner and project schedule meetings to verify correct inspection coverage, plans, and appropriate documentation were provided to the GDOT.</li><li>• <b>Work Plan Preconstruction Meetings:</b> AWC used pre-activity planning meetings prior starting major activities. Meetings included GDOT, the QC and QA teams, and safety personnel, these meetings aided in successfully identifying risks related to quality, safety, and schedule prior to the start of work</li></ul>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					





WORK HISTORY AND QUALITY FORM – CONTRACTOR

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 AWC’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 AWC (in thousands)
Name: <b>I-95 DB Overland Bridge</b>  Location: <b>Jacksonville, FL</b>	Name: <b>RS&amp;H</b>	Name of Owner: <b>FDOT</b> Project Manager: <b>Mr. Greg Evans, PE</b> Phone: <b>386-967-7800</b> Email: <a href="mailto:greg.evans@dot.state.fl.us">greg.evans@dot.state.fl.us</a>	Construction: <b>February 2018</b>  Design: <b>October 2015</b>	<b>\$164,559</b>	<b>\$114,718</b>
g. Narrative describing the work performed by AWC. If submitting work completed by an affiliated or subsidiary company of AWC, identify the full legal name of the affiliate or subsidiary and their role on the Project.					
<p><b>Project Description:</b> AWC was the Design Builder and Prime Contractor on this 2.5 mile long interstate highway widening and reconstruction project. This project consists of the design and construction for the replacement of the I-95 Overland Bridge in Jacksonville, Florida. Improvements within the project limits include the reconstruction of I-95, reconstruction of the southbound Collector/Distributor (CD) Road, construction of a new northbound CD Road, construction to convert a partial interchange to a full interchange providing all traffic movements between I-95, Atlantic Boulevard and Philips Highway, and the realignment of Atlantic Blvd. in the vicinity of I-95. The improvements also include the construction of 12 new bridges (including third level flyovers) and three bridge widenings. The roadway reconstruction is concrete pavement, and includes substantial MSE walls and complex multi-phase maintenance of traffic plan.</p> <p>Public interest in the project was high due to the number of stakeholders in the downtown and surrounding areas. There are five local hospitals located on this section of I-95 and access was not impacted. Additionally, I-95 serves as a main hurricane evacuation route so maintaining all lanes of traffic during construction was imperative. AWC had to work within a R/W acquisition schedule established by FDOT for several parcels through the first year of construction.</p> <p><b>Key Individual name/role/time on the project:</b></p> <p>N/A</p>					
<div><div><p><b><u>SIMILIARITIES to CCR PH I::</u></b></p><ul style="list-style-type: none"><li>✓ Design-Build delivery</li><li>✓ Interstate bridge construction/demolition</li><li>✓ Interstate widening in urban setting</li><li>✓ Bridges with complex geometry</li><li>✓ Multiphase MOT while maintaining traffic</li><li>✓ Limited site access (used dedicated median access)</li><li>✓ Reconstructing adjacent service (CD) roads</li><li>✓ Municipal and private utility relocations</li><li>✓ R/W acquisition was handled by DOT</li></ul></div><div></div></div>					
h. Self-Assessment. The information provided in this section should be a self-assessment of AWC’s performance on the project to identify Lead Contractors/Major Subcontractors with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Contractors/Major Subcontractors that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>This was FDOT District 2’s most visible design-build project which AWC delivered on time, on budget and with <b>zero claims</b>.</p> <p>The project was segmented by disciplines (Structure, Roadway, Civil), each with its own supervisory staff providing greater oversight and the ability to plan for, recognize, and react to potential issues.</p> <p>AWC self-performed all of the items of work that were on the critical path (concrete paving, bridge reconstruction/widening, storm drainage, concrete barrier wall). This provided greater schedule and quality control contributing to the project’s on time delivery.</p>					
i. Quality Initiatives. Discuss AWC’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>Through the ATC process the MOT sequence was improved to reduce the number of traffic shifts, a redesigned interchange reduced the overall project schedule, and a focus on minimizing impacts to the mainline I-95 traffic was instituted.</p> <p>The work zone was separated from traffic by a temporary concrete barrier which provided a safer environment for both the traveling public and the workers.</p> <p>During pre-award development of the project, the design-build team developed numerous innovations through the Alternative Technical Concept (ATC) process that resulted in significant schedule and cost savings. Innovations included:</p> <ul style="list-style-type: none"><li>✓ A ramp alignment switch that eliminated an 800-foot-long bridge, reduced thousands of vehicular weave movements, and improved ramp geometry and stopping sight distance.</li><li>✓ Restacking of the US 90/US 1 interchanges, which simplified and reduced construction phasing and MOT operations, eliminated a 500-day utility relocation outage, and significantly reduced MSE wall height.</li></ul>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, AWC shall provide a detailed explanation below.					
Not Applicable					



WORK HISTORY AND QUALITY FORM – CONTRACTOR

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project design	c. Contact information of the Client & their Project Manager who can verify United’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 United (in thousands)
Name: <b>I-77 Express Lanes</b> Location: <b>Mecklenburg &amp; Iredell Counties, NC</b>	Name: Louis Berger Group, Inc.	Name of Owner: <b>NCDOT</b> Project Manager: <b>Roger Rochelle, PE</b> Phone: <b>919.212.3250</b> Email: <b>rdrochelle@ncdot.gov</b>	Construction: 04/2019	<b>\$444,000 (DB Contract)</b>	<b>\$15,609</b>

g. Narrative describing the work performed by United.

**Project Description:** This Public-Private Partnership (PPP) Project involved the conversion and expansion of current HOV lanes to provide HOT lanes along I-77 for a length of 26 miles from I-277 in downtown Charlotte, north to NC 150 in Mooresville. Two HOT lanes in each direction are provided through the southern and central sections of the project while a single HOT lane in each direction is provided in the northern section. A direct connection flyover is provided for the HOT lanes from I-77 to and from I-277 at the southern end of the project. The remaining access points are provided through slip ramps in and out of the I-77 general purpose lanes. Nine new bridges were required along with the widening of 17 existing bridges to accommodate the construction of the HOT lanes in the median of I-77.

As part of the Dragados-United Team, United self-performed the following services: New Construction for the following Bridges: BR 114 Tie to existing Lakeview and I-77 T connector to 77NB / 77SB HOV, BR- 113E and 113W New Bridge Alignment I-77 over I-85, BR-112 New Bridge I-77 over I-85, BR-111E and 111W New Bridge I-77 over I-85, BR-110 I-77 New Bridge with Post Tensioning Caps, BR-106 13 Span New Bridge from I-277 to SB-77, Concrete Slope Protection, Latex Overlay on 3 Bridges tied to new construction, Demolition of 5 Bridges within project limits, joint rehab and bearing rehab on 2 existing bridges.

**Key Individual name/role/time on the project:**

N/A

**SIMILARITIES to CCR PH I**

✓ Design-Build

✓ Interstate bridge construction/demolition

✓ Interstate widening in urban setting

✓ Multiphase MOT while maintaining traffic

✓ Limited site and median access

✓ Working adjacent to environmentally sensitive areas



I-277 to I-77Bridge

h. Self-Assessment. The information provided in this section should be a self-assessment of United’s performance on the project to identify United personnel that have successfully completed projects on time and on or under budget, and to identify United’s records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.

United Infrastructure Group was asked to perform work outside of most contractor’s ability and to perform work at an accelerated pace to maintain the schedule outlined for requested work. While having a good rapport with NCDOT and the Prime Contractor, United Infrastructure Group executed the tasks with the Company’s Construction Operations Group, Project Operations Group and Field Personnel Group, completed the task of comprehensive planning of work, execution of work, without a recordable incident or first aid, was under budget and on schedule without penalty to the Prime Contractor. This request included, but is not limited to: comprehensive lane closures from I-77NB / I-77SB / I-277EB and I-277WB / 277 On-Ramp NB 277 / 277 On-Ramp SB; comprehensive logistics to stage, prepare, mobilize, and erect 8 spans of 6 each Bulb-Tee Girders in a 7-day timeframe within a nightly closure from 11 pm until 5 am which had a potential 115K LD per 15 minutes after 5 am.

i. Quality Initiatives. Discuss United’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.



On a cost control side, UIG along with the Prime Contractor proposed: VE’s, alternative construction methods, and reduction of 3<sup>rd</sup> party components (concrete pumping services). Scheduling innovations included multiple concrete pour operations to reduce cost and short lane closure durations to have less impact on the traveling public. UIG worked diligently with NCDOT and the CEI group to capture the owner’s requests upfront, thus avoiding rejection, claims and issues in both quality, and or non-conformance.

j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, United shall provide a detailed explanation below.

NA



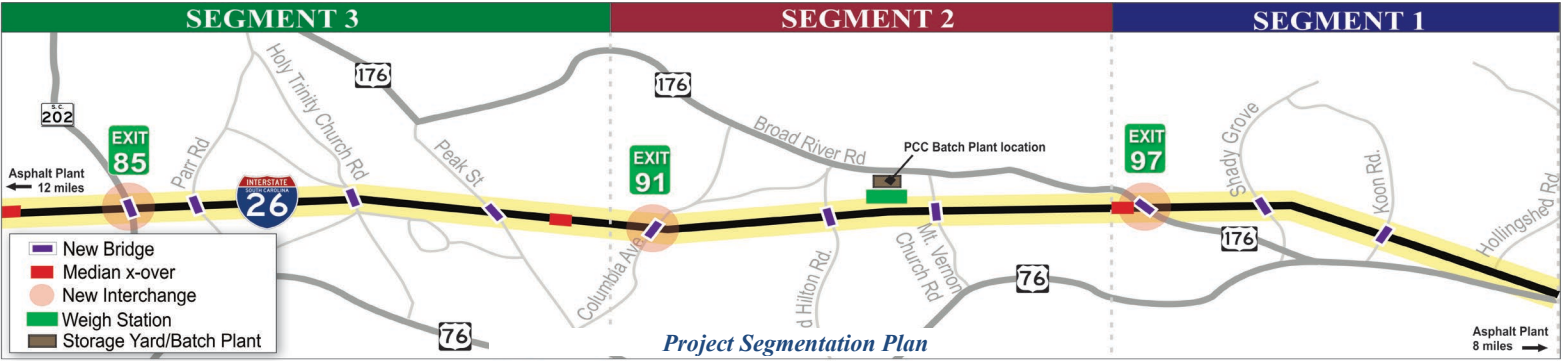


WORK HISTORY AND QUALITY FORM – CONTRACTOR

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 United’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 United (in thousands)
Name: <b>Monroe Bypass</b> Location: <b>Mecklenburg &amp; Union Counties, NC</b>	Name:  <b>RK&amp;K</b>	Name of Owner: <b>NCDOT / NCTA</b> Division Engineer: Rick Baucom Phone: 704-289-7905 Email: <a href="mailto:rwbaucom@ncdot.gov">rwbaucom@ncdot.gov</a>	Substantial Completion: 11/27/2018	<b>\$472,000</b>	<b>\$81,300</b>
g. Narrative describing the work performed by United.					
<p><b>Project Description:</b> This \$457 million project is a new, four-lane tolled expressway that will extend 20 miles from US 74 near 1-485 in Mecklenburg County to US 74 between the towns of Wingate and Marshville in Union County, North Carolina. The project includes the reconstruction of a one-mile portion of US 74 that includes an elevated, six-lane controlled-access freeway.</p> <p>The project has over 5,000,000 CY of unclassified and borrow excavation, utilities, noise walls, and MSE walls. The pavement structure consists of a lime treated subgrade and cement treated base stone and 760,000 tons of HMA. The project also has 26 new bridges and five major box culverts. The project included construction of toll gantries, ITS, cameras, and fiber installation. The ACCI/UG/BPI JV which was able to use the newest technology on our plants and equipment to accelerate the schedule and deliver a quality product within budget. ACCI/UG/BPI JV maintained a strategic partnership with all material suppliers to ensure products and materials were available and delivered to accelerate the schedule. United was the managing partner of the joint venture and provided 90% of the project management team with its employees. In addition to managing the project, United was responsible for all Bridge and Noise wall construction.</p> <p><b>Key Individual name/role/time on project:</b> Billy Hardwick / Structural Manager / 2014-2018</p>					
					
			<div><p><b><u>SIMILARITIES to CCR PH I:</u></b></p><ul style="list-style-type: none"><li>✓ Multi-million dollar lump sum Design-Build project</li><li>✓ Significant bridge construction</li><li>✓ Interstate construction in urban and greenfield setting</li><li>✓ Significant utility relocation- coordination and construction</li><li>✓ Multiphase MOT while maintaining traffic</li><li>✓ Limited site access in the urban portion</li><li>✓ Working adjacent to environmentally sensitive areas</li></ul></div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of United’s performance on the project to identify United personnel that have successfully completed projects on time and on or under budget, and to identify United’s records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
The project experienced several environmental challenges, which ultimately delayed the start of the project by five years. The JV weathered the challenges and reached an agreement with NCDOT to proceed forward. The project was opened for traffic on November 27, 2018, earning a significant early completion bonus.					
i. Quality Initiatives. Discuss United’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.					
The success of this fast-paced project was attributed to extraordinary teamwork by all contractors and sub-contractors involved. The JV used the latest technology and survey modeling for all roadway and structures. The team developed a survey 3D modeling system that was used by all sub-contractors on the project, which helped produce a high-quality end product with no delays. The Construction Team designed traffic control plans that minimized impact to the public and strategically planned detours to allow the Construction Team to perform 24 hour shifts in major intersections to eliminate multiple phasing of work in a specific area. The Construction Team developed a Safety Leadership Team that all sub-contractors are required to participate in, which has led to a safety culture on the project that Safety is everyone's responsibility.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, United shall provide a detailed explanation below.					
NA					





WORK HISTORY AND QUALITY FORM – DESIGNER

a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project construction	c. Contact information of the Client & their Project Manager who can verify ICE, PLLC’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 ICE, PLLC (in thousands)
Name: <b>I-26 MM 85 to 101 (SEGMENTS 1 &amp; 3)</b> Location: <b>Richland, Lexington, and Newberry Counties, SC</b>	Name: Archer United, JV 	Name of Owner: <b>SCDOT</b> Project Manager: <b>Brad Reynolds, PE</b> Phone: <b>803-737-1440</b> Email: <a href="mailto:reynoldsbs@scdot.org">reynoldsbs@scdot.org</a>	<b>Segments 1 &amp; 3 Design:</b> May 2019 – April 2020  <b>Segments 1 &amp; 3 Construction:</b> May 2020 – Dec. 2021	<b>\$421,000 (Total Contract)</b> <b>Segment 1 - \$158 Million</b> <b>Segment 3 - \$123 Million</b>	<b>\$23,183 (Total Design Fee)</b> <b>\$10,432 (Segment 1 Design)</b> <b>\$8,778 (Segment 3 Design)</b>
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE was the lead designer or a sub-consultant.					
<p><b>Project Description:</b> This Design-Build project includes 16 miles of widening and reconstruction, three new interchanges, and eight overpasses north of Columbia from mile marker 85 to 101. ICE is the Lead Engineer and will provide all engineering services as well as quality control inspection during construction. This project will reconstruct pavement, increase capacity, and upgrade interchanges and overpass bridges to meet state and federal design requirements. SCDOT intends to widen I-26 from four lanes to eight lanes from approximately Exit 101 (US 176) to just west of Exit 97 (US 176) and from four lanes to six lanes from just west of Exit 97 (US 176) to just west of Exit 85 (SC 202) in Richland, Lexington, and Newberry Counties. Interchanges will be improved at Exit 97 (US 176), Exit 91 (S-48), and Exit 85 (SC 202). Overpass bridges will be replaced at Koon Road, Shady Grove Road, Mt. Vernon Church Road, Old Hilton Road, Peak Street, Holy Trinity Church Road, and Parr Road. The weigh station at mile marker 94 westbound will also be upgraded. The design/permitting phase will occur during 2019/2020. This project was separated into three segments, <b>Segment 1 is 5.4 miles long</b> and consists of an 8-lane mainline section with a DDI Interchange at US 176 - Broad River Road (Exit 97) and two crossroad structure replacements at Shady Grove and Koon Road. <b>Segment 3 is 5.93 miles long</b> and consists of an 6-lane mainline section with an improvement with SC 202 ((Exit 85) and three crossroad structure replacements at Parr Road, Holly Trinity Church Road and Peak Street.</p> <p><b>Design Location:</b> Columbia (ICE), SC   <b>Key Individual name/role/time on the project:</b> Elham Farzam, PE/Lead Design Engineer/2018-present   Gus Kretschmer/Utility Manager/2018-present</p> <div><p><i>DDI Interchange for Broad River (Exit 97)</i></p></div>					
<p><b>h. Self-Assessment.</b> The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify with firms or personnel that have successfully completed projects on time and on or under budget, and to identify ICE’s records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.</p> <p>ICE began all pre-construction planning and activities as soon as the determination of best value team in May 2019. ICE allocated proper resources to ensure the timely submission of all design, environmental, traffic planning and utility relocation submittals. ICE has <u>met every one of its contract and submittal deliverables</u> and in accordance with the approved CPM schedule by SCDOT.</p>					
<p><b>i. Quality Initiatives.</b> Discuss ICE, PLLC’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> <p>ICE implemented a comprehensive QC/QA program for all of the design, environmental, traffic planning and utility relocation submittals to SCDOT to assure timely and quality submittals. In addition to independent quality review by a separate QA Team, the construction JV also performed detailed “constructability” reviews in order to minimize RFI and construction issues during construction. Additionally, ICE developed Concept work zone traffic control plans which was submitted for the entire project (all 3 segments) to ensure continuity between adjacent segments. Pavement innovation trials at rest areas in coordination with Jay Thompson, State Pavement Engineer, will allow SCDOT to study alternate pavement structures for future projects which will enhance pavement quality throughout the state.</p>					
<p><b>j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.</b></p> <p>Not applicable</p>					






WORK HISTORY AND QUALITY FORM – DESIGNER

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 ICE, PLLC’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 ICE, PLLC (in thousands)
Name: <b>I-77 Widening &amp; Rehab. (MM 15-27)</b> Location: <b>Richland County, SC</b>	Name: <b>Archer Western Construction, LLC</b> 	Name of Owner: <b>SCDOT</b> Project Manager: <b>Mr. Tyke Redfearn, PE</b> Phone: <b>803.737.1430</b> Email: <a href="mailto:redfearnwt@scdot.org">redfearnwt@scdot.org</a>	Construction: <b>Dec. 2018</b>  Design: <b>March 2017</b>	<b>\$90,931</b>	<b>\$5,412 (Design) + \$910 (QC Inspection)</b>
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE, PLLC was the lead designer or a sub-consultant.					
<p><b>Project Description:</b> ICE is the Lead Design Firm for this 12-mile interstate widening and pavement rehabilitation design-build project. This project consists of widening northbound and southbound I-77 with an additional lane in each direction from MM 15 to MM 22 (7 miles) including the widening of the mainline bridges (5 dual bridges) including two stream / lake crossings. In addition, I-77 travels below two existing railroad bridges and the widening through this area must be designed and constructed to minimize impacts to those bridge piers and foundations.</p> <p><b>Roadway Design:</b> ICE was responsible for preparing roadway geometric design for the project using the design standards and criteria based on design speed, functional classification, design traffic volumes, right-of-way, and aesthetics. Construction Phasing/MOT is one of the most critical aspects of the project because of the high volume of traffic on I-77. A comprehensive Traffic Control Plan / MOT was developed by the Roadway Design Team. This Plan was developed in concert with the Construction personnel during both the procurement and final design phases.</p> <p><b>Structural Design:</b> ICE’s Structural Design Team was responsible for evaluating the existing bridges and embankments to determine any required enhancements to the existing structures that may be required to meet SCDOT’s scope requirements. There are five pairs of mainline bridges to be widened. Additionally, ICE designed the two (2) Median Access Ramp (MAR) at Edgewater and Windsor Lake Blvd. used for delivery of material in the median.</p> <p><b>Hydro Design:</b> The hydraulic design includes analyzing four detailed FEMA flood study stream crossings, as well as seven miles of Geopak Drainage design associated with the highway drainage. HDS#5 and XPSWMM are being used to analyze cross pipes. Erosion Control is being designed, as well as water quality BMPs due to 303D watersheds on a portion of the project.</p> <p><b>Utilities &amp; Railroad Coordination:</b> Extensive utility coordination was necessary with utility owners of commercial, industrial, and residential land uses. The Design Team identified all utility conflict points and designed the Project to avoid conflicts with utilities where possible, and minimize impacts where conflicts cannot be avoided.</p> <p><b>Quality Control:</b> QC inspectors travel to the location of the material production site and perform QC tests and inspections at the producer’s facility. Upon completion of all tests, the Quality Control Manager verifies the results are transmitted to the RCE, Quality Acceptance, and Independent Assurance Manager.</p> <p><b>Office Location where the Work was Performed:</b> Columbia, SC (ICE’s Corporate Headquarters)</p> <p><b>Key Individuals:</b> Elham Farzam, PE, Design Manager and Sr. Pavement Engineer (2015-2017)   Gus Kretschmer, Utility Coordination (2015-2017)</p>			 <div><p><b><u>SIMILARITIES to CCR PH I:</u></b></p><ul style="list-style-type: none"><li>✓ Design-Build</li><li>✓ Interstate bridge work in urban setting</li><li>✓ Interstate widening in urban setting</li><li>✓ Multiphase MOT while maintaining traffic</li><li>✓ Extensive asphalt paving</li><li>✓ Utility coordination</li><li>✓ Permitting by D/B Team</li><li>✓ Environmental Compliance Inspection</li></ul></div>		
h. Self-Assessment. The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify Lead Designers/Major Sub-consultants with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designers/Major Sub-consultants that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
The design of the Project was completed 3 months ahead of the schedule by end of December 2016 and with the USACE permit and SCDHEC NOI permit in hand, enabled AWC to start construction 3 months earlier than planned. The design of non-critical path bridges followed and all completed by March 2017. There are no existing or pending claims, disputes or litigation/arbitration on this Project.					
i. Quality Initiatives. Discuss ICE, PLLC’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.					
Quality Initiatives included: a) <b><i>Schedule Control</i></b> measures put in place on the outset and monitored on a minimum of weekly basis by the D-B Coordinator / Pre-Construction Manager (Andy Gillis). He acted as the schedule Czar and ensured every one met their pre-agreed upon deliverable dates, b) <b><i>QC/QA of Design</i></b> – All submittals went through a comprehensive QC review by the production squads and disciplines, followed by the QA Quality Review Team by ICE (Peter Graf (structures), Larry Cook (Roadway), Jonathan Scarce (Hydro) and Michael Valiquette (Geotech), and, c) <b><i>Constructability Reviews</i></b> - AWC’s management (Christie and Pozzi) provided over the shoulder constructability reviews of all submittals prior to submittals to SCDOT.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.					
Not Applicable					



WORK HISTORY AND QUALITY FORM –DESIGNER

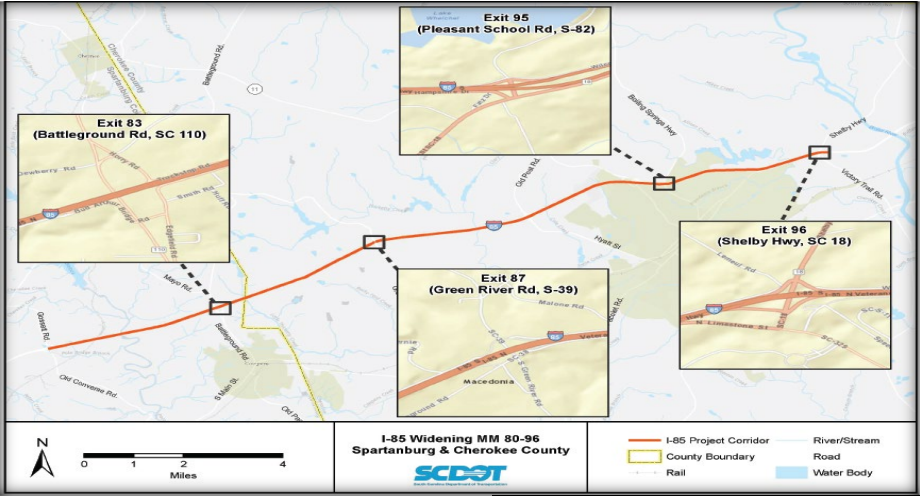
a. Project Name & Location (City, State)	b. Name of lead responsible for the overall project construction	c. Contact information of the Client & their Project Manager who can verify ICE’s responsibilities	d. Actual or Estimated Construction & Professional Services Completion Date	e. Actual or Estimated Project Construction Cost (in thousands)	f. Dollar Value of Work Performed by ICE (in thousands)
Name: <b>SC 277 over I-77 Bridge Replacement</b> Location: <b>Richland County, SC</b>	Name:  Archer Western Construction, LLC	Name of Owner: <b>SCDOT</b> Project Manager: <b>James (Jae) Mattox</b> Phone: <b>803-737-1805</b> Email: <a href="mailto:mattoxjh@scdot.org">mattoxjh@scdot.org</a>	Design: <b>July 11, 2019</b> (RFC Plans) Construction: <b>August 2020 (est.)</b>	<b>\$ 24,990</b>	<b>\$1,642 (ICE)</b>
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE was the lead designer or a sub-consultant.					
<p><b>Project Description:</b> The Project includes the construction of a new replacement bridge and related roadway approaches along SC 277 Northbound over I-77 and demolishing the existing bridge.</p> <p><b>Roadway Design:</b> Serving as the Lead Design Firm, ICE was responsible for preparing roadway geometric design for the project using the design standards and criteria based on design speed, functional classification, and design traffic volumes. Construction Phasing/MOT is a critical aspect because of access / erection plans for the structure / and demolition of existing bridge. A comprehensive Traffic Control Plan / MOT / Detour was developed by the Roadway Design Team. This Plan was developed in concert with the Construction personnel during the procurement and final design phases. <b>Structural Design:</b> ICE’s Structural Design Team was responsible for a design that meets all current standards and provided the clear distance required in the RFP. In order to meet all design standards a curved steel plate girder structure was selected. <b>Hydro/Hydraulic Design:</b> This work included analyzing four detailed FEMA flood study stream crossings, as well as seven miles of Geopak Drainage design associated with the highway drainage. HDS#5 and XPSWMM are being used to analyze cross pipes. Erosion Control is being designed, as well as water quality BMPs due to 303D watersheds on a portion of the project. <b>Utilities &amp; Railroad Coordination:</b> Extensive utility coordination was necessary with utility owners of commercial, industrial, and residential land uses. The Design Team identified all utility conflict points and designed the Project to avoid conflicts with utilities where possible, and minimize impacts where conflicts cannot be avoided. Railroad coordination is on-going and all necessary agreements and Right of Entry documents will be completed prior to work with in Railroad Right of Way commencing. <b>Quality Control:</b> QC inspectors are currently performing QC tests and inspections at the producer’s facility. Upon completion of all tests, the Quality Control Manager verifies the results are transmitted to the RCE, Quality Acceptance, and Independent Assurance Manager.</p> <p><b>Design Location:</b> Columbia, SC <b>Key Individual name/role/time on the project:</b> Elham Farzam, Executive Committee (2017-present), Gus Kretschmer Utility Coordination (2017-2019)</p>		 			
<p><b>h. Self-Assessment. The information provided in this section should be a self-assessment of ICE’s performance on the project to identify with firms or personnel that have successfully completed projects on time and on or under budget, and to identify ICE’s records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.</b></p> <p>All deliverables for the project were completed on time with a compressed design schedule. Preliminary plans and design were performed at risk and submitted once project NTP was provided in late November 2018. All preliminary plan submittals included additional information beyond the minimum criteria to allow SCDOT to review final plan concepts at a preliminary stage. All final plans were completed by early May 2019. ICE expedited the review of all shop and working drawings to facilitate early fabrication and construction and has been very timely in response to all construction RFIs. There are no existing or pending claims, disputes or litigation/arbitration on this Project.</p>					
<p><b>i. Quality Initiatives. Discuss ICE’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.</b></p> <p>Quality Initiatives included: a) <b>Schedule Control</b> measures put in place on the outset and monitored on a minimum of weekly basis by the D-B Coordinator / Design Engineer (Chris Gossett). He ensured everyone met their pre-agreed upon deliverable dates, b) <b>QC/QA of Design</b> – All submittals went through a comprehensive QC review by the production squads and disciplines, followed by the QA Quality Review Team, and c) <b>Constructability Reviews</b> - AWC’s management provided over the shoulder constructability reviews of all submittals prior to submittals to SCDOT.</p>					
<p><b>j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE shall provide a detailed explanation below.</b></p> <p>Not applicable</p>					

**SIMILARITIES TO CCR PH I:**

- ✓ Design-Build w/ AWC
- ✓ Same Team/Key Personnel
- ✓ Interstate MOT
- ✓ Bridge over Interstate
- ✓ Demolition of Existing Bridge
- ✓ Traffic Analysis


WORK HISTORY AND QUALITY FORM – DESIGNER

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 ICE, PLLC’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 ICE, PLLC (in thousands)
Name: <b>I-85 Widening Project (MM 80 to 96)</b> Location: <b>Spartanburg and Cherokee Counties, SC</b>	Name: <b>Blythe/Zachry, Joint Venture</b>	Name of Owner: <b>SCDOT</b> Project Manager: <b>Mr. Brad Reynolds, PE</b> Phone: <b>803.737.3081</b> Email: <a href="mailto:ReynoldsBS@scdot.org">ReynoldsBS@scdot.org</a>	<b>Construction: October 2021</b>  <b>Design: December 2017</b>	<b>\$435,000</b>	<b>\$4.8 Million (DB Prep, NEPA &amp; DB Plan Reviews)</b>
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE, PLLC was the lead designer or a sub-consultant.					
<p><b>Project Description:</b> As the Lead Design Firm, ICE was responsible for managing the engineering services necessary for development of the Environmental Assessment and Design-Build preparation for widening approximately 18 miles of interstate. The Columbia, SC office performed all of the services on this Project. Along the approximately 18-mile project area, interchanges at Exit 83 – Battleground Road (SC 110), Exit 87 – Green River Road (S-39), Exit 95 – Pleasant School Road (S-82), and Exit 96 – Shelby Highway (SC 18) will be modified to bring them into compliance with state and federal design requirements. The project also included adding a travel lane in each direction, improving various interchanges and exit ramps, and replacement of overpass bridges. This project was separated into three sections. ICE was responsible for the bridge/structure design, hydrology design, and roadway design in Segment 3.</p> <p><b>Project Management</b>   ICE was responsible for the project organization, management, scoping, and coordination with SCDOT, FHWA, and municipalities. ICE also coordinated public meetings and development of displays. ICE provided budget, schedule, and expenditure reports to SCDOT. ICE also managed subconsultants who performed the tasks required to deliver the preliminary road and bridge plans, environmental documents, and traffic studies.</p> <p><b>Bridge/Structure Design</b>   ICE identified and analyzed bridge replacement alternatives and developed the conceptual bridge plans. The bridge construction staging was also included. ICE provided conceptual level and detailed cost estimates for each bridge and performed bridge inspections in order to direct the Contractor to repair the bridge as needed in the Design-Build RFP.</p> <p><b>Hydrology Design</b>   The hydrology design for this project involved the analysis and preliminary sizing of all cross line structures with the use of HY8 and XPSWMM. Downstream structures were analyzed as well due to pre/post concerns from the interstate widening. Several major streams were analyzed to evaluate the degree of FEMA involvement.</p> <p><b>Roadway Design</b>   This task required providing the preliminary roadway plans including interchange design, providing cost estimates, identifying preliminary right-of-way requirements and environmental impacts, developing roadway design criteria, and completing any necessary design exception documentation.</p> <p><b>Utility Coordination</b>   A preliminary utility report was developed to include major utility and utility easements within the project limits, recommendations to the extent of prior rights, assessment of utility impacts and costs associated with impacts and feasibility of early utility relocations.</p> <p><b>Office Location where the Work was Performed:</b> Columbia, SC (ICE’s Corporate Headquarters) <b>Key Individuals/role/time on project:</b> Gus Kretschmer, Utility Coordination, 2014-2017</p>					
h. Self-Assessment. The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify Lead Designers/Major Sub-consultants with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designers/Major Sub-consultants that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
ICE managed the work of nine subconsultants on this assignment, including three major subconsultants including Mead & Hunt, STV and Three Oaks. ICE Leadership committed to SCDOT the completion of the NEPA Document and DB RFP package in time for SCDOT’s procurement in February 2016. The original professional services agreement included NEPA Document, Preliminary Design, and support during the Design-Build procurement phase for approximately \$6 Million. After 16 months of planning, environmental analysis, and completion of the Preliminary Plans, the contract budget was decreased by \$1 Million, which was the direct result of effective management and attention to details by ICE Management Team. All deliverables were submitted on time per the established schedule. There are no existing or pending claims, disputes, or litigation/arbitration on this Project.					
i. Quality Initiatives. Discuss ICE, PLLC’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.					
Quality Initiatives included: a) <i>Schedule and Cost Control</i> measures put in place on the outset and monitored on a minimum of bi-weekly snap shot as well as weekly status meeting to make sure everyone stayed on the project schedule and specifically no critical path activity was impacted by delays or indecision, b) <i>QA/QC of Design</i> - the EA was signed on October 19, 2015 (less than 12 months) allowing SCDOT to begin the DB procurement of the project. This was made possible only by implementation of a robust QA/QC program for the deliverables on the project including but limited to NEPA document, alternative analysis, impact analysis, “preferred option” Preliminary Design plan preparations, Stormwater Management Report, and Conceptual Bridge Plans, c) Working closely with SCDOT and resource agencies to meet this aggressive schedule for an 18-mile widening project with four interchanges. There are no claims and no litigation because of ICE services to date.					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.					
Not Applicable					



- SIMILARITIES to CCR PH I:**
- ✓ Design-Build
  - ✓ Environmental Document Prep
  - ✓ Interstate Widening
  - ✓ Interchange Design
  - ✓ Utility Coordination
  - ✓ Traffic Analysis
  - ✓ Bridge Design



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 ICE, PLLC’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 ICE, PLLC (in thousands)
Name: <b>I-285/SR 400 Interchange Improvements</b> Location: <b>Fulton &amp; Dekalb Counties, GA</b>	Name: <b>North Perimeter Contractors (NPC)</b> 270 Carpenter Drive Suite 700 Atlanta, GA 30328 (USA)	Name of Owner: <b>GDOT</b> Butch Welch, Jr., PE Phone: (404) 772-6969 Email: <a href="mailto:awelch@dot.ga.gov">awelch@dot.ga.gov</a> ,	Utility Coordination: <b>April 2016</b> CQAF Services: <b>December 2021</b>	<b>\$460,000 (DBF Contract)</b> <b>\$803,000 (Total Project Cost)</b>	<b>\$1,650 (Utility Design &amp; Coordination Fee)</b> <b>\$32,000 (MOT Design &amp; IQF Services Fee)</b>
g. Narrative describing the work performed by ICE, PLLC. Include the office location(s) where the design work was performed and whether ICE, PLLC was the lead designer or a sub-consultant.					
<p><b><u>Project Description:</u></b> The I-285/SR 400 Interchange Improvement Project (known as <b>Transform 285/400</b>) will reconstruct the I-285 and SR 400 interchange north of Atlanta. Along with the new interchange the improvements include eastbound and westbound collector-distributor lanes on I-285 and northbound and southbound collector-distributor lanes on SR 400. The project is approximately 4.3 miles of I-285 from west of Roswell Road to east of Ashford-Dunwoody Road and 6.2 miles along SR 400 from the Glenridge Connector to Spalding Drive. A diverging diamond interchange will also be constructed on Abernathy Road at SR 400. Additional work included replacing the I-285 bridges over Peachtree Dunwoody Road and Glenridge Drive. The project is a Design-Build-Finance (DBF), using a tax-exempt bank loan. Total project cost is approximately \$800 million which includes the cost of preliminary design, environmental approval, right of way acquisition, final design, construction management, utility relocations, construction engineering and inspection (CE&amp;I), and insurance. These YouTube and Vimeo video link provides additional information regarding the scope and current schedule of the project. <a href="https://www.youtube.com/watch?v=k80XROkBDMY">https://www.youtube.com/watch?v=k80XROkBDMY</a>   <a href="https://youtu.be/ohQPOAYPc_A">https://youtu.be/ohQPOAYPc_A</a>.</p>					
<p><b><u>ICE served as the Lead Utility Coordinator and provided services from its Columbia, SC and Norcross, GA offices.</u></b> ICE was responsible for all of the Developer/Design-Builder’s obligations with respect to the coordination of Utility Adjustment Work in accordance with the Design, Build, and Finance Agreement (DBFA) and the utility coordination scope of work which included: Utility Impact Analysis (UIA) review/evaluation for initial conflicts (1,150 points); Facilitation of coordination meetings with Developer and GDOT; Identification of areas where efficiencies in the design streamlined the utility relocation/adjustment (reduced to 797 points), reduced/ minimized replace utility easement requirements, and development of monthly reports. ICE performed all utility coordination work beginning with identifying all Utility Owners and facilities within the project, developing Utility Analysis and Preliminary Routing Reports, finalizing the development of 80 Utility Adjustment Agreements with Utility Assemblies for each conflict for a value of \$30 million and have completed 70 Utility Adjustment Agreements. ICE also coordinated with roadway design engineering consultants (Neil Shaffer &amp; Louis Berger) who prepared exhibits and developed typical utility cross sections at critical locations. ICE provided monthly utilities schedule updates and provided “look-ahead” utilities schedules each week. ICE Utility Coordinators prepared Utility Work Plans (UWP), utility conflict matrices, Master Utility Adjustment Agreements (MUAA) with Amendments (MUAAA), and coordinated subsurface utility engineering performing designation and location services.</p>			<div><p><b><u>SIMILARITIES to CCR PH I:</u></b></p><ul style="list-style-type: none"><li>✓ Design-Build</li><li>✓ Extensive Utility Coordination</li><li>✓ Complex Interstate MOT</li><li>✓ QC Inspection / Testing</li><li>✓ Interstate Widening</li><li>✓ Interchange Improvements</li></ul></div>		
<p><b><u>ICE currently provides Independent Construction Quality Assurance &amp; Acceptance (CQAF) services from its Sandy Springs, GA office.</u></b> Through a separate contract, ICE is serving as the Independent Construction Quality Acceptance Firm (CQAF) responsible for the field acceptance inspection and materials sampling and testing for the Project as part of the Construction Quality Acceptance Program (CQAP). This includes Construction Engineering &amp; Inspection (CE&amp;I) services, conducting a continuous inspection program and perform quality acceptance testing on behalf of the Developer. ICE owns and operates a GDOT/AASHTO accredited Lab.</p>					
<p><b><u>Key Personnel:</u></b> Elham Farzam, Project Principal (2015-present), Gus Kretschmer, Utility Coordination Manager (2015-2018)</p>					
h. Self-Assessment. The information provided in this section should be a self-assessment of ICE, PLLC’s performance on the project to identify Lead Designers/Major Sub-consultants with firms or personnel that have successfully completed projects on time and on or under budget, and to identify Lead Designers/Major Sub-consultants that have records of managing contracts to minimize delays, claims, dispute proceedings, litigation, and arbitration.					
<p>The D/B Contractor (NPC) and GDOT have been very pleased with both the utility coordination and CQAF services. The utility coordination involved working with over 25 utility entities (public and private) with over 930 points of conflicts and estimated relocation cost in excess of \$16 Million. The utility relocation has kept in front of the proposed construction work and has never been on the critical path.</p>					
i. Quality Initiatives. Discuss ICE, PLLC’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>One of the main challenges and dangers for the project is maintaining traffic during construction. The I-285/SR 400 Interchange Improvement project is in the heart of one of metro Atlanta’s busiest residential and business districts with more than 400,000 cars passing through per day. Traffic without construction is already challenging and adding construction will heavily impact the traveling public. ICE as CQAF and Utility Lead worked very closely with the Design and Construction Team to develop a project MOT and Phasing plans to minimize construction related impacts and be able to work safely and effectively to deliver the project.. The following link provides the MOT / Construction Staging / Phasing Plan in further details. <a href="https://vimeo.com/168179573">https://vimeo.com/168179573</a></p>					
j. For each question in Section 3.5.2 of the RFQ for which a “Yes” answer was provided, ICE, PLLC shall provide a detailed explanation below.					
Not Applicable					















## APPENDIX D: Legal & Financial

1. *Letter of Financial Capacity*
2. *CCR PH 1 Surety Letter*
3. *JV Teaming Agreement*
4. *JV Liability Statement*
5. *DUNS Numbers*





































### 3.6.4 - D-U-N-S Number for all Firms

FIRM	ROLE	D-U-N-S NUMBER
Archer Western Construction, LLC	Joint Venture Member	963849901
United Infrastructure Group, Inc.	Joint Venture Member	021395108
Infrastructure Consulting & Engineering, PLLC	Lead Design Consultant	058232290
Raba Kistner, Inc.	Independent Quality Firm	061174181
Mead & Hunt, Inc.	Quality Acceptance Inspection & Testing	066862558
Construction Support Services, LLC	Pre-Design Surveys	146508721
Ramey Kemp & Associates, Inc.	Traffic Engineering Support	841962327
GEL Engineering, LLC	HAZMAT Studies	137405069
GEL Solutions, LLC	SUE	137405168
GeoEngineers, Inc.	Support Geotech Engineers / Designers	018982918
Primacq Group, Inc.	Right-of-Way Acquisition	606438831
Wi-Skies, LLC	Lighting Design	029045724
J. Bragg Consulting, Inc.	Signing	081039220



## APPENDIX E: Organizational Conflict of Interest Certifications

1. *Archer Western Construction, LLC*
2. *United Infrastructure Group, Inc.*



# 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

05/13/2020

\_\_\_\_\_  
Date

\_\_\_\_\_  
Andrew Douglas, Vice President

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Archer Western Construction, 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:

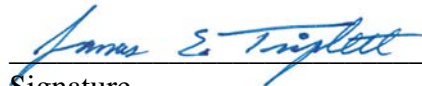
  X   Determined that no potential organizational conflict of interest exists.

       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

04/22/2020

Date

James E. Triplett

Print Name

United Infrastructure Group, 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.

\_\_\_\_\_

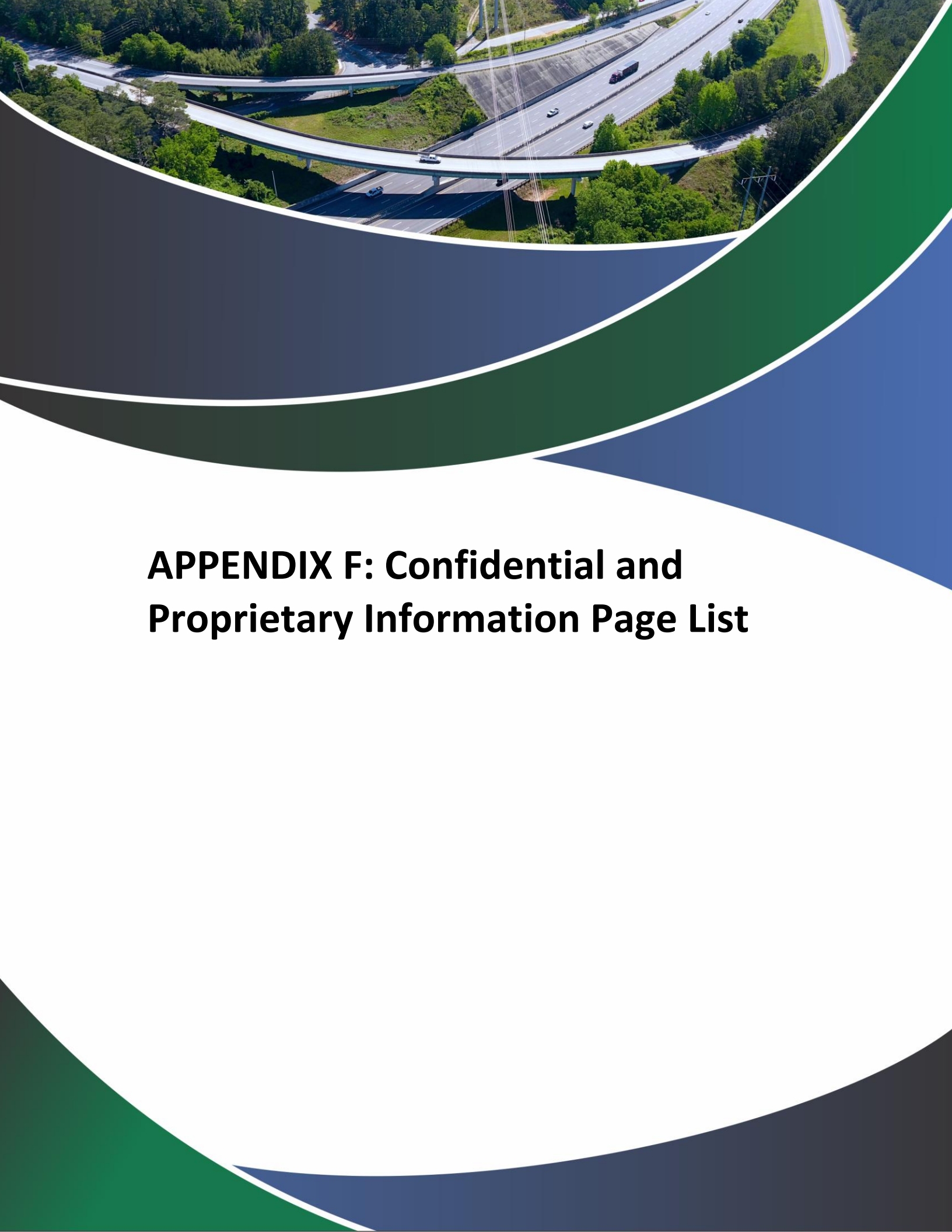
Name

\_\_\_\_\_

Phone

\_\_\_\_\_

Company



## **APPENDIX F: Confidential and Proprietary Information Page List**



## **APPENDIX F (RFQ 3.1.5)**

### **Confidential and/or Proprietary Information Page Numbers**

The following section of this SOQ is considered confidential and should not be disclosed under the South Carolina Freedom of Information Act.

**Table of Questions** .....Narrative Page 10

#### **Appendix C – Quality of Past Performance**

Table of Questions .....Appendix C, Cover Sheet

Quality of Past Performance Forms .....Appendix C, Pages 1-3

#### **Appendix D – Legal & Financial**

AUJV Signed Affidavit

JV Bond Letter

JV Teaming Agreement

JV Liability Statement



## APPENDIX G: Addendum Acknowledgement Forms

1. [Addendum 1](#)
2. [Addendum 2](#)

## **NOTICE OF RECEIPT**

**Carolina Crossroads Phase 1 – Colonial Life Blvd.  
Design-Build – Project ID P039718  
Richland and Lexington Counties**

### **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

April 15, 2020

\_\_\_\_\_  
Date

Andrew Douglas

\_\_\_\_\_  
Printed Name

For: Archer-United JV

\_\_\_\_\_  
Design-Build Team Name



**NOTICE OF RECEIPT**  
**Carolina Crossroads Phase 1 – Colonial Life Blvd.**  
**Design-Build – Project ID P039718**  
**Richland and Lexington Counties**

**Addendum 2**

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

April 20, 2020

  
\_\_\_\_\_  
Date

Andrew Douglas

  
\_\_\_\_\_  
Printed Name

For: Archer-United JV

  
\_\_\_\_\_  
Design-Build Team Name





## **APPENDIX H: Reference Forms**

*1. Key Individual References*

*2. Contractor / Designer References*

Email	First Name	Last Name	Key Individual Name	Project Name	Role of Key Individual	Team
<a href="mailto:burtond@scdot.org">burtond@scdot.org</a>	Daniel	Burton	Billy Hardwick	US 21 over Harbor River Bridge Replacement	Project Manager	United/ICE
<a href="mailto:rwbaucom@ncdot.gov">rwbaucom@ncdot.gov</a>	Rick	Baucom	Billy Hardwick	Monroe Bypass	Structural Manager	United
<a href="mailto:dickinsorc@scdot.org">dickinsorc@scdot.org</a>	Robert	Dickinson	Billy Hardwick	Columbia Airport Expressway (formerly John N. Hardee Expressway)	Project Manager	United
<a href="mailto:sthigpen@charlestoncounty.org">sthigpen@charlestoncounty.org</a>	Steve	Thigpen	Billy Hardwick	US 17/Johnnie Dodds Boulevard Improvements	Project Manager	United/ICE
<a href="mailto:colvinld@scdot.org">colvinld@scdot.org</a>	Leland	Colvin	Billy Hardwick	I-520 Palmetto Parkway Phases I & II	Project Manager	United/ICE
<a href="mailto:RedfearnWT@scdot.org">RedfearnWT@scdot.org</a>	Tyke	Redfearn	Elham Farzam	I-77 Widening & Rehabilitation (MM 15-27)	Lead Design Engineer and Sr. Pavement Engineer	ICE/United/AWC
<a href="mailto:ReynoldsBS@scdot.org">ReynoldsBS@scdot.org</a>	Brad	Reynolds	Elham Farzam	I-26 Widening (MM 85-101)	Lead Design Engineer and Sr. Pavement Engineer	ICE/United/AWC
<a href="mailto:rtritt@dot.ca.gov">rtritt@dot.ca.gov</a>	Raymond	Tritt	Elham Farzam	I-15/I-215 Devore Interchange	Procurement Advisor / VE Consultant	LPA Group
<a href="mailto:bweber@scpa.com">bweber@scpa.com</a>	Butch	Weber	Elham Farzam	Hugh Leatherman Sr. Container Terminal (HLT)	Project Manager / Senior Pavement Engineer	ICE
<a href="mailto:jmosher@sugarcreekllc.us">jmosher@sugarcreekllc.us</a>	Jeff	Mosher	Elham Farzam	I-77 Express Lanes	Design Manager / Sr. Pavement Engineer	United/ICE
<a href="mailto:ReynoldsBS@scdot.org">ReynoldsBS@scdot.org</a>	Brad	Reynolds	Gus Kretschmer	I-26 Widening (MM 85-101)	Utility Relocation Manager	ICE/United/AWC
<a href="mailto:awelch@dot.ga.gov">awelch@dot.ga.gov</a>	Butch	Welch, Jr.	Gus Kretschmer	I-285 / SR 400 Reconstruction P3 Project (DBF)	Utility Coordinator	ICE
<a href="mailto:RedfearnWT@scdot.org">RedfearnWT@scdot.org</a>	Tyke	Redfearn	Gus Kretschmer	I-77 Widening & Rehabilitation (MM 15-27)	Utility Coordinator	ICE/United/AWC
<a href="mailto:ReynoldsBS@scdot.org">ReynoldsBS@scdot.org</a>	Brad	Reynolds	Gus Kretschmer	I-85 Widening Project (MM 80 to 96)	Utility Coordinator	ICE
<a href="mailto:ryggsre@scdot.org">ryggsre@scdot.org</a>	Robert	Ryggs	Gus Kretschmer	85 / 385 Gateway Project	Utility Coordinator	Michael Baker (formerly The LPA Group)
<a href="mailto:slively@dot.ga.gov">slively@dot.ga.gov</a>	Stephen	Lively	Dennis Haring	GDOT Northwest Corridor (I-75/I-575)	Construction Manager	AWC
<a href="mailto:ssweitzer@smeinc.com">ssweitzer@smeinc.com</a>	Shannon	Sweitzer	Dennis Haring	NCTA NC-540 Western Wake Expressway	Construction Manager	AWC
<a href="mailto:rsmls@ncdot.gov">rsmls@ncdot.gov</a>	Randall	Miles	Dennis Haring	NCDOT I-77 PCC Rehab	Construction Manager	AWC
<a href="mailto:frucker@itsmarta.com">frucker@itsmarta.com</a>	Frank	Rucker	Dennis Haring	City of Atlanta/H-JAIA I-285 Bridge Structures	Construction Manager	AWC
<a href="mailto:JGadsby@azdot.gov">JGadsby@azdot.gov</a>	Julie	Gadsby	Lee Robertson	Loop 202, South Mountain Freeway	Construction IQF Manager (CIQM)	RKI
<a href="mailto:Fowlerjm@scdot.org">Fowlerjm@scdot.org</a>	Joseph	Fowler	Lee Robertson	CRM-West	Resident Construction Manager	Fluor Corp
<a href="mailto:DWhittington2@azdot.gov">DWhittington2@azdot.gov</a>	Del	Whittington	Lee Robertson	SR-89, Hell Canyon Bridge	Senior Resident Engineer / Team Leader	AECOM



### References from Previous Working Relationships Table

Email	First Name	Last Name	Company Name	Project Name	Team
<a href="mailto:parrissl@scdot.org">parrissl@scdot.org</a>	Shane	Parris	SCDOT	SC 150 Emergency Bridge	United/ICE
<a href="mailto:Kenyon.warbritton@modot.gov">Kenyon.warbritton@modot.gov</a>	Ken	Warbritton	MODOT	Safe & Sound Bridge (554 Bridges)	United / Kiewit / Traylor (JV) & LPA (engineer)
<a href="mailto:sthigpen@charlestoncounty.org">sthigpen@charlestoncounty.org</a>	Steve	Thigpen	Charleston County	Palmetto Commerce Parkway, Phase II	United/ICE
<a href="mailto:cbarclay@ncdot.gov">cbarclay@ncdot.gov</a>	Carl	Barclay	NCDOT	NC 540 Western Wake Freeway	AWC/ICE
<a href="mailto:sthigpen@charlestoncounty.org">sthigpen@charlestoncounty.org</a>	Steve	Thigpen	Charleston County	US 17 / Johnnie Dodds Blvd. Improvements	United/ICE/Banks
<a href="mailto:parrissl@scdot.org">parrissl@scdot.org</a>	Shane	Parris	SCDOT	Package C Bridge Replacements	United/ICE/Banks
<a href="mailto:greenfk@scdot.org">greenfk@scdot.org</a>	Keith	Green	SCDOT	Package D Bridge Replacements	United/ICE/Banks
<a href="mailto:parrissl@scdot.org">parrissl@scdot.org</a>	Shane	Parris	SCDOT	Package E Bridge Replacements	United/ICE
<a href="mailto:reynoldsbs@scdot.org">reynoldsbs@scdot.org</a>	Brad	Reynolds	SCDOT	S 176 Emergency Bridge Replacement over Cannons Creek	United/ICE
<a href="mailto:redfearnwt@scdot.org">redfearnwt@scdot.org</a>	Tyke	Redfearn	SCDOT	Emergency Bridge Package 4	United/ICE
<a href="mailto:robsamm@hargray.com">robsamm@hargray.com</a>	Rob	McFee (Former County Engineer)	Beaufort County	Perryclear Bridge Replacement	United/ICE
<a href="mailto:bboisvert@walshgroup.com">bboisvert@walshgroup.com</a>	Ben	Boisvert	PennDOT	Rapid Bridge Replacement Program	AWC/ICE
<a href="mailto:dvanmeter@dot.ga.gov">dvanmeter@dot.ga.gov</a>	Darryl	VanMeter	GDOT	Northwest Corridor Express Lanes	AWC/ICE
<a href="mailto:redfearnwt@scdot.org">redfearnwt@scdot.org</a>	Tyke	Redfearn	SCDOT	I-77 Widening / Rehabilitation	AWC/United/ICE
<a href="mailto:rwbaucom@ncdot.gov">rwbaucom@ncdot.gov</a>	Rick	Baucom	NCDOT / NCTA	Monroe Bypass	United/ICE
<a href="mailto:redfearnwt@scdot.org">redfearnwt@scdot.org</a>	Tyke	Redfearn	SCDOT	US 21 Bridge over Harbor River	United/ICE
<a href="mailto:ESTehmeyer@SCSPA.com">ESTehmeyer@SCSPA.com</a>	Ed	Stehmeyer	SCPA	HLT – Wall Remediation & Site Work	AWC/United/ICE
<a href="mailto:jhutto@northcharleston.org">jhutto@northcharleston.org</a>	Jim	Hutto	City of North Charleston	Future Drive / Northside Dr.	United/ICE
<a href="mailto:frank.carson@berkeleycountysc.gov">frank.carson@berkeleycountysc.gov</a>	Frank	Carson	Berkeley County	Nexton Parkway / I-26 Widening	United/ICE/Banks
<a href="mailto:rshaw@ncdot.org">rshaw@ncdot.org</a>	Ramie	Shaw	NCDOT Division 11	I-77 Pavement Rehabilitation (I-5912)	AWC/ICE
<a href="mailto:fowlerjm@scdot.org">fowlerjm@scdot.org</a>	Joseph	Fowler	SCDOT	I-85 Widening (MM 69-77)	AWC/ICE
<a href="mailto:burnsjm@scdot.org">burnsjm@scdot.org</a>	John	Burns	SCDOT	SC 277 Bridge Replacement over I-77	AWC/United/ICE
<a href="mailto:reynoldsbs@scdot.org">reynoldsbs@scdot.org</a>	Brad	Reynolds	SCDOT	I-26 Reconstruction (MM 85-101)	AWC/United/ICE

### References from Work History Forms

Email	First Name	Last Name	Company Name	Project Name	Team
<a href="mailto:burnsjm@scdot.org">burnsjm@scdot.org</a>	John	Burns	SCDOT	I-77 Widening & Rehab. (MM 15-27)	AWC/ICE
<a href="mailto:jhancock@dot.ga.gov">jhancock@dot.ga.gov</a>	John	Hancock	GDOT	Northwest Corridor Express Lanes	AWC/Parsons
<a href="mailto:greg.evans@dot.state.fl.us">greg.evans@dot.state.fl.us</a>	Greg	Evans	FDOT	I-95 DB Overland Bridge	AWC/RS&H
<a href="mailto:rdrochelle@ncdot.gov">rdrochelle@ncdot.gov</a>	Roger	Rochelle	NCDOT	I-77 Express Lanes	United/LBG
<a href="mailto:rwbaucom@ncdot.gov">rwbaucom@ncdot.gov</a>	Rick	Baucom	NCDOT / NCTA	Monroe Bypass	United/RK&K
<a href="mailto:reynoldsbs@scdot.org">reynoldsbs@scdot.org</a>	Brad	Reynolds	SCDOT	I-26 MM 85 to 101 (SEGMENTS 1 & 3)	ICE / Archer United, JV
<a href="mailto:redfearnwt@scdot.org">redfearnwt@scdot.org</a>	Tyke	Redfearn	SCDOT	I-77 Widening & Rehab. (MM 15-27)	ICE/AWC
<a href="mailto:mattoxjh@scdot.org">mattoxjh@scdot.org</a>	James	Mattox	SCDOT	SC 277 over I-77 Bridge Replacement	ICE/AWC
<a href="mailto:reynoldsbs@scdot.org">reynoldsbs@scdot.org</a>	Brad	Reynolds	SCDOT	I-85 Widening Project (MM 80 to 96)	ICE / Blythe/Zachry, JV
<a href="mailto:awelch@dot.ga.gov">awelch@dot.ga.gov</a>	Butch	Welch, Jr.	GDOT	I-285/SR 400 Interchange Improvements	ICE/NPC

