



SR 30 (US 98) ELEVATED ROADWAY AT TYNDALL AFB ENTRANCE

Contract E3Q67 | FPID 43168415201



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Superior Construction Company Southeast, LLC (SUPERIOR), in association with GAI Consultants, Inc. (GAI) – The SUPERIOR Team – is pleased to submit this Letter of Interest (LOI) to provide Design-Build (DB) services for the SR 30 (US 98) Elevated Roadway east to west of Tyndall Air Force Base (Tyndall AFB) Entrance in Bay County.

The SUPERIOR Team has a proven performance record for providing construction quality, economic value, and innovative solutions. We are committed to continuing our successful partnership with FDOT District 3 on this very important project. Our Team offers the following:

- Military/Airfield Experience:** Our prior projects involve a work mix nearly identical to this DB project, *including three recent projects fronting military airfields (Hurlburt Field, Florida Air National Guard at Jacksonville International Airport, and Mayport Naval Air Station).* This experience supplements our already extensive list of projects requiring coordination with airports, numbering more than 15 within Florida.
- Exceptional Performance:** We exceed expectations. SUPERIOR regularly achieves CPPR ratings over 100 and we complete our projects ahead of schedule. *The SUPERIOR Team has received 40 awards for design, construction, and safety performance in the last five years (FICE, FTBA, ACI, DBIA, ASBI, ENR).*
- Innovative Solutions and Economic Value:** The SUPERIOR Team has a history of bringing project-enhancing innovative solutions and cost savings on similar DB projects. *We have saved FDOT almost \$200 Million over the last 15 years on similar projects.*
- Well-Coordinated, Comprehensive MOT Plan:** Our MOT plan will be based upon lessons learned on the recent Hurlburt Field interchange project, recognizing the unique requirements of base access, security, and peak traffic management. Construction of the Louisiana Avenue overpass will be prioritized, enhancing connectivity between both sides of the base. This will allow flexibility for the SUPERIOR Team and Tyndall AFB forces to mutually fulfill our individual missions.

Figure 1 – Key Challenges & SUPERIOR Team Approach

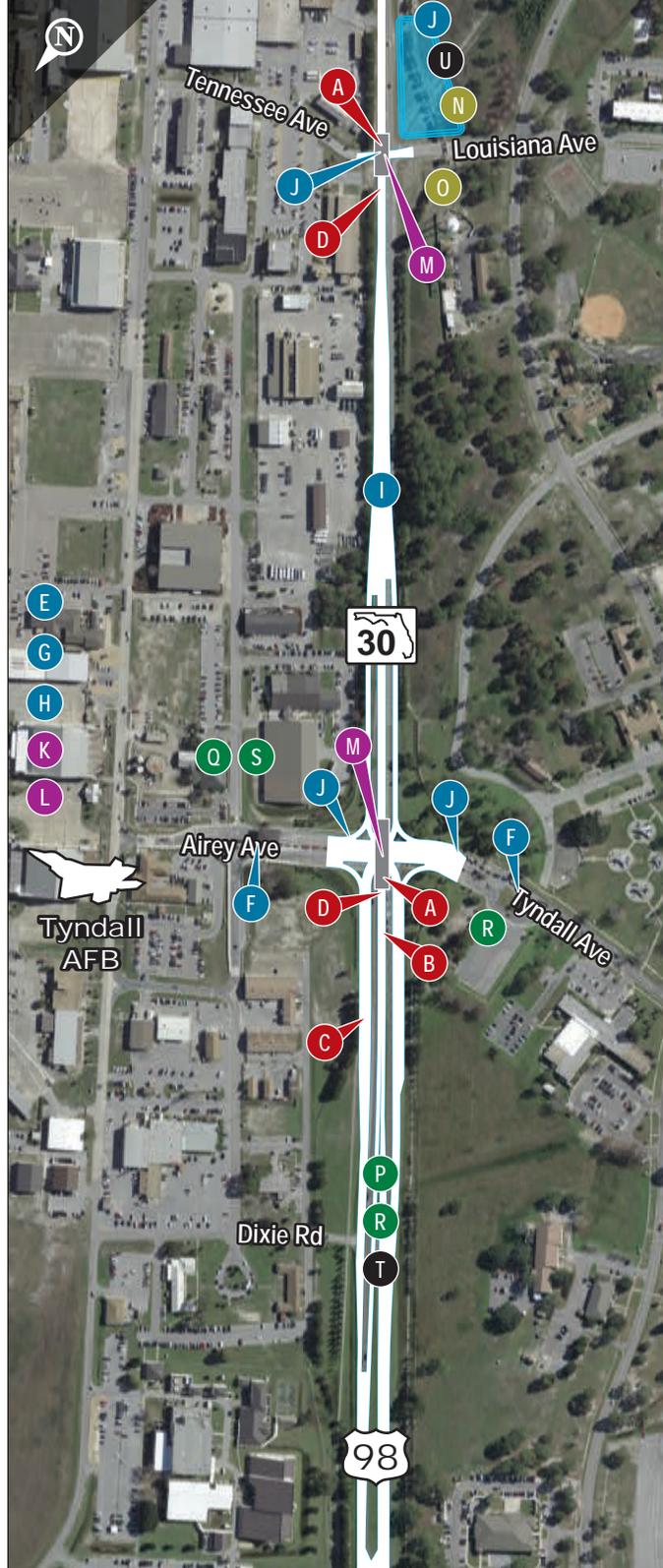


Table 1 – Key Challenges & SUPERIOR Team Approach

Challenge	SUPERIOR Team Approach
Geotechnical Conditions	A Bridge piles B Roadway surcharge C Roadway muck removal D Settlement of 1" or more for MSE walls
Air Force Base Coordination	E Work closely with Tyndall AFB representatives F Obtain security screening for construction personnel G Obtain dig permit with Tyndall AFB Civil Engineer prior to construction H Use Tyndall AFB-approved radio frequencies during construction I Construction staging outside of Tyndall AFB gates J Secure site from Tyndall AFB with security fencing
Glide Path Restrictions	K Coordination with FAA L Conform to Tyndall AFB Flightline M Provide cranes with a maximum height of 180' with properly flagged and lit boom tips
Tyndall AFB Communications	N Adjust pond locations due to communication line O Design around Tyndall AFB communications lines
Effective MOT for Traffic Patterns and Special Events	P Hurricane evacuation route Q Emergency vehicle access at all times R Coordination with special events S Access to Tyndall AFB at all times
Other Important Elements	T Provide pedestrian and bicycle safety during construction U Use of dry ponds to conform with Bird Aircraft Strike Hazard
Meeting Schedule Milestones	★ Develop a comprehensive schedule to meet the 630-day construction schedule ★ Right-of-way cleared for construction by Dec 15, 2018 ★ Design phase submittals

Section 1 – Design-Build Firm Name and Qualifications

The contracting entity for this project will be Superior Construction Company Southeast, LLC. Our Team's prequalifications are presented in the accompanying organization chart.

Section 2 - Past Performance Evaluations, Design-Build Project Experience, Organization, Staffing

2.1 Contractor Grades

Our staff and crew members take great pride in their work, as evidenced by our exceptional past performance ratings. SUPERIOR's workforce is committed to maintaining safe work zones, providing quality workmanship in a timely manner, and minimizing adverse impacts to the traveling public. Our average Contractor Past Performance Rating (CPPR) for all FDOT projects completed in the last five years is 100. Individual CPPR scores for our similar projects can be found in **Tables 2, 3, and 4**.

2.2 Professional Consultant Grades

GAI has gained significant experience with FDOT as EOR on many DB projects, and has worked closely with FDOT and CEI staff throughout design and construction to achieve excellent CPPR grades on every project. This is further demonstrated by GAI's average consultant performance grade of 3.4 on conventional projects.

2.3 Performance History with Other States or Agencies if None with Department N/A

2.4 Design-Build Project Experience of the Contractor and Professional Consultant

The SUPERIOR Team has a strong history, both individually and together, of delivering successful DB projects in Florida. Together, we have successfully completed the \$66M I-295/Collins Road Interchange DB; the \$33M I-295 East Beltway Project; and the \$27M I-10/Hammond Blvd. Interchange DB for District 2. Our numerous DB projects, listed in **Table 2**, illustrate the unparalleled DB project experience our Team brings to District 3. We also have a history and reputation of providing innovative and cost savings solutions, including:

- SR 9B Phase 2 DB (SUPERIOR) - *Reconfiguration of the SR 9B/I-95 Interchange - \$10M in Savings*
- SR 9B Phase 1 DB (GAI) - *Modification to the 9B roadway profile - a reduction of over 1 million CY of embankment - \$7M in Savings*
- SR 115/MLK Interchange DB (GAI) - *Modification to the SR 115/Phoenix Avenue/Port Entry Interchange - \$10M in Savings*
- I-95/I-4/US-92 Interchange DB (GAI) - *Elimination of major right-of-way acquisition and significant earthwork, MSE walls and bridge length - \$40M in Savings*
- Heckscher Drive CSI (SUPERIOR/GAI) - *Reconfiguration of the NB off-ramp - \$1M in Savings*

Table 2 – Design-Build Project Experience

Award-Winning Project

SUPERIOR | SR 30 (US 98) at Cody Avenue, FDOT D3, \$13.9M, 2016, CPPR 96
 The signature feature of this project is a 191', single-span, pre-tensioned, prestressed concrete girder Single Point Urban Interchange (SPUI) bridge elevating four lanes of SR 30 over Cody Avenue/Champaign Street and includes all necessary ramps and connections to the existing 4-lane rural typical section along SR 30. Also included are pedestrian facilities, full signalization, stormwater facilities, and lighting. **FICE Outstanding Design-Build Project Award.** *Ref: Ed Hudec (850) 330-1617. Key Staff: Pete Kelley, Curtis Long, Jacob Lawrence*



SUPERIOR, GAI (EOR) | I-295 East Beltway at UNF Drive, FDOT D2, \$33M, 2006, CPPR 96
 Design of SPUI roadway for Segment 6, a four-lane divided interstate highway from north of the JTB interchange to south of Beach Blvd. Scope included stormwater design and permitting, two 2,000' bridges (AASHTO girder), and JEA utility design (water & wastewater facilities). **ACI Significant Concrete Structure Award.** *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long, Sylvester Asiamah, Kevin Leadbetter*



SUPERIOR, GAI (CSI) | I-295/Heckscher Drive Interchange, FDOT D2, \$21M, 2016, CPPR 102
 New ramp and bridge construction connecting New Berlin Road, Heckscher Drive and the TraPac Cargo Terminal to I-295. SUPERIOR and GAI collaborated to implement a CSI resulting in a \$1 Million savings to the project. Project scope included 47,500 SY of concrete paving and IMR modification. **FTBA Best in Construction - Interchange, ACI Significant Concrete Structure.** *Ref: Will Lyons, PE (904) 360-5574. Key Staff: Pete Kelley, Jeremy Andrews, Sylvester Asiamah, Kevin Leadbetter, Randy Miner, Bobby Jamieson*



SUPERIOR, GAI (CEI) | I-295 Interchange/Collins Road, FDOT D2, \$66M, 2014, CPPR 104
 Construction of a collector/distributor system to alleviate traffic congestion and improve safety: 150,000 SY of concrete pavement, 6 miles of new concrete pavement on I-295, four new bridges, one bridge widening, 12 miles of concrete barrier wall, and new ITS. MOT plan effectively routes over 125K vehicles per day. **DBIA Transportation Merit Award, FTBA Best in Construction - Interstate.** *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long, Kevin Leadbetter*



SUPERIOR, GAI (CEI) | I-10 Marietta Interchange at Hammond Blvd., FDOT D2, \$27M, 2016, CPPR 104
 The new interchange was constructed at Hammond Blvd. with on- and off-ramps to and from I-10. An overpass was constructed across I-10, connecting Hammond Blvd. on the south side of I-10 to Devoe Street on the north side. Hammond Blvd. was widened from two to four lanes with turn lanes to accommodate the increased traffic volume of the new interchange. GAI worked with SUPERIOR as the CEI on this important contract. *Ref: Jessica Tippett, PE (904) 360-5504. Key Staff: Pete Kelley, Curtis Long, Kevin Leadbetter*



SUPERIOR | SR 9B, US 1 to I-95, FDOT D2, \$95M, 2016, CPPR 96
 Two mile extension of SR 9B and the construction of interchanges at I-95 and US 1, eight new bridges, two million CY of embankment, and 200,000 SY of concrete pavement. Successfully utilized the FDOT's ATC process to reconfigure the I-95/SR 9B interchange, saving over \$10 million in construction costs, and allowing single-phase construction. **ENR Award of Merit, DBIA Merit Award, ACI Significant Concrete Structure Award.** *Ref: Jeff Daugharty, PE (904) 360-5575. Key Staff: Jeremy Andrews, Pete Kelley, Curtis Long*



GAI (EOR), UES (GEO) | I-95 / I-4 / US 92 Systems Interchange, FDOT D5, \$205M, Completion 2018
 Project includes reconfiguration of the systems interchange of I-95 with I-4 and with US-92, along with widening of I-95 from 4 to 6 lanes from SR 44 to US 92. GAI's innovative redesign of the interchange resulted in saving over \$20M of ROW acquisition. Additional scope items include drainage improvements, bridge widening/replacement, and ITS modifications. This project fronts the Daytona International Airport, and required extensive coordination with both the FAA and airport operations for crane use and permanent construction. *Ref: Paul Wabi, PE (386) 740-3594. Key Staff: Luis Tellechea, Steve Boylan, Bobby Jamieson, Randy Miner, Ali Noorollahi, Judson Fohr, Randy Miner, Kevin Leadbetter, John Murphy*



GAI (EOR), UES (GEO) | Veterans Expressway Widening, FTE, \$51M, Completion 2018
 This major highway project increases capacity on the Veterans Expressway toll road between the Sugarwood Toll Plaza and Van Dyke Road. This project will introduce express lanes into the middle of a highly urbanized section of a 20-mile system. One general use lane and one express lane will be added in each direction. This project lies within the primary flight path for Tampa International Airport, and coordination with the FAA was required for use of cranes and controlling heights. *Ref: Tom Neyer, PE (407) 532-3999. Key Staff: Luis Tellechea, Steve Boylan, Sylvester Asiamah, Judson Fohr, Lloyd Gurr, Bobby Jamieson, Randy Miner, John Murphy, Kevin Leadbetter, Ali Noorollahi, John Murphy*



2.5 Similar Types of Work Experience

Additional relevant work experience directly applicable to this project is offered in **Tables 3 and 4**.

Table 3 – Similar Project Experience

Project	Value	Design-Build	Widening/Reconst.	New Interchange	Major Interchange	Drainage Const.	Permitting/Env.	Complex MOT	Utility Coord.	Adj. Proj. Coord.	ITS
SUPERIOR, GAI (EOR) I-295 Widening (I-10 to Commonwealth Avenue), FDOT D2, 2014 <i>Key Staff: Sylvester Asiamah, Randy Miner, Curtis Long</i>	\$11M		✓			✓	✓	✓	✓	✓	✓
SUPERIOR I-95 Widening, Flagler County, FDOT D2, 2007 <i>Key Staff: Pete Kelley, Curtis Long</i>	\$81M		✓		✓	✓	✓	✓	✓	✓	✓
GAI (EOR) SR 9B/US 1 to I-295, FDOT D2, 2013 <i>Key Staff: Kevin Leadbetter, Bobby Jamieson, Sylvester Asiamah, Randy Miner, Hazem Ibrahim, John Murphy</i>	\$94M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GAI (EOR), UES (Geo.) SR 115 / 21st Street Interchange, FDOT D2, 2014 <i>Key Staff: Kevin Leadbetter, Bobby Jamieson, Sylvester Asiamah, Randy Miner, Hazem Ibrahim, John Murphy</i>	\$31M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GAI (EOR), UES (Geo.) CR 210 at US 1, FDOT D2, 2014 <i>Key Staff: Bobby Jamieson, Randy Miner, Sylvester Asiamah, Kevin Leadbetter, John Murphy</i>	\$10M	✓	✓		✓	✓	✓	✓	✓	✓	
SUPERIOR Beach Blvd / Kernan Blvd Interchange, JTA, 2009 <i>Key Staff: Pete Kelley, Curtis Long</i>	\$32M	✓	✓	✓	✓	✓	✓	✓	✓	✓	
SUPERIOR Nocatee Parkway over US 1, PARC Group, 2011 <i>Key Staff: Pete Kelley, Curtis Long</i>	\$27M		✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 4 – Additional Similar Project Experience

Award-Winning Project

SUPERIOR | SR 30 at SR 368 Flyover, FDOT D3, \$68M, Complete 2019, CPPR 100 (Current Score)
Construction of a grade separated intersection with six independent structures, including two elevated railroad crossings. Improvements include roadways, storm drainage, lighting, signalization, ITS, and utility relocations. Structures work includes steel tub girders, 72" prestressed concrete u-beams, 40,000 LF of 24" prestressed concrete piling, and 128,000 SF of MSE walls. CSI replaced 700' of parallel elevated structures with elevated roadway and MSE Walls, resulting in a project savings of \$2M. *Ref: Ed Hudec (850) 330-1617. Key Staff: Pete Kelley, Curtis Long, Evan Lawrence, Tony Arabia, Alex Arabia, Seth Hall*



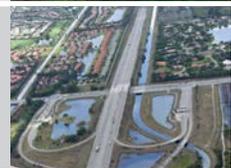
SUPERIOR | I-295 / JTB Interchange, FDOT D2, \$92M, 2009, CPPR 98
Construction of multi-level interchange including 6 new steel tub girder flyover structures, 95,000 SY of concrete pavement, and 1.4 million CY of embankment for new ramp construction. The existing bridges and median on SR 202 were also widened to accommodate four travel lanes in the westbound direction and three travel lanes in the eastbound direction. SR 9A was also widened to accommodate three travel lanes. Self-performed earthwork, drainage, roadway base, pile driving substructure, and superstructure for all bridges. **FTBA Major Interchange Award.** *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long*



SUPERIOR | I-95 / I-295 / SR 9A North Interchange, FDOT D2, \$50M, 2010, CPPR 104
Project included a 2,256 LF variable depth post-tensioned segmental flyover, allowing for high speed transition from I-95 SB to I-295 EB. The new flyover consists of 234 segments over 10 spans with a total width of 49' and more than 10,000 CY of concrete, 2 million pounds of reinforcing steel, and over 1 million LF of post-tensioning strand. The substructure consists of nine intermediate bents and two end bents. Each bent is supported with a series of 30" precast concrete piling. Temporary cofferdams allowed installation of supporting footers below grade upon which fared support caps were built. **ASBI Award of Excellence, FTBA Best in Construction - Major Bridge, ACI Significant Concrete Structure Award.** *Ref: Carrie Stanbridge, PE (386) 961-7730. Key Staff: Pete Kelley, Curtis Long, Jacob Lawrence*



GAI (EOR) | Turnpike Widening (Atlantic Avenue to Boynton Beach Blvd), FTE, \$75M, Complete 2024
The Turnpike will be widened from six to ten lanes, including two tolled express lanes using variable tolling to manage congestion and assure quality level of service. This project has extensive involvement with both Florida Gas Transmission (FGT) and the Lake Worth Drainage District who have major facilities bordering the corridor. The project includes rework of the Boynton Beach Blvd. interchange and conversion of existing tolling to all-electronic collection. *Ref: Marco Barbarosa, PE (407) 532-3999. Key Staff: John Saunders, Sylvester Asiamah, Steve Boylan, Judson Fohr, Kevin Leadbetter, Randy Miner, Ali Noorollahi, Jim Schlottman, DJ Silverberg, Anna Zhang*



GAI (Original Design & Design-Build RFP) | Wekiva Pkwy Section 6, FDOT D5, \$215M, 2015
The Wekiva Parkway (SR 429) project involves the construction of the Wekiva River Crossing, a nationally designated wild and scenic river. GAI's design effort includes 21 new bridge structures, one of which is a new bridge over the Wekiva River, and 5,700' of new wildlife bridge structures so animals can safely pass between the Seminole State Forest and Rock Springs Run State Reserve. *Ref: Kevin Moss, PE (386) 943-5255. Key Staff: Pete Kelley, Curtis Long, Jeremy Andrews, Steve Boylan, Lloyd Gurr, Sylvester Asiamah, Bobby Jamieson, Randy Miner, Jim Schlottman, Abner Serrano, DJ Silverberg, John Murphy, Jim Murray*



GAI (EOR) | I-95 at I-10 Operations Improvements, FDOT D2, \$117M, Complete 2020
GAI is serving as EOR to provide design and construction services for operational improvements to the existing interchange at I-95 and I-10 in Duval County, Florida. The \$117 Million DB project includes the widening of the Fuller Warren Bridge over the St. Johns River for an additional lane and a pedestrian path. Our innovative design includes two straddle bents to support the third-level flyover ramp connecting I-95 NB to I-10 WB. *Ref: Craig Teal, PE (386) 961-7800. Key Staff: Bobby Jamieson, Jim Murray, Ali Noorollahi, Randy Miner, Sylvester Asiamah, Judson Fohr, Lloyd Gurr, Kevin Leadbetter, John Murphy*



2.6 Environmental Record

SUPERIOR has zero environmental violations from WMD, FDEP, or EPA during the last 5 years. The Category 7 component of our CPPR rating over this same time is 11/12. Our Team's Health Safety and Environmental Manager, Seth Hall, GSP, will develop a project specific environmental plan ensuring the project remains consistent with the PD&E commitments and permit requirements. Our environmental records on some of FDOT's most challenging interchange projects include the following:

- I-295/Heckscher Drive Interchange – **Category 7 Score 12/12**
- I-95/I-295 / SR 9A North Interchange – **Category 7 Score 12/12**
- I-295 Interchange/Collins Road – **Category 7 Score 12/12**
- I-10/Hammond Blvd. Interchange – **Category 7 Score 12/12**

2.7 Contractor Experience Modification Rating

Our history of providing a safe and healthy workplace for employees and the traveling public assures you we will deliver this project safely. SUPERIOR enjoys a superb current year Experience Modifier Rating (EMR) of 0.50, validating our safety commitment. This rating demonstrates we have 50% fewer workplace accidents than the industry average. We achieve this through a pledge to safety starting at the top which is instilled through all levels. Field managers conduct weekly tool box talks, daily safety job briefings, and new hire orientations.

Our employees are involved in our safety program by dedicating themselves to understanding safety is a behavior and is ultimately their responsibility. This is reinforced through focused training and education on the recognition of hazards and methods of abatement. Our SUPERIOR commitment to safety has been recognized with the **2013 and 2015 American Road & Transportation Builders Association Excellence in Safety Award, and 6 consecutive FTBA safety awards.**



2.8 Design-Build Firm Organization

SUPERIOR will execute the prime contract for DB services with District 3, provide and lead project management, and perform all bridge, concrete, and roadway construction activities. SUPERIOR is a Licensed Florida General Contractor founded in Gary, Indiana, in 1938 and has been a committed partner to FDOT for over 30 years. We are an ENR Top 400 Contractor and consistently rank among the leading bridge contractors in the nation, specializing in constructing complex bridge projects. **SUPERIOR has completed, or is actively working on, 27 DB projects totaling more than \$842 Million, and in the last five years has completed over \$1.3 Billion in heavy civil construction projects.**

GAI is the lead designer and will provide roadway, structures, environmental and utility coordination services. **GAI has completed, or is actively working on, 35 DB projects for FDOT as well as 39 DB projects in Florida in the past ten years, with a total value of over \$780 Million.** GAI and our subconsultant partners are prequalified in all the required design categories and offer District 3 unparalleled experience working together on DB projects.

2.9 Design-Build Firm Staffing Plan

The SUPERIOR Team includes not only the same firms, but many of the same key design and construction staff members from the successful similar projects noted in **Tables 2, 3 and 4**, including the recently completed SR 30 (US 98) at Cody Avenue Project and the SR 30 at SR 368 Flyover Project estimated to complete mid 2019. This highly competent team of professionals will finish strong and transition well into the project at Tyndall AFB, as construction is not anticipated to begin until early 2019. These individuals have significant DB and airfield coordination experience and have demonstrated an excellent ability to work together to solve construction and design issues quickly. Our key personnel on this project are identified in **Table 5**, with detailed resumes accompanying this LOI.

Table 5 – Design-Build Team Staffing (continued on following page)

***Key Staff - Resume Included**

Executive Committee – Pete Kelley, Kevin Leadbetter, PE. These senior staff members of SUPERIOR and GAI, respectively, will provide general direction and oversight, and will be integrally involved in solving any significant project challenges. The Executive Committee will fully support the project management team to guarantee a successful completion and provide proven leadership in establishing project policies, critiquing schedules, ensuring sufficient resources, and demanding safety, quality, and environmental stewardship woven into every project discipline. They will assist with addressing contractual issues if necessary, conduct quarterly progress meetings with FDOT management, participate in periodic project meetings, and resolve any major project issues. Quality, Safety, and Environmental managers will report directly to the Executive Committee, allowing these three important aspects of the project to act independently from the project management team.

Project Principal – Curtis Long, CGC. Curtis is a proven operational leader with over 22 years of experience at all management levels. He has been personally involved with every project SUPERIOR has constructed in District 3. He currently leads day-to-day operations with the on-site management teams for SUPERIOR throughout Florida. He will ensure the project receives the resources necessary to ensure success. He manages owner/client interaction, value engineering and re-design efforts, assists with project planning and scheduling, subcontractors, unforeseen work, and construction conflict resolution. He provides constructability reviews for major project estimates while leading the estimating and construction effort on emergency projects. Curtis comes from an Air Force family and is well-versed in military chain of command and security.

Project Principal – Steve Boylan, PE. Steve has 24 years of experience in design and management, specializing in the design of major limited access and arterial roadway reconstruction and roadway rehabilitation. Steve is widely experienced in the coordination that sensitive projects require, including specific experience in managing DB projects and working with utilities, community stakeholders, and the public. He will rely on his experience in District 3 to assure major design decisions are well-coordinated and proper and adequate staff are assigned to support this project.

Construction Project Manager* – Evan Lawrence. Evan has more than 10 years of experience in the construction industry, managing various types of roadway and bridge projects. His responsibilities include leading the on-site project team, coordination with subcontractors, project scheduling, utility coordination, and maintaining owner/client relationships. He demonstrates extensive project knowledge and can plan and execute projects with complex phasing in urban areas. Since becoming a part of the SUPERIOR team, Evan has worked exclusively on FDOT projects in District 3.

Construction DB Coordinator* – Jeremy Andrews, PE. Jeremy provides a vital link between construction operations and the multi-discipline Design Team responsible for completing the FDOT's approved and Released-For-Construction (RFC) documents on schedule for active field operations. Jeremy will act as a liaison between design and construction, ensuring constructability and quality assurance, and tracking the design and permitting progress. Jeremy has extensive design management and pre-construction experience, having served as task team lead managing stakeholder risk assessment, constructability review, and schedule development for more than 16 years.

Construction Roadway Superintendent* – Jacob Lawrence. Jacob brings a unique skill set to the Roadway Superintendent, role as he has also served as both a superintendent and a project manager. Jacob has progressed rapidly as a superintendent by using his exceptional planning and problem-solving skills. Jacob grew up in the civil construction industry prior to completing his BS in Construction Management and has been employed by SUPERIOR since graduation. He has been an integral team player with 10 years' experience in grading, drainage, concrete pavement, complex MOT, and minor structures. He is responsible for developing innovative, practical and constructible solutions leading to savings in cost and duration. Jacob is responsible for productivity, quality, planning and safety, and has provided effective construction management and technical leadership on several large-scale transportation projects.

Construction Structures Superintendent* – Tony Arable. Tony has over 25 years of heavy construction experience. He has direct responsibility for managing and coordinating all SUPERIOR construction crews, including multiple foundation and pile driving crews, multiple structural concrete crews, storm drainage crews, embankment crews, grading crews, and subcontractors. His experience proves invaluable in assisting in the design and review of specialty formwork, planning large concrete pours and heavy lifts. He has constructed some of the largest structural concrete projects in Northeast Florida and has been an integral to the operational success in District 3.

Table 5 – Design-Build Team Staffing (continued)
***Key Staff - Resume Included**

Construction MOT (Specialty) Superintendent & Tyndall AFB Coordinator* – Alex Arabie. Alex has a background in survey and has managed a survey crew for SUPERIOR for 10 years. In addition to his responsibilities providing supervision to the on-site surveyors, Alex currently oversees the daily roadway operations, including coordination of field personnel, specialty subcontractors, and utility conflict avoidance and mitigation. He is a certified Advanced MOT worksite supervisor responsible for reviewing Traffic Control Plans and coordinating all major traffic shifts and lane closures in construction of the project. He will be the single point of contact in coordinating construction operations with Tyndall AFB.

Design Project Manager* – Luis Tellechea, PE. Luis brings 20 years of experience and is a successful manager of DB projects, a skilled client relations manager, transportation department manager, and senior project manager. He has designed roadways, highways, and interchanges, including pavement design, design variances and exceptions, signing and pavement markings, MOT schemes, drainage analysis, signalization, Quality Assurance/Quality Control (QA/QC) of plans, and the authoring of rehabilitation, restoration and resurfacing (RRR) reports for FDOT.

Design Roadway EOR* – Robert (Bobby) Jamieson, PE, PTOE. Bobby brings 16 years of experience specializing in highway and traffic engineering and final design of major highways. Mr. Jamieson will lead the roadway and overall design of the project to assure that FDOT criteria and standards are met throughout the project. He will use his experience from other DB projects to execute a detailed and efficient MOT plan for the project duration. Bobby will work directly with our Construction PM Evan Lawrence and Superintendents Jacob Lawrence, Tony Arabie, and Alex Arabie during design development and its successful implementation during construction.

Design Structures EOR* – Randy Miner, PE. Randy specializes in structural engineering and has served as a structural design engineer since 1995. His primary responsibilities include leading the southeast transportation structures group, providing project feasibility evaluation and concept development, design and analysis of bridge structures, preparation and checking of contract plans, and quality assurance. Randy will oversee all structural design aspects of the bridges over Tyndall Drive/Airey Avenue and over Louisiana Avenue, wraparound bridge MSE walls, traffic signal structures, and any other miscellaneous structures required on the project.

Design Geotechnical (Specialty) EOR* – Jeff Pruett, PE. Jeff has over 26 years of postgraduate geotechnical engineering and materials testing. He has been the geotechnical Engineer-of-Record for 26 FDOT projects including six ranging from \$120 Million to \$550 Million. His expertise includes deep foundation design of driven piling and drilled shafts, MSE wall and high-fill settlement, and various shallow and deep ground improvement techniques (preloading, surcharging, rigid inclusions, stone columns, etc.). Jeff will conduct a comprehensive geotechnical investigation plan during the design phase to identify any and all issues with muck soils, embankment/foundation settlement, vibration impacts, and contaminated soils along the SR 30 (US 98) project.

We are committed to exceeding FDOT's goal of 10.65% DBE and 3% non-DBE Small Business utilization. We understand District 3's commitment to DBE firms and your desire to exceed the statewide goals.

2.10 Design-Build Firm Coordination Plan

SUPERIOR Team Internal Coordination

The knowledge we have gained from the SR 30 at SR 368 interchange project, and our history working on a similar interchange improvement project at SR 30 at Cody Avenue Flyover at Hurlburt Field, has allowed us to conduct numerous internal workshops studying preliminary design concepts enhancing safety, mobility, and overall project operations during and following construction – all while reducing construction time and associated impacts to customers. Weekly progress meetings with GAI design and SUPERIOR construction staff will continue through the proposal phase into final design and throughout construction. File sharing through our innovative "Newforma" system allows for daily mirroring of files on GAI's servers for access by all team members and FDOT's PM – providing a sole source of the latest information and CADD files in a simple, user-friendly portal.

Design and construction submittals will be prioritized based on our comprehensive design and construction schedule. Evan Lawrence (Construction PM) and Jeremy Andrews, PE (DB Coordinator), will work together through procurement and into the start-up of the project, ensuring an efficient and constructable design. The high level of coordination on all of SUPERIOR's and GAI's previous DB projects and the resultant performance grades provides the strongest evidence of our effective internal coordination.

External Coordination

Coordination with FDOT

Our Team has demonstrated we can work cooperatively with FDOT to resolve any project issues arising during design or construction, as evidenced on SR 30 at SR 368 Flyover Project in Panama City, in which partnership was key in implementing a multi-million dollar CSI. This CSI entailed constructing MSE wall in lieu of bridge structure and was proactively brought to FDOT by SUPERIOR pre-construction. This allowed for improved constructability and reduced maintenance costs, with no impacts to the project schedule. SUPERIOR has also been a go-to contractor for emergency repair projects in the District when seamless coordination with FDOT and a rapid construction effort is required to restore critical infrastructure.

Pre-submittal meetings, direct contact with FDOT plan reviewers, and open communication between key members of our staff and the FDOT Design

and Construction Project Managers/CEI has resulted in rapid resolution of even the most complex issues on our DB projects. Construction Project Manager Evan Lawrence will develop a partnership with the CEI and FDOT Construction Staff, facilitating an effective flow of information and issue resolution.

Coordination with Tyndall AFB

This important stakeholder will in many ways drive the design of the project and our approach to construction. The SUPERIOR Team has assigned Alex Arabie to serve in the role of Base Liaison, providing FDOT and Tyndall AFB personnel with a single point of contact for base coordination. This will allow for consistency and a building of trust that will be the key to the project's success.

Items such as access, staging of operations, utility protection, and management of the airspace (cranes, etc.) are just a few examples of critical activities that will govern our efforts. SUPERIOR has first-hand knowledge of working in this environment as a result of our successful Hurlburt Field interchange project.

Coordination with Permitting Agencies

The SUPERIOR Team will promptly and thoroughly engage all environmental agencies, including the Northwest Florida Water Management District (NFWMD), the Florida Department of Environmental Protection (FDEP), and the U.S. Army Corps of Engineers (USACE). We will leverage our strong relationships with these agencies to work alongside FDOT's environmental permitting staff to efficiently coordinate throughout all phases of design and construction.

Coordination with Other Adjacent Department and Local Projects

The ongoing milling and resurfacing project (FPID 426950-1) should be completed well in advance of construction activities on this project. We are not aware of any other adjacent projects at this time, but we will constantly monitor both FDOT's work program and coordinate with Tyndall AFB regarding any upcoming work.

Coordination with Utility Agency Owners (UAO's)

GAI has experience working with all nine of the UAOs listed in the RFP. In addition to the Tyndall AFB communication lines – **which will NOT be impacted** – the team will clearly and regularly coordinate with other UAOs in the corridor to minimize impacts and avoid relocations. This outreach will begin on day one of the project, using concept plans delivered as part of the Technical Proposal to build a plan to work with these key stakeholders.

Section 3 - Design-Build Project Requirements and Critical Issues

The SUPERIOR Team has a full understanding of the issues behind this project as well as the commitments made to stakeholders. The primary project objective is to provide improved access to Tyndall AFB by constructing a single point urban interchange (SPUI) at the intersection of SR 30 (US 98) and Tyndall Drive/Airey Avenue. SR 30 (US 98) will also be elevated over Louisiana Avenue, thus providing a secure connection between the Flightline and the Support sides of the base. The overpasses will carry two lanes (one lane each direction) for SR 30 (US 98), along with wide shoulders for bicycles. The SPUI will feature dual left turns for the eastbound to northbound movement and the northbound to westbound movement. The minimum vertical clearance over Tyndall Drive will be 18' to accommodate Air Force activities and 16.5' over Louisiana Avenue. Although Tyndall Drive and Louisiana Avenue are not on the state highway system, we will design these bridge structures to the more stringent standard and provide horizontal offsets to retaining walls and bridge abutments that meet PPM requirements.

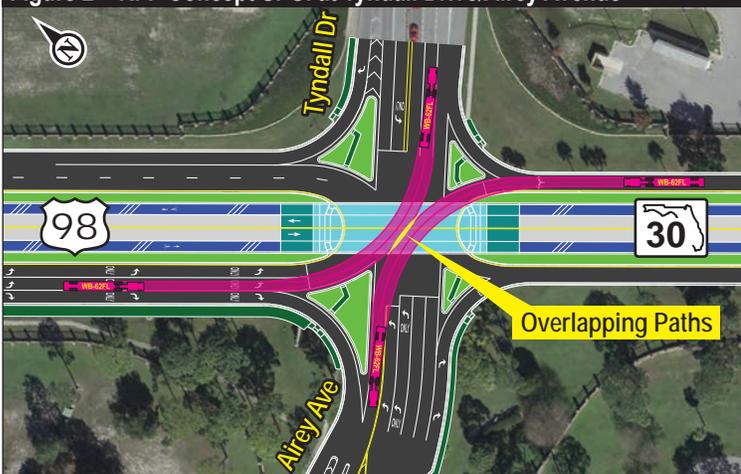
SPUI at Tyndall Drive/Airey Avenue

South of the intersection on Airey Drive, two NB lanes, two NB left turn lanes and one NB right turn lane will be provided without impacting the Support side entry gate. North of the intersection on Tyndall Blvd, one SB travel lane, one SB right turn lane, and one SB left turn lane will be provided without impacting the Tyndall AFB entry gate. All travel and turn lanes will have a minimum 12' width with provisions for a WB-62FL truck with a minimum of 5' between opposing left turn lanes. The ramps will vary from one to two lanes, and will have a design speed of 35 mph.

The SUPERIOR Team thoroughly evaluated the concept design to establish a foundation upon which to build. We discovered the RFP concept did not accommodate a WB-62FL vehicle within the SPUI envelope. As can be seen in **Figure 2**, the paths of two opposing left-turning vehicles overlap each other, resulting in an intersection that cannot manage concurrent left turns - one of the defining principles of a SPUI interchange.

To address this issue, we have developed two Alternative Technical Concepts (ATC) that will be presented to FDOT during procurement of this contract.

Figure 2 – RFP Concept SPUI at Tyndall Drive/Airey Avenue



Potential Alternative Technical Concepts (ATCs)

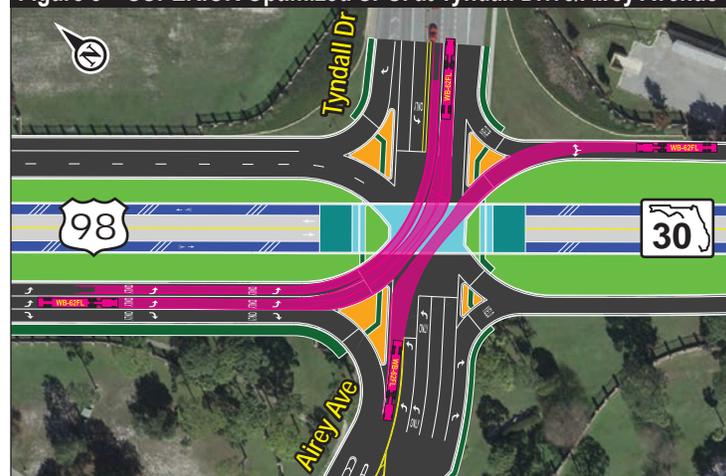
ATCs will focus on refining the concept design while meeting project goals. We will evaluate opportunities to optimize horizontal and vertical alignments. This will improve current operations, ensure the constructability of future

improvements, and reduce earthwork and retaining walls. We will endeavor to reduce impacts, including those from substandard soils and utilities. Our geometric refinements will also address the needs of a traffic control plan to safely direct motorists through the construction zones while minimizing temporary pavement and embankment. We understand significant changes to the interchange concept and geometry will require a minor PD&E re-evaluation, which will be fully accommodated within our project schedule. The SUPERIOR Team has developed two potential ATCs we will explore with District 3 through the ATC process.

ATC #1 Modified SPUI

Understanding the critical importance of avoiding utilities, the SUPERIOR Team will propose to realign the ramps and stormwater system to avoid them. The ramps would be shifted closer to the right-of-way line and then sloped toward treatment swales in the interior infields. This significantly reduces the number of drainage structures and eliminates numerous potential utility conflicts. This optimization of the SPUI will reduce the bridge lengths from 160' on the concept plans to 118' in our ATC #1 (See **Figure 3**).

Figure 3 – SUPERIOR Optimized SPUI at Tyndall Drive/Airey Avenue

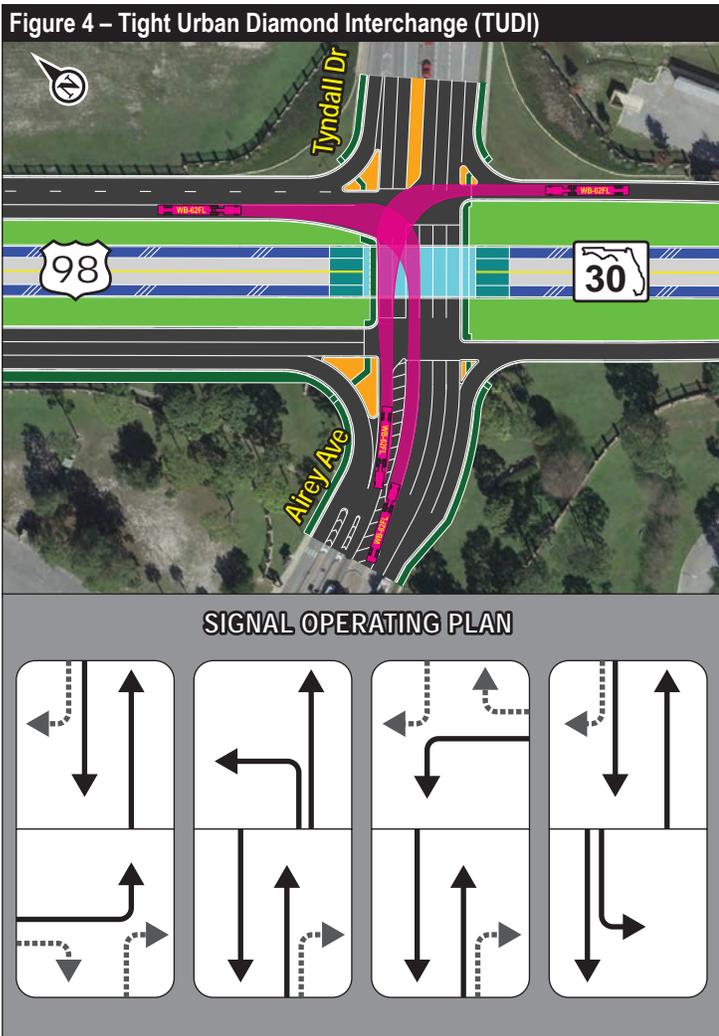


Most importantly, this ATC concept fully accommodates opposing WB-62FL vehicle movements, allowing the SPUI to function as intended. In addition to this improvement, the design also meets an 8' separation between concurrent left turns as desired within the Florida Intersection Design Guide (Section 3.13.7). This enhancement greatly improves safety through the busy intersection and improves operations as a result of an increased "comfort level" for turning traffic. As an added bonus, this ATC will allow for future widening of the SR 30 (US 98) bridge over Tyndall Drive/Airey Avenue without the need to reconstruct the on/off-ramps.

ATC #2 Tight Urban Diamond Interchange (TUDI)

Similar to the modified SPUI illustrated in ATC #1, this ATC proposes to shift the ramps closer to the right-of-way line to open the envelope at the intersection and allow for a dual signal operation (see **Figure 4 on the following page**). These signals will be closely coordinated to maximize flow.

While this configuration may not seem intuitively effective, its success lies fully in the traffic characteristics that exist at this interchange. Movements here are not balanced; it is the heavy movement to and from the Flightline side during shift changes that makes this a viable alternative. We have modeled the intersections using Synchro software and have found equal level of service to the SPUI concept and improved metering to the gates on either side of SR 30 (US 98). During the ATC process, The SUPERIOR Team



will request to utilize FDOT's existing VISSIM model to perform a more in-depth traffic analysis to demonstrate this alternative's effectiveness.

A result of ATC #2 is the significant reduction in bridge length (from the concept's 160' length to 100'). This provides a benefit at both the bridge and approaches, saving cost and reducing the overall profile and overburden on compressible soils approaching from the west. Similar to ATC #1, ATC #2 will allow for future widening of the SR 30 (US 98) bridge over Tyndall Drive/Airey Avenue without the need to reconstruct the on/off-ramps.

Our team is also exploring several other innovative design refinements to improve the concept design and provide cost benefits to FDOT, which will be presented to FDOT during the ATC process. These potential concepts include the following:

Gore Adjustment for Profile Optimization

This concept optimizes the profile by shifting the SR 30 (US 98) eastbound exit terminal and the SR 30 (US 98) westbound entrance terminal to the west so that the physical gores no longer fall on an elevated portion of the proposed SR 30 (US 98) profile. This innovation will increase the storage length on the eastbound off-ramp and the acceleration distance on the westbound on-ramp. In addition, it reduces embankment and wetland impacts by keeping the profiles close to existing grade.

Pitch Ramps Toward Median

This concept consolidates drainage toward the inside, creating a swale between the MSE wall and curb and gutter. This will reduce the drainage

trunk lines and drainage structures on the outside where more utilities are present. The curb and gutter section will include flumes to discharge water to the swales and convey the stormwater to the outfalls.

Roadway Design Features

SR 30 (US 98)

The roadway will transition from four travel lanes west of Tyndall Drive/Airey Avenue to two travel lanes approaching the SPUI. The design speed along SR 30 (US 98) will be 50 mph. The project extends approximately 1.25 miles along SR 30 (US 98) and includes the milling and resurfacing of the existing pavement.

Louisiana Avenue Overpass

A bridge will be constructed over Louisiana Avenue, providing connectivity to both the Flightline and Support sides of Tyndall AFB. The minimum vertical clearance over Louisiana Avenue will be 16.5'. Louisiana Avenue will have two travel lanes under the bridge with curb and gutter. The design speed on Louisiana Avenue will be 35 mph.

Pedestrian and Bicycle Safety

The project will incorporate a sidewalk for pedestrians on both sides of SR 30 (US 98) from the beginning of the project to the intersection of Tyndall Drive/Airey Avenue, as well as sidewalks along Tyndall Drive/Airey Avenue and provisions for ADA ramps. Bicycle accommodations will be provided along the 7' wide shoulders of SR 30 (US 98).

Security Fencing

Perimeter fencing will be constructed along the entire limits of the right-of-way/easement and at the Louisiana Avenue bridge. The fencing will be in accordance with Tyndall AFB requirements. Curved top bridge fencing will be provided on top of both the Tyndall Drive/Airey Avenue and Louisiana Avenue overpasses. Coordination with the Tyndall AFB for the ultimate security fencing location will be completed during final design. Once the Louisiana Avenue bridge is completed, the team will proceed to constructing the new perimeter fence to ensure that the base is properly secured.

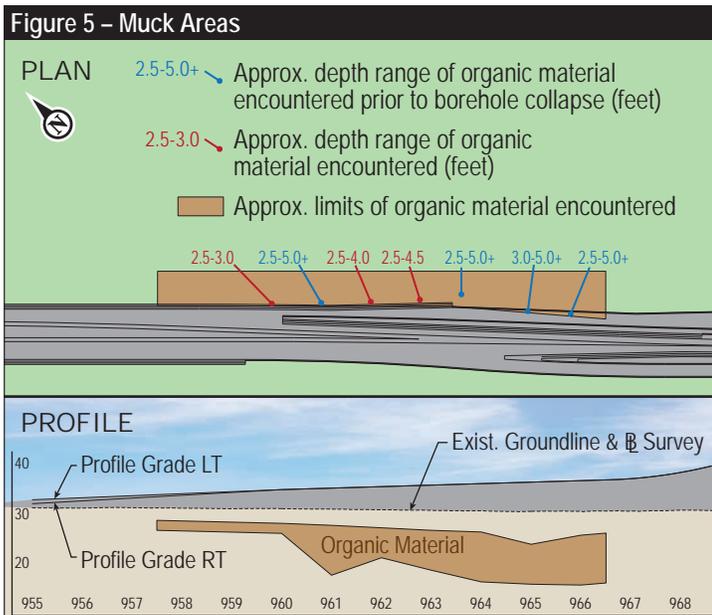
Typical Section / Pavement Design

Our Team will develop and submit a signed and sealed Typical Section Package and Pavement Design (if modified) for review and concurrence by FDOT. We will adhere to the design criteria presented in the RFP, including ramp design speeds (35 mph) and parallel entrance/exit ramps. Our Team will also adhere to the minimum allowable grade criteria in superelevation transitions included in the PPM to mitigate hydroplaning potential.

Geotechnical Considerations

Our design team has thoroughly reviewed the RFP and geotechnical data to preliminarily assess the subsurface conditions within the proposed project area. Based on this review and our team's thorough geotechnical knowledge of the area, we will develop a comprehensive geotechnical investigation plan during the design phase, providing assurance all work is performed in accordance with FDOT and FHWA requirements as well as all requirements in the RFP. **This approach will allow our team to take full responsibility for the geotechnical design.**

We will conduct additional soil borings, muck delineation, and associated laboratory testing to confirm existing geotechnical conditions. Detailed geotechnical evaluations in conformance with the FDOT Soils and Foundations Handbook will be performed for all components of this project in order to avoid the potential of unforeseen conditions and



construction delays. Project-specific issues and solutions based on our local experience, site visits, and review of available data are outlined in the following:

- **Muck soils (A-8) within roadway areas.** The SUPERIOR Team will perform additional muck delineation borings and laboratory testing to fully define limits of muck within the construction areas. Where encountered, we will over-excavate and backfill with structural fill or utilize ground improvement methods for deeper organic layers (See **Figure 5**).
- **Potential for embankment/foundation settlement due to very soft clayey/silty soils.** We will modify embankment construction to include preloading/surcharging, lightweight fill, or use of ground improvement techniques to manage this potential settlement. The SUPERIOR Team will also evaluate the potential for down-drag forces on piling, and design pile tip elevations below very soft soils and evaluate pile group settlement.
- **Potential for vibrations to impact existing structures.** We will perform pre- and post- construction surveys to monitor structures for vibrations and settlement during construction. Our approach in sensitive areas will be to use specialized techniques such as static rollers and low-displacement piles to reduce construction-generated vibration levels.
- **Potential for contaminated soils within the corridor.** We will thoroughly evaluate the potential for contamination during design and select foundation types such as driven piles to minimize removal of contaminated soil and groundwater.

We will provide a comprehensive load test program consisting of PDA testing and a test pile program for all driven piles. The dynamic pile load test program for the planned pile foundations will include a Wave Equation Analysis Program (WEAP) and a Case Pile Wave Analysis Program (CAPWAP) to confirm PDA capacity and load distribution.

Drainage/Permitting

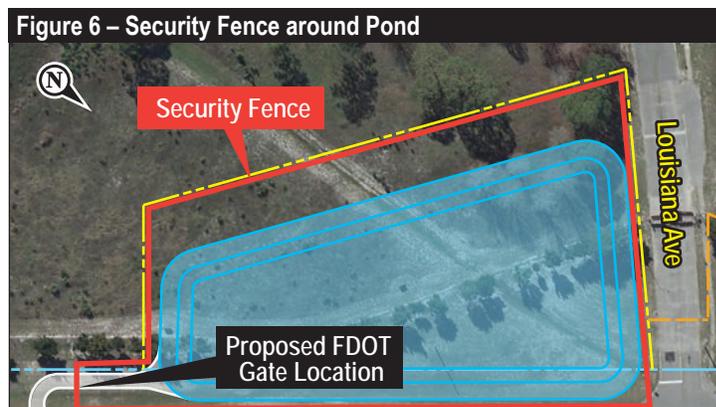
This project lies within both the Fred Bayou and the St. Andrew Bay Basins, with ultimate discharges to East Bay and Hog Sound Island, respectively. SR 30 (US 98) generally acts as a ridge and stormwater drains northward in areas north of SR 30 (US 98) and southward in areas south of SR 30 (US 98). Permitting will be through FDEP and NFWMD. The SUPERIOR Team anticipates an Environmental Resource Permit (ERP) for construction activities.

Stormwater treatment and attenuation is expected to be provided through dry retention systems following the Tyndall AFB Bird Aircraft Strike

Hazard (BASH) requirements and the criteria described in FAA Advisory Circular 150/5200-33B to minimize the potential of bird strikes on aircraft. Compensatory treatment for areas of poor soils and high ground water could be provided at the anticipated dry pond site located in the SE quadrant of the Louisiana Avenue and SR 30 (US 98) interchange. We are confident a dry retention system will be the choice at this pond site, as the soils are A-3 and have acceptable groundwater tables.

Special consideration will be given to drainage during all phases of construction. Positive drainage will be maintained at all times and not impact adjacent properties during construction.

An important aspect of the pond construction is the need to provide access by FDOT maintenance forces. This pond - which lies within the boundary of the Support side security fence - will likely need a separate access that does not penetrate the secure envelope. This will be closely coordinated with FDOT and Tyndall AFB personnel to develop a mutually acceptable solution, which will likely include a roadside gate and full security fencing around all boundaries of the pond (See **Figure 6**).



Structures

The SUPERIOR Team will provide structure design for the SR 30 (US 98) bridges over Tyndall Drive/Airey Avenue and over Louisiana Avenue, wraparound bridge MSE walls, traffic signal structures, and any other miscellaneous structures required on the project. Our structure design will deliver efficient and low-maintenance bridge systems to provide optimum value to FDOT. We will develop a comprehensive Traffic Control Plan, prioritizing safety of the construction team and traveling public by strategically placing piles and foundations as far from traffic as practical.

Our preliminary evaluation indicates reliable, low-maintenance precast prestressed concrete superstructures are an appropriate choice for both bridge sites. Our optimized bridge depths will lower profiles and provide a more cost-efficient project to FDOT while meeting minimum vertical clearances at the overpasses. Our design will account for the enhanced 1.05 operational importance factor, the classification as “critical” for vehicular collision, and the special load rating requirements noted in the RFP for these structures.

We have identified several early coordination items that will be important to streamline the structures design schedule:

- Early coordination with Tyndall AFB and other stakeholders regarding critical utilities in the vicinity of the bridges to finalize bridge span and foundation configurations
- Early evaluation of embankment settlement to finalize our utility protection plan
- Early coordination with Tyndall AFB regarding aesthetic symbols to be incorporated into the retaining walls prior to fabrication of wall components
- Early consensus on bridge fence layout solution at Louisiana Avenue

Aesthetics

All permanent retaining walls will have a concrete facing with a vertical fractured fin finish. The wraparound retaining walls at the bridge approaches will include application of the Air Force symbol at regular intervals. Location and spacing of the symbols will be in accordance with the RFP and will be closely coordinated with Tyndall AFB. At Airey Avenue/ Tyndall Drive, a minimum of four symbols will be provided at each quadrant. At Louisiana Avenue, a minimum of four symbols will be provided for each quadrant that is visible to vehicles traveling on Louisiana Avenue.

Environmental

The SUPERIOR team has reviewed the available information and documentation regarding wetlands and listed species within and adjacent to the project area. Wetland and other jurisdictional surface waters impacted will be permitted and mitigated as necessary. Listed species surveys will be coordinated with Tyndall Natural Resources and the District Environmental Management Office. Impacts to black bear, gopher tortoise, and bald eagle are not anticipated. Care will be taken during design and construction to ensure listed species are protected and excluded from the construction site where practical.

Traffic Evaluation

This section of SR 30 (US 98) heavily serves the needs of Tyndall AFB, with traffic counts dropping significantly to the east of the interchange. The base runs a 24-hour-a-day operation with regular shift changes, creating heavy movements to and from the Panama City urban area to the west. This results in highly directional use of the interchange.

This type of traffic is conducive to solutions other than a SPUI. During EB left turn movements into the Flightline side of the base, there are relatively few vehicles using the WB left turns – resulting in "wasted" green time that could otherwise be allocated to other movements. In the case of the TUDI alternative, this time can be allocated to uninterrupted EB right turns serving the Support side of the base, as well as staging SB left turns toward the east.

Our preliminary analysis of the TUDI alternative resulted in an essentially similar level of service as the SPUI, without taking into account the benefit of metering into the gate stations. In preparation of the ATC presentations, the SUPERIOR Team will complete a detailed VISSIM analysis (using FDOT's model) to clearly demonstrate the effectiveness of this option.

Signing & Pavement Markings

New guide signs will be provided within and in advance of the proposed interchange, including guide/destination signs on the ramps in accordance with the RFP requirements. The messages on these signs will be closely coordinated with the Tyndall AFB and the FDOT. Other signing and markings will be consistent with the RFP concept plans.

Signalization/ITS

The RFP signalization concept calls for installation of horizontally oriented heads on the bridge structure, angled to face the left turn lanes. This design creates several issues, as the rotation of the heads against the bridge beam will be difficult to construct and may cause a visible obstruction to the adjacent heads. To remedy this, vertically positioned heads are proposed, which allow for rotation without impairing the view of other signal indications.

In addition, near side signal heads (pedestal mounted) will be necessary to provide proper visibility for traffic on the ramps approaching the intersection. Pedestal mounted signals will also be installed on the far side of the intersection to reinforce movements for turning traffic for any SPUI alternative chosen.

The RFP also requires installation of ITS conduits along SR 30 (US 98) within the project limits for future use. Design and ultimate location of these conduits will be closely coordinated with adjacent utility owners and the Bay County Traffic Engineering Department.

Lighting

The project will include lighting of SR 30 (US 98) at the interchange with underdeck lighting under the bridges. Fixtures will be conventional with LED lighting and will apply "Dark Skies" initiatives to reduce as much light pollution as possible. Pedestrian lighting at the intersections will be provided to meet the current vertical illumination standards for pedestrians.

Utility Design and Coordination

The SUPERIOR Team will develop a detailed Utility Conflict Matrix for the project, including complete identification of all facilities and a project plan to minimize conflicts. The SUPERIOR Team will partner with Tyndall AFB to ensure their communication lines will not be impacted by proposed construction. Two 4" schedule 80 conduit crossings will be installed on the west side of Louisiana Avenue, along with a conduit north of Tennessee Avenue for future use by Tyndall AFB.

Landscaping

Our Landscape Opportunity Plan (LOP) will strive to preserve/designate landscape planting areas within the project limits that are free of the proposed roadway, drainage, lighting, ITS, and utility improvements. Proposed landscaping areas will address clear zone, horizontal clearance and setback requirements. Preservation of existing vegetation shall be coordinated with FDOT's Landscape Architect along with the development of a tree protection plan. The SUPERIOR Team's LOP will address FDOT's "Bold" initiative and be in compliance with the Tyndall AFB Integrated Natural Resources Management Plan. Close coordination between FDOT's and our Team's Landscape Architect will be maintained throughout the design and construction phases. We will remove all Category 1 invasive exotics as defined by the Florida Exotic Pest plant Council and as identified in the LOP.

Survey

Our design survey plan will focus on confirmation of previously recovered data and supplementing it with updated utility information and boring locations, etc. Field work will be closely coordinated with Tyndall AFB, particularly when using any radio communication equipment or lasers. All surveyors working within base limits will be properly badged in accordance with Tyndall AFB procedures.

Transportation Management Plan (TMP)

The SUPERIOR Team will develop a TMP and work zone traffic control plan allowing efficient construction of the project while providing a safe work zone for motorists and construction personnel. In addition to maintenance of traffic, the SUPERIOR Team will consider maintenance of mission for the Air Force. This involves close coordination with base officials to ensure critical military activities are not disrupted by construction. Our TMP consists of three components:

Temporary Traffic Control Plan (TTCP)

The TTCP will focus on safely moving traffic through active work zones and providing positive guidance to road users. We will minimize the number of TTCP phases and their duration while providing effective coordination with adjacent projects. The TTCP will utilize temporary barrier wall or low-profile barrier as appropriate to enhance worker and public safety within the work zone.

This project can be completed with three primary construction phases:

- **Phase 1:** Will consist of constructing the eastbound off-ramp and on-ramp, along with temporary pavement in key locations.
- **Phase 2:** Traffic will be shifted to the newly built ramps so that the new overpass, MSE walls, and westbound on/off-ramps may be built. Keeping all of the traffic on the south side of the new overpass instead of splitting traffic around it not only allows for a more efficient temporary signal, but it also avoids reducing the storage space ahead of the gate to the Flightline side of the base. All movements during construction will be evaluated to make sure emergency vehicles may be accommodated.
- **Phase 3:** Major activities include finalizing any minor roadway widening, performing final milling and resurfacing, final friction course, striping and incidentals.

The overpass at Louisiana Avenue will essentially be built in one phase. Traffic will be shifted to the south on temporary pavement, providing enough room to construct the overpass in its entirety. This construction will be prioritized within the schedule to connect Support and Flightline sides of the base and provide additional flexibility to build the interchange.

Transportation Operations

The SUPERIOR Team will analyze traffic characteristics and develop a strategy to reduce queuing and ensure consistent operations at the base entrance. Our plan will be flexible enough to allow for adjustments due to changing traffic conditions and plan for special events and condensed periods of congestion surrounding shift changes.

Public Involvement

The SUPERIOR Team will support FDOT's Public Involvement Consultant (PIC) by providing current information regarding construction progress, detours/diversions, lane closures, traffic shifts, etc. We will provide experienced staff members and graphic support including renderings as needed to assist in the public involvement process.

Construction

Tyndall AFB Construction Protocol

The SUPERIOR Team understands the sensitive nature of this project and will remain within FDOT's easement and existing right-of-way for all final design and construction. We will be proactive in providing FDOT information on areas that will require temporary access to Tyndall AFB property, so that the proper right-of entry can be obtained. The SUPERIOR Team will coordinate all work efforts inside Tyndall AFB through a dedicated point-of-contact and will ensure all required staff and subcontractors complete the required security screening and badging in compliance with Tyndall AFB security protocols.

Foundation Installation Plan

The SUPERIOR Team will develop and submit a Pile Installation Plan which will address process control standards and quality assurance for the installation of bridge foundation pile. The Pile Installation Plan will include the operation and maintenance of the pile driving system, criteria for replacement of hammer/pile cushions, and aspects of a dynamic monitoring program. District 3 will be immediately notified of any deviations from the approved Foundation Installation Plan. We recognize the airspace restrictions when planning installation of deep bridge foundations, superstructure components, and other activities.

Test Pile Program

Universal Engineering Sciences (UES) will perform Dynamic Load Testing, provide recommended production pile casting lengths, and develop driving criteria in coordination with the Geotechnical Foundation Design Engineer of Record. Coordination will be seamless, and turn-around time optimized for



document submittals since the PDA services and geotechnical engineering will both be performed by UES. 100% Dynamic Testing will be used to expedite construction, minimize impacts to the motoring public, and make certain the bridge construction schedule is achieved.

Vibration and Settlement Monitoring

The SUPERIOR Team will identify and coordinate with the vibration-sensitive sites throughout the Project. We understand FDOT has identified 16 sites (See Figure 7) as being vibration sensitive, and all are located on Tyndall AFB property. Close coordination with Tyndall AFB will be required to research any additional potential sites, evaluating the need for and extent of precautionary features to protect a site, and to adequately perform appropriate surveys throughout the life of the Project.

We will submit a Settlement and Vibration Monitoring Plan (SVMP) to FDOT as part of our 90% plan submittal and update the plan throughout construction. The SVMP will establish maximum settlement and vibration thresholds based on FDOT Specification Section 108 for Protection of Existing Structures. The SUPERIOR Team will comply with this Specification throughout all aspects of design and construction. We will thoroughly investigate, inspect, and document nearby structures. Proper selection of construction means, methods, and equipment will ensure we execute our operations within allowable thresholds.

Vibration monitoring will consist of using Instantel® or Sigicom seismographs to measure construction vibrations. The seismographs are equipped with a triaxial transducer, which will be firmly attached (coupled) to the surface of structures being monitored, or buried in the ground adjacent to the closest accessible areas adjacent to the structure. The seismographs record three orthogonal channels of ground motion, with a peak particle velocity (PPV) range of 0.005 to 10.0 in/sec in a frequency range of 2 to 250 Hertz (Hz). This information is constantly measured and recorded via wireless device and stored on a secured website for client access.



Settlement monitoring will consist of using survey instrumentation to establish pre-construction baseline elevations on all existing structures of concern in the vicinity of the project. Settlement surveying and monitoring will be performed in accordance with FDOT Specification 108-2.1.5 throughout construction. Post-construction survey elevations will also be collected to verify the final condition after work is complete.

THE SUPERIOR TEAM

Our Team stands ready to deliver this important project to FDOT and your customers. We have a complete understanding of all project challenges and have a plan to match each of them. The SUPERIOR Team looks forward to partnering with District 3 to successfully deliver this project!