

A. Executive Summary

EXECUTIVE SUMMARY

Alamo South Construction (ASC) has assembled a world class team of engineering, construction, quality and maintenance professionals to meet TxDOT's expectations and deliver the I-35 NEX South project.

The equity members of ASC are Ferrovial Construction US Corp. and Webber, LLC. Ferrovial Construction and Webber bring extensive self-performance capabilities, a San Antonio presence (as the equity members of Alamo NEX Construction (ANC), the DB Contractor on NEX Central) and experience gained from comparable DB contracts in Texas.

CONSOR/OTHON will lead our design team, with Raba Kistner (RKI) serving as IQF. We have also added specialized subcontractors for the primary scopes. The firms were chosen because of their qualifications, skills and demonstrated performance. The ASC team and its members are shown to the right.

Having the same design and construction firms on both NEX Central and NEX South brings synergies and benefits including management plans that are already developed, approved and tested by the time NEX South starts; knowledge and working relationships with design approval processes, expediting the overall schedule; and coordination of activities such as traffic closures, utility relocations and stakeholder engagement.

A truly integrated team, we emphasize consistent communication and collaboration among all team members. We use a fast-tracked design approach, which considers construction-driven schedules while prioritizing long-term maintenance considerations.

Proposer and Lead Contractor
Alamo South Construction ★
Lead Engineering Firm
CONSOR/OTHON ★
IQF
Raba Kistner
PSQA
Bowman ★
Design Support
TYLIN ★
Utilities
CSJ Engineering ★
Geotech
Terracon ★
Environmental
EPR ★

★ NEX Central ANC Team

A. TECHNICAL PROPOSAL ORGANIZATION AND CONTENTS

Following the direction of the Instructions to Proposers, ASC has organized its response according to the checklist in Exhibit E and contains the requirements of Exhibit B. Appendices include:

Concept Plans – Roll Plots and 11 x 17

- General Plans, Index and Location Maps
- Construction Staging and Temporary Drainage
- Roadway
- Bridges
- Retaining Walls
- Drainage

Schedule Layouts – 11 x 17 Appendix

- Schedule of Values for NTP1 works
- Preliminary Project Baseline Schedule
 - Critical Path
 - Major contract milestones including warrant and capital maintenance terms
 - WBS full schedule
 - Activity code full schedule organized by intermediate milestones
 - Activity code full schedule organized by construction sequence

3-D Files & Multimedia Appendices

- Multimedia file and videos illustrating implementation of a selection of ASC ATCs and VEIs
- VISSIM Traffic Modeling Analysis for Construction Staging
- 3-D files for ASC Design Model

ASC performed an exhaustive analysis of the existing infrastructures, local conditions and project requirements in all disciplines. Documentation related to this technical due diligence and investigations is included in digital and roll plot format in the form of Exhibit M; this material includes:

- Additional Geotechnical Investigation
- CCTV Drainage System Investigation
- 3D LIDAR
- Lighting & ITS Concept Plans
- Temporary ITS Concept Plans
- Traffic Modeling Analysis for Construction Staging

B. QS CHANGES

ASC has no changes to our QS.

C. ORGANIZATION AND KEY PERSONNEL CHANGES

ASC did not submit any change in organization, Equity Members or other Major Participants or Key Personnel.

D. MANAGEMENT STRUCTURE

Day-to-day and operational decision-making authority and accountability will be vested in our project manager, Pablo Molla. He is TxDOT's sole point of contact for communication on all items, except those specifically assigned to others. A corporate management committee including senior management for the DB Contractor will oversee the organization and major strategic decisions.

COMMITMENT STATEMENT

Each major participant with key personnel commits to providing the specified individuals:

FCUS – Project Manager Pablo Molla; Construction Manager Justin Benge; Design Manager Pablo Lopez, PE; Utility Manager, Javier Moino; Lead MOT Implementation Manager, Dean Conrad; and Safety Manager, Tommie Callahan

Othon – Lead Structural Engineer, Ben Anderson, PE; and Lead MOT Design Engineer, Danny Davila, PE

Raba Kistner – Independent Quality Firm Manager, Dale Martin, PE

Bowman – Professional Services Quality Assurance Manager, Matthew Letson, PE

E. TECHNICAL SOLUTIONS

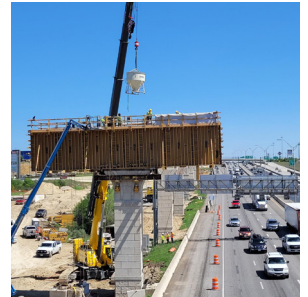
1. Project Management

ASC identified a significant number of Value Added Responses (VARs) or proposal commitments that exceed the requirements of the DBA. We have included the VARs that provide superior benefits and value to TxDOT and/or result in outstanding improvements in implementation of the project. A few examples from the PMP component plan:

- Co-locate Project Manager, Construction Manager and Safety Manager and onsite from NTP1 until Final Acceptance and avail for in-person meetings at TxDOT's discretion within 24 hours for six months after Final Acceptance.
- Co-locate Independent Quality Firm Manager onsite three months prior to construction start.
- Accelerate mobilization, save time in overall project schedule and mitigate delays due to resource limitations through already executed agreements with major, strategic vendors including precast concrete girders, aggregates and cement.
- Integrate traffic management software to evaluate the projected lane closures and combines all the activities involved with the resulting traffic flow patterns. The system will help to prevent lane closure conflicts and last-minute cancellations.
- Co-locate Lead MOT Implementation Manager three months before NTP2. For a seamless transition and to provide input on long-term maintenance and life-cycle considerations to the design. The Lead MOT Manager will also serve as the Maintenance Manager. Maintenance will start one month before NTP2 to provide the maintenance related to amenity and sweeping and cleaning (obstructions and debris) as described in DB Specs Attachment 27.

ASC VAR/VEIs are derived from our best practices and lessons learned as a result of having reconstructed five major TxDOT design-build projects amounting to \$8B in construction costs.

ASC Lead Contractor and Lead Engineering Firm have the same roles on NEX Central, bringing continuity, accelerated mobilization, lessons learned and already in-place relationships with district personnel, regulatory agencies and stakeholders.



ANC Bent cap construction in I-35 NEX Central



ANC Drill shaft construction at I-35/I-410 N interchange

2. Quality Management

IQF RKI founded in 1968 in San Antonio, has been involved in construction projects valued at more than \$15B with a total staff of more than 600 employees which includes over 300 construction inspectors, construction managers, project managers, technicians and analysts. RKI has established and operated certified project laboratories for on-site materials testing. PSQAF Bowman has been involved in design and construction projects valued at more than \$2.54B for TxDOT. The firm has 55 licensed professional engineers in seven offices in Texas including offices in San Antonio and San Marcos.

ASC's quality VARs exceed the requirements of the DBA and improve the overall quality of the project. The VARs bring best practices, lessons learned and unique solutions from similar projects. Examples include:

- IQF, Lead MOT Engineer and Lead MOT Implementation Manager to conduct monthly field verification visits to verify that the traffic control has been implemented and maintained per plan.
- Use of ProjectWise by all the design firms involved in the production of all the drawings during the detailed design phase.
- ASC quality control staff will test critical materials (soils/concrete) for early breaks and density in advance of the IQF testing.
- Daily coordination between IQF and OVTI teams and weekly meetings between IQF Manager and OVTI Manager.

3. Design, Construction and Maintenance Plan

Through a collaborative approach with TxDOT during the Proposal phase and performing value engineering and constructability analysis, our team incorporated many Value Engineering Improvements (VEI) into the proposal that improve mobility and operational efficiency, accelerate construction and minimize disruptions and inconveniences to the traveling public and surrounding businesses, while still maintaining a safe environment.

ASC performed an exhaustive analysis of existing infrastructures, local conditions and project requirements. For the basis of the analysis, we used a detailed mobile Lidar. We also performed a geotechnical boring campaign and engineering, pavement visual inspection, CCTV drainage inspections and surveys. This extensive analysis provides an accurate representation of existing conditions and ensures the project will be delivered with the highest quality and certainty.

Highlights of the major design improvements (compared to the Schematic Design) are listed below. Additional detail is included in the technical solutions, Concept Plans and videos.

- Improving the geometrical parameters when feasible. For example, incrementing the outside shoulder at the I-35 mainlane, incrementing the radius of the existing I-35 frontage road and improving visual configuration of the I-35 and I-410 Interchange.
- Utilizing consistent and efficient structures that reduce the permanent/construction footprint. This entails eliminating 30 straddle bents and 34 cantilever bents and maximizes the use of smaller footings with monoshaft foundations. This results in 27 fewer total bents.
- Improving traffic management and traffic closures by reducing work zones. This will be accomplished with extensive use of monoshafes, which will reduce the number of straddle bents and overlaps between elevated and at grade infrastructure.
- Eliminating all the steel structure bridge area, that is more than 260,000 square feet of steel spans.
- Maintaining infrastructure in good condition and avoiding conflicts with existing infrastructure by avoiding the reconstruction of three existing retaining walls, thus minimizing impacts on utilities and drainage elements.

F. DBE APPROACH

FCUS has a proven comprehensive approach for DBE inclusion. The team's primary objective for the DBE program is to facilitate DBE participation in all phases of the project and achieve DBE participation goals while providing the necessary resources to ensure these firms are successful in their work.

FCUS has exceeded every DBE participation goal and has awarded over \$1B DBE subconsultants / subcontractors on projects in the past ten years.

We will engage in an outreach strategy through our team sponsored events both virtually and in-person in addition to sharing contract opportunities and project information on the project website. Our subcontracting plan will be tailored to foster DBE subcontractors and supplier's participation. Close attention will be paid to scope packaging, to encourage subcontracting opportunities within the community.

In addition to traditional outreach networking meetings, ASC will hold virtual and in-person "office hours" to assist DBE firms with certified payroll, safety planning/scheduling and estimating issues and any other issues that impact DBE subcontractors. We will also hold and facilitate education workshops quarterly to teach and empower local DBEs with targeted topics such as design-build methods, quantity take-offs, estimating, construction law, safety, taxes and certified payrolls.