3.1 Executive Summary

Introduction - **J.D. Abrams, L. P.** and **Haas-Anderson Construction, LTD** have formed **Route 77 Constructors** to be the Proposer for the US 77 Upgrade Project. J.D. Abrams, L. P. will be the managing partner of the Joint Venture and the prime point of contact for TxDOT. Both J.D. Abrams, L. P. **(Abrams)** and Haas-Anderson Construction, LTD (HAC) each have a superior track record of delivering top quality projects safely, timely, and cost effectively. Together Abrams and HAC combine those experiences to provide TxDOT a powerful complement of capabilities that is second to none.

(a) Proposal Contents - Route 77 Constructor's (R77C) proposal is organized following Exhibit E of the Instructions to Proposers (ITP) of the Request for Proposals (RFP) and is presented in the following volumes:

Volume 1, Technical Proposal - Executive Summary

Volume 2A & 2B, Technical Proposal – Forms – Proposer information, Certifications and Documents including:

- Technical and Financial Proposal Letter
- Information about Proposer Organization
- Proposer & Major Participants Questionnaire
- Personnel Work Assignments
- TxDOT Letters Approving Key Personnel
- Non-Collusion Affidavit
- DBE Certification
- Conflict of Interest Disclosure
- Key Subcontractors
- Certification Regarding Ineligible Contractors
- Substantial Completion Deadline
- Identification of Proposer and Equity Members
- Information about Major Participants
- Industrial Safety Record
- Key Personnel Statements of Availability
- TxDOT Letters Approving Changes in Proposer's Organization
- Buy America Certification
- Child Support Statements
- Equal Employment Opportunity Certification
- Certification Regarding Use of Contract Funds for Lobbying
- Surety Information
- Payment for Work Product Agreement

Volume 3, Technical Proposal - Project Development Plan, includes:

- Technical Solutions
- Project Management Plan
- Quality Management Plan

Volume 4, Technical Proposal Appendices, roll plots of R77C's US 77 Schematic Plans and schedule including:

- Revised Roadway Schematic with Typical Sections, Walls, Signs, Drainage and ITS
- Traffic Control Plan
- Bridge Layouts, Cross Sections and Informational Spreadsheets
- Preliminary Project Baseline Schedule

Volume 5, Technical Proposal Appendices, with Key Personnel Resumes and References

Volume 6, Financial Proposal, includes:

- Identification of Proposer and Equity Members
- Information about Major Participants
- Copy of Surety Letter
- Letter of Financial Condition
- Information about Proposer Organization
- Current Prequalification Letter
- Guarantor Letters of Support

Volume 7, Price Proposal, includes:

- Design Build Price
- ATC Adjustments
- Maintenance Price
- Design Build Price Breakdown
- DB Contractor Draws/ Cask Flow Table
- Schedule Adjustment Credit

Volume 8, Proposer Security, an envelope with the Proposer Security

(b) & (c). Changes In Route 77 Constructors Team

TxDOT approved the following personnel changes:

- Substituted Jose Melendez, PE for Oscar Rodriguez, PE as the Construction Quality Assurance Manager
- Substituted Mario Reyna for Jesus Anguiano as the Bridge/ Structure Superintendent
- Substituted Tim Robarge for Kalin Johnson as the Design-Construction Coordinator
- Added Joe Graff, PE for the Maintenance QC Manager
- Changed title of Adam Ellis, PE to Professional Service Quality Control Manager.

(d) Proposed Management, Decision Making And Day-To-Day Operation Structure

Route 77 Constructors is a fully integrated joint venture committed to undertaking the development, design, construction and the capital maintenance of the US 77 Upgrade Project in a manner which provides the best value for the Texas Department of Transportation (TxDOT). Abrams and HAC serve both as the Design-Builder as well as the Lead Contractor and will self-perform 75% of the construction. Route 77 Constructors' design team is fully integrated as well and is led by major non-equity member Binkley & Barfield, Inc. They are supported by Michael Baker, Jr., Inc. and the following non-equity members:

Organization Role	Team Member	DBE
Independent Design Quality Assurance Firm	TranSystems Corporation Consultants	
Independent Construction Quality Assurance Firm	Rodriguez Engineering Laboratories	■
Environmental Compliance Firm	TranSystems Corporation Consultants	
Capital Maintenance Firm	Infrastructure Corporation of America	
Utility Coordination	CSJ Engineering Associates, LLC	
Geotechnical Investigation, Pavement Design	Kleinfelder Central, Inc.	
Environmental Investigation	Blanton & Associates, Inc.	■
Retaining Wall Design	Unintech Consulting Engineers, Inc.	■
Engineering Design Support	LNV Inc.	■
Professional Survey Firm	Arrendondo, Zepeda & Brunz, LLC	■
Engineering Design Support	TBG Partners	
Public Involvement Firm	Olivarri & Associates, Inc.	■

Our Project Manager and 35-year veteran, **Bill Mahrer,** will serve as R77C's final point of responsibility for TxDOT regarding design, construction, capital maintenance, and contract administration for the delivery of the US 77 Upgrade. With 19 years of experience, **Tommy Cromer, PE**, of Binkley and Barfield will lead design. Construction will proceed under the direction of **Mark DeHarde** who recently completed the $268 million Spur 601 DB project in El Paso. **Zane Webb** will lead the Capital Maintenance team tapping his 30 years of transportation operations and maintenance experience, 15 of which have been with TxDOT as its Director of Maintenance at both the district and statewide levels.

Together these project leaders are committed to establishing cooperative management relationships among all participants of the project. Our formula for accomplishing this is characterized by familiar elements of partnering such as goal setting, teambuilding, issue escalation, and periodic evaluation. In the spirit of Partnering and through a highly structured series of weekly meetings, these leaders draw out the day to day and real time experiences of the folks that are the closest to the issues. This produces information that is current and accurate and minimizes the influence of personal agendas. The result is a decision making process with only one outcome in mind, and that is to do what is in the best interest of the US 77 Upgrade Project.

Route 77 Constructors empowers our staff to make decisions within their authority at the appropriate level. These decisions are discussed, tracked and verified in our weekly project meetings. We are committed to the success of this Project. Immediately after the Notice of Award we will begin working at risk before the Notice to Proceed so that the development team is at full production starting on day one. Route 77 Constructors and its team members have committed the personnel listed in this Proposal. Commitment Letters are included with Form E in Volume 2B.

Technical Solutions

Design--Route 77 Constructors has incorporated the following conditionally approved Alternative Technical Concepts (ATC) into all of our proposed schematics:

ATC NO	Description
R77C#002	Join the northbound and south bound road beds resulting in one roadbed, instead of two separate roadbeds, from baseline STA 8057+57 to baseline STA 8136+65
R77C#003	Realign NBML from STA. 8162+20.02 to STA 8222+88.38 in order to fully use the existing pavement.
R77C#004	Move the retaining walls away from the edge of pavement, toward the frontage road
R77C#006	Use cement stabilized sand in lieu of Type A structural backfill for all MSE retaining walls.

Construction--The US 77 Upgrade Project breaks down into two very different types of projects within one. From FM 70 to the South the project is fairly straightforward in that it is all on existing Right of Way (ROW) and requires relatively routine utility accommodation. However, from FM 70 to the North the majority of the work is built on new ROW requiring significant utility accommodation. On the south half of the project construction and utility work will begin at the same time and take about 20 months to complete after NTP 1, finishing nine months earlier than the north half. .

Roadway--A large portion of the existing mainlanes will be rehabilitated and remain in place. To bring US 77 up to interstate standards we will remove the normal crown that exists in those

pavements today and create a 2% cross slope using hot mix asphaltic concrete level-up. Route 77 Constructors will use a flexible pavement for the construction of new US 77 mainlanes, ramps, frontage roads, and cross-streets. Our team drilled ten test borings along the proposed project alignment to obtain samples of the subgrade soils. We performed laboratory tests to evaluate the moisture content, silt and clay content, and liquid and plastic limits of the subgrade soils. With the results of these tests we designed the following new pavement sections for the US 77 Upgrade Project:

Exhibit 19, US 77 Pavement Designs

US 77 Mainlane Pavement Section	
Material	**Thickness, Inches**
Hot Mix Asphalt	6
Flexible Aggregate Base Course	18.5
Lime-treated stabilized subgrade soil	8
Total	32.5
US 77 Frontage Road Pavement Section	
Material	**Thickness, Inches**
Hot Mix Asphalt	6
Flexible Aggregate Base Course	12
Lime-treated stabilized subgrade soil	8
Total	26

Bridges and Surface Structures--All of the new bridges will use slab-on-girder construction of consistent span lengths to optimize girder fabrication. For overpasses R77C will use Tx46 I-girders and for creek crossings, TxDOT T28 double tee girders. The double tees used over the creeks will minimize the superstructure depth and provide maximum the freeboard above the design high water elevations; and, to avoid potential scour or backwater issues we will match lateral position of new substructure with existing. New substructures will use standard 16 inch square concrete piling topped with footings that in turn support standard, 36 inch square columns.

Retaining Walls--Geometric constraints along the US 77 corridor will require the use of Mechanical Stabilized Earth (MSE) retaining walls. We will move the MSE walls out from under the edge of pavement and place them closer to the frontage roads. This adjustment will reduce the height of the walls, thereby reducing the required wall panel quantity and also reducing the amount of select fill required for the construction of these walls. These reductions will, in turn, simplify the construction of the walls and minimize the overall schedule of the project. Route 77 Constructors will also integrate the cement stabilized backfill with the MSE walls as shown in the latest TxDOT Houston District MSE wall standard, MSRW-CSB. The team will use this approach for the new mainlane overpasses at the San Fernando Turn-around, CR 4, East 6th Street, East 4th Street/ FM 257, CR 10, and CR 12.

Maintenance--Route 77 Constructors will use Infrastructure Corporation of America (ICA) to perform the capital maintenance and Maintenance Manager **Zane Webb** will lead that effort. He and his Maintenance Team will develop and implement a comprehensive maintenance program that will facilitate inspection and testing of the maintained elements in order to preserve the condition of the US 77 transportation asset throughout the maintenance period. Zane's trained inspection teams will categorize defects discovered during inspection through use of a project specific written defect classification matrix. They will generate corrective action work orders through a computer based

maintenance management information system and complete mitigation, remedies, and repairs within the prescribed maintenance program time frames.

Project Management Plan

The R77C team will co-locate all key management, design, and construction personnel alongside TxDOT and its representatives in a common project office, located adjacent to the project at the southeast corner of US 77 and FM 70. This office will also provide space for subcontractors, utility companies, and local governmental personnel, if they elect to occupy it. Co-location is a tremendous technique for facilitating the exchange of information. Its advantages include:

- Integration of team members and coordination of resources
- Decision making, coordination, communication, and cooperation among team members
- Interface with the TxDOT and all project stakeholders
- Coordination with utility owners

Effective communication among project participants is critical to Project success. As demonstrated on its previous DB Projects, R77C achieves this objective through the use of weekly meetings, each scheduled for a specific day and time. The meetings, shown in the table below, provide the forum for management staff to track the progress of utility relocation, design and construction, to prioritize tasks, and to resolve project issues in expedited fashion.

Meeting	Designers	Constructors	Quality	Environmental	Maintenance	TxDOT
Task Force	X	X	X	X	X	X
Interdisciplinary Meetings	X					X
Constructability	X	X			X	
Over-the-Shoulder	X	X	X	X	X	X
Comment Resolution	X	X	X		X	X
Schedule	X	X	X			X
Construction		X	X	X		X
Project Status	X	X	X	X	X	X
Partnering	X	X	X	X	X	X
Maintenance					X	X

Design, Construction, and Maintenance is committed to work together with TxDOT as a team to interface with its consultants, State and local agencies and utility owners through:

- Continual partnering
- Synchronizing input from stakeholders by co-locating in R77C's project office
- Assembling a team experiences with TxDOT standards and FHWA requirements
- Establishing effective communications through our formal structure of weekly meetings
- Using an EDMS to transfer, store, and maintain project documents

Quality Management Plan

Route 77 Constructors has developed a quality management organization that will inspect and verify that TxDOT receives a first-class transportation facility.

Design --Independent from design production, **Adam Ellis, PE** will serve as the R77C Professional Services Quality Control Manager. In this role, he will oversee the Design Quality Acceptance process as well as implementing our ISO 9001-compliant Design Quality Management Plan (DQMP). He and his staff will check all plans, reports, calculations, specifications, and verify that design task procedures are correctly implemented in design.

Construction – Independent from Route 77 Constructors **Jose Melendez, PE**, with Rodriguez Engineering Laboratories will be responsible for performing construction quality acceptance, inspection, material testing, and audits of the Construction Quality Management Plan. Rodriguez Engineering Laboratories is currently pre-certified by TxDOT to perform inspection and testing in the required categories that apply to the US 77 Upgrade Project. All testing will use accredited laboratories and comply with the applicable TxDOT and ASTM standards and FHWA requirements.

Maintenance--R77C will use Infrastructure Corporation of America to perform the Capital Maintenance for the project. **Joe Graff**, Maintenance Quality Control Manager, will be responsible for administering and executing our Maintenance Services Quality Control program. Mr. Graff will develop the comprehensive Maintenance Services QC Plan. The plan will describe the system, policies, and procedures that will be used to assess and document the quality of maintenance services. It will include provision for an annual report of the quality inspections and tests performed and will identify opportunities for improvement, corrective measures, and lessons learned.

(f) Approach to Satisfying the DBE Requirements:

Route 77 Constructors will continually provide opportunities for small and disadvantaged entities to know about the project and how to participate by conducting subcontracting and vendor outreach sessions that begin post project award and continue through the issuance of detailed design plans. As evidence of this commitment, Route 77 Constructors has already engaged the following DBE firms:

- Blanton & Associates, Inc.
- Olivarri & Associates
- LNV Inc.
- Rodriguez Engineering Laboratories
- Unintech Consulting Engineers, Inc.
- Rock Engineering & Testing Laboratory, Inc.

Route 77 Constructors will exceed the 6.0% goal for the project by utilizing a "Two Step" Subcontracting and Purchasing Plan to proactively promote subcontractor and supplier participation for this design-build project. In the first step we advertise in various local and community-based ethnic papers and direct-mail letters inviting subcontractors to bid on the project. In the second step we follow up with telephone inquiries and provide bidding documents when requested. In order to provide for the development of our DBE subcontractors Route 77 Constructors will establish for the US 77 Upgrade Project a series of training programs.