

# Executive Summary

The Lane Construction Corporation and HDR have once again assembled a strong team (Lane-HDR) that provides the best value to TxDOT and the CTRMA. Our success in delivering design-build (DB) projects is demonstrated from working together on multiple projects with design and construction values greater than \$3B. We maintain a prominent reputation for dependability, integrity and quality workmanship.

Lane-HDR has assembled an experienced team and the hands-on processes to deliver on TxDOT's Project goals for construction mobility, long-term mobility enhancements, environmental sensitivity, optimizing life-cycle performance by exceeding technical requirements, safe construction, DBE participation, and a coordinated cooperative TxDOT-DB Contractor relationship. We will deliver innovative technical solutions and add to our history of on-time or early construction completion. Team members are known for their environmental process expertise and are trusted utility coordination and relocation professionals.

Our team is supported by the following:

Role	Firm
Prime Contractor	Lane
Prime Designer	HDR
Geotechnical	B2Z
Major Design Support & MOT	CP&Y
Illumination/Electric	Encotech
Public Information	GAP
Construction QA	CEC
Survey	RODS
MOT and Roadway	RTG
Design QA & Construction QC	Lochner

Lane has over 500 people in the State of Texas, many of them based in Central Texas, and will combine with HDR and their 274 design professionals employed in the State. Lane's construction expertise and HDR's design and utility experience creates a team with an extensive understanding of TxDOT, City of Austin, and Project Utility Agreements in Travis and Williamson County.

## QUALIFICATIONS SUBMITTAL CHANGES

We have supplemented our Qualifications Submittal (QS) organization to conform to the specific requirements of TxDOT's Request for Proposals, Technical Provisions, and the Design-Build Agreement to deliver the Project in the most cost-effective manner possible. Positions have been added to the Organization Chart for important non-key design and construction disciplines, accompanied by their respective resumes (where named), and include: Maintenance during Construction Supervisor, Construction Utility Coordinator, design support for public information, environmental, traffic operations and ITS/Tolling.

## ORGANIZATION CHANGES

The following are the changes in Key Personnel and changes to the Proposer's Organization since our QS. TxDOT's May 9, 2014 correspondence approving these changes is included in Section B.

Position	Name in SQ	TxDOT Approved Change
Construction Quality Acceptance Manager	Roger Cisneros	Frank Jaster
Construction Quality Acceptance Firm	PaveTex Engineering and Testing, Inc.	Civil Engineering Consultants

## MANAGEMENT, DECISION-MAKING, AND DAY-TO-DAY OPERATION STRUCTURE

The Lane-HDR team is committed to undertaking the development, design, construction and maintenance during construction of the SH 71 Project in a manner that provides the best value for TxDOT. Our organizational structure provides open partnering relationships that provide TxDOT a superior management team that started during the statement of qualifications, continued through this Proposal period, and will remain intact through substantial completion and transition to the CTRMA. Our Team approach is organized by function, with clear objectives and responsibilities, stressing the need for an adaptable, flexible organizational structure capable of responding to the specific demands posed by each major Project activity. Our Project Management System will provide the specific ingredients for a successful Project, which include:

- An on-site Project Manager, Bill Hameza, who provides TxDOT a single point of authority to represent the Lane-HDR team;
- a Safety Manager, Steve Ford, who reports directly to the Lane Executive Support Team and has authority to stop any unsafe act or operations. In our QS, Lane committed to Steve achieving his Certified Safety & Health Official (CSHO) credentials by the submittal of this proposal. Steve achieved this goal on April 22, 2014. A copy of his CSHO certificate accompanies Steve's resume;
- a Design Manager, Philip Fulton (HDR), who will implement a management approach that integrates senior managers from HDR and Austin-based subconsultants to prepare an optimized design. Philip and Lane have the advantage of working together on the DB delivery of TxDOT's IH 35E Managed Lanes Project in Dallas;
- a DQAM, David Williams, who brings extensive experience in this same role on TxDOT's \$1B DFW Connector Project;
- a CQAM, Frank Jaster, who brings 17 years of TxDOT experience and a quality management role on the \$140M US 281/Loop 1604 interchange; and
- a Public Involvement firm, Gap Strategies, that brings their success, local understanding, and local relationships with TxDOT and city and county governments in the region.

The Proposal organization chart reflects the Management Structure, Key Personnel, and reporting hierarchy of the Lane-HDR team's design and construction operations. We will use a proven management approach gained in successful Lane-HDR DB teaming relationships. Our DB approach assures the integration of TxDOT and facilitates transparency and accountability.

All design, construction, quality acceptance and maintenance personnel will partner with TxDOT, CTRMA and other SH 71 stakeholders to form a cohesive team focused on delivering project design, construction and maintenance solutions quickly and efficiently. We will establish an environment that applies proven managed-lane DB project systems and tools from some of the largest toll projects in Texas and the country including Lane-HDR's current work on TxDOT's \$1B IH 35E Managed Lanes Project and Lane's work on VDOT's \$1.5B DBF I-495 Express Lanes Project in Northern Virginia.

## KEY PERSONNEL COMMITMENT

The Lane Construction Corporation and its partners commit to providing the Key Personnel identified in this technical proposal. In accordance with Section 7.4 of the Project Design-Build Agreement Lane represents, warrants and covenants that the personnel listed in the Proposal are available for and will fulfill the roles identified for them in the Proposal in connection with the Work.

## PROJECT DEVELOPMENT PLAN

### Technical Solutions

**ATCs.** The Lane-HDR Team has incorporated four ATCs (three approved, one conditionally approved) into our Proposal. They are as follows: ATC No. 1 'Superbox implementation', ATC No. 4 'Reduce FM 973 Bridge Length', ATC No. 5 'Use of Prime Coat', and ATC No. 8 'Modified Pylon TY D'. ATC No. 1 removes the large structure over the SH 130 mainlanes and rail corridor and places the SH 71 toll lanes at-grade, eliminating the long grades by placing them at ground level. ATC No. 1 reduces construction time by minimizing bridge construction and complex MOT phasing. Our proposed technical solutions are consistent with the Project environmental commitments and aesthetic guidelines. Implementation of ATCs contributes significantly to the Project goals of maintaining mobility during construction, maintaining a high level of construction quality and safety, and expediting delivery of the Project. None of the ATCs requires additional developer designated ROW.

**Value Added.** The Lane-HDR Team design includes pin pile foundations for the existing perched walls. This improves global stability and extends the service life. Additionally, our proposed pavement design includes Thin Overlay Mixture (TOM) in lieu of the 2" SMA. This addresses local shortages of SAC A aggregate.

**Design and Construction Plan.** Lane-HDR will prepare discipline specific systematic plans to be released for construction after review and approval from TxDOT. We will incorporate 3-D modeling in our "over the shoulder" reviews with TxDOT. This will assist in outlining issues early with "fit and finish" and provide an opportunity for our team to share animated visualizations during any necessary public involvement and/or stakeholder outreach efforts associated with ATC No. 1.

**Traffic Control.** The Lane-HDR Maintenance and Traffic Management plans will maintain mobility

during construction. To minimize impacts, we have divided the Project into four segments with phased construction planned for each segment.

**Structures.** Development of the Technical Solutions for the Project includes the design and construction of new bridges, the widening of existing structures, new mechanically stabilized earth (MSE) walls, and rehabilitation of existing MSE walls.

**Roadway/Drainage.** The Lane-HDR roadway design incorporates geometric modifications associated with improved traffic operations at the SH 71/SH 130 intersection and utilizes turnaround structures for left-turn movements. Drainage improvements utilize open channels where ROW and grading allow. We propose two storm sewer systems on the north side of SH 71 from Presidential Blvd. to Lyle Rd. and along FM 973. We do not anticipate additional drainage easements for the Project.

**Utilities.** The Lane-HDR Team has identified over 130 potential utility conflicts in this corridor. We expect to reduce conflicts to fewer than 70 by implementing modifications outlined in our Utility Conflicts Matrix.

## Project Management Plan

The Lane-HDR team utilizes Technical Work Groups (TWG) as the primary forum to communicate and coordinate project information and protocols. The TWGs are interdisciplinary meetings to integrate design, construction, and maintenance professionals with specific expertise on key project elements that will develop solutions geared toward the achievement of Project goals.

Our TWG process consists of multiple design, construction, and maintenance disciplines which have worked together since the release of the Draft RFP to develop this Project Management Plan. Upon selection by TxDOT as the best-value provider key personnel will co-locate at HDR's Austin office until they transition to a Project office on the corridor and co-locate with TxDOT representatives. Each TWG member will "hit the ground running" due to their previous project involvement and move forward to finalize the design and plan construction operations.

**Risk.** The contract calendar days to achieve substantial completion is aggressive to complete the design, extensive utility relocations, and construction operations. To mitigate schedule challenges, after conditional award Lane will give HDR a conditional NTP to start design solely at

Lane's risk. Our risk analysis indicates the risks with the highest likelihood of occurrence are the utility adjustments, ROW acquisition, and approvals by the City of Austin and CTRMA.

**Construction and Traffic Management.** For planning and organization purposes, the Project is divided into four segments. This approach reduces traffic switches, maximizes work areas and expedites the schedule to minimize disruptions and takes advantage of critical path items, particularly the utilities at FM 973. Lane will implement a comprehensive public information campaign to communicate our traffic control and sequencing plan to all stakeholders.

**Schedule and Cost-Control Management.** A Primavera P6 cost and resource loaded schedule is submitted as the Preliminary Baseline Schedule. We will develop a realistic budget, monitor and track labor, equipment and material cost, analyze production and cost trends, and identify and implement construction efficiencies.

**Environmental Management.** Our environmental management plan establishes site controls during pre-operation planning that includes a series of environmental checklists, ensuring all work begins in compliance. We have a plan to inspect, maintain and document those site controls for the Project's duration. The controls verify the Project meets Lane's and TxDOT's environmental commitments. A consistent approach to environmental management results in positive working relationships with regulatory staff and inspectors. An Environmental Assessment re-evaluation is required for ATC No. 1. Additional impacts are expected to be minor.

**Design Management.** Lane-HDR's design management organization is structured to deliver the design on time, incorporate previous TxDOT and Lane-HDR project experience, and provide TxDOT the best value with the least public impact. Our Design Manager is using several Texas and Austin-based subconsultants with expert knowledge and understanding of the SH 71 Project issues. The entire design team, particularly the environmental and utility managers, are familiar with TxDOT, City of Austin and third party utility specifications and are fully committed to working as partners.

**Safety and Health Plan.** Safety is the number one priority of employees of the Lane organization and its subcontractors. Each Lane employee is empowered to take appropriate steps to eliminate incidents in the workplace and protect the safety of the traveling public. The unique nature of



stakeholders such as ABIA, the Circuit of Americas/ Formula One Track, and commuters places an importance on traffic/worksite safety and effective traffic control. A cornerstone of the Lane’s safety approach is to engage every employee, supervisor, manager, and subcontractor in our **“Zero Accident”** philosophy and help them become program ambassadors. We will initiate a **“Don’t Walk By”** program where everyone is responsible for their own safety and the safety of their fellow employees. All managers, supervisors and craft employees are responsible to stop and correct any unsafe act or condition they observe. Successful safety management occurs when expectations are clearly defined, instilled in each employee, and rigorously enforced.

**Mentoring and Job Training.** Beyond Lane’s commitment to workforce diversity and our active intern and apprenticeship program, this SH 71 Project provides significant opportunities for DBE firms and Texas Unified Certificate Program listed firms. Lane will develop short and long term DBE relationships to assist with this project and future Lane contracts.

**Preliminary Baseline Schedule (PBS).** Lane’s experience on over \$2B in design-build toll lane projects proves the importance of quickly building project momentum. Our PBS details a step-by-step process for mobilization, design start-up, Environmental Assessment re-evaluation, utility negotiations, ROW, submittals and early start of construction. The following table presents preliminary baseline schedule activities and dates.

 **Major Milestone**     **Other Major Activity**

Activity	Completion Date
Proposal Due Date	21 May 2014
DBA Conditional Award	26 June 2014
DBA Contract Execution	31 August 2014
Notice to Proceed 1	2 October 2014
Notice to Proceed 2	1 December 2014
ROW Acquisition	31 December 2014
Utility Adjustments	2 April 2016
Design	5 February 2015
Substantial Completion	30 September 2016
Final Acceptance	21 October 2016

## Quality Management Plan

The Lane-HDR team’s approach to quality is to assign key DB leaders who will focus specifically on the design and construction work for each separate package. We have assigned David Williams, PE as our DQAM, and Frank Jaster, PE as our CQAM. David will be responsible for design quality assurance and Frank will be responsible for construction quality acceptance. David will be responsible for implementation of procedures to ensure all design products are accurate and checked before release. Our designers will coordinate closely with TxDOT to review all elements of design and construction to provide a quality finished project.

Our team’s Quality Management Plan (QMP) is predicated on the following four key principles:

- Understanding TxDOT quality requirements;
- “doing it right the first time”;
- checking and documenting results; and
- continuous improvement.

The Lane-HDR team will integrate TxDOT and the CTRMA into our Quality Management Plan (QMP). Our approach includes provisions for design, construction, and maintenance coordination meetings specifically established to inform TxDOT and the CTRMA of issues, progress and status of the work during “over the shoulder” reviews. TxDOT and the CTRMA will have full access to work areas and will be afforded the opportunity to oversee QA and QC activities during all phases of design, construction, and maintenance during construction.

**DBE Requirements.** The Lane-HDR team will meet TxDOT’s DBE goals including 4% of price allocable to design work, and 8% of the price allocable to construction work. Lane and HDR have been invited to participate in TxDOT’s new Alliance Program that provides outreach services to expand minority firm participation. To ensure maximum benefit and successful execution of the DBE performance plan, Lane will use proven approaches in plan creation that include public outreach, marketing and communication, procurement, contract compliance and reporting processes. In addition to program administration, Lane-HDR will implement a job training and small business opportunities program aimed at providing training to construction industry candidates in critical craft fields and providing capacity-building and technical training to DBE firms on the Project.

We will use a number of methods to manage the DBE program effectively, including:

- Developing and maintaining lists of DBE bidders from the Texas United Certification Program;
- structuring procurement packages to afford DBEs maximum participation;
- including DBEs in all solicitations for products and services they are capable of providing;
- coordinating outreach events targeting second-tier and lower-tier bid opportunities; and
- reviewing each subconsultant/subcontractor opportunity to assure the DBE firms are certified and provide a commercially useful function.

Our team has already committed to six (6) DBE or minority design firms and we recognize that the outreach efforts do not stop when the Project starts. Lane will continuously solicit DBE participation in the following positions throughout the life of the Project:

Asphalt	Geotechnical Materials & Testing	Traffic Control Components
Bridge components	ROW Maintenance	Trucking
Concrete components	Janitorial	Misc. metals
Design support	Pavement components	Electrical
Fencing/guardrail	Landscaping	Signs

## CONCLUSION

For any major project to be a success it must start with the right plan. Our goals focus on effective solutions that provide added Project benefits. Our Project Development Plan delivers:

- A true partnership with TxDOT, CTRMA and local stakeholders;
- an open door policy from the Executive Support Team and the Project Manager on down;
- an uncompromised commitment to public and workforce safety;
- continued mobility with minimum construction impacts;
- opportunities for DBEs; and
- the economic and utility coordination

advantages of working as the bid-build prime contractor on the adjacent FM 973 project.

Lane-HDR provides a strong local team with expertise and experience gained from previous teaming relationships to successfully complete DB projects. Our expertise is demonstrated from our experience working together on multiple projects totaling greater than \$3B, including the IH 35E Managed Lanes Project in Dallas, the I-77 Widening in North Carolina, the I-85 Bridge Replacement and I-85 Widening in North Carolina, and the I-4 Reconstruction in Florida (just awarded). We will employ proven management approaches and project tools from those successful endeavors. We are committed to effective partnering with TxDOT, CTRMA, and Project stakeholders to maintain mobility on the SH 71 corridor. We are eager and ready to “Rock and Toll.”

Lane will use the **resources, financial benefits, and maintenance of traffic coordination** provided by our adjacent FM 973 bid-build project to the SH 71 Project's **advantage.**

