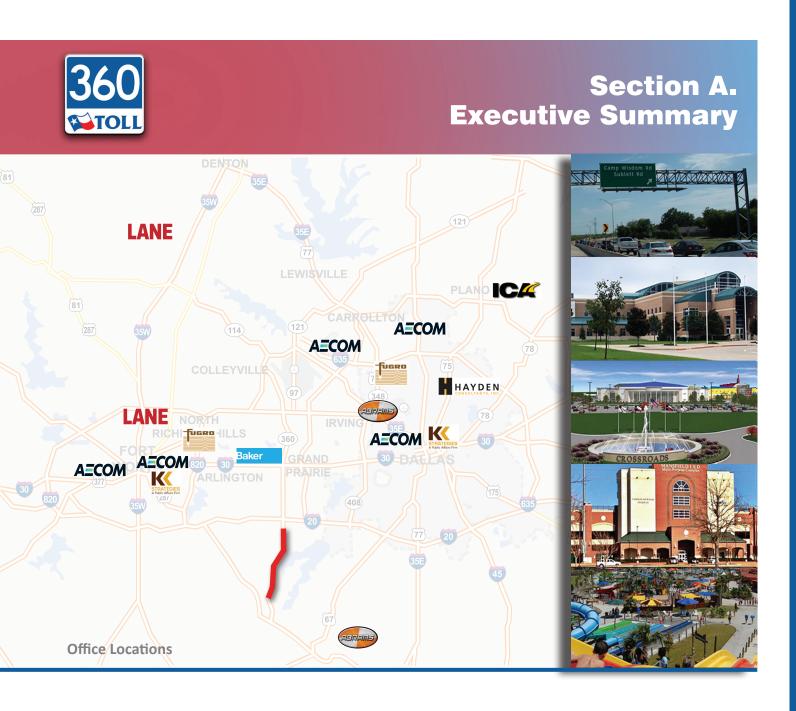
Technical Proposal for the **TxDOT SH 360 Project**



LANE | ABRAMS
Joint Venture

JOINT VENTURE

Section A – Executive Summary

Introduction

TxDOT and NTTA have partnered to deliver the SH 360 Toll Road to the North Texas community. Much the same way, The Lane Construction Corporation (Lane) and J.D. Abrams, L.P. (Abrams) have partnered to form the Lane-Abrams Joint Venture (L|AJV) to design, construct, and maintain the project. The L|AJV is prepared to partner with TxDOT and NTTA to deliver SH 360 to the corridor stakeholders. The L|AJV will use our local, statewide, and national resources and design-build experience to construct SH 360 to meet or exceed TxDOT's and NTTA's expectations.

The L|A JV has partnered with AECOM Technical Services, Inc. (AECOM) and will use their extensive design-build experience in the DFW area to deliver a quality design for this project. Lane, Abrams, and AECOM have spent the last six months analyzing and developing an in-depth understanding of SH 360 to determine the most efficient way to deliver the project. Our plan, detailed in this proposal, will meet or exceed TxDOT's established goals.

A. Changes to the Proposers QS

The L|A JV has not made any changes to our organization from the QS. Changes to Key Personnel are identified below in Section B.

B. Changes in Proposer's Organization

TxDOT has approved the proposed Key Personnel changes.

Position	Lane-Abrams Committed Manager	Change from QS
Project Manager	Kier Ouderkirk	Replaces Robert Patcheck
Safety Manager	Steve Ford, CSHO	Replaces Tom Rusek

TxDOT added requirements in the RFP stage for additional Key Personnel. TxDOT has approved the two Key Personnel below to fulfill those requirements.

Position	Lane-Abrams Committed Manager
Maintenance Manager	Zane Webb, P.E.
Environmental Compliance Manager	Michael Green

C. Summary of Proposed Management, Decision Making and Day-to-Day Operation Structure

Our team members have experience working on projects similar in size, schedule requirements, and conditions. Past

PROPOSAL ORGANIZATION AND CONTENTS

The L/A JV has organized this proposal according to the Instruction to Proposers (ITP), Exhibit E. We have included a reference copy of Exhibit E, as requested.

A. Executive Summary

 Executive Summary (Exclude price information)

B. Proposer Information, Certifications & Documents

- 1. Form A
- 2. Organizational and Authorization Documents
- 3. Form B-1
- 4. Form B-2
- 5. Form B-3
- 6. Form C
- 7. Form D
- 8. Form E
- 9. Key Personnel Statements of Availability
- 10. Letter(s) Approving Changes in Key Personnel
- 11. Letter(s) Approving Changes in Proposer's Organization
- 12. Form F
- 13. Form G
- 14. Form H
- 15. Form I
- 16. Form J
- 17. Form P
- 18. Form Q
- 19. Form R
- 20. Form S
- 21. Surety Information
- 22. Exhibit H

C. Proposal Security

1. Form K

D. Project Development Plan

- 1. Technical Solutions
- 2. Project Management Plan
- 3. Quality Management Plan

E. Substantial Completion Dates

1. Form O

F. Appendices

- 1. Key Personnel Resumes and References
- 2. Hub Subcontracting Plan
- 3. Technical Drawings, Graphs, and Data
- 4. Preliminary Project Baseline Schedule

JOINT VENTURE

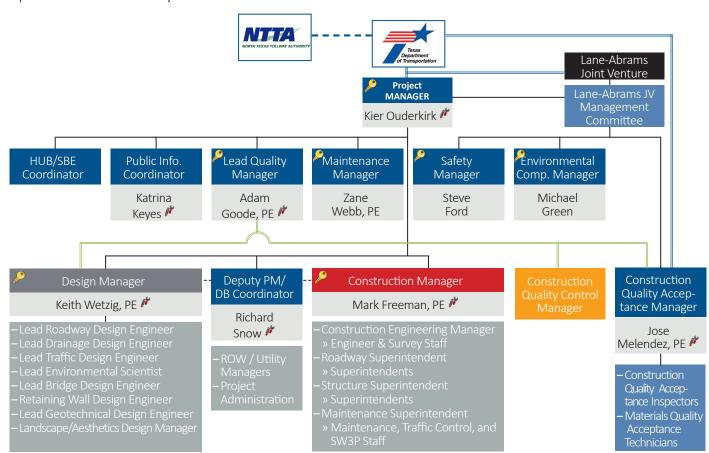
projects such as Spur 601 Pass-Through Toll in El Paso and SH 161 Phase 4 in Grand Prairie have given us the ability to develop an operational structure that can easily manage the fast-paced and rapidly changing climate of a design-build project. Current TxDOT design-build projects that L|AJV team members are involved in, such as IH 35E Managed Lanes, the Horseshoe in Dallas, and Loop 375 Border Highway West Extension in El Paso, have shared lessons learned with our SH 360 Management Team.

Kier Ouderkirk will lead the overall decision-making and day-to-day operations of the SH 360 Project as the Project Manager. Kier will be supported in his role by multiple key personnel. The chart below summarizes the structure of our key personnel and key value-added positions. Our staff has been thoughtfully selected and structured to successfully deliver the SH 360 project to TxDOT. The L|AJV confirms that each of the Key Personnel designated below are available and committed to their assigned roles for the SH 360 Project.

D. Project Development Plan

The L|A JV will provide TxDOT with a Project Development Plan (PDP) that meets or exceeds the requirements of the Design Build Agreement (DBA). Our PDP will be fully adaptable to perform the Base Scope as well as any or all of Options 1-3 that TxDOT may elect to include in the contract.

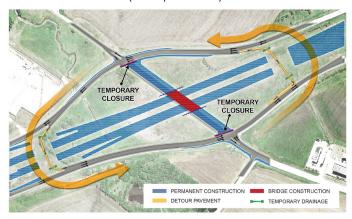




Technical Solutions

Traffic Management Plan

Our Traffic Management Plan will minimally impact normal traffic conditions during construction. Our management and design staff have developed a plan that will allow traffic to use existing improvements on SH 360 for a majority of the construction duration. Many of the cross streets will be constructed using a detour concept to keep traffic conditions at or above existing levels of service. This will allow for single-phase, rapid construction of grade separation between SH 360 and cross streets (example below).



Bridges and Surface Structures

The L|A JV will provide TxDOT and NTTA with structures that meet NTTA design guidelines for aesthetics, while maximizing value with TxDOT design standards for bridge construction. Our design and construction teams spent months evaluating multiple bridge options, sizes, and configurations to deliver TxDOT and NTTA the most efficient design for their money. At many cross streets, such as Camp Wisdom Road/E. Sublett Road, Lynn Creek Parkway, Debbie Lane/Ragland Road, Holland Road, Broad Street, and Heritage Parkway, a reduced number of bridge spans will allow expedited construction due to limited substructure work.

Roadway

We have developed a roadway design using up-to-date 3D modeling techniques that allowed our construction team to evaluate the most cost effective profiles for SH 360. The L|AJV has improved TxDOT's schematic to provide a more balanced excavation and fill process, which will result in overall cost savings. In the area of Broad Street, a significant change was made to create more on-site spoils to use in fill areas rather than bringing in off-site materials. This design optimization process will provide efficient earthwork operations throughout construction.

Drainage

The L|A JV drainage design key goals are:

 Maintain existing drainage patterns to fully convey off-site flows by culverts or bridge openings without adverse upstream or downstream impacts.

- Design improvements to accommodate TxDOT criteria; adjacent municipalities, including the cities of Arlington, Mansfield, Grand Prairie; and FEMA/NFIP regulations.
- Optimize design for lowest impact at FEMA stream crossings with Lynn Creek, Bowman Branch, Walnut Creek, and Low Branch.
- Maintain 6-foot minimum flat bottom ditches to avoid erosion and increase channel flow paths.
- Maintain culvert structures and storm sewer systems with suitable access points to optimize maintainability and project life cycle costs.
- Develop an efficient drainage system design that allows for future expansion to ultimate conditions while minimizing current costs.

Utilities

The L|A JV has worked diligently throughout the RFP phase to develop a comprehensive understanding of utility interests in and along the corridor. We used TxDOT's Subsurface Utility Engineering (SUE) data and survey data collected by the L|A JV team to integrate all known utility alignments into our design. Our utility designers, who have decades of experience in the DFW area, provided design and construction requirements for potential utility impacts to our discipline leads. Using this information, our team was able to develop a design for TxDOT and NTTA that will minimize relocations, will not require any additional ROW acquisitions, and will allow for recovery should any delays develop due to utility conflicts.

Environmental Impacts

During the RFP stage, L|AJV construction management worked with our environmental design and management staff to develop a plan to accommodate environmental impacts. Our largest impacts are related to migratory bird nests and the time required for obtaining critical environmental permits. We have scheduled the project aggressively to finish clearing operations prior to the October 1st deadline to avoid disturbing migratory bird nesting. Failure to conclude that work could cause a 5-month schedule delay waiting for the non-disturbance period. To build SH 360 in the shortest time possible, our designers incorporated potential impacts from the USACE permitting process into certain design choices. Our designers used every option available to design an economical project that minimizes environmental impacts to streams and wetlands.

Unavoidable impacts, such as the crossing at Low Branch, were accounted for in the schedule using conservative estimates of the permitting process. These estimates were based on our experience with similar projects. We will construct improvements adjacent to the impacted areas during the permitting process and will tie in

construction once the permits are approved. This will keep the project on track. Our team is prepared to schedule double shifts or add additional crews to recover schedule slippage due to the permit process. This will only be necessary in the areas covered under the permit.

Project Management Plan

General Project Management Control and Coordination of Subcontractors

Many of our subcontractors have been involved during the RFQ and RFP stages, and will continue working with us through the pre-construction stages. All subcontractors have provided constructability input that has helped schedule the project accurately from both a self-performed and subcontractor standpoint. L|AJV management will work with our subcontractors maintain our high level of safety and quality standards developed and implemented for this project. Subcontractors will be assigned an L|AJV engineer who will be responsible for monitoring performance in the areas of safety, quality, and schedule. Key subcontractors will be co-located at the Project Office and will participate in weekly meetings with TxDOT and the L|AJV.

Project Schedule

The L|A JV will deliver the project ahead of schedule. We have worked since the release of the RFP documents to develop a Project Baseline Schedule (PBS) that reflects realistic, upfront activity durations for design, ROW acquisition, utility relocations, and environmental and governmental permitting. The L|A JV is committed to finishing the project in 785 days from NTP 1 for the base scope, which is a 25-day savings from the RFP allowance. The graphic below represents a summary of our schedule.

Safety and Health Plan

The L|AJV has a "Zero Accident" philosophy, which is the belief that all accidents are predictable, preventable, and unacceptable. Our Safety and Health Plan takes a multistep approach to educating our employees on the best safety practices. Daily pre-shift safety meetings will include Job Hazard Analysis discussions, appropriate safety topics, and changes to the work plan based on site conditions, weather, and changes in equipment or personnel. Weekly

safety meetings will be held at a work area level, and monthly safety meetings will be held project-wide. Also included in our Safety Plan is the "Don't Walk By" program. This program holds employees accountable for their own safety and the safety of those around them. All managers, supervisors, and craft employees are responsible to identify, stop, and report any unsafe act or condition they observe without the fear of reprisal.

Public Information and Communication

Our Public Information Team, led by K Strategies, will work with TxDOT and NTTA to keep corridor stakeholders informed on the project progress. The L|AJV will encourage 2-way communication between the project team and corridor stakeholders throughout the project. Our team will hold outreach activities to engage the public throughout the project duration. Katrina Keyes, our Public Information Coordinator, will lead our team's Public Information activities. Katrina has over 20 years of experience working in the DFW area and will lead the team in reaching the stakeholders and public through public meetings, our public information office, project website, mobile app and text alerts, traditional and social media, and project hotlines. Our project information staff will appropriately disseminate information related to project updates, routine closures, weather events, or emergency events.

Maintenance Management Plan

During construction, the L|A JV will manage Maintenance During Construction (MDC) with our own crews. Subcontractors will be assigned for specialized items. Our experience with MDC includes working as engineers for TxDOT to performing TxDOT maintenance contracts. This gives us the experience and expertise to handle MDC. The L|A JV has partnered with Infrastructure Corporation of America (ICA) to provide maintenance during the Comprehensive Maintenance Agreement (COMA) period for SH 360. Zane Webb, P.E. will serve as Maintenance Manager for this project and will meet or exceed all of the requirements of the COMA. Zane has been thoughtfully selected to lead the maintenance during the COMA based on his years of experience successfully working for TxDOT and ICA.



Risk Management

The L|A JV has been evaluating the risk on SH 360 throughout the RFQ and RFP stages. Our team has held multiple workshops to discuss risks among the design, construction, and maintenance groups. Those risks have been evaluated and categorized as low, medium, and high priority. Items such as obtaining the critical permits in time, obtaining design approval, performing reconstruction under the Union Pacific railroad bridge, and integrating Option 3 work are some of the risks we have identified. For each item in our risk matrix, we have developed and identified mitigation strategies. After NTP 1, the L|A JV will begin meeting with TxDOT and NTTA to further develop our risk matrix. Risk will continue to be analyzed and discussed throughout the project and mitigation strategies will continuously evolve to meet the needs of SH 360.

Quality Management Plan

Organizational Structure

The L|A JV has assembled an experienced group of Quality Management personnel that will be led by Jose Melendez, P.E., of Rodriguez Engineering Laboratories for Quality Acceptance (QA), and Adam Goode, P.E., for Quality Control. The structure of our quality management organization is shown below.

QC and QA Acceptance

A quality project begins with QC. Adam and his team will work with our construction team to ensure that all work meets or exceeds applicable TxDOT and NTTA standards and specifications. Jose's QA team will be brought in to accept the work for TxDOT only after Adam's QC team has verified that all requirements are met. This process will limit rework and retesting in the QA stage, and allow production to progress without delay.

E. Approach to Satisfying HUB and SBE Requirements

TxDOT has set a HUB goal of 23.7% for professional services, and an SBE goal of 11% for construction services. The L|A JV has already enlisted the services of multiple HUB and SBE firms that will help us fulfill the HUB/SBE goals for this project. During the RFP phase, multiple professional service companies that are HUB-certified or are pending Hub certification have been actively involved with our project development. Prior to and during the bidding phase, we solicited quotes from multiple SBE firms, and have selected many to perform subcontracted work. The L|A JV will use the following methods to engage levels of HUB and SBE participation for additional professional services and construction packages that will be procured after submission of this proposal:

- Develop and maintain a list of certified HUB and SBE bidders
- Implement a team website during the procurement period with links for HUB and SBE firms
- Structure procurement packages to afford HUB and SBE maximum participation
- Include HUBs and SBEs in all solicitations for products and services that they can provide
- Coordinate outreach events targeting second-tier and lower-tier bid opportunities
- Review each Major Participant's subcontractor/ subconsultant opportunities to ensure HUB and SBE firms are certified and provide useful commercial functions.

Summary

The L|A JV has assembled an experienced, reputable team to successfully partner with TxDOT and NTTA and deliver a high-quality, safe project for the SH 360 corridor. Our personnel have been carefully selected based on specific, relevant experience to incorporate lessons learned on

QA/QC **Organizational Chart Proiect** Manager Kier Ouderkirk 🧨 Lead Quality Manager Adam Goode, PE 🧨 **Professional Services** Construction Quality Control Manager **Construction Quality** Quality Control Manager Acceptance Manager Laura Weis, PE 🧨 Jose Melendez, PE 🧨 Design Manager **Construction Quality Acceptance Inspectors** Keith Wetzig, PE 🧨 **Design Quality** Design Quality Control Engineer **Materials Quality** ssurance Engineers

previous projects and implement efficient methods of design and construction. The L|A JV has developed a design and construction plan to deliver a quality project ahead of schedule. Our team members are committed to TxDOT goals and the goals of the SH 360 Project and are immediately available. We look forward to partnering with TxDOT to successfully deliver this high-profile project.