We have formed a Team comprised of world class companies and leaders in their respective fields.

A. Executive Summary

Introducing the SH 288 Mobility Alliance Team!

Proven leadership and an innovative design never before seen in the state of Texas. We are ready to partner with TxDOT to make SH 288 a model project for the State.

SH 288 Mobility Alliance (SH288MA) is pleased to submit this proposal for The State Highway 288 Toll Lanes Project In Harris County (Project). Our Team of OHL Concesiones, S.A. (OHLC), developer and lead O&M firm; Obrascón Huarte Lain, S.A. (OHL, S.A.), lead contractor; Michael Baker Jr., Inc., a Michael Baker International Company (Baker) and Stantec Consulting Inc. (Stantec) – SH 288 Mobility Designers (SH288MD), lead engineering joint-venture, is committed to meeting or exceeding all of TxDOT’s requirements including:

- Improving mobility within the SH 288 corridor;
- Delivering an optimized project to meet operational and handback requirements; and
- Maintaining safe mobility throughout the construction, operation, and maintenance periods.

The southern Houston area has been experiencing significant population growth, and this trend is expected to continue in the years to come. This growth is inevitably causing the traffic in the area to grow. The traffic growth rate could reach 40% in a 20-year period on the SH 288 corridor, which already experiences a volume of over 180,000 vehicles a day. SH288MA will improve the corridor to accommodate this traffic growth with the addition of two toll lanes (TL) in each direction and superior Operations and Maintenance (O&M) of the entire facility.

SH288MA is strategically structured to vertically integrate most of the core functions required to deliver this project: investment, construction, and O&M will be performed in house within the same company, OHL. This vertical integration will provide fast decision making, and the self performance of the O&M will also enable the Team to provide efficient service, ultimately benefiting all stakeholders. This strategy has been successfully implemented by OHL on over 10 P3 projects worldwide.
(a) Organization and Contents of the Proposal

The Proposal has been organized according to the Instructions to Proposers (ITP), Exhibit E. The Proposal Checklist has been provided as requested per the ITP.

A. Executive Summary
B. Proposer Information, Certifications, and Documents
C. Project Development Plan
   C.1. General Project Management
   C.2. Design-Build Management and Technical Solutions
   C.3. Operations and Maintenance Management and Technical Solutions
D. Appendices

(b) Summary of Changes to Proposer’s Qualifications Submittal (QS)

OHLC will now be the sole equity member and O&M provider, and OHL, SA will be the sole construction contractor. Given the size and scope of this Project, these changes allow us to submit the most competitive bid. In addition, SH288MA has changed or added key personnel including the Construction Manager, Safety Manager, Design Manager, Public Information Coordinator, and Financial Manager. Table 1 below details the approved changes to the QS which have been incorporated into the Proposal.

See Section B. Proposer Information, Certifications & Documents for TxDOT approval letters.

(c) Major Participants and Identification of any Changes to the SH288MA Team

SH288MA offers TxDOT full-time committed professionals with the benefit of having worked together on other TxDOT and design-build (D/B) projects in Texas of similar size and scope. We will deliver the best solution for the community by providing excellent design, construction, and O&M services on time or ahead of schedule, while maintaining safety and mobility for users during construction.

Major Participants are shown in the organizational chart to the right, and changes to SH288MA’s organization and key personnel are provided in Table 1.

Table 1. Approved Changes to SH288MA Organization

<table>
<thead>
<tr>
<th>Role</th>
<th>Qualifications Statement</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Advisor</td>
<td>Removal of Macquarie Capital Group Limited</td>
<td>Replaced with BMO Capital Markets</td>
</tr>
<tr>
<td>Lead Contractor JV Members</td>
<td>Removal of the Lane Construction Company and Texas Sterling Construction Co.</td>
<td>OHL, S.A. remains</td>
</tr>
<tr>
<td>Design Subcontractor</td>
<td>Removal of LJA Engineering, Inc.</td>
<td>No replacement needed (one of six designers)</td>
</tr>
<tr>
<td>Equity Member</td>
<td>Removal of Macquarie Capital Group Limited</td>
<td>OHL Concesiones, S.A. remains</td>
</tr>
<tr>
<td>Superintendent</td>
<td>Removal of Robert Patcheck</td>
<td>Replaced with Jeff McCall</td>
</tr>
<tr>
<td>Safety Manager</td>
<td>Removal of Raymond Berrios</td>
<td>Replaced with David Dennis</td>
</tr>
<tr>
<td>Design Manager</td>
<td>Removal of Don Treude, PE</td>
<td>Replaced with Wayne Ellenberger, PE, DBIA</td>
</tr>
<tr>
<td>Public Information Coordinator</td>
<td>Not submitted in QS per RFQ</td>
<td>Addition of Ruth Henshall</td>
</tr>
<tr>
<td>Financial Manager</td>
<td></td>
<td>Addition of Pablo Ybanez</td>
</tr>
</tbody>
</table>
(d) Summary of the Project Development Plan

We challenged our design and construction teams to develop an innovative design and approach tailored to the unique challenges of the corridor with TxDOT’s Project goals in mind. Through our experience and the talents of our design, construction, operations, and maintenance staff, SH288MA succeeded in the approval and conditional approval of 10 Alternative Technical Concepts (ATCs) of which 3 will be included in the attached proposal, and the integration of numerous technical innovations that deliver community and environmental enhancements, as well as cost-savings. Through our Team’s dedication and research during the RFP phase, we will deliver an optimized SH 288 Toll Lanes Project.

(i) Proposed Management, Decision Making, and Day-to-Day Operation Structure

Proposed Management and Decision Making

The management of the Team is outlined in the organizational chart below. Our management structure places the most qualified individuals in management roles regardless of company. SH288MA believes in an integrated approach where the experience of the individual companies are combined to achieve the Project’s goals.

Day-to-Day Operation Structure

José María López de Fuentes, the Project Manager of SH288MA, is an experienced toll road manager and will be responsible for Project delivery and overall operations. Mr. López de Fuentes has previously led the North Tarrant Expressway, LBJ Expressway, and SH130 segments 5&6 P3’s in Texas. He was also the Project Manager...
Executive Summary

Our Independent Quality Manager will develop, implement, and oversee SH288MA’s Quality Management Plan to achieve the highest quality standards.

Personnel Commitment

As evidence of SH288MA’s commitment to the Project, in Section B, we have provided a commitment letter from all Major Participants who are proposing the Key Personnel mentioned herein.

(ii) Quality Management

SH288MA will put in place a comprehensive Quality Management Plan (QMP), to establish the quality process which will be followed throughout the concession lifetime and which will be especially important during construction, to assure the expected lifetime of the built structure will at least match the originally planned one. The Team is assigning the Quality Management task to Mr. Danny Bennett of Kleinfelder, a highly skilled professional with several years of experience in a lead quality role. He will ensure effective implementation of the QMP beginning to end, including timely reviews, communication with all other quality personnel, and streamlined report and database management in association with TxDOT.

(iii) Working with TxDOT and Third Parties, Including Conflict Resolution

Working with TxDOT and Third Parties

The basis of a healthy relationship with TxDOT, and all third parties will be transparency and fluid communication. SH288MA will kick-off the Project with a partnering session with TxDOT and key stakeholders to build a project team that has a clear strategy, lines of communication, well defined roles, and expectations. TxDOT and key stakeholders will be invited to participate in our weekly Technical Work Group (TWG) meetings; it is our mission to work with TxDOT and all interested third parties collaboratively during the Project. Through partnering, issues can be identified early and conflicts can be avoided or mitigated. We will actively engage TxDOT and third parties through regular meetings and progress reports, throughout all phases of the Project. SH288MA will distribute a zipper list – a list of personnel roles, contact information, and TxDOT/third party counterparts – so that everyone will have access to the appropriate team members at all times.

Conflict Resolution

SH288MA is committed to resolving all disputes at the lowest level, and utilizing partnering sessions and TWGs, which serve as a forum to anticipate, identify, and resolve issues before they become disputes. SH288MA has a clearly defined dispute escalation process that facilitates dispute resolution by those closest to the issue. Strengthened by working relationships developed on past projects, we believe that our negotiated agreements are excellent tools to deal with every type of dispute that may occur during the life of the concession. The Team considers the Dispute Resolutions Procedures (Article 30) to be adequate in establishing procedures to reach an agreement for all parties involved.
(iv) Public Information and Communications

SH288MA’s Public Information Coordinator, Ruth Henshall of The Lentz Group, will develop and implement a Public Information and Communications Plan (PICP). Ms. Henshall and her team have overseen 68 public information programs on Houston infrastructure projects and 22 TxDOT projects, including TxDOT’s SH 288 Corridor Feasibility Study. The Group’s public involvement history along SH 288 and throughout Texas will provide direct insight into tailoring an outreach program that highlights the unique features of the Project to maintain public support.

Key initiatives of our plan include timely notification of Project activities including the development of a Project website and the use of communications tools (e.g., SMS, real-time Twitter updates, eNewsletter blasts); providing the public opportunities to identify issues and recommend solutions via workshops and events; close coordination with TxDOT Houston District via workshops, briefings, and stakeholder meetings; and statewide public information activities and brand guidelines to put forth a consistent message. To benefit the community members in the corridor who could perceive the two SH 288 projects (the Harris County and Brazoria County portions) as a single venture, the PICP calls for close coordination with Brazoria County’s SH 288 public involvement plan in order to appear as a concerted effort.

(v) Environmental Sensitivity and Safety

To achieve our commitment to zero environmental violations, a dedicated team of skilled environmental professionals, led by Mr. Stan Reece of ACI Consulting, will manage environmental compliance throughout the life of the Project. This environmental team brings over 60 years of collective compliance management experience and a consistent track record of developing innovative solutions to complex environmental issues on D/B and P3 projects.

Our Comprehensive Environmental Protection Program (CEPP) will detail specific strategies and procedures to achieve zero environmental violations in connection with identified environmental commitments including mitigation for identified wildlife habitat and vegetation; maintaining existing water quality within Clear Creek, Sims Bayou, and Brays Bayou; avoidance of impacts to riparian habitat at Clear Creek; and the provision of on-site resources during construction if contaminated soils and groundwater associated with the Texas Bus Lines site are encountered. All components of the CEPP will reflect the SH288MA Team’s commitment to impact avoidance first, minimization of risks second, and effective mitigation as a final resort.

Drawing from our extensive experience completing re-evaluations for other Texas projects, we will coordinate internally and with TxDOT representatives to expedite the re-evaluation process, to accommodate design modifications that may occur during the pre-construction phase of the Project. This understanding will benefit TxDOT by ensuring on-time delivery of Project improvements.

(vi) Schematic and Innovative Concepts, Approved ATCs and Approved AFCs

Through a collaborative effort evaluating the existing SH 288 infrastructure, supplemental geotechnical investigations, and a myriad of alternatives, the SH288MA team has refined the schematic design and incorporated significant technical innovations and ATCs.

Technical innovations incorporated into our design include:

1. Increasing the layer coefficient values in our hot-mix asphalt pavement designs to refine pavement thicknesses and reduce pavement costs without creating extensive future maintenance;
2. Enlarging the existing detention ponds near the Beltway 8 (BW8), Airport, Reed, Bellfort, IH-610, and Brays Bayou interchanges and intersections through over-excavation to efficiently achieve reduced construction efforts and significant cost reduction;

3. Identifying a Conditional Letter of Map Revision for Sims Bayou by the Harris County Flood Control District which affects FEMA’s flood mapping along Sims Bayou and significantly alters the floodplain in this area allowing us to lower the SH 288 profile, reduce the effect of backwater in our hydraulic modeling, locate roadside ditch in-line detention closer to Sims Bayou, and ultimately improve local drainage at Sims Bayou and reduce project costs; and

4. Accommodating a 4-foot diameter pier for the existing BW8 bridge in the median of the new SH 288 bridges by reducing the outside TL shoulder width from 10 feet to 8 feet.

Innovative ATCs incorporated into our design include:

1. **ATC-08** – A turbine Interchange between SH 288 and BW8 that avoids conflicts between the BW8 tollway widening while providing SH 288 TL users a similar direct route to and from BW8 as the TxDOT schematic, bypassing the existing at-grade intersections of the BW8 frontage roads with the SH 288 frontage roads and significantly reducing structure square footage and overall interchange height;

2. **ATC-11** – The TLs are placed at-grade and the general purpose (GP) lanes on new structures over the existing IH-610 interchange, providing a cost effective constructible solution that improves traffic control by eliminating straddle bents that would otherwise be required to move the TLs in and out of the median area while maximizing use of existing infrastructure and providing all possible connections between IH-610 and SH 288 including the TLs; and

3. **ATC-24** – SH 288 TLs are elevated to span the two existing Brays Bayou pump stations, avoiding relocation of the pump stations, providing the required vertical clearance to allow maintenance access to the pump areas and effectively reducing the costs of relocating and replacing the pump stations while ensuring they will remain operational throughout Project development.

SH288MA will continue to use this collaborative effort throughout the D/B Phase to ensure the built facility is based on a quality, constructible design that will be economical to maintain and operate.

**(vii) ROW Acquisitions**

To secure and clear the necessary property rights, the Team has partnered with Percheron Field Services, LLC. Our approach includes two significant themes:

1. Early engagement of affected property owners and occupants as stakeholders in the project, including affording property owners the opportunity to have their design and/or construction concerns communicated to the Team; and

2. Facilitating a fully iterative process of offers and counteroffers between TxDOT and the owners of required ROW, a project practice model that has proven successful on several other projects in other states.

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*SH288MA’s inclusion of ATCs at BW8, IH-610, and Brays Bayou provide benefits to adjacent properties, TxDOT, and the travelling public by reducing the overall height, maintenance, and cost of the BW8 interchange, providing connectivity between IH-610 and the toll lanes, and ensuring the Brays Bayou pump stations remain operational at all times by avoiding replacements.*

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*Our ROW approach allows us to acquire all parcels without adversely impacting the construction schedule.*
(viii) Utility Adjustments

Led by Mr. David Whiddon, the Team’s Utility Manager, the Utility Adjustments Team (UAT) will work closely with each utility owner as well as the roadway designers in weekly TWGs. Their focus will be on the consideration of existing utilities and planning ahead for unavoidable conflicts. We will treat each potential conflict as its own individual project, focusing on each specific task creating a methodological approach to accommodating utilities.

The UAT’s proactive coordination process is based on providing early and frequent communication such as a UAT-held utility kickoff meeting upon NTP1, which will include key design and construction team members, and all utility owners throughout the corridor; and regularly scheduled UAT meetings throughout design. This proactive approach gets utility owners on board early, and reduces cost and schedule risks.

Convero, an external collaboration and electronic file sharing system, will be used to ensure that each utility agreement revision and distribution is recorded while feeding each document into the master Project ATSER repository. Convero allows quick transfer and recordation of transmittals, facilitating reviews, comments, and approvals much quicker and easier than traditional means.

(ix) Schedule

Preliminary Baseline Schedule

SH288MA’s Project Controls Manager (PCM), John Hardy, has prepared a preliminary baseline schedule that meets the schedule requirements of the RFP. Mr. Hardy, as a project executive, has never failed to deliver a project either on schedule or ahead of schedule. The Project will be divided into four segments, each to be managed by a Segment Superintendent and work will start on all four segments concurrently. For our schedule, work is predicated on a full work week, factoring in appropriate weather (based on NOAA historic meteorological data) and holidays. Roadway work will be performed predominately at night with bridge work being performed predominately during the day. The IH-610 fly-over is the critical path: it is the most complex part of the job, with the construction of major side-by-side bridges. Long lead items, such as bridge beams, are particularly relevant with the bridge structure, but we do not anticipate difficulty in acquiring these items in line with the scheduled works due to our supplier relationships.

Milestones for Development, Design, Construction and Commencement of Revenue Operations and Maintenance

The preliminary project schedule summary below highlights the key milestones, and durations for ROW acquisition, utility adjustment/relocation, design, and construction activities. It also notes when SH288MA will open the new toll road facility to the public and begin revenue operations and maintenance.

![SH 288 Toll Lanes Project Schedule Summary](image-url)
Technical Work Groups form the nucleus of contact for all parties as each entity will have a seat and a voice at the table.

(x) Delivering the Design and Construction Components of the Project

SH288MA will deliver SH 288 using an integrated D/B management approach that includes extensive collaboration between the Project Team, stakeholders, TxDOT and the IE. Sound partnering principles established at Project initiation, will promote communication and coordination, facilitated by colocating key Project staff in the Project Office and their participation in weekly TWG meetings. Our D/B Coordinator, Gisela Andreu, PE, and the D/B Coordination Team will facilitate this collaborative effort, and work with our Design Manager, Wayne Ellenberger, PE, DBIA, and Construction Manager, Jeff McCall to deliver a high quality Project.

Completion of pre-design activities (survey, utilities, environmental permitting, and geotechnical) and review and approval of critical-path design elements are required before design packages can be released for construction. The construction schedule will drive the scheduling and sequencing of design.

SH288MA has elected to construct SH 288 in four segments. We have developed our Project Construction Management Team to allow concurrent construction in all segments. A primary factor in establishing our schedule for SH 288 was developing a sequence of construction to maximize construction work zones, while minimizing impacts to motorists and the environment. Safety, Quality, Environmental, and Schedule are the driving forces for the Project.

(xi) Construction Sequencing, Traffic Management and Mobility during Construction

The SH288MA team has scheduled work to minimize lane closures. Additionally, our Team anticipates utilizing night shifts to supplement day shifts to avoid traffic disruption, especially in the connections with existing roads – with great emphasis on the BW8 connector ramps.

Within the four construction segments, work will be phased to avoid possible conflicts in significant extensions of SH 288 and adjacent roads.

- Phase 1: Prepare for Construction
- Phase 2: Construct Median Pavement and Bridges
- Phase 3: Construct Relocated GP Lanes and Ramps
- Phase 4: Complete Construction of BW8 Interchange Bridges, Ramp Approaches, and SH 288 GP Structures through IH-610 Interchange
- Phase 5: Complete the Texas Medical Center (TMC) Ramps and Direct Connectors
- Phase 6: Complete all Roadway Construction, Signing, and Permanent Traffic Control

For traffic management during construction, safety for users and 24/7 access to and from the TMC are the priorities for the Team. SH288MA recognizes the advantages of building the majority of the Project within the road median, and only foresees minor partial closures of the existing lanes for the construction of slip ramps to the tolled lanes or eventually for structure set up. We will strive to be good neighbors, for instance, vibration will be minimized during construction by utilizing the FlexSystem Soil Compaction System that minimizes the energy that a vibratory compactor typically uses to compact the soils. A dedicated sweeper truck will operate onsite to monitor travel lanes and address tracking and dust due to construction activities. Water trucks will be utilized to spray for dust control and light and noise emissions will be controlled in accordance with local construction permitting regulations.
(xii) Safety Program

**D/B Phase:** Our goal is to have **zero reportable incidents**. During the design phase, Safety Manager Mr. David Dennis will identify potential hazards and mitigations of the site to create a comprehensive Safety and Health Plan (SHP). Mr. Dennis has over 17 years of safety operation experience related to health and safety, accident prevention, and investigation training for managers and supervisors. He has been actively involved with TxDOT projects for the last six years and will not hesitate to stop work on a jobsite if it is perceived to be unsafe.

**Operating Period:** Open on a 24/7 basis, 365 days per year, our Traffic Management Center will have continuous information about the conditions of the road and direct contact with an around-the-clock available Emergency Response Team. The ITS systems will allow automatic or semi-automatic incident detection on the road. Our control center will have a CCTV system to monitor 100% of its length, which will be complemented by Patrol Crews, equipped with the latest in communications tools to respond promptly and effectively to any accident. The public will be made aware of any event on the road that could adversely affect traffic through Dynamic Message Signs, and the mass media tools described in the PICP.

(xiii) Operations, Maintenance, and Renewal Work

The O&M and Renewal Work is a critical function, and is central to our objectives of ensuring roadway safety, delivering a premium service to roadway users, preserving and extending the life of the Project, and meeting or exceeding the CDA requirements.

Below is a summary of our approach for each of the main components of O&M:

- **Operations:** Our operations approach focuses on safety, high level of service, and full compliance with the CDA. More specifically, we place great emphasis on diligent response and reliable functionality. Our operations approach is set apart by diligent incident response, effective Traffic Management Center operations, attention to customer service, close collaboration with TxDOT, community and stakeholders, and strong focus on reliability of roadway and tolling equipment, communications and reporting devices.

- **Maintenance:** Our maintenance approach is based on systematic activities directed at preserving and extending the life of the Project in a cost effective manner. Our maintenance strategy is differentiated by robust routine maintenance, comprehensive inspections process, incorporation of quality assurance and quality control (QA/QC) functions, availability of information, and clear reporting and stakeholder collaboration.

- **Renewal:** Our approach to Renewal Work is based on the need to ensure full compliance with Handback requirements and Residual Life requirements for the Project. Our Renewal Work strategy places emphasis on condition assessments and inspections, cross collaboration between design, construction and O&M teams, and incorporation of QA/QC procedures.

The O&M day-to-day activities will be managed by Mr. Roberto Hombrados, a seasoned professional with over 18 years of global experience managing O&M activities on roadways, particularly in urban areas. Mr. Hombrados oversaw O&M services on Highway A-2 and Highway M12, both in Madrid, Spain.
We will establish an advanced Traffic Management Center to manage our incident response program which has successfully led to the rapid detection of incidents on past projects.

(xiv) Toll Lane Tolling Operations

Toll Collection, Operations and Interoperability

SH288MA will count on the experience of millions of transactions registered yearly through OHLC projects globally.

The Electronic Toll Collection System (ETCS) will store user information, including pictures of both front and back plates, which will be read and processed through Optical Character Recognition (OCR) systems. This information will also be sent to TxDOT’s Customer Service Center (CSC) Host for billing.

The ETCS will be fully interoperable with all the systems used in the State of Texas and with the most common U.S. commercial tag operators.

State-of-the-art Open Road Tolling technology will be installed through the usage of gantries strategically located above the tolled lanes, along with Advanced Toll Information Signs (ATIS) to inform the users of toll rates for each segment so that go/no-go decisions can be made instantly and safely.

Enforcement

With close coordination with TxDOT and local law enforcement, SH288MA is committed to providing the necessary support for toll collection and enforcement through back office operations including video image reviews. While TxDOT will retain enforcement responsibilities, we are committed to helping TxDOT maximize toll collection through the life of the concession.

Customer Relations

SH288MA will provide TxDOT and the traveling public the most up-to-date information regarding toll rates, maintenance and repair activities, as well as current traffic conditions.

With the implementation of our PICP, the traveling public will be kept informed through news traffic reports, the SH288 Project website, mobile apps, email subscriber alerts, social media, and DMS signs.

Conclusion

SH288MA eagerly accepts the challenge ahead; we have the resources needed to successfully deliver this Project, and the necessary experience to do so. As you will see in the documents ahead, SH288MA is composed of proven leaders in the Texas P3 and D-B markets. Our innovative design will improve mobility and safety along the SH 288 corridor.

SH288MA Provides Exceptional Value to TxDOT in These Three Top Areas:

1. **Vertical Integration of Core Functions**: Investment, construction, and O&M functions will be performed by OHLC and OHL, S.A., improving Project management, expediting decisions, and creating efficiencies.

2. **State-of-the-Art Managerial Tools**: SH288MA will use proven software and processes, some of which are proprietary, developed in house by OHLC’s Traffic and Transport Systems company, TTS.

3. **International and Local Experience**: Our team members have a long history of working with TxDOT and bring a wealth of international P3 experience to the emerging P3 market in Texas.