



## SECTION A. Executive Summary

### The Right Team for Corpus Christi

Almost two years ago, Harbor Bridge Constructors (HB Constructors) hand selected a team to partner with TxDOT to deliver an award-winning New Harbor Bridge (NHB) to Corpus Christi. Our team brings design and construction experience on over 30 award-winning cable-stayed bridges. HB Constructors will serve as the Developer for the NHB project with the Lead Contractor Joint Venture consisting of Archer Western Construction, LLC (AW) and Granite Construction Company (Granite). Infrastructure Corporation of America (ICA), Lead Maintenance Firm, brings TxDOT maintenance experience coupled with cable-stayed bridge maintenance expertise. In addition, HB Constructors has the extensive experience and resources of our in-house maintenance firm, Walsh Infrastructure Management (WIM). WIM's personnel have experience in the long-term operation, maintenance and renewal of highway infrastructure assets.

HDR Engineering, (HDR), Lead Engineering Firm, has maintained a Corpus Christi office since 1982, and led the last inspection and rehabilitation design for the existing Harbor Bridge. The firm has the largest local employee base of transportation and maritime engineers and brings a strong team of Corpus Christi design subconsultants to foster growth and opportunity. In addition, our team also includes International Bridge Technologies (IBT), a global leader in signature bridges, and a strong supporting cast of TxDOT experienced design firms, most of which are Disadvantaged Business Enterprise (DBE).

### HB Constructors Unmatched Qualifications and Design for the New Corpus Christi Harbor Bridge

#### (a) An Explanation of the Organization and Contents of the Proposal

##### HB Constructors Organization of this Proposal

<b>Volume 1</b>	<i>Proposer Information, Certifications &amp; Documents</i>
<b>Volume 2</b>	<i>Executive Summary Project Development Plan</i>
<b>Volume 3</b>	<i>Appendices</i>
<b>Volume 4</b>	<i>Aesthetics Plan</i>
<b>Volume 5</b>	<i>Updated Financial Proposal</i>
<b>Volume 6</b>	<i>Price Proposal</i>

#### (b) Summary of Any Changes to Proposer's QS

HB Constructors has made no changes to its organization since the submission of the Qualifications Statement, other than the changes related to Key Personnel identified on the next page.

#### (c) Summary of Any Changes in Proposer's Organization, Equity Members, Other Major Participants, Key Personnel and Any Other Personnel Identified in the QS Since Submission of the QS

After thoughtful consideration and valuable input provided by TxDOT during the QS debrief meeting, HB Constructors received TxDOT approval of the better qualified Key Personnel listed



*Heading east on IH37 toward Corpus Christi, the pedestrian bridge at Stillman Street provides a gateway to the corridor. Color accents and architectural details make it a memorable focal point.*

below. These Key Personnel provide more relevant and similar experience to the NHB project. All additions and changes to Key Personnel were approved by TxDOT per the letters received on December 2, 2014, February 10, 2015 and February 26, 2015. These include the following:

#### Key Personnel Not Required to be Submitted in the QS

Key Personnel	Position
Dave Rogowski, PE	Lead Demolition Manager
Allen Wynn	Environmental Compliance Manager
John Lazzara, PE*, ENV SP	Sustainability Manager

#### Key Personnel Replacements since the QS

Replacement Key Personnel	Position	Exceeds Predecessor in the Following Areas
Jeff St. John, PE*	Project Manager	24 years of signature, long span bridge and highway construction experience. PM on more than \$1B of bridge projects over navigable water in the last five years.
Carrie Weir	ROW Acquisition Manager	Provided \$140M of Right-of-Way (ROW) services in the last six years. Recently acquired over 350 parcels within budget and schedule.
Stephen Martin, PE	Professional Services Quality Acceptance Manager	33 years of design quality experience Design Quality Acceptance Manager on over \$3B in the last five years.
John Bergman, PE	Lead Maintenance Manager	20 years of experience with O&M, asset management and inspections for bridges over navigable water and highways. Managed the O&M Program for the Ravenel Cable-Stayed Bridge that crosses over the Cooper River.

\*Texas registration pending, currently registered outside of Texas

#### Added Teaming Partners

- ★ Hinman Consulting – NHB Safety and Security
- ★ Bridgescape, LLC – Bridge Aesthetic Architecture
- ★ Genesis Structures – Demolition Engineering
- ★ Stateside Right of Way Services, LLC – ROW
- ★ Applied Research Associates, Inc. (ARA) – Pavement Design

#### (d) Summary of the Proposed Management, Decision Making, and Day-to-Day Operational Structure of Proposer, and a Statement that Each Major Participant has Committed to Provide the Relevant Key Personnel

Our design, construction and maintenance personnel will work as one unified team with TxDOT throughout the project at our co-located office in Corpus Christi. HB Constructor's Team is led by Jeff St. John, PE\*, our proposed Project Manager, the single point of contact for TxDOT. Jeff has led similar complex, cable-stayed bridge projects and understands the value of co-location. This design and construction team successfully co-located with TxDOT and GEC staff on the \$1B, IH35E Managed Lanes DBM project in North Texas and fully understands the value and benefits gained on both sides. Our Project Management, key design, construction, maintenance personnel and corresponding TxDOT staff will work through challenges and track project progress during task force meetings under the same roof. Our management philosophy promotes clear and effective lines of communication beginning and ending with TxDOT. **We offer TxDOT the unique advantage of a construction JV and design firm that have worked on a TxDOT DBM project together that will have no learning curve and will hit the ground running.**



## Experienced Project Leadership

The success of this project begins with our Project Manager and the quality of dedicated key personnel. As the longest cable-stayed bridge in the history of the Lone Star State, the Corpus Christi Harbor Bridge project deserves the leadership of a Project Manager with proven experience delivering cable-stayed bridges of similar size and complexity. Walsh/Archer Western have provided their most qualified Project Manager and Construction Manager to lead HB Constructors and deliver to Corpus Christi an elegant, iconic and unique bridge that will be the first design of its kind in the world.

Jeff has more than 24 years of signature, long span bridge and highway construction experience. He has delivered five signature bridges, including the award winning, Ohio River Bridge East End Crossing \$763M DBFOM cable-stayed bridge project.

Jeff is passionate about building signature bridges, and is 100% committed to the Corpus Christi NHB project. He will be responsible for the overall design, construction and contract administration for this project. Jeff has consistently achieved safety, quality and schedule goals for complex bridges and transportation projects. During the design phase for our submittal, Jeff and his team developed an innovative, cost effective design to deliver an award winning, iconic symbol to Corpus Christi.



Execution of a DBM project of this magnitude requires the orchestration of hundreds of personnel, each with their respective expertise. To that end, Jeff brings the perfect combination of DBFOM experience coupled with a track record delivering large, signature bridges on time and within budget. Jeff is responsible for executing the project safely, to TxDOT’s quality standards and within the budget and schedule constraints established in the contract. Our Management Approach provided in Volume 2, Section B (Management Structure) outlines our plan to integrate team members. Collectively, this team brings the best engineering, construction and maintenance innovations to TxDOT for this project. The Exhibit on page 5 identifies our key personnel and benefits they bring to TxDOT and the project.

**(e) Summary of the Project Development Plan**

HB Constructors has tailored our approach to deliver TxDOT a high quality project that is on-time and under budget with safety as the top priority. **We have been studying this project for the past eight years**, since HDR performed the last Harbor Bridge inspection/rehabilitation design. During that time, we had the opportunity to identify key technical challenges associated with this project. HB Constructors has developed a plan for the project that will provide TxDOT a state-of-the art, award-winning bridge that will improve connectivity and reduce maintenance costs on this vital transportation link.

The NHB project will be rightfully hailed as one of the longest and tallest cable-stayed bridges in North America – and one which provides safe passage for vehicles and pedestrians high above one of the most vital port facilities in the world. However, to the people that live and work in Corpus Christi, this project represents far more – a once-in-a-lifetime opportunity to energize the entire region with a modern and durable transportation system that will seamlessly unite their community for generations to come.

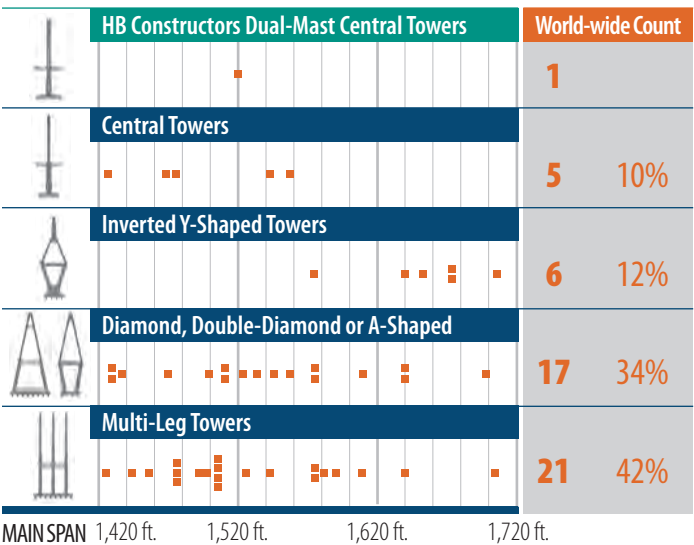
The NHB project will replace a proud but aging structure, one which has provided workmanlike service for over a half century, with an elegant, durable and iconic bridge design that is truly unique in the world – a NHB worthy of its place as the iconic symbol of the Gulf Coastal Bend.

**(e) (1) Summary of the Technical Solutions)**

Through our experience, similar corporate philosophies and collaboration of innovative thinking, HB

Constructors has succeeded in the approval, or conditional approval, of 10 Alternative Technical Concepts (ATCs) and the integration of numerous community and environmental betterments, as well as cost-saving elements.

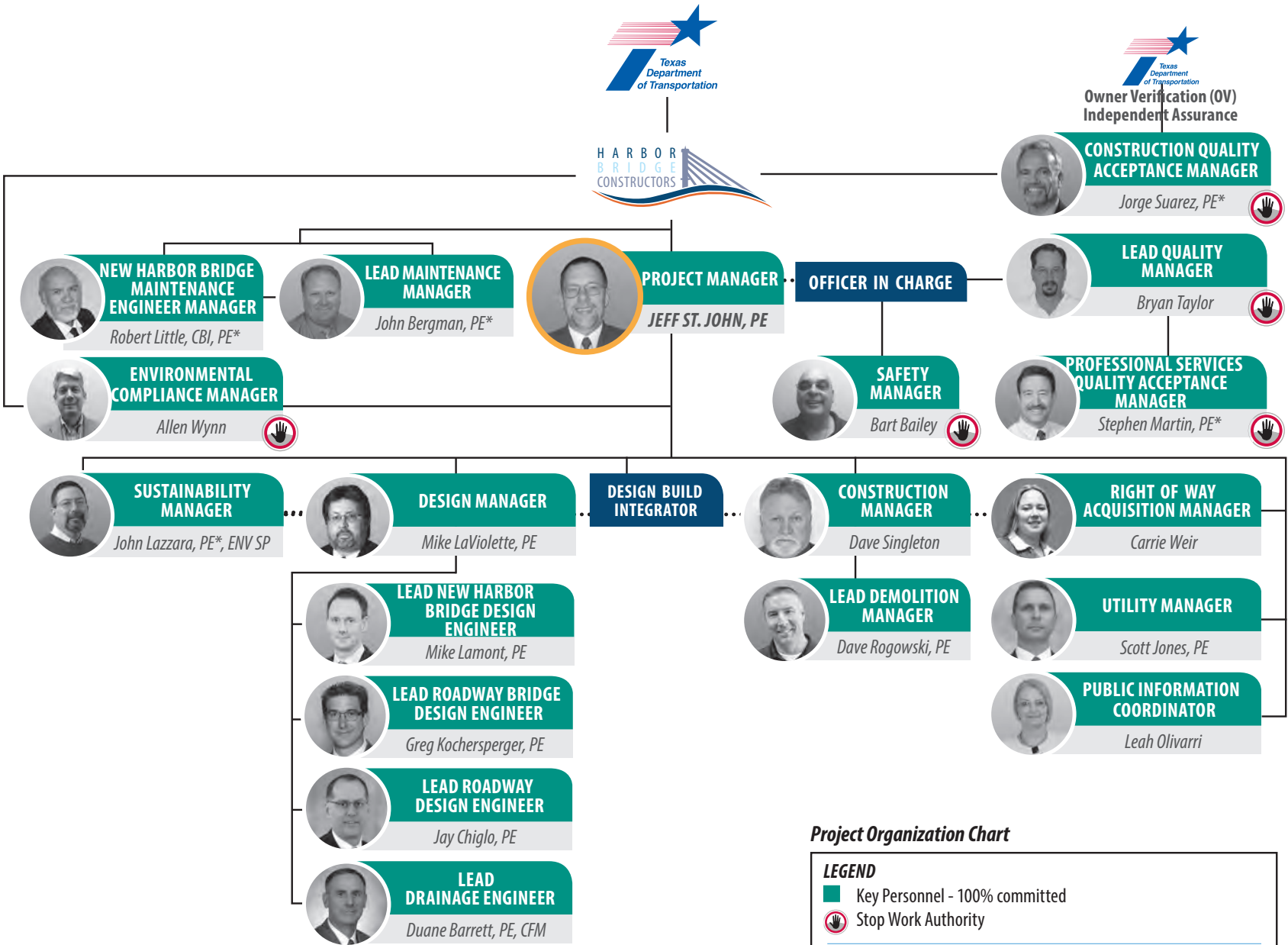
Our team’s dedication and research during the proposal phase, will deliver the NHB with minimal to no risk to TxDOT. Our in-depth evaluation determined that a steel/concrete composite superstructure provides the most efficient and cost effective solution for the main span necessary to clear the Port of Corpus Christi’s widened navigation channel. For the tower type selection, four proven shapes were evaluated-central towers, inverted Y pylons, diamond-shaped and multi-leg towers. The graphic on the right shows the options considered and the uniqueness of each type for bridges built throughout the world with main spans in the range of the NHB span. In addition to being the most unique, the central towers concept is ideally suited to address the skew between the bridge alignment and channel. **As an added aesthetic element, our bridge architect designed a Dual-Mast Tower allowing additional light features and a true “one of a kind” appearance.**



**Future Shipping Channel:** We considered the future growth of the shipping channel use, Panamax vessel collision vulnerability and chose to set the tower foundations predominately out of the water, and well behind the bulkhead lines. As an added value, the main span was set at 1,520 ft., extended approximately 80 ft. beyond the minimum span permitted by TxDOT. This provides additional channel width and reduces vessel collision risks far better than any other resistance measure.

Name	Role	Benefits to Harbor Bridge
Jeff St. John, PE*	Project Manager	<ul style="list-style-type: none"><li>• 24 years of successful signature, long span bridge construction over navigable water</li><li>• \$1B in bridge construction, including the combined 18 awards for the Ohio River Bridges and the Mike O'Callaghan-Pat Tillman Memorial Bridge (Hoover Dam bridge) projects</li></ul>
Dave Singleton	Construction Manager	<ul style="list-style-type: none"><li>• \$1.3B of DB transportation project experience</li><li>• CM for the \$867M, Ohio River Bridges DBM project that includes a center span cable-stayed bridge of 1,250 ft./back spans of 600 ft. over the Ohio River</li></ul>
Leah Olivarri	Public Information Coordinator	<ul style="list-style-type: none"><li>• Bilingual, 37 years of experience in Corpus Christi and unparalleled understanding of the community</li><li>• Led Public Involvement program with HDR on the TxDOT Southside Mobility Study in Corpus Christi</li></ul>
Carrie Weir	ROW Acquisition Manager	<ul style="list-style-type: none"><li>• Provided \$140M of ROW services in the last six years</li><li>• Recently acquired over 350 parcels within budget and schedule</li></ul>
Scott Jones, PE	Utility Manager	<ul style="list-style-type: none"><li>• Headquartered in Corpus Christi, Scott performed utility design and relocation services totaling over \$22M for City of Corpus Christi, including relocations for TxDOT projects</li><li>• 11 miles of utility reconstruction/relocation services in Corpus Christi, including working with HDR local staff</li></ul>
Mike LaViolette, PE	Design Manager	<ul style="list-style-type: none"><li>• Served as Deputy Design Manager for \$3.14B Tappan Zee Bridge, largest single DB project in the U.S. including two-1,200 ft. span cable-stayed bridges</li><li>• Experience designing bridges with 100-year life span and reducing maintenance costs</li></ul>
Jay Chiglo, PE	Lead Roadway Design Engineer	<ul style="list-style-type: none"><li>• 23 years of roadway design experience on transportation and bridge projects</li><li>• Lead Roadway Design Engineer on \$1.5B of highway projects, including the TxDOT IH35E DBM with other key personnel, Greg Kochersperger and Bart Bailey</li></ul>
Greg Kochersperger, PE	Lead Roadway Bridge Design Engineer	<ul style="list-style-type: none"><li>• Bridge design experience on two \$1B, TxDOT DB projects, IH35E DBM and SH-130 DBM</li><li>• Completed design of 10 multi-level interchange projects for TxDOT; including the IH35E DBM project with Jay Chiglo and Bart Bailey</li></ul>
Duane Barrett, PE, CFM	Lead Drainage Engineer	<ul style="list-style-type: none"><li>• 32 years of drainage experience on Texas transportation projects, including work in Corpus Christi</li><li>• Experience designing bridge drainage systems to eliminate erosion problems</li></ul>
Mike Lamont, PE, SE	Lead New Harbor Bridge Design Engineer	<ul style="list-style-type: none"><li>• 6 built cable-stayed bridges over navigable waterways including the record-setting Port Mann Bridge (in collaboration with IBT), currently the 2nd longest in North America and widest in the world</li><li>• Worked with Mike LaViolette and Granite on the \$3.14B Tappan-Zee DB cable-stayed bridge</li></ul>
Bryan Taylor	Lead Quality Manager	<ul style="list-style-type: none"><li>• 19 years of experience developing and implementing quality control programs</li><li>• Served as Lead Quality Manager on \$620M of DB bridge and transportation projects; including working with Bart Bailey on the I-64 and Chisholm Trail Parkway</li></ul>
Jorge Suarez, PE*	Construction Quality Acceptance Manager	<ul style="list-style-type: none"><li>• More than 31 years of Design and Construction Bridge Experience – including 8 cable-stayed bridges</li><li>• Construction QA role for the William Harsha Cable-Stayed Bridge over the Ohio River and Dame Point Bridge, currently the longest cable-stayed bridge in the U.S.</li></ul>
Allen Wynn	Environmental Compliance Manager	<ul style="list-style-type: none"><li>• 22 years of experience managing environmental compliance</li><li>• ECM on a \$900M DBM project that included a wetland mitigation plan for 265 acres</li></ul>
Stephen Martin, PE*	Professional Services Quality Acceptance Manager	<ul style="list-style-type: none"><li>• 33 years of design quality experience</li><li>• Design Quality Acceptance Manager on over \$3B in the last five years</li></ul>
Bart Bailey	Safety Manager	<ul style="list-style-type: none"><li>• 28 years of Safety Program experience; worked with Greg Kochersperger and Jay Chiglo on the TxDOT IH35E DBM project and also Bryan Taylor on the I-64 and Chisholm Trail Parkway projects</li><li>• Safety Manager on \$902M DB bridge/transportation projects including US 90 Bay St. Louis Bridge DB constructed by AW and Granite, and also worked with Dave Singleton</li></ul>
John Lazzara, PE*, ENV-SP	Sustainability Manager	<ul style="list-style-type: none"><li>• 26 years of experience in the highway sustainability field</li><li>• Sustainability Manager on a \$2.3B, 22 mile DBM project</li></ul>
Dave Rogowski, PE	Lead Demolition Manager	<ul style="list-style-type: none"><li>• 24 years of experience managing the demolition of unique bridge projects over navigable water</li><li>• Performed demolition services for more than \$375M of Archer Western/Walsh projects, including with Dave Singleton</li></ul>
Robert Little, CBI, PE*	New Harbor Bridge Maintenance Engineer Manager	<ul style="list-style-type: none"><li>• More than 41 years of bridge maintenance experience and a certified bridge engineer</li><li>• Performed maintenance and inspection services on eight bridges over navigable water including the Sunshine Skyway Cable-Stayed bridge</li></ul>
John Bergman, PE*	Lead Maintenance Manager	<ul style="list-style-type: none"><li>• 20 years of experience with operations, maintenance, asset management and inspections for bridges over navigable water and highways</li><li>• Managed the O&amp;M Program for the Ravenel Cable-Stayed Bridge that crosses over the Cooper River, a major commercial waterway in the immediate vicinity of the Port of Charleston.</li></ul>

\* Texas registration pending, currently registered outside of Texas

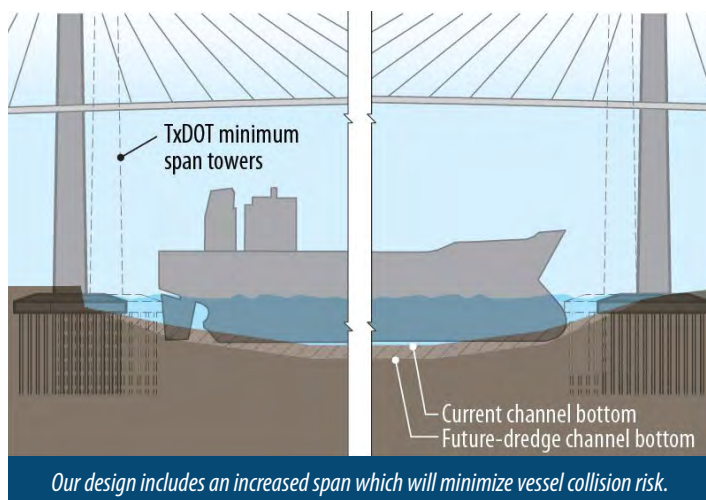


**Project Organization Chart**

**LEGEND**





-  Key Personnel - 100% committed
-  Stop Work Authority







\* Texas registration pending, currently registered outside of Texas  
Complete organization chart is included in Section 4.2.



**HB Constructors Span-by-Span Approach to the NHB Design and Construction:** Our team members researched the details of the project, driving and studying the alignment. During the proposal phase, we assigned our top technical experts who expended more than 117,000 hours creating an optimal design and erection approach. Our most significant offering, beyond the NHB, to TxDOT is our innovative span-by-span access plan. This plan will increase the level of service and minimize disruption to the traveling public throughout the construction of this project. We have summarized their components and advantages along with references to where more robust write-ups can be found within our proposal.

Below is the list of ATCs included in our proposal. We have incorporated all conditional requirements into the design. All listed ATCs provide the same or better functional scope, but represent genuine savings in capital costs, maintenance costs, environmental footprint and schedule.

ATC No.	ATC Title and Description
	<b>Beach Ave. Ramp Modifications.</b> Redesign southbound US181 exit ramp movement to Burlison (Ramp 52EEE) and entrance ramp movement from Beach Ave. (Ramp 52BBB). <b>Cross Reference: 4.5</b>
	<b>Split Belvedere.</b> Provided a belvedere overlook at each of the two towers. One additional from TxDOT requirements. <b>Cross Reference: 4.1</b>
	<b>Concrete Girder Release Strength.</b> Increase the prestressed concrete girder release strengths from 6,000 to 6,500 psi corridor wide. <b>Cross Reference: 4.5</b>
	<b>NHB Transition Pier Tie-Downs.</b> Eliminate at least 200-ft. of steel composite superstructure and intermediate piers from the main bridge by providing redundant, maintainable and replaceable tie-down. <b>Cross Reference: 4.5</b>

ATC No.	ATC Title and Description
	<b>Traffic Control at Burlison.</b> Left and right turn access at Burlison St. to reroute US181 ML traffic to the frontage roads, to allow tie-in to be built. <b>Cross Reference: 4.5</b>
	<b>Cable Stay Monitoring.</b> Alternative. <b>Cross Reference: 4.5</b>
	<b>Reuse Existing HB Bearings.</b> Preserving the existing bridge bearings as a symbol of the 1959 Harbor Bridge. <b>Cross Reference: 4.1.1.1 (e) and 4.5</b>
	<b>Upper and Lower Broadway St. Modifications.</b> Connect Upper and Lower Broadway St. via Antelope St. and Lower Broadway St. to IH37. <b>Cross Reference: 4.1.1.6</b>
	<b>BrIM Modeling.</b> Replace the required single-file BrIM system with a more reliable and functional system. <b>Cross Reference: 4.3</b>
	<b>Necklace Lighting.</b> Along the face of the main span super structure. <b>Cross Reference: 4.5</b>

The components listed in the following table exceeds the stated project requirements and bring added value to TxDOT and the traveling public.

Added Value	Description
<b>Proposed Phased Ship Impact Study Reveals Optimal Longer Main Span</b>	★ Utilized our design and construction expertise to address ship impact collision. Our central towers solution is ideally-suited for ship impact resistance. Even though the towers can withstand enormous impacts, it is best to reduce the ship impact through passive resistance by extending the main span.
<b>In-house maintenance expertise</b>	★ Our equity member, Walsh Infrastructure has in-house staff prepared to manage or self-perform, if necessary, the capital and routine maintenance.
<b>Inspected existing bridges and drainage</b>	★ All existing bridge and paving facilities were inspected onsite and include capital maintenance during construction to assure life expectancy.
<b>Site photos using aerial drone</b>	★ Photos of the project site and Port area were taken using aerial drones to provide a more realistic simulation of the NHB and better plan for the construction and demolition efforts.
<b>Wind analysis</b>	★ Utilized analytical and sectional modeling to validate and optimize our design during proposal phase. Also provide for an accelerated design start at NTP2.
<b>Detailed type selection for foundation, deck and tower</b>	★ Utilized our design and construction expertise to address the challenges of the project site by employing an extensive type-selection process in order to select the most cost-effective and efficient structure for Corpus Christi.
<b>Safe and efficient MOT plan</b>	★ Developed a Maintenance of Traffic (MOT) plan that allows us to work in six different areas simultaneously with minimal disruption to the current traffic configuration. Our plan also avoids constant traffic switches, that yields a safer, more predictable roadway to the daily traveler.



Added Value	Description
<b>Established relationships with utility owners</b>	★ Meeting with utility owners has given our team the most comprehensive understanding to incorporate underground design and schedule constraints to plan for early relocation and ROW acquisition.
<b>Corrosion mitigation</b>	★ Concrete service life evaluated using TxDOT's ConcreteWorks software to verify minimum time to corrosion initiation exceeds 75 years for all structures. Brian Merrill, PE, who developed TxDOT's first bridge preventative maintenance program, is applying his 30 years of TxDOT experience to assure long-term durability of the project.
<b>Two belvederes in lieu of only one</b>	★ Two belvedere outlooks, one at each tower, provides a more comfortable experience for users, due to less wind and vibration, as well as an additional rest area.
<b>Improved drainage concepts</b>	★ Our base drainage design calls for a new Salt Flats Channel to replace the spider web of aged box culverts that forms the Culberson culvert system, as well as new detention facilities to protect the Salt Flats Levee. Old drainage systems will be replaced with that meet or exceed TxDOT requirements.

### (e) (2) Summary of the Project Management Plan

Our project management plan involves coordination, communication and collaboration on all levels. Our team will provide superior quality, on budget and on time completion. We will focus our skilled and experienced personnel and resources on specific areas of the project to meet TxDOT's project goals of safety, mobility, quality, environmental compliance, budget and schedule. Our approach encompasses co-location, task force teams and technology.

### General Project Management

Safety, quality, environment, sustainability, maintenance and the community are at the heart of HB Constructor's commitment to design, build and maintain the NHB project. Our Project Manager, Jeff St. John PE\*, will lead our team to exceed TxDOT's goals for this award-winning project.

**Co-Location:** Our personnel will work interdepartmentally with TxDOT staff at our co-located office. This will facilitate continuous internal value engineering, collaboration and partnering. Our Integrated Project Management Office is very close to the project site and will provide a partnering and collaborative environment.

**Task Forces:** Our task force teams will meet weekly to focus on developing specific DB solutions with design, construction, maintenance and TxDOT staff. Task force teams are broken down by discipline with a clear leader. Each meeting will facilitate communication, encourage

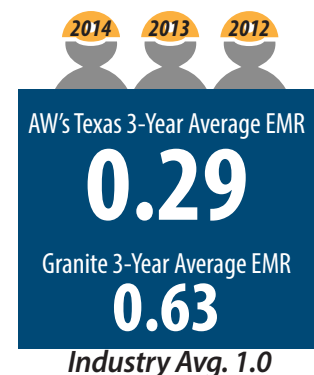


*This design is proven to be most efficient for gravity loads and is best suited to resist the two major extreme loadings associated with the NHB site – wind and ship impact.*

real-time design reviews, establish action items and persons responsible and time line. Port and Railroad representatives, utility owners and all other stakeholders will be actively involved with any task force relating to their interests.

**Partnering Plan:** HB Constructors embraces partnering based on the premise that important, complementary opportunities exist between all project participants. When the right people are brought together in an open and honest environment with an effective organizational process, a mutually beneficial relationship will develop, resulting in a successful project.

**Safety:** HB Constructors will not sacrifice safety for production. Safety will be an integral part of QC, cost control and job efficiency. Every supervisor will monitor the safety performance demonstrated by the employees under their supervision. This Safety Culture has led our team members to achieve a high level of safety consciousness and incident prevention. The program is extended not only to protect our work force, but also the public, at all times.





*The SUP will provide a tremendous new amenity to the community and a unique attraction for the Corpus Christi region. Our clear panel belvedere overlook design allows for unobstructed viewing of the Corpus Christi Bay while maintaining safety.*

**Aesthetics:** Our team developed a maritime theme for the project's aesthetic design features that is reflective of the founding and history of the City of Corpus Christi and the dominant backdrop, the Gulf and bay has played in the development of the local community. The pivotal feature of the maritime theme is the dual-mast towers of our New Harbor Bridge, which reflect characteristics of a ship's masts, sails and ropes. The maritime theme is showcased throughout the project by using shapes, colors, textures and details that visually unify the entire project. The color palette reflects the coastal hues found naturally in the Corpus Christi Bay, and use of a continuous strip of color along the length of the bridge invokes the feeling of waves gently rolling into the horizon. As the height of the elements become closer to human scale, the level of detail increases to improve the user's experience. Local elements, such as retaining walls, landscaping and design details will be finalized with the community to garner public support and ensure the theme is applied seamlessly throughout the project.

**Utility Interface:** HB Constructors has met with or talked to all utility owners that will be affected by the project. We have evaluated each utility to determine the

project's impact and have determined the need to relocate, protect, or leave in place. **Our local Utility Manager, Scott Jones, PE with locally headquartered RVE will maintain coordination and relationships.**

**Risk Management:** Our approach provides a consistent methodology that identifies all critical project risks, assesses their likelihood of occurring and the potential magnitude of outcomes. HB Constructors has identified design, construction and maintenance risks, and their likelihood before and after mitigation. We understand that success requires all parties to recognize each other's critical project risks and work cooperatively to manage and mitigate the total shared risk. Our approach involves TxDOT and project stakeholders as active participants in our identification of risks and how to respond to them proactively, while recognizing our ownership of contractual risks assigned to us as the Developer.

**Construction and Traffic Management During Construction Period:** Our construction and traffic management plan during construction is centered on the six work areas developed by our Construction Manager, Dave Singleton, to account for all public and construction movements. MOT plans will be evaluated daily by field personnel audited by safety representatives, communicated to the community, stakeholders and emergency responders; and continuously improved to adapt to stakeholder, environmental and public needs. As outlined in further detail in our proposal, HB Constructors proposes a detailed staging and phasing plan and has divided the project into six manageable areas based on maintaining the current traffic configuration and working independently in all areas simultaneously. This allows flexibility to independently advance each area to meet TxDOT's schedule but also reduces the quantity of MOT phases which is important for providing dependable conditions for travelers.

**Public Information and Communications:** Communicating early and often with businesses, community and stakeholders is our team's highest priority. **HB Constructors includes a local DBE firm Olivarri & Associates for Public Information.** This firm has been headquartered in Corpus Christi for the last 30 years and is led by Leah Olivarri. Leah is well-known in the Corpus Christi area and will be a familiar face to the local public. Leah will serve as our Public Information Coordinator where her main priority is to make sure clear, concise and timely bilingual messages are delivered to the public. Leah brings previous TxDOT and City of Corpus Christi experience as well as the Port, Corpus Christi





*Commemorative coins will be created from the materials of the old Harbor Bridge to provide the citizens of Corpus Christi a piece of history. In addition, the NHB will showcase a plaque to monumentalize the old Harbor Bridge.*

Metropolitan Planning Organization and Corpus Christi Regional Transportation Authority. She understands the expectations of keeping the community and stakeholders informed to maintain positive public perception and local support.

**Environmental Management:** HB Constructors understands the environmental process associated with this project and will work with TxDOT to guarantee that the environmental commitments are integrated into the design, construction and maintenance of the project. We will develop and implement a Comprehensive Environmental and Protection Program (CEPP). Our Environmental Compliance Manager, Allen Wynn, will lead the effort to focus on environmental compliance with all approvals, permits, agency regulations and laws within the jurisdictional authorities.

**Design Management:** Our Design Manager (DM), Mike LaViolette has more than 20 years of experience, recently serving as the Deputy Design Manager for the \$3.14B Tappan Zee Bridge, the largest single DB project in the US including two-1,200 ft. span cable-stayed bridges. In addition, he has designed bridges with 100-year life span focused on reducing maintenance costs. He has been working alongside our construction and maintenance team to make sure our design and design management process for this project addresses the needs of TxDOT, City of Corpus Christi, stakeholders and the corridor users.

The key to our design management structure and approach will be building a framework and schedule of weekly discipline focused task force and design coordination meetings. Issues and actions will be assigned to specific staff, given due dates and tracked to completion. Early and ongoing engagement between HDR and AW/Granite with TxDOT and other stakeholders will help us phase design deliverables to achieve the earliest possible construction start and focus on early completion of portions of the project as soon as possible.



#### **MIKE LAMONT, PE - Lead NHB Design Engineer**

- » 23 years of experience including 6 completed cable-stayed bridges over navigable waterways including the record-setting Port Mann Bridge (with IBT), the 2nd longest in North America and widest in the world
- » Working experience with DM, Mike LaViolette and Granite on the \$3.14B Tappan-Zee DB cable-stayed bridge



#### **MIKE SMART, PE - NHB Deputy Design Engineer**

- » 20 years of experience in design and construction for award winning bridge projects in the U.S. and around the world
- » Responsible for independent design check on the Ohio River Bridges Downtown Crossing cable-stayed bridge, a successful collaboration with Walsh




*Mike Lamont and Mike Smart have already designed and built a similar cable-stayed bridge together (Port Mann Bridge) and will use their proven expertise to deliver an iconic NHB.*







HDR's in-house national bridge team is headed by **Pat Hickox, PE**, with over 24 years of experience on 14 cable-stayed bridges. He has reunited with IBT's **Daniel Tassin, PE**, who brings over 40 years of experience on 20 cable-stayed bridges. Pat and Daniel will support the HB Constructors team and provide world-renowned technical advisory support. We have also enlisted the award-winning bridge architect, **Fred Gottemoeller, PE\*, AIA**. With over 47 years of experience, including over 25 bridges, he is widely considered the father of bridge architecture.

### **(e) (3) Summary of the Maintenance Management Plan**

Our maintenance firm, ICA, has been intimately involved with the design and construction team during the proposal phase. ICA will remain a vital part of project decisions throughout the construction phase regarding material selection, installation procedures and other long-term maintenance decisions.

ICA and HB Constructors internal maintenance firm, Walsh Infrastructure Management (WIM), will lead the planning, scheduling and execution of maintenance and rehabilitation work. ICA along with WIM assisted in the development of the ATCs below.

ATC No.	Description of Maintenance Benefit
	<b>Beach Ave. Ramp Modifications.</b> <ul style="list-style-type: none"> <li>★ Reduce structure amount for exit and entrance ramps and the number of straddle bents</li> <li>★ Eliminate the exit ramp for improved access and reduces lane closures for maintenance</li> </ul>
	<b>Split Belvedere.</b> <ul style="list-style-type: none"> <li>★ Belvedere overlook locations are easier to maintain allowing easier and more routine maintenance accessibility</li> </ul>
	<b>Concrete Girder Release Strength.</b> <ul style="list-style-type: none"> <li>★ Reduce the ease and overall maintenance costs</li> <li>★ Eliminate future painting, inspection and maintenance associated with Steel Plate Girder</li> </ul>

ATC No.	Description of Maintenance Benefit
	<b>NHB Transition Pier Tie-Downs.</b> ★ Reduction in Cable-Stayed bridge components will reduce future maintenance needs
	<b>Traffic Control at Burleson.</b> ★ Reduction in staging will reduce additional construction joints on structures
	<b>Cable Stay Monitoring.</b> ★ Continual monitoring of stays for notification of wire breaks ★ Monitoring of stay forces after extreme events (i.e. hurricanes)
	<b>Reuse Existing HB Bearings.</b> ★ Reduced damage to plaza near the Ortiz Center
	<b>Upper and Lower Broadway St. Modifications.</b> ★ Reduced conflict with retaining walls and existing buildings ★ Improved vertical geometry ★ Reduced materials/excavation and impact to Winnebago and adjacent properties
	<b>BrIM Modeling.</b> ★ More reliable BrIM model that provides faster functional capabilities ★ Smaller file sizes enables sharing data across multiple secure platforms

#### (e) (4) Summary of the Quality Management Plan

Our QMP will be fully compliant for all systems, plans and audits, per ISO 9001. Our Lead Quality Manager, Bryan Taylor, has an outstanding record for delivering high-quality, ISO-compliant, large DB highway projects throughout the country. He will verify that the NHB project QMP is fully compliant with TxDOT's Section 2, QMP of Book 2 of the Technical Provisions.

Additionally, all project management and personnel will be held accountable to the random and continuous checking and auditing of their work products for making sure quality is held to the highest standard. The QMP establishes the foundation and processes for continuous improvement in every aspect of the project, with the final product and end-user in mind.

#### (e) (5) Summary of the Approach to Sustainability

**Sustainability:** Our Sustainability Manager, John Lazzara, PE\*, ENV SP, will lead our sustainability team. John has 26 years of experience in highway sustainability projects and recently served as the Sustainability Manager on the \$2.3B I-4 Ultimate DBM highway project.

HB Constructors does not view sustainability as a simple box check, but rather as a holistic approach founded

on the triple bottom line of environmental resource efficiency, social equity and economic viability. Our approach has allowed us to develop ATCs with sustainability benefits that will enhance the project for TxDOT and the citizens of Corpus Christi. In addition, we will achieve Platinum rating for the design and construction. **As an added value, we will obtain a Gold level rating, which exceeds the stated silver level requirements, for maintenance.**

#### (f) Summary of the Proposer's Approach to Satisfying the DBE Requirements

HB Constructor's leadership team has a long history of working with local disadvantaged and minority firms. Our business philosophy and strategy is focused on competency building as well as capacity building. **We will exceed the DBE goal of 9%** just as we have done consistently on other recent Texas transportation projects.

#### (g) Summary of the Proposer's Approach to Satisfying the On-The-Job Training

HB Constructors will provide a formal mentoring process and On-the-Job-Training aimed at increasing the knowledge and skills of local design and construction DBEs. This formal mentoring pairs each firm with one of our managers allowing support to be tailored to each firm's needs.

We look forward to the opportunity to partner with TxDOT to deliver an award winning, new iconic bridge for the citizens of Corpus Christi and our great state of Texas.



*Our "one of a kind" elegant Dual-Mast central tower design is accentuated in this Nighttime Rendering Approaching the New Harbor Bridge with a Patriotic Lighting Theme*