

## January 2023



## Harbor Bridge Project (HBP) 2023 Progress Report

Activity on the HBP is moving at an impressive pace in 2023. Safety training for new team members, managing weekend and AM/PM shifts, and scheduling overlapping work is more crucial than ever. For example, transporting the massive 100-plus ton segments from our precast yard in Robstown to the approach viaducts and pylons involves significant planning as follows: Mobilize heavy cranes for loading and offloading \* Secure heavy load permits for transport compliance \* Arrange police escorts for traffic control \* Determine routes to factor in highway bridge clearance constraints while not impeding roadworks construction \* Perform earthwork to level ground before staging segments at the job site \* Conduct survey checks and inspections at every step to ensure the precision of each unit. Sequencing the deliveries requires input and cross-communication from each section of the job. With everything aligned, the project averages seven segment/ delta frame deliveries per week. The Precast Yard team is on target to complete casting all segments and delta frames by this summer.

Achieving the following scopes of work this year required vital collaboration with subcontractors and stakeholders to advance such a colossal project.

**Utility and Drainage Crews:** Continued work to tie in or install new water, wastewater, and drainage on North Beach at Breakwater Avenue, Mestina/Doss Street, and along the new southbound SH 286 frontage road. Illumination work for new IH 37 mainlanes and frontage road underpasses also prevailed.

**North Approach Crews:** Advanced towards completing remaining substructure piers and the new US 181 abutment wall this winter. Started ground improvements and staging to build the falsework towers utilized to support placing remaining superstructure spans.

*South Approach Gantry Crews:* Completed all southbound lane spans and will finish the remaining seven northbound lane spans this spring.

*Cable Stayed Bridge (CSB) Crews:* Worked around the clock to successfully lift 20 back span, main span, and delta frame segments in five weeks.

**North Pylon:** Poured Upper Tower (UT) Lift 6. Initiated median slab installation. Poured cast-inplace connections between delta frames. Installed and jumped tower crane tie-in #2 to provide clearance for ongoing UT progression. Multiple activities occurred to add 210-foot-deep drilled shafts for the footing extension.

**South Pylon:** Poured Upper Tower (UT) Lift 4. Jumped UT formwork to install reinforcement for UT Lift 5. Installed tower crane tie-in #1 for UT progression. Began preparations to install drilled shafts for the footing extension.

*Structure Crews:* Completed the last substructure element for the new soutbound IH 37 to northbound US 181 direct connector. Placed barrier wall and prepared the last two spans for concrete on the new Leopard Street bridge. Finished substructure, deck, and approach spans for a new northbound IH 37 bridge.

**Roadwork Crews:** Began restoration of Doss Street by Metro Ministries. Continued work on IH 37 frontage roads. Placed subgrade and base for the new Lake Street. Prepared new IH 37 lanes for asphalt with non-organic subgrade and concrete-treated base layers. Coordinated environmental compliance to place hydroseeding on ramp slopes and high embankments.