Final Report #20-060-016-C676



Whitecap Circle Beach Access Development

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Overview:

The City of South Padre Island has a mission to improve and offer inclusive access across its beachfront. The Whitecap Circle Beach Access project was an unimproved access point prone to unmanaged pedestrian and vehicular traffic. These activities have resulted in dune vegetation destruction and lower dune elevations and contributed to the development of storm surge channels, increasing the risk of blowouts and inland flooding. The City took on the role of utilizing low-impact construction with a permeable paver parking lot, following the original footpath for the dune walkover installation to minimize dune impact, and filling a much-needed flood basin with mitigation resources.

Task 1: Survey, Design, and Permitting

On September 17th, 2020, the Request for Qualifications (RFQ) advertisement was released to the public. Advertisements ran for two consecutive weeks, and five viable Submission of Qualifications (SOQ) were received and opened on October 6th, 2020, at 2:00 p.m. The SOQs were reviewed initially by the Shoreline Task Force on October 27th, 2020, and then recommended to the City Council for the November 4th, 2020, meeting where the contract was awarded to Green, Rubiano, and Associates (GRA) Engineering. An agreement was executed between the City of South Padre Island and GRA Engineering and was finalized on January 29th, 2021. GRA Engineering submitted the initial designs for sand fencing use and plant selection for the GLO to review.



Public Notice:

Request for Qualifications for Whitecap Circle Beach Access
Improvements



The City of South Padre Island is soliciting Statements of Qualifications (SOQ) until 2:00 pm on Tuesday, October 6th, 2020 from experienced engineering and consulting firms to provide services for the Whitecap Circle Beach Access (Access). The selected consultant will need to provide surveying, engineering, and design services of the Access. Improvements to this beach access will include an ADA dune walkover, permeable parking, and other associated amenities. The RFQ packet is available on the City's website at www.myspi.org. All inquiries regarding the RFQ should be directed to: Kristina Boburka at 956-761-3837 or via email at kboburka@myspi.org.

Statement of Qualifications are due by 2:00 pm on October 6th, 2020 after which all qualified responses will be opened and acknowledged at 4601 Padre Boulevard South Padre Island, Texas 78597. Any proposals received after the specified deadline will be returned unopened.

Design and Permitting Cont.



GRA began pulling together conceptual designs in November 2020. **Figure 1** shows the original design submission. After a preliminary design meeting with internal staff, the Texas General Land Office, and the Shoreline Department, the engineering firm began on a new set of public access for the coast.

Working alongside the Shoreline Department's mission, GRA noted that this would be an opportunity to showcase a new and refreshed coastal access look while meticulously incorporating low-impact design and ADA inclusivity at

the forefront of this project.

In February 2021, along with the final construction plans, GRA showcased an open-concept restroom design presented in **Figure** 2. Facilitating a breezeway throughout the structure, allowing the walls to act as passageways to illuminate the restroom, conserving

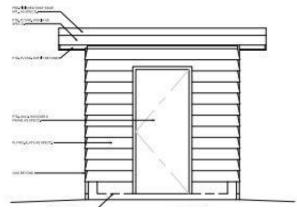


Figure 2. Custom engineering

electricity, and reducing the feeling of a confined environment. The restrooms specifically designed for Whitecap included a full utility closet for maintenance access and repairs when needed. All fixtures within the restroom were installed with local materials, allowing for the ease of replacement when required.

Figure 1. Conceptual

Along with these solutions to modern public facilities on the lower Texas coast, GRA implemented final plans, Figure 3, to incorporate following the

original footpath when building the new walkover. Following the original path allowed for a reduction in dune disturbance, habitat replacement, and decreased mitigation needs.



Figure 3. Final plans

Task 2: Construction and Sign Installation

On May 5th, 2022, the Whitecap project received one complete bid from Bryant Industrial Services (BIS). The following Tuesday, May 10th, the single bid was presented to the Shoreline Task Force. The Task Force agreed that BIS was a reputable choice and recommended to the City Council that a contract be enacted between the City and BIS. City Council approved this recommendation on May 20th, 2022, and BIS was issued a Notice to Proceed on July 25th, 2022.

Foundational work began in September 2022, as noted in **Figure 4**. During this time, work focused on the movement of sand to designated mitigation areas and the development of active slope grading for runoff drainage. Temporary signage was placed at the east and west entrances of the construction site. Signage included directions to the adjacent northern and southern beach accesses, temporary GLO CMP funding signage, construction permitting, and the contractor's information.

By January 2023, the Whitecap project began taking hold, with many structures receiving their base construction. During this month, the restroom and sidewalk foundations were poured. The walkover saw the installation of its base planks, finishing out the month with full railing posts in **Figure 5**.



Figure 4. Sloping and sand placement

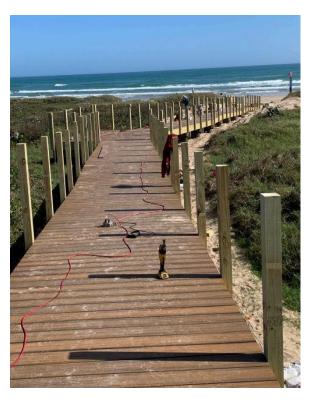


Figure 5. Walkover base planks

Task 3: Dune Restoration

The dune mitigation plan submitted by HALFF Associates, **Figure 6**, was accepted by the GLO Beach and Dune Team on March 14th, 2022. The official Beach and Dune Permit was filed with the City in March 2022. Mitigation details were finalized at the preliminary construction meeting between GRA, BIS, Coastal Transplants, and the Shoreline Department. Mitigation began in August 2023; vegetation was planted at a 1:1 ratio within the approved mitigation locations, **Figure 7**. All vegetation was sourced from South Padre Island, creating a hardy and sustainable transplant. The mitigation sites quickly saw significant plant growth and stability successes within the fall planting season. Mitigation was deemed completed by the GLO on August 25th, 2023.

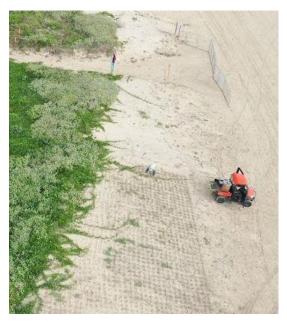


Figure 7. Dune restoration planting

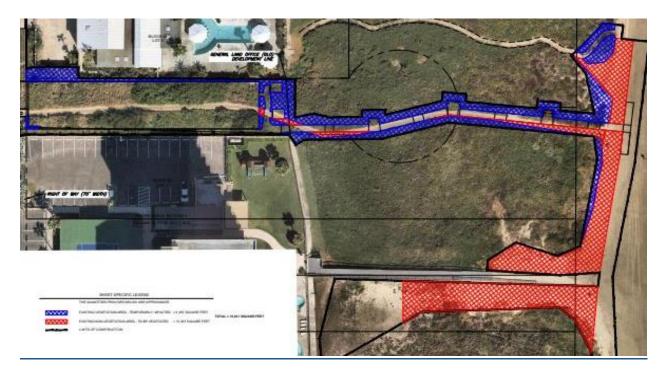
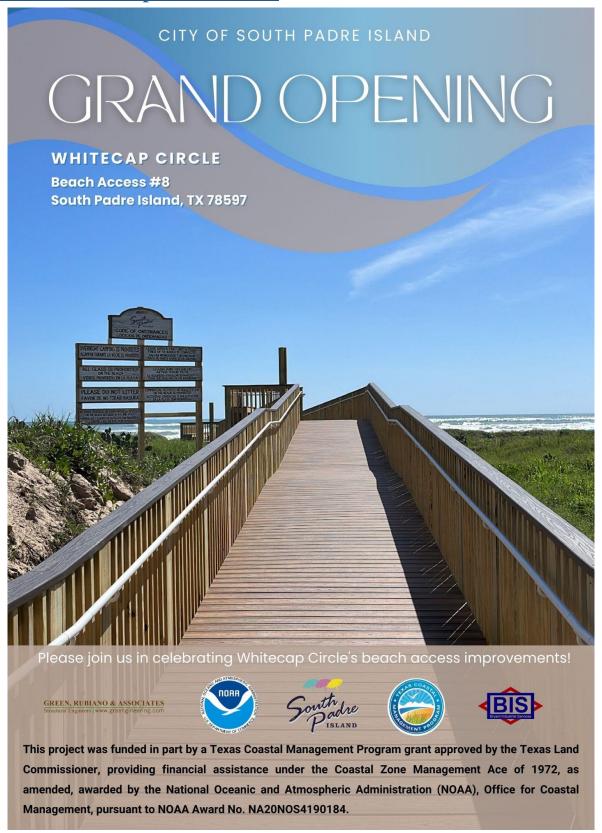
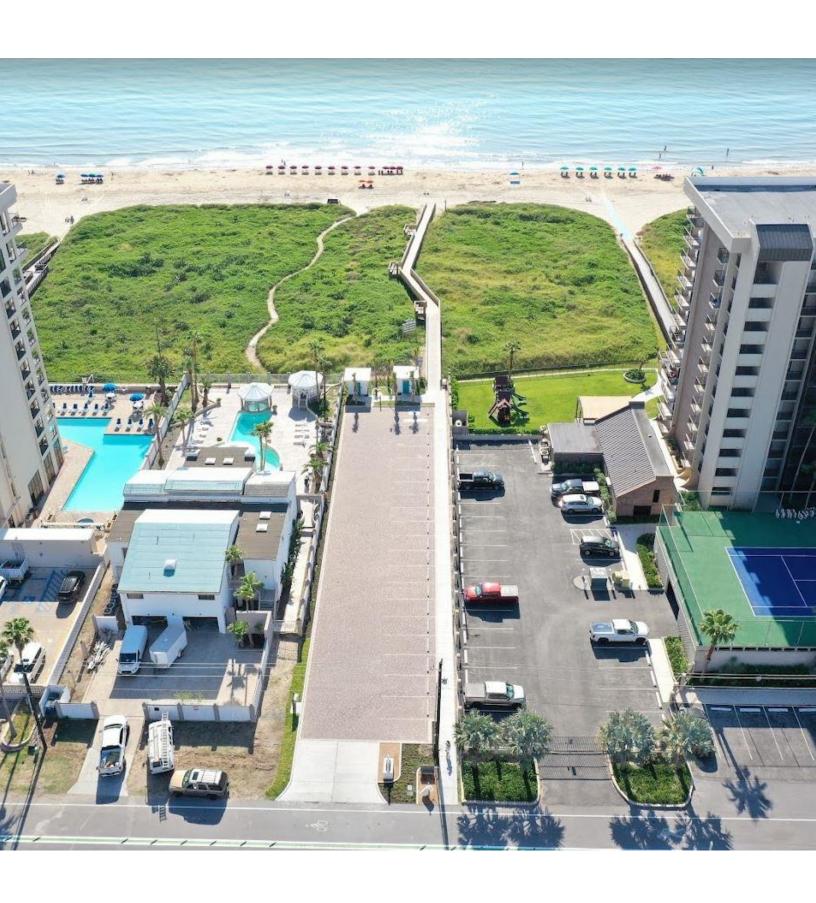
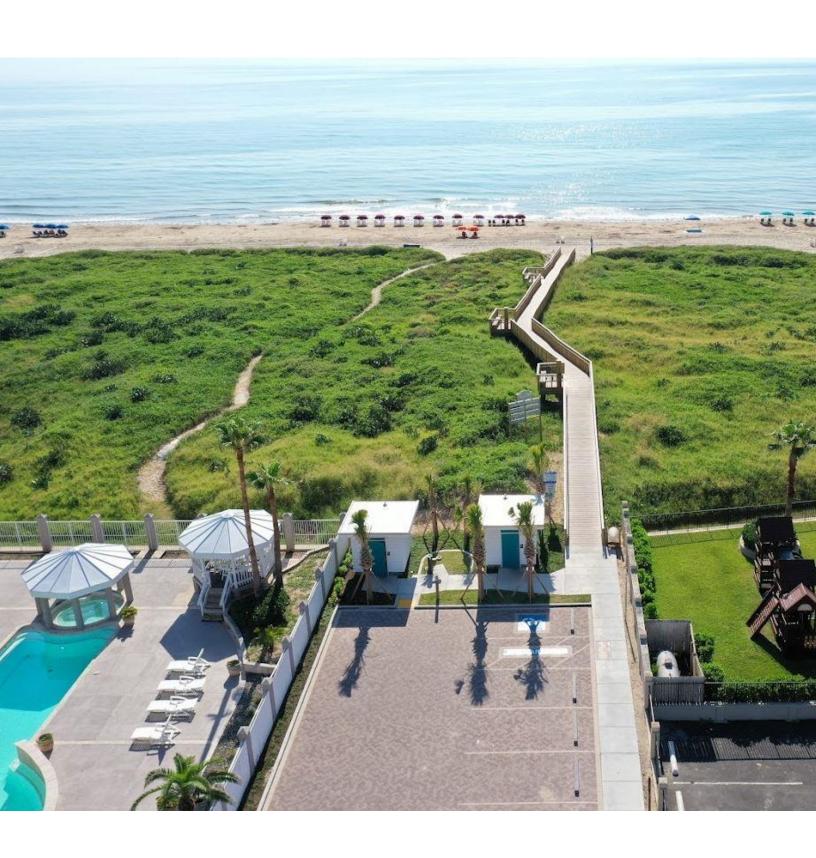


Figure 6. Proposed mitigation plan

Final Whitecap Access #8:

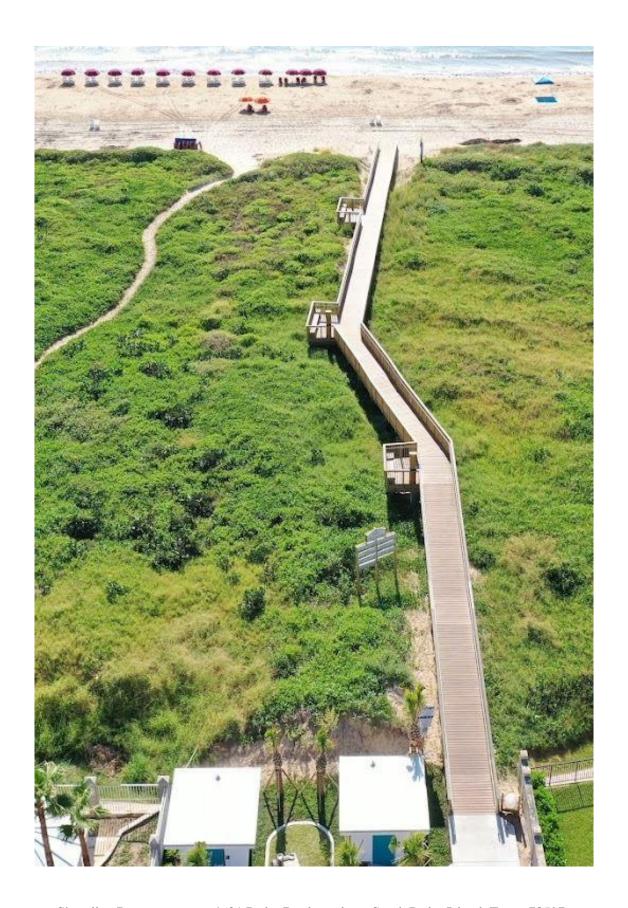




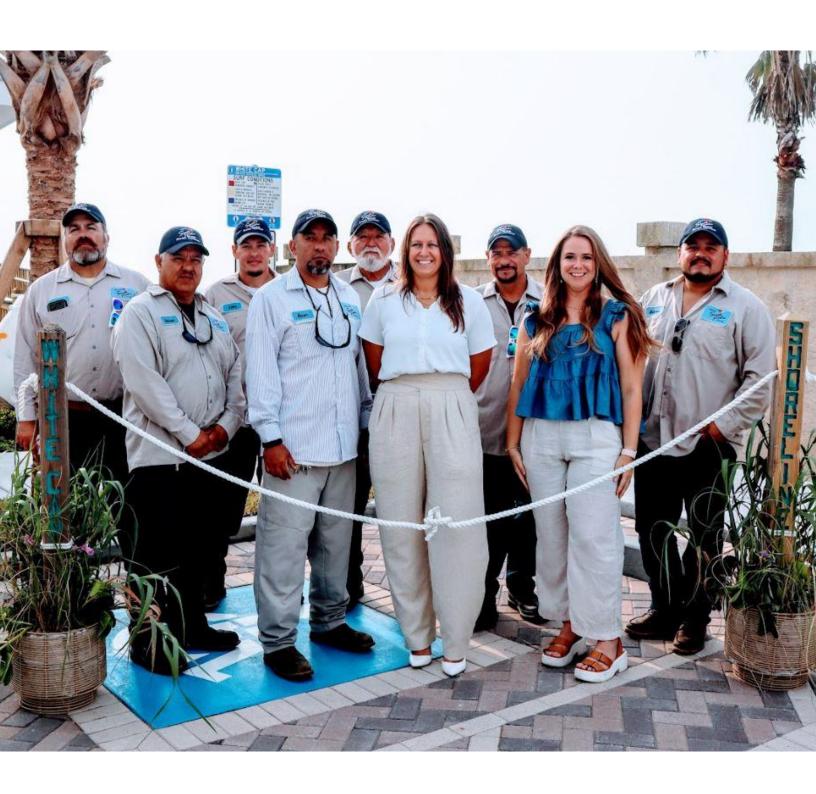




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Closeout:

The City of South Padre is excited to set the precedent for the South Texas coastline and show what is possible by applying critical dune protection and promoting public access. The key importance of this project is to allow viable recreational access to the coast, enhance public facilities, fortification against storm surges, and overall satisfaction with the beachgoer experience. Considerable successes throughout the project included adding a fully permeable parking lot, ADA access from Gulf Boulevard to all amenities, custom engineering restroom facilities, two rinse station platforms, an elevated walkover, and critical dune habitat protection. The City would like to thank the CMP team, GRA Engineering, HALFF Associates, Bryant Industrial Services, and Coastal Transplants for their work alongside the City throughout the project, ensuring the safety, stability, and continued success of the Texas coastline. We greatly look forward to working together again soon.

09.06.2023

Date

Erika Hughston, Coastal Coordinator

