



19BF-087

STAFF REPORT

ADDRESS:

Beach adjacent to 1200-8900 blocks of Seawall Boulevard, Seawall Beach Urban Park

LEGAL DESCRIPTION:

The beach area seaward of Seawall Boulevard, landward of the Gulf of Mexico, west of the 10th Street rock groin and east of the fishing pier at 89th Street.

APPLICANT/REPRESENTATIVE:

Galveston Park Board of Trustees, Reuben Trevino

PROPERTY OWNER:

City of Galveston

REQUEST:

Beachfront Construction Certificate/Dune Protection Permit for Annual Beach Maintenance.

APPLICABLE LAND USE REGULATIONS:

Chapter 29, Article 2, Beach Access Dune Protection and Beachfront Construction Regulation.

STAFF RECOMMENDATION:

Approval with Conditions

EXHIBITS:

- A – Aerial Map
- B – Narrative and Site Plan
- C – GLO Comment Letter

STAFF:

Dustin Henry, AICP
Coastal Resources Manager
DHenry@GalvestonTX.gov



Note: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

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Executive Summary:

The City of Galveston's Dune Protection and Beach Access Plan designates the Planning Commission as the authority to review and consider for approval of applications for a Beachfront Construction Certificate/Dune Protection Permit when the proposed construction activities will occur in areas within or seaward of the Dune Conservation Area or up to 50-foot landward of the Dune Protection Line. The Dune Protection Line is defined as the area within 25-foot landward of the north toe of the critical dune area, or for those beach areas where no dunes exist west of the terminus of the Seawall, within 200-foot landward of the line of vegetation.

The applicant is requesting approval to conduct annual beach maintenance activities on approximately 30,500 linear feet of beach area at the area commonly known as Seawall Beach Urban Park. The proposed beach maintenance area is seaward of the Dune Protection Line and within the Planning Commission review area.

The applicant proposes to maintain the beach on a daily, as needed basis. Seaweed collected will be placed in designated areas as described and shown in the applicant's narrative (Attachment "B"), which describes in more detail the beach maintenance activities that are proposed and the types of equipment that will be utilized.

Site and Surrounding Area:

The subject site totals approximately 30,500 linear feet of beach at the area commonly known as Seawall Beach Urban Park. The Galveston Seawall and Seawall Boulevard border the proposed beach maintenance area to the North, the Gulf of Mexico to the South, the 10th Street rock groin to the East, and the 89th Street fishing pier to the west.

According to the U.T. Bureau of Economic Geology, this is a mostly eroding beach area, with some areas of stable beach. Between the 1950s and 2012, this beach area experienced an average shoreline change rate ranging from -7.3 to +0.5 feet per year.

Analysis:

In accordance with Chapter 29: Planning – Beach Access Dune Protection & Beach Front Construction, before issuing a permit, the Planning Commission must find that the proposed construction conforms with the following Beachfront Construction Certificate and Dune Protection Permit standards:

(1) The proposed activity is not a prohibited activity as defined in these standards.

The request conforms to the City of Galveston's Dune Protection and Beach Access Plan, and Erosion Response Plan. The narrative and site plan, (Attachment "B"), are submitted with this request.

Staff has reviewed the application materials and have identified no prohibited activities seaward of the Dune Protection Line as defined by §(j) of the Plan.

(2) The proposed activity will not materially weaken dunes or materially damage dune vegetation seaward of the Dune Protection Line based on substantive findings as defined in "Technical Standards" of these standards.

According to Section 29-2(k) Technical Standards, the Planning Commission shall not approve an application for construction if it is determined that it will result in a material weakening and material damage of dune vegetation. The following standards are to be used to make this determination:

- a. The activity shall not result in the potential for increased flood damage to the proposed construction site or adjacent property;
- b. The activity shall not result in runoff or drainage patterns that aggravate erosion on or off the site;
- c. The activity shall not result in significant changes to dune hydrology;
- d. The activity shall not result in adverse impacts on dune complexes or dune vegetation;
- e. The activity shall not significantly increase the potential for washovers or blowouts to occur; or
- f. The Commission shall not issue a Beachfront Construction Certificate and Dune Protection Permit authorizing construction unless the construction and property design is designed to minimize impacts on natural hydrology. Such projects shall not cause erosion to adjacent properties, critical dune areas, or the public beach.

Some of the locations proposed for seaweed relocation coincide with areas where a different applicant has recently obtained a permit to plant dune vegetation associated with a dune restoration project. Staff has provided this applicant with a copy of the proposed planting locations, and advises the applicant not to place seaweed in areas where dune vegetation has been or will be planted.

Provided the applicant does not place seaweed on areas where dune vegetation has recently been planted, staff finds that the proposed beach maintenance activities will not materially weaken dunes or materially damage dune vegetation, as defined by these Technical Standards.

(3) There are no practicable alternatives to the proposed activity that is located seaward of the Dune Protection Line and adverse effects cannot be avoided as provided in the Mitigation sequence as outlined in these Standards.

The City's Dune Protection and Beach Access Plan states that the Planning Commission shall utilize the Mitigation Sequence in determining whether to issue a permit for an activity located seaward of the Dune Protection Line, after the determination that no material weakening of dunes or material damages to dunes will occur within critical dune

areas or seaward of the Dune Protection Line. The mitigation sequence is as follows:

- 1) **Avoid** the impact altogether by not taking a certain action or parts of an action;
- 2) **Minimize** impacts by limiting the degree or magnitude of the action and its implementation;
- 3) **Rectify** the impact by repairing, rehabilitating, or restoring the affected environment; and,
- 4) **Compensate** for the impact by replacing resources lost or damaged.

The entirety of the proposed beach maintenance activities will be located in areas seaward of the Dune Protection line, however no adverse effects to dunes or dune vegetation are anticipated as beach maintenance activities will only take place in areas where there are no dunes or dune vegetation.

(4) The applicant's mitigation plan, for an activity seaward of the Dune Protection Line, if required, will adequately minimize, mitigate, and/or compensate for any unavoidable adverse effects.

The applicant is proposing to completely avoid any adverse effects to dunes or dune vegetation located seaward of the Dune Protection Line.

(5) The proposed activity complies with any applicable requirements of: Requirements for Beachfront Construction Certificate and Dune Protection Permits and Management of the Public Beach of this Section; and

The application conforms to the City of Galveston's requirements for a Beachfront Construction Certificate and Dune Protection Permit, and the City's requirements for the management of the public beach.

(6) The structure is located as far landward as practicable.

This standard does not apply. The applicant is proposing annual beach maintenance activities.

Staff Recommendation:

Staff recommends approval of 19BF-087 with the following conditions:

Specific Conditions to Case 19BF-087:

1. The applicant shall not place seaweed in areas where dune vegetation has been or will be planted;
2. The applicant shall adhere to all comments from the Texas General Land Office (GLO) included in Attachment "C":
 - a. The applicant should only grade and/or rake beaches to level sand drifts and fill holes and washouts if the activity is necessary to maintain access for emergency vehicles or ensure public access to and use of the beach. The Park Board must ensure the activity does not create additional holes and that any redistributed sand remains within the site;
 - b. The applicant must minimize the raking of the beach to only when the influx of materials is heavy enough to impact the public's ability to use the public beach easement. The GLO encourages the removal of litter and other debris by handpicking or raking by hand and strongly discourages the use

of machines;

- c. The applicant's activities must not result in significant redistribution of sand or significantly alter the beach profile, materially weaken dunes or dune vegetation, or reduce the protective function of dunes;
- d. The proposed beach maintenance activities must not restrict or interfere with public use of the beach;
- e. The applicant shall avoid impacts to any dunes or dune vegetation. The applicant may not rake over dune vegetation or operate machinery on dunes. The GLO recommends thinly spreading collected materials in low areas, blowouts and breaches within the primary dune complex. If maintenance materials cannot be placed in the primary dune complex or its placement would adversely affect dunes and dune vegetation, the collected maintenance materials may be placed immediately adjacent to the line of vegetation provided its placement would not adversely affect public access. An additional permit shall be required if any adverse impacts to dunes occur;
- f. The rake height should be adjusted to allow the rake teeth to draw man-made and naturally occurring debris into piles or windrows, while at the same time minimizing the amount of sand moved from the beach;
- g. The applicant must return any sand moved or redistributed due to beach maintenance activities to the area between the line of vegetation and mean high tide;
- h. The applicant's beach maintenance activities must not result in the potential for increased flood damage to the site or adjacent property; result in runoff or drainage patterns that aggravate erosion; cause significant changes to dune hydrology; adversely affect dune complexes or dune vegetation; or significantly increase the potential for washovers or blowouts to occur;

Additionally, the Texas General Land Office (GLO) provided the following recommendations, included in Attachment "C":

- i. In addition to the requirements outlined above, the applicant must conduct activities in accordance with other local, state, or federal regulations and permits, such as permits issued by the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers, and with the Galveston Park Board of Trustees Recommended Best Practices for Beach Maintenance.

Standard Conditions:

- 3. Work approved under this permit shall be completed within one (1) year from the date this permit is issued. If work is not completed in this time period, it will be necessary for the applicant to reapply for a Beachfront Construction Certificate/Dune Protection Permit, unless an extension of the period, prior to the expiration, has been submitted to the Texas General Land Office for review and approved by the City;
- 4. Any alterations to the project, as approved, shall return to the Planning Commission and/or Texas General Land Office for additional review and approval;
- 5. The applicant shall coordinate any/all dune enhancement plans with the Development Services Department; and,
- 6. The applicant must adhere to all aspects of Section 29: Planning-Beach Access Dune Protection & Beachfront Construction.

ERP PRACTICABLE DEFINITION

Practicable means available and capable of being done after taking into consideration existing building practices, siting alternatives, and the footprint of the structure in relation to the area of the building portion of the lot, and considering the overall development plan for the property.

TEXAS ADMINISTRATIVE CODE PRACTICABLE DEFINITION 15.2(57)

In determining what is practicable, local governments shall consider the effectiveness, scientific feasibility, and commercial availability of the technology or technique. Local governments shall also consider the cost of the technology or technique.

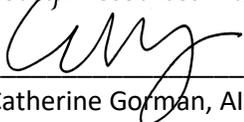
Respectfully Submitted,



Dustin Henry, AICP
Coastal Resources Manager

March 13, 2020

Date



Catherine Gorman, AICP
Assistant Planning Director / HPO

March 13, 2020

Date



0 2,500 5,000 10,000 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Seawall Beach Urban Park (19BF-087)

Map prepared by the City of Galveston Development Services Department (dhenry) - 3/13/2020
Data Sources: Topographic Data from Atkins July 2017 wading depth surveys, 2018 Aerial Imagery and Parcel Data from Galveston CAD

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Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application Narrative
2020 Seawall Urban Beach Park
~12th to 89th street Galveston, Texas

The Park Board of Trustees of the City of Galveston is seeking a Beach Maintenance permit from the City of Galveston for the 2020 season to perform routine beach maintenance activities along Seawall Blvd between ~12th street to 89th street- Seawall Urban Beach Park. These activities would include both normal day to day maintenance activities and conditions of extraordinary circumstances as determined using the seaweed wrack scale developed by researchers at Texas A&M Galveston. The Park Board has included within this narrative updated map of the proposed seaweed relocation, as well as locations of current vegetated seaweed mounds.

It is important to note the City of Galveston Park Board of Trustees is the only entity on Galveston Island to obtain a U.S. Army Corps of Engineers permit (#SWG-2014-00448) for beach cleaning/seaweed relocation; and all of its ongoing maintenance activities will be in compliance with the USACE permit guidelines. It is also important to note that when the USACE Permit maps are compared to these maps, it can be seen that the dunes have benefitted from the seaweed relocation, in nearly all instances.

Additionally, Park Board committees and staff have coordinated to develop a set of Best Practice recommendations for beach maintenance that has been provided to the City of Galveston for its use and information to facilitate deliberations in the City's permitting and review process. The Park Board has also sought to specifically reduce the footprint of beach cleaning equipment and has prioritized the use of "surf rake" type equipment within its fleet. Such equipment, while less impactful, is very often much slower to operate and more demanding of staff time resulting in much higher labor costs. Previously submitted is a copy of the Park Board approved "Best Practices" originally submitted to the City. This document may be more strict than existing guidelines, but Park Board staff intends to use the Best Practices document in support of the City's beach maintenance permitting guidelines.

The linear footage of beach frontage to be maintained at the Seawall Urban Beach Park is approximately 30,488 ft. It is anticipated the area will be maintained on an as needed daily basis due to its inclusion as a beach access point, and its iconic representation of Galveston. This location is also a public park and has the general public expectation to be cleaned and well maintained. The primary equipment to be used to maintain the beach is a Barber Surf Rake style of equipment. This equipment generally picks up the material and debris from atop the sand rather digging down with a mechanical rake and drawing it through the beach in a "tilling" fashion. Other equipment will also be utilized on the beach including garbage trucks, pick-up trucks, loaders, augers (for bollards) and other small equipment. Additionally, the Park Board has maintenance staff that remove trash and debris from the beach on a daily basis, this includes handpicking litter and trash from the beach and servicing the trash barrels daily.

Park Board beach maintenance staff is required to attend species training provided through Texas A&M Galveston and is equipped with the necessary contact phone numbers and information to facilitate any notification or reporting if that situation occurs. Previously, Park Board staff has reported marine species landings and has successfully coordinated with resource agencies. It is understood the Park Board's beach maintenance activities will not adversely affect the public, public beach access way, or exacerbate erosion. Included with this application is a packet of maps (17 pages) from the USACE permit #SWG-2014-00448 designating specific locations to stockpile seaweed. Park Board activities will not adversely weaken the dune or dune vegetation or reduce the protective functions of the dunes. The Park Board's activity will not result in the significant redistribution of sand and the activity will not significantly alter the beach profile or the line of vegetation. The piles would never exceed 20' from the existing Line of Vegetation (LOV).

The Park Board understands all documents submitted with this application are subject to the Open Records Act / Texas Public Information Act; and, receipt of an application does not constitute application completeness and that staff will review the application and return incomplete applications; and that application fees are non-refundable once the application has been submitted. The Texas General Land Office must review this application prior to any authorization to proceed with the Beach Maintenance Sworn Affidavit. It is also understood the Park Board will conform to any comments received from the General Land Office regarding this application.

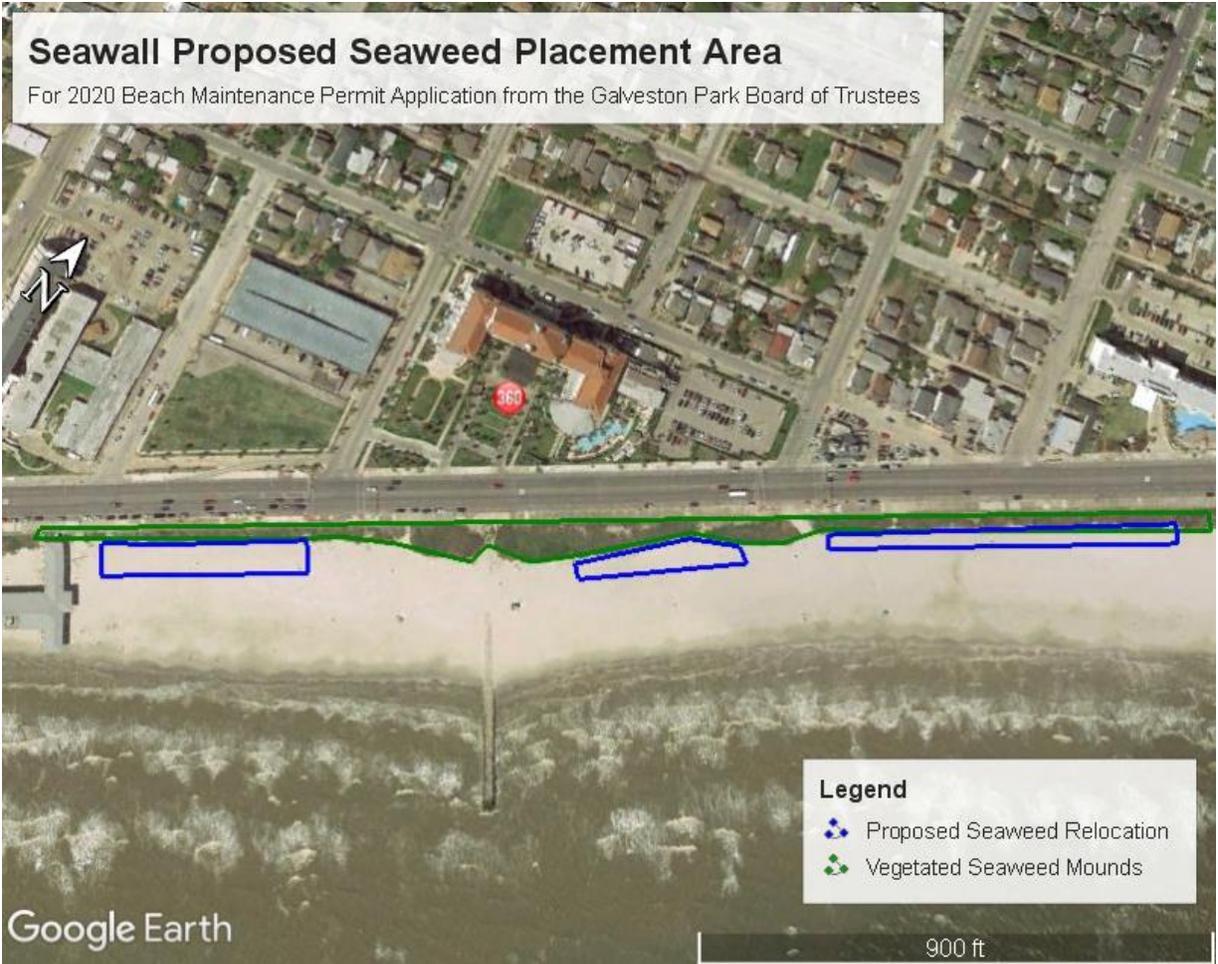
The seawall beach area is a pedestrian access only area with multiple locations with access stairways and an ADA ramp located adjacent to 57th street. Access to the beach area is utilizing these ramps and stairs and pedestrian access along the public beach easement. Stockpile locations are located adjacent to the base of the seawall and are not expected to have any impacts or cause any restrictions to the public's access to the beach.

**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 12th to 18th)**



Park Board activities will not adversely weaken the dune or dune vegetation or reduce the protective functions of the dunes. The Park Board's activity will not result in the significant redistribution of sand and the activity will not significantly alter the beach profile or the line of vegetation. The piles would never exceed 20' from the existing Line of Vegetation (LOV).

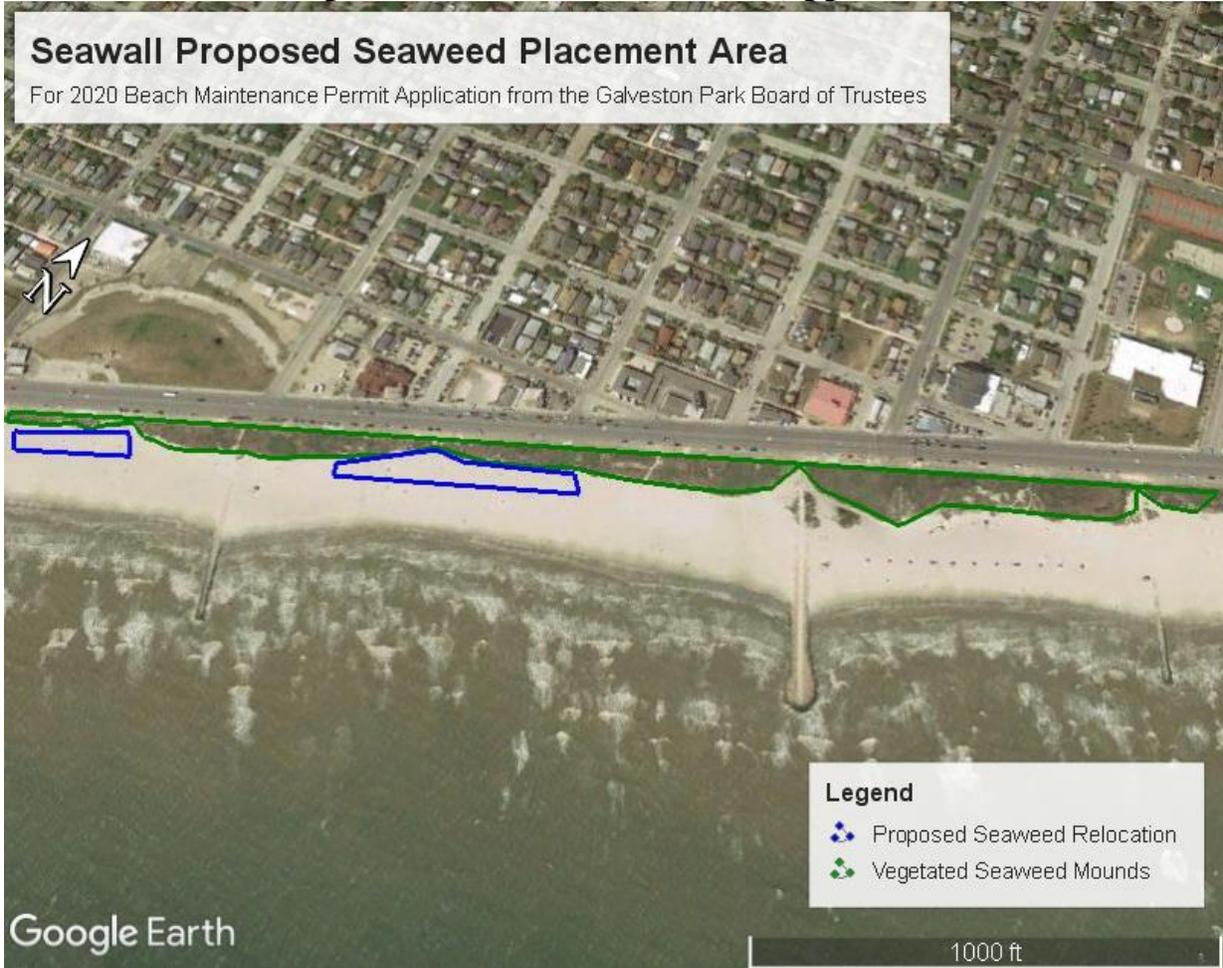
**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 18th to 20th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 22nd to 26th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 26th to 35th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 36th to 38th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 41st to 45th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 45th to 49th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 49th to 53rd)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (approx. 56th to 59th)**



**Park Board of Trustees of the City of Galveston
Beach Maintenance Permit Application
Current Map from Seawall Urban Park (beyond 60th)**





TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

January 13, 2020

Via Electronic Mail

Virginia Greb
Coastal Resource Assistant Manager
Development Services Department
City of Galveston
823 Rosenberg, Room 401
Galveston, Texas 77550-2103

Beachfront Construction Certificate and Dune Protection Permit in the City of Galveston

Site Address: 1200-8900 Seawall Boulevard, Galveston
Legal Description: Blocks 1200-8900, Public Beach Seaward of Seawall Boulevard
Lot Applicant: Galveston Park Board of Trustees c/o Reuben Trevino
Case Number: 19BF-087
GLO ID No.: BDCOG-19-0326a

Dear Ms. Greb:

The General Land Office (GLO) has reviewed the amended application materials for a beachfront construction certificate and dune protection permit for the above-referenced location. The applicant proposes to conduct beach maintenance activities along approximately 30,488 linear feet of beach at Seawall Urban Beach Park on a daily, as needed basis. According to the Bureau of Economic Geology, the area is eroding at a rate of one to seven feet per year.

Based on the information provided to our office for review, we have the following comments:

- The applicant should only grade and/or rake beaches to level sand drifts and fill holes and washouts if the activity is necessary to maintain access for emergency vehicles or ensure public access to and use of the beach. The Park Board must ensure the activity does not create additional holes and that any redistributed sand remains within the site.
- The applicant must minimize the raking of the beach to only when the influx of materials is heavy enough to impact the public's ability to use the public beach easement.¹ The GLO encourages the removal of litter and other debris by handpicking or raking by hand and strongly discourages the use of machines.

¹ 31 Tex. Admin. Code § 15.7(l).

- The applicant's activities must not result in significant redistribution of sand or significantly alter the beach profile, materially weaken dunes or dune vegetation, or reduce the protective function of dunes.²
- The proposed beach maintenance activities must not restrict or interfere with public use of the beach.³
- The applicant shall avoid impacts to any dunes or dune vegetation.⁴ The applicant may not rake over dune vegetation or operate machinery on dunes. The GLO recommends thinly spreading collected materials in low areas, blowouts and breaches within the primary dune complex. If maintenance materials cannot be placed in the primary dune complex or its placement would adversely affect dunes and dune vegetation, the collected maintenance materials may be placed immediately adjacent to the line of vegetation provided its placement would not adversely affect public access. An additional permit shall be required if any adverse impacts to dunes occur.⁵
- The rake height should be adjusted to allow the rake teeth to draw man-made and naturally occurring debris into piles or windrows, while at the same time minimizing the amount of sand moved from the beach.⁶
- The applicant must return any sand moved or redistributed due to beach maintenance activities to the area between the line of vegetation and mean high tide.⁷
- The applicant's beach maintenance activities must not result in the potential for increased flood damage to the site or adjacent property; result in runoff or drainage patterns that aggravate erosion; cause significant changes to dune hydrology; adversely affect dune complexes or dune vegetation; or significantly increase the potential for washovers or blowouts to occur.⁸
- In addition to the requirements outlined above, the applicant must conduct activities in accordance with other local, state, or federal permits, such as permits issued by the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers, and with the Galveston Park Board of Trustees Recommended Best Practices for Beach Maintenance.

If you have any questions, please contact me at (512) 463-5232 or at michelle.culver@glo.texas.gov.

Sincerely,



Michelle Culver
Beach Access & Dune Protection Program
Coastal Resources Division

² 31 Tex. Admin. Code § 15.7(l).

³ 31 Tex. Admin. Code § 15.7(e)(2).

⁴ 31 Tex. Admin. Code § 15.4(f).

⁵ 31 Tex. Admin. Code § 15.3(s)(1).

⁶ City of Galveston Beach Access Plan § 29-90(o)(6)(d)(1).

⁷ 31 Tex. Admin. Code § 15.7(l).

⁸ 31 Tex. Admin. Code § 15.4(d).

Ms. Greb
January 13, 2020
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Texas General Land Office

cc: Dustin Henry, Coastal Resources Manager