#### <u>JOINT</u> <u>PUBLIC NOTICE</u>

#### CHARLESTON DISTRICT, CORPS OF ENGINEERS 1949 INDUSTRIAL PARK ROAD, ROOM 140 CONWAY, SOUTH CAROLINA 29526 and THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL Office of Ocean and Coastal Resource Management 1362 McMillan Avenue, Suite 400 North Charleston, South Carolina 29405

REGULATORY DIVISION Refer to: P/N SAC-2020-00503 (REVISED)

2 July 2020

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 <u>et.seq.</u>), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

#### The Peninsula Property Owners Association c/o Coastal Science & Engineering Inc. P.O. Box 8056 Columbia, South Carolina 29202

for a permit to conduct beach nourishment in the

# ATLANTIC OCEAN

at a location described as the south end of Litchfield Beach, encompassing 3,600 linear feet(If) of shoreline located east of Norris Drive, in Pawleys Island, Georgetown County, South Carolina (Latitude: 33.4566°, Longitude: -79.1032°), Magnolia Beach Quad.

In order to give all interested parties an opportunity to express their views

# NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** and **SCDHEC** until

#### 30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed activity is a beach nourishment project along the south end of Litchfield Beach, SC. (<u>NOTE:</u> The proposed project is a revision of the plan previously advertised on April 14, 2020. Only comments pertaining to this public notice will be considered). In detail, the revised plan consists of the placement of up to 450,000 cubic yards (cy) of beach compatible sand along approximately 3,600 (If) of shoreline. The proposed project consists of beach restoration via additions of beach quality sand trucked to the beach from an inland borrow source in multiple events over a five-year period. Sand will be obtained from inland (upland) borrow pit(s)

containing sufficient beach compatible sand. The proposed work will be accomplished by heavy machinery (bulldozers) shaping the fill on the beach. The applicant further stated that any work in waters of the United States, if authorized, would be performed outside of sea turtle nesting season (construction from 1 November to 31 March).

# Specific Project Details Provided by the Applicant:

# Trucking Project Plan

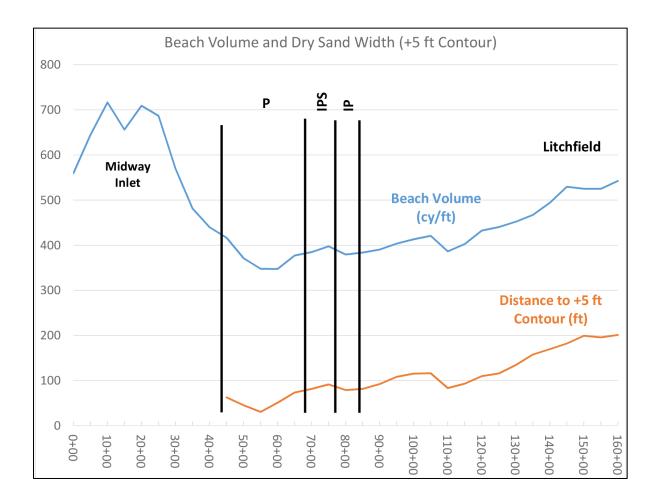
The applicant requests to conduct a beach improvement program over a five-year period which would allow for multiple additions of sand via trucking from an inland source. The applicant proposes to add 150,000-200,000 cy over the length of the project area in the first available construction window (December 2020 – March 2021), and another 100,000 – 150,000 cy the following winter. This quantity will restore the majority of the existing sand deficit along the project area, including sufficient sand to restore a protective dune and dry sand beach seaward of the dune.

Following the initial two projects, the applicant would monitor the beach annually to document the performance of the beach fill. Should the beach condition warrant additional nourishment, the applicant proposes to add 50,000-100,000 cy of additional sand in year 4 or 5 following the initial nourishment. The total scope of nourishment proposed under a trucking program is up to 450,000 cy spread over three events in a five-year period.

Each project will require approximately 100-150 truckloads of sand per day to transfer 50,000 cy of sand per month. Trucks would generally run during daylight hours, and would deposit sand along the upper beach. Stockpiled sand would be graded to the design elevation using bulldozers. With this type of operation, the sloping section of beach is built to a natural slope by wave action on a daily basis. Sand for the project would be obtained from inland borrow sources approved by DHEC-OCRM. The applicant would provide sufficient sediment samples from each borrow site to confirm sediment compatibility. Sand would be free of rocks, organic matter, roots, and silt or muddy material. Prior to selection of a borrow pit, the applicant will provide a minimum of one sediment sample from the borrow area for every 5,000 cy planned to be excavated from the pit. For example, if 150,000 cy of sand are planned to be excavated, then the applicant will provide 30 samples from the pit prior to the project. During construction, each truck will be monitored for sand quality and any truck containing unsuitable material will be rejected and made to return to the borrow pit.

# Nourishment Design

The nourishment design is based on the present condition of the beach, historical erosion rates, impacts from recent hurricanes, desired levels of storm protection and recreation area, environmental considerations, and available budget. In evaluating the existing sand deficit, the beach volume seaward of the oceanfront structure line was used to compare eroded sections of the beach with an ideal beach profile. The ideal profile contains sufficient volume to hold a primary dune and recreational dry beach, as well as to withstand modest storm events. For Litchfield Beach, healthy sections of the beach meeting these criteria were found to hold a minimum of 500 cubic yards per foot (cy/ft) of sand in the profile. Each section of the beach was compared to this value to determine volume deficits (Figure 2).



# Figure 2. Beach volumes along the southern end of Litchfield Beach

The nourishment plan includes a dry-sand berm constructed at +6 ft NAVD and a sloped intertidal section constructed at 1 on 20 slope (Figure 3). In areas lacking protective dunes capable of withstanding a storm event with a return period of 5 years or less, a dune will be constructed no more than 6 ft above the berm height with a crest width no greater than 15 ft. Fill density for full sections will range from 20-60 cy/ft for each trucking event. The design will be tapered so that higher fill volumes being placed in the most eroded areas. The fill volumes generally decrease moving from south to north, reflecting the generally healthier condition of the northern end of the project site. Taper sections will extend up to 200 ft on either side of the full sections to tie the nourishment into the native beach contours. The nourishment fill will be distributed as follows:

	Fill Density – Trucking (1 event) (cy/ft)	Total Quantity – Trucking 1
Station		event (cy)
35+00	0	0
40+00	0	5,000
45+00	20	20,000
50+00	60	37,500
55+00	90	45,000
60+00	90	37,500
65+00	60	25,000
70+00	40	15,000
75+00	20	10,000
80+00	20	5,000
85+00	0	0
90+00	0	0
Total		200,000
Total Trucking		450,000
(3 events)		

The requested volume is the maximum amount of sand the applicant intends to place on the beach during the project. If funding is insufficient to accomplish this, the volumes will be scaled back to match the available funds. Any reduction of volume would be applied fairly evenly across the fill.

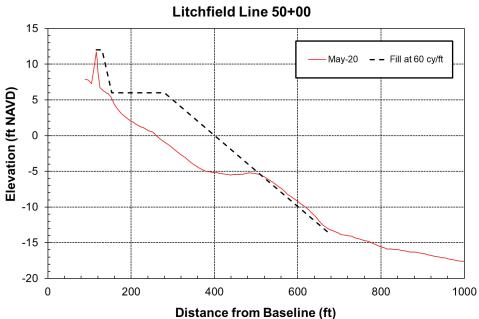


Figure3. Example fill profile showing nourishment of 60 cy/ft Litchfield Line 50+00

# Measures taken to avoid and minimize impacts to waters of the United States.

The proposed trucking project will take place between 1 November and 31 March to avoid any impacts to sea turtle season. Trucking operations will take place mostly during daylight hours, with possible work extending into the early evening hours. Borrowing sand from an approved inland borrow site eliminates any impacts to open waters that an offshore project would entail. At a placement rate of ~2,000 cy per day, there is likely to be less of an impact on benthic infauna in the surf zone than an offshore project, which can add over 50,000 cy per day. At 2,000 cy per day, and with most of the sand placed along the upper beach profile, sand is likely to spread to the surf zone at a rate slow enough to allow for vertical migration of infauna. The trucking program would require multiple impacts to the upper beach over the life of the permit. With a trucking programs, the applicant can better guarantee sediment quality of the fill material. Limitations in the ability to fully observe an offshore borrow source allow for variations in the sediment characteristics that reach the beach. With a trucking project, sediment quality can be observed in the borrow pit as trucks are loaded and unsuitable material can be avoided.

The applicant proposes the following measures to avoid and minimize impacts to endangered species and waters of the US:

- The project will be construction outside of turtle nesting season (construction from 1 November to 31 March).
- Any existing emergency erosion control structures, devices, or other measures will be removed in conjunction with the initial truck fill project.
- The applicant will obtain pre-project sediment samples at a minimum density of one sample per 5,000 cy of excavation quantity at each borrow site.
- The applicant will monitor sediment quality at the fill site and reject any truck containing incompatible sediment. For the purposes of this project, incompatible sediment includes sediment containing organic matter, roots, mud, rocks, or large clasts.
- Upon completion of construction, the applicant (through its agent) will resample the project area and obtain representative samples of the beach fill using the same stations as the pre-project samples. Results will be compared with pre-project beach samples and borrow area sediment test results. Data will be submitted to the USACE and OCRM in a comprehensive final report.
- The applicant will provide pre and post project vertical aerial imagery of the project area, including Midway Inlet, and for three years post-project.
- The applicant will conduct topographic and bathymetric beach surveys before and after the project and for 3 years post-project. Surveys will be conducted at profiles presently monitored by the applicant and will encompass the beach between a point landward of the stable dune and extend to depths of -20 ft NAVD, or a distance of 3,000 ft from the shoreline, whichever is closer. Post-construction surveys will compare beach volumes and contour positions to before-and-after project conditions to document beach volume changes and identify any erosion hotspots. Annual reports will be submitted to USACE and SCDHEC-OCRM.
- Following the initial project, the applicant will coordinate with the USACE and SCDHEC-OCRM prior to any additional sand placements. The implementation and performance of the initial fill will be documented and used to adjust construction logistics and design.
- The applicant (through its agent) will provide all contractors associated with construction a copy of the permit and associated drawings. A copy of the permit will be kept at the construction site at all times.

# Sea Turtle Protection Measures for Project

The applicant proposes to construct the project outside of sea turtle season (May-October). If, for any reason, portions of the project overlap with turtle nesting season, standard protection and monitoring actions will be completed to minimize impacts to turtles. Action items include:

- Daily early morning surveys for sea turtles.
- Nest relocation by qualified personnel for nests laid in areas where they may be impacted by construction activities.
- Equipment storage will be off the beach to the maximum extent practicable and as far landward as possible. Temporary fencing or other measures will be utilized to prevent turtles from being trapped by equipment.
- Direct night-time lighting of the beach will be limited to the immediate construction area and shielded according to USFWS recommendations. If any turtles are observed in the construction area, activities will cease until the turtle(s) returns to the water and any nest is marked.
- Tilling of the nourished beach and compaction monitoring for three years after nourishment.
- Escarpment monitoring and leveling for three years after nourishment.
- Beach compaction tilling Since the fill will be placed by truck, sediment compaction issues associated with hydraulic fill will be avoided. The applicant recommends that tilling of the beach be avoided to protect the integrity of the dune and plantings.
- Lighting The applicant will conduct one lighting survey of the beach in the first May following nourishment following guidelines prepared by USFWS. A summary report of the survey, including the methodology, map of lighting sources, and description of each source) will be submitted to USFWS within three months of the survey. Following the submission of the survey results, the applicant will meet with USFWS to discuss the report.

#### Proposed Mitigation:

The applicant offered no compensatory mitigation for the proposed impacts.

#### Project Purpose:

The project purpose is storm damage reduction.

# NOTE: This public notice and associated plans are available on the Corps' website at: <a href="http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices">http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices</a> .

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As

such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions of the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact ~25 acres of intertidal beaches utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project area, examined all information provided by the applicant, and the District Engineer has determined, based on the most recently available information that the project <u>may affect</u> the Loggerhead sea turtle (*Carretta caretta*); West Indian Manatees (*Trichechus manatus*); Green sea turtle (*Chelonia mydas*); Leatherback sea turtle (*Dermochelys coriacea*); Kemp ridley turtle (*Lepidochelys kempii*); piping plover (*Charadrius melodus*); Red knots (*Calidris canutus rufa*); and Seabeach amaranth (*Amaranthus pumilus*). A biological assessment (or other similar document) detailing our analysis of the potential effects of the action will be provided to the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(/)(1)), and has initially determined that no historic properties are present; therefore, there will be no effect on historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and any other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity. **Please submit comments in writing, identifying the project of interest by public notice number, to the following e-mail address:** <u>SAC.RD.Conway@usace.army.mil</u>, or via USPS at the address below:

#### U.S. Army Corps of Engineers ATTN: REGULATORY DIVISION 1949 INDUSTRIAL PARK ROAD, ROOM 140 CONWAY, SOUTH CAROLINA 29526

If there are any questions concerning this public notice, please contact Rob Huff, Team Lead, by email at Robert.C.Huff@usace.army.mil.

