

JOINT
PUBLIC NOTICE

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-2020-01348

22 December 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 *et seq.*), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

Inlet Harbour Homeowners 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 the south end of Garden City Beach, encompassing 2,500 linear feet (lf) of shoreline located east of South Waccamaw Drive, in Garden City, Georgetown County, South Carolina (Latitude: 33.5345°, Longitude: -79.0283°), Brookgreen Quad.

In addition, pursuant to Section 14 of the Rivers and Harbors Act of 1899, amended and codified at 33 USC 408 (Section 408), an application has also been received for Department of the Army Section 408 permission for alteration of the federally-authorized Murrells Inlet Navigation Project. The request to excavate accreting sand from portions of the federal navigation channel (Murrells Inlet) will be reviewed as outlined below in order to determine whether the work proposed will be injurious to the public interest or impair the usefulness of the project.

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** until 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 Garden City Beach, SC. In detail, the proposed work consists of the placement of up to 400,000 cubic yards (cy) of beach compatible sand along 2,500 linear feet of shoreline. The applicant proposes to periodically recycle sand from accreting shoals and intertidal sand bars around Garden City spit at Murrells Inlet within the general area of the deposition basin for the federal navigation channel (Murrells Inlet). The proposed project calls for periodic sand transfer via land-based equipment from demonstrated accretion zones within the inlet to the immediate upcoast area—a maximum of approximately 2,500 linear feet of shoreline extending north from the northern jetty of Murrells Inlet to the southernmost groin along south Garden City. Up to 400,000 cy of sand would be excavated and transferred to the upcoast beach in multiple events according to available sand quantities and need. The applicant anticipates three to four events will be required during the life of the requested permit with each event involving the transfer of ~100,000–150,000 cy for a total not to exceed 400,000 cy. The applicant stated that all work would be performed during winter months unless otherwise specified by resource agencies.

Specific Project Details Provided by the Applicant:

Work Areas

The federal Murrells Inlet navigation project consists of two weir jetties completed in 1977 and an entrance channel with an authorized project depth of –12 feet (ft) mean low water (Douglass 1987). Littoral sand moving north to south passes over the north jetty weir and deposits around Garden City spit; this has resulted in shoaling in the authorized deposition basin and navigation channel (Sheet 2 of 6). Work would consist of periodic excavations of shoal sand inside the jetties around the spit and transfer (“back-passing”) to the upcoast beach along the Inlet Harbour subdivision (Sheet 3 of 6). The area of excavation will depend on conditions at the time of each work event and will be limited to wet-sand beach and attached shoal areas contiguous with Garden City spit seaward of the high watermark. The areas for excavation will be restricted to portions of the deposition basin and/or spit outside, or inside, the authorized federal channel as approved by state and federal regulatory officials. Sheet 2 of 6 illustrates conditions in January 2020, and one scenario excavation area (A). Area A encompasses intertidal and shallow subtidal areas of the authorized deposition basin and portions of the authorized federal channel which has infilled partially as a result of spit extension to the south.

Up to 400,000 cubic yards (cy) would be excavated and transferred to the upcoast beach in multiple events according to available sand quantities and need. The applicant anticipates three to four events will be required during the life of the permit with each event involving the transfer of ~100,000–150,000 cy for a total not to exceed 400,000 cy. It is possible that conditions may indicate that for some transfers, a smaller volume of the order of ~50,000 cy would be sufficient. The condition of the beach in January 2020 and the volume of sand available in Area A indicate that the initial transfer event should involve ~115,000 cy to restore the deficit volume along the Inlet Harbour beach to provide erosion relief for 1–2 years if there is sufficient volume available within the borrow area. The applicant will monitor the condition of the beach and borrow area for purposes of establishing threshold criteria for action in close coordination with regulatory agencies. No excavations would be conducted within 75 ft of the jetty or closer than 300 ft from existing habitable structures.

Construction

Excavations will be performed via land-based (wheeled and tracked) equipment (eg, Caterpillar excavator 349F, Terex TA300, CAT 637G Wheeled Scraper) depending on the contractor's preference, and will begin at the seaward most accessible portion of the borrow area. Excavation in the shallow, underwater portion of the spit will allow for incoming sand to rapidly fill any low areas created by the excavation. Excavation depths will be limited to a specified elevation, likely -6 ft NAVD (-3.0 ft MLLW) unless otherwise specified by resource agencies. Sand will be transferred by offroad trucks or equivalent, operating on the low-tide beach.

Fill volume in areas receiving sand will vary depending on beach condition at the time of each sand recycling event. The area currently showing focused erosion (the immediate vicinity south of the groin field) contains 30–60 cubic yards per foot (cy/ft) less volume than adjacent healthy sections of beach (CSE 2020). In the current configuration, the proposed project would restore the beach profile along at least 1,500 linear feet to a relatively healthy condition. Fill will be placed in the form of a berm of variable width at the natural dry-sand beach level (approximately +6 ft NAVD) (Sheet 4 of 6). The seaward edge of the fill will be sloped in the offshore direction generally on a 1 on 15 slope to the existing ~mid-tide beach.

It is anticipated that each sand transfer event will be accomplished in less than two calendar months. Subject to regulatory and resource agency approval, some sand may be pushed up against existing seawalls at a gentle slope (1 on 5 to 1 on 10) so as to limit wave impacts and runup on the structures. While the maximum length of shoreline impacted may be 2,500 ft, the length of each nourishment event is anticipated to be no greater than 1,800 linear feet, targeting the sections of beach which exhibit the largest sand deficit.

Pre- and post-project surveys of the beach will be performed annually to verify sand volumes, beach condition, and shoreline change trends, and to monitor the scale and rate of rebuilding of the shoal borrow area.

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

The applicant proposes to conduct work during winter months when biological productivity is lower in the borrow area and fill area, unless otherwise directed by resource agencies. Work will be performed by mechanical methods largely in the dry and thus minimize turbidity associated with hydraulic pumping. All work will be performed during daylight hours further reducing potential encounters with threatened species such as sea turtles. Should the resource agencies propose a late spring schedule so as to minimize impacts to shorebirds utilizing the area in winter or early spring, the applicant will provide morning turtle monitors to detect any nesting activity in the project area. Should nesting activity be detected, the applicant through its engineering representative will direct work to stop and contact regulatory and resource agency officials to obtain instructions for nest protection or relocation. All equipment will be stored nightly at a designated staging or access area off the active beach or away from sensitive bird habitat.

The applicant will seek to scale each sand recycling event so that the time between events is as long as possible (typically ~2 years). This will help reduce cumulative environmental impacts associated with more frequent events. Studies have shown that benthic organisms in the borrow area (accreting sand spit) and beach tend to recover rapidly (ie – one growing season) and also return to normal more efficiently where the disturbance is not continuous (Baca and Lankford 1987; Jutte et al 1999; Van Dolah et al 1992, 1994, 1998). Undisturbed areas will be left in close

proximity around the borrow area and along the relatively short length of shoreline in the fill area. Most of the filling will occur landward of the mid-tide line leaving extended areas of low tide beach and shallow sub-tidal beach habitat untouched by mechanical equipment or direct burial.

Following are anticipated proactive measures the applicant will implement during and after the project (subject to review and approval by resource and regulatory agencies).

1) All excavations and sand transport will be along the intertidal beach and low-tide terrace via land-based equipment during daylight hours. The contractor will be directed to minimize ingress and egress along the dry-sand beach and to avoid areas of incipient dune formation and vegetation. Equipment will be parked at night in a designated staging area off the beach or as high along the back beach (construction berm) as practicable.

2) Measures to avoid impacts on manatees will be followed as described in, "Guidelines for Avoiding Impacts on the West Indian Manatee in North Carolina Waters," by the USFWS, also applicable to South Carolina waters www.fws.gov/raleigh/pdfs/manatee_guidelines.pdf.

3) All project personnel will follow NMFS marine mammal stranding report procedures.

4) Lights will be directed offshore and shielded during turtle nesting season.

5) A standardized turtle nest monitoring and relocation program is in place for ~49 miles of beach in northern Georgetown and Horry counties under the direction of SCUTE (South Carolina United Turtle Enthusiasts). This includes Garden City and Inlet Harbour (www.seaturtle.org/nestdb/index.shtml?view_beach=30). Project managers will coordinate with the Turtle Team, relying on the team to provide its usual activities:

- a. Daily patrols of active beach disposal areas at sunrise.*
- b. Relocation of any nests (under the supervision of SCDNR personnel) identified in areas to be impacted by fill placement.*
- c. Notification of escarpment formations that hinder nesting.*
- d. Monitoring of hatchling success of the relocated nests.*

6) Visual surveys for escarpments along the project area will be made immediately after completion of the beach nourishment project and prior to April 1 for three subsequent years. Results of the surveys will be submitted to the USFWS prior to any action being taken. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 ft will be leveled to the natural beach contour before nesting season begins.

7) Sand of similar quality as the existing beach will be used to reduce any changes in physical characteristics of the beach that may affect turtle nest survival.

8) Beach compaction will be monitored, and tilling will be conducted in areas where the post-disposal beach is harder than 500 CPUs. This will reduce the likelihood of impacting sea turtle nesting and hatchling activities.

9) *The Applicant will perform periodic surveys of the proposed project area so as to estimate the volumetric erosion and provide updated design criteria for application in the federal project.*

10) *The Applicant will implement reasonable and prudent measures for the protection of sea turtles as detailed in Item 5, subject to final revisions by the USFWS and state and federal resource and regulatory agencies.*

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:
<http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

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 ~40 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 may affect the Loggerhead sea turtle (*Carretta caretta*); Green sea turtle (*Chelonia mydas*); Leatherback sea turtle (*Dermochelys coriacea*); Kemp ridley turtle (*Lepidochelys kempii*); Black rail (*Laterallus jamaicensis*); Piping plover (*Charadrius melodus*); Red knots

(*Calidris canutus rufa*); and Seabeach amaranth (*Amaranthus pumilus*). Additionally, the District Engineer has determined that the proposed project may affect, not likely to adversely affect, West Indian Manatee (*Trichechus manatus*); Humpback Whale (*Megaptera novaengliae*); Blue whales (*Balaenoptera musculus*); Sei whales (*Balaenoptera borealis*); Sperm whales (*Physeter microcephalus*); Fin whale (*Balaenoptera physalus*); Atlantic sturgeon (*Acipenser oxyrinchus*); Shortnose sturgeon (*Acipenser brevirostrum*); and North Atlantic Right Whale (*Eubalaena glacialis*). 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)(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 address:**

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

Section 408 Compliance Review

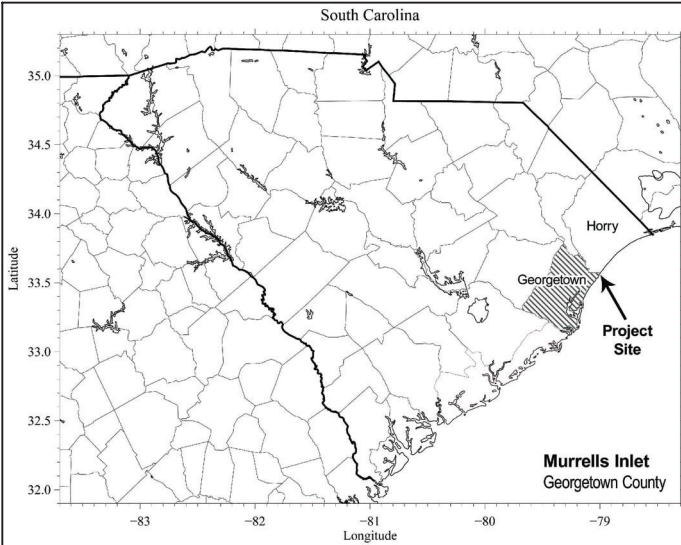
In addition, the decision whether to grant the requested permission for project modification under Section 408 is based on several factors which are outlined in Engineering Circular (EC) 1165-2-216. Review of the requests for modification will be reviewed by a USACE technical review team considering the following factors:

1. Impair the Usefulness of the Project Determination. The review team will determine if the proposed work would limit the ability of the federally authorized project to function as authorized, or would compromise or change any authorized project conditions, purposes or outputs. All appropriate technical analyses including geotechnical, structural, hydraulic and hydrologic, real estate, and operations and maintenance requirements, must be conducted and the technical adequacy of the design must be reviewed. The Charleston District is working closely with the requestor to ensure that all required technical plans, maps, drawings, and specifications necessary for these analyses are provided and complete. In order to approve a request for modification, it must be determined that the usefulness of the authorized project will not be negatively impacted.

2. Injurious to the Public Interest Determination. Proposed alterations will be reviewed to determine the probable impacts, including cumulative impacts, on the public interest. Evaluation of the probable impacts that the proposed alteration to the USACE project may have on the public interest requires a careful weighing of all those factors that are relevant in each particular case. Factors that may be relevant to the public interest depend upon the type of USACE project being altered and may include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, floodplains, residual risk, induced damages, navigation, shore erosion or accretion, and recreation. The decision whether to approve an alteration will be determined by the consideration of whether benefits are commensurate with risks. If the potential detriments are found to outweigh the potential benefits, then it may be determined that the proposed alteration is injurious to the public interest. This determination is not the same as the "contrary to the public interest determination" that is undertaken pursuant to Sections 10/404/103.

3. Legal and Policy Compliance. A determination will be made as to whether the proposal meets all legal and policy requirements. This includes the National Environmental Policy Act (NEPA) and other environmental compliance requirements, as well as USACE policy. While ensuring compliance is the responsibility of USACE, the requester is required to provide all information that the Charleston District identifies as necessary to satisfy all applicable federal laws, executive orders, regulations, policies, and ordinances. The compliance determination for any Section 10/404/103 permit decision associated with the proposed alteration is separate from and will not be included in this 408 compliance determination.

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



From Garden City, SC

From US 17 in Garden City, take Atlantic Avenue 1.0 mile east to Waccamaw Drive. Turn right and follow South Waccamaw Drive 3.2 miles to visitors gate for Inlet Harbour. Project begins south of the North Jetty at Murrell's Inlet and extends 2,500 ft north of the jetty to the first groin

Project Location

Latitude: 33° 32' 03" N
Longitude: 79° 01' 40" W



SAC-2020-01348
Inlet Harbour Sand Recycling Project
Georgetown County, SC
Sheet 1 of 6
Date: December 3, 2020

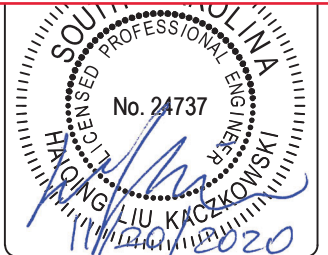
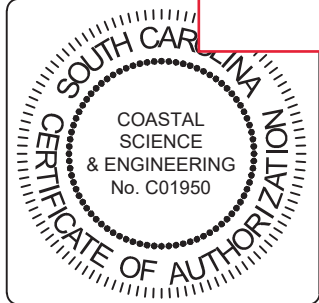
APPLICANT:
Inlet Harbor Homeowners Association
2272 South Waccamaw Drive
Garden City, SC 29576

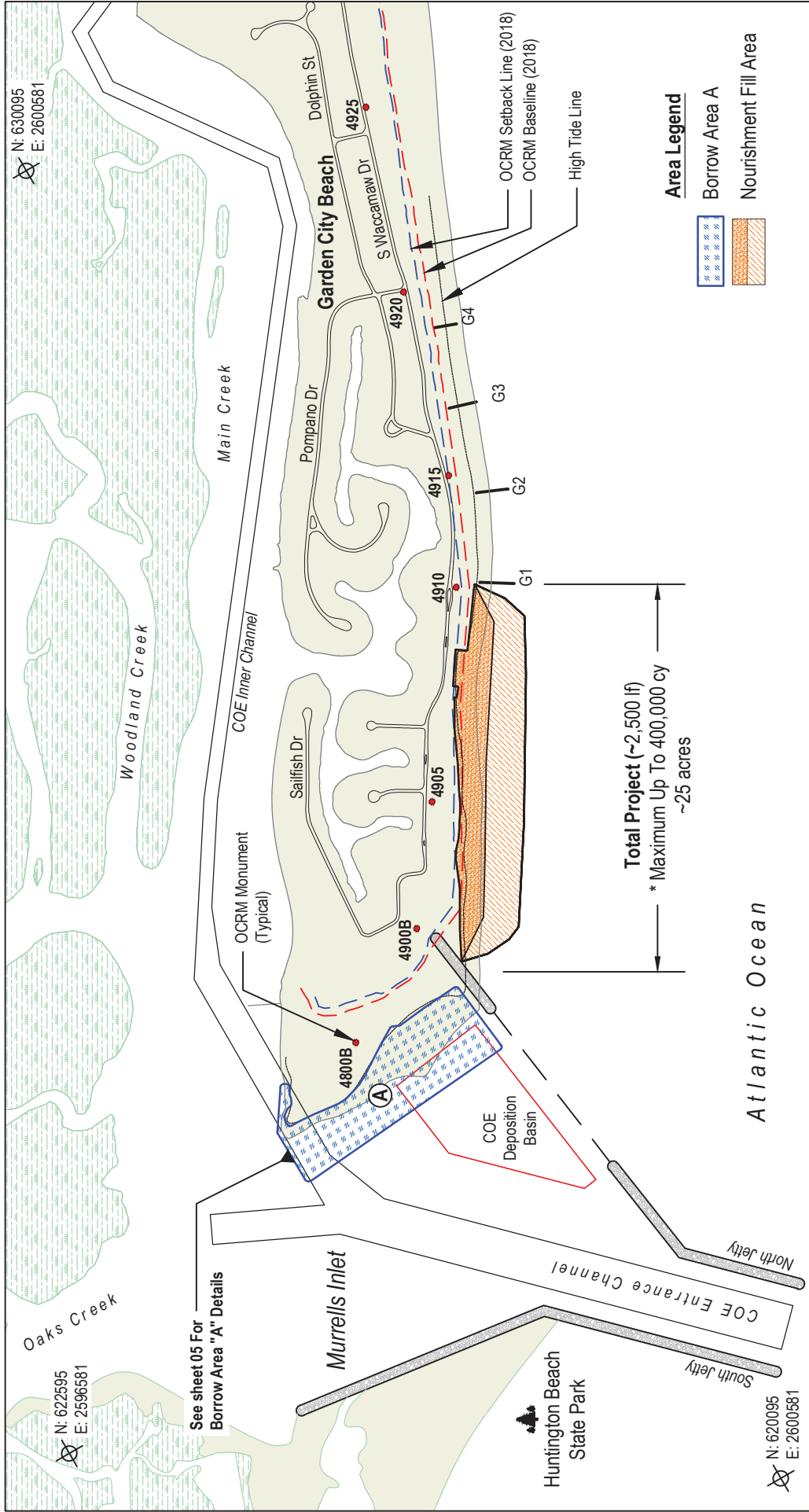
AGENT:
Coastal Science & Engineering, Inc.
P.O. Box 8056
Columbia, SC 29202

DRAWING TITLE:
VICINITY MAP
PROJECT: Murrells Inlet Interim
Beach Restoration Project

SCALE: AS SHOWN SHEET #:
DATE: Nov 2020
TMS#
PROJECT #: 2524

01



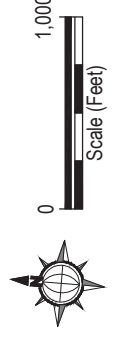


N: 622595
E: 2596581

N: 630095
E: 2600581

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Area Legend
 Borrow Area A
 Nourishment Fill Area



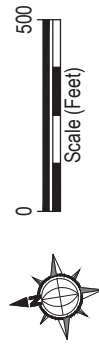
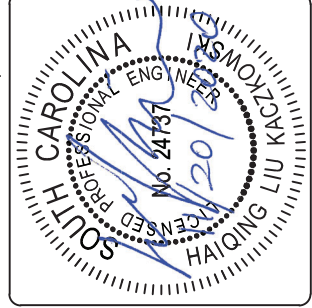
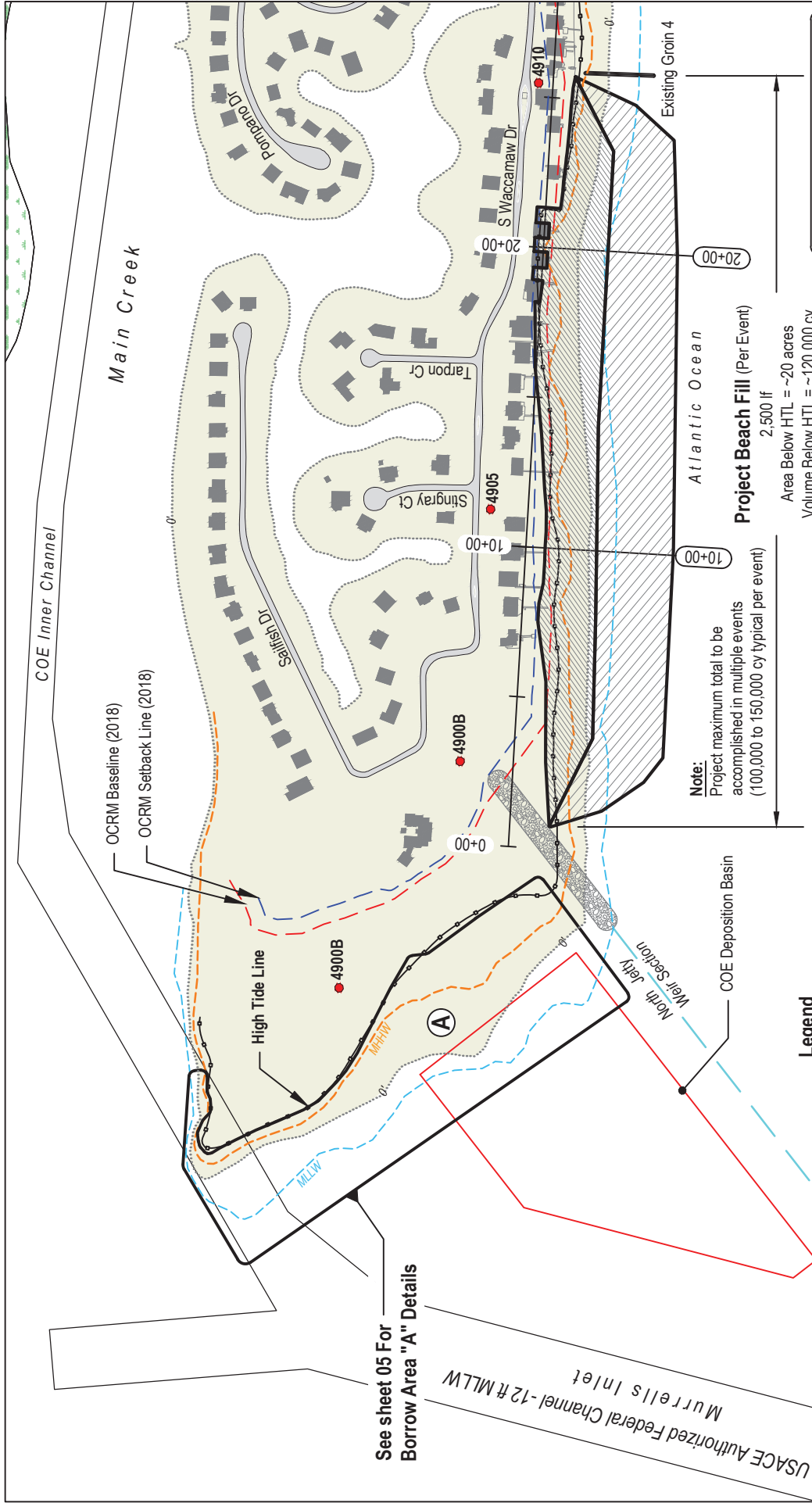
Notes:
 Excavations are proposed via land based equipment from area A
 * Project maximum total to be accomplished in multiple events (100,000 to 150,000 cy typical per event)

Scale:	As Shown	Sheet #:	02
Date:	Nov 2020		
Permit #			
Project #:	2524		

DRAWING TITLE:
Overall Plan Map

SAC-2020-01348
Inlet Harbour Sand Recycling Project
 Georgetown County, SC
 Sheet 2 of 6
 Date: December 3, 2020

Survey Datum:
 Horizontal: SPCS NAD '83 (Feet) SC Zone 3900



Project Beach Fill (Per Event)
 2,500 lf
 Area Below HTL = ~20 acres
 Volume Below HTL = ~120,000 cy

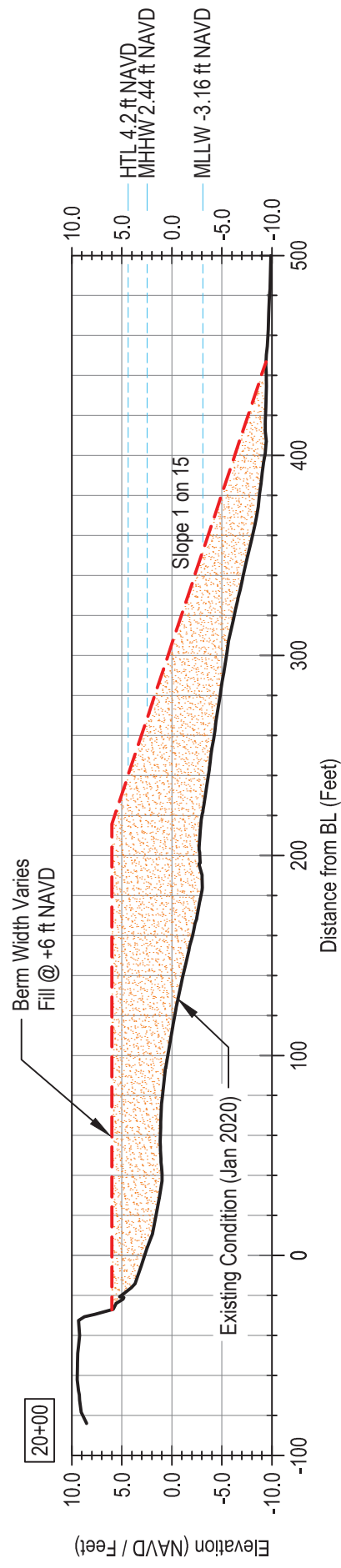
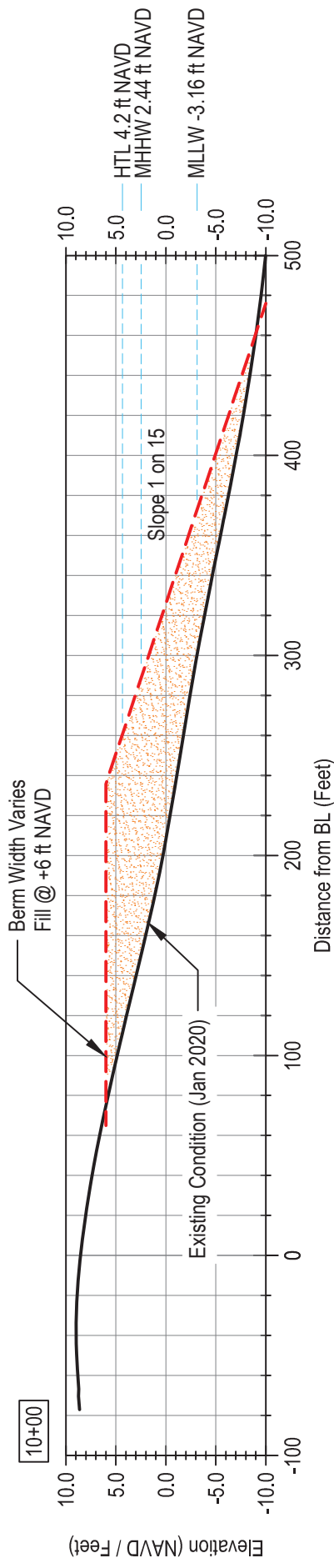
Note:
 Project maximum total to be accomplished in multiple events (100,000 to 150,000 cy typical per event)

- Legend**
- OCRM Setback Line (2018)
 - OCRM Baseline (2018)
 - Nourishment Impact Area
 - Maximum Extent
 - HTL 4.2 ft NAVD
 - MHHW 2.44 ft NAVD
 - Shoreline @ 0 ft NAVD
 - MLLW -3.16 ft NAVD

Survey Datum:
 Horizontal: SPCS NAD '83 (Feet) SC Zone 3900
 Vertical: NAVD 1988 ft
 Condition shown January 2020

Scale:	As Shown	Sheet #:	03
Date:	Nov 2020	Permit #:	
Project #:	2524		
DRAWING TITLE: Project Plan			

SAC-2020-01348
Inlet Harbour Sand Recycling Project
 Georgetown County, SC
 Sheet 3 of 6
 Date: December 3, 2020



Survey Datum:
 Horizontal: SPCS NAD '83 (Feet) SC Zone 3900
 Vertical: NAVD 1988 ft Vertical Exaggeration: 5
 Condition shown January 2020

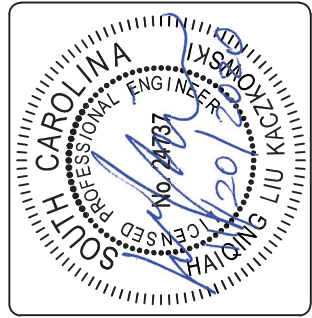
HTL - High Tide Line
 MHHW - Mean Higher High Water
 MLLW - Mean Lower Low Water

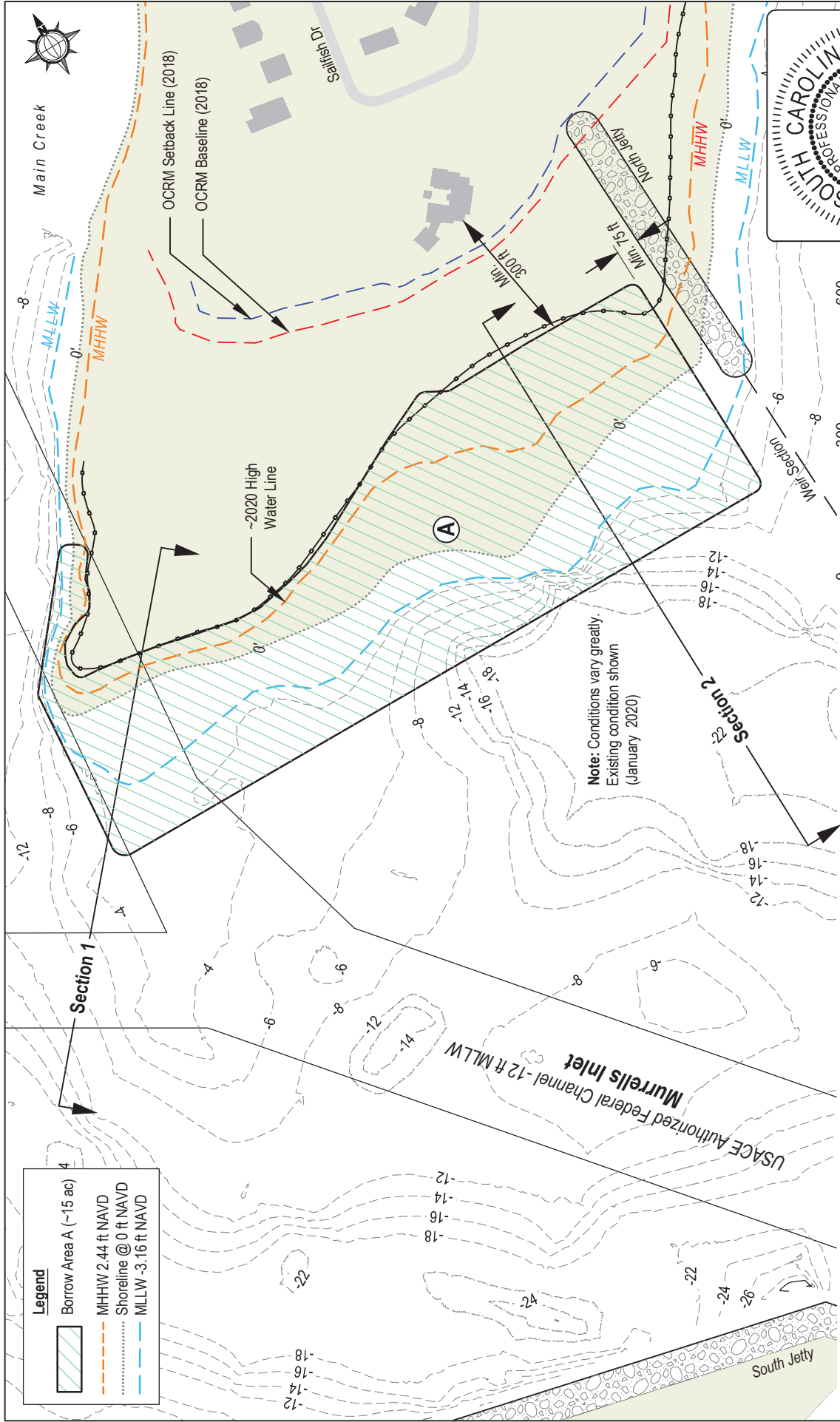
Note: See Sheet 03 For Section Locations

SAC-2020-01348
 Inlet Harbour Sand Recycling Project
 Georgetown County, SC
 Sheet 4 of 6
 Date: December 3, 2020

DRAWING TITLE:
 Typical Fill Sections

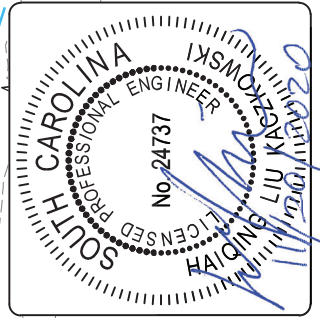
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Date:	Nov 2020	Permit #	
Project #:	2524		





Legend

	Borrow Area A (~15 ac)
	MHHW 2.44 ft NAVD
	Shoreline @ 0 ft NAVD
	MLLW -3.16 ft NAVD



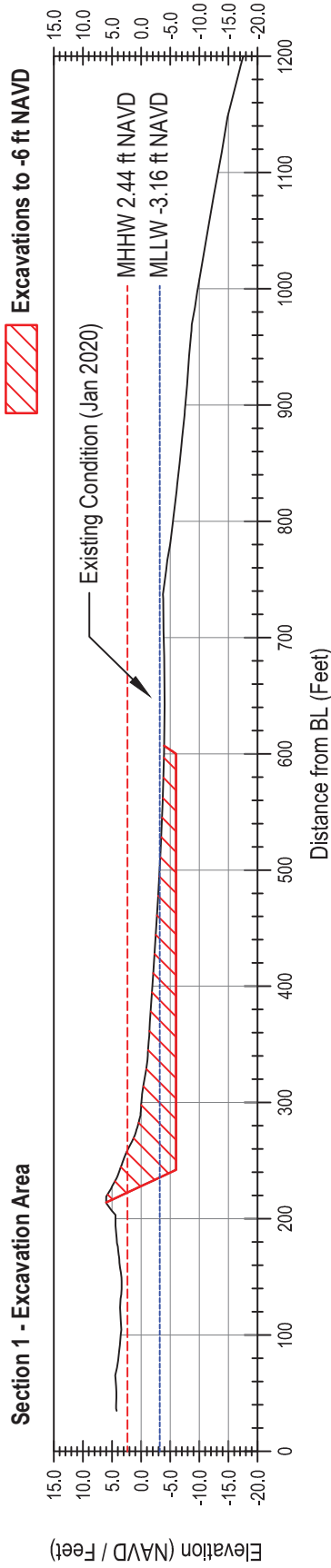
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Date:	Nov 2020
Permit #	
Project #:	2524

DRAWING TITLE:
Proposed Borrow Area

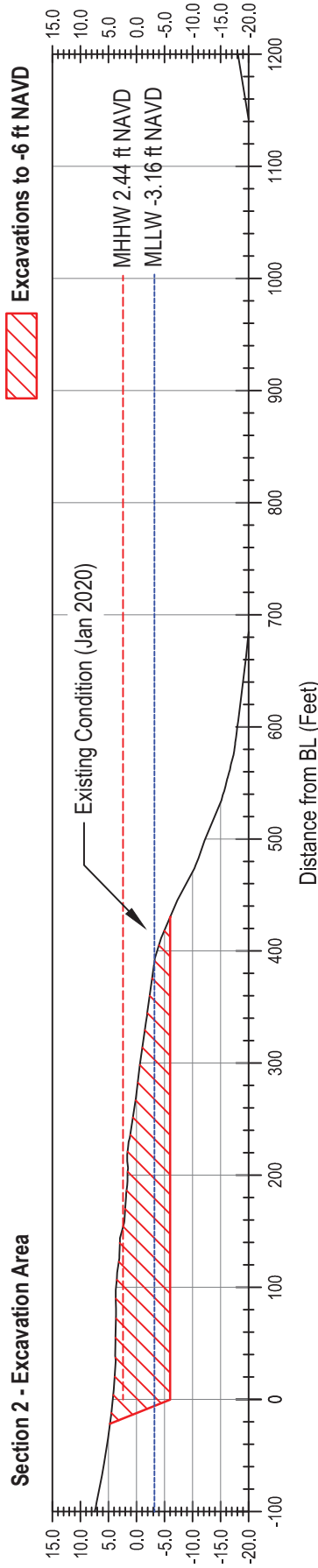
SAC-2020-01348
Inlet Harbour Sand Recycling Project
 Georgetown County, SC
 Sheet 5 of 6
 Date: December 3, 2020

Datum:
Horizontal: SPCS NAD '83 (Feet) SC Zone 3900 **Vertical:** NAVD 1988 ft. Jan 2020 Condition shown

 Excavations to -6 ft NAVD



 Excavations to -6 ft NAVD



MHHW - Mean Higher High Water
MLLW - Mean Lower Low Water

Survey Datum:

Horizontal: SPCS NAD '83 (Feet) SC Zone 3900

Vertical: NAVD 1988 ft

Vertical Exaggeration: 5

Condition shown January 2020

Note: See Sheet 05 For Section Location

SAC-2020-01348
Inlet Harbour Sand Recycling Project
Georgetown County, SC
Sheet 6 of 6
Date: December 3, 2020

DRAWING TITLE:

Typical Excavation Section

Scale: As Shown

Date: Nov 2020

Permit #

Project #: 2524

Sheet #:

06

