

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
Charleston, South Carolina 29405

REGULATORY DIVISION

Refer to: P/N # 2015-00515-3B

Date: May 12, 2015

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

GAIRY NICHOLS
INLET HARBOUR HOMEOWNERS ASSOCIATION
C/O TREY HAIR
COASTAL SCIENCE & ENGINEERING, INC.
P.O. BOX 8056
COLUMBIA, SOUTH CAROLINA 29202

for a permit to perform beach nourishment activities adjacent to the

ATLANTIC OCEAN

located along the beachfront adjacent to the Inlet Harbour subdivision, in Garden City, Georgetown County, South Carolina (Latitude: 33.533439°N; Longitude: -79.028847°W).

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 both of the above mentioned offices 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 work consists of excavating approximately 200,000 cubic yards of material from below the high tide line (HTL) to nourish approximately 4,200 linear feet of beachfront. Approximately 150,000 cubic yards of material will be placed below the HTL. In detail, the applicant provided the following project description:

Proposed Project Description

The Inlet Harbour Homeowners Association is seeking permits to periodically borrow 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. The proposed plan calls for sand transfer via land-based equipment from demonstrated accretion zones within the inlet to

the immediate upcoast area—a maximum of approximately 4,200 linear feet of shoreline extending north from the northern jetty of Murrells Inlet to the northernmost groin along south Garden City (Sheet 01). All work would be performed during winter months unless otherwise specified by resource agencies.

Work Areas

The federal Murrells Inlet navigation project consists of two weir jetties completed in 1977 and an entrance channel with 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 entrance channel (Sheet 02). 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 03). 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 under the permit by state and federal regulatory officials. Sheet 02 illustrates conditions in May 2014 and three scenario excavation areas (A, B, and C). Area A is fully outside and at least 200 ft upcoast of the authorized navigation channel for Murrells Inlet within the general area of the authorized deposition basin. Area B is outside the boundaries of the federal channel extending around Garden City spit to within ~25 ft of the authorized channel. Area C is within the authorized federal channel and extending to the accessible south limit of Garden City spit at the time of construction. Up to 200,000 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 events will be required during the life of the permit with each event involving transfer of ~50,000–75,000 cy for a total not to exceed 200,000 cy. The condition of the beach in May 2014 and volume of sand available in Area A indicate that the initial transfer event should involve at least 40,000 cy to restore the deficit volume along the beach within Reach 1 and an additional quantity to provide erosion relief for 1–3 years. 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. Reach 2 is designated for additional fill as necessary to provide a feeder beach for Reach 1 (Sheet 04).

Douglass, SL. 1987. Coastal response to navigation structures at Murrells Inlet, SC. CERC Report 85-8, U.S. Army Corps of Engineers, Vicksburg, MS.

Construction

Excavations will be performed via land based (wheeled and tracked) equipment (eg, Cat excavator 349F, Terex TA300, CAT 637G Wheeled Scraper) depending on contractor's preference, and will begin at the seawardmost 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 (Sheets 06, 07). Sand will be transferred by off-road 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 transfer event. The area currently showing focused erosion (the immediate vicinity south of the groin field) contains 15–30 cubic yards per foot (cy/ft) less volume than the adjacent healthy section of beach (CSE 2014). 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 05). The seaward edge of the fill will be sloped in the offshore direction generally on a 1 on 15 slope to the existing 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 runoff on the structures. Reach 2 encompasses an existing field of four groins. This reach will be filled if surveys indicate it will be advantageous to add sand for bypassing gradually to Reach 1. While the maximum length of shoreline impacted may be 4,200 ft, the length of each nourishment event is anticipated to be no greater than 2,500 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.

CSE. 2014. Erosion assessment & preliminary plan for beach restoration at Inlet Harbour, Garden City, South Carolina. Technical Report for Inlet Harbour Homeowners Association, Garden City, SC. CSE, Columbia, SC, 41 pp.

32. Overall Project Purpose

The overall purpose of the project is to maintain a healthier beach, expand recreation area, and improve storm protection by recycling sand from the inlet deposition basin back to upcoast areas. Such recycling is necessary to mitigate erosion losses along the oceanfront between each federal nourishment of Garden City or after storm events. The specific goals of the project are to:

- 1) Offset sand losses on the public beach and restore a dry beach.
- 2) Reduce or eliminate the need for emergency measures such as sand scraping or sand bagging.
- 3) Maintain nesting habitat for turtles.
- 4) Facilitate dune growth by maintaining a dry beach and improving habitat and storm protection.
- 5) Maintain public recreational, dry-beach area during all stages of the tide.

Rationale

Garden City is nourished periodically under an authorized 50-year storm damage reduction project (USACE 1993) which terminates immediately upcoast of the proposed project area. Four existing groins at the north end of the project area help stabilize the federal project and reduce downcoast losses. However, between nourishment cycles, the natural supply of sand to the project area declines, which leads to erosion and increasing exposure of the groins. As the groins become more exposed, the rate of sand bypassing to the Inlet Harbour beach declines. Meanwhile, sand continues to erode along Inlet Harbour and deposit in Murrells Inlet. Property owners along Inlet Harbour have constructed seawalls, installed emergency sand bags, or have scraped the upper beach to mitigate erosion. The proposed project would provide a soft-engineering alternative to these adhoc measures and allow the applicant to respond to erosion events in a systematic way for the benefit of the entire community. No sand will be transferred and placed on private property. The restored beach will provide additional dry-sand area for public use and interim erosion relief between federal renourishment events. The project will also remove sediment from the deposition basin at Murrells Inlet, thereby restoring capacity and reducing the rate of shoaling in Murrells Inlet.

39. Mitigation

The proposed project is considered to be a form of mitigation because it seeks to restore and maintain a public dry-sand beach in a segment of oceanfront that is armored with seawalls and emergency sand bags. The borrow source is a renewable deposition zone around a sand spit which is officially designated as an area for excavations and removal of sediment in connection with the Murrells Inlet Navigation Project. Given the uncertainty of federal funding availability for channel maintenance (D Warren, USACE–Charleston, pers comm, October 2014), the applicant believes the proposed project will benefit the federal interest. Construction activities will be restricted to winter months (unless otherwise determined by resource agencies) when biological

impacts are at a minimum. The excavations and sand placement are expected to yield an incremental net gain in intertidal sandy beach habitat compared with existing conditions and, therefore, no additional mitigation is proposed.

NOTE: This public notice and associated plans are available on the Corps' website at: <http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices>. For those unable to access the website, a copy of this notice and the associated plans will be provided, upon receipt of a written request. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
1949 Industrial Park Road, Room 140
Conway, South Carolina 29526**

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 the Coastal Zone Management Program (15 CFR 930). 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 estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. Our 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). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project is not likely to adversely effect any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended).

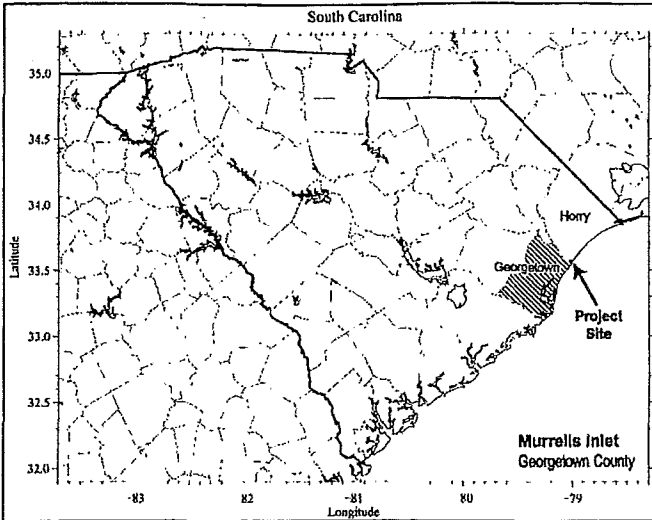
Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

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. 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 of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers 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 of Engineers 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.

If there are any questions concerning this public notice, please contact Wiley Bracey at 843-365-1707.

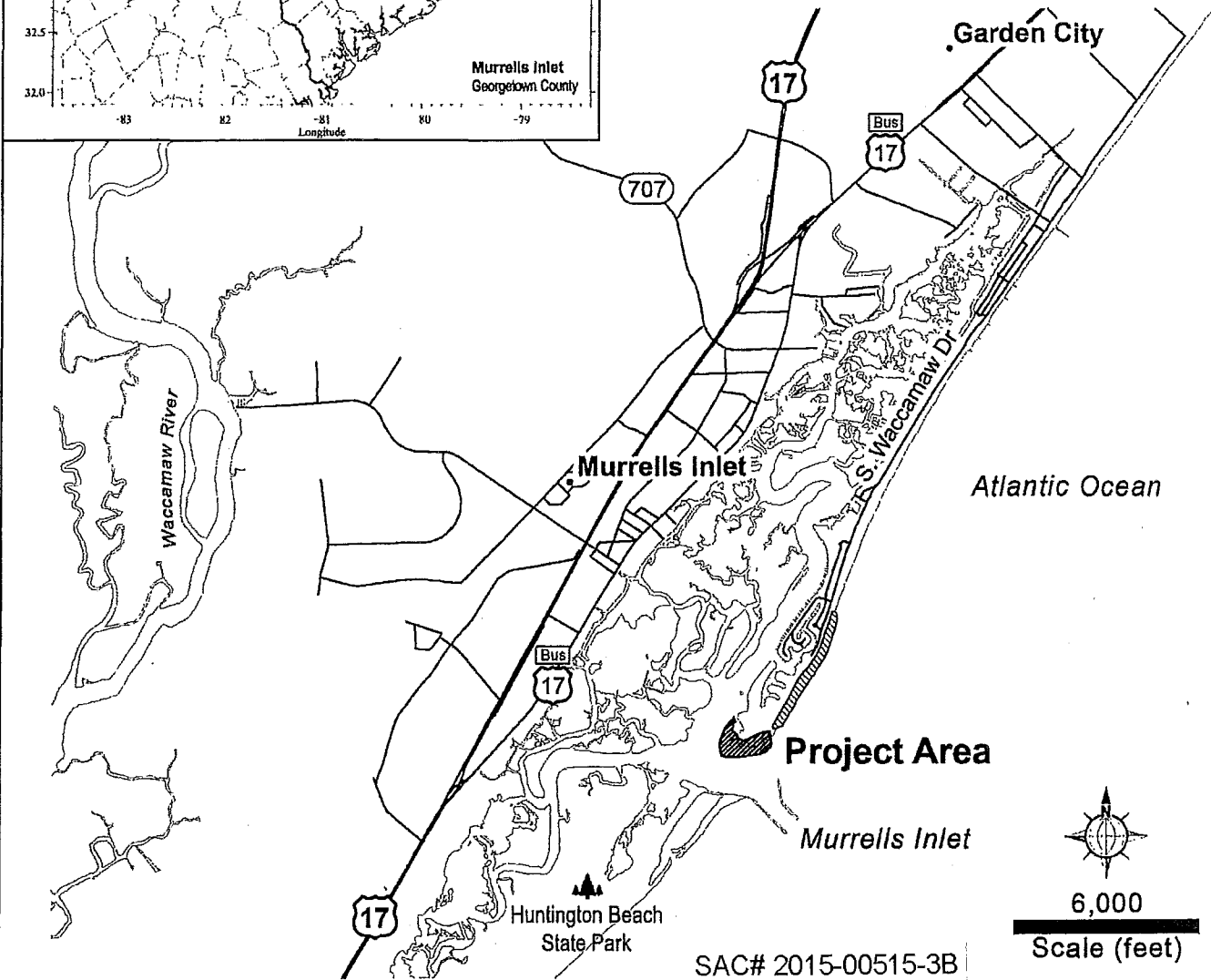


From Garden City, SC

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 ~1,500 feet north of Inlet Harbour visitors gate and extends south ~2,700 feet to the north jetty of Murrells Inlet.

Project Location

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



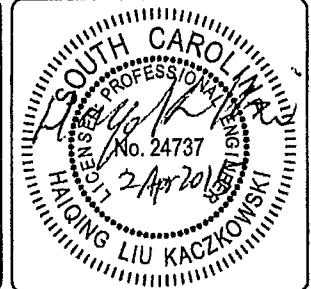
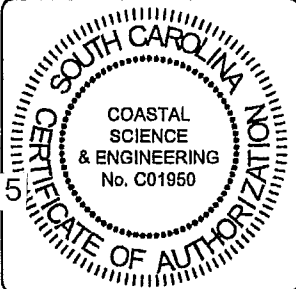
SAC# 2015-00515-3B

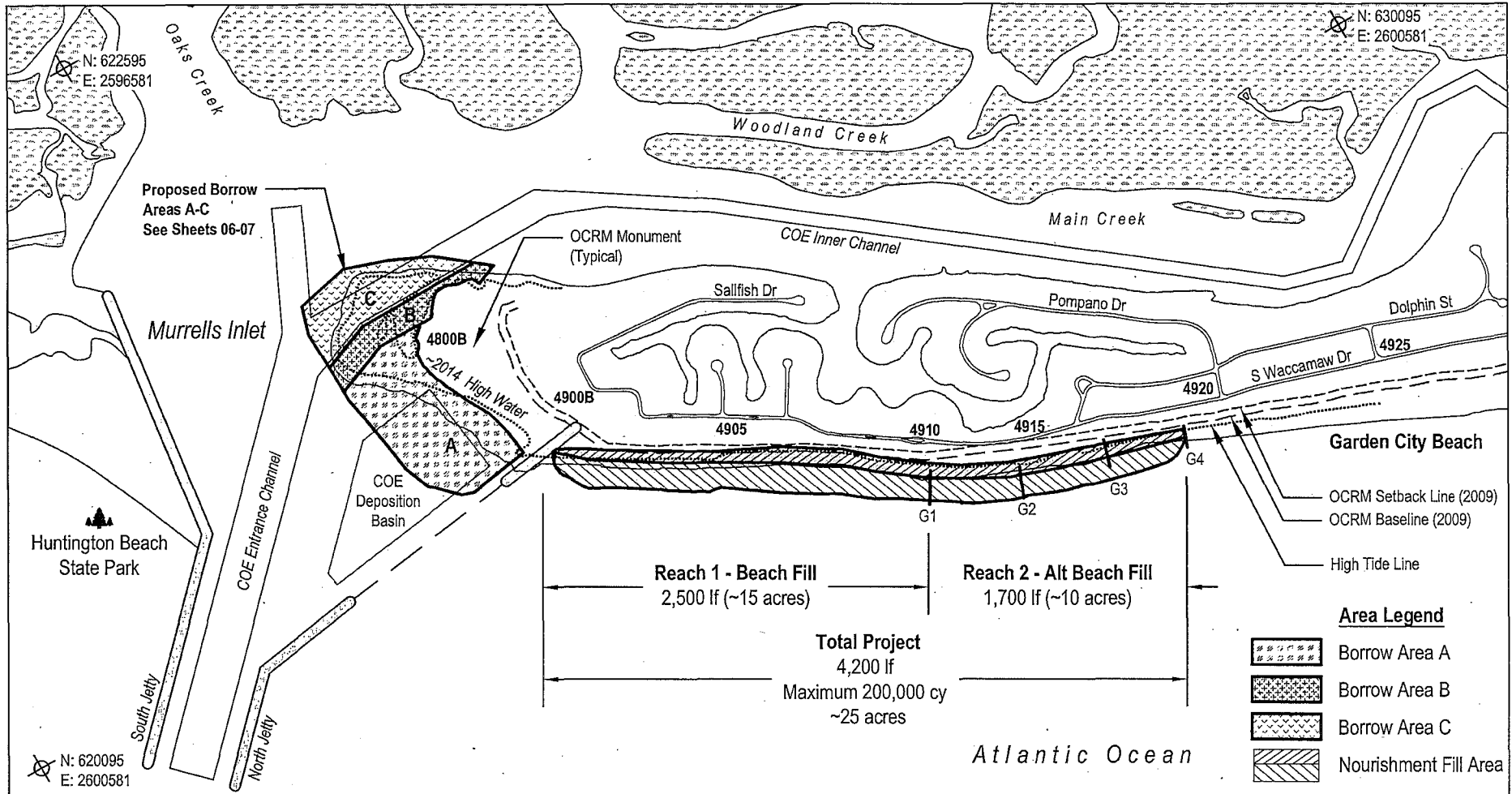
APPLICANT:
Inlet Harbor Homeowners Association
2272 South Waccamaw Drive
Garden City, SC 29576

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

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

SCALE: AS SHOWN SHEET #:
DATE: April 2015 Sheet 1 of 5
TMS#
PROJECT #: 2428





Proposed Borrow Areas A-C See Sheets 06-07

OCRM Monument (Typical)

COE Inner Channel

Murrells Inlet

COE Deposition Basin

Reach 1 - Beach Fill
2,500 lf (~15 acres)

Reach 2 - Alt Beach Fill
1,700 lf (~10 acres)

Total Project
4,200 lf
Maximum 200,000 cy
~25 acres

Garden City Beach

OCRM Setback Line (2009)
OCRM Baseline (2009)

High Tide Line

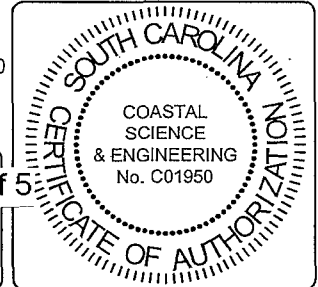
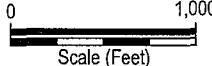
Area Legend

-  Borrow Area A
-  Borrow Area B
-  Borrow Area C
-  Nourishment Fill Area

Notes:

Excavations are proposed via land based equipment from areas A and/or B and/or C as approved by regulatory and resource agencies.

SAC# 2015-00515-3B



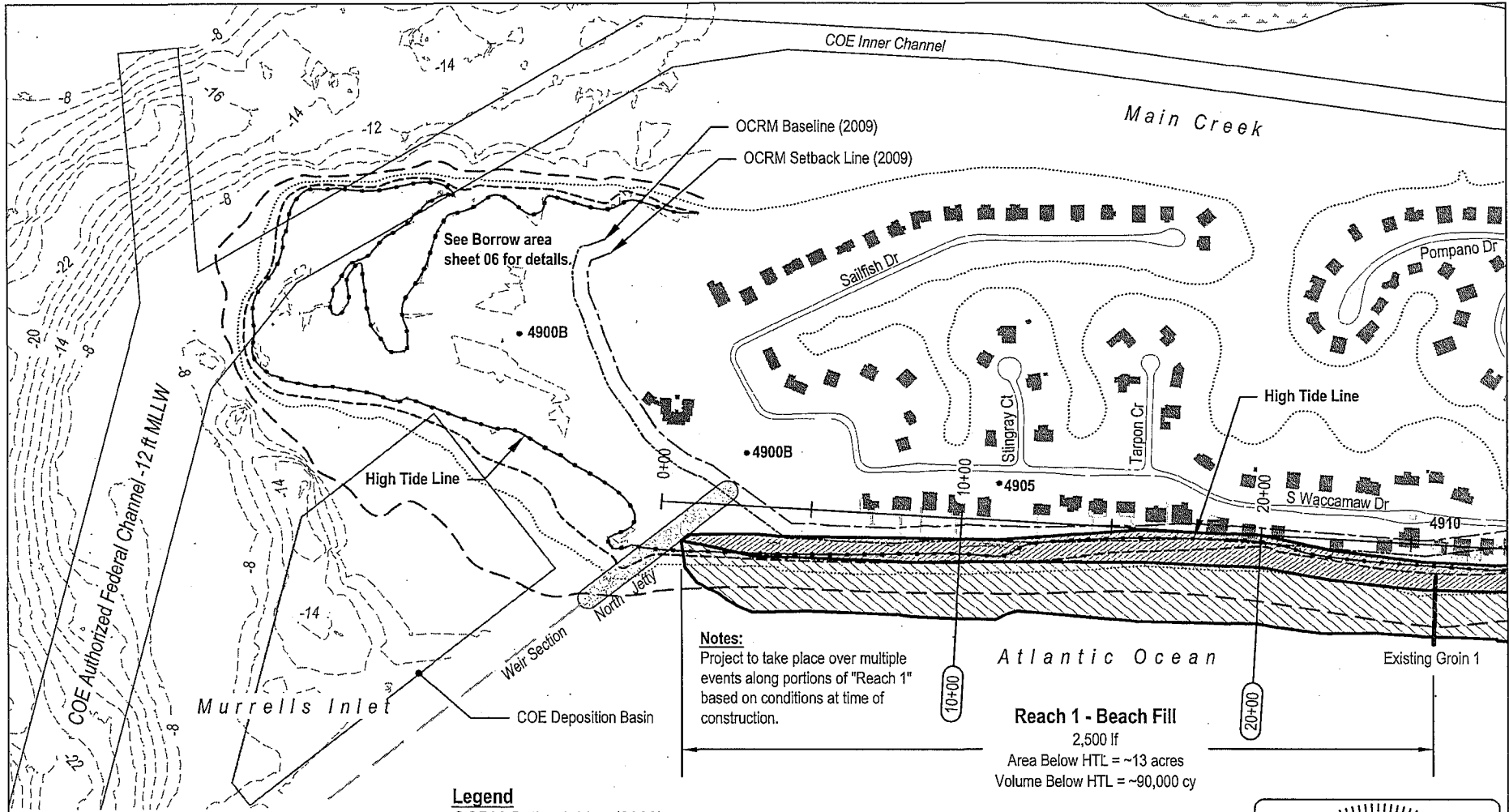
Survey Datum:
Horizontal: SPCS NAD '83 (Feet) SC Zone 3900

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

AGENT:
Coastal Science & Engineering
PO Box 8056
Columbia, SC 29202

DRAWING TITLE:
Overall Plan Map

| | | |
|------------|----------------|--------------|
| Scale: | As Shown | Sheet #: |
| Date: | Rev April 2015 | Sheet 2 of 5 |
| Permit # | | |
| Project #: | 2428 | |



Notes:
 Project to take place over multiple events along portions of "Reach 1" based on conditions at time of construction.

Atlantic Ocean

Reach 1 - Beach Fill
 2,500 lf
 Area Below HTL = ~13 acres
 Volume Below HTL = ~90,000 cy

Existing Groin 1

Legend

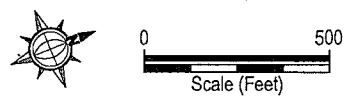
- OCRM Setback Line (2009)
- OCRM Baseline (2009)
- ▨ Nourishment Impact Area Maximum Extent
- HTL 4.2 ft NAVD
- MHHW 2.44 ft NAVD
- Shoreline @ 0 ft NAVD
- MLLW -3.16 ft NAVD

Survey Datum:
 Horizontal: SPCS NAD '83 (Feet) SC Zone 3900
 Vertical: NAVD 1988 ft
 May 2014 Condition Shown

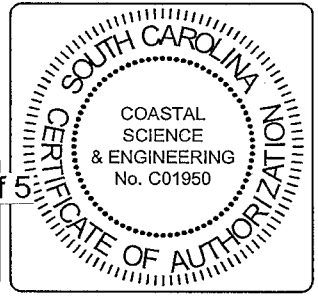
APPLICANT:
 Inlet Harbor Homeowners Association
 2272 South Waccamaw Drive
 Garden City, SC 29576

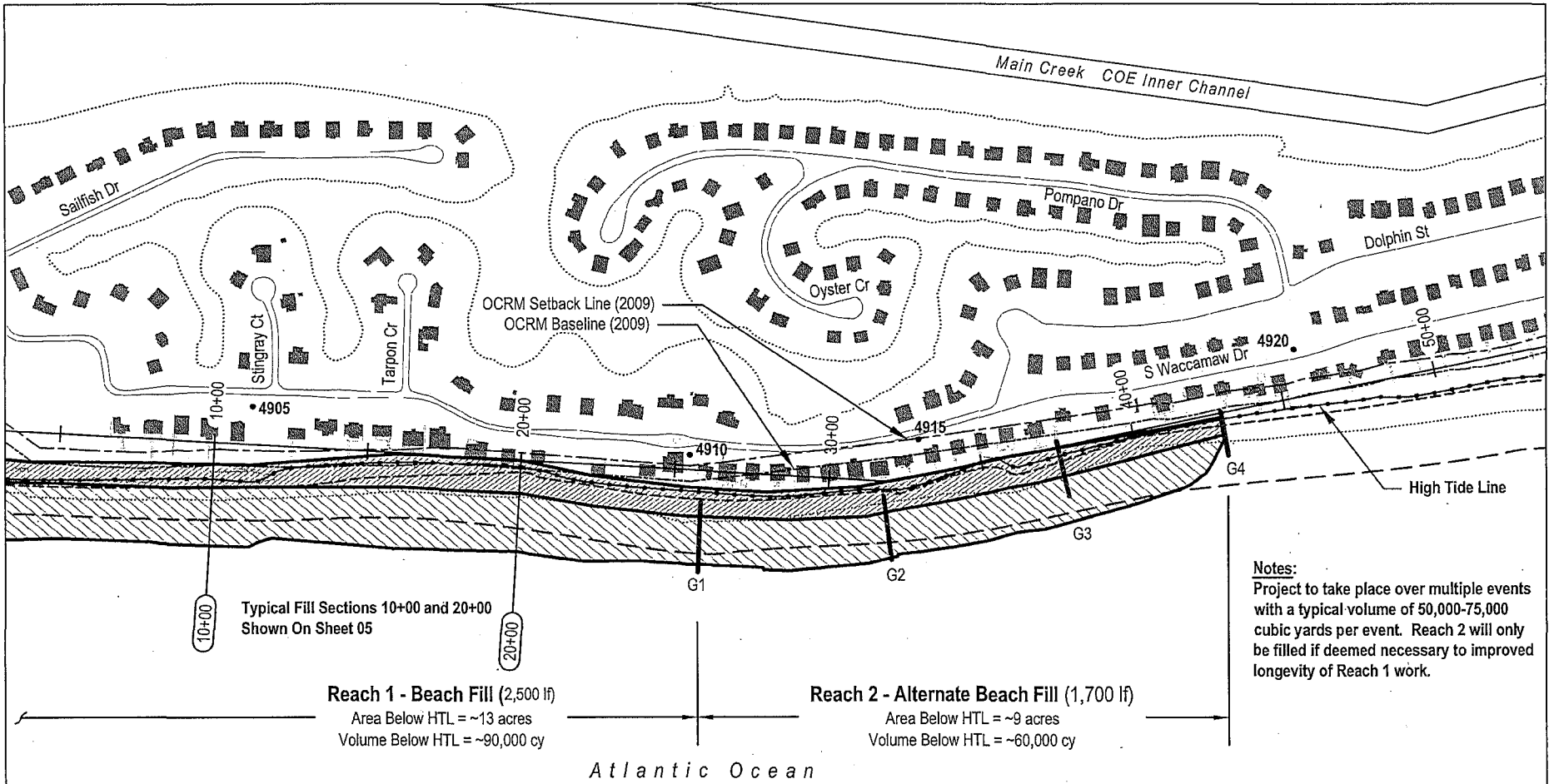
AGENT:
 Coastal Science & Engineering
 PO Box 8056
 Columbia, SC 29202

DRAWING TITLE:
 Reach 1 Plan Map
SAC# 2015-00515-3B



| | | | |
|------------|--------------|---------------------|--|
| Scale: | As Shown | Sheet #: | |
| Date: | Rev Apr 2015 | Sheet 3 of 5 | |
| Permit # | | | |
| Project #: | 2428 | | |





Notes:
 Project to take place over multiple events with a typical volume of 50,000-75,000 cubic yards per event. Reach 2 will only be filled if deemed necessary to improved longevity of Reach 1 work.

Reach 1 - Beach Fill (2,500 lf)
 Area Below HTL = ~13 acres
 Volume Below HTL = ~90,000 cy

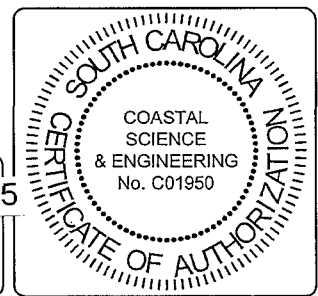
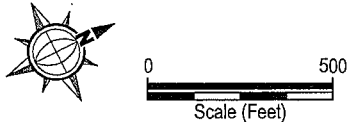
Reach 2 - Alternate Beach Fill (1,700 lf)
 Area Below HTL = ~9 acres
 Volume Below HTL = ~60,000 cy

Atlantic Ocean

Legend

- OCRM Setback Line (2009)
- OCRM Baseline (2009)
- 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
 May 2014 Condition Shown

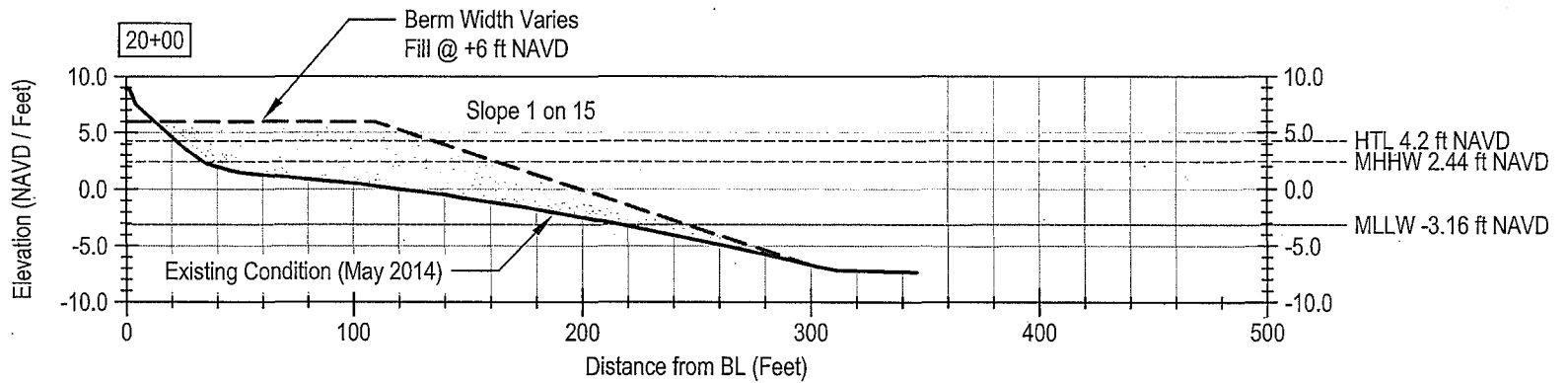
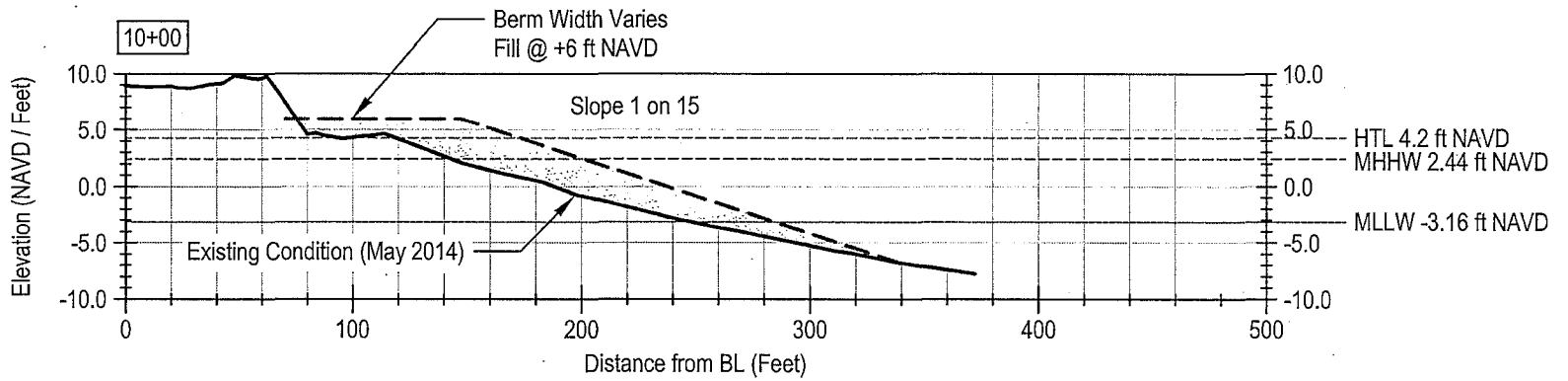


APPLICANT:
 Inlet Harbor Homeowners Association
 2272 South Waccamaw Drive
 Garden City, SC 29576

AGENT:
 Coastal Science & Engineering
 PO Box 8056
 Columbia, SC 29202

DRAWING TITLE:
 Reach 2 Plan Map
 SAC# 2015-00515-3B

| | |
|--------------------|-----------------------|
| Scale: As Shown | Sheet #: Sheet 4 of 5 |
| Date: Rev Apr 2015 | |
| Permit # | |
| Project #: 2428 | |



Survey Datum:
 Horizontal: SPCS NAD '83 (Feet) SC Zone 3900
 Vertical: NAVD 1988 ft Vertical Exaggeration: 5
 Condition shown May 2014

Note: See Sheets 03-04 For Section Locations

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

AGENT:
 Coastal Science & Engineering
 PO Box 8056
 Columbia, SC 29202

DRAWING TITLE:
 Typical Fill Sections
SAC# 2015-00515-3B

Scale: As Shown
 Date: Jan 2015
 Permit #
 Project #: 2428

Sheet #:
Sheet 5 of 5

