

**US Army Corps
of Engineers®**
New England District
696 Virginia Road
Concord, MA 01742-2751

PUBLIC NOTICE

Comment Period Begins: 5/14/2019
Comment Period Ends: 6/14/2019
File Number: NAE-2016-01554
In Reply Refer To: Phillip Nimeskern
Phone: (978) 318-8660
E-mail: phillip.w.nimeskern@usace.army.mil

The District Engineer has received a permit application to conduct work in navigable waters of the United States from the Town of Dennis, P.O. Box 2060, South Dennis, Massachusetts, 02660. This work is proposed on Chapin Beach in Cape Cod Bay off Dr. Bottero Road and Chapin Beach Road, Dennis, Massachusetts. The site coordinates are: Latitude 41.73612° N; Longitude -70.22844° W.

The work involves beach nourishment to restore the beach along Dr. Bottero Road, which will provide a natural buffer to dissipate wave energy and prevent further erosion of the beach and roadway. The work includes the placement of both sand for beach nourishment and stone for groin construction below the High Tide Line (approximately 19,110 cu. yds. and 710 cu. yds. respectively). Two stone groins will be constructed perpendicular to the shore for the purposes of stabilizing the sand fill, and extending the design life of the nourishment. The groins will be approximately 100' long and 69' long, measured from the mean high water (MHW) line, and vary from 5' to 32' wide. The groins will place 303 cu. yds. and 136 cu. yds. of fill below MHW, respectively. The area of disturbance below the High Tide Line for groins and beach fill is approximately 1,390' long and between 80' to 100' wide, for a total area of approximately 3.46 acres.

The sand for beach nourishment will be from an upland source and will match the grain size of the sand presently on the beach.

The work is shown on the attached plans entitled "Application by: Town of Dennis," on 8 sheets, and dated "March 2019."

Throughout the development of this project, the applicant has worked to avoid and minimize direct impacts to waters of the United States. As the project purpose is to stabilize an eroding beach, no compensatory mitigation is proposed.

AUTHORITY

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- Section 404 of the Clean Water Act
- Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general

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environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

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 proposed 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 proposal. 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 proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, US Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

This project will impact 3.5 acres of Essential Fish Habitat (EFH) for Atlantic cod (*Gadus morhua*), Atlantic sea scallop (*Placopecten magellanicus*), Atlantic wolfish (*Anarhichas lupus*), ocean pout (*Macrozoarces americanus*), red hake (*Urophycis chuss*), sand tiger shark (*Carcharias taurus*), silver hake (*Merluccius bilinearis*), smooth dogfish (*Mustelus canis*), surf clam (*Spisula solidissima*), windowpane flounder (*Scophthalmus aquosus*), winter flounder (*Pseudopleuronectes americanus*). This habitat consists of sandy, intertidal beach. Loss of this habitat may adversely affect these species. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.

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- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

ENDANGERED SPECIES CONSULTATION

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. A threatened species, the piping plover (*Charadrius melodus*), has been found on Chapin Beach during its entire breeding cycle. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

COASTAL ZONE MANAGEMENT

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved Coastal Zone Management Programs. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (x) Permit, License or Assent from State.
- (x) Permit from Local Wetland Agency or Conservation Commission.
- (x) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

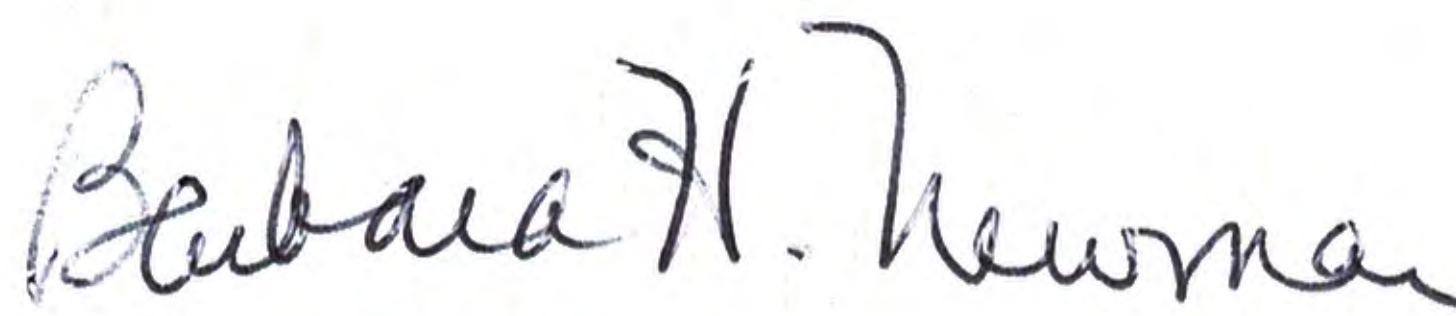
In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Phillip Nimeskern at (978) 318-8660, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

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THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.



**Barbara H. Newman
Chief, Permits and Enforcement Branch
Regulatory Division**

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____

ADDRESS: _____

PHONE: _____

IMPROVING COASTAL RESILIENCY AT DR. BOTTERO ROAD AND CHAPIN BEACH DENNIS, MASSACHUSETTS

MARCH 2019

PREPARED FOR:



Town of Dennis
685 Route 134
South Dennis, Massachusetts 02660

PREPARED BY:



environmental consulting
& engineering services

100 Fifth Avenue, 5th Floor
Waltham, Massachusetts 02451
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www.essgroup.com



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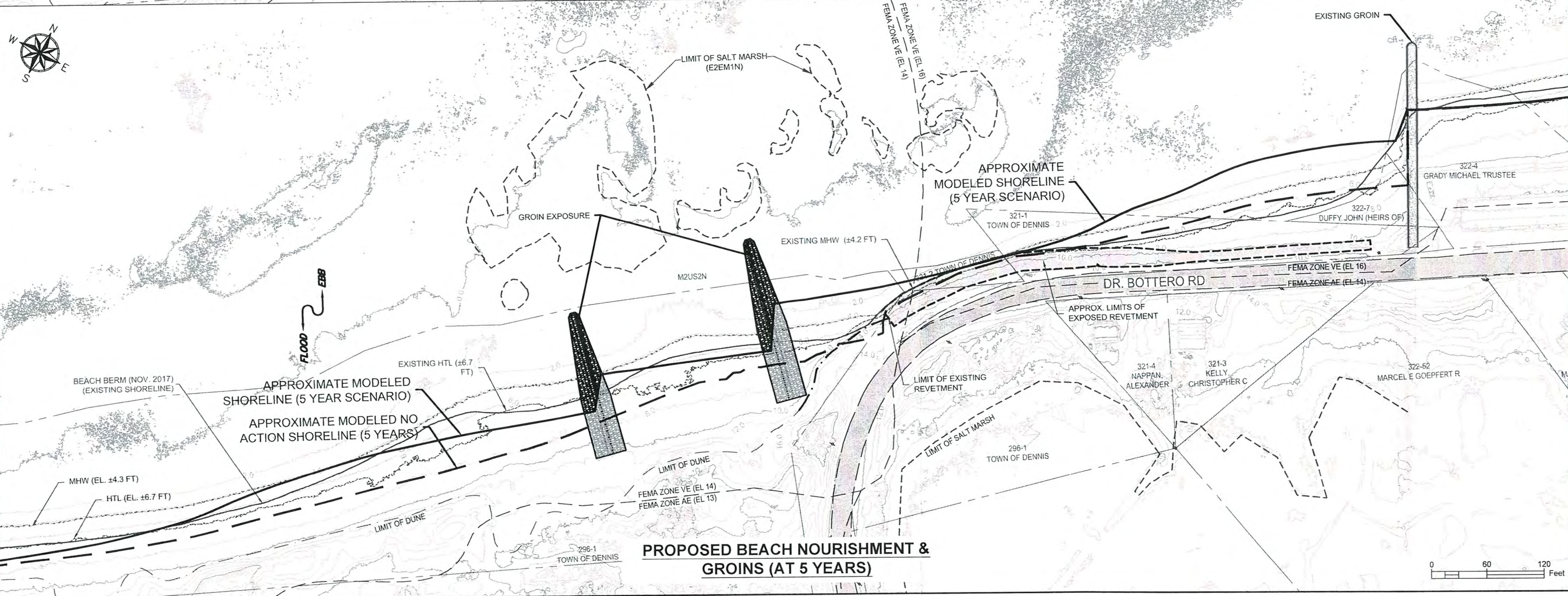
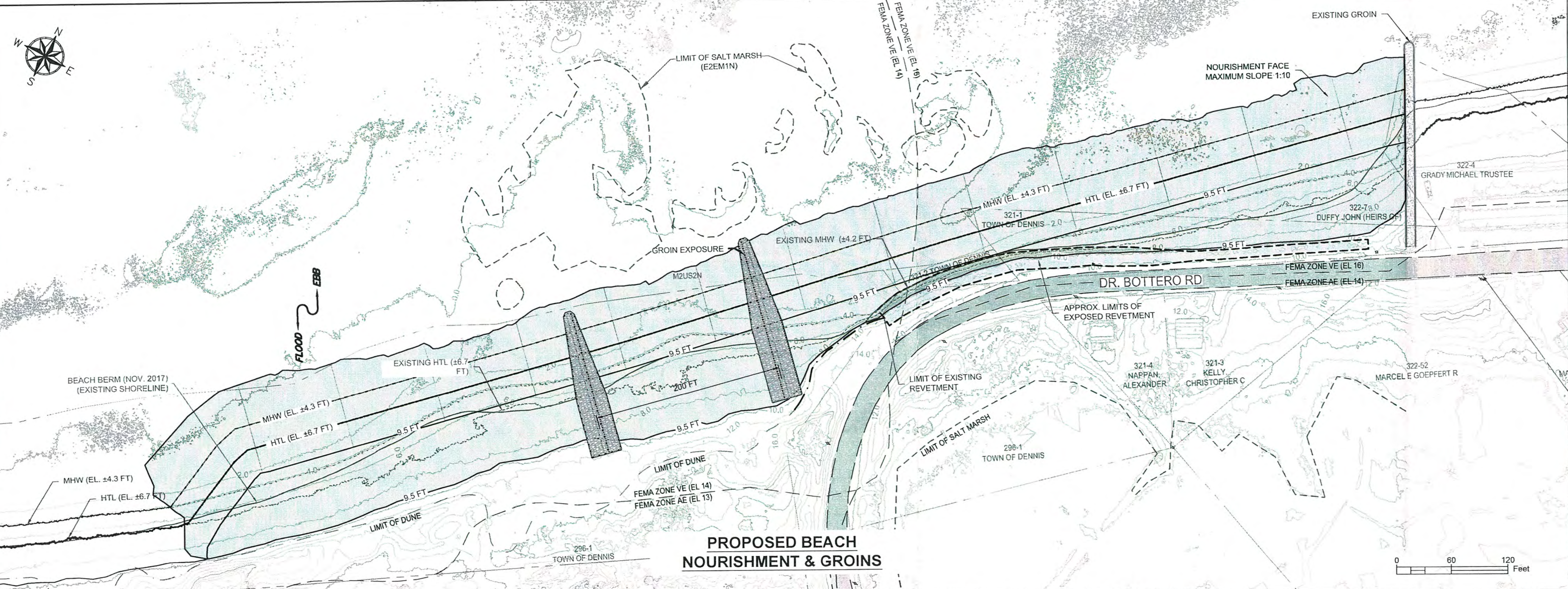
LOCATION MAP



SCALE: 1" = 2,000'
SOURCE: USGS, 2015

For US Army Corps of Engineers Permit Application

DATE: Mar 26, 2019 11:47PM
 PROJECT: 101033000 - Cape Cod, Barnstable County, Massachusetts, Cape Cod National Seashore, USACE, Phase 4
 DRAWN BY: SJC
 CHECKED BY: PRW
 DESIGNED BY: SJC
 APPROVED BY: PRW
 PROJECT No.: D186-000.04
 SHEET No.: 4 OF 8
 DATE OF ISSUE: MARCH 2019
 SHEET No.: 4 OF 8
 SCALE: AS SHOWN
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LEGEND

- PROPOSED BEACH NOURISHMENT
- GROIN EXPOSURE ABOVE BEACH NOURISHMENT
- EXTENT OF GROIN COVERED BY BEACH NOURISHMENT
- EXISTING GROIN

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Application by:
TOWN OF DENNIS

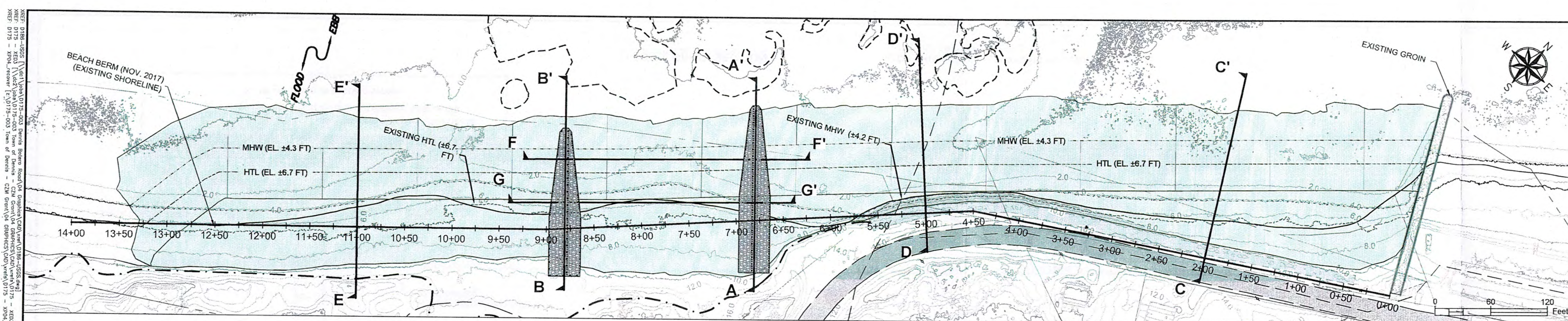
AT: DENNIS
 IN: CAPE COD BAY
 BARNSTABLE COUNTY
 COMMONWEALTH OF MASSACHUSETTS

DR. BOTTERO ROAD & CHAPIN BEACH
 IMPROVING COASTAL RESILIENCY

PROPOSED CONDITIONS

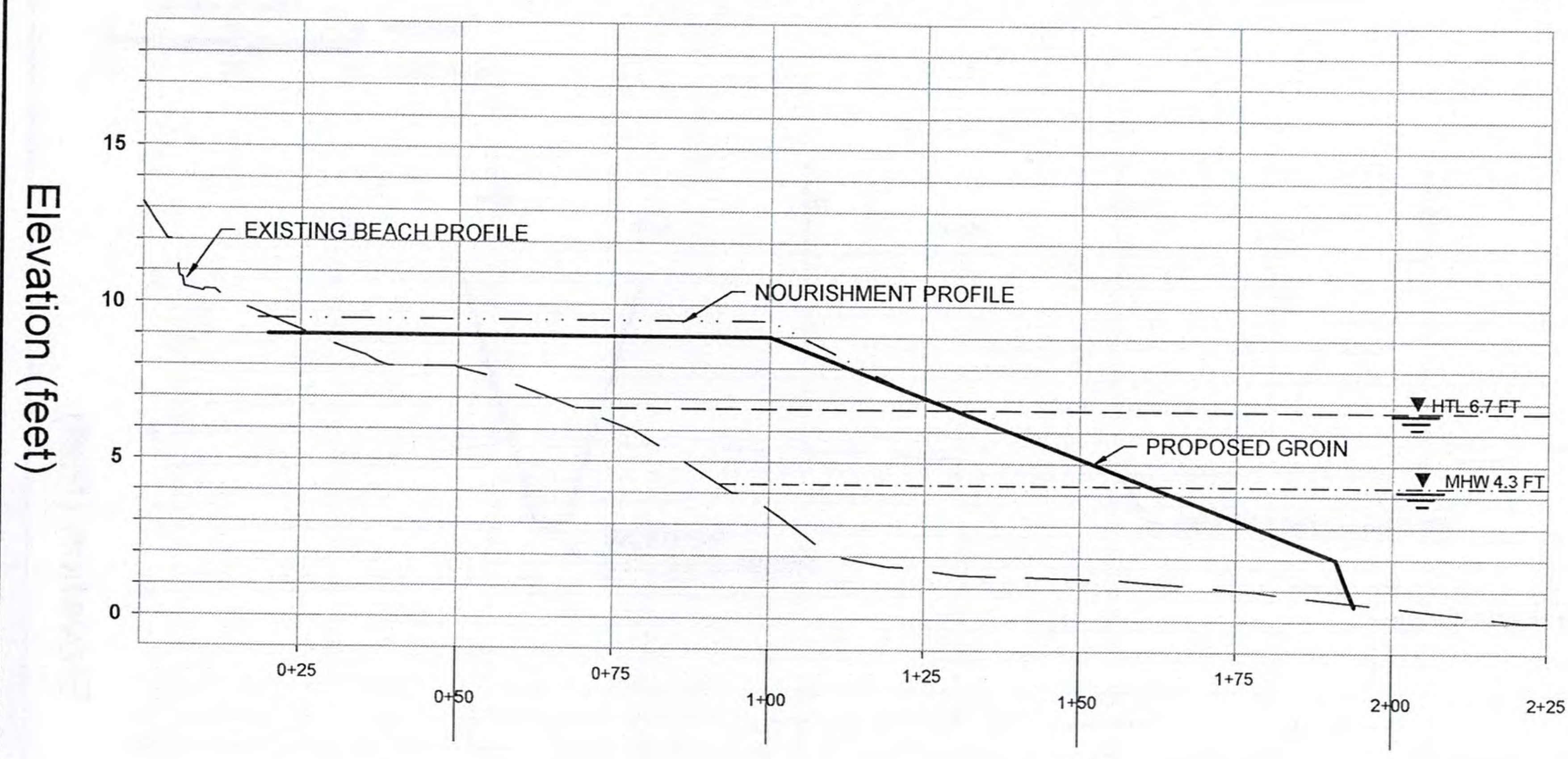
PROJECT No.: D186-000.04
 SHEET No. **4 OF 8**
 DATE OF ISSUE: MARCH 2019
 SHEET No.: 4 OF 8
 SCALE: AS SHOWN

For US Army Corps of Engineers Permit Application

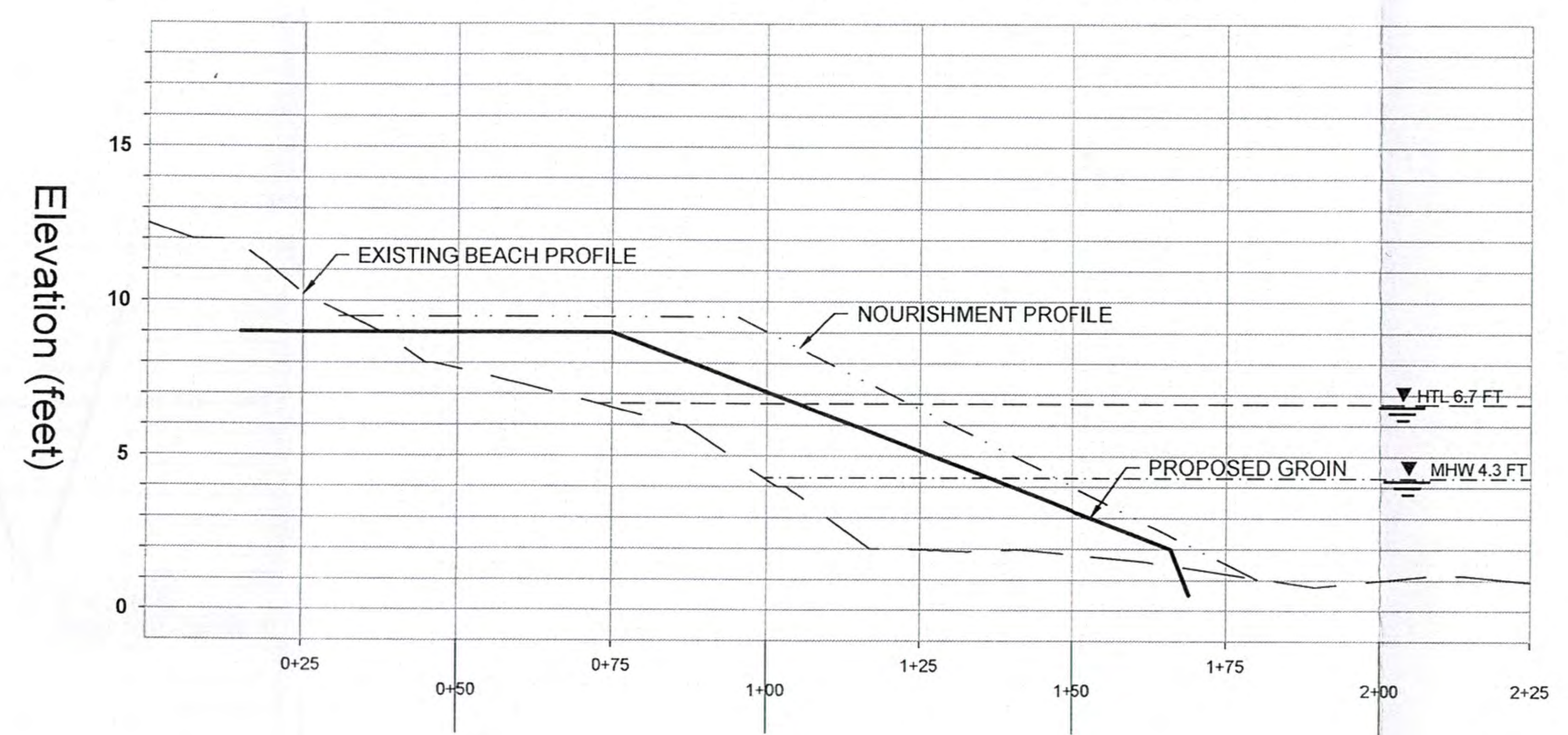


NOTE: TRANSECT 3 (WEST) AND GROIN SECTIONS F-F' AND G-G' ON SHEET 6 OF 7.

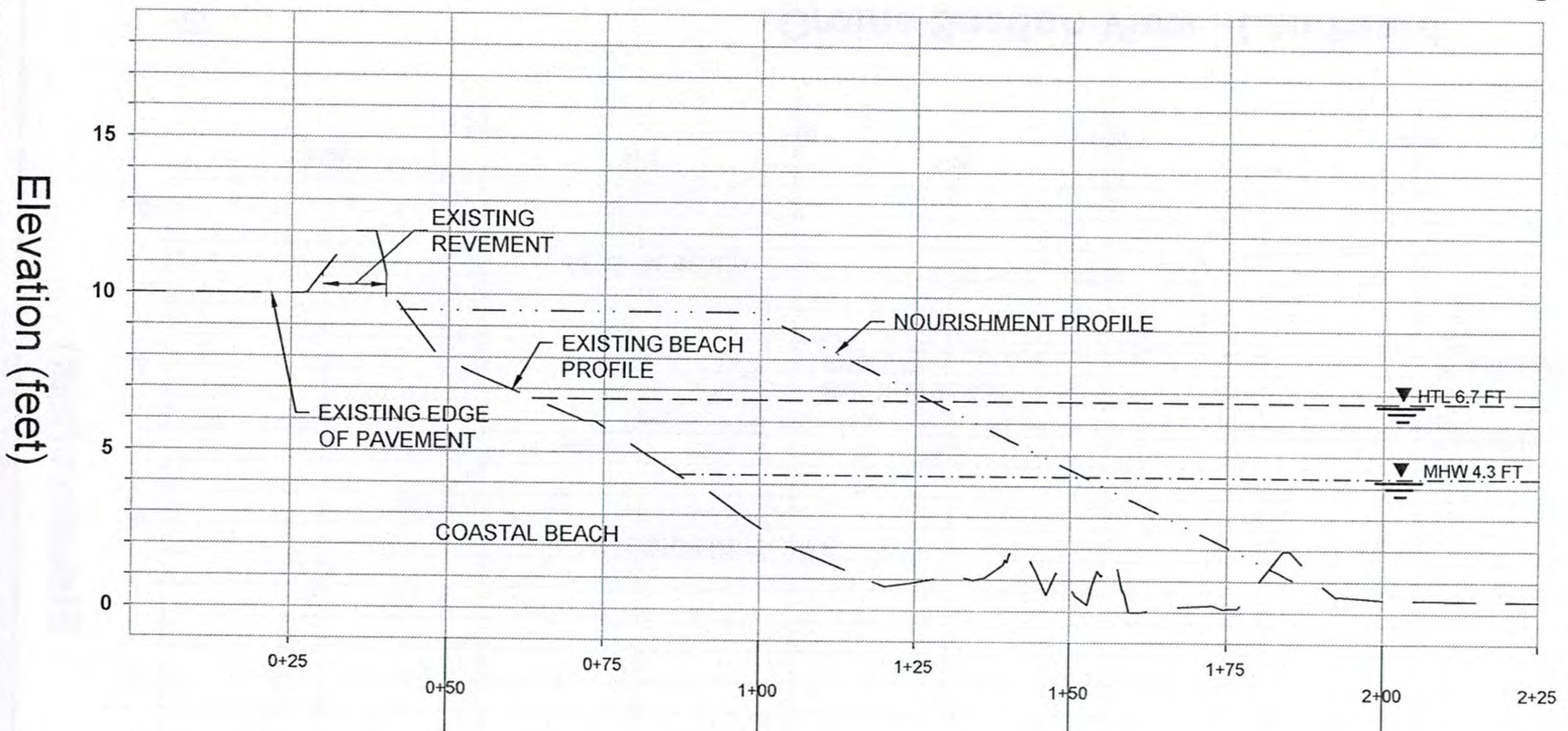
A Groin 1 (Eastern) Center Line Profile A'



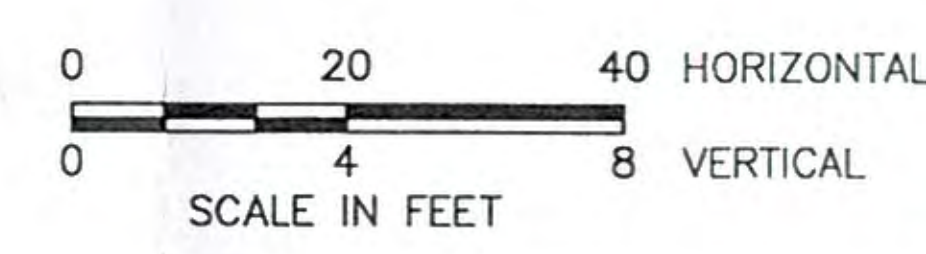
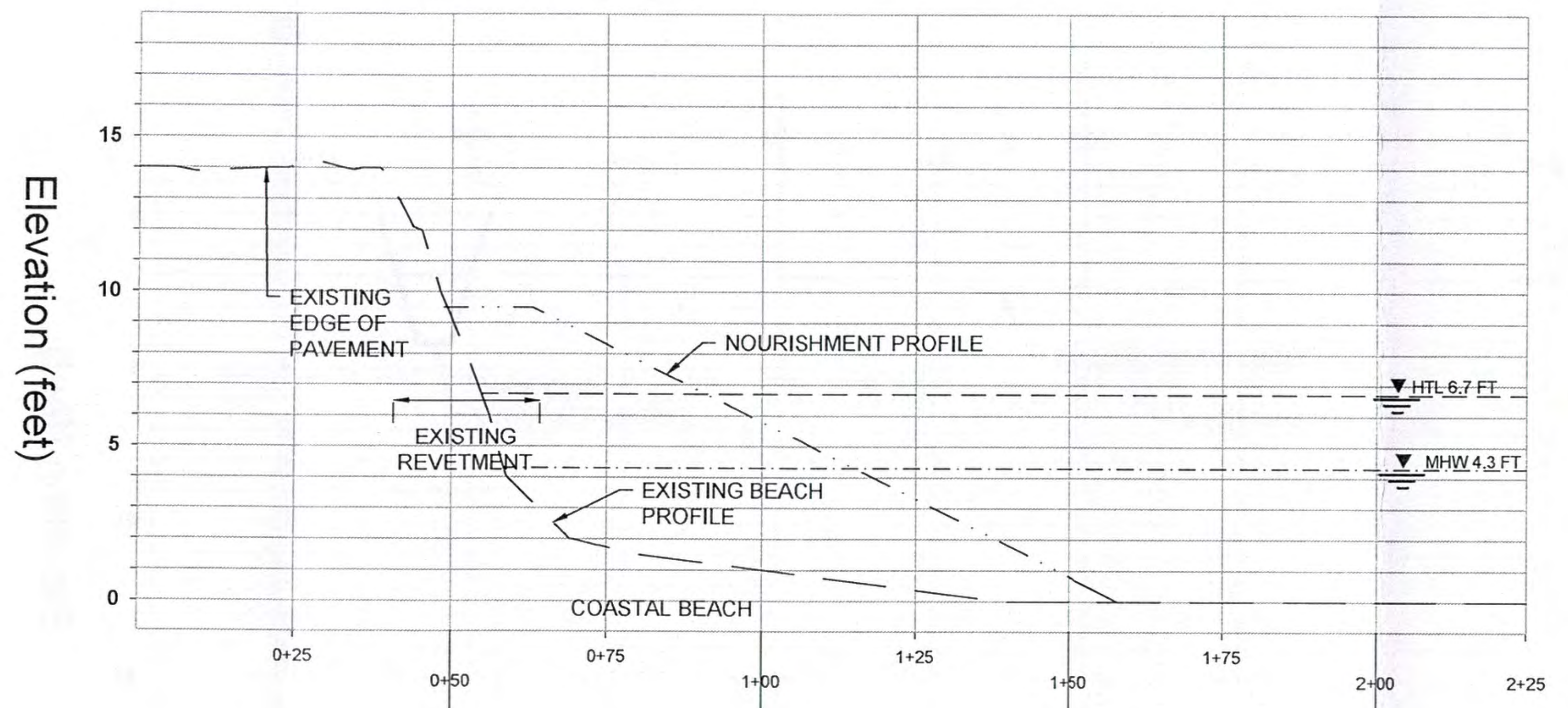
B Groin 2 (Western) Center Line Profile B'



C Transect 1 (East) C'



D Transect 2 (Middle) D'



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No.	REVISION	DATE	APP BY

Application by:
TOWN OF DENNIS

AT: DENNIS
IN: CAPE COD BAY
BARNSTABLE COUNTY
COMMONWEALTH OF MASSACHUSETTS

DR. BOTTERO ROAD & CHAPIN BEACH
IMPROVING COASTAL RESILIENCY

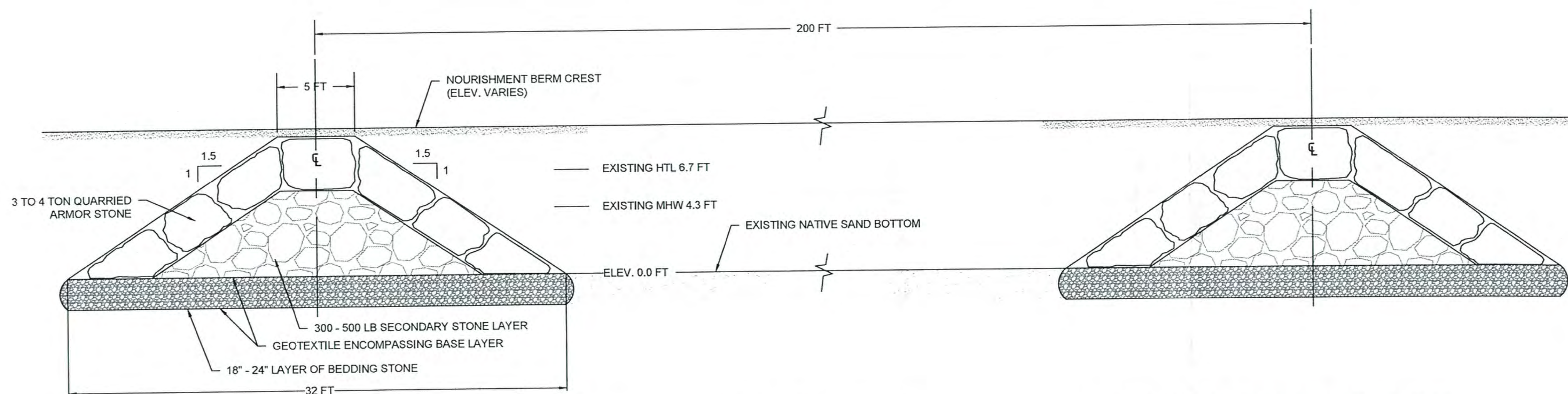
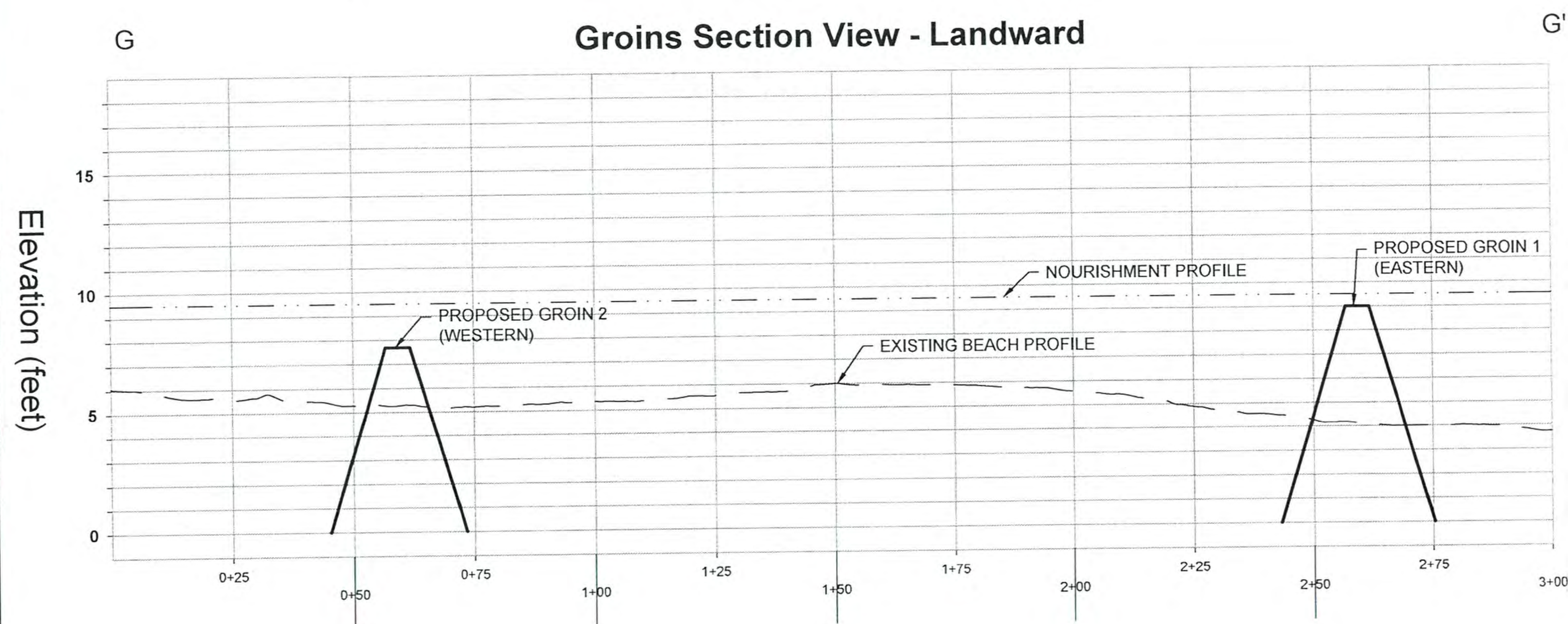
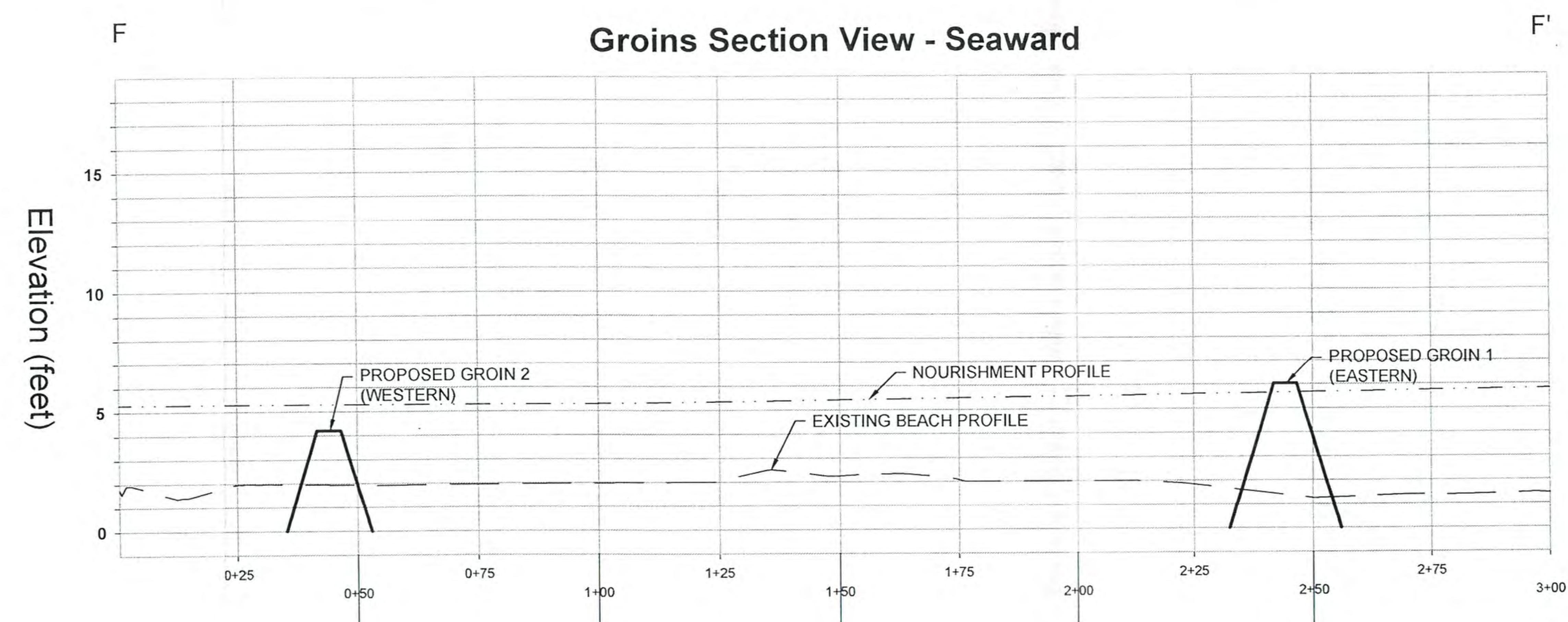
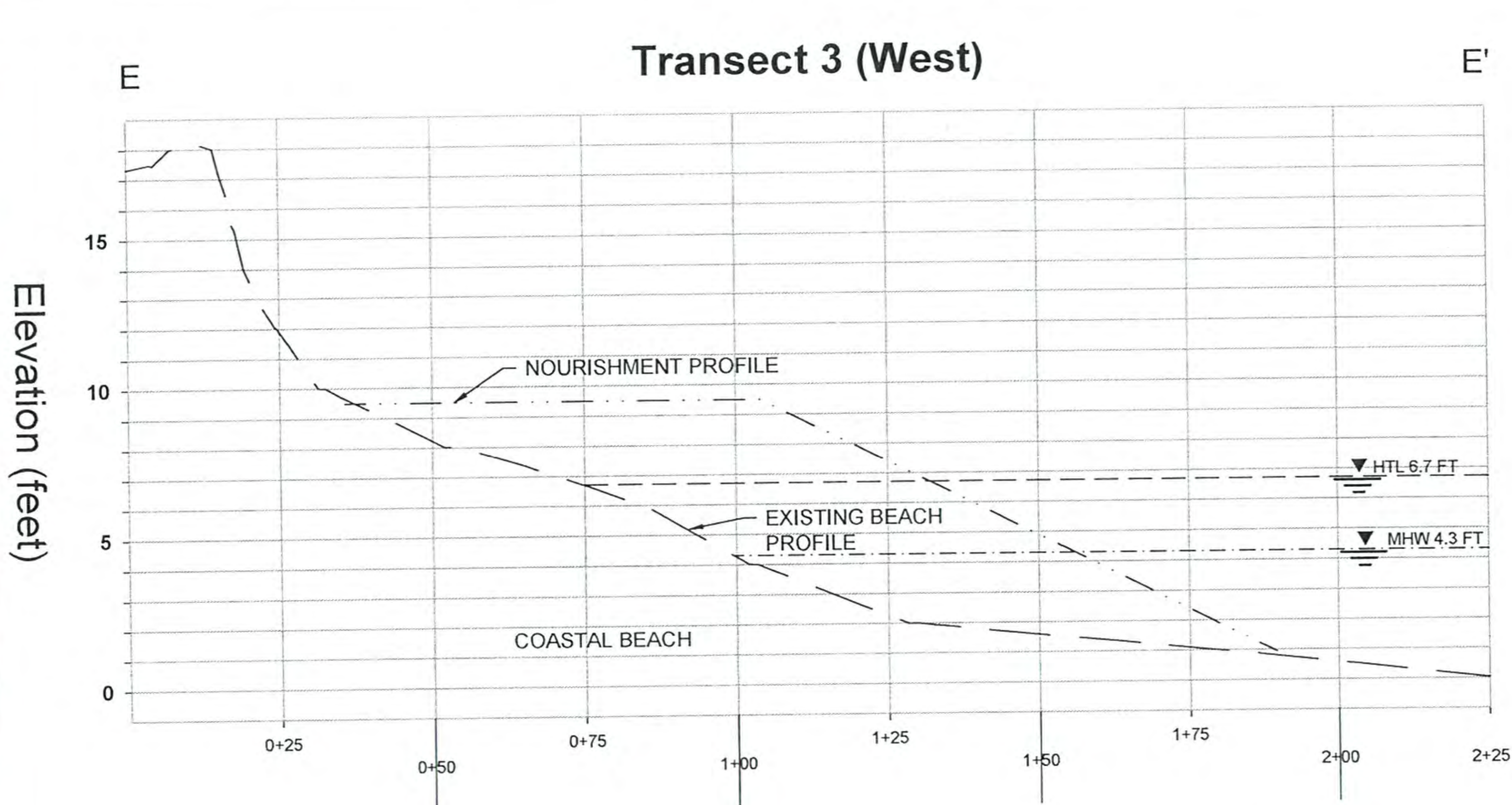
PROFILES & SECTIONS

PROJECT No.: D186-000.04 SHEET No.
DATE OF ISSUE: MARCH 2019
SHEET No.: 5 OF 8
SCALE: AS SHOWN

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 PLOTTING MODE: EPL
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 PLOTTING SHEETS: 8
 PLOTTING SHEET NO.: 5
 PLOTTING SHEET TOTAL: 8
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 PLOTTING END TIME: 3/28/2019 1:48:00 PM
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 PLOTTING STATUS: SUCCESS

PROJECT: 01185-000.04 For US Army Corps of Engineers Permit Application
DRAWN BY: SJC CHECKED BY: PRW
DATE: Apr 28, 2019 1:48PM

DESIGNED BY: SJC APPROVED BY: PRW
PROJECT No.: 01185-000.04 SHEET No.: 6 OF 8
DATE OF ISSUE: MARCH 2019



NOTE: GROIN CREST ELEVATIONS WILL VARY ALONG THE LENGTH OF THE STRUCTURES



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For US Army Corps of Engineers Permit Application

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Application by:
TOWN OF DENNIS

AT: DENNIS
IN: CAPE COD BAY
BARNSTABLE COUNTY
COMMONWEALTH OF MASSACHUSETTS

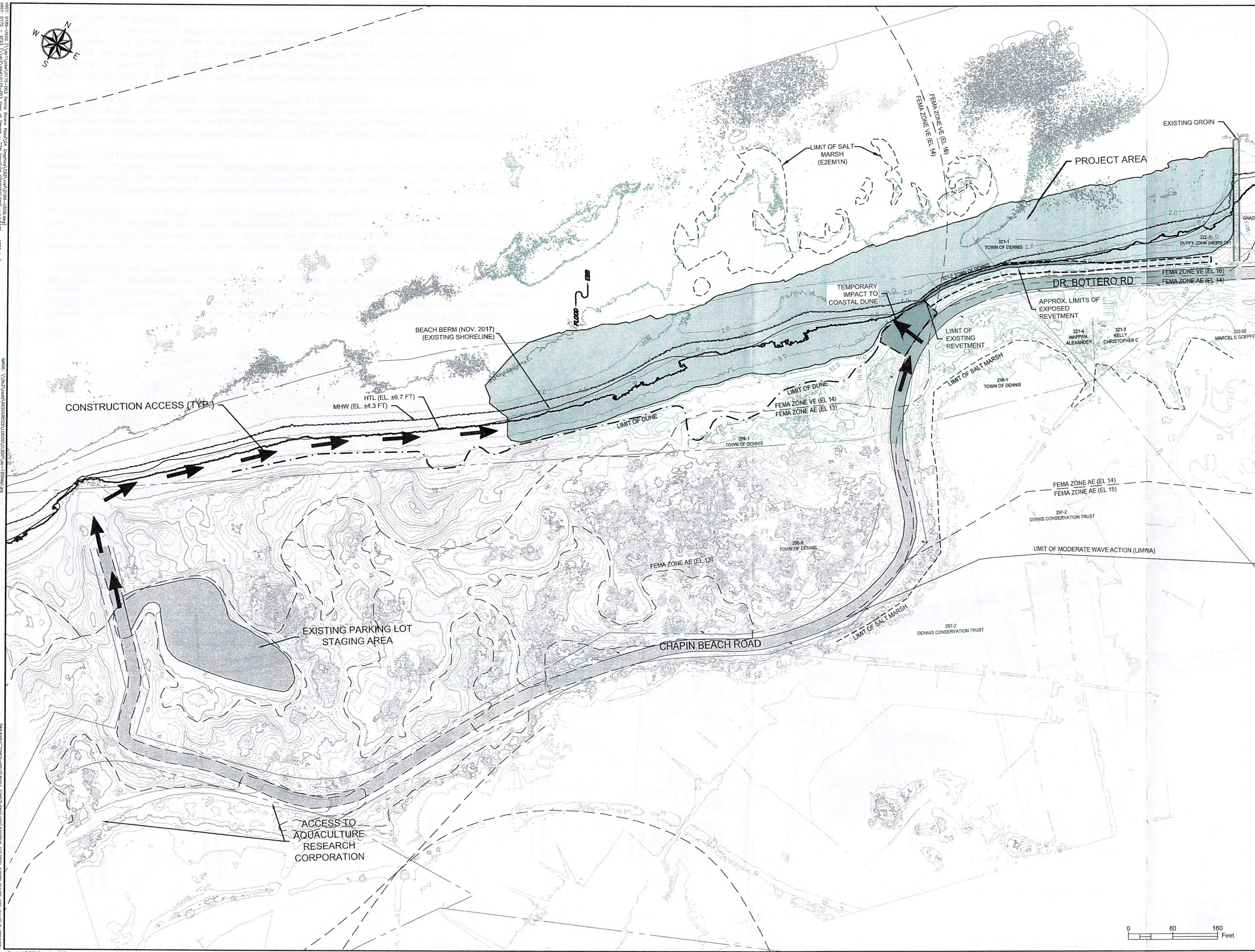
DR. BOTTERO ROAD & CHAPIN BEACH
IMPROVING COASTAL RESILIENCY

SECTIONS

PROJECT No.: 01185-000.04
DATE OF ISSUE: MARCH 2019
SHEET No.: 6 OF 8
SCALE: AS SHOWN

SHEET No.
6 OF 8

DATE: Nov. 26, 2018 - 1:45pm
 DRAWN BY: SJC
 CHECKED BY: FRW
 DESIGNED BY: SJC
 APPROVED BY: FRW
 PROJECT No.: D186-000.04
 SHEET No.: 7 OF 8
 DATE OF ISSUE: MARCH 2019
 SHEET No.: 7 OF 8
 SCALE: 1"=80'
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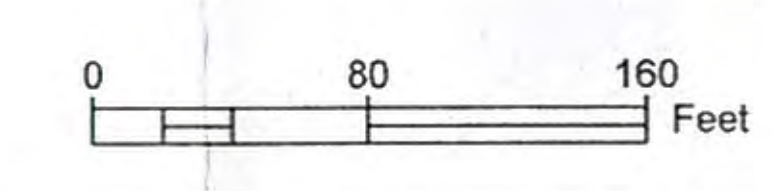
Application by:
TOWN OF DENNIS

 AT: DENNIS
 IN: CAPE COD BAY
 BARNSTABLE COUNTY
 COMMONWEALTH OF MASSACHUSETTS

DR. BOTTERO ROAD & CHAPIN BEACH
 IMPROVING COASTAL RESILIENCY

CONSTRUCTION ACCESS & STAGING

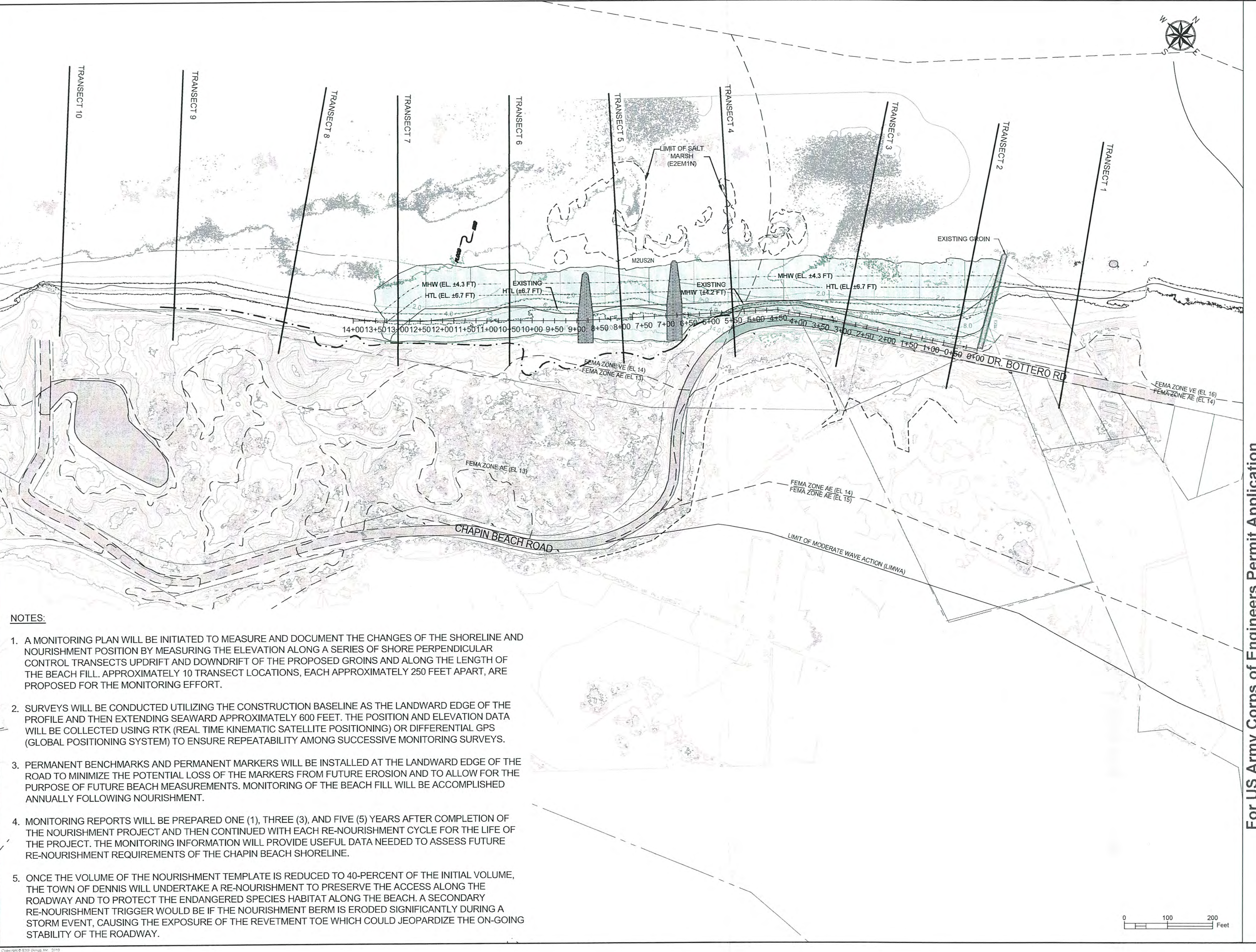
PROJECT No.: D186-000.04	SHEET No.
DATE OF ISSUE: MARCH 2019	7 OF 8
SHEET No.: 7 OF 8	
SCALE: 1"=80'	



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- NOTES:**
- A MONITORING PLAN WILL BE INITIATED TO MEASURE AND DOCUMENT THE CHANGES OF THE SHORELINE AND NOURISHMENT POSITION BY MEASURING THE ELEVATION ALONG A SERIES OF SHORE PERPENDICULAR CONTROL TRANSECTS UPDRIFT AND DOWNDRIFT OF THE PROPOSED GROINS AND ALONG THE LENGTH OF THE BEACH FILL. APPROXIMATELY 10 TRANSECT LOCATIONS, EACH APPROXIMATELY 250 FEET APART, ARE PROPOSED FOR THE MONITORING EFFORT.
 - SURVEYS WILL BE CONDUCTED UTILIZING THE CONSTRUCTION BASELINE AS THE LANDWARD EDGE OF THE PROFILE AND THEN EXTENDING SEAWARD APPROXIMATELY 600 FEET. THE POSITION AND ELEVATION DATA WILL BE COLLECTED USING RTK (REAL TIME KINEMATIC SATELLITE POSITIONING) OR DIFFERENTIAL GPS (GLOBAL POSITIONING SYSTEM) TO ENSURE REPEATABILITY AMONG SUCCESSIVE MONITORING SURVEYS.
 - PERMANENT BENCHMARKS AND PERMANENT MARKERS WILL BE INSTALLED AT THE LANDWARD EDGE OF THE ROAD TO MINIMIZE THE POTENTIAL LOSS OF THE MARKERS FROM FUTURE EROSION AND TO ALLOW FOR THE PURPOSE OF FUTURE BEACH MEASUREMENTS. MONITORING OF THE BEACH FILL WILL BE ACCOMPLISHED ANNUALLY FOLLOWING NOURISHMENT.
 - MONITORING REPORTS WILL BE PREPARED ONE (1), THREE (3), AND FIVE (5) YEARS AFTER COMPLETION OF THE NOURISHMENT PROJECT AND THEN CONTINUED WITH EACH RE-NOURISHMENT CYCLE FOR THE LIFE OF THE PROJECT. THE MONITORING INFORMATION WILL PROVIDE USEFUL DATA NEEDED TO ASSESS FUTURE RE-NOURISHMENT REQUIREMENTS OF THE CHAPIN BEACH SHORELINE.
 - ONCE THE VOLUME OF THE NOURISHMENT TEMPLATE IS REDUCED TO 40-PERCENT OF THE INITIAL VOLUME, THE TOWN OF DENNIS WILL UNDERTAKE A RE-NOURISHMENT TO PRESERVE THE ACCESS ALONG THE ROADWAY AND TO PROTECT THE ENDANGERED SPECIES HABITAT ALONG THE BEACH. A SECONDARY RE-NOURISHMENT TRIGGER WOULD BE IF THE NOURISHMENT BERM IS ERODED SIGNIFICANTLY DURING A STORM EVENT, CAUSING THE EXPOSURE OF THE RETMENT TOE WHICH COULD JEOPARDIZE THE ON-GOING STABILITY OF THE ROADWAY.

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 COMMONWEALTH OF MASSACHUSETTS

DR. BOTTERO ROAD & CHAPIN BEACH
 IMPROVING COASTAL RESILIENCY

MONITORING TRANSECTS

PROJECT No.: 0186-000.04	SHEET No.
DATE OF ISSUE: MARCH 2019	8 OF 8
SHEET No.: 8 OF 8	
SCALE: AS SHOWN	