



PUBLIC NOTICE

Honolulu District, US Army Corps of Engineers

Regulatory Branch (CEPOH-RB)
Building 230
Fort Shafter, Hawaii 96858-5440

Public Notice Date: **January 13, 2017**
Expiration Date: **February 12, 2017**
Permit File Number: **POH-2015-00097**

FEDERAL PUBLIC NOTICE

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States as described below and shown on the attached drawings.

APPLICANT: State of Hawaii Department of Land and Natural Resources, Kalanimoku Building, DLNR Main Office, 1151 Punchbowl Street, Honolulu, Hawaii 96813

WATERWAY AND LOCATION OF THE PROPOSED WORK: The proposed project is located in the Mamala Bay of the Pacific Ocean in marine waters and along the shoreline fronting the Royal Hawaiian (2259 Kalakaua Avenue) and Sheraton Waikiki Hotels (2255 Kalakaua Avenue), Waikiki, Honolulu, Island of Oahu, Hawaii. Central coordinates: 21.276587° N, -157.829734° W.

PROPOSED PROJECT AND PURPOSE: The State of Hawaii Department of Land and Natural Resources (DLNR) is proposing to replace the existing 370-foot long Royal Hawaiian Groin with a T-head rock groin to maintain the constructed (2012) beach east of the structure. The existing groin is deteriorated and fails to function as a viable beach stabilization structure. The new groin would be constructed immediately to the west of the existing groin, extending (a total length of 180 feet) approximately 160-foot seaward of the seawall fronting the Sheraton Waikiki Hotel. The groin would have a "T" head extending east and west from the end of the groin stem. The groin stem would be rock rubblemound construction, a single layer of carefully placed (keyed and fit) 2,500 to 4,500 pound armor stone over a 250 to 450 pound underlayer stone, with a concrete core wall to prevent the migration of sand through the structure. The stem crest elevation would vary from +7 feet mean sea level (msl) for 40 feet nearshore, the same elevation as the beach crest, and then uniformly slope down to an elevation of +4 feet at the location of the beach toe, about 110 feet from the start of the groin, and maintain this elevation for the rest of its length. The T head would be constructed entirely of stone, without the concrete core, with a crest elevation of +4 feet and crest width of 8 feet. The rock groin construction sequence would be approximately as follows:

1. Clear loose material fronting the seawall on the west side of the existing groin and begin constructing the groin stem. The landward end of the stem would be overbuilt with stone as necessary for construction equipment and material access from the existing beach and over the existing groin.

2. Starting from shore, clear loose material from the seafloor, place the leveling stone bed, place the precast concrete wall section on the leveling bed, and then immediately place the core stone and armor stone up to the +2.5-foot elevation. Place temporary additional armor stone on both sides to provide for adequate equipment access width along the stem.

3. Move seaward constructing the lower portion of the stem until the head area is reached, then construct the lower portion of the head(s) out to their end(s).

4. Work backward toward shore constructing the finished groin to the design elevation, using the temporary armor stone placed along the sides. The top portion of the concrete core wall would be cast-in-place in order to obtain a uniform finished top of wall elevation. Remove the existing RHG remnants as construction proceeds back to the shore and dispose of them at an approved on-land disposal site.

The T-Groin construction will result in the permanent discharge of a total of 870 cubic yards of fill over 7,440 square feet of navigable waters. Additionally, the proposed construction method would result in the temporary discharge of 230 cubic yards of fill over 1,470 square feet of navigable waters for construction access that would be removed as the groin construction is completed. Construction equipment would consist primarily of a large excavator and large offroad capable trucks for stone and precast concrete delivery. The applicant has designated two upland staging areas along the shoreline, one near Kuhio Beach and one fronting Royal Hawaiian Hotel. DLNR would remove any portions of the existing groin that pose an impediment to construction of the T-head groin or, if left in place, would pose an unacceptable navigational or safety hazard to the public. A map of the project location, associated drawings and project scope are provided as an attachment to this notice.

AUTHORITY: A Department of the Army permit is required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) – To install a structure in navigable waters of the U.S.
- Section 404 of the Clean Water Act (33 U.S.C. 1344) – To discharge fill material into waters of the United States. The Corps' public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413) - Transport dredged material for the purpose of dumping it into ocean waters. The Corps' public interest review will consider the criteria established under authority of Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (40 CFR Parts 220 to 229), as appropriate.

WATER QUALITY CERTIFICATION: The proposed action will result in a discharge of a pollutant into a water of the U.S. and will require authorization from the U.S. Army Corps of Engineers (Corps) in accordance with Section 404 of the Clean Water Act of 1972 (CWA). Under Section 401 of the CWA (Public Law 95-217), the Corps may not issue a permit for the described work until the applicant obtains a certification, or waiver of certification, from the State of Hawaii, Department of Health – Clean Water Branch.

COASTAL ZONE MANAGEMENT ACT CERTIFICATION: The proposed activity will affect land or water uses in the Coastal Zone. Under Section 307(c)(3) of the Coastal Zone Management Act of 1972, as amended by 16 U.S.C. 1456(c)(3), the Corps may not issue a permit for the described work until the applicant obtains a Federal Consistency Concurrence from the State of Hawaii, Department of Business, Economic Development, and Tourism – Office of Planning.

CULTURAL RESOURCES: The existing Royal Hawaiian Groin is a structural component of the historic Waikiki Beach assemblage of structures and resources constructed before 1966 that contribute to the establishment of Waikiki Beach. Pursuant to Section 106 of the National Historic Preservation Act (NHPA), our assessment of the project leads us to a preliminary determination that the undertaking would result in an adverse effect to a historic property. Therefore, consultation with the State of Hawaii, Department of Land & Natural Resources, Historic Preservation Division, Office of Hawaiian Affairs, and interested Native Hawaiian Organizations and parties will be conducted independent of this public notice. Please respond to this public notice if you or your organization would like to request to be a consulting party for this undertaking. A permit for the proposed activity will not be issued until the consultation process is completed.

ENDANGERED SPECIES: Pursuant to Section 7 of the Endangered Species Act (ESA), federal agencies must consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service on any action that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. Based on the project location, the following protected species have the potential to occur near the project location: Green sea turtle (*Chelonia mydas*), Central North Pacific DPS, threatened, Hawksbill sea turtle (*Eretmochelys imbricata*), endangered, Hawaiian monk seal (*Monachus schauinslandi*), endangered; including designated critical habitat. Preliminary determinations indicate that the proposed action may affect the above species. Consultation under Section 7 of the Endangered Species Act of 1973 (87 Stat. 844) will be initiated with NMFS independent of this notice. A permit for the proposed activity will not be issued until the consultation process is completed.

ESSENTIAL FISH HABITAT: The proposed action is being evaluated for possible effects to Essential Fish Habitat (EFH) pursuant to The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), which 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. The Honolulu District includes areas of EFH as Fishery Management Plans. We have reviewed the January 20, 1999, Western Pacific Fishery Management Council's Environmental Assessment to locate EFH area as identified by NMFS. Based on the project location, EFH for the following Management Unit Species may occur at the project location: Bottomfish (all life stages), Pelagics (all life stages), Crustaceans (all life stages) and Coral Reef Ecosystem

Preliminary determinations indicate that the described activity may have an adverse effect on EFH. Consultation under MSA will be initiated with NMFS independent of this notice. A permit for the proposed activity will not be issued until the consultation process is completed.

FEDERAL EVALUATION OF APPLICATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts 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 reasonably may be expected to 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 environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to evaluate the direct, indirect, and cumulative impacts of this proposed activity. Any comments received will be considered by the Corps 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.

PUBLIC HEARING: Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. 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 public hearings shall state clearly and concisely, the reasons and rationale for holding a public hearing. The District Commander will then decide if a hearing should be held.

COMMENT AND REVIEW PERIOD: Comments on this public notice should be made in writing via conventional mail or e-mail. Comments will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. Conventional mail comments should be sent to

U.S. Army Corps of Engineers, Honolulu District
Regulatory Office, Attn: J. Paahana
Building 230
Fort Shafter, Hawaii 96858-5440.

Alternatively, comments may be emailed to jessie.k.paahana@usace.army.mil. In order to be accepted, e-mail comments must originate from the author's e-mail account.

Both conventional mail and e-mail comments must include the DA permit number **POH-2015-00097**, and the commentor's name, address, and phone number. All comments, whether conventional mail or e-mail, should be received by the close of business on **February 12, 2017**.

PRIVACY & CONFIDENTIALITY: It should be noted that materials submitted as part of the permit application become part of the public record and are thus available to the general public under the procedures of the Freedom of Information Act. Submissions should not include any information that the submitter seeks to preserve as confidential.

If you have any questions about this project or the permit process, please contact Ms. Jessie Paahana of my staff via telephone at (808) 835-4107 or via email at jessie.k.paahana@usace.army.mil.

Tunis W. McElwain
Chief, Regulatory Branch

Attachment – Additional Information
Application for Department of the Army Permit

ROYAL HAWAIIAN GROIN IMPROVEMENT PROJECT

(5) PROJECT SPECIFIC CRITERIA

180 Foot Long Rock T Head Groin

The new groin would be constructed immediately to the west of the existing groin, extending a total length of 180 feet from the seawall fronting the Sheraton Waikiki Hotel. The groin would have a “T” head extending east and west from the end of the groin stem to help maintain beach width adjacent to the groin and reduce the potential for rip (seaward flowing) current formation along the stem. The T head would also facilitate possible sand accretion and beach formation fronting the Sheraton Waikiki Hotel. The groin stem would be rock rubblemound construction, a single layer of carefully placed (keyed and fit) 2,500 to 4,500 pound armor stone over a 250 to 450 pound underlayer stone, with a concrete core wall to prevent the migration of sand through the structure. The stem crest elevation would vary from +7 feet mean sea level (msl) for 40 feet nearshore, the same elevation as the beach crest, and then uniformly slope down to an elevation of +4 feet at the location of the beach toe, about 110 feet from the start of the groin, and maintain this elevation for the rest of its length. The T head would be constructed entirely of stone, without the concrete core, with a crest elevation of +4 feet and crest width of 8 feet. A plan view of the proposed groin, and typical section and elevation views, are shown on Figure 3. This plan would potentially maintain the 2012 nourishment project beach configuration and width; however, it would not result in the opportunity for a wider beach. The proposed RHG improvement project does not include additional beach nourishment, so the actual width of the beach adjacent to the groin will depend on the existing available sand volume and the sand transport processes occurring at any given time.

(6) PROJECT DESCRIPTION

C. CONSTRUCTION METHODS

Construction Methodology

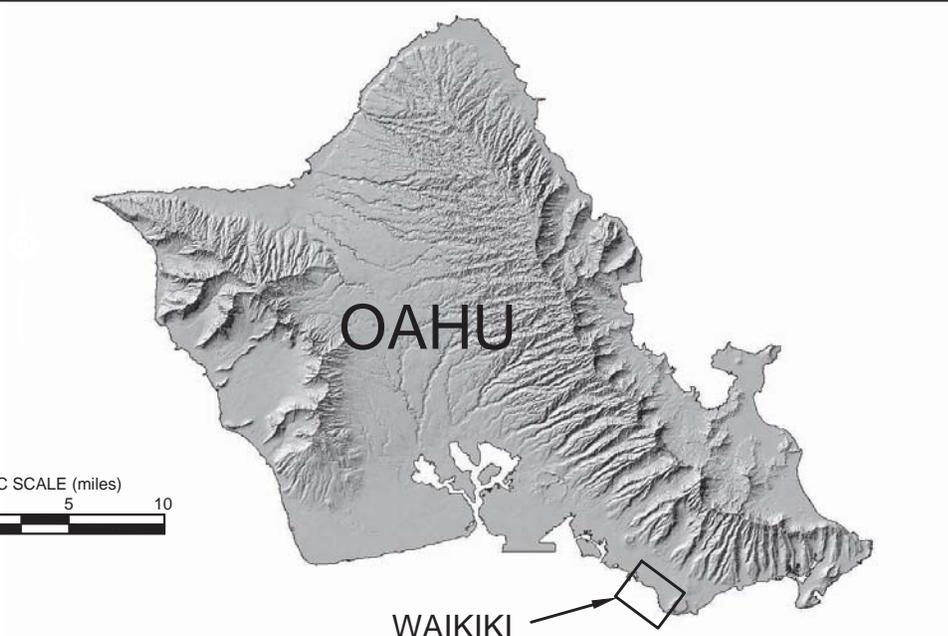
While construction of the RHG improvement project is a relatively straightforward marine construction effort, its location in the middle of Waikiki and fronting one of the largest and oldest hotels presents construction challenges. The biggest challenge is construction access and limited space for a staging area on the shoreline. Thus the project must entail a replacement groin design and construction methodology that is relatively quick to construct and minimizes impacts to the adjacent hotel operations and recreational users.

A narrow pedestrian beach access between the Royal Hawaiian and Outrigger Waikiki hotels provides access to the project site from Kalakaua Avenue; however, its width (nominal 8 feet) significantly limits the size of equipment that can use it. Large construction equipment and materials will have to come through Kuhio Beach 1,730 feet to the east and then move up the beach. A preliminary staging area for material would be located in the vicinity of Kuhio Beach,

approximately 100 feet by 100 feet (0.23 ac). A second staging area would be located on the beach adjacent to the existing groin (fronting the Royal Hawaiian Hotel) for equipment storage and a limited amount of construction material, approximately 40 feet by 200 feet (0.18 ac). The staging areas would be located entirely above mean higher high water and would be completely surrounded by a two-foot high geotextile fabric construction silt fence. Materials would be delivered to the staging areas by truck every couple of days, or possibly even daily, early in the morning. Construction equipment would consist primarily of a large excavator and large off-road capable trucks for stone and precast concrete delivery (similar to those used to move sand during the 2012 Waikiki Beach Nourishment project). Construction access and staging areas are shown on Figure 2.

The rock groin construction sequence would be approximately as follows:

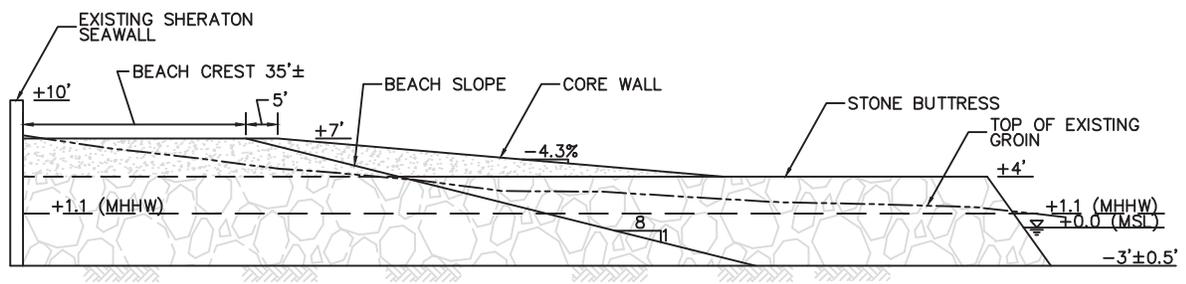
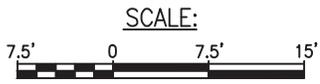
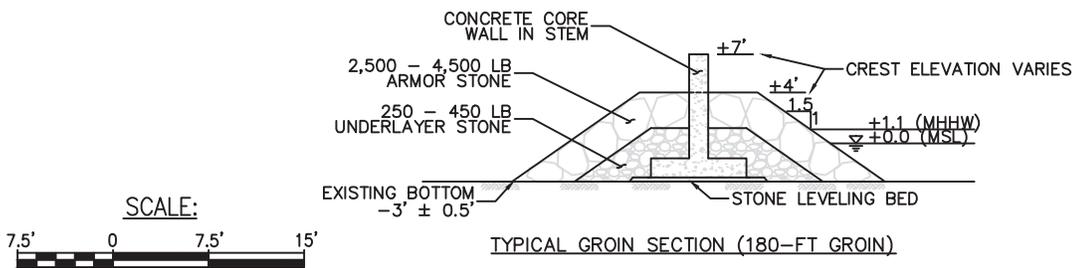
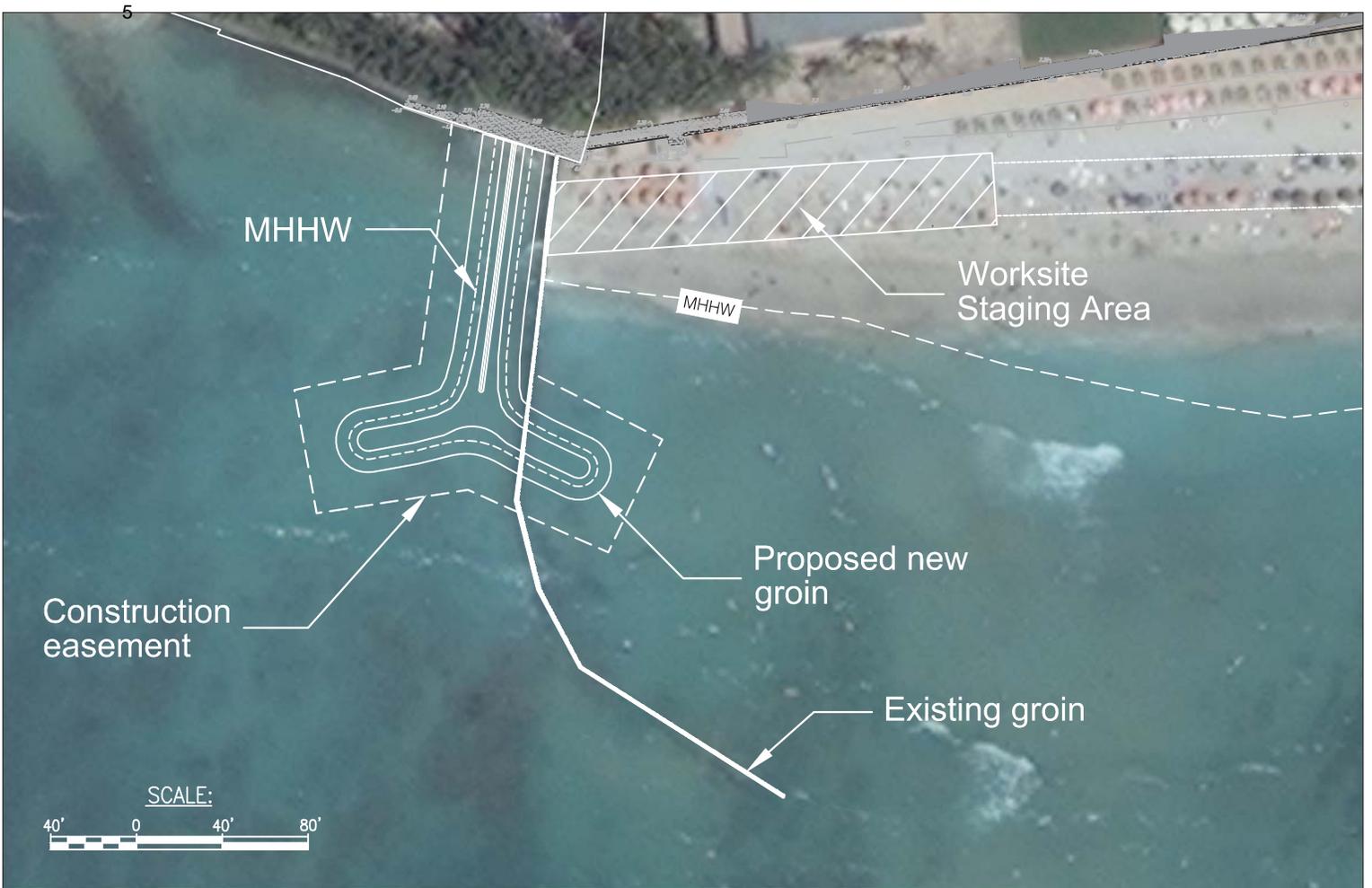
- Clear loose material fronting the seawall on the west side of the existing groin and begin constructing the groin stem. The landward end of the stem would be overbuilt with stone as necessary for construction equipment and material access from the existing beach and over the existing groin.
- Starting from shore, clear loose material from the seafloor, place the leveling stone bed, place the precast concrete wall section on the leveling bed, and then immediately place the core stone and armor stone up to the +2.5-foot elevation. Place temporary additional armor stone on both sides to provide for adequate equipment access width along the stem.
- Move seaward constructing the lower portion of the stem until the head area is reached, then construct the lower portion of the head(s) out to their end(s). (Note that the heads would be constructed entirely of stone, without the concrete core wall.)
- Work backward toward shore constructing the finished groin to the design elevation, using the temporary armor stone placed along the sides. The top portion of the concrete core wall would be cast-in-place in order to obtain a uniform finished top of wall elevation. Remove the existing RHG remnants as construction proceeds back to the shore and dispose of them at an approved on-land disposal site.



Project: Royal Hawaiian Groin Improvement Project	REF: POH-2015-00097	Location: Waikiki Beach Honolulu, HI
Datum: NAD83, MSL	Waikiki Beach	Sheet 1 of 4
		Date: June 29, 2016



Figure 2. Project overview



ELEVATIONS RELATIVE TO MSL
2X VERTICAL EXAGGERATION

GROIN ELEVATION
(LOOKING FROM WEST)

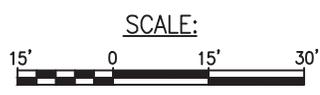
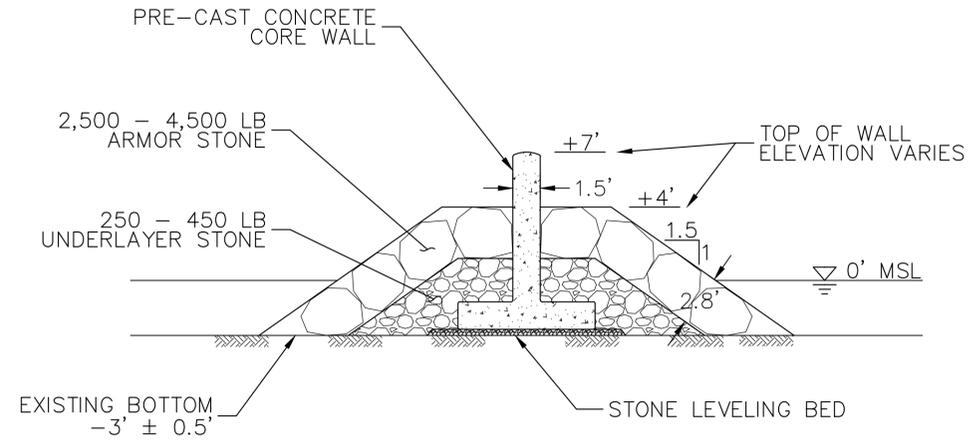
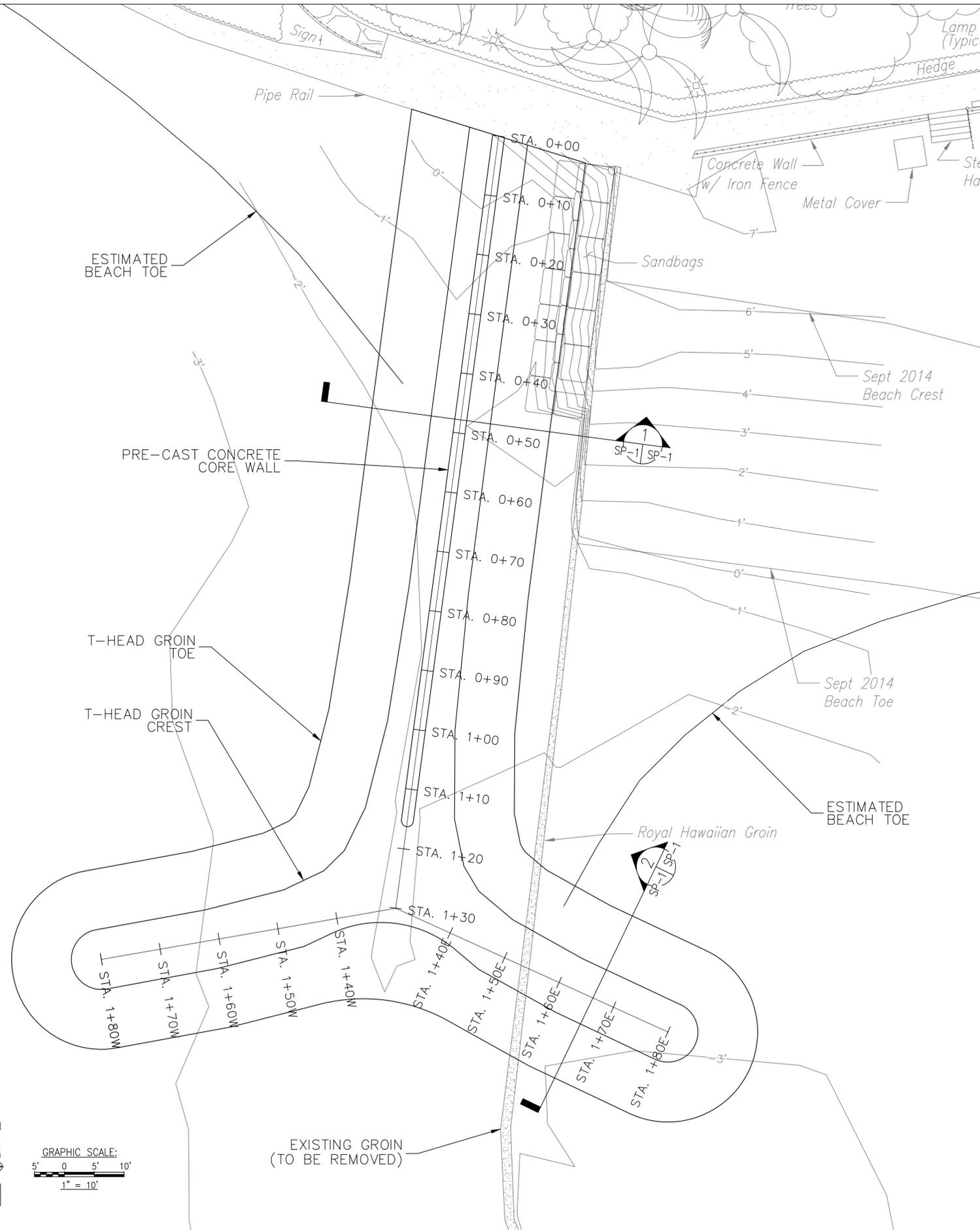
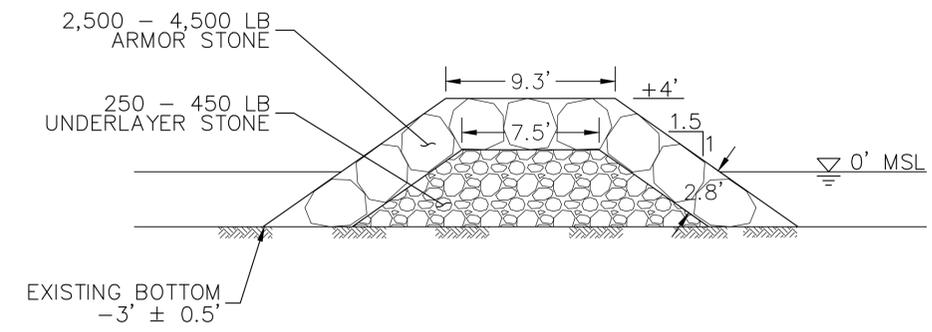


Figure 3. 180-ft rock T-head groin

REF: POH-2015-00097
 APPL: DLNR
 Location: Waikiki Beach
 Honolulu, HI
 Sheet 3 of 4
 July 29, 2016



1 TYPICAL STEM SECTION
SCALE: 1" = 5'



2 TYPICAL HEAD SECTION
SCALE: 1" = 5'



Sea Engineering, Inc.
MAKAI RESEARCH PIER
WAIMANALO, HI 96795
808.259.7966
FAX 808.259.8143

REVISION	DATE

**ROYAL HAWAIIAN GROIN
REPLACEMENT
HONOLULU, OAHU, HAWAII**

PROJECT NUMBER: 25516
PROJECT ENGINEER: DS
DRAWN BY: DL
CHECKED BY: SS
SCALE: 1" = 20'
DATE: AUG 26, 2016

**LAYOUT,
TYPICAL SECTIONS**

SHEET:
SP-1



Sea Engineering, Inc.
MAKAI RESEARCH PIER
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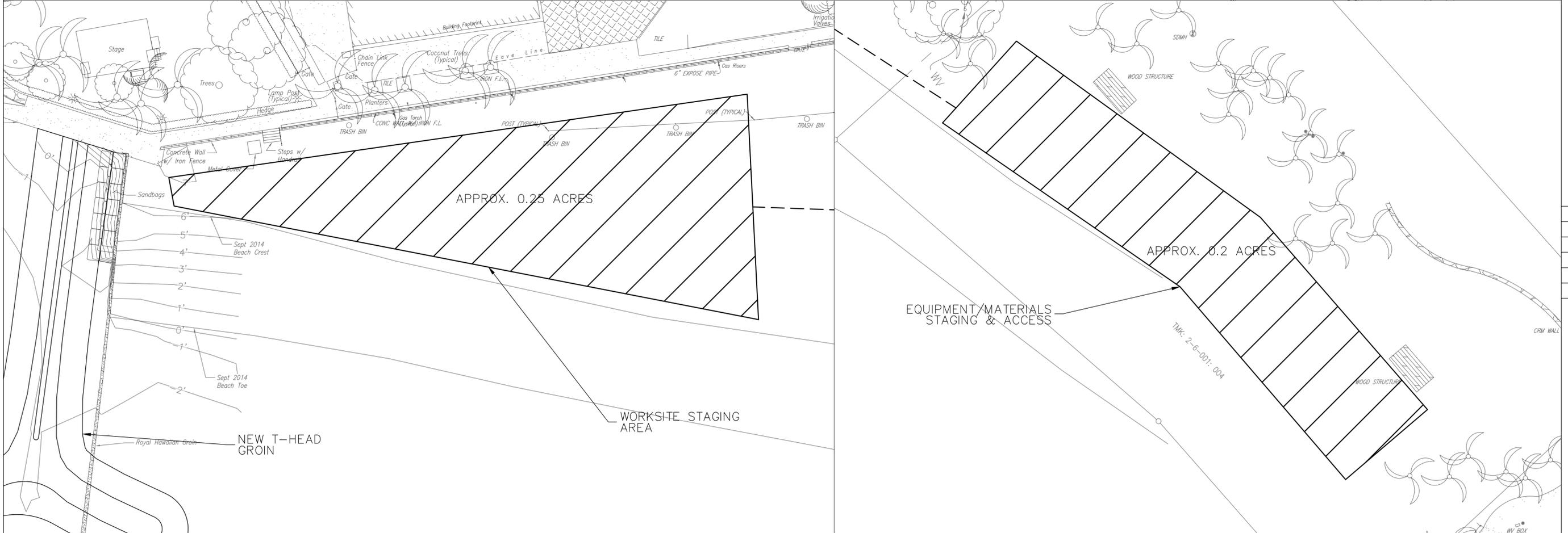
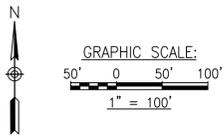
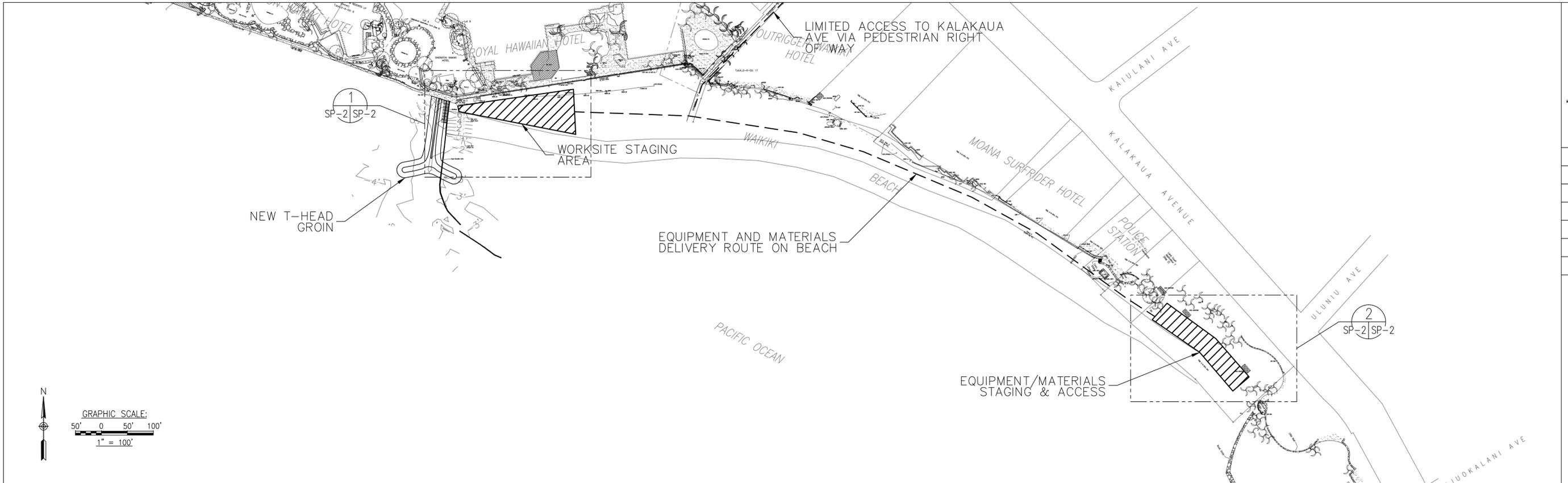
REVISION	DATE

ROYAL HAWAIIAN GROIN REPLACEMENT HONOLULU, OAHU, HAWAII

PROJECT NUMBER: 25516
PROJECT ENGINEER: DS
DRAWN BY: DL
CHECKED BY: SS
SCALE: 1" = 20'
DATE: AUG 26, 2016

CONSTRUCTION ACCESS AND STAGING AREAS

SHEET:
SP-2



1 WORKSITE STAGING AREA DETAIL
SP-2 | SP-2 SCALE: 1" = 20'

2 EQUIPMENT/MATERIALS STAGING DETAIL
SP-2 | SP-2 SCALE: 1" = 20'