

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
1151 Punchbowl Street, Room 221
Honolulu, Hawaii 96813

ADDENDUM NO. 1

TO

Job No. E00CO30A
Kuhio Beach Restoration Groin Construction,
Small Scale Beach Nourishment, and Groin Repairs
Honolulu, Oahu, Hawaii

05/15/2026

The items listed hereinafter are hereby made a part of the contract for the above project and shall govern the work, taking precedence over previously issued plans and specifications governing the items mentioned.

SPECIFICATIONS

1. Proposal – **DELETE** in its entirety and **REPLACE** with the attached Proposal.
 - a. Added Item No. 5 - State Inspection Administrative Costs on Proposal.
 - b. Removed Bidder's Statement of Qualifications.
2. Section 01019 General Specifications – **DELETE** in its entirety and **REPLACE** with the attached Section 01019.
 - a. Revised Part 1 – General, Section 1.2 General Item F.
3. Section 01200 Qualifications of Bidders – **DELETE** in its entirety and **REPLACE** with the attached Section 01200.
 - a. Added Bidder's Statement of Qualifications.
4. Section 02260 Sand Recovery, Transportation, and Placement – **DELETE** in its entirety and **REPLACE** with the attached Section 02260.
 - a. Revised Part 3 – Execution, Section 3.1 Sand Recovery Item A and B.
 - b. Revised Part 3 – Execution, Section 3.2 Sand Transportation and Placement Item E.
5. Section 02486 Stone Material and Placement – **DELETE** in its entirety and **REPLACE** with the attached Section 02486.
 - a. Revised Part 3 – Execution, Section 3.1.3 Armor Stone.

PLANS

1. Revised Sheet G-101. See attached revised Sheet G-101.
 - a. Revised Note #6 of General Armor Stone Notes.

REQUEST FOR INFORMATION

1. **Please provide copies of all permits and/or permit applications listed in section 01567, paragraph 1.2.B.**

Permits will be provided after bid and prior to Notice To Proceed.

2. **Specification Section 01567, paragraph N states that Water quality monitoring during construction shall be conducted in accordance with the Section 401 Water Quality Certification from the State Department of Health and the “Applicable Monitoring and Assessment Plan for Clean Water Act Section 401 Water Quality Certification.” Bidders have not been provided with a copy of these documents. Please provide a copy of these documents so bidders are informed of their requirements. If copies of these documents cannot be provided, please provide a Force Account item on the proposal to account for the uncertainty in Water Quality Monitoring costs.**

Permit documents are not available at this time, and water quality monitoring requirements will not be known until the permit is issued.

3. **Please provide drawings showing the lines, grades, and cross sections of the sand recovery area in both pre- and post-recovery conditions.**

Sand is to be collected from the post nourished Kuhio Beach Ewa Basin which is planned to have an elevation of +5.5 ft MSL. Sand collected from this basin will be placed on Kuhio Beach. Recovery operations consist of skimming 0.5 ft of sand from the top of the dry beach surface, extending from the beach crest to the landward hard structures. The post-recovery final elevation of the Kuhio Beach Ewa Basin will be +5.0 ft MSL. The estimated volume of sand recovered from this operation is 1,000 cubic yards. No excavation below +5.0 ft MSL is permitted.

4. **Drawing C-203, note 1 states: “Do not remove sand from below +5 FT MSL.” Specification 02260, paragraph 3.2.E states: “Excavator buckets or similar may recover sand from within the water.” Please confirm which statement is correct.**

Do not remove sand from below +5.0 ft MSL in Kuhio Beach Ewa Basin is correct. Specification 02260 Par. 3.2.E has been updated.

5. **Drawing C-202 typical sections indicate a “Two-stone thick armor layer”. Specification section 02486, paragraph 3.1.3 states that armor stone shall be placed...to provide a one-stone thick layer. Please confirm which statement is correct.**

Two-stone thick armor layer is correct. Specification 02486 Par. 3.1.3 has been updated.

6. **The proposal item for Ewa Groin Repairs is listed as 1 Lump Sum. The drawings state: "Armor stone may be sourced from on-site or supplied by contractor provided it falls within the weight range specified by the engineer and conforms to specifications 02486." Given the limited information provided, it is not possible for the bidders to quantify how much, if any, armor stone needs to be supplied to supplement the on-site material. In order to provide a level bidding field, please indicate the quantity of armor stone, toe stone, and core stone that bidders should include in their proposals for this work.**

Ewa Groin Repairs require no core stone for all repairs. It is estimated that 50 CY of armor stone (between 1,000 and 3,400 lbs) is needed to complete the repairs.

7. **In order for the State to receive the greatest competition, would the State consider extending the bid date by at least 2 weeks?**

Due to tight timeline, we cannot extend the bid date by two weeks.

8. **Is a bid bond required for this project?**

Yes, bid bond is required for this project

9. **Section I-5, Paragraph P of the RFP states, "No work shall be done on Saturdays, Sundays, legal State Holidays, at night, and/or in excess of 8 hours each day without the written consent of the Engineer". Will work on Saturdays, Sundays, legal Holidays, at night, and/or in excess of 8 hours each day be approved?**

Work may be performed between 7:00 am to 6:00 pm Monday to Friday, 9:00 am to 6:00 pm on weekends. If the public complains about the contractor working on the weekend, the State has the right to revise to no construction work on the weekends at no extra cost to the State.

10. **Section I-5, Paragraph P of the RFP (in regards to work hours) states, "Should permission be granted to work at such times, the contractor shall pay for all inspection administrative costs thereof". If approved, please provide the rate for all inspection administrative costs that will be required to be paid by the Contractor.**

Work may be performed between 7:00 am to 6:00 pm Monday to Friday, 9:00 am to 6:00 pm on weekends. If the public complains about the contractor working on the weekend, the State has the right to revise to no construction work on the weekends at no extra cost to the State. The allowance for State Inspection Administrative Costs is added to the proposal.

11. **Section P-1 of the RFP states, "...Fully complete all work under this contract within 180 consecutive calendar days from the day of written notice to proceed..". Specification Section 01019, Paragraph F states, "Work on the Kuhio Beach Restoration project shall be completed within 150 consecutive calendar days". Please confirm the consecutive calendar days for this project.**

180 consecutive calendar days is correct. Specification 01019 Par. F has been updated.

12. Is a grading permit required for this project? Will the State apply for this?

Grading permit is not required for this project.

13. Specification Section 02660 3.1 Section B states, "Rocks, cobbles, and coral rubble larger than 1.0 inches in any dimension shall be removed from the recovered sand and disposed of by the contractor prior to completion and acceptance of the in-place sand fill". Will the Department of Land and Natural Resources allow material greater than 1.0 inches in dimension to be placed in the interior of the slope and encapsulated with material less than 1.0 inches in dimension? This would reduce the amount of material being removed from the work area.

Sand grain size is expected to be fine, based on screening from previous nourishment activities in the Kuhio basins. Specification 02260, 3.1 Section A and B have been updated.

14. Can the State please provide the electronic topographic survey data for the project?

An electronic copy of the topographic survey will be provided after bid and prior to Notice To Proceed.

15. Specification Section 01567, Paragraph N.1 Water Quality Monitoring states, "water quality monitoring during construction shall be conducted in accordance with the Section 401 Water Quality Certification from the State Department of Health and the "Applicable Monitoring and Assessment Plan for Clean Water Act Section 401 Water Quality Certification". Since the project does not have the permits yet, please define the frequency of Water Quality Monitoring inspections that are anticipated.

Permit documents are not available at this time, and water quality monitoring requirements will not be known until the permit is issued.

16. Specification Section 02486, paragraph 3.1.3 states, "...Underlayer stone shall not be left exposed over a distance of more than 25 feet ahead of armor stone placement". Plan Sheet C-202, Note 4D states, "Place underlayer stone from the groin towards the head following alignment shown on C-201 and C-202". Furthermore, Note 4E states, "Starting from the terminus of the structure and moving towards the root place armor stones, set flexible formwork, and cast in place concrete in 10 foot sections". Please clarify if the underlay placed from the root to the terminus can be exposed over a distance of more than 25 feet ahead of armor stone placement.

The requirement to not leave more than 25 feet of underlayer exposed ahead of armor stone placement has been removed. Spec 02486 Par 3.1.3 has been updated.

17. Plan Sheet C-202, Note 4E states, "Starting from the terminus of the structure and moving towards the root place armor stones, set flexible formwork, and cast in place concrete in 10 foot sections". Building the structure in larger sections than 10 feet will provide the best product to the State. Furthermore, it is cost advantageous to not break the project into several small portions of work. Please confirm if the Contractors means and methods can perform larger sections than 10 feet at a time,

it will be allowed.

Contractor shall bid according to the Plans and Specifications.

- 18. The Proposal states that the State may hold bids for one hundred eighty (180) days from bid opening, during which time no bid may be withdrawn. The Proposal also states that Notice to Proceed may be delayed up to eighteen (18) months after bid opening, and that no additional compensation will be provided for escalation or delay for issuance of Notice to Proceed on or before that date. Please clarify the intended pricing basis for labor, materials, equipment, subcontractor pricing, supplier quotations, bonding, insurance, and other time-sensitive costs if Notice to Proceed is issued substantially after bid opening.**

The Contractor shall bid in accordance with the terms and conditions outlined in the Proposal Documents.

- 19. Please confirm whether bidders are required to include all escalation and delayed-start risk for a possible Notice to Proceed delay of up to eighteen (18) months after bid opening, including labor, materials, equipment, fuel, trucking, subcontractor/vendor quotations, bonding, insurance, and other time-sensitive costs; whether any adjustment will be allowed for expired quotations, market escalation, changed labor/equipment rates, bond or insurance cost increases, or subcontractor/supplier standby if Notice to Proceed is issued within that period; whether the limited escalation claim language in the Special Provisions applies only after eighteen (18) months from bid opening and excludes overhead, extended general conditions, standby, bond/insurance increases, and administrative costs; and whether the State would consider limited Notice to Proceed, early procurement authorization, or other written direction for long-lead or price-sensitive materials if award or full Notice to Proceed is delayed.**

The Contractor shall bid in accordance with the terms and conditions outlined in the Proposal Documents.

- 20. Section 01567, Paragraph 1.2.B lists required permits, including the Department of the Army Permit, Section 401 Water Quality Certification/AMAP, NPDES permit, DLNR Small Scale Beach Nourishment Permit, SMA Permit, DCAB Review, and CZM Federal Consistency Determination Review. Paragraph 1.2.B states that copies of permits are attached at the end of the section, and that permit applications or placeholders are attached where permits are pending. However, the permit copies, applications, and placeholders do not appear to be included in the currently available bid documents. Please provide the referenced permit copies. For any permits not yet issued, please provide the permit applications, placeholders, draft conditions, or agency correspondence currently available. Please also clarify the Contractor's permit responsibility.**

Permits will not be issued during the pre-bid period. All permits will be provided after award and prior to Notice to Proceed.

- 21. Item Q states that the State will process permit applications whenever possible, but if permit applications are not processed by the State, the Contractor shall process the applications, permits, and licenses and pay all charges and fees. Section 02200 appears to state that necessary Federal and State permits have been obtained by the State, with additional local permits, such as temporary road closures, by the Contractor. Please confirm whether the Contractor is responsible only for compliance, fees, required contractor information, permit reporting/submissions, notices, and local/means-and-methods permits, or whether the Contractor must also prepare, process, and obtain any of the primary project permits listed in Section 01567.**

Permits listed in section 01567 and Permit Attachments will be obtained by the state. Contractor will be responsible for permit compliance, notices, local/means-and-methods permits, if necessary.

- 22. Proposal P-3 states that Bid Item 2 is based on 1,000 CY of sand to be borrowed and placed, and that if the sand quantity is reduced, the Bid Item Price will be reduced in direct proportion to the sand quantity reduction. The note also states that a 10% reduction in sand quantity will result in a 10% reduction in "Unit Price." However, Bid Item 2 is shown as a lump sum item, not a unit price item. Please clarify whether Bid Item 2 will be administered as a lump sum item or as a unit-price/quantity-adjusted item.**

All bid items are Lump Sum.

- 23. Drawing G-101 states that the crest of underlayer stone under the CIP concrete crest cap may be chinked with small stone and gravel to retain concrete. However, the section details on C-202 and C-206 appear to show the CIP concrete crest cap bearing on or interfacing with armor stone. Please clarify the intended bearing surface and stone interface for the CIP concrete crest cap.**

General Armor Stone Notes #6 on G-101 has been updated. CIP concrete cap is intended to bear on armor stone; however, chinking and void filling is allowed to mitigate concrete leakage.

- 24. Please confirm whether the CIP concrete crest cap is intended to bear on underlayer stone, armor stone, or another prepared stone surface, and whether chinking, void filling, and leakage control at that interface are incidental to the lump sum work.**

CIP concrete cap is intended to bear on armor stone; however, chinking and void filling is allowed to mitigate concrete leakage.

- 25. The drawings and specifications require a CIP concrete crest cap with flexible formwork that abuts adjacent armor stone. Drawing G-101 also states that small stone and gravel may be used to chink the stone below the crest cap to retain concrete. Please clarify whether armor stone is intended to be inside, partially embedded in, or encased by the CIP concrete crest cap pour, or whether the crest cap is intended to be a formed concrete element placed against the adjacent armor stone only.**

CIP Concrete crest cap is intended to be a formed element placed against and adjacent to armor stone. The CIP concrete cap is to bear on armor stone.

- 26. Please confirm the intent of the flexible formwork and chinking requirements: are both required together, or is chinking only supplemental if flexible formwork cannot prevent concrete loss? Please also clarify whether concrete is intended to seep into the armor stone/underlayer voids for interlock, or whether the intent is to contain the concrete and prevent leakage through the stone voids.**

Both chinking and flexible formwork are required to prevent loss and seepage of concrete through the armor stone and to underlayer.

- 27. Drawing C-202, Note 1 requires removal of existing shoreline material and debris as necessary for construction of the new groin. However, Bid Item 1 is a lump sum item, and the drawings do not appear to provide a defined quantity, depth, limit, or material breakdown for this removal work. Please provide the bid quantity and limits for existing shoreline material and debris removal so all bidders are pricing the same scope.**

The ELCOROCK bags were placed in three layers. Bottom layer is three bags wide, and the bottom layer was placed at approximately elevation of -1.2 feet MSL.

- 28. Drawing C-203 states that sand released from demolition of the ELCOROCK® sandbag groin shall not count toward the 1,000 CY of sand collected from Kuhio Beach Ewa Basin, and that sand from the bags is to be placed onto Kuhio Beach. Please provide the estimated quantity of sand expected to be recovered from demolition of the ELCOROCK® sandbag groin.**

We estimate that there is approximately 250 CY of sand present in the existing sandbags.

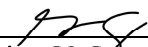
- 29. Please confirm the bid quantity or assumed range of sand released from the ELCOROCK® sandbags, whether this sand placement is included under Bid Item 1 or Bid Item 2, and whether handling/placement of sand quantities materially above the stated assumption will be treated as changed work.**

We estimate approximately 250 CY of sand is present in the existing sandbag groin. Placement and handling of this material must be included in bid item 1.

GENERAL INFORMATION

A voluntary pre-proposal conference was held on May 5, 2026 at 9:30am. The pre-proposal conference meeting agenda and sign-in sheet are attached.

Engineering Division



Dina U. Lau
Acting Chief Engineer

P R O P O S A L

FOR

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
State of Hawaii

JOB NO. E00CO30A
KUHIO BEACH RESTORATION
GROIN CONSTRUCTION, SMALL SCALE BEACH NOURISHMENT,
AND GROIN REPAIRS
OAHU, HAWAII

_____, 2026

Chief Engineer
Engineering Division
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Sir:

The undersigned, having carefully examined the local conditions and all available records and information covering conditions which may affect the cost of the work to be performed, and having carefully examined the Plans and Specifications, and other contract documents, hereby proposes to furnish and pay for all materials, tools, equipment, labor and other incidental work necessary for construction of Kuhio Beach Restoration - Groin Construction, Small Scale Beach Nourishment, and Groin repairs, as required or called for in this Proposal, all according to the true intent and meaning of the Notice to Bidders, Information and Instructions to Bidders, Proposal, Detailed Specifications, Interim General Conditions, Plans, and any and all addenda for:

JOB NO. E00CO30A
KUHIO BEACH RESTORATION
GROIN CONSTRUCTION, SMALL SCALE BEACH NOURISHMENT,
AND GROIN REPAIRS
OAHU, HAWAII

on file in the office of the Engineering Division for the TOTAL BASE BID (Items 1 to 7) of:

_____ Dollars (\$ _____)

and will fully complete all work under this contract within 180 consecutive calendar days from the date of written notice to proceed, including date of said order, said total sum being itemized on the following pages.

ADDITIVE BID ITEMS

The Bidder further proposes to incorporate in the work the Additive Bid Item as described on the drawings and Specifications Section 01230 ADDITIVE BID ITEMS for the following amounts. The Bidder must completely fill in the dollar amounts for each Additive Bid Items, where the work will be performed at no cost to the State, fill in "\$0.00" as the dollar amount. If Additive dollar amounts are left blank, the proposal will be rejected as being an "irregular proposal":

Additive Bid Item

_____ Dollars (\$_____)

PROPOSAL

Item No.	Quantity	Unit	Description	Unit Price	Total
<u>BASE BID</u>					
1.		LS	Sandbag groin demolition and rock rubble mound groin construction	LS	\$ _____
2.		LS	Beach sand borrow, transport, and placement.	LS	\$ _____
3.		LS	BMP Plan, Environmental and Pollution Controls, in place and complete.	LS	\$ _____
4.		LS	Project Sign, in place complete.	LS	\$ _____
5.	Allowance		State Inspection Administrative Costs		\$ 10,000.00
6.	Allowance		Field Office		\$ 10,000.00
Subtotal Base Bid (Items 1-6)					\$ _____
7.		LS	Mobilization and Demobilization (not to exceed 10% of the Subtotal Base Bid)		\$ _____
Total Base Bid (Items 1-7)					\$ _____

<u>ADDITIVE ITEM</u>					
8.		LS	Ewa Groin Repairs	LS	\$ _____
Total Additive Bid (Item 8)					\$ _____

NOTE: Bid Item No. 2 is based on a quantity of 1,000 cy of sand to be borrowed and placed, as shown on the Plans. The Engineer reserves the right to revise the borrow and placement plan no less than two (2) weeks prior to the start of construction if necessary to reflect current beach conditions. If the sand quantity is reduced the Bid Item Price will be reduced in direct proportion to the sand quantity reduction (e.g., a 10% reduction in sand quantity will result in a 10% reduction in Unit Price). The sand quantity, however, shall not be reduced to less than 500 cy.

RECYCLED PRODUCTS PREFERENCE

This project allows a 10% price preference for recycled products in accordance with HRS 103D-1005. Please indicate your recycled or non-recycled product by indicating its cost FOB jobsite unloaded in the schedule below, including applicable General Excise & Use Taxes.

<u>DESCRIPTION</u>	<u>RECYCLED PRODUCT COST</u>	<u>NONRECYCLED PRODUCT COST</u>
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

The bidder requesting a recycled product preference shall also complete and submit the form "CERTIFICATION OF RECYCLED CONTENT" as shown in the Interim General Conditions and provide all supporting information with this proposal. Additional information may be requested to qualify a product.

The following definitions are applicable to the CERTIFICATION OF RECYCLED CONTENT form:

"Post-consumer recovered material" means any product used by a consumer, including a business that purchases the material, that has served its intended end use, and that has been separated or diverted from the solid waste stream for the purpose of use, reuse, or recycling.

"Product" includes materials, manufactures, supplies, merchandise, goods, wares, and foodstuffs.

"Recovered material" means waste material and by-products that have been separated, diverted, or removed from the solid waste stream after a manufacturing process for the purpose of use, reuse, or recycling. Recovered material does not include those materials and by-products that are generated and normally reused on-site or within original manufacturing processes (such as mill broke, in the case of paper products).

"Recycled content" means the percentage of a product composed of recovered material, or post-consumer recovered material, or both.

"Recycled product" means a product containing recovered material, or post-consumer recovered material, or both.

The bidder agrees that preference for recycled products shall be taken into consideration to determine the low bidder in accordance with said Section and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive any preference.

APPRENTICESHIP AGREEMENT PREFERENCE

1. If applicable to this project, any bidder seeking the preference must be a party to an apprenticeship agreement registered with the State Department of Labor and Industrial Relations (DLIR) at the time the bid is submitted for each apprenticeable trade the bidder will employ to construct the project. “Employ” means the employment of a person in an employer-employee relationship.
 - a. The apprenticeship agreement shall be registered with the DLIR and conform to the requirements of Hawaii Revised Statutes Chapter 372.
 - b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain preference.
 - c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.
2. A bidder seeking the preference must state the apprenticeable trade the bidder will employ for each trade to be employed to perform the work by submitting a completed signed original Certification Form 1 verifying participation in an apprenticeship program registered with DLIR. “Apprenticeable trade” shall have the same meaning as “apprenticeable occupation” pursuant to Hawaii Administrative Rules (HAR) §12-30-5.
 - a. The *Certification Form 1* shall be authorized by an apprenticeship sponsor listed on the DLIR list of registered apprenticeship programs. “Sponsor” means an operator of an apprenticeship program and in whose name the program is approved and registered with the DLIR pursuant to HAR §12-30-1.
 - b. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor.
 - c. The completed signed original Certification Form 1 for each trade must be submitted with the bid. Previous certifications shall not apply.
 - d. When filling out the *Certification Form 1*, the name of Apprenticeable Trade and Apprenticeship Sponsor must be the same as recorded in the List of Construction Trades in Registered Apprenticeship Programs that is posted on the DLIR website. “Registered apprenticeship program” means a construction trade program approved by the DLIR pursuant to HAR §12-301 and §12-30-4.
 - e. The *Certificate Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: <http://hawaii.gov/labor/wdd>.
3. Upon receiving the *Certification Form 1*, the Procurement Officer will verify that the apprenticeship program is on the List of Construction Trades in Registered Apprenticeship Programs and that the form is signed by an authorized official of the Apprenticeship Program Sponsor. If the programs and signature are not confirmed by the DLIR, the bidder will not qualify for the preference.
4. If the bidder is certified to participate in an apprenticeship program for each trade which will be employed by the bidder for the project, a preference will be applied to decrease the bidder’s bid

amount by five percent (5%) for evaluation purposes.

5. Should the bidder qualify for other preferences (e.g. Hawaii Products), all applicable preferences shall be applied to the bid price.

CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED

Contractors are hereby notified of the applicability of Section 11-355, HRS, which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body.

CONDITION OF AWARD

It is understood that the award of the contract will be made on the basis of the lowest responsible Total Base Bid and Additive Bid Items in accordance with the "Information and Instruction to Bidders", Items K and L, and as selected by the Board of Land and Natural Resources.

It is understood and agreed that the Board of Land and Natural Resources reserves the right to reject any and/or all bids and waive any defects when, in the Board's opinion, such rejection or waiver will be for the best interest of the State of Hawaii.

In the event all bids exceed available funds certified by the appropriate fiscal officer, the head of the purchasing agency responsible for the procurement in question is authorized in situations where time or economic considerations preclude resolicitation of work of a reduced scope to negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsible and responsive bidder, in order to bring the bid within the amount of available funds. It is understood and agreed upon that the head of the purchasing agency may delete a portion or all of any item(s) in the proposal at the stated unit or lump sum price as necessary to stay within the available funding. The bidder is responsible to make an earnest effort to represent the actual cost of each item, including all materials, labor, equipment, overhead and profit in their bid proposal to preclude claims of anticipated profit or loss of profit because of an unbalanced bid proposal.

It is also understood that if a mutually agreeable cost for the reduced scope of work necessitated by a lack of available funds cannot be agreed upon between the bidder and the head of the purchasing agency within 14 calendar days after the bid opening, then the bid may be rejected in the best interest of the purchasing agency, and the head of the purchasing agency may negotiate in progressive order (lowest to highest) with the next lowest responsible and responsive bidder.

It is also understood and agreed that the award of the contract shall be conditioned upon funds being made available for this project and further upon the right of the Board of Land and Natural Resources to hold all bids received for a period of one hundred and eighty (180) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn.

It is also understood that Notice to Proceed may be delayed up to eighteen (18) months after the bid opening date, and that no additional compensation will be provided for any claim for escalation or delay for issuance of Notice to Proceed on or before that date.

It is also understood and agreed that the quantities given herewith are approximate only and are subject to increase or decrease, and that the undersigned will perform all quantities of work as either increased or decreased, in accordance with the provisions of the Contract Specifications.

It is also understood and agreed that the estimated quantities shown for the items for which a UNIT PRICE is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this contract, and the undersigned agrees that he is satisfied with and will at no time, dispute said estimated quantities as a means of claims for anticipated profit or loss of profit, because of a difference between the quantities of the various classes of work done or the materials and equipment installed, and the said estimated quantities. On UNIT PRICE bids, payment will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

After the proposals are opened and read, the figures will be extended and/or totaled in accordance with the bid prices of the acceptable proposals and the totals will be compared. In the comparison of bids, words written in the proposal shall govern over figures and unit prices will govern over totals. Until the award of the contract, however, the right will be reserved to reject any and all proposals and to waive any defects or technicalities as may be deemed best for the interest of the State.

It is also understood and agreed that liquidated damages in the amount of Two hundred and No/100 (\$200.00) for each and every calendar day in excess thereof prior to completion of the contract shall be withheld from payments due to the Contractor.

It is also understood and agreed that if this bid is accepted, the successful bidder must enter into and execute a contract with the Board of Land and Natural Resources and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to provisions of Section 103D-324 and 325, Hawaii Revised Statutes and any law applicable hereto.

It is also understood and agreed that the successful bidder will provide all necessary labor, materials, tools, equipment, and other incidentals necessary to do all the work and furnish all the materials specified in the contract in the manner and time herein prescribed, and according to the requirements of the Engineer as therein set forth.

It is understood that by submitting this proposal, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past two years.

It is understood that by submitting this proposal in accordance with HAR 3-122-192, the undersigned is declaring that the price submitted is independently arrived without collusion.

It is also understood that by submitting this proposal, a Certification for Safety and Health Programs for bids in excess of \$100,000 (in accordance with HRS 396-18), the undersigned certifies that his organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division (HIOSH).

It is further understood and agreed that the successful bidder shall comply with paragraph 3.1.a "SUBCONTRACTING" of the General Provisions which requires that the contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than twenty percent (20%) of the value of all work embraced in the Contract, except that certain contract items of work, if specifically referred to in the special provisions, will be exempted from said twenty percent requirement.

Compliance with §103-310 HRS. As a condition of award all bidders shall comply with all laws governing entities doing business in the State, including Chapter 237 HRS (general excise tax);

Chapter 383 HRS (employment security – unemployment insurance); Chapter 386 HRS (workers compensation); Chapter 392 HRS (temporary disability insurance); and Chapter 393 HRS (pre-paid health care), and shall produce all documents to the State (DLNR, Engineering Division) required to demonstrate compliance with these subsections. Any bidder making a false affirmation or certification under this subsection shall be suspended and may be debarred from further offerings or awards pursuant to §103D-702 HRS.

RECEIPT OF ADDENDA

The bidder also acknowledges receipt of any and all addenda issued by the Engineering Division, by recording the date of receipt of the respective addenda in the space provided below:

<u>Addendum</u>	<u>Date Received</u>	<u>Addendum</u>	<u>Date Received</u>
No. 1	_____	No. 5	_____
No. 2	_____	No. 6	_____
No. 3	_____	No. 7	_____
No. 4	_____	No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this Proposal as submitted.

It is also understood and agreed that if this Proposal is accepted and the undersigned should fail or neglect to contract as aforesaid, the Board may determine that the bidder has abandoned the Contract, and thereupon, forfeiture of the security accompanying his proposal shall operate and the same shall become the property of the Board.

JOINT CONTRACTORS OR SUBCONTRACTORS
TO BE ENGAGED ON THIS PROJECT

The Bidder agrees that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes (HRS), who will be engaged by the Bidder on this project to perform the required work indicated pursuant to Section 103D-302, HRS. It is the sole responsibility of the contractor to review the requirements of this Project and determine the appropriate licenses that are required to complete the Project. The Bidder certifies that the completed listing of joint contractors or subcontractors fulfills the requirements for the project and the Bidder, together with the listed subcontractors or joint contractors have all the specialty contractor's licenses to complete the work, except as provided for in HRS §103D-302(b). Failure of the Bidder to comply with this requirement may be just cause for rejection of the bid.

“A” General Engineering Contractors and “B” General Building Contractors are reminded that due to the Hawaii Supreme Court’s January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area in which the general contractor has no license. Although the “A” and “B” contractor may still bid on and act as the “prime” contractor on an “A” or “B” project (See, HRS §444-7 for the definitions of an “A” and “B” project.), respectively, the “A” and “B” contractor may only perform work in the areas in which they have the appropriate contractor’s license (*An “A” or “B” contractor obtains “C” specialty contractor’s licenses either on its own, or automatically under HAR § 16-77-32*). The remaining work must be performed by appropriately licensed entities.

General Engineering “A” Contractors automatically have these “C” specialty contractor’s licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-49, C-56, C-57a, C-57b and C-61.

General Building “B” Contractors automatically have these “C” specialty contractor’s licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-32a, C-42a and C-42b.

In completing the Joint Contractors or Subcontractors List, describe the specialty contractor’s nature and scope of work to be performed for this project and provide the complete firm name of the joint contractor or subcontractor in the respective columns. If the Bidder is a general contractor providing the work of a required specialty contractor, whose license is not automatically held pursuant to HAR 16-77-32, fill in the Bidder’s (general contractor’s) name and nature and scope of work to be performed on this project.

List only one joint contractor or subcontractor per required specialty contractor’s classification, unless within the same specialty, the work of each joint contractor or subcontractor can be described so that there is no overlap in work descriptions.

If a contractor’s license is required by law for the performance of the work which is called for in this bid, the bidder and all subcontractors must have the required license before the submission of the bidder’s proposal in the case of a non-federal aid project, and for federal-aid projects, the bidder must have the required license prior to the award of the project and all subcontractors prior to the start of the subcontracted work.

Enclosed herewith is a:

- 1. Surety Bond (*1))
- 2. Legal Tender (*2))
- 3. Cashier's Check (*3))
- 4. Certificate of Deposit (*3)) in the
- 5. Certified Check (*3)) amount
- 6. Official Check (*3)) of
- 7. Share Certificate (*3))
- 8. Teller's Check (*3))
- 9. Treasurer's Check (*3))

(Cross Out Those Not Applicable)

_____ Dollars (\$ _____)

as required by law.

Respectfully submitted,

 Name of Company, Joint Venture
 or Partnership

 Contractor's License No.

By _____
 Signature (*4)

Title _____

Print Name _____

Date _____

Address _____

Telephone No. _____

E-Mail Address _____

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;
2. Legal tender; or
3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration.
 - A. These instruments may be utilized only to a maximum of \$100,000.
 - B. If the required security or bond amount totals over \$100,000, more than one instrument not exceeding \$100,000 each and issued by different financial institutions shall be accepted.
4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company and also the names and residence addresses of all officers of the Company.
5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT, MISSING PAGES MAY INVALIDATE YOUR BID.

End of Proposal

SECTION 01019

GENERAL SPECIFICATIONS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Work shall consist of furnishing all labor, tools, materials, and equipment necessary and required to construct in place complete all work as indicated on the PLANS and as specified herein.

1.2 GENERAL

- A. Examination of Premises: The Contractor shall contact the Engineer and obtain permission before visiting the site.
- B. All lines and grades shall be established by a licensed surveyor, or licensed Civil Engineer, registered in the State of Hawaii. The Contractor shall submit evidence of current and valid registration.
- C. Notices: The Contractor shall notify the Engineer and give at least three (3) working days notice before starting any work.
- D. Disruption of Utility Services: All work related to the temporary disconnection of electrical systems shall be pre-arranged with the Engineer so that any disruption of such services will be kept to a minimum. In the event temporary power hook-up is required, the Contractor shall provide the necessary services.
- E. Contractor's Operations
 - 1. The Contractor must employ, insofar as possible, such methods and means of carrying out the work so as not to cause any interruption or interference to the facility's operations. Where the Contractor's operations would result in interruptions which would hamper the operations of the facilities, the Contractor shall rearrange the schedule of work accordingly.
 - 2. The Contractor shall maintain safe passageway to and from the facility for the user agency personnel and the public at all times.
- F. Construction Schedule. Work on the Kuhio Beach Restoration project shall be completed within 180 consecutive calendar days. The Contractor shall not commence construction until all approved material, tools, and equipment required for the project are ready to be used at the project site.

G. Lead Paint

1. When the project includes paint to be disturbed that was applied prior to 1980, it shall be assumed to contain lead. The Contractor shall inform its employees, subcontractors, and all other persons engaged in the project that lead containing paints are present in the existing buildings at the job site and to follow the requirements of the Department of Labor and Industrial Relations, Division of Occupational Safety and Health, Title 12, Subtitle 8, Chapter 148, Lead Exposure in Construction, Hawaii Administrative Rules (Chapter 12-148, HAR).

H. Parking Policy for Contractor

1. The Contractor and its employees will not be allowed to park in zones assigned to facility personnel.
2. Areas to be used by the Contractor shall be as designated by the Engineer. Any lawn damaged by the Contractor shall be restored as instructed by the Engineer at no cost to the State.

I. Toilet Accommodations: Contractor is responsible for providing toilet accommodations for its employees.

J. Protection of Property: The Contractor shall continually maintain adequate protection of all its work from damage and shall protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, and utility systems located at and adjoining the job site. The Contractor shall repair, replace, or pay the expense of repair of damages resulting from its operations.

K. Use of Power Driven Equipment: The Contractor is cautioned to take all necessary safety precautions to protect the facility personnel and the public whenever power driven equipment is used.

L. Safety: The Contractor shall carefully read and strictly comply with the requirements of the Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes, as amended, is applicable and made a part of the Contract.

M. Clean Up Premises: The Contractor shall clean up and remove from premises all debris accumulated from operations as necessary or as directed.

N. Responsibility

1. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the prime Contractor in matters pertaining to other trades employed on the job. The Contractor shall be responsible for coordinating the work of all trades on the job.
2. Should the Contractor discover any discrepancy in the PLANS or specifications, the

Contractor shall immediately notify the Engineer before proceeding any further with the work, otherwise, the Contractor will be held responsible for any cost involved in correction of work placed due to such discrepancy.

- O. Cooperation With Other Contractors: The State reserves the right at any time to contract for or otherwise perform other or additional work within the contract zone limits of this Contract. The Contractor of this project shall, to the extent ordered by the State, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by other contractors.
- P. Division of the Work: The Divisions and Sections into which these Specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to all work specified within each Section.
- Q. Drawings and Specifications
1. The Contractor shall not make alterations in the PLANS and specifications. In the event the contractor discovers any errors or discrepancies, the Contractor shall immediately notify the Engineer in accordance with the General Conditions.
 2. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the work.
 3. Specifications and PLANS are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.
- R. Required Submittals
1. Required submittals as specified in the Technical Sections of these specifications include one or more of the following: Shop drawings; color samples; material samples; technical data; schedules of materials; schedules of operations; guarantees; operating and maintenance manuals; and as-built drawings.
 2. The Contractor shall make a comprehensive list of the required submittals, by Specification Section, and submit this list to the Engineer within 15 days after notice to proceed.
 3. As-Built Drawings: When as-built drawings are required for submittal, the following shall apply:
 - a. As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required.
 - b. All deviations from alignments, elevations and dimensions which are stipulated on the PLANS shall be recorded in red on the as-built drawings.

- c. The following procedure shall be followed:
- 1) Immediately after these changes are constructed in place, the Contractor shall record them on the field office PLANS.
 - 2) Within two weeks after final inspection of the project, the Contractor shall transfer the changes marked on the field office PLANS onto a clean copy of PLANS using a red pencil. Any deletions shall be so noted and redrawn as necessary. The Contractor shall stamp or mark the tracings "AS-BUILT", and also sign and date each drawing so marked.
 - 3) The Contractor shall submit the as-built drawings to the Engineer for review and approval. After the Engineer approves the as-built drawings, the Contractor shall submit an electronic copy in Adobe PDF format.
 - 4) Any as-built drawing which the Engineer determines does not accurately record the deviation shall be corrected by the State, and the Contractor shall be charged for the services.

END OF SECTION

SECTION 01200

QUALIFICATION OF BIDDERS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. The prospective bidders must be capable of working with rock rubble mound structures, for which bids are being called, using work force members who meet the minimum experience requirements established by the State. Prior to the opening of bids, the State shall evaluate bidders' work force qualifications and, from these evaluations, the State shall be the sole judge as to whether bidders are "qualified" or "disqualified".
- B. Bidders shall thoroughly reference and understand the provisions and instructions of this section, the NOTICE TO BIDDERS, and the BIDDER'S STATEMENT OF QUALIFICATION form of these Contract Documents.

1.2 BIDDER'S STATEMENT OF QUALIFICATION

- A. In accordance with the Notice to Bidders, each prospective bidder must complete and submit the BIDDER'S STATEMENT OF QUALIFICATION CONTRACTOR FORM that has been made a part of these Contract Documents within five (5) days¹ after of bid opening. Submit form via email at: dinr.engr@hawaii.gov
Failure to submit a fully completed form will be sufficient cause for the State to reject their bid.
- B. From the responses to the BIDDER'S STATEMENT OF QUALIFICATION form and other available information, the State will determine whether a bidder's work force meets the minimum requirements established by the State for satisfactory performance of the intended work. The final decision whether a bidder is deemed qualified or disqualified lies solely with the State. Bidders, who in the judgment of the State have not provided qualified work force members or have not provided adequate evidence of qualification, will be deemed disqualified to undertake the Project and will have their bids rejected.
- C. All members of the Contractor's work force must be under the Contractor's, or his subcontractor's, employment **at the time of Notice to Proceed.**

1.3 WORK FORCE QUALIFICATIONS

- A. All work involving the repair and construction of rubble mound groins shall be performed by a work force that can be shown to possess experience in work similar in scope and technical requirements to the Project. The following minimum experience requirements shall be met by the work force to be qualified for the Project. The qualified work force shall include, but not be limited to, a work supervisor and a work

¹ In computing calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or holiday.

crew member experienced in shoreline rubble mound construction. Qualified work force members must directly provide the specific work for which they have been qualified until such work has been completed and accepted by the State.

1. All phases of the groin repair and construction work shall be performed under the direct supervision of an experienced supervisor who has field experience on successfully completed shoreline rubble mound projects performed in the United States within the last ten (10) years, in which he had direct supervision over shoreline rubble mound construction work. The qualifying projects shall have involved the successful construction of shoreline rubble mound structures.

1.4 PERSONNEL REASSIGNMENT

1. If the Contractor desires to reassign or replace personnel who have been qualified by the State, a written request to the State naming replacement personnel shall be made. The request shall include documentation of replacement personnel work qualifications and experiences which demonstrates that the minimum qualifications of this special provision is met. Written favorable review from the State of replacement personnel's qualifications shall be obtained prior to replacing or reassigning qualified personnel on the Project.
2. If qualified personnel leave the Contractor's employment during the Contract, the Contractor shall provide replacement personnel that meet the minimum qualifications established by the State.

END OF SECTION

BIDDER’S STATEMENT OF QUALIFICATION

In accordance with the Notice to Bidders and Section 01200- Qualification of Bidders, each Bidder must complete and submit this form that has been made a part of these Contract Documents within five (5) days¹ after of bid opening. Submit form via email at: dlnr.engr@hawaii.gov

Failure to submit a fully completed form will be sufficient cause for the State to reject their bid.

Bidders must demonstrate prior work force experience in working with rock rubble mound shoreline structures satisfying the minimum requirements of SECTION 01200 QUALIFICATION OF BIDDERS. Bidders who, in the judgment of the State, do not meet such minimum requirements will have their bids rejected.

Full and explicit replies to the inquiries are required. Attach additional sheets as required.

Print or Type All Information

A. GENERAL BIDDER INFORMATION

Bidder’s Name and Mailing Address

Bidder’s Street Address (if different than above)

Name of Contact Person _____

Bidder’s Telephone Number () _____

Bidder’s Fax Number () _____

Hawaii Contractor’s License _____

B. GENERAL QUALIFICATION REQUIREMENTS

A bidder’s bid will be rejected if the bidder cannot provide for the Project a minimum work force whose members have been deemed “qualified” by the State.

The minimum work force required for the Project, for which each member must be deemed “qualified” by the State, shall include one (1) WORK SUPERVISOR and one (1) WORK CREW MEMBER. Each member of the Contractor’s work force must be under the Contractor’s, or his subcontractor’s, employment **at the time of the Notice to Proceed.**

Prospective bidders are permitted to name more than one person in this STATEMENT for each position requiring qualifying experience. Attach additional sheets as required.

C. QUALIFICATIONS REQUIREMENTS

All work involving rock rubble mound shall be performed by an experienced Contractor's or Subcontractor's work force. The rock rubble mound work force shall include, but not be limited to, the work supervisor and one work crew member (other than the supervisor) who will be involved in construction of the rock rubble mound groins.

1. ROCK RUBBLE MOUND WORK SUPERVISOR – The rock rubble mound work supervisor shall have direct supervisory experience as specified in Section 01200 - QUALIFICATION OF BIDDERS.

Name of rock rubble mound Structure Work Supervisor: _____

List Supervisor's qualifying projects below:

a) **PROJECT #1** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of rock rubble mound construction work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

b) **PROJECT #2** _____
Employer _____
Employer Address _____

Contact Person _____
Employer Telephone Number () _____
Project Start Date _____
Project Completion Date _____
Owner _____
Address _____

Contact Person _____
Telephone Number () _____
Total area of rock rubble mound construction work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

c) **PROJECT #3** _____
Employer _____
Employer Address _____

Contact Person _____
Employer Telephone Number () _____
Project Start Date _____
Project Completion Date _____
Owner _____
Address _____

Contact Person _____

Telephone Number () _____

Total area of rock rubble mound construction work that Supervisor directly performed in Qualifying Supervisory Position (in Square Feet)

2. ROCK RUBBLE MOUND WORK CREW MEMBER – The rock rubble mound work crew member shall have direct field experience as specified in Section 01200 - QUALIFICATION OF BIDDERS.

Name of rock rubble mound Structure Work Member: _____

List Work Crew Members' s qualifying projects below:

a) **PROJECT #1** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of rock rubble mound construction work that crew member directly performed in Qualifying Position (in Square Feet)

b) **PROJECT #2** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of rock rubble mound construction work that crew member directly performed in Qualifying Position (in Square Feet)

c) **PROJECT #3** _____

Employer _____

Employer Address _____

Contact Person _____

Employer Telephone Number () _____

Project Start Date _____

Project Completion Date _____

Owner _____

Address _____

Contact Person _____

Telephone Number () _____

Total area of rock rubble mound construction work that crew member directly performed in Qualifying Position (in Square Feet)

¹ In computing calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or holiday.

SECTION 02260

SAND RECOVERY, TRANSPORTATION, AND PLACEMENT

PART 1 – GENERAL

- 1.1 GENERAL REQUIREMENTS: The work shall include the furnishing of all labor, materials, and equipment necessary to recover and place sand within Kuhio Beach to the lines and grades shown on the PLANS, and other work required to complete the work as indicated on the PLANS.
- 1.2 SUBMITTALS:
- A. No later than 15 days after notice to proceed (NTP) the Contractor shall submit six (6) hard copies and one (1) digital copy of the Work Plan and Schedule to the State for approval. No work shall commence until the operation and performance schedule has been approved by the State. The Work Plan shall include, but not be limited to, the following information: sand recovery equipment type and specifications; turbidity containment types; sand recovery methodology; estimated daily sand recovery and placement rate; sand transportation equipment and methodology; sand placement verification methodology; sand placement grade stake recovery plan; and public safety plan during sand recovery and placement.
 - B. The Contractor shall maintain a Daily Log of work activities, to include but not be limited to work activities conducted that day, problems encountered or issues of concern, inspection of critical equipment, equipment operation and performance, work stoppage and reason why (e.g., equipment malfunction, turtle sighting in work vicinity), estimated volumes of sand recovered and placed on the beach. The Daily Log shall cover a 24-hour period beginning at 4:00 am each day, and four (4) copies shall be submitted to the State within 24 hours following each log period.
 - C. On days that sand is recovered and/or placed, surveys shall be conducted in the recovery and placement areas prior to commencement of work and immediately after completion of work that day. Surveys shall be taken at alongshore intervals of no more than 25 feet, and sufficient points shall be acquired on each profile to adequately represent the topography. The survey shall cover any area where sand will be recovered or placed for that day. Survey data shall be submitted to the State within 24 hours following each placement day. The survey data shall be in graphical format and shall show the design lines and grades, envelope of acceptability based on listed tolerances (see section 3.2D below) and shown on the PLANS, and the surveyed pre- and post-fill profiles, and shall be referenced to the vertical datum and horizontal baseline shown on the PLANS. Submittal shall include digital files of the survey data in .csv format.
- 1.3 CONTRACTOR'S RESPONSIBILITY: The Contractor shall comply with a) all permit requirements and conditions for this project, b) all applicable Federal, State, and County laws, rules and regulations, including Hawaii Public Health regulations, and c) all laws, rules and regulations concerning pollution control and abatement.

The Contractor shall provide, erect, and maintain, at no cost to the State, warning signs, lights, barricades, fences, or other means as necessary to prevent unauthorized persons and the general public from entering onto the site where they may suffer injury or create a hazard to construction

operations. The Contractor shall also take all necessary precautions for safety in his operations and to prevent injury to his employees and to others having lawful access to the site.

The Contractor shall use all proper precautions and methods of procedure in his operations to ensure that no debris or other deleterious materials be allowed to fall, flow, leach, or otherwise enter the water. The Contractor shall promptly retrieve any misplaced materials/equipment. The Contractor shall maintain complete control of the movement of all equipment and material on and below the surface of the water. No loose floating or submerged equipment or material will be permitted.

All work shall be confined to the Contractor work areas and construction easements as shown on the PLANS. The contractor shall exclude the public from the work area in the immediate vicinity of his operations. Any damage to private or public property or structures caused by the Contractor in his execution of the work shall be repaired promptly at the expense of the Contractor. Recognizing that the project area is a very heavily utilized public beach, the Contractor shall endeavor to accomplish the project with the least adverse impact to public and commercial beach activities as is practicable, reasonable and necessary for the accomplishment of the work.

- 1.4 PLAN REVISION: It is understood that the project site is a dynamic sand beach, subject to rapid change. The State reserves the right to revise the sand recovery and placement plan no later than two (2) weeks before the start of construction in order to reflect beach conditions at the time of construction.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SAND RECOVERY

- A. Only loose, unconsolidated sand from within the sand recovery areas shown on the PLANS is to be recovered. Care shall be exercised to not damage existing coastal infrastructure, including existing groins and walls. The total amount of sand to be recovered and placed is no more than 1,000 ± 100 cubic yards.
- B. The sand recovery shall be accomplished utilizing appropriate equipment, e.g., skid-steer or similar. The sand recovery equipment shall be sufficient to accomplish the work in as short a time as is reasonably possible. No equipment shall operate below the Mean Higher High Water line (+1.1 feet).
- C. Interference with Recreation Activities: The Contractor shall avoid interfering with recreational use of the nearshore waters in the project vicinity to the maximum extent practicable.
- D. Ranges and Markers: Place and maintain markers as necessary to ensure that all work activities are conducted within the designated sand recovery area as shown on the PLANS, including turbidity containment devices.
- E. Turbidity Control: Turbidity containment devices as shown on the PLANS shall completely surround the placement area. The development of a leak in the turbidity containment devices shall be promptly repaired and work shall be stopped until repairs

are completed. Failure to repair the leaks or change the method of operation that is resulting in spillage that exceeds turbidity and water quality standards will result in suspension of work activities.

3.2 SAND TRANSPORTATION AND PLACEMENT

- A. Sand shall be recovered and placed to the lines, grades, and cross sections shown on the PLANS.
- B. Sand shall be graded to the to the lines, grades, and elevations shown on the PLANS using as small equipment as is practicable in order to minimize noise and other disturbance to adjacent properties.
- C. Dressing and Tolerance: Immediately following each alongshore incremental placement of sand the Contractor shall grade, level and dress the beach fill to meet the required elevations and dimensions indicated on the PLANS and achieve the sectional fill volume densities specified on the PLANS. The dressing for payment shall include the removal of humps and depressions, and shall be made prior to survey measurements for payment. A tolerance of three (3) inches plus or minus from the design beach crest elevation and beach slope will be acceptable. The total volume of material placed between 50-foot station intervals shall be within ten (10) percent plus or minus from the design volume shown on the PLANS; however, cumulative volumes between adjacent reaches and over the entire project length shall not deviate by more than plus two (2) percent and minus five (5) percent from the cumulative volumes shown on the PLANS. Total sand volume placed shall be between 900 and 1,100 cubic yards.
- D. The State reserves the right to modify or revise the sand placement lines and grades shown on the PLANS as necessary to accommodate changes in the existing beach conditions and to achieve the required beach profiles at the time of construction.
- E. Equipment used to move, distribute, and compact the sand to the design beach profiles shall be the smallest practicable equipment suitable to accomplish the work in order to minimize noise and inconvenience to beach users and adjacent properties. No equipment shall operate on the beach between 6:00 p.m. and 7:00 a.m. No land-based equipment shall operate (i.e., drive) in the water or below the mean higher high water elevation (+1.1 feet msl).
- F. Grade stakes and any other stakes for any purpose shall be made of material that can and will be removed after filling to the design cross sections and accepted by the Engineer. All stakes shall have sufficient length above grade so they will not be accidentally covered by the sand fill. The Contractor's Work Plan shall contain a grade stake recovery plan to insure accountability for and complete removal of all grade stakes.
- G. If any material is deposited elsewhere than as designated or approved, the Contractor may be required to remove such misplaced material and redeposit it where directed by the Engineer at his expense.

- 3.3 ENVIRONMENTAL CONTROLS: Turbidity containment devices as shown on the PLANS shall be maintained at all times during dredging, dewatering and sand placement work. Regular inspection of the devices shall be conducted by the Contractor, and should any leaks or breaks

occur the associated work activities shall cease until the leaks are repaired. All work shall be accomplished in accordance with specification 01567 Environmental Protection and the project's BMP Plan.

3.4 EQUIPMENT REMOVAL: Upon completion of the work the Contractor shall promptly remove all equipment, markers and buoys, turbidity containment devices, and any other ancillary equipment or materials.

3.5 MEASUREMENT

- A. Surveys for payment shall be made by the Contractor at his expense. The survey methodology and qualifications of the survey personnel shall be included in the Contractor's Work Plan submittal for approval by the Engineer.
- B. Beach profiles shall be surveyed at maximum 25-foot intervals along the baseline and shall include the two nearest stations shown on the PLANS. The profile surveys shall extend from the hard backshore feature (wall, walkway, stairs) at the inshore edge of the beach to the offshore breakwaters. The profile surveys shall be accomplished immediately prior to initiation of sand placement each day and immediately post-placement the same day to determine and verify the sand placement. The profiles shall at a minimum contain spot elevations at maximum 10-foot intervals along the profile and at any slope change points. It is understood that there is potential for sand movement after placement; thus the Contractor shall make every effort to perform the pre-and post-placement beach profile surveys in as timely a manner as possible.
- C. The Contractor shall maintain detailed survey logs and the daily post-placement surveys plotted against the design profile. The profile survey data shall be submitted to the Engineer within 48 hours following each placement increment. Each survey submittal to the Engineer shall contain the statement "I hereby certify that this submittal is a correct representation of the work accomplished." The submittal shall be signed by an authorized Contractor's representative.
- D. For purposes of expediency and efficiency, it is the State's intent to utilize the Contractor's surveys for purposes of assessing the work's conformance to the job requirements and for payment. The State shall accept or reject each sand placement for each increment within 48 hours of receipt of the verification survey data from the Contractor. However, the State reserves the right to conduct independent surveys, at its own expense, for the purposes of verifying the Contractor's measurements. In the event that survey discrepancies are developed that cannot be otherwise resolved, the State reserves the right to request the Contractor to re-survey portions of the work at no additional cost to the State; and/or utilize the State's survey for measurement.

END OF SECTION

SECTION 02486

STONE MATERIAL AND PLACEMENT

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

This work shall consist of furnishing and placing underlayer and armor stone for groin construction as shown on the plans and specified herein. The approximate stations and limits of construction are indicated on the plans. The quantities of rocks indicated on the plans are estimates only, actual quantities may differ because of size and shape of rocks supplied. The Contractor shall conduct his own survey prior to bidding to verify all dimensions and conditions at the job site and determine the amount of imported rocks required.

1.2 SUBMITTAL

1.2.1 SAMPLES OF STONE

Representative samples of stone shall be delivered at the Contractor's expense to the State Testing Laboratory, Honolulu, Hawaii, at least 30 days in advance of the time when placing of stone is expected to begin. Sampling identification, preparation and transportation of samples shall be in accordance with ASTM D75-82.

PART 2 - PRODUCTS

2.1 MATERIALS

2.1.1 SOURCES OF STONE

The Contractor shall be responsible for locating and obtaining all stone required for this project. Stone may be either "field" stone or "new" stone obtained from existing operating commercial quarries as approved. All stones shall meet the requirements specified herein. The sources from which the Contractor proposes to obtain the material shall be selected well in advance of the time when the stones will be needed in the work. Approval of a source or sources of stone shall not be construed as approval of all material from that source or sources. The right is reserved to reject materials produced from localized areas, zones, or strata when such materials are unsuitable as determined by the Engineer. Any suitable size stone salvaged or recovered from required excavation and meeting the specified requirements may be used in the work.

2.1.2 STONE

All stones shall be dense, durable, and of a suitable quality to ensure permanence in the structure and in the climate in which it is to be used. Stones shall be free from cracks, seams, and other defects that would tend to increase unduly its deterioration from natural causes.

2.1.3 FIELD TESTING OF STONE

Prior to removal from the source, the Contractor shall field test representative rock pieces selected by the Engineer by dropping from a vertical height of ten feet on a solid rock surface or on a bed of comparable size rock proposed for the project. Broken, cracked, or otherwise damaged stones found by dropping will not be acceptable and shall be disposed of by the Contractor at his expense.

2.1.4 PHYSICAL REQUIREMENTS

Physical properties of the stones shall conform to the following requirements when tested in accordance with the respective ASTM Standards. Acceptance tests shall be performed on individual stone pieces 10 to 30 pounds in weight in lieu of the sizes specified in ASTM C 127. Test apparatus shall be improvised to accommodate the above stone sizes. All acceptance tests shall be made by and at the expense of the Contractor.

Bulk specific gravity (ASTM C127-81) not less than 2.5; and
Absorption not greater than four (4) percent (ASTM C127-81)

Duplicate sets of samples shall be taken, numbered, referenced and identified. One set shall remain at the Contractor's quarry (source) for later comparison with actual pieces of rock to be furnished for the project. The second set of samples shall be delivered at the Contractor's expense to the State Testing Laboratory, Honolulu, Hawaii, at least 30 days in advance of the time when placing of stone is expected to begin. Sampling identification, preparation and transportation of samples shall be in accordance with ASTM D75-82.

PART 3 - EXECUTION

3.1 CONSTRUCTION

The Contractor shall use equipment and workmen capable of performing the work. The construction methods which the Contractor intends to use shall be thoroughly discussed with the Engineer and approval of the methods obtained prior to commencing the operations.

3.1.1 PREPARATION OF GROUND SURFACE

The Contractor shall prepare the groin foundation to lines and grades indicated on the plans. All excavation shall be unclassified regardless of the nature of materials encountered.

3.1.2 UNDERLAYER STONE

Underlayer stones shall be placed to the lines, grades, and thicknesses indicated on the plans. Underlayer stone shall be placed to its full layer thickness in one operation and in such a manner to avoid displacing the underlying material. A tolerance of +/- 3 inches will be permitted. The desired distribution of sizes of stones throughout the mass may be obtained by selective loading, controlled dumping of successive loads during placing or by a combination of these methods.

Placing stones into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted.

3.1.3 ARMOR STONE

Armor stone shall be placed within the lines, grades and thicknesses indicated on the plans to provide a two-stone thick layer. Allowable tolerance for the slope stones shall be plus 6 inches from the thickness shown. Crest stone tolerance of plus 6 inches from the elevation indicated is allowed. Extremes in the indicated tolerance shall be avoided, and extremes of this tolerance over an area greater than 100 square feet are not permitted. Stones shall be individually keyed and fitted in the structure such that each stone shall be in contact with all adjacent stones. The size of the voids between all stones shall be kept to a minimum to prevent underlayer stone from passing through the voids. Chinking of void spaces using smaller stones is not permitted. Stones shall be generally rectangular in cross-section. The maximum aspect ratio (greatest dimension:least dimension) of any piece of armor stone shall be not greater than 3:1 when measured across mutually perpendicular axes. Not more than 25 percent of the stones within a gradation range shall have an aspect ratio greater than 2:1. Armor stone shall be placed on the prepared underlayer using equipment and methods suitable for handling the sizes indicated without damage to the stones. Placement of the armor stones shall proceed as soon as practicable after the underlayer placement to prevent wave action from displacing the underlayer material.

END OF SECTION

GENERAL NOTES

1. THE PROJECT OBJECTIVE CONSISTS OF THE FOLLOWING:
 - DEMOLITION OF THE EXISTING ELCOROCK® SANDBAG GROIN,
 - CONSTRUCTION OF A ROCK RUBBLE MOUND GROIN AND CIP CONCRETE CREST CAP,
 - RECOVERY FROM KUHIO BEACH EWA BASIN AND PLACEMENT ON KUHIO BEACH OF 1,000 CY ± 100 CY OF SAND ON KUHIO BEACH,
 - AND (ADDITIVE ITEM) REPAIR KUHIO BEACH EWA GROIN, INCLUDING RESETTING AND RESTACKING EXISTING STONE, PLACING NEW STONE, AND DEMOLISHING THE EXISTING CONCRETE CREST CAP AND CONSTRUCTING A NEW CIP CONCRETE CREST CAP.
2. THE PROJECT OWNER IS THE STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES (ENGINEER). THE ENGINEERING CONSULTANT IS SEA ENGINEERING, INC (CONSULTANT).
3. COORDINATES ARE BASED ON NAD83, HAWAII STATE PLANE, ZONE 3 (US SURVEY FEET).
4. ELEVATIONS ARE REFERRED TO MEAN SEA LEVEL (MSL). AZIMUTHS ARE MEASURED CLOCKWISE AND REFERRED TO TRUE SOUTH.
5. THE CONTRACTOR SHALL USE THE VERTICAL AND HORIZONTAL CONTROLS SPECIFIED AT MONUMENTS SHOWN ON DRAWING C-102.
6. ALL DISTANCES, DIMENSIONS, ELEVATIONS, AND COORDINATES ARE IN FEET, UNLESS NOTED OTHERWISE.
7. THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DIRECTION.
8. WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO ON THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR HIS OPERATIONS AND ALL COSTS SHALL BE BORNE BY THE CONTRACTOR.
10. CONTRACTOR SHALL NOT PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL, OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS, OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION SHALL BE PAYABLE BY THE CONTRACTOR.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND REMOVAL OF ALL SAND AND DEBRIS GENERATED BY HIS CONSTRUCTION WORK AND DEPOSITED AND ACCUMULATED ON ROADWAYS AND OTHER AREAS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROJECT AREA IN A CLEAN AND ORDERLY MANNER, AND FOR CLEARING AND REMOVAL OF ALL DEBRIS GENERATED BY HIS CONSTRUCTION WORK.
13. ALL EXISTING UTILITIES, ROADWAYS, WALKWAYS, WALLS, AND BUILDINGS, WHETHER OR NOT SHOWN ON THE DRAWINGS, SHALL BE PROTECTED FROM DAMAGE AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO THEM SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
14. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATION OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE ONE CALL CENTER AT (866) 423-7287 OR 811 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF EXCAVATION. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
15. ALL PROJECT WORK, INCLUDING DEMOLITION, STOCKPILING, AND GRADING, SHALL BE PERFORMED IN CONFORMANCE WITH APPLICABLE FEDERAL AND LOCAL LAWS AND REGULATIONS REGARDING WATER QUALITY AND WATER POLLUTION CONTROL. THE CONTRACTOR/OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
16. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
17. THE CONTRACTOR, AT HIS OWN EXPENSE SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
18. ALL CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANT FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.
19. NO BLASTING SHALL BE ALLOWED ON THIS PROJECT.
20. THE JOB SITE MUST BE LEFT IN A SAFE, SECURE CONDITION AT THE END OF EACH CONSTRUCTION WORK DAY. CLEAN UP AND REMOVE FROM THE JOB SITE ALL RUBBISH AND MAINTAIN THE PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
21. ALL EXISTING TREES, SHRUBS, AND SURROUNDING VEGETATION SHALL BE PRESERVED AND PROTECTED AS FAR AS PRACTICAL. REMOVAL OF ANY TREES SHALL REQUIRE APPROVAL BY THE ENGINEER. ANY DAMAGED VEGETATION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
22. DLNR WILL DELEGATE THE CONTRACTOR AS THE AUTHORIZED REPRESENTATIVE TO SUBMIT ALL NECESSARY DOCUMENTS AND REPORTS AS REQUIRED BY DOH AND US ARMY CORPS OF ENGINEERS DIRECTLY TO THEIR OFFICES AT NO COSTS TO THE STATE.

23. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS, AND OTHER PUBLIC RIGHTS OF WAY IN A CLEAN, SAFE, AND USABLE CONDITION. ALL SPILLS OF SAND, ROCK, OR CONSTRUCTION DEBRIS SHALL BE REMOVED IMMEDIATELY. ALL AREAS ADJACENT TO DESIGNATED WORK AREAS SHALL BE MAINTAINED IN A CLEAN, SAFE, AND USABLE CONDITION.
24. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING FOR PUBLIC SAFETY IN THE VICINITY OF WORK AREAS. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORK HOURS. ALL WORK AREAS SHALL HAVE SUITABLE SAFETY FENCING AND WARNING SIGNAGE TO INSURE PUBLIC SAFETY. CONTRACTOR SHALL ALSO PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE, AND SAFETY OF THE PUBLIC.
25. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. TEMPORARY PASSAGEWAYS SHALL BE ACCESSIBLE PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2, SECTIONS 201.3 AND 206.1.
26. THE PUBLIC BEACH AREA SHALL REMAIN OPEN TO THE MAXIMUM EXTENT POSSIBLE DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS TO THE BEACH AREA THROUGHOUT THE CONSTRUCTION PERIOD.
27. UPON COMPLETION OF CONSTRUCTION THE ENTIRE JOB SITE SHALL BE CLEANED OF ALL CONSTRUCTION-RELATED RUBBISH AND DEBRIS.
28. SHOULD HISTORIC REMAINS SUCH AS ARTIFACTS, BURIALS, CONCENTRATIONS OF SHELL OR CHARCOAL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL CEASE IMMEDIATELY IN THE IMMEDIATE VICINITY OF THE FIND. THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION DIVISION (808-692-8015), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND APPROPRIATE MITIGATION MEASURES, IF NECESSARY.

GENERAL ARMOR STONE NOTES:

1. ALL STONE SHALL HAVE A MINIMUM SPECIFIC GRAVITY OF 2.5, AND BE WELL GRADED WITHIN THE ALLOWABLE SIZE RANGES.
2. STONE SHALL BE DENSE, DURABLE, FREE OF CRACKS OR DEFECTS, AND OF A SUITABLE QUALITY TO INSURE PERMANENCE IN THE STRUCTURE. ALL STONE SHALL BE WASHED AND FREE OF SILT, SEDIMENT, EARTHEN MATERIAL, AND ANY CONTAMINANTS.
3. ARMOR STONE SHALL BE PLACED WITHIN THE LINES, GRADES, AND THICKNESSES SHOWN ON THE PLANS.
4. ARMOR STONE SHALL BE INDIVIDUALLY KEYED AND FITTED IN THE STRUCTURE SUCH THAT EACH STONE SHALL CONTACT AND FIRMLY ABUT SURROUNDING ARMOR STONE AND UNDERLAYER STONE.
5. ALL EXCESS STONE SHALL BE REMOVED AND DISPOSED OF FOLLOWING COMPLETION OF CONSTRUCTION.

6. CONCRETE CREST CAP SHALL BE CAST-IN-PLACE. FLEXIBLE FORMWORK SHALL BE USED TO FORM THE CONCRETE CAP SUCH THAT IT CLOSELY ABUTS THE SURROUNDING ARMOR STONE. CIP CONCRETE CAP IS INTENDED TO BEAR ON ARMOR STONE. CHINKING AND VOID FILLING IS ALLOWED TO MITIGATE CONCRETE LEAKAGE. THE FORMWORK SHALL BE CAPABLE OF CONTAINING CONCRETE DURING PLACEMENT AND PREVENTING LEAKS OF CONCRETE. ALL TOP CONCRETE SURFACES SHALL RECEIVE A HEAVY BROOM FINISH 1/16-1/8" DEPTH PERPENDICULAR TO EDGE OF CONCRETE, SEE SPEC 03320. CONCRETE CREST CAP SHALL HAVE A 3" RADIUS ROUNDED CORNERS ON BOTH TOP EDGES. CONCRETE CONTROL JOINTS ARE SHOWN ON PLANS.

NEW GROIN CONSTRUCTION NOTES:

1. REMOVE EXISTING SHORELINE MATERIAL AND DEBRIS (ROCKS, RUBBLE, SANDBAGS, SAND, ETC.) AS NECESSARY TO CONSTRUCT THE GROIN TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS. BEACH SAND SHALL BE STOCKPILED ON THE BEACH CREST ABOVE THE +6 FOOT ELEVATION WITHIN THE WORKSITE STAGING AREA, AND PLACED ADJACENT TO THE NEW GROIN FOLLOWING COMPLETION OF CONSTRUCTION. ALL CONCRETE DEBRIS AND MANMADE MATERIAL SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE DISPOSAL AREA.
2. NEW GROIN ARMOR STONE SHALL CONSIST OF 2,100 TO 3,400 LB STONE. ARMOR STONE SHALL BE UTILIZED WITHIN THE ALLOWABLE SIZE RANGE AS NECESSARY TO MEET THE LINES AND GRADES OF THE GROIN AS SHOWN ON THE PLANS. A MINIMUM OF 50% OF THE ARMOR STONE BY VOLUME SHALL BE GREATER THAN 2,700 LBS.
3. UNDERLAYER STONE SHALL CONSIST OF 210 TO 340 LB STONE.
4. SAND GENERATED FROM SANDBAG GROIN DEMOLITION AND NEW GROIN CONSTRUCTION SHALL BE STOCKPILED ON SITE. DISPOSAL OF SAND OFF SITE IS NOT PERMITTED.
5. ALL SAND OBTAINED FROM DEMOLITION AND EXCAVATION SHALL BE PLACED ON THE ACTIVE BEACH PRIOR TO ANY SAND RECOVERY FROM KUHIO BEACH EWA BASIN.
6. CONCRETE CREST CAP CONTROL JOINTS TO BE SPACED AS SHOWN.
7. THE GENERAL CONSTRUCTION METHODOLOGY AND SEQUENCE SHALL BE AS FOLLOWS:
 - A. IMPLEMENT BEST MANAGEMENT PRACTICES PER G-102, C-103, AND SPECIFICATIONS.
 - B. REMOVE EXISTING ELCOROCK® SANDBAGS. SAND FROM THE BAGS SHALL BE PLACED AND SPREAD ABOVE MHHW ON THE DRY BEACH IN BETWEEN THE NEW GROIN AND THE EXISTING EWA GROIN.

- C. EXCAVATE SAND AS NECESSARY FOR GROIN CONSTRUCTION. STRUCTURE TOE DEPTH IS TO BE PLACED ON HARD BOTTOM OR -3.0 FT MSL, WHICHEVER COMES FIRST. GEOTEXTILE FABRIC IS TO BE PLACED IF HARD BOTTOM IS NOT REACHED.
- D. PLACE UNDERLAYER STONE FROM THE ROOT OF THE GROIN TOWARDS THE HEAD FOLLOWING ALIGNMENT SHOWN ON C-201 AND C-202.
- E. STARTING FROM THE TERMINUS OF THE STRUCTURE AND MOVING TOWARDS THE ROOT PLACE ARMOR STONES, SET UP FLEXIBLE FORMWORK, AND CAST IN PLACE CONCRETE IN 10 FOOT SECTIONS. CONCRETE CREST CAP SHALL HAVE A HEAVY BROOM FINISH 1/16-1/8" DEPTH PERPENDICULAR TO EDGE OF CONCRETE AND HAVE 3" RADIUS SMOOTH CORNERS ON BOTH TOP EDGES.

SAND PLACEMENT NOTES:

1. 1,000 CY ± 100 CY OF SAND SHALL BE RECOVERED FROM KUHIO BEACH EWA BASIN AND PLACED ON KUHIO BEACH PER THE PLANS SHOWN ON C-203. SAND WILL BE COLLECTED FROM THE KUHIO BEACH EWA BASIN DRY BEACH AREA FROM THE CREST LANDWARDS TOWARD THE BACKSHORE STRUCTURES (WALLS, STEPS, ETC.). DO NOT REMOVE SAND FROM BELOW +5 FT MSL.
2. SAND EXCAVATED FROM THE NEW GROIN CONSTRUCTION AND SAND RELEASED FROM THE DEMOLITION OF THE SANDBAG GROIN SHALL NOT COUNT TOWARDS THE 1,000 CY ± 100 CY OF SAND COLLECTED FROM KUHIO BEACH EWA BASIN.
3. DEMOLITION OF ELCOROCK® SANDBAG GROIN WILL RESULT IN THE RELEASE OF PREVIOUSLY APPROVED INLAND SAND. SAND FROM THE BAGS IS TO BE PLACED ONTO KUHIO BEACH. THE CONTRACTOR IS RESPONSIBLE FOR SANDBAG MATERIAL DISPOSAL.
4. PLACE SAND IN MAXIMUM 25 FOOT LONG INCREMENTS. BEACH PROFILES SHALL BE SURVEYED IMMEDIATELY PRIOR TO AND FOLLOWING SAND PLACEMENT TO VERIFY THE QUANTITY OF IN-PLACE SAND.
5. SAND SHALL BE PLACED AFTER THE CONSTRUCTION OF THE NEW GROIN AND REPAIRS OF THE EWA GROIN (ADDITIVE ITEM). SAND SHALL BE PLACED TO THE DESIGN BEACH SLOPE OF 1V:6H AS SHOWN ON C-204.
6. EQUIPMENT USED TO MOVE AND DISTRIBUTE THE SAND TO THE DESIGN BEACH PROFILES SHALL BE THE SMALLEST PRACTICABLE EQUIPMENT IN ORDER TO MINIMIZE NOISE AND INCONVENIENCE TO ADJACENT PROPERTIES.
7. NO EQUIPMENT SHALL OPERATE IN THE WATER OR BELOW THE MHHW ELEVATION (+1.08 FT MSL).
8. SAND MAY BE PLACED UP TO THE EDGES OF THE NEW/EXISTING HARD FEATURES (NEW GROIN AND EWA GROIN).

EWA GROIN REPAIR NOTES (ADDITIVE ITEM):

1. REMOVE EXISTING SHORELINE MATERIAL AND DEBRIS (ROCKS, RUBBLE, SANDBAGS, SAND, ETC.) AS NECESSARY TO REPAIR THE GROIN AS SHOWN ON C-205 AND C-206. CONCRETE DEBRIS AND MANMADE MATERIAL SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE DISPOSAL AREA.
2. REPLACEMENT ARMOR STONE FOR TYPE 1, TYPE 2, AND TYPE 3 REPAIRS SHALL CONSIST OF STONES WEIGHING BETWEEN 1,000 TO 3,400 LBS. ARMOR STONE SHALL BE UTILIZED WITHIN THE ALLOWABLE SIZE RANGE AS NECESSARY TO MEET THE GROIN REPAIRS AS SHOWN ON THE PLANS. ARMOR STONE MAY BE SOURCED FROM ON-SITE OR SUPPLIED BY CONTRACTOR PROVIDED IT FALLS WITHIN THE WEIGHT RANGE SPECIFIED BY THE ENGINEER AND CONFORMS TO SPECIFICATIONS 02486.
3. FILL VOIDS WITH A SINGLE STONE. STONE SIZE SHALL BE CAREFULLY SELECTED TO FIT IN EACH RESPECTIVE VOID.
4. REMOVE AND REPLACE EXISTING CONCRETE CREST CAP WITH NEW CIP CONCRETE CREST CAP. MATCH ELEVATIONS AND SLOPE SHOWN ON PLAN.
5. TOE STONES SHALL WEIGH 3,000 LBS MINIMUM.
6. THE GROIN CORE VARIES IN CONSTRUCTION AND SIZE (INCLUDING FORMED CONCRETE AND CONCRETE BAGS). THE DEPTH AND EXTENT OF THE CORE ARE UNKNOWN. LIMITS OF REMOVAL AND EXPOSURE SHALL BE AS DIRECTED BY THE ENGINEER.

REVISION NO.		SYMBOL		DESCRIPTION		SHT. OF		DATE		APPROVED	
								5/14/26		a a	
ADDENDUM NO. 1 STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION KUHIO BEACH RESTORATION - GROIN CONSTRUCTION, SMALL SCALE BEACH NOURISHMENT, AND GROIN REPAIRS GENERAL NOTES - 1											
DESIGNED: GT				SUBMITTED: APRIL 20, 2026							
DRAWN: RH				DATE: APRIL 20, 2026							
CHECKED: DS				SCALE: N/A							
APPROVED:								04/30/2028		DRAWING NO.	
CHIEF ENGINEER								05/15/2026		G-101	
								DATE			

Agenda

Pre-Proposal Conference

**Job No. E00CO30A
Kuhio Beach Restoration Groin Construction,
Small Scale Beach Nourishment, and Groin Repairs
Honolulu, Oahu, Hawaii**

Date: May 5, 2026 @ 9:30 a.m.

Location: Kuhio Beach, Waikiki

1. Introductions
2. Brief Description of Project and Scope:
The proposed project includes the demolition of the existing elcorock sandbag groin and construction of a rock rubble mound groin, placement of sand on Kuhio Beach, and repairs of Kuhio Beach Ewa Groin (additive item).
3. Proposals are due on May 21, 2026, at 3:00 p.m. Proposals shall be uploaded to the HlePRO website.
4. Last day to submit questions is May 11, 2026, at 2:00 p.m.
5. Questions Note: All answers and comments are unofficial; official answers will be distributed in an Addendum.
6. **Walk through of project area.**

SIGN-IN SHEET
PRE-BID CONFERENCE

Job Number: E00CO30A

Date: May 5, 2026

Time: 9:30 a.m.

Job Title: Kuhio Beach Restoration Groin Construction, Small Scale Beach Nourishment, and Groin Repairs
Honolulu, Oahu, Hawaii

	NAME	AGENCY	PHONE NO.	EMAIL ADDRESS
1	Melissa Agbayani	DLNR ENG		melissa.m.agbayani@hawaii.gov
2	Rachael Han	Sea Engineering (SE)	808 470 5227	rhan@seaengineering.com
3	DAVID SMITH	SEA ENG	808 460 3434	DSMITH@SEAENGINEERING.COM
4	Keith MacKenzie	Healy Tibbitts	808-368-5747	KMacKenzie@healytibbitts.com
5	GIANNICOLA TUMINO	SEA ENGINEERING	808 460 3443	gtumino@seaengineering.com
6	Kawai Maa	Kiewit	808 808 208 3576	kawai.maa@kiewit.com
7	KOSNER LEWIS	KIEWIT	808 583 0266	KOSNER.LEWIS@KIEWIT.COM
8	Gordie Meyer	Orion	808 400 1926	gmeyer@orn.net
9	Matt Minton	ORION	(609) 42-7230	mminton@orn.net
10	Maifala Laa	Orion	(808) 275-7706	m1aa@orn.net
11				
12				
13				
14				