



O&M REPORT
FOR Kahului Bay Prevention & Mitigation of Shore Damages
Honolulu Engineer District
CEPOH-EC-T

KahuluiBaySPP11rpt-spp.doc

1. Project Name: Kahului Bay Prevention & Mitigation of Shore Damages
2. Date of Inspection: October 14, 2010
3. Inspection Personnel:

<u>Name</u>	<u>Agency/Office</u>	<u>Telephone No.</u>
a. Dan Meyers	COE	438-8875

4. Discussion:

The Kahului Bay Preventive and Mitigation of Shore Damages Project was authorized under Section 111 of the River and Harbor Act of 1968. The Detailed Project Report, dated August 1973, concluded that the Kahului Federal navigation project contributed to the erosion along the south shore of Kahului Harbor and recommended that erosion control improvements be made along this south shoreline. The improvements were undertaken and construction was completed in April 1976. The project consists of an 890-foot revetment (which included the rehabilitation of an existing 380-foot long revetment, built by the State in 1964), a 280-foot long west groin, a 100-foot long offshore breakwater, a 100-foot long extension to an existing 200-foot long east groin (also, built by the State in 1964), and the beach replenishment of 6,550 cubic yards of sand. The owners of the hotels constructed the shoreline revetment, between the east and west groins, back in the late 1960's.

East Groin (300 LF) :



- a. Sta. 0+10, Overview of the East Groin.



- b. Sta. 0+00, structure covered with vegetation, unable to inspect.



- c. Sta. 0+75, Left Side (LS) as looking toward the head of the groin - 1 ea. cracked armor stone, no changes this year.



- d. Sta. 1+00, 1 ea. dislodged armor stone - no obvious void in the structure. No change this year.



- e. Sta. 2+00, Overview, photo for reference. No changes this year.



Beach Fill Area:



- a. Overview of the beach fill area. Beach profile looks the same as it did in 1997 inspection report.

West Groin (280 LF):



- a. Sta. 1+48, Left Side (LS), Scattered stones are remnants of the old WWII LST landing site. No changes this year.



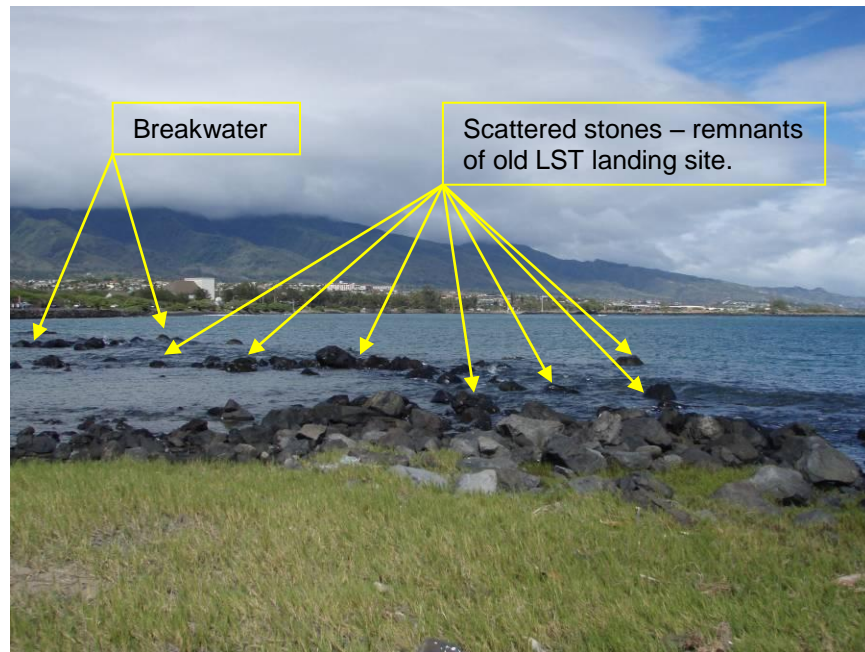
b. Sta. 2+00, 1 ea. perched armor stone. No changes this year.



c. Sta. 1+50, Centerline Crest (CL), Scattered stones are remnants of the old LST landing site. No changes this year.



Breakwater (100 LF) :



- a. Breakwater Overview. Scattered stones are remnants of the old LST landing site.

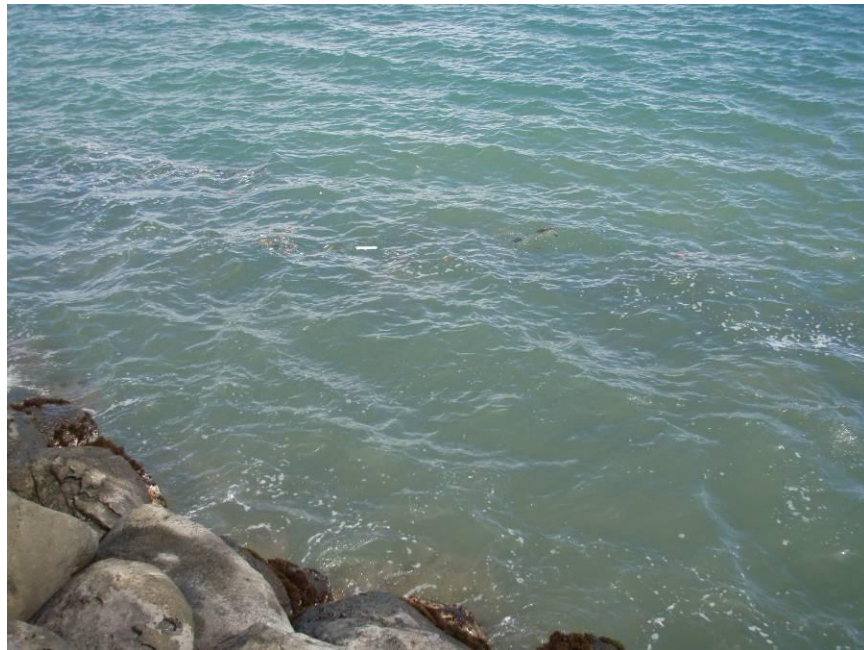
Revetment (890 LF) :



- a. Sta. 0+51, There appears to be additional sideslope sliding this inspection. Continue to monitor this section of revetment.



- b. Sta. 0+68, Monitor settling at the crest and remove tree from structure.



- c. Sta. 2+00, 3 ea. Dislodged armor stones, slight change this year.



- d. Sta. 2+63, 1 ea. Cracked armor stone, photo for reference.
No changes this year.



- e. Sta. 2+97, Monitor 1 ea. missing armor stone at the toe.
No change this year.



- f. Sta. 3+60, Monitor Settling at the crest. No changes this year.



- g. Sta. 5+28 - Sta. 5+40, Monitor 3 ea. flipped as armor stones and settling on crest.



h. Sta. 7+81, Monitor void at the crest. Road culvert blocked.



i. Sta. 8+90, Monitor settling at crest. No additional settling this inspection.



- j. Sta. 8+90, Monitor settling at crest. No additional settling this inspection (Close-up Photo).



- k. Sta. 9+06, End of Project.



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5. Conclusion:

The overall project is in marginal condition. The East and West Groin structures are in good condition, although there is some vegetation growth on the root section of the East Groin. The Revetment is in good condition. The breakwater is in marginal condition.

Note: The Maui County DPW has installed Jersey Barriers along the Kahului Beach Road to minimize wave overtopping of the Revetment structure.

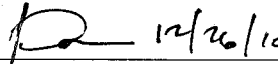
6. Recommendations:

Recommend that a study be conducted to evaluate the present condition of the breakwater structure to determine if a repair to the structure is required. The study should also include a historical beach profiling of the project area where sand was placed back in 1976, to determine if the shoreline has stabilized over the years or if there is a continuing erosion of the shoreline. Recommend the removal of the vegetation on the root of the East Groin and the removal of the tree at Sta. 0+68 on crest of the Revetment.

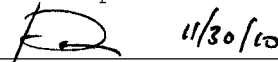
7. Proposed Actions:

The Corps Honolulu District will budget for an Initial Appraisal report to evaluate the present condition of the breakwater structure and adjacent shoreline, to determine if a repair to the breakwater and renourishment of the shoreline is required. The report will be conducted, subject to the availability of funds.


SIGNED:

 12/26/10
Dan Meyers, CEPOH-EC-T
PCS Inspector


SIGNED:

 11/30/10
Pat Tom, CEPOH-EC-T
Technical Manager, CW O&M (PCS)

SIGNED:

 12/15/10
Michael Wong P.E., Ch, CEPOH-EC-T
Chief, Civil Works Technical Branch

SIGNED:

 12/17/10
Lorayne Shimabuku, P.E. CEPOH-PP-C
Program Manager, CW O&M

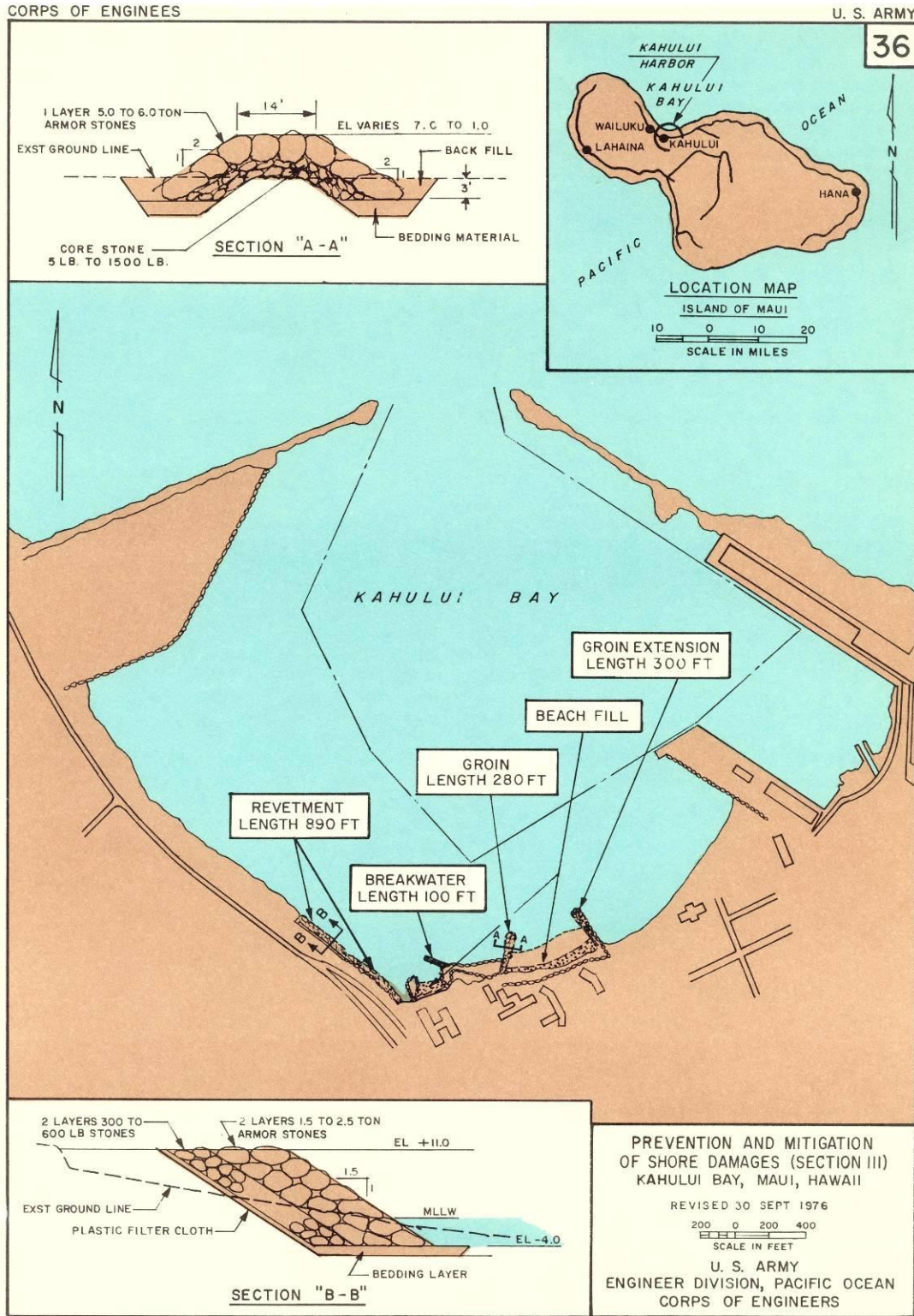
ATTACHMENTS:

1. Index Map (8-1/2"x11")
2. Fact Sheet (8-1/2"x11")



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PREVENTION AND MITIGATION OF SHORE DAMAGES
KAHULUI BAY, MAUI, HAWAII

CONDITION OF IMPROVEMENT 30 SEPTEMBER 1989

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized under Section 111 of the River and Harbor Act of 1968, Public Law 90-483. Provides for (a) rubblemound breakwaters on the east and west sides of the harbor, approximately 2,766 and 2,315 feet in length, respectively; (b) an entrance channel 600 feet wide between the breakwaters; and (c) a harbor basin 2,050 feet wide, 2,400 feet long, and 35 feet deep. The existing revetment located slightly west of the central section of the shoreline and adjacent to the road was initially constructed by the State in 1964, and later repaired by the State and County of Maui in 1966 and 1968.

PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in April 1976. The completed portion of the project provides for: (a) 890 feet long stone revetment along Kahului Beach Road; (b) beach replenishment of 6,550 cubic yards of sand; (c) a 100-foot long breakwater; and (d) west groin, 280 feet, and east groin, 300 feet.

Work Remaining: None.

COST OF CONSTRUCTION:

	<u>New Work</u>
<u>Completed Works:</u>	
United States Funds	\$751,867
Total Costs	\$751,867

RANGE OF TIDES: The range of tide between mean lower low water and mean higher high water is 2.2 feet and the extreme range is 4.5 feet.