



**OPERATIONS AND MAINTENANCE REPORT**  
**FOR NAVIGATION PROJECTS**  
**Honolulu Engineer District**  
**CEPOH-EC-T**

*Kalaupapa04rpt-ldg.doc*

1. Project Name: KALAUPAPA HARBOR

2. Date of Inspection: October 16, 2003

3a. Inspection Personnel:

	<u>Name</u>	<u>Agency/Office</u>	<u>Telephone No.</u>
1.	Dan Meyers	COE (CEPOH-EC-T)	438-8875
2.	LTC David Press	COE (CEPOH-DE)	438-1069



4. Discussion:

Mr. Mike McCarten, Administrator, DOH, (97-808-567-6613) was off island and not available for discussions. There was activity at the harbor as NPS was off-loading a barge of base course material during the inspection. At the previous year's inspection McCarten stated there had been no apparent changes within the project limits however; there were concerns with the erosion and undermining of a bulkhead wall adjacent to



the existing landing. The noted discrepancies and reference photographs are as follows:



a. Sta. 0+00, Oceanside (OS), overview.



b. Sta. 0+00 to Sta. 1+00, several perched and placed armor stones resting on the top of the sideslope.



c. Sta. 0+75, sideslope failure, oceanside (OS), 20' l x 10' W x 6' D, underlayer & some core material exposed, one large armor stone perched.



d. Sta. 0+98, OS, missing armor stones and sideslope steepening.



e. Same as above, Sta. 0+98, OS, missing armor stones and sideslope steepening, photo taken from top of sideslope to toe.



f. Sta. 1+30 to Sta. 0+00, OS, sideslope overview.



g. Sta. 1+35, Harborside (HS), several armor stones resting adjacent the toe. (Possibly from Sta. 1+98, HS head area).



h. Sta. 1+60, HS, overview of armor stones.



i. Sta. 1+75, OS, overview of armor stones.



j. Sta. 1+75, HS, Perched armor stone.



k. Sta. 1+98, HS, missing armor stones from top layer.



l. Reference photo FY 03.



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m. Non-Federal Area - Reference photo.

5. Conclusion:

The overall rating of the project is **FAIR**. There are indications of armor stone movement at the breakwater's root, trunk areas on the oceanside of the structure and additional armor stone displacement observed at the harborside head area.

Signed: \_\_\_\_\_

Dan Meyers, CEPOH-EC-T

Signed: \_\_\_\_\_

James Pennaz, P.E., Ch, CEPOH-EC-T

Enclosure(s)

1. FY 2000 Photos
2. Site Plan & Fact Sheet
3. Color Plan View
4. B/W Details
5. 1984 Aerial Photos



2000 Photo - Sta. 1+56, OS, 1 cracked in-place armor stone.



2000 Photo - Sta. 1+70, HS, concrete spalling and rust noted at footing of breakwall.



2000 Photo - Sta. 1+90, HS, concrete spalling and rust noted at footing of breakwall.



2000 Photo - Sta. 1+95, HS, 1 armor stone dislodged, void, at the crest on the hinge.



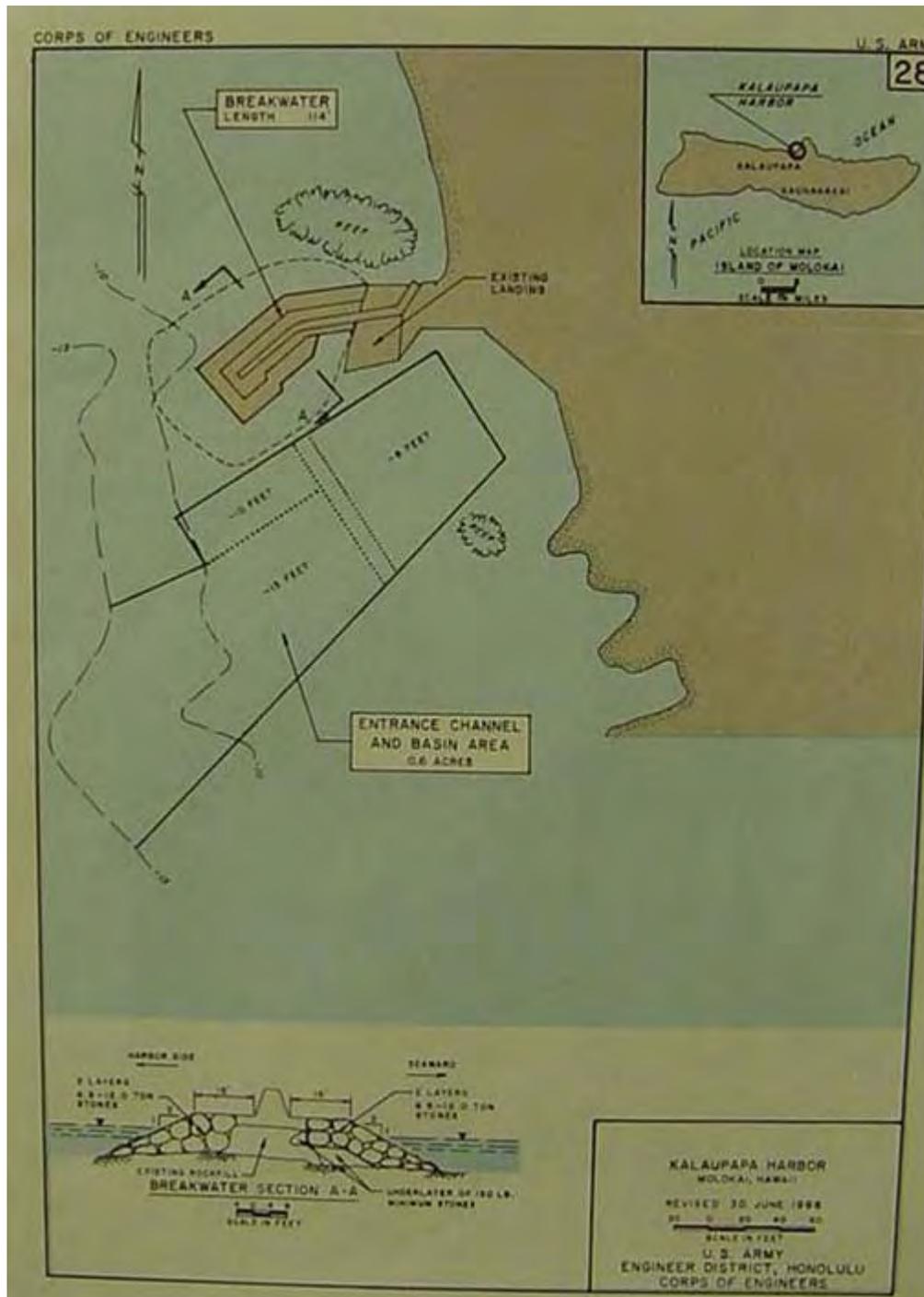
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KALAUPAPA HARBOR, MOLOKAI, HAWAII  
Condition of Improvement, 30 June 1973

LOCATION: Kalaupapa Harbor is on the north coast of the island of Molokai, approximately 57 nautical miles east of Honolulu.

AUTHORITY: The project was authorized under Section 107, River and Harbor Act of 1960.

PROJECT: The existing project provides for (a) breakwater 114 feet long, and (b) basin 110 feet in width at the seaward end and 70 feet near shore, 305 feet long and 13 feet deep for the seaward 210 feet, a 10-foot wide transition from 13 to 8 feet, and 8 feet for the shoreward portion.

PROGRESS OF WORK: The project was completed in September 1967.

COST OF CONSTRUCTION:

	<u>New Work</u>	<u>Maintenance</u>	<u>Total</u>
Federal (Corps of Engineers) Funds	\$157,997	\$3,127	\$161,124

RANGE OF TIDE: The range of tide between mean lower low water and mean higher high water is 1.8 feet, and extreme tidal range under normal conditions is 3.8 feet.

CONTROLLING DEPTHS: Controlling depth as of September 1967 was 8 feet in the barge basin.





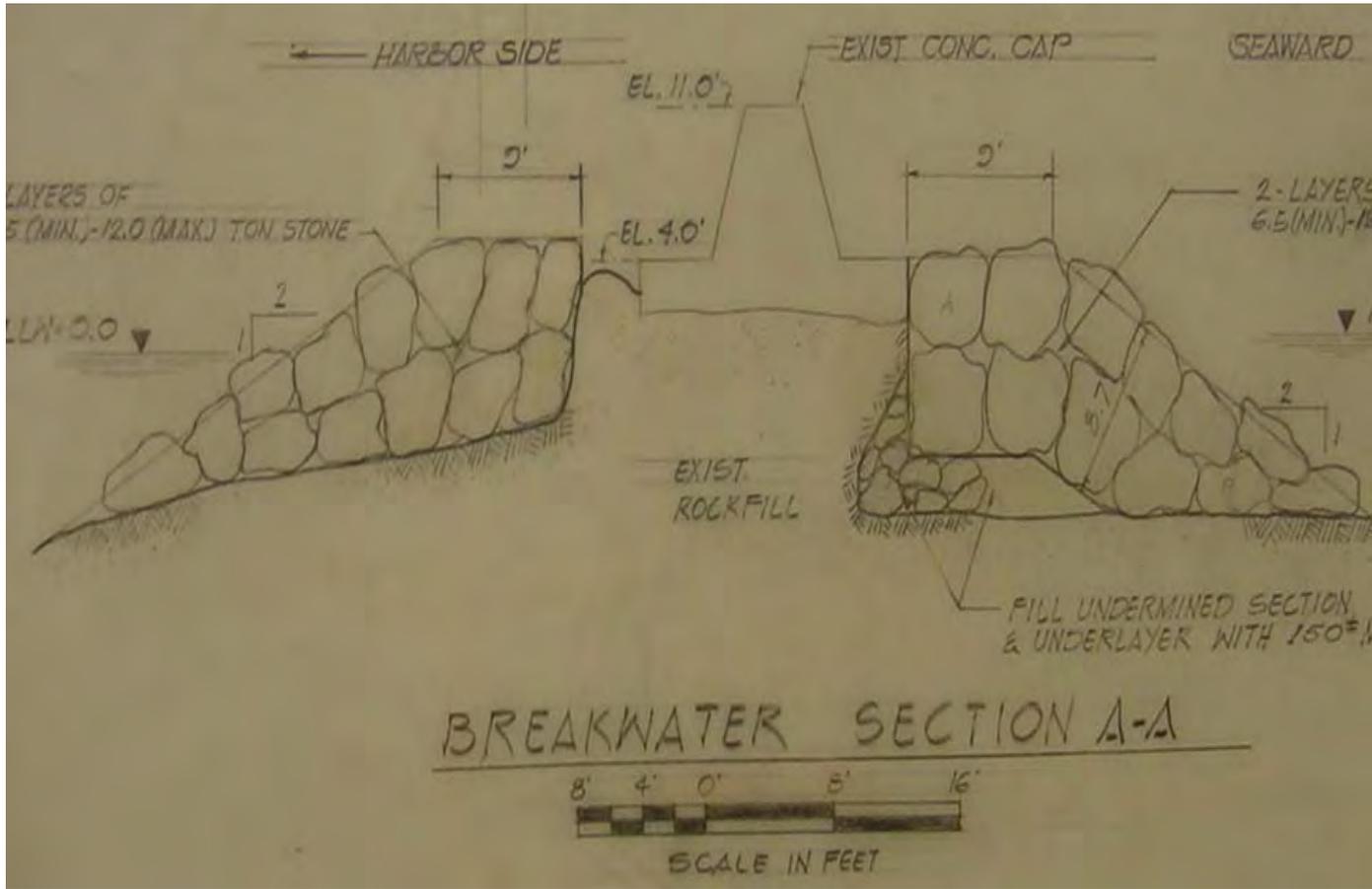
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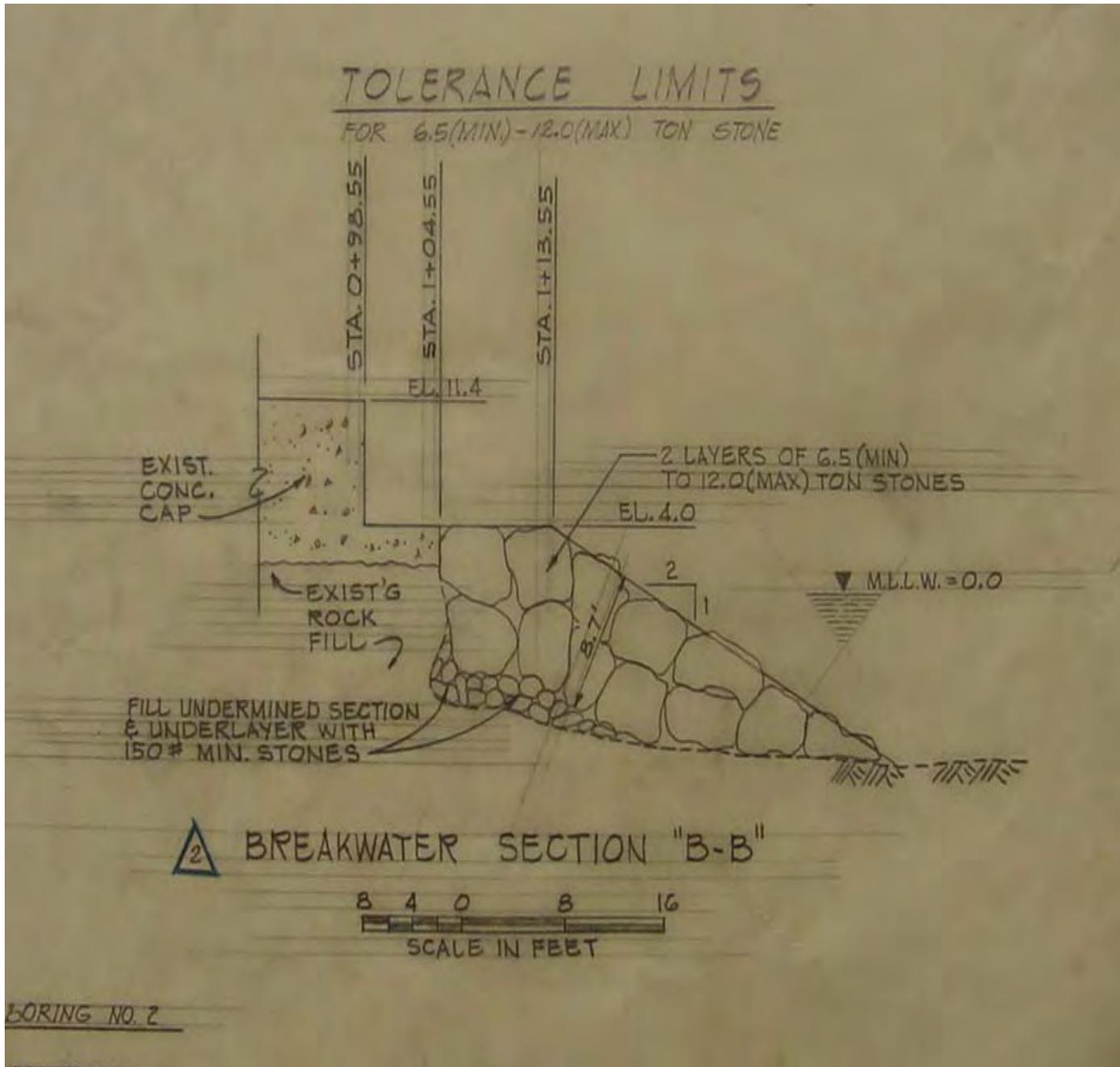
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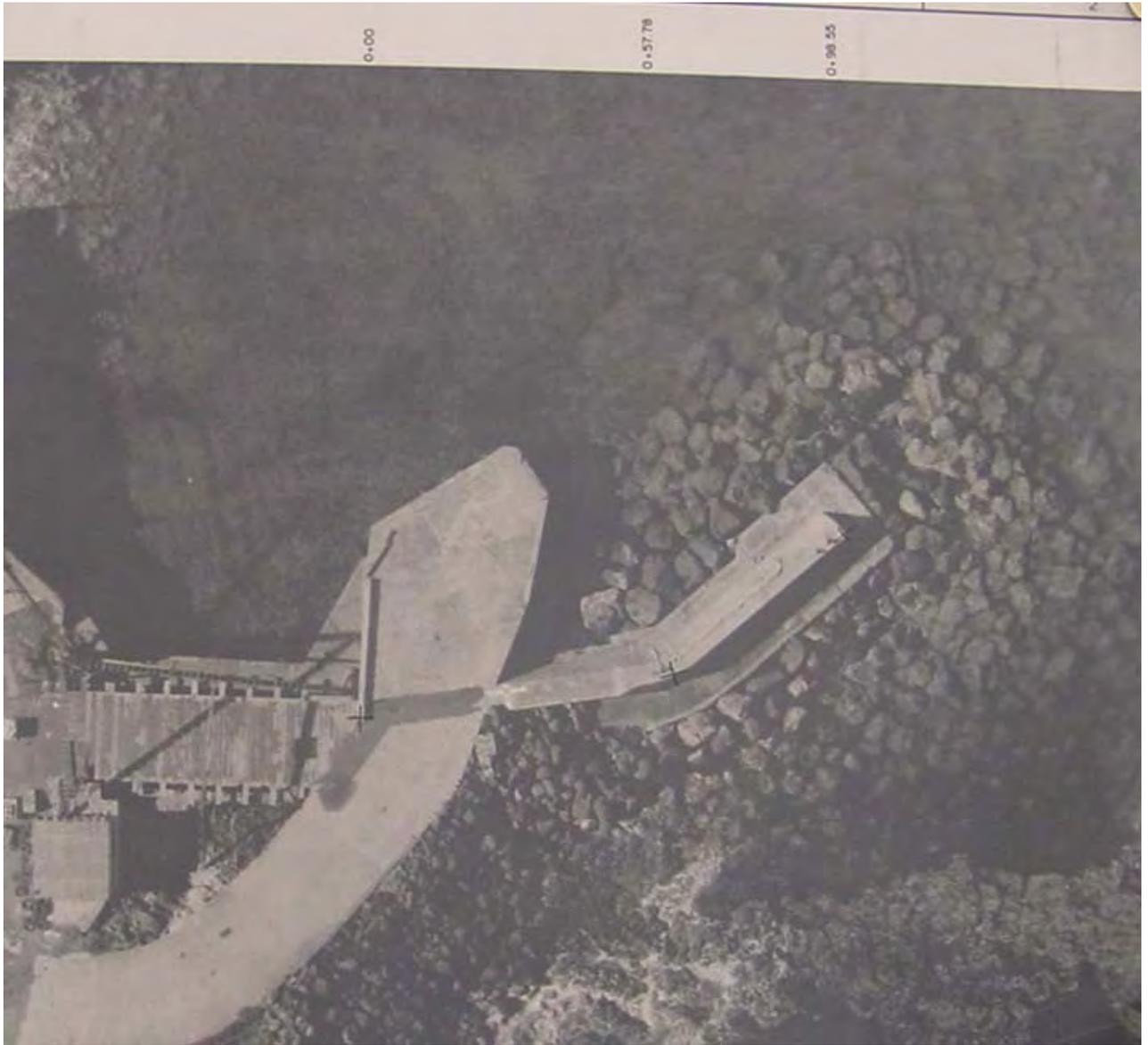
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