

**O & M INSPECTION REPORT
FOR NAVIGATION AND SHORE PROTECTION PROJECTS**

1. Project Name: Auasi SBH
2. Date of Inspection: March 9, 2005
3. Inspection Personnel:

	<u>Name</u>	<u>Agency/Office</u>	<u>Telephone No.</u>
a.	Dan Meyers	COE	438-8875
b.	Jessica Hays	COE	438-1680

4. Discussion:

East Revetment/Breakwater/Jetty:

<u>Station</u>	<u>Description</u>
0+00 to 0+77	Revetment Reach 1
0+77 to 1+65	Revetment Reach 2
1+65 to 2+87	Breakwater
0+00 to 0+90	East Jetty

The structure was measured as described in the following. Revetment Reach 1 begins at the structure's joint with the embankment to the road and ends at the approximately 90-degree turn of the centerline to the southwest. Revetment Reach 2 begins at the end of Revetment Reach 1 and extends to the end of a transition area visible by a change in structure crest elevation. The Breakwater begins at the end of this transition area and extends to the end of the structure on this alignment. The Jetty begins at its joint with the Breakwater, at the first stone on centerline at a lowered elevation, and extends to the end of the structure on this alignment.

The major damages / deficiencies were as follows:

Revetment and Breakwater:



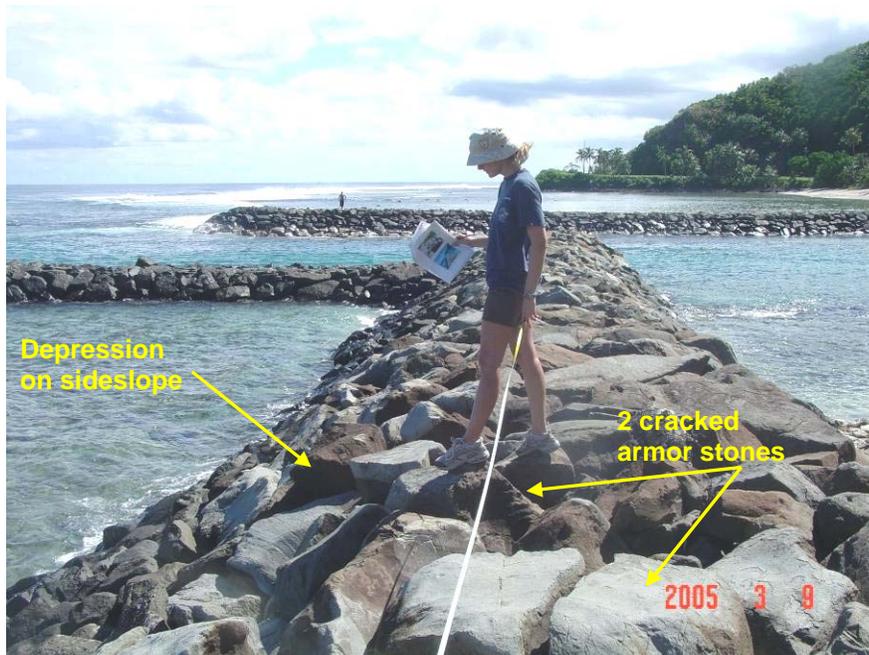
a. Sta. 0+22, HS, Void and 2 dislodged armor stones resting near toe.



b. Sta. 0+25 to 0+77, Overview of Revetment Reach 1, no damage noted along this reach.



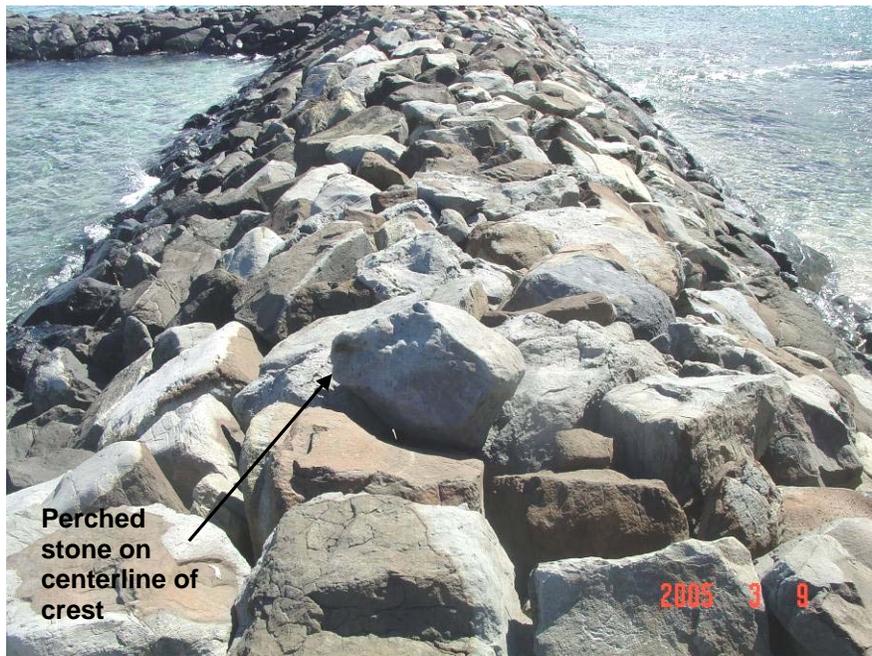
c. Sta. 1+04, OS, settling of sideslope and crest hinge, approx. 5ft in diameter.



d. Sta. 1+29, OS, Depression on sideslope and 2 cracked armor stones on crest.



e. Sta 1+29, Fishing pole holder, noted for station reference.



f. Sta. 1+65, End of revetment and crest elevation change, single perched stone on centerline.



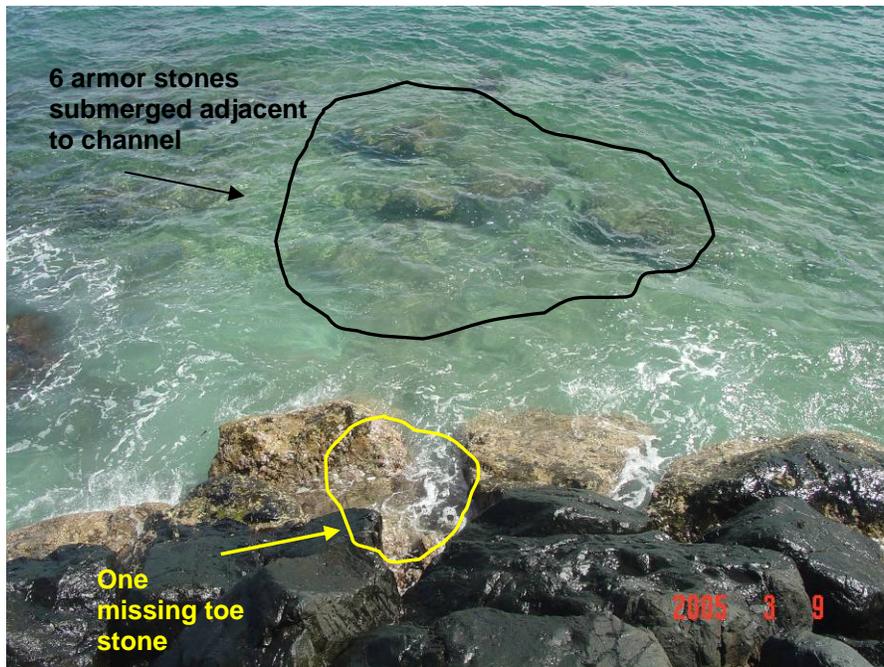
g. Sta 1+91 to 2+87, Overview of breakwater and joint with west jetty.



h. Sta 2+52, Minor settling of crest and hinge.

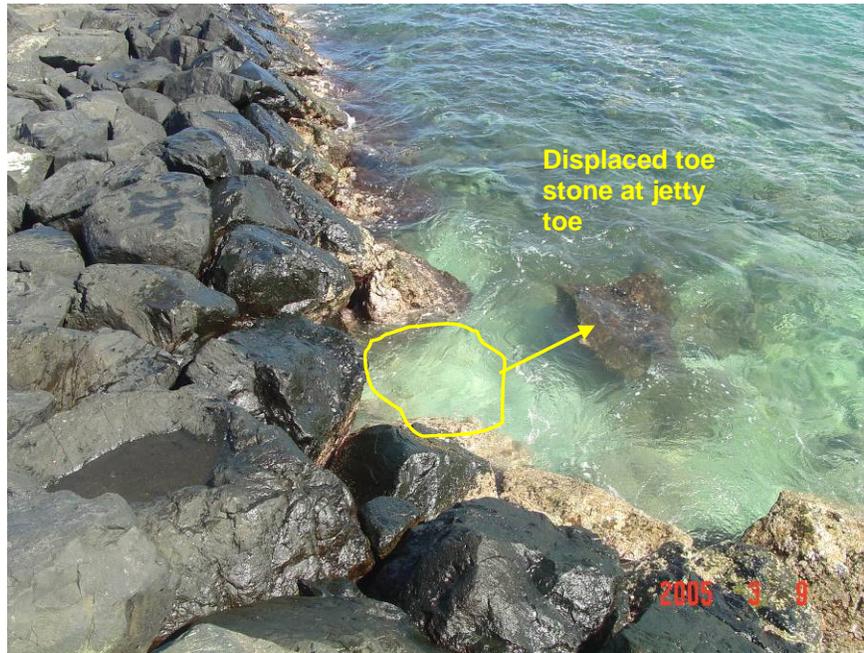


i. Sta 2+87, Small flipped stone near end of breakwater.

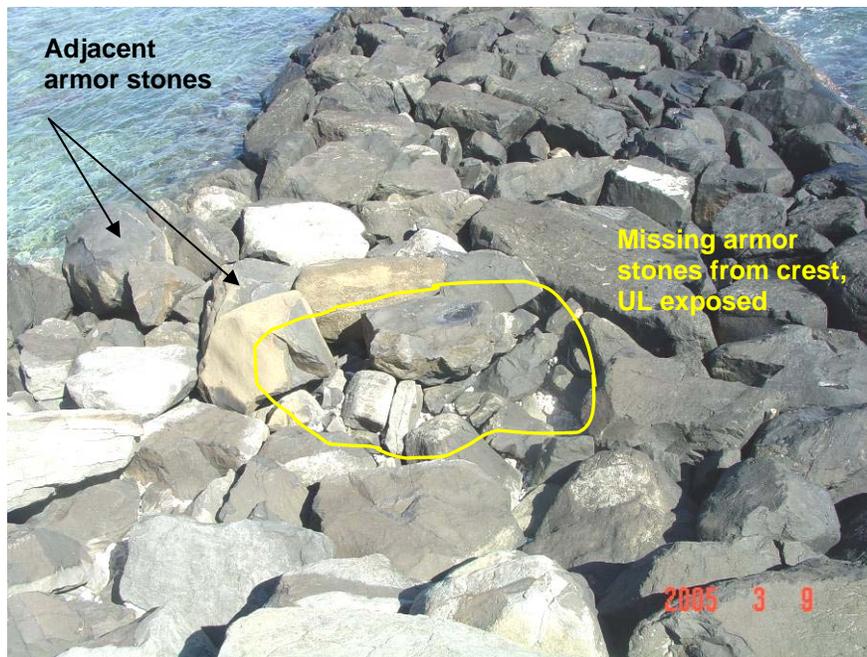


j. Sta 2+87, End of breakwater, one missing toe stone, 6 armor stones adjacent to channel.

East Jetty:



k. Sta. 0+00, HS, toe stone displaced at breakwater/jetty joint. Note that jetty station 0+00 is located at first stone of lowered elevation.



l. Sta. 0+05, Crest missing armor stone with underlayer exposed, same as in previous inspections. 2 armor stones adjacent may have been dislodged from this area.



m. Sta. 0+17, Crest missing armor stone with underlayer exposed.



n. Sta 0+47, OS, Void and flipped armor stone near centerline.



o. Sta 0+48, HS, Flipped armor stone and adjacent void.



p. Sta. 0+90, OS, Head of jetty is in good condition.



p. Sta. 0+90, HS, head of jetty is in good condition.



r. Overview of East Revetment/Breakwater and Jetty.

West Jetty:

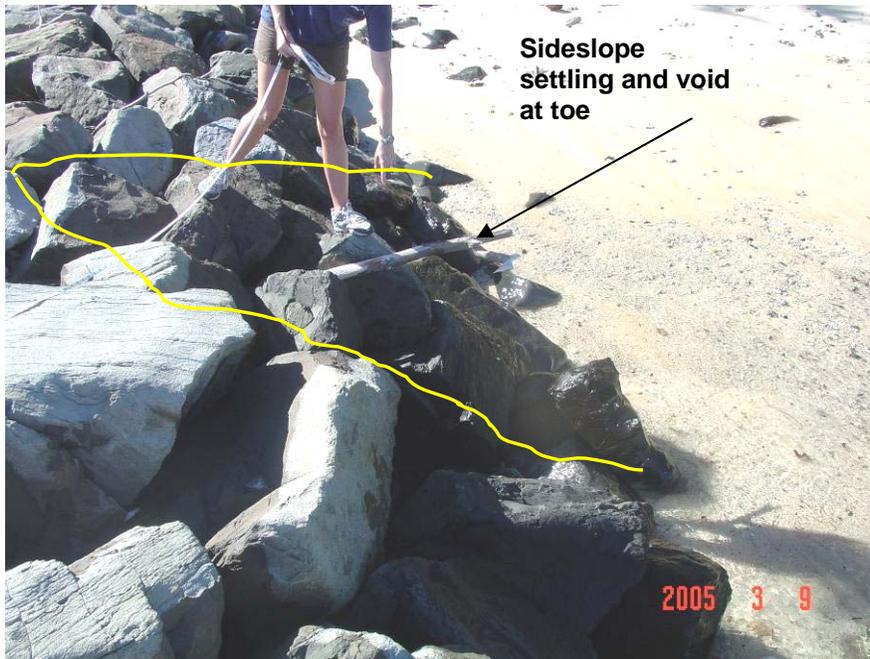
<u>Station</u>	<u>Description</u>
0+00 to 4+30	West Jetty



a. Sta. 0+00, Beginning station marked by coconut tree. Some vegetation growth here since last inspection, vines and juvenile coconut trees, remove with herbicide.



b. Sta. 0+55, Void at centerline of crest, approx. 2'x 2'x 2'. No dislodged stones observed nearby.



c. Sta. 0+55, HS, Slight sideslope settling (10'x5' area) and void at toe.



d. Sta. 0+64, CL, coconut tree growing, remove. (2004 Photo)



e. Sta. 0+98, Overview facing landward. Several small coconut trees in the area, remove.



f. Sta 1+08, HS, 1 ea. Missing armor stone at hinge, and some settling of crest.



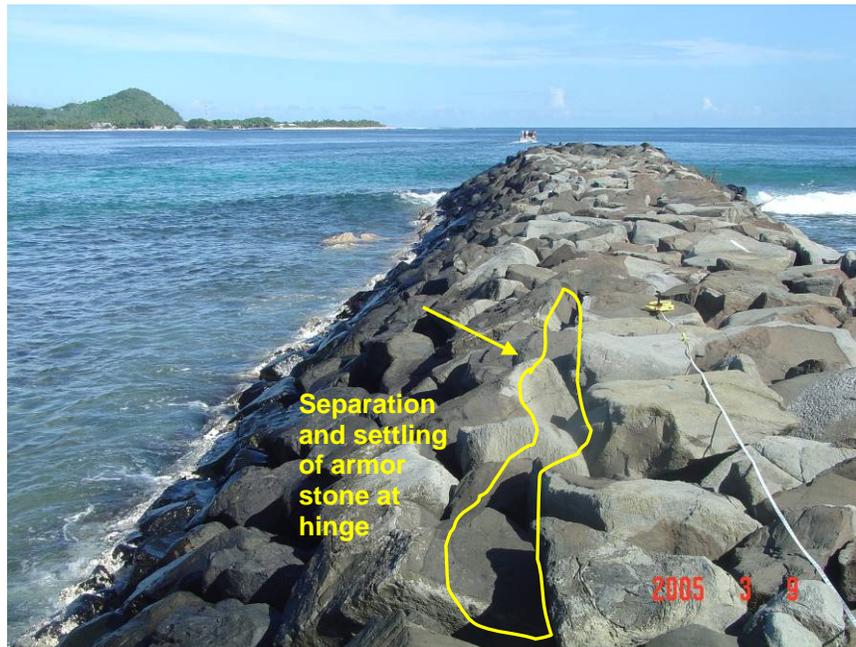
g. Sta. 1+27, Void on jetty crest, underlayer exposed. No visible displaced stone nearby. Void on HS sideslope and bridging (not shown).



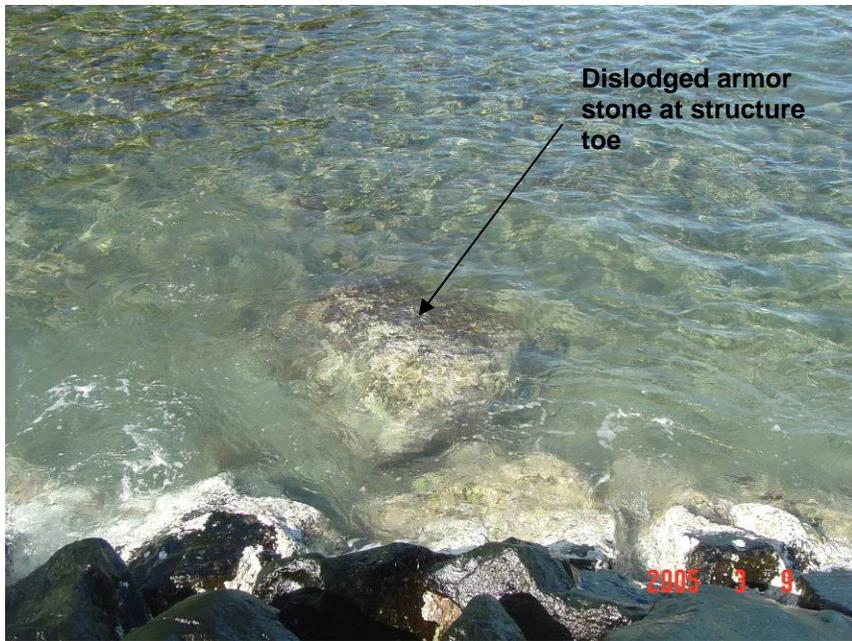
h. Sta. 2+27, Identifiable triangle-shaped stone for stationing reference.



i. Sta 2+79, OS, Cracked armor stone on oceanside and flipped stone on harborside (not shown).



j. Sta 3+07, HS, Sideslope and hinge settling, UL exposed. Centerline armor stone bridging.



l. Sta. 3+52, HS, 1 dislodged armor stone 2' from toe, no obvious void nearby.



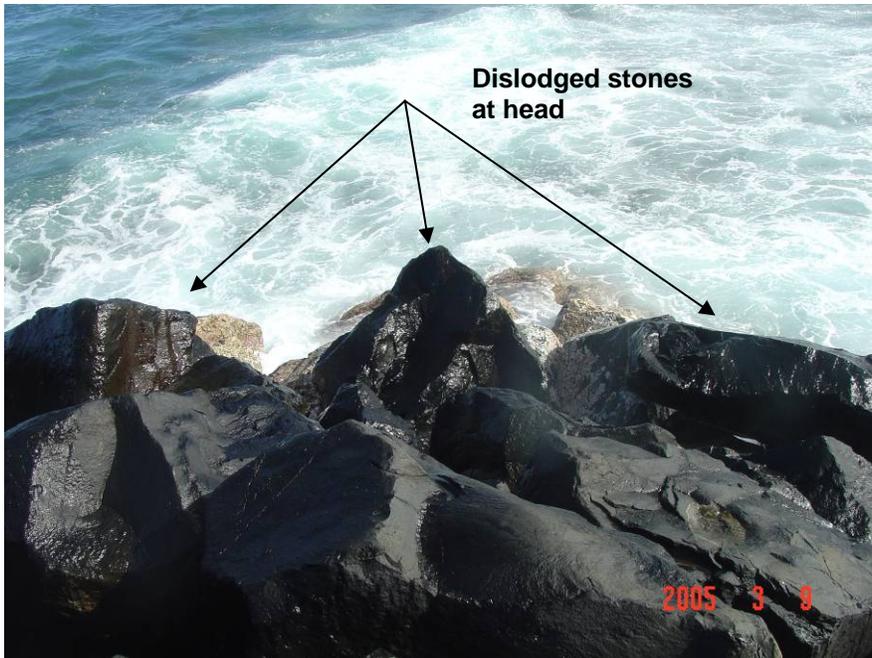
m. Sta. 3+87, HS, 4 armor stones resting 3' from the toe of the structure, no obvious voids.



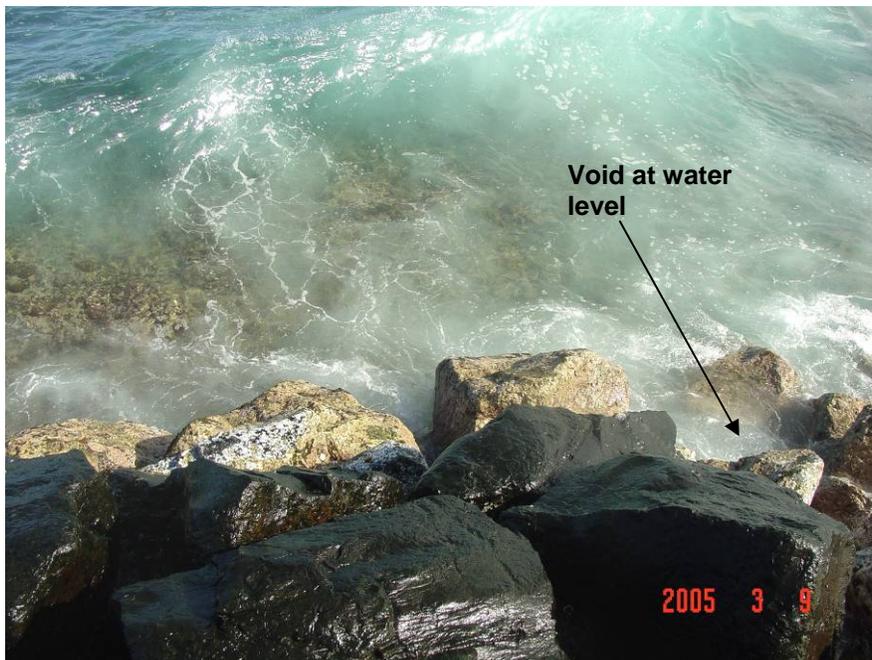
n. Sta 4+16, Armor stone depression at head and cracked armor stone.



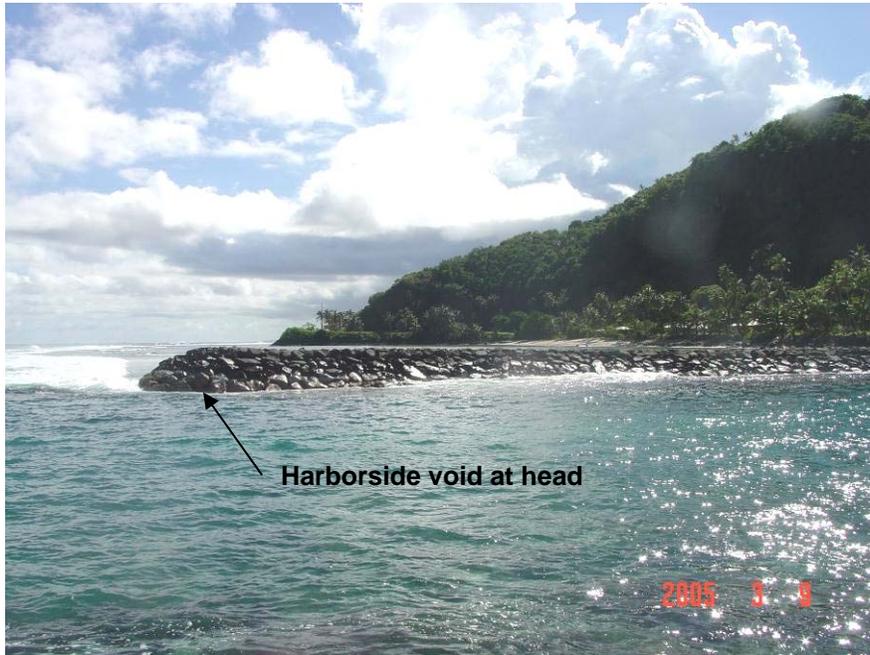
o. Sta. 4+20, OS, 2 dislodged armor stones 3' from head.



p. Sta 4+30, Head, Voids and resulting dislodged stones on oceanside of head (crest to water level, 0 to 80 degrees).



q. Sta 4+30, Head, Void at water level on harborside of head.



r. Overview of West Jetty, head is damaged, but remains primarily intact.

5. Findings/Conclusions:

The East Exterior Revetment (165LF) + Breakwater (125LF) + East Jetty (100LF) are evaluated as the East Breakwater (390LF). These structures function primarily as 1 breakwater and for rehabilitation purposes, as they are connected, any impact to one structure will affect all. The major item of concern noted during this inspection was the condition of the West Jetty's head, monitor the armor stones as they may have moved since the last inspection cycle. The overall condition of the project is GOOD.

Signed: _____
Jessica Hays, CEPOH-EC-T

Signed: _____
Jim Pennaz P.E., Ch, CEPOH-EC-T

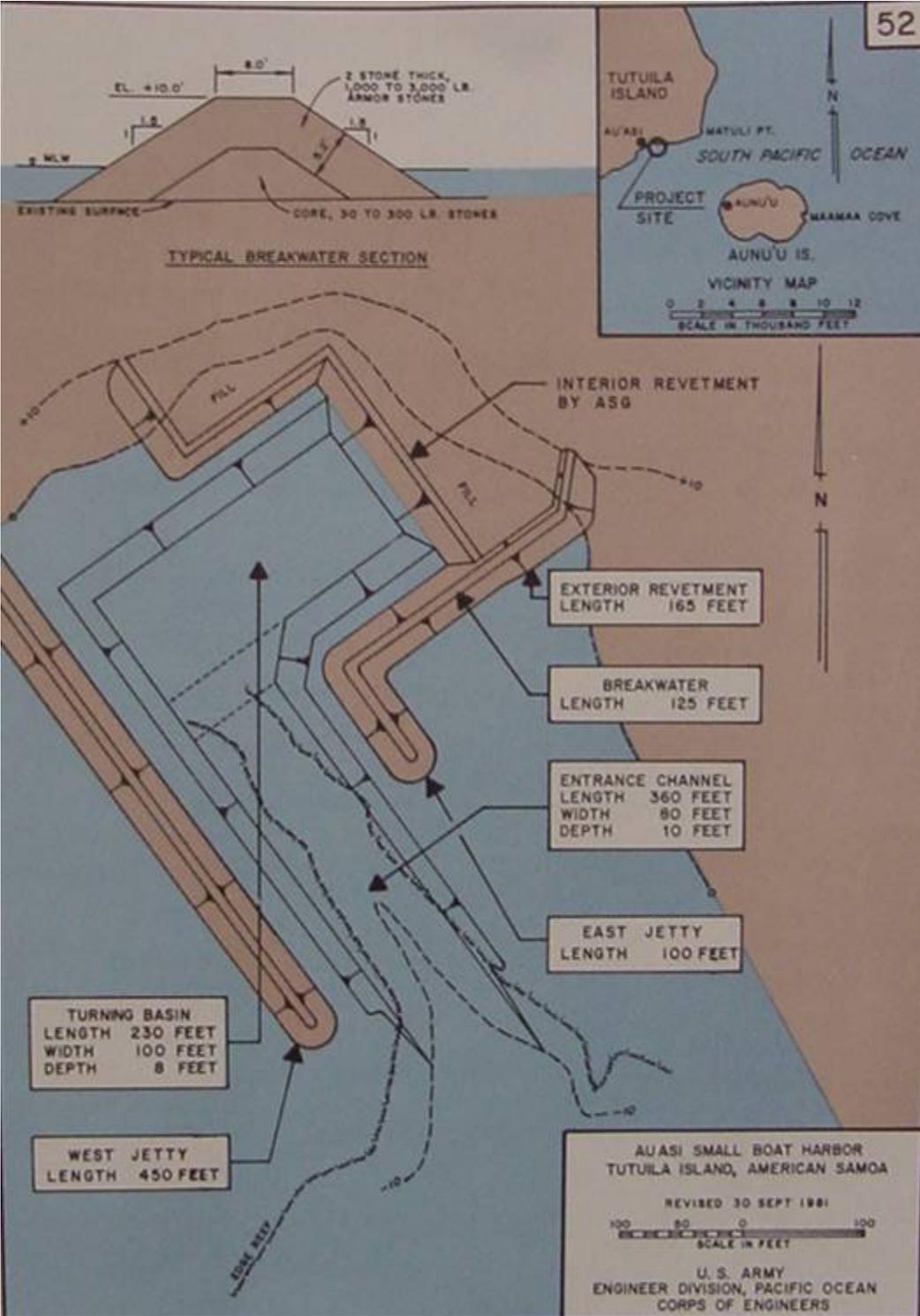
Attached:
Additional Photos
Project Index Map



Overview of interior revetment (Non-federal responsibility).



Project Sign



AUASI SMALL BOAT HARBOR, AMERICAN SAMOA

CONDITION OF IMPROVEMENT 30 SEPTEMBER 1993

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized for construction on 22 June 1978 under Section 107 of the River and Harbor Act of 1960, as amended. Provides for an entrance channel 360 feet long, 80 feet wide and 10 feet deep; a turning basin 230 feet long, 100 feet wide and 8 feet deep; a breakwater 125 feet long; an exterior revetment 165 long; an east jetty 100 feet long; a west jetty 450 feet long; and appurtenant aids to navigation.

PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in March 1981. A single contract to repair damages to public facilities caused by Hurricane Ofa in February 1990 at Aunuu Harbor and to repair damages to breakwaters caused by Hurricane Val in December 1991 at Aunuu and Auasi Small Boat Harbor was awarded in August 1992 for \$415,000 of which \$20,000 was for Auasi. Repair work at Auasi was completed in February 1993.

Work Remaining: None. Financial completion pending completion of repair work at Aunuu Harbor.

COST OF CONSTRUCTION:

	<u>New Work</u>	<u>Maintenance</u>	<u>Total</u>
<u>Completed Works:</u>			
United States Funds			
Corps of Engineers	\$955,213		\$955,213
Coast Guard	47,076		47,076
Contributed Funds			
Required	86,235		86,235
Other	<u>7,412</u>		<u>7,412</u>
Total Costs	\$1,095,936		\$1,095,936

Uncompleted Works:

United States Funds	<u>\$79,500</u>	<u>\$79,500</u>
Total Estimated Costs	\$79,000	\$79,000

RANGE OF TIDES: The range of tide between mean low water and mean high water is 2.5 feet.