O & M INSPECTION REPORT
FOR NAVIGATION AND SHORE PROTECTION PROJECTS

1. Project Name: Kawaihae DDH

2. Date of Inspection: May 6, 2002

3. Inspection Personnel:

	Name	Agency/Office	Telephone No.
a.	Dan Meyers	COE	438-8875
b.	Rick Oleniacz	COE	438-1981

4. Discussion:

STATION	REACH	COMMENTS
0+07 to 0+48	#1	Root
0+49 to 1+56	#2A	Truck
1+57 to 6+56	#2B	Trunk
6+57 to 11+49	#2C	Trunk
11+50 to 16+59	#2D	Truck
16+60 to 21+53	#2E	Trunk
21+54 to 26+14	#2F	Trunk
26+15 to 26+64	3	Head

The major deficiencies were as follows:

a. Sta. 0+60, OS, slight depression on the sideslope, no obvious signs of sliding, monitor.

b. Sta. 2+00, HS, cracked armor stone @ hinge (adj. #3 dolphin).

b. Sta. 2+30, HS, cracked armor stone @ hinge (adj. #3 dolphin).

c. Sta. 3+83, Crest (CL), cracked armor stone.

d. Sta. 4+00, OS, 2ea. dislodged armor stones resting 20LF from toe, no obvious voids.

e. Sta. 4+94, HS, Cracked armor stone on sideslope.

f. Sta. 5+06, CL, Split armor stone @ crest.

g. Sta. 670, Split armor stone @ crest.

h. Sta. 7+00, CL, cracked armor stone.

i. Sta. 7+30, HS, 1 ea. flipped armor stone at the toe.

j. Sta. 7+43, HS/CL, void at hinge.

k. Sta. 9+60, 1 ea. cracked armor stone @ HS hinge.

l. Sta. 10+00, Fractured armor stone at crest.

m. Sta. 10+30, split armor stone and depression of the crest approx. 20LF

n. Sta. 11+19, CL, wire rope thru armor stone.

o. Sta. 11+49, OS, 1 ea. split armor stone, no void.

p. Sta. 11+65, OS hinge, settling approx. 20LF.

q. Sta. 11+85, HS, 1 ea. dislodged armor stone at the toe.

r. Sta. 14+20, OS, Double split armor stone.

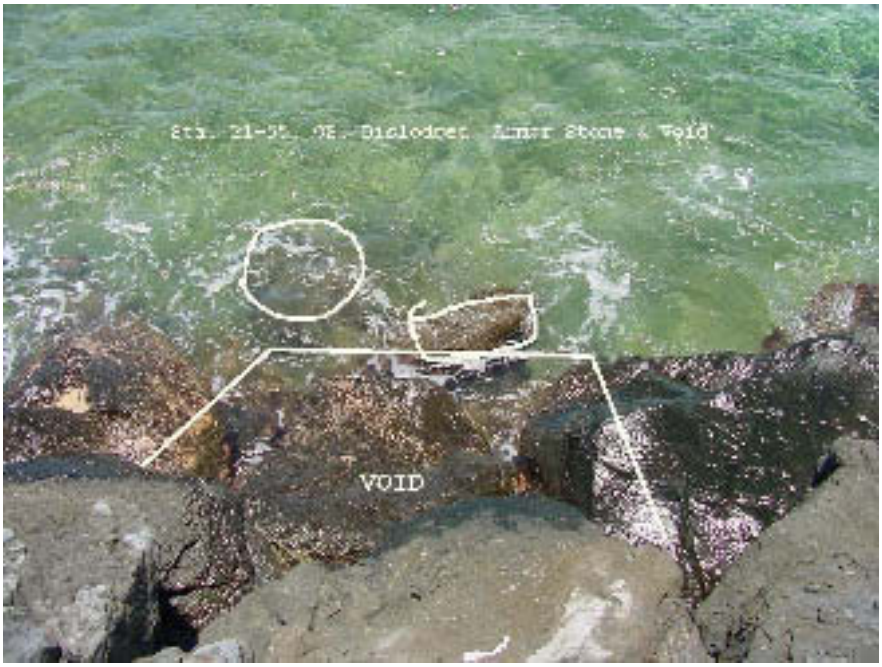
s. Sta. 16+65, OS, settling of hinge approx. 20LF.

t. Sta. 17+50, OS, sideslope and crest settling approx. 20LF.

u. Sta. 18+75, CL, 1 ea. cracked armor stone.

v. Sta. 20+00, HS, 1 ea. fractured armor stone.

w. Sta. 20+01, OS Hinge, 1 ea. split armor stone.



x. Sta. 21+55, OS, 1 ea. dislodged armor stone and void.

y. Sta. 24+00, Overview reference photo.

z. Sta. 26+00, OS, 4 ea. dislodged armor stones and large void.

aa. Sta. 26+45, OS, Dislodged armor stones at the waterline.

bb. Sta. 26+64, OS of Head.

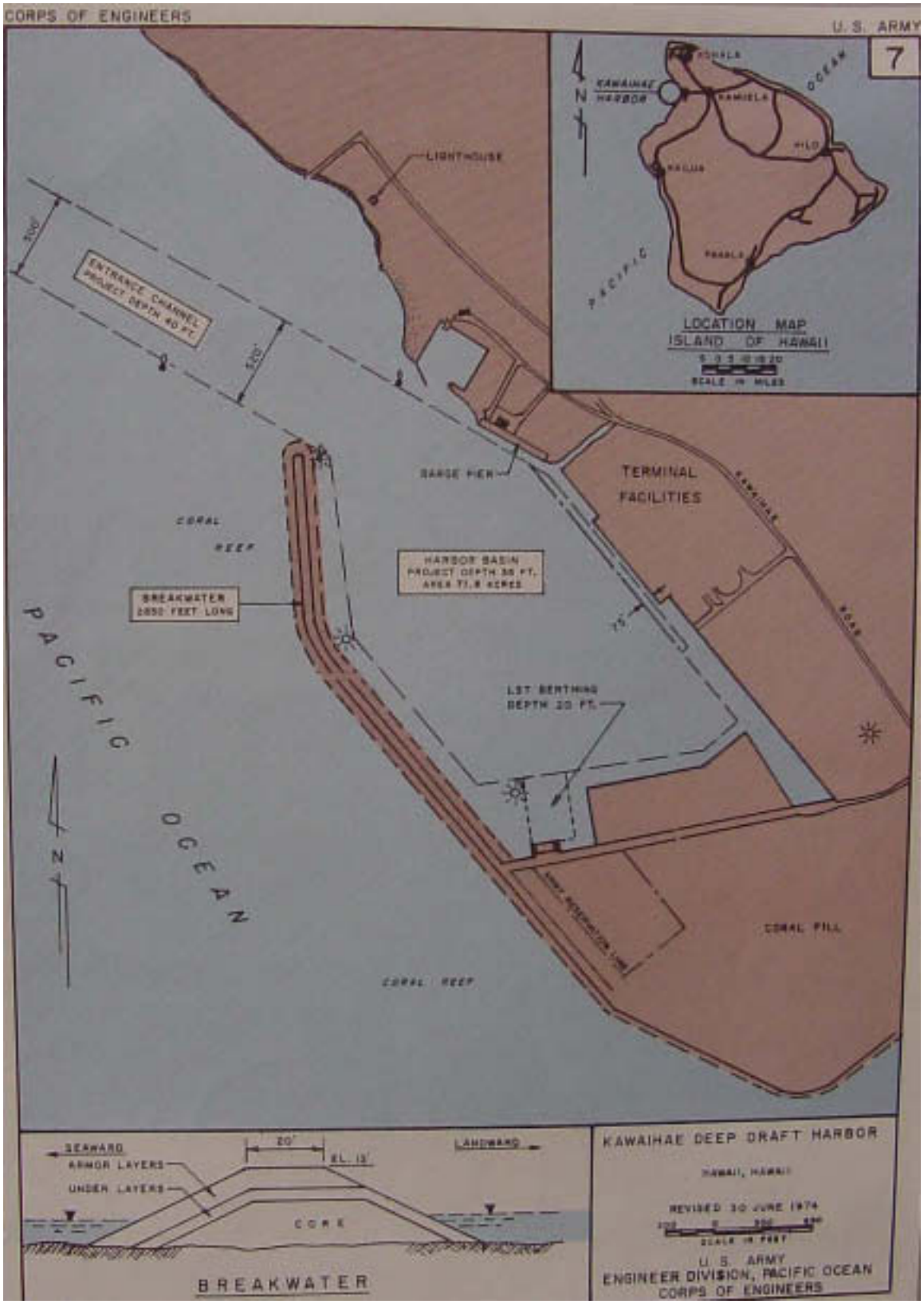
cc. Sta. 26+64, Head, Missing armor stones at the waterline.

5. Findings / Conclusions: Reach 2F, has the majority of the damage as shown in the above photographs. This area should be monitored for changes. The overall condition of the breakwater is FAIR, however the functionality is GOOD.

Signed: _____
Dan Meyers, CEPOH-EC-T

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

Project Index Map


CORPS OF ENGINEERS
U. S. ARMY
7
LIGHTHOUSE
ENTRANCE CHANNEL
PROJECT DEPTH 40 FT.
200'
320'
BARGE PIER
TERMINAL
FACILITIES
CORAL
REEF
HARBOR BASIN
PROJECT DEPTH 30 FT.
AREA 71.8 ACRES
BREAKWATER
2850 FEET LONG
75'
LST BERTHING
DEPTH 20 FT.
PACIFIC
OCEAN
N
CORAL FILL
CORAL REEF
KAWAIHAE
HARBOR
N
OCEAN
PACIFIC
HILO
LOCATION MAP
ISLAND OF HAWAII
SCALE IN MILES
SEAWARD
ARMOR LAYERS
UNDER LAYERS
20'
EL. 13'
LANDWARD
CORE
BREAKWATER
KAWAIHAE DEEP DRAFT HARBOR
HAWAII, HAWAII
REVISED 30 JUNE 1974
SCALE IN FEET
U. S. ARMY
ENGINEER DIVISION, PACIFIC OCEAN
CORPS OF ENGINEERS

KAWAIHAE DEEP DRAFT HARBOR, HAWAII

CONDITION OF IMPROVEMENT 30 SEPTEMBER 1989

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized by the River and Harbor Act of 17 May 1950, and the River and Harbor Act of 27 October 1965. The project provides for:

a. An entrance channel 3,270 feet long, widens from 500 feet at seaward end to 520 feet within a distance of 2,100 feet then flaring to the basin width of 1,450 feet; entrance channel is 40 feet deep for the seaward 2,900 feet and transitions to a 35-foot depth at the harbor basin end;

b. A harbor basin 1,450 feet wide, 1,750 feet long on northeast side, 1,050 feet long on southwest side and 35 feet deep; and

c. A rubblemound breakwater 2,650 feet long with a maximum crest elevation of 13 feet about mean low water.

PROGRESS OF WORK:

Completed and Under Maintenance: Existing improvements were completed in July 1962. A construction contract for the enlargement of Kawaihae Harbor was completed in January 1973. Maintenance dredging was accomplished under contract in October 1972. Total material dredged was 24,825 cubic yards.

Work Remaining: None.

COST OF CONSTRUCTION:

	New Work	Maintenance	Total
Completed Works:			
United States Funds	$5,983,501	$61,800	$6,045,301
Contributed Funds			
Required	61,496	0	61,496
Other	191,336	0	191,336
Total Costs	$6,236,333	$61,800	$6,298,133

RANGE OF TIDES: The range of tide between mean lower low water and mean higher high water is 2.1 feet, and the extreme range is 4.5 feet.