



## CONTINUING ELIGIBILITY INSPECTION (CEI) REPORT

FOR FLOOD CONTROL WORKS

Honolulu Engineer District

CEPOH-EC-T

Iao08rpt-fcp.doc

1. Project Name: Iao Stream FCP
2. Date of Inspection: October 30, 2007
3. Inspection Personnel:

Name	Agency/Office	Telephone No.
a. Dan Meyers	CEPOH-EC-T	438-8875
b. Lincoln Gayagas	CEPOH-EM	438-1981
c. Leonard Costa	DFM Maui County	270-7869
d. Ray Oshiro	DFM Maui County	270-7443

4. Discussion:

The project: Iao Stream FCP is located in Wailuku, Maui, authorized by the Flood Control Act of 1968. The project was completed in 1980 and provides for a debris basin about 2.5 miles upstream of the mouth of Iao Stream, channel improvements from the debris basin to about 1,100 liner feet downstream of Market Street Bridge, diversion levees and channel improvements to the Waiehu Bridge. Maintenance deficiencies were noted and suggestions were made to the DPW representatives. These deficiencies and suggestions are listed below.

### FY08 CEI Ratings

Project Rating: **"US, Unsatisfactory"**

Project Condition Code: **"UA, Unacceptable"**

Project Status: **"Inactive"**





**Levee I and Debris Basin:**



a. Sta. 135+00, Left Bank (LB), upstream of the debris basin, overview of the grouted rock slope protection.



b. Sta. 130+50, LB, Overview of Levee I.



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c. Sta. 133+00, Right Bank (RB), vegetation removed from sideslope.



d. Sta. 133+00, LB, add fill material adjacent to splash apron.



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e. Sta. 127+00, RB, remove vegetation and material from debris basin.



f. Sta. 127+00, repair broken pipes in debris gates.



Levee H:



g. Sta. 121+00, LB, Overview of levee, monitor surface cracks in sideslope.



h. Sta. 119+00, RB, repair joints and seal exposed rebar at the toe of the sideslope.



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NOTE : Drop apron # 1 = Sta. 119+00



- i. Sta. 114+40, repair 2 ea. holes in fence.

NOTE : Drop apron # 2 = Sta. 114+50



- j. Sta. 105+00, RB, repair fence.



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- k. Sta. 104+96, repair hole on face of drop structure.



- l. Sta. 100+00, LB, repair concrete and re-install fence.



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m. Sta. 93+25, RB-side of invert, repair invert and re-establish maintenance right-of-way, behind fence.

### **Levee G:**



n. Sta. 87+50, LB side of stream, woody vegetation cleared and unauthorized structure removed, establish ground covering.



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o. Sta. 87+00, trees removed from interior sideslope.



p. Sta. 86+00, remove debris stockpile from town side of levee.



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q. Sta. 84+00, LB, remove tree and stockpile of material from town side of levee sideslope.



r. Sta. 80+00, RB, remove woody vegetation from levee sideslope and golfing platform from crest.



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- o. Sta. 79+36, flapgate in good condition adjacent NRCS Channel.

**Levee E:**



- p. Sideslope of levee, pending repairs, remove woody vegetation from structure and pack boulders at the toe to minimize further erosion.



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Levee F:



q. Overview, remove woody vegetation and encroachments (storage shed & stairs) from sideslope.



r. Overview, verify easement at toe of structure and remove fence post if within easement.



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Levee D:



s. Survey and re-establish maintenance access road.



t. End of levee "D".



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### **Levee C:**



u. Levee "C", survey townside easement to verify maintenance access. Existing maintenance access road has been capped with crushed rock for dust control.

### **Revetment X:**



v. Toe of levee, RB, COE levee repairs pending, perform temporary repairs to minimize further erosion and undermining.



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w. LB tie back has failed, COE levee repairs pending, remove woody vegetation from structure and perform temporary repairs to minimize further erosion and undermining.



x. RB, COE levee repairs pending, perform temporary repairs to minimize further erosion and undermining.



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Levee B:



y. RB, levee maintenance access road capped with crushed rock to control dust.



z. RB, levee sideslope steepening and eroding, perform temporary repairs to minimize further erosion.



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Levee A:



aa. Sta. 21+00, RB, woody vegetation has been removed from the townside of levee.



bb. Sta. 19+65, Overview under Waiehu bridge.



Rectangular Concrete Channel - Stream Realignment



cc. Approximate Sta. 10+00, RB, survey and verify maintenance access.



dd. Approximate Sta. 4+76, end of channel bottom. Fencing repaired on LB channel wall.



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Additional manpower and equipment is needed to maintenance and perform repairs. Maintenance of the project needs improvement, station numbering needs to be established, encroachments and access roads need surveying and remedial action needs to be taken in areas identified as design deficiencies. In accordance with EP 500-1-1(dated 30 September 2001), and based on this CEI, the Project Rating Code is "US, Unsatisfactory". The project condition code is "UA, UNACCEPTABLE", and the project status is considered "INACTIVE" in the Rehabilitation and Inspection Program.

Signed: \_\_\_\_\_  
Dan Meyers, CEPOH-EC-T

Signed: \_\_\_\_\_  
James Pennaz, P.E., Chief, CEPOH-EC-T

Enclosure(s)

1. Site Plan
2. As-Built Plan



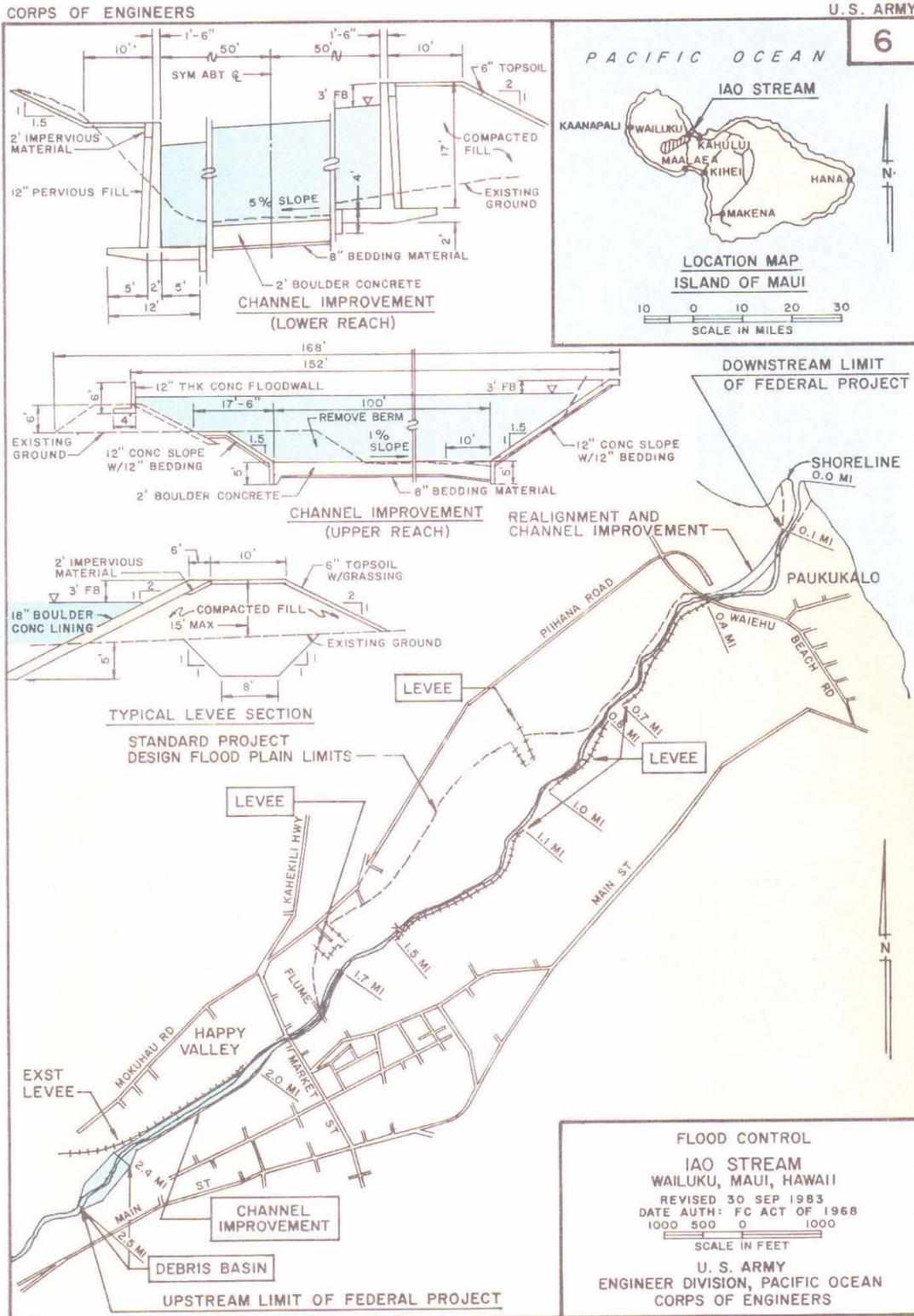
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I AO S T R E A M , M A U I , H A W A I I

CONDITION OF IMPROVEMENT 30 SEPTEMBER 1993

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized by the Flood Control Act of 1968. Provides for a debris basin about 2.5 miles upstream of the mouth of Iao Stream; channel improvement from the debris basin to about 1,100 feet downstream of Market Street bridge; diversion levees and flood plain management from the channel improvements to the Waiehu Bridge. The standard project design discharge is 26,500 cfs at the stream mouth.

PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in October 1980. A construction contract for corrective measures for levee protection was completed in November 1983.

Work Remaining: Plans and specifications initiated in November 1992 to correct design deficiency are 30 percent complete.

COST OF CONSTRUCTION:

	<u>New Work</u>	<u>Maintenance</u>	<u>Total</u>
<u>Completed Works:</u>			
United States Funds	\$12,285,000		\$12,285,000
Contributed Funds (Other)	<u>274,262</u>		<u>274,262</u>
Total Costs	\$12,559,262		\$12,559,262
<u>Uncompleted Works:</u>			
United States Funds	\$4,540,000	\$240,000	\$4,780,000
Contributed Funds			
Required	1,510,000		1,510,000
Other	<u>2,000</u>		<u>2,000</u>
Total Estimated Costs (1993)	\$6,052,000	\$240,000	\$6,292,000