

**U.S. Army Corps
of Engineers**
Honolulu District

Public Notice

Public Notice No.
POH-2008-083

Date:
July 23, 2009

Reply to:
Regulatory Branch (CEPOH-EC-R)
U.S. Army Corps of Engineers, Honolulu District
Building 230
Fort Shafter, Hawaii 96858-5440

Respond by:
August 7, 2009

POH-2008-083

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT:
REPAIR OF ROUTE 005 AT FAGASA AND FAGATELE VILLAGES,
TUTUILA ISLAND, AMERICAN SAMOA**

1. **APPLICANT:** Department of Public Works, American Samoa Government, Pago Pago, American Samoa 96799
2. **AGENT:** Mr. Scott Sullivan, Sea Engineering, Inc., Makai Research Pier, 41-305 Kalaniana'ole Highway, Waimanalo, Hawaii 96795
3. **APPLICABLE STATUTORY AUTHORITY:** Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
4. **LOCATION OF PROPOSED ACTIVITY:** The project area extends along the shoreline of Fagasa Bay at the villages of Fagasa and Fagatele on the north coast of Tutuila, American Samoa (Figure 1).
5. **PURPOSE AND DESCRIPTION OF PROJECT:**

The purpose of the project is to repair and protect approximately 2,340 linear feet of the Route 005 access roadway at Fagasa and Fagatele. Due to limited available space and the proximity of steep mountain slopes, it is not practicable to move the access roadway inland. The project would involve reconstruction of two loosely constructed rock revetments (total length approximately 1,300 feet) which parallel the shoreline of Fagasa Bay in order to provide permanent protection for the road. Fagasa Bay is directly exposed to northerly storm waves approaching from the northwest through northeast. Although the shoreline is protected from large waves to some extent by a fringing reef, deeper water in the center of the bay permits significant wave energy to approach close to shore. Shoreline erosion and damage has occurred over many years, and various temporary shore protection measures have not endured. The shoreline was eroded and the road severely damaged by Hurricane Heta waves in 2004. The

proposed permanent road repair and shore protection project to provide the necessary protection against future storms has been funded by the Federal Highway Administration.

To provide the desired permanent protection, the applicant proposes to construct approximately 1,300 linear feet of shore protection revetment, consisting of 800 feet west of the village church and 500 feet east of the church (Figures 2, 3). The road and shoreline fronting the church are protected by an existing rock revetment which would remain in place. The new revetment sections would be constructed of 1-ton concrete tribar armor units, placed in a single uniform layer over an underlayer of 100 to 300 pound stone and geotextile filter fabric, with a side slope of 1 vertical on 1.5 horizontal (Figure 4). The tribar crest elevation would be either +8 feet or +9.8 feet MSL, with concrete rubble masonry (CRM) wall of varying height constructed behind it to accommodate the varying elevation of the finished road. Grout-filled geotextile bags would be used between the tribar crest and the CRM wall to lock the tribars into place and armor the CRM wall toe. The revetment toe would be stabilized by excavating a trench into firm coral (limestone) substrate, placing the tribar units, and filling the trench with tremie concrete to lock the tribars into place. The new revetment sections would be tied into existing shoreline features by construction of sloping CRM transition sections. In addition, six storm drain culverts and the Leele Stream bridge would be reconstructed. Culvert and bridge repair would involve placement of concrete box culvert sections with wing walls, stone aggregate leveling courses, and CRM below the mean higher high water (MHHW) line.

Fill placed below the MHHW for construction of the revetment and its transition sections would include including approximately 750 CY of concrete tribars, 385 CY of underlayer stone, 240 CY of tremie concrete, 35 CY of CRM and 1,155 SY of geotextile filter fabric. Fill for the Leele Bridge reconstruction would include 10 CY of concrete, 21 CY of coarse aggregate and 7 CY of CRM. Fill for drainage culvert replacement would include 41 CY of concrete, 65 CY of coarse aggregate, 10 CY of underlayer stone and 16 CY of CRM.

The horizontal width of the shoreline area below MHHW which would be directly affected by revetment construction is about 8 feet. The total area of fill placed below the MHHW line for the project (revetment sections, bridge reconstruction, and drainage culverts) would be approximately 11,525 square feet (0.26 acre).

Silt curtains would be deployed during the work to minimize movement of project-related suspended materials across the inshore marine environment.

6. IMPACTS OF PROPOSED ACTIVITIES IF AUTHORIZED:

The proposed revetment construction would occur in shoreline areas which have been disturbed by construction of previous shore protection measures and repair of previous hurricane damage. The shoreline marine substrate at the project area consists primarily of basalt cobbles and boulders, and manmade shore protection including rock filled gabion baskets and loose, small-rock revetment. The marine biological community at the work sites would be directly impacted by temporary construction activities, but stable rocky shoreline habitat for marine organisms would be created by construction of the proposed revetments.

Construction activities have the potential to cause a temporary increase in turbidity in inshore waters, but this potential impact is expected to be minimized by the applicant's planned use of silt curtains to avoid or mitigate potential effects on the aquatic environment. Project construction is expected to result in only minor and temporary local increases in dust and noise.

The project is not expected to have any significant long-term adverse environmental impacts. Providing permanent shore protection for the shoreline and road would avoid or reduce the future need for repair of recurrent storm damage. By reducing future shoreline erosion, the completed revetments are expected to help maintain near-shore water quality and marine habitat. The project would enhance the safety and well being of residents by improving safe access to and from the villages during and after severe storms. Because such revetment projects are normally undertaken where erosion of existing shoreline protection structures and critical infrastructure (e.g., a roadway) is recurring, the number of such projects is naturally limited and cumulative effects are not considered to be significant.

The proposed project is not expected to result in any losses of aquatic resources or impacts to waters of the United States requiring compensatory mitigation pursuant to federal regulations at 33 CFR Parts 325 and 332.

7. IMPACT ON HISTORIC PROPERTIES:

The Area of Potential Effect (APE) of the proposed project includes all areas involving excavation of the existing substrate. The APE has been previously disturbed during roadbed and shoreline revetment construction and repair. The Corps has consulted the on-line version of the National Register of Historic Places (NRHP) for the presence or absence of historic properties, including those listed in or eligible for listing in the National Register of Historic Places, and has determined that there are no listed or eligible properties in the vicinity of the proposed worksite. With inclusion of suitable conditions to insure appropriate actions in the event of discovery of previously unidentified resources, it appears that there would be "no properties affected" by the proposed undertaking. This notice has been sent to the American Samoa Historic Preservation Office (ASHPO). Any additional comments ASHPO may have concerning archaeological or historic resources that may be lost or destroyed by work under the present project will be considered before a final decision is made on the permit application.

8. IMPACT ON ENDANGERED SPECIES:

No federally protected species is known to occur within the project site, although federally protected sea turtles are known to occur in the marine waters surrounding American Samoa, including the endangered leatherback sea turtle (*Dermochelys coriacea*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), threatened loggerhead sea turtle (*Caretta caretta*), and threatened green sea turtle (*Chelonia mydas*). The rocky shoreline areas at the project area do not comprise suitable turtle nesting habitat. The relatively shallow reef areas seaward of the project area may be utilized by sea turtles for foraging; however, with deployment of silt fences and with inclusion of appropriate permit conditions to avoid work when sea turtles are present in the work area the project is unlikely to result in any significant disturbance to sea turtle foraging opportunities.

Based on the location and nature of the proposed work, the lack of suitable turtle nesting habitat at the project site, and the potential for only minimal disturbance to sea turtle foraging opportunities, it appears the project “may affect, but is not likely to adversely affect” sea turtles or other species listed as threatened or endangered under the Endangered Species Act. This notice is being sent to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to request their concurrence with the Corps’ “Effect” determination in accordance with Section 7 of the Endangered Species Act. Any comments they have on endangered or threatened species, or their critical habitat, will be considered before a final decision is made on the permit.

9. IMPACT ON ESSENTIAL FISH HABITAT (EFH):

The marine environment of Fagasa Bay is designated coral reef EFH, consisting of typical fringing reef components which contribute to maintenance of fisheries. The magnitude of potential impacts of the proposed project on coral reef EFH is dependent on the degree of movement onto the seaward reef of sediments or other materials disturbed during project construction. With the incorporation of suitable BMPs to control effects of the construction, the proposed project is not expected to adversely affect any Essential Fish Habitat (EFH) identified pursuant to the Magnuson-Stevens Fishery and Management Act.

10. OTHER GOVERNMENT AUTHORIZATIONS/CERTIFICATIONS:

The American Samoa Coastal Management Program issued a Federal Consistency Certification for the project on October 27, 2008. Before a DA permit can be issued, the applicant must first obtain a Section 401 Water Quality Certification issued by the American Samoa Environmental Protection Agency.

11. EVALUATION FACTORS:

The decision whether to issue the requested permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof: among these are conservation, economics, aesthetics, general environmental concerns, wetlands, historic values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

12. COMMENTS AND INQUIRIES:

Interested parties may submit in writing any comments that they have on the proposed permit. Comments should be forwarded so as to reach this District no later than the response date indicated on the first page of this notice. Mailed comments should cite this notice and should be sent to: Regulatory Branch (CEPOH-EC-R/P. Galloway); U.S. Army Corps of Engineers, Honolulu District; Building 230; Fort Shafter, Hawaii 96858-5440. Alternatively, comments

may be transmitted via e-mail to *CEPOH-EC-R@usace.army.mil* or faxed to (808) 438-4060. If needed, further information may be obtained from Peter Galloway via telephone at (808) 438-8416. This notice is also available at the Honolulu District web site (*www.poh.usace.army.mil*).

13. REQUEST FOR PUBLIC HEARING:

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the proposed permit. Requests for public hearing shall specifically state the reasons for holding a public hearing.

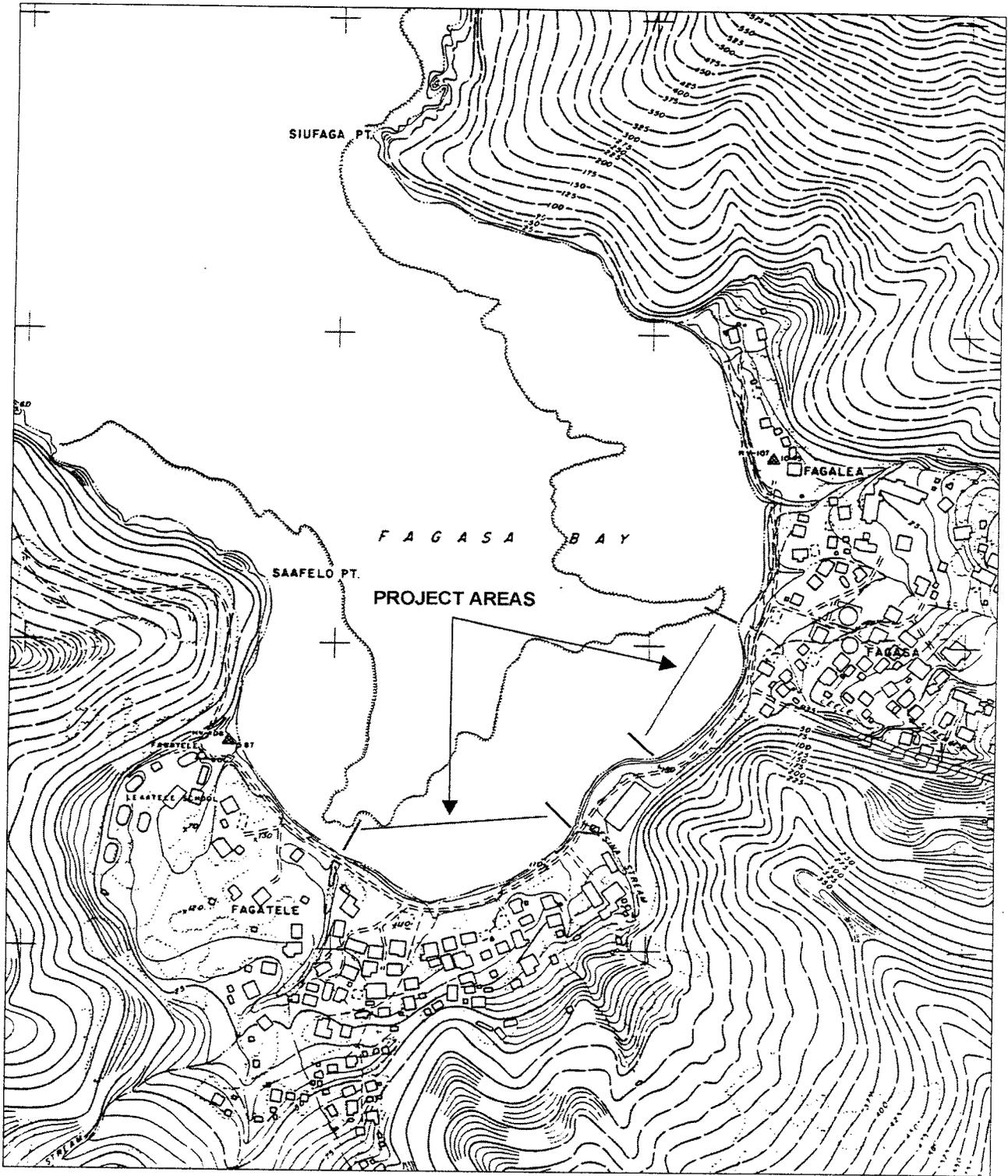
Attachments:

Figure 1. Project Location

Figure 2. Fagasa Bay Vicinity

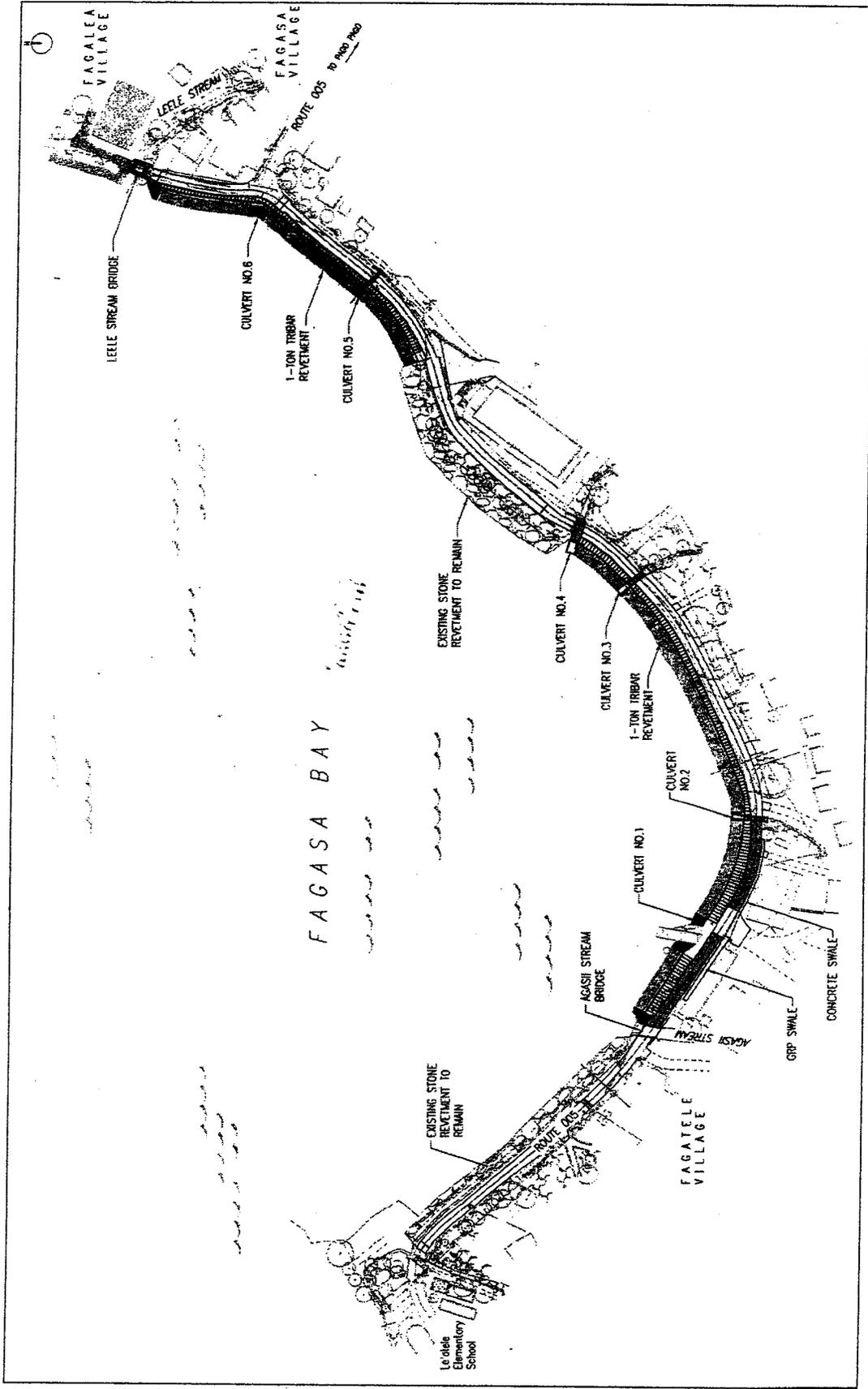
Figure 3. Project Plan

Figure 4. Typical Revetment Section



Fagasa Bay Vicinity
(Scale 1" = 500')

FIGURE 2

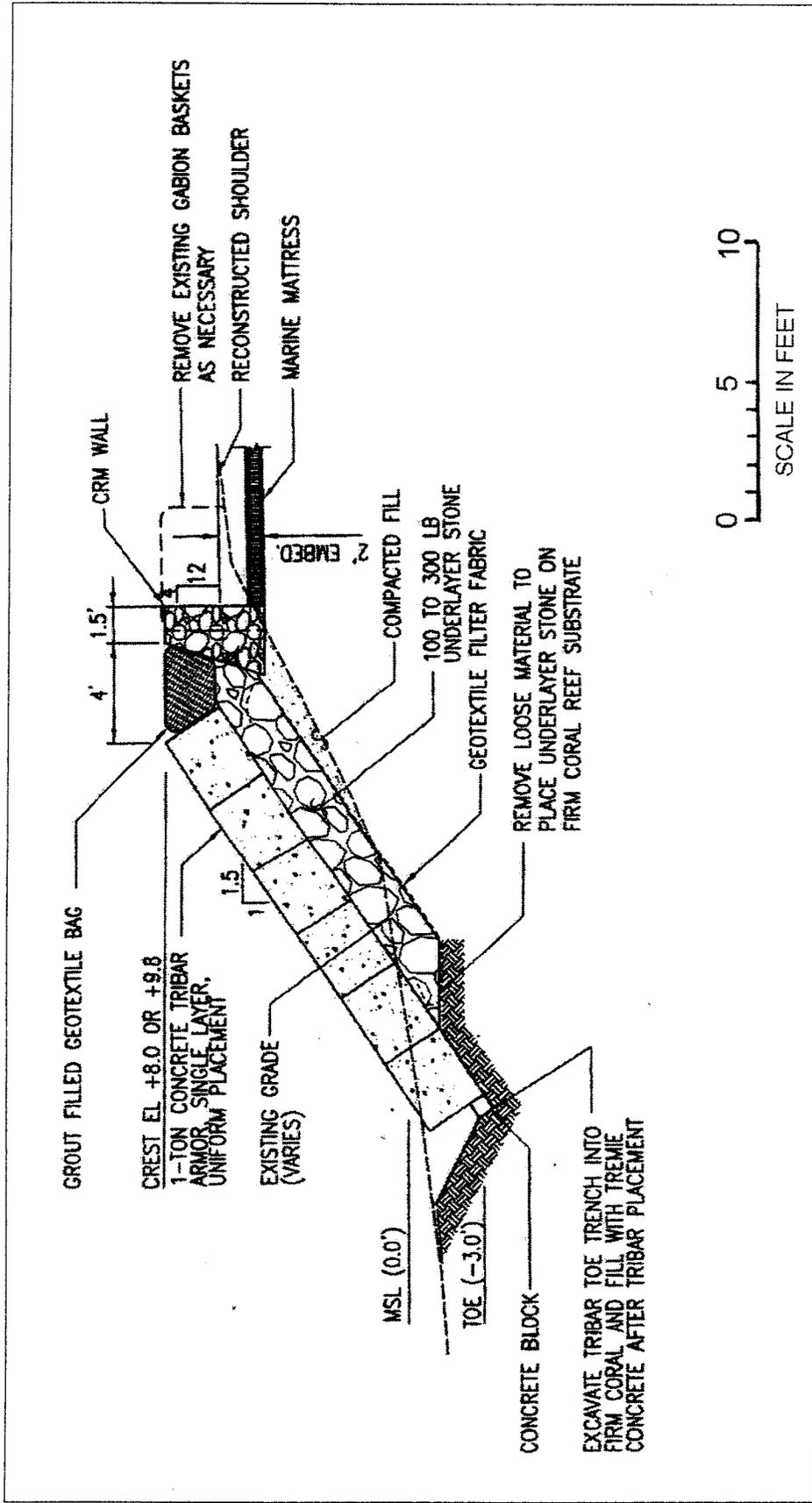


Project Plan

FIGURE 3

Route 005 – Fagasa/Fagatele Shore Protection and Road Repair

Tutuila Island, American Samoa



Typical Revetment Section

FIGURE 4