



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

COASTAL RESOURCES MANAGEMENT COUNCIL

Oliver H. Stedman Government Center  
4808 Tower Hill Road, Suite 3  
Wakefield, R.I. 02879-1900

(401) 783-3370  
FAX: (401) 783-3767

February 2, 2009

Ms. Winoma Johnson  
NAVFAC MIDLANT (Code OPNEEV)  
Environmental Restoration  
Building Z 144, Room 109  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Re: CRMC File No. 2007-04-016 – Federal consistency Determination, Replacement Stone Revetment at Old Fire Fighter Training Area (Site 09), Naval Station Newport, Newport RI. Comments on 100% Design Submission dated 12/22/08.

Dear Ms. Johnson:

CRMC staff have completed review of the 100% design submission, in accordance with 15 CFR 930, Subpart C. The review included a site inspection December 12, 2008, with Navy and RIDEM personnel.

The following issues are noted relative to the revetment design submission, per plans entitled "Stone Revetment Replacement Design, Old Fire Fighter Training Area, Naval Station Newport, Newport Rhode Island...", in eleven sheets, dated 12/19/08, by NFEC, stamped by J.R. Forrelli, PE. The plans are assumed to supercede any discrepancies noted with other documentation in the submission package.

(1) - In general, the revetment "toe" design is considered excessive and is not considered "as close as practicable" to the shoreline feature. The "Stone Revetment West" (Typical Section / Detail "2", sheet C-8) is not consistent with cover stone layer thickness calculated in "Shoreline Stabilization Calculation" (sheet 4 of 17, dated 4/29/08), but rather "includes only the toe portion of the revetment" (page 4-3 narrative, "Shoreline Stabilization Toe Configuration), which is sized from "Figure VI-5-50 Typical Seawall Toe designs where scour is foreseen" (Calculations, sheet 17 of 17).

The intent of the toe protection is to prevent scour from wave induced turbulence (at the base of a slope) eroding the bottom sediments which support the armor layer permitting displacement or slope failure. The selection of the largest toe design geometry, and substitution of this geometry for a conventional revetment slope results in excessive disturbance and elimination of coastal beach area.

Ms. Winoma Johnson  
CRMC File No. 2007-04-016  
February 2, 2009  
Page Two

Similarly, the "Stone Revetment East" (Detail "1", sheet C-8) includes an excessive toe design, considering the calculated design wave height of 2.1 feet (Calculations, sheet 2 of 17). The selected geometry (from sheet 17 of 17) appears applicable to above-beach-grade toe design, whereas a smaller geometry is appropriate for subgrade toe construction (sheet 17 of 17, column 1, row 2). This would also reduce overall coastal beach impacts.

(2) - Regarding Specification Section 2.2.1 ("Reused Rocky Shore Material") notation "when required, additional material shall be by weight gradation, 100 percent less than 36 inches, 0 to 50 percent less than 24 inches, and 0 to 15 percent less than 12 inches", this gradation of additional material appears inconsistent with the observed beach composition noted during the site inspection, and as characterized in "Attachment A (A.1.1. Soil Pre-Design Investigation, Figures 4-2 through 4-5), which denotes the beach as "Fill - fine to medium sand, silt, gravel, and rock fragments, mixed with varying amounts of construction-type debris including" asphalt, concrete, metal, brick, wood, and glass." This specified gradation should be revised to reflect the overall smaller gradation of the beach substrate.

(3) - Regarding Specification 2.2.2. ("Reused Riprap"), does a sufficient volume of existing riprap exist (per sheet C-5, C-6) to satisfy the requirements per "Stone Revetment West" (sheet C-8) cross section? The design implies that no additional riprap will be imported for the proposed narrow band of riprap landward of the revetment. Please confirm.

(4) - With regard to Sheet T2, Note 8 - please include notation to require offset benchmark/stakes beyond the limit of disturbance that can be used (by regulatory staff, etc.) to verify new toe location.

It is noted that pursuant to CRMC Management Procedures Section 4.2.(6), the CRMC will require RIDEM approval to issue final concurrence with the consistency determination ("Removal Action Approval" or "Feasibility Study" minimum).

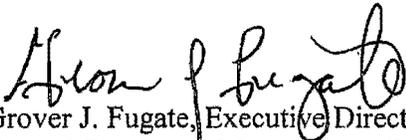
At this time, the CRMC does not concur with the 100 % design consistency determination. Appeal rights exist pursuant to 15 CFR 930.64(e).

Pursuant to 15 CFR 930.41(b), an extension to the response time is requested to reconcile the above noted issues.

Ms. Winoma Johnson  
CRMC File No. 2007-04-016  
February 2, 2009  
Page Three

Thank you for the opportunity to comment on the 100% design submission. Questions or comments may be directed to staff engineer Ken Anderson, at 401-783-2797.

Sincerely,

  
Grover J. Fugate, Executive Director  
Coastal Resources Management Council

cc: D. Reis CRMC  
C. Mueller, USN  
A. Leite, NSN  
P. Kulpa, RIDEM  
S. Parker, Tetra Tech