



Alaska District
U.S. Army Corps of Engineers

Civil Works Branch

Public Notice

Date OCT 03 2007 Identification No. ER-07-27
Please refer to the identification number when replying.

Revised Section 117 Expedited Erosion Control Project Kivalina, Alaska

The U.S. Army Corps of Engineers, Alaska District is proposing expedited construction of an erosion control structure to protect the City of Kivalina from coastal erosion. The Corps released a Public Notice (ER-07-25), Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the proposed action on September 26, 2007.

This Public Notice describes recent modifications to the proposed revetment that were prompted by storm damages that occurred at the site in September 2007 (figure 1). These modifications are relatively minor and do not affect the impact analysis or significantly change the alternatives presented in the EA. This Public Notice as well as the previously released Public Notice, EA, and unsigned FONSI are available on the Corps of Engineers, Alaska District web page at: www.poa.usace.army.mil, under Civil Works and Planning, Documents Available for Public Review, Reports and Environmental Documents.

The modifications include length, depth, and slope changes to the revetment proposed on both the Chukchi Sea and lagoon sides of the island. The overall length of the proposed revetment along the Chukchi Sea side of the island has been increased from 3,100 feet to 3,438 feet (figure 2) to prevent flanking, and the toe has been deepened by about 3 feet to compensate for recent scour in front of the existing seawall. The crest elevation of the revised revetment would not change, but the general slope of the revetment on both sides of the island would be changed from 1 vertical (V):3 horizontal (H) to 1V:2H, with the lower portions terminating with a 1V:1.5H slope. Cut and fill would generally be used to create a 1V:2H prepared slope on the Chukchi Sea side. The areas to be cut include portions of the existing seawall and areas seaward of the existing seawall. These areas were disturbed during construction of the original seawall. On the lagoon-side revetment, fill would be used to construct the 1V:2H prepared slope. Larger armor stone would be used to construct the steepened slope. The revised footprint of the revetment would decrease from an estimated 5.7 acres to 5.23 acres due to the change in slope. Revised revetment cross sections are shown in figures 3 and 4.

The quantity of material that may be obtained from local sources would also increase from an estimated 7,900 cubic yards to about 15,000 cubic yards. The potential sources of this material would not change. The material could be imported from an outside source, taken from an existing site north of the airport, taken from a former site on the beach about 1 mile south of Kivalina, or from a combination of these sources. The table below revises quantities published in Table 1 of the EA.

Revised Quantities

Phase 1 (up to 2000 feet length)

Material	Estimated Quantity yd ³
Sand	10,000
Core Rock	6,500
B-Rock	7,200
Armor Stone	15,500
Excavation ^a	13,000

Total Project (estimated 3,350 feet length) (plus two end sections for a total of 3438')

Material	Estimated Quantity yd ³
Sand	15,000
Core Rock	9,100
B-Rock	11,500
Armor Stone	22,200
Excavation ^a	13,000

a. Onsite excavation for sacrificial sand for beach nourishment at toe of revetment on Chukchi Sea side of the project (includes some material from existing seawall).

The beach site 1 mile south of Kivalina was also expanded in length from 700 feet to 2,700 feet to accommodate taking the entire estimated 15,000 cubic yards at one time if necessary (figure 5). Expanding the length was necessary to retain reasonable width and depth dimensions. The width and depth of the potential excavation is unchanged from a maximum width of 100 feet and a maximum depth of 18 inches.

The proposed project includes a rock revetment as described as the preferred alternative in the EA, but may incorporate partial sand bag construction to meet expedited protection requirements with available funding. Sand bag construction is described as Alternative 3 in the EA. The project would be constructed in phases as described in the EA, but the phased revetment length and time line of construction may change to accommodate larger than expected budgetary appropriations if authorized by Congress.

The Corps considers the described revisions to be minor in scope with no significant impact. Consequently, the Corps will modify the FONSI released with the original EA to reflect these revisions.

Additionally, a figure error in the original EA was discovered after publication. Figure 7 and 8 are duplicates of the same figure. Figure 6 in this Public Notice replaces Figure 8 in the EA and shows the correct location of the potential sand and gravel site north of the Kivalina airport.

Notice is hereby given that Corps will be applying for State Water Quality Certification from the Alaska Department of Environmental Conservation (ADEC). ADEC may certify there is a reasonable assurance this project and any discharge that might result will comply with the Clean

Water Act, Alaska Water Quality Standards, and other applicable State laws. ADEC may also deny or waive certification.

Any person desiring to comment on this project with respect to water quality certification may submit written comments to ADEC at the address below within 30 days from the date of Public Notice for review of the original EA and FONSI, September 26, 2007.

Alaska Department of Environmental Conservation
WQM/401 Certification
555 Cordova Street
Anchorage, AK 99501-2617

Please submit comments regarding the proposed action to the address below no later than 30 days from the date of Public Notice for review of the original EA and FONSI, September 26, 2007. No public meeting for this action is scheduled. If you believe a public meeting is needed, please explain in writing why a meeting is necessary and mail it to the address below. The FONSI will be signed upon review of comments received and resolution of significant objections.

U.S. Army Engineer District, Alaska
ATTN: CEPOA-EN-CW-ER (Bartlett)
P.O. Box 6898
Elmendorf AFB, Alaska 99506-0898

For more information about the project, please contact Larry D. Bartlett of the Environmental Resources Section at (907) 753-2690 or electronically to the e-mail address:
larry.d.bartlett@Poa02.usace.army.mil.

For


Guy R. McConnell
Chief, Environmental Resources Section



Figure 1. Flanking failure and house on the north end of the existing seawall. (13 Sept, 2007).

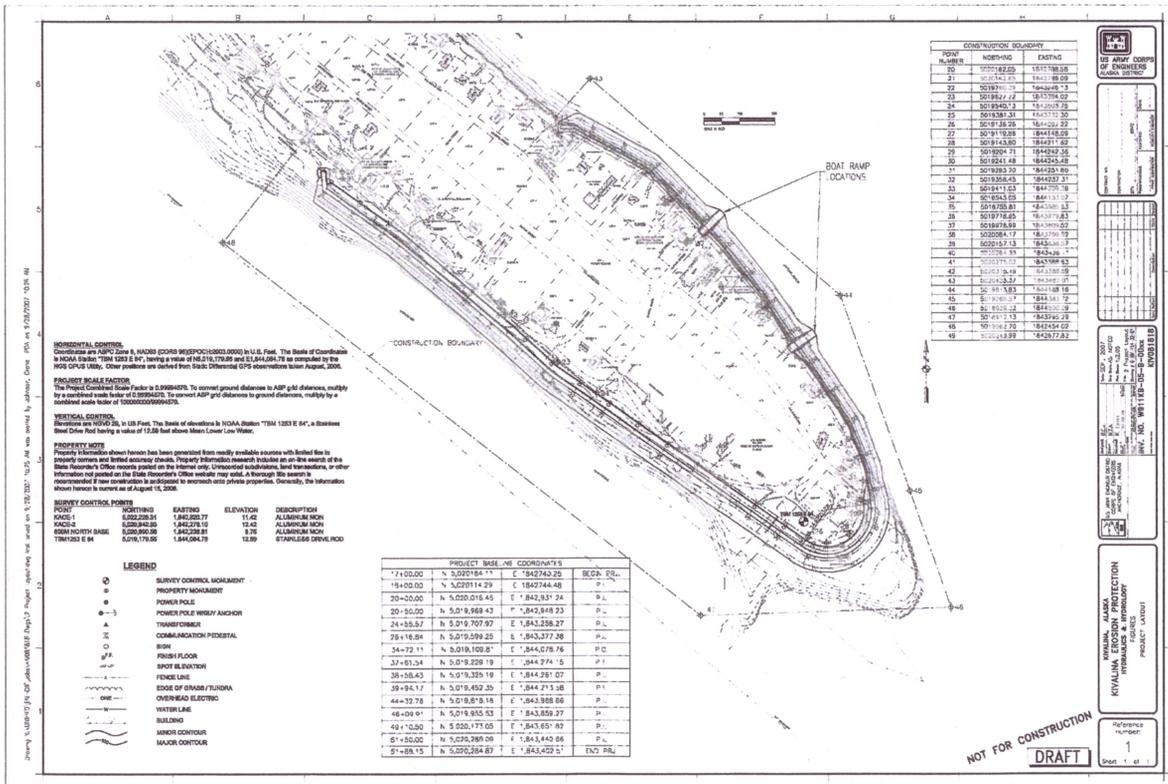


Figure 2. Revised Kivalina erosion control structure footprint, September 28, 2007.

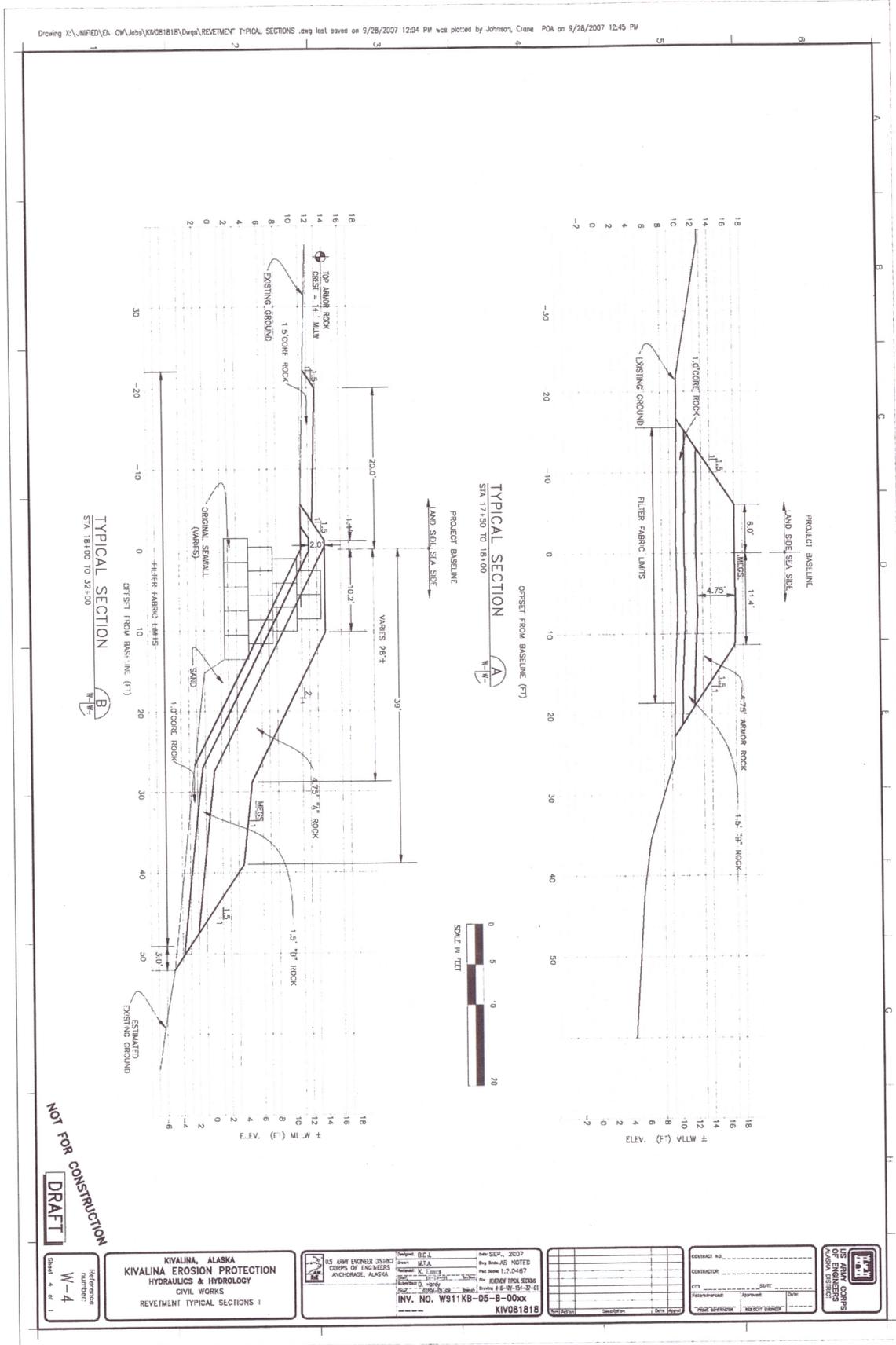
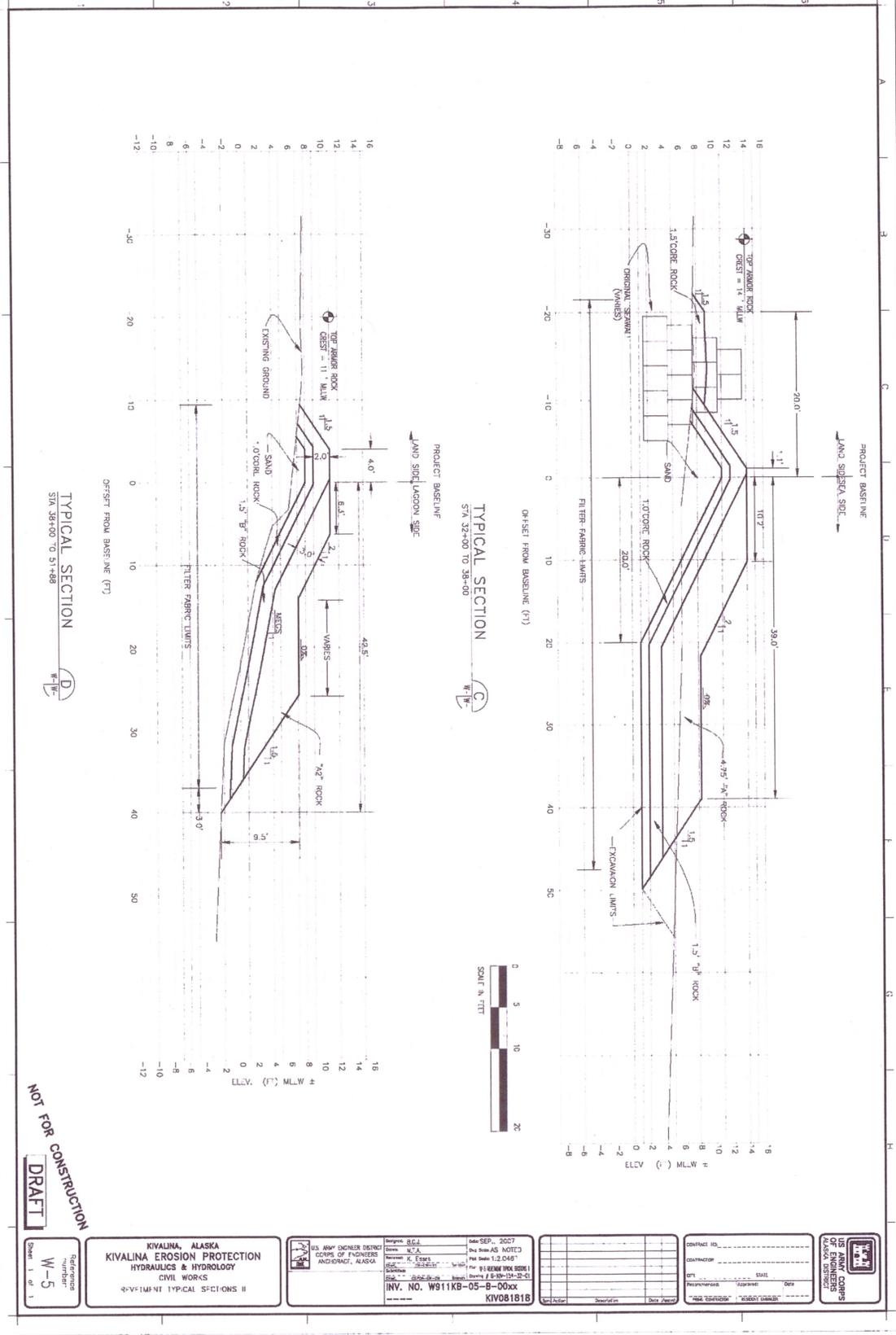


Figure 3. Kivalina erosion control structure cross section typical I, September 28, 2007.



NOT FOR CONSTRUCTION
DRAFT

Sheet 1 of 1
W-5

KIVALINA, ALASKA
 KIVALINA EROSION PROTECTION
 HYDRAULICS & HYDROLOGY
 CIVIL WORKS
 4-V-TIME-TYPICAL SECTIONS II

REGISTERED PROFESSIONAL ENGINEER
 CIVIL ENGINEER DISTRICT
 STATE OF ALASKA
 ANCHORAGE, ALASKA

PROJECT NO. 0007
 CONTRACT NO. 046
 INV. NO. W911KB-05-B-00xx
 KIV081818

CONTRACT NO.
 CONTRACTOR
 DATE

APPROVED: [Signature]
 DATE

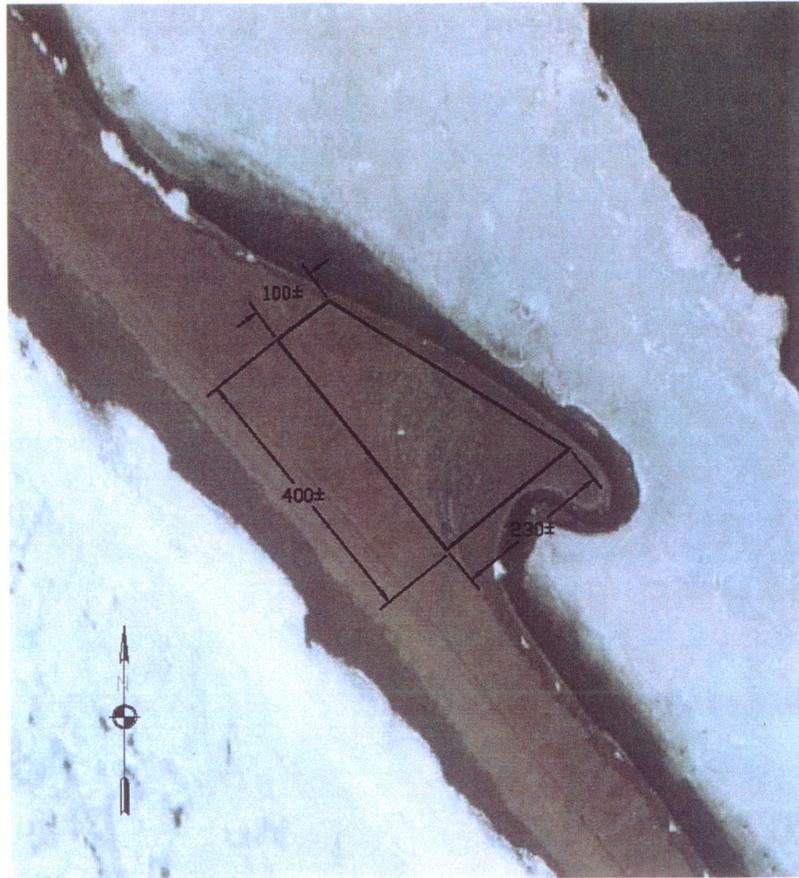
U.S. ARMY CORPS OF ENGINEERS
 CIVIL ENGINEER

Figure 4. Kivalina erosion control structure cross section typical II, September 28, 2007.



SITE LOCATED WITHIN
T27N R26W SEC. 26 & 27
KATEEL RIVER MERIDIAN

Figure 5. Revised Chukchi Sea potential sand and gravel source, September 28, 2007.



SITE LOCATED WITHIN
T27N R26W SEC. 8
KATEEL RIVER MERIDIAN

Figure 6. Dimensions of the potential Kivalina Spit materials site.