

**DOUGLAS HARBOR, ALASKA**  
(CWIS NO. 72789)

Condition of Improvement 30 September 2000

**AUTHORIZATION:** Rivers and Harbors Act, 3 July 1958 (House Doc. 286, 84th Congress, 2nd Session) as adopted, provides for a boat basin of 5.2 acres with entrance channel both to a depth of -12 feet MLLW and protected by a rock jetty about 90 feet long off the northerly shore of Juneau Isle adjacent to the basin entrance.

<b>EXISTING PROJECT:</b>	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
?? Basin . . . . .	400 ft	-12 ft	380 ft
?? Entrance Channel . . . . .	345 ft	-12 ft	60 ft
?? Jetty . . . . .	105 ft		

**PROJECT USAGE:** The small boat basin provides protected moorage for 100 small craft. Douglas Harbor is one of three Corps of Engineers projects that provide moorage for the large commercial fleet and recreational vessels in the Juneau/Douglas area (see Juneau Harbor and Gastineau Channel). The government, commercial fishing, and tourism provide a unique and diversified economy in the metropolitan area. All transportation to the area is by sea or air.

**PROGRESS OF WORK:**

- 1961 - Plans and specifications are prepared and the contract is awarded.
- 1962 - Construction of the breakwater begins in January and is completed in June. Dredging of the basin follows in June and is completed in August. The finished project includes gravel berm protection, gravel slope protection, and quarry run slope protection rock.
- 1993 - A condition survey is performed in April.
- 1995 - Sampling and testing of harbor sediments is conducted.
- 1997 - The entrance channel is straightened and dredged to two feet over project depth; 24,242 cubic yards of material are removed within the new limits.
- 2000 - The current condition of the Federal project is checked by hydrographic survey in May.

<b>COST TO DATE:</b>	<u>New Work</u>	<u>Maintenance</u>	<u>Total</u>
	\$ 282,019	\$910,113	\$ 1,192,132

<b>RANGE OF TIDE:</b>	<u>Mean Range</u>	<u>Diurnal Range</u>	<u>Extreme Range</u>
	13.8'	16.4'	28.5'

**CONTROLLING DEPTH:** A depth of -12.0 feet MLLW controls in the entrance channel, and -11.4 feet controls for the approach to the transient float, from the May 2000 survey.

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**MAINTENANCE DREDGING SUPPLEMENT:****A. General**

1. The first maintenance dredging for this project is conducted Aug-Sep 1997 (a 35 year span).
2. The entrance channel was straightened and dredged under the 1997 dredging contract.
3. A "no dredging" window from 15 April to 15 June is established by the State of Alaska.

**B. Sampling & Testing**

1. A composite of five samples taken from the entrance channel were classified as silty sand (SM). Samples from two sites within the harbor were classified as silt with sand (ML), January 1995.
2. Chemical analysis was conducted using (8) test methods as outlined with results below:

Method 8260	Volatile Organic Compounds	Acetone, 0.090 - 0.500 ppm* 2-Butanone, 0.036 - 0.250 ppm*
Method 8270	Semi-volatile Organics	Fluoranthene, 2.9 - 3.5 ppm** Chrysene, 1.9 ppm**
Method 8080	Pesticides and PCB's	none detected (ND)
Series 6000-7000's	(8) RCRA Metals	Mercury, 1.54 - 2 ppm ***
Method 350.2	Ammonia as Nitrogen	31 - 380 ppm
Method 415.1	Total Organic Carbon	1.01 - 1.66 ppm
Method 9030	Total Sulfide	40 - 2800 ppm
Method 160.1	Total Solids	36.6 - 63.4 %

\* Possibly caused by laboratory contamination; (8) other TIC's (tentatively identified compounds) were found in low concentrations.

\*\* Found in the inner harbor and may be considered above the minimum management threshold.

\*\*\* All samples above minimum management threshold for mercury; all others below management levels or not detected.

**C. Disposal**

1. Two dredge disposal sites were considered as possibilities for the 1997 contract: one, a shallow water site across Gastineau Channel requiring additional improvement, and a deep water site (> 100' deep) near the project entrance.
2. The deep water site was selected for this contract with the following coordinates (NAD27): Corner (1) 58°16'38.31" N. latitude and 134°22'49.88" W. longitude, Corner (2) 58°16'42.08" N. latitude and 134°22'58.05" W. longitude, Corner (3) 58°16'44.51" N. latitude and 134°22'54.00" W. longitude, and Corner (4) 58°16'40.75" N. latitude and 134°22'45.83" W. longitude.
3. A dredging window established by the State of Alaska runs from 15 April to 15 June.
4. Various options, including the possibility of upland disposal, must be considered for future spoils disposal.

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**D. Environmental Permits and Reports**

1. An Environmental Assessment (EA) was disseminated by the Corps, 28 April 1997, and a Finding of No Significant Impact (FONSI) was signed by the District Engineer on 19 June 1997; a Chemical Data Report was previously prepared by the Corps in April 1995 subsequent to the sampling and testing of harbor sediments.

2. The following permits or authorizations were issued by agency below:

<u>Agency Name</u>	<u>Date of Issue</u>	<u>Date of Expiration</u>
ADGC	16 Jun 97 *	n/a
ADEC	18 Jun 97	n/a
USFWS	14 May 97	n/a

\* Indicated review by ADEC, ADF&G, ADNR, and the Juneau Coastal District.

3. Water Quality: Seven physical parameters were measured at three locations through the water column, January 1995; temperature, pH, conductivity, oxidation-reduction potential (ORP), turbidity, dissolved oxygen, and salinity were measured in the field. No chemical analysis was conducted.