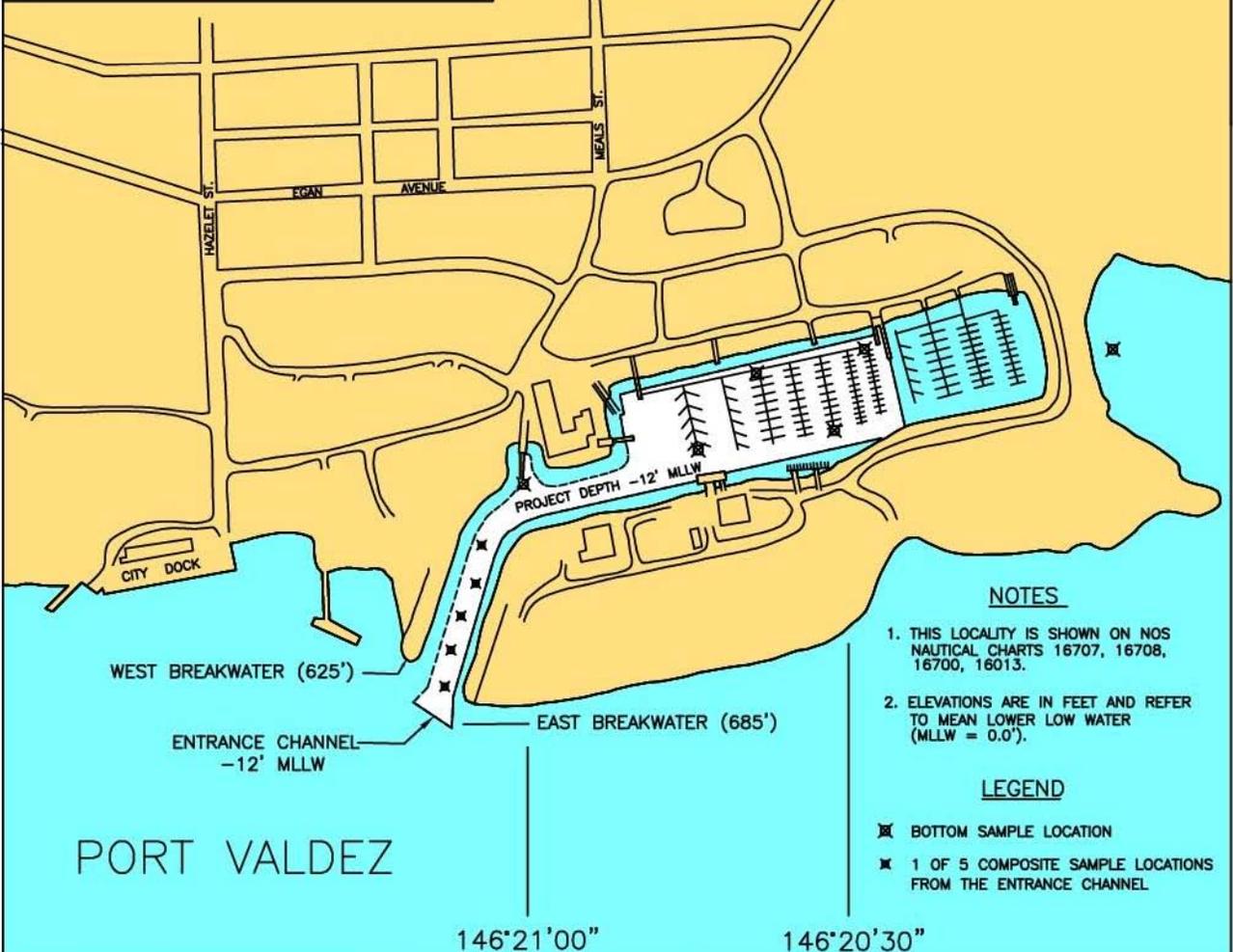
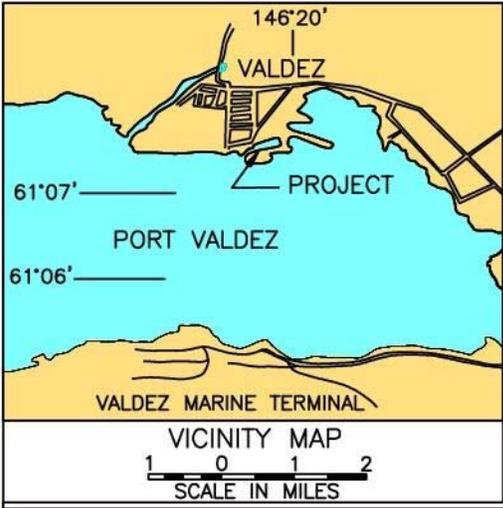


VALDEZ HARBOR

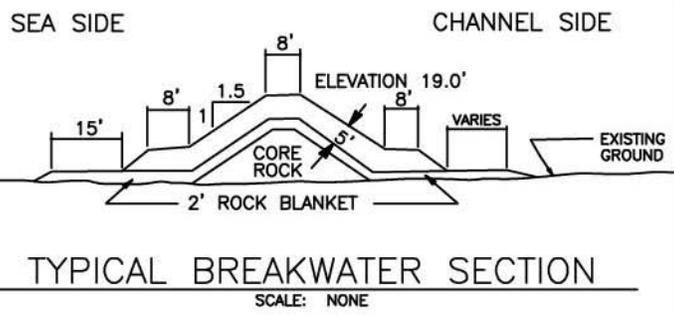


NOTES

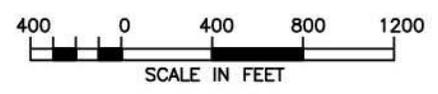
1. THIS LOCALITY IS SHOWN ON NOS NAUTICAL CHARTS 16707, 16708, 16700, 16013.
2. ELEVATIONS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW = 0.0').

LEGEND

- ✕ BOTTOM SAMPLE LOCATION
- ✕ 1 OF 5 COMPOSITE SAMPLE LOCATIONS FROM THE ENTRANCE CHANNEL



VALDEZ HARBOR
ALASKA
1993



VALDEZ HARBOR, ALASKA
(CWIS NOS. 72850 & 87770)

Condition of Improvement 30 September 2009

AUTHORIZATION: (1) Rivers and Harbors Act, 20 June 1938 (House Doc. 415, 75th Congress, 1st Session) as adopted, provides for a small boat and seaplane basin of 3 acres dredged to a depth of 12 feet below MLLW and for diversion of small creek from the basin site. (2) Rivers and Harbors Act, 3 September 1954 (House Doc. 182, 83rd Congress, 1st Session) as adopted, provides for a rock and gravel breakwater 475 feet long and for two pile breakwaters 490 feet in length to partially close the west side. (3) Rivers and Harbors Act, 19 August 1964, as adopted, provides for a sheltered small boat harbor of about 10 acres by relocating and expanding the previous project including an entrance channel 12 feet in depth protected by two rock mound breakwaters of 625 and 685 feet in length.

EXISTING PROJECT:	<u>LENGTH</u>	<u>DEPTH</u>	<u>WIDTH</u>
• Basin (Federal)	1270 ft	-12 ft	467 ft
• Basin (local)	650 ft	-12 ft	450 ft
• Entrance Channel	1724 ft	-12 ft	120 ft
• West Breakwater	625 ft		
• East Breakwater	685 ft		

PROJECT USAGE: The Valdez small boat harbor provides protected moorage for local and transient commercial fishing vessels as well as recreational craft with a 510 vessel capacity. Valdez is located at the terminus of the trans-Alaska pipeline and is accessible by sea, air, and the Alaska highway system.

PROGRESS OF WORK:

- 1939 - The original basin is dredged and the small creek is diverted from the site.
- 1951 - Project depth is restored by maintenance dredging in September.
- 1957 - Design modifications delete one pile breakwater and extend the other pile breakwater to 530 feet in length. Construction of the breakwaters begins in April and is completed in October.
- 1960 - Repairs are accomplished on the southwest pile breakwater.
- 1962 - Maintenance dredging is completed in August with 2 feet of advance maintenance included.
- 1964 - The project is completely destroyed by the March earthquake. Restoration phase of construction begins at relocated site in August. Expansion phase dredging begins in December. Funds are made available by the Office of Emergency Planning (OEP).
- 1965 - The existing Federal project is completed in June.
- 1985 - The small boat basin is expanded by local interests for a total basin area of approximately 20 acres.
- 1995 - Sampling and testing of harbor sediments is completed.
- 2002 - Vertical aerial photography is taken in June.
- 2003 - A hydrographic survey of the project is accomplished in June.
- 2006 - The most recent condition survey of the project is conducted in May.
- 2009 - Project condition survey is completed in late September.

VALDEZ HARBOR, ALASKA (continued)

30 September 2009

COST TO DATE:

CG Appropriation 87770	\$717,005
CG Costs 87770	\$709,005
O&M Appropriation 72850	\$322,807
O&M Costs 72850	\$333,807

RANGE OF TIDE:Mean Range

9.7'

Diurnal Range

12.1'

Extreme Range

21.7'

CONTROLLING DEPTH: A depth of -9.1 feet MLLW controls in the northern bend of the entrance channel. There is some minor shoaling along the southern edge of the project near the floating dock. A depth of -10.2 feet MLLW controls along the eastern edge of the Federal basin in September, 2009.

MAINTENANCE DREDGING SUPPLEMENT:**A. General**

1. Dredging for the existing Federal project was completed in 1965; no maintenance dredging has been required since that time.
2. Some shoaling has occurred in the entrance channel along the project limits. In the Federal basin some shoaling has occurred along the northern limit and at several spots near the floats.
3. No dredging window has been set for this project.
4. A determination of the dredging method and the location of the disposal site are outcomes pending the decision to dredge.

B. Sampling & Testing

1. Four (4) sites were sampled in the harbor proper, February 1995; (3) were classified as silt (ML) and (1) as silty gravel (GM). The Coast Guard dock sample was classified as silt (ML) and a composite sample from the outer entrance channel was classified as gravelly silt (ML).

Continues on page 1-50b

VALDEZ HARBOR, ALASKA (continued)

30 September 2009

2. Chemical analysis was conducted using (8) test methods as outlined with results below:

Method 8080	Pesticides and PCB's	none detected (ND)
Series 6000-7000's	(8) RCRA Metals (4) of (8) detected	Mercury 14 - 21 ppm, all others well below management thresholds
Method 415.1	Total Organic Carbon	0.48 - 1.09 %
Method 305.2	Ammonia as Nitrogen	2.2 - 19 ppm
Method 9030	Total Sulfides	15 - 2500 ppm
Method 160.1	Percent Solids	46.5 - 65.2 %
Method 8260	Volatile Organic Compounds	ND or below management levels
Method 8270	Semi-volatile Organics	Chrysene ND - 2.63 ppm Fluoranthene ND - 5.61 ppm Phenanthrene ND - 2.98 ppm, all others below management levels or ND

C. Disposal

1. Dredge spoils may be conveyed to a contained upland or intertidal site, or material may be transported and discharged in a pre-selected deep water site.
2. Selection of the site will depend on the needs of the community, the availability of alternate sites, the quality of the dredge spoils, possible environmental impacts, and the funds available. A primary and an alternate site are often selected to insure disposal if a prime site becomes unfeasible. Agency participation is a prerequisite.

D. Environmental Permits and Reports

1. The Chemical Data Report prepared by the Corps in May 1995 represents the only environmental assessment on file.
2. Federal dredging has not been performed since harbor restoration in 1965. Agency participation will be required for any future dredging endeavors.
3. Water quality: Seven physical parameters were recorded at six sites within the project, February 1995, measuring temperature, pH, conductivity, oxidation-reduction potential (ORP), turbidity, dissolved oxygen, and salinity. No chemical analysis was conducted.

Valdez Harbor



Photo taken during the project condition survey in September, 2009.



View of the small boat harbor in September, 2009.