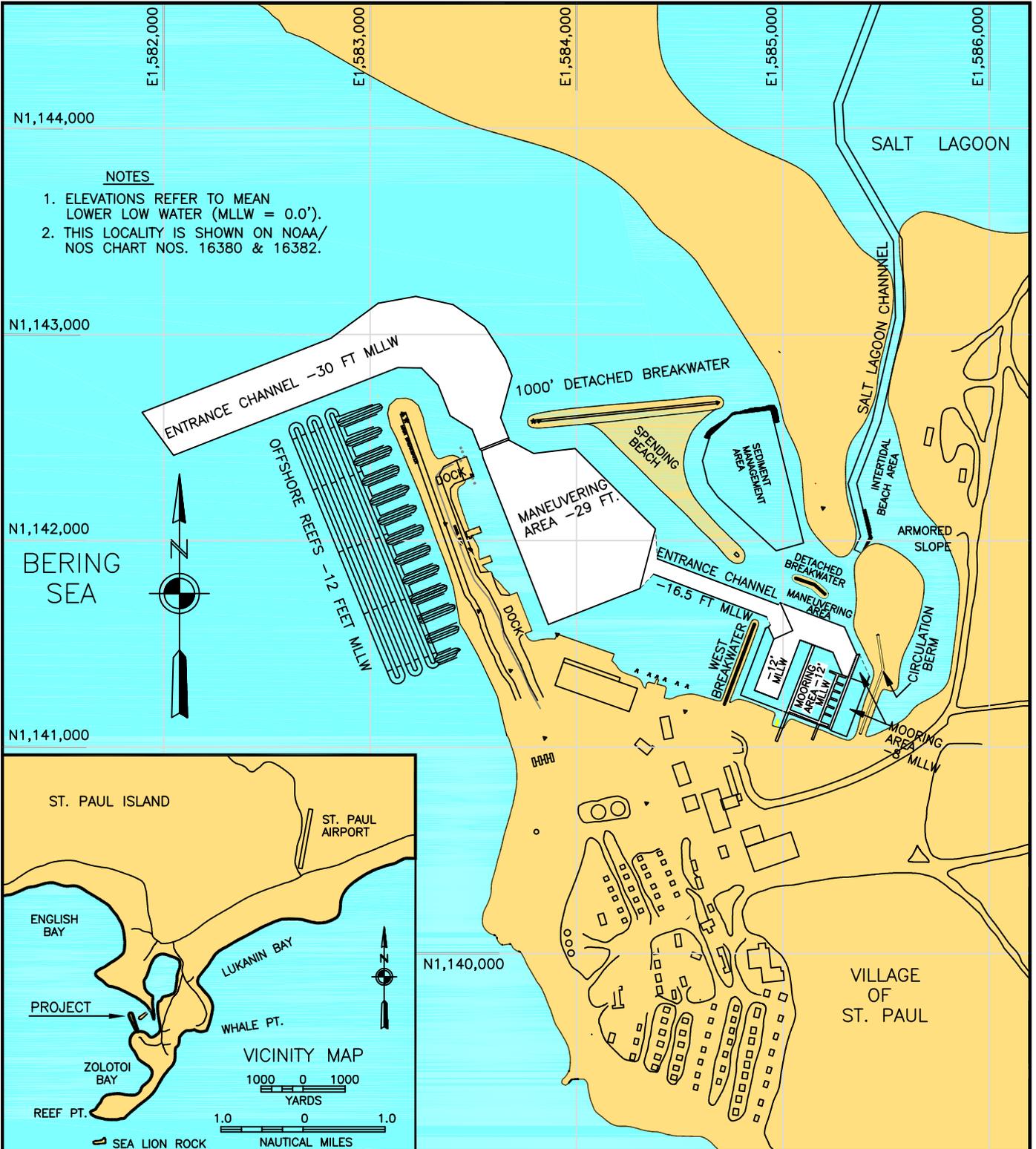
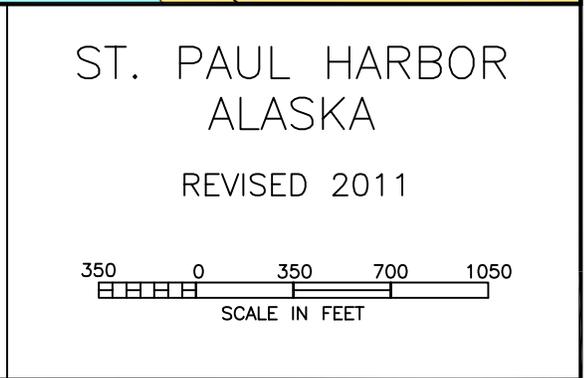
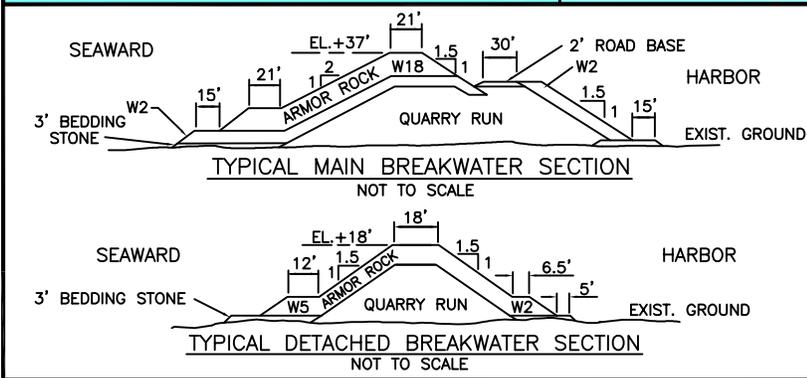
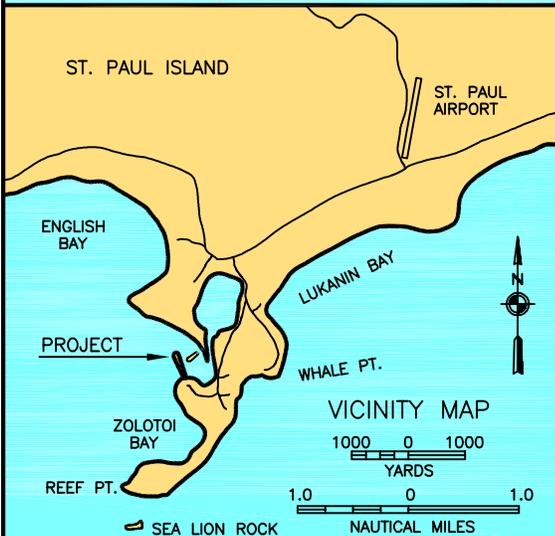


St Paul Harbor



- NOTES**
1. ELEVATIONS REFER TO MEAN LOWER LOW WATER (MLLW = 0.0').
 2. THIS LOCALITY IS SHOWN ON NOAA/ NOS CHART NOS. 16380 & 16382.



Condition of Improvements
 30 December 2014
St Paul Harbor
 St Paul Island, Alaska
 (CWIS Nos. 010169, 010429 & 080526)

Authorization (1) Water Resources Development Act, 17 November 1986 (Public Law 99-662, Section 202) as adopted, provides for an addition to the existing breakwater of 1050 feet at 37 feet above MLLW, a detached breakwater 1000 feet in length at 18 feet above MLLW protecting Village Cove, and a maneuvering area 200 feet wide at 18 feet below MLLW. (2) Water Resources Development Act of 1996, (Section 101(b)(3), Public Law 104-303) provides for an entrance channel at -30 feet MLLW, enlarges the maneuvering basin to 415 by 830 feet with a depth of -29 feet MLLW, creates a wave spending beach at +4 feet MLLW, a tidal channel into the Salt Lagoon at 40 feet in width at -3 feet MLLW for environmental mitigation, and three off-shore reefs 1,300 feet in length at -12 feet MLLW. (3) Water Resources Development Act of 1999, 106th Congress, provides for a small boat harbor with an entrance channel at -16 feet MLLW and a maneuvering area at -12 feet MLLW with appropriate wave protection flow directing features consisting of a breakwater of 435 feet at 10 feet above MLLW and a circulation berm of 530 feet at 10 feet above MLLW.

Local Cooperation Under Section 204(e) of Public Law 99-662, the Federal government agreed to reimburse the City 80% of the project costs upon acceptance by the Corps of Engineers. Under this agreement, the project was initially funded and supervised by the City of St. Paul.

Table 1

Existing Project	Length ft.	Width ft.	Depth ft.
Main Breakwater (Federal)	1050		
Detached Breakwater	1000		
Entrance Channel	2000	varies	-30
Maneuvering Area	varies	varies	-29
Offshore Reefs (3)	1300		-12
Birth Area			-29
Intertidal Beach Area			0

Table 2

Small Boat Harbor	Length ft.	Width ft.	Depth ft.
Detached Breakwater	160		
Circulation Berm	485		
Attached Breakwater	435		
Entrance Channel	varies	varies	-16
Mooring/Maneuvering Area			-12
Mooring Area (Back)			-8

Project Usage The harbor at St. Paul (Pribilof Islands) is an important harbors-of-refuge for the bottom-fishing fleet in the Bering Sea and provides crucial economic support for this remote community.

Progress of Work

1989	Construction begins in May and all phases are completed in December.
1990	After the project is inspected and accepted by the Corps of Engineers, the City of St. Paul is reimbursed \$18,150,000 in March.
1995	A condition survey of the breakwaters and entire harbor is completed in July. Minor repairs are made to the main and detached breakwaters by placing armor stone at the damaged sites.
1999	Phase I contract is awarded to construct (3) off-shore reefs to protect the main breakwater.
2001	The latest condition survey of the harbor and breakwaters is completed in July. Phase I contract is modified to repair scour behind the off-shore reefs.
2002	A survey of the three off-shore reefs is conducted in May.
2003	The three off-shore reefs and the outer entrance channel are surveyed in May. A contract for Phase II dredging is awarded in June.
2005	The Salt Lagoon and main harbor are surveyed in March. Phase II construction is completed.
2006	Vertical and oblique aerial photography is taken in May. An extensive condition survey was conducted throughout the harbor and Salt Lagoon in May and June.
2008	A contract for Phase III construction of the small boat harbor is prepared.
2009	The contract for construction of the small boat harbor, Phase III, was awarded in May. Construction will begin in the summer of 2010.

Progress of Work

- 2010 As a local feature in the small boat harbor, armored slope protection was added to the breakwater berth area and the harbor dredged to -29 feet. Trenches were dredged to -33 feet in front of the existing docks. The harbor was also updated with a circulation berm, a detached breakwater, and an attached breakwater. The mooring/maneuvering area was dredged to -12.5 feet and an entrance channel was dredged to -16.5 feet. The intertidal beach area was excavated as an environmental mitigation feature. Construction was completed October.
- 2011 A project condition survey was conducted in August.
- 2012 USACE Comprehensive Evaluation of Project Datums (CEPD) Compliance report completed and recorded in September.
- 2014 A project condition survey was conducted in August.

Table 3 Cost to Date

Project	Description	Cost \$
010169	GI PED Appropriation	534,000
	GI PED Costs	534,000
	O&M Appropriation	1,257,428
	O&M Costs	1,057,481
010429	GI PED Appropriation	696,770
	GI PED Costs	696,770
	CG Appropriation	81,559,449
	CG Costs	81,478,285
	CG Contributed Appropriation	9,373,322
	CG Contributed Costs	8,863,395

Table 4 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
946 4212 St Paul Island AK	2.10	3.30	7.36

Controlling Depth A depth of -29.5 feet MLLW controls at the center of the northern end of the federally maintained maneuvering basin, May 2006.

Saint Paul Harbor, Saint Paul, Alaska



Aerial of St. Paul Harbor, 2014.



Oblique of St. Paul Harbor, 2006.

Saint Paul Harbor, Saint Paul, Alaska



St. Paul Harbor, 2011.



St. Paul Harbor, 2011.