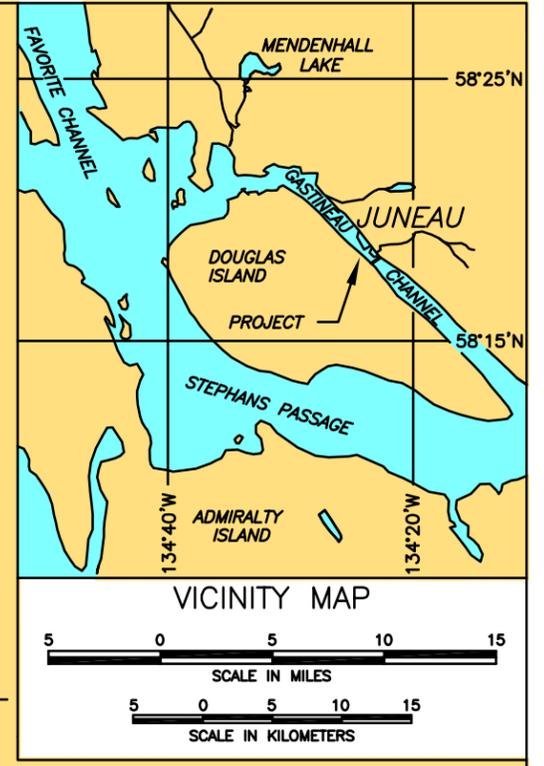
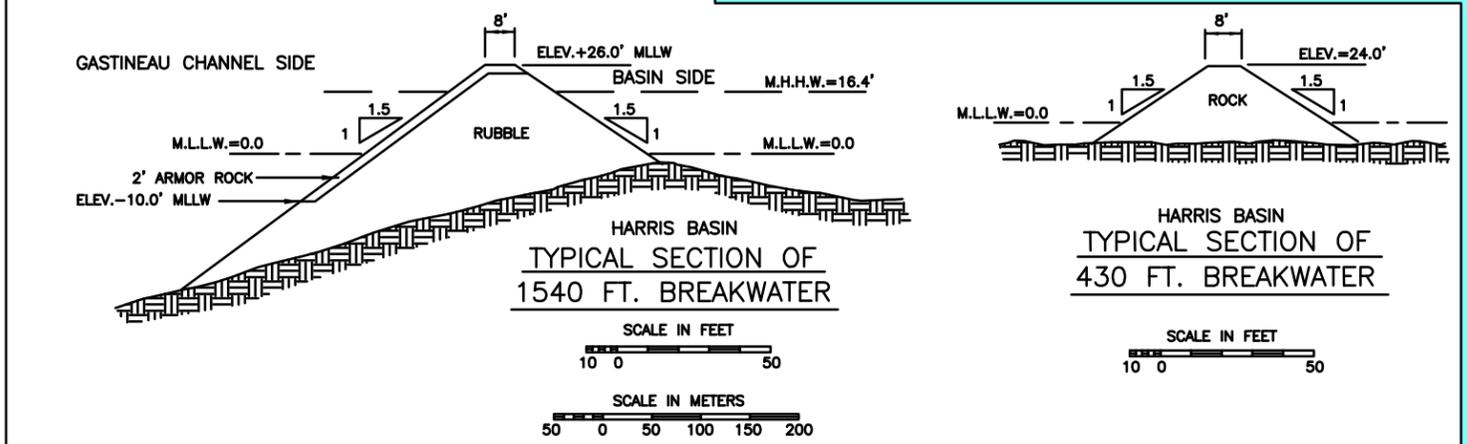
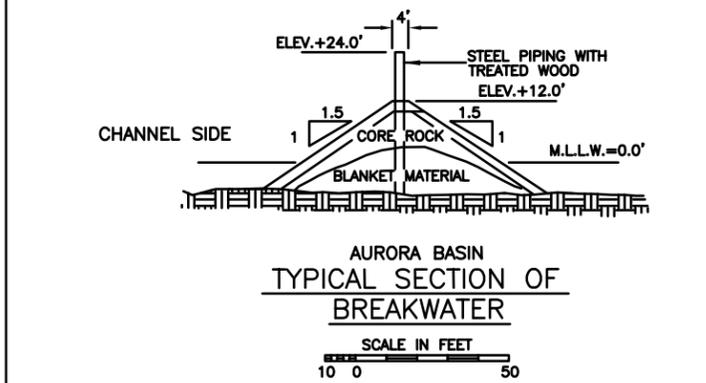
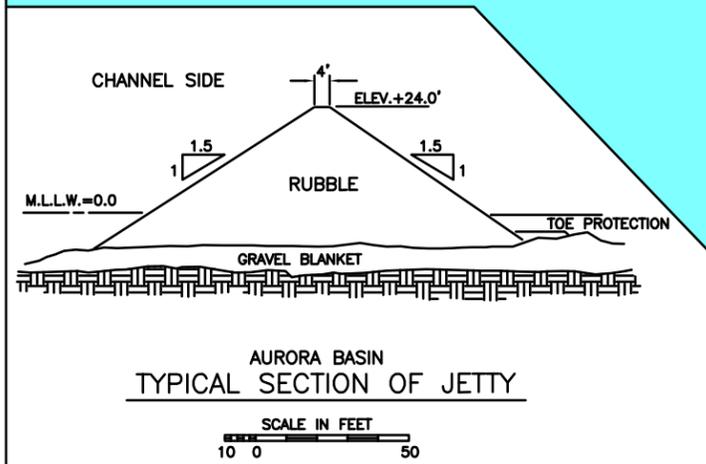
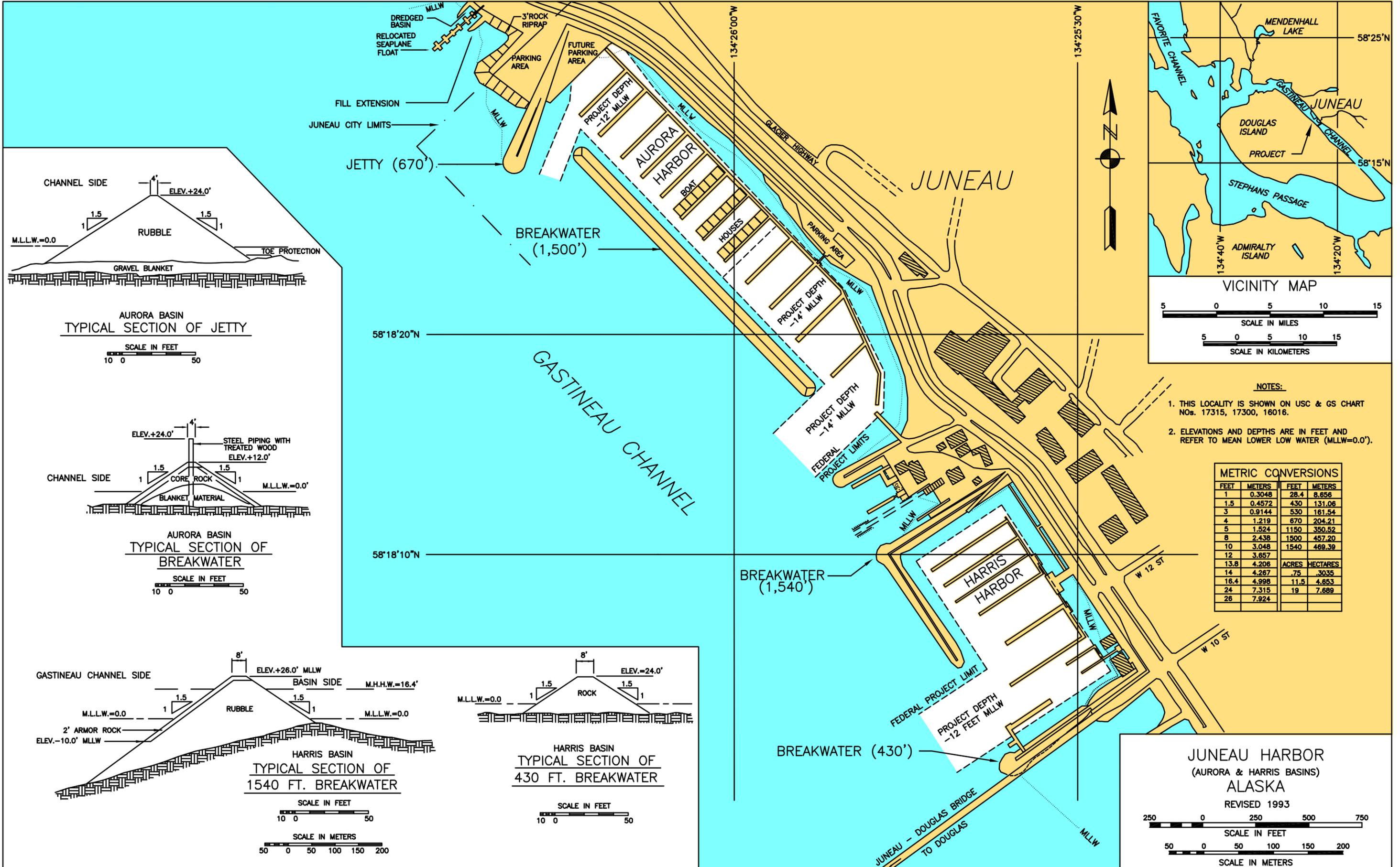
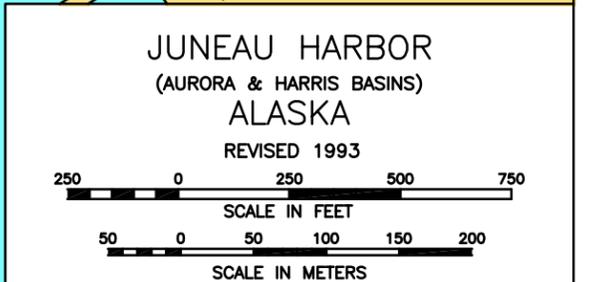


**Juneau Harbors
Harris and
Aurora Harbors**



- NOTES:**
1. THIS LOCALITY IS SHOWN ON USC & GS CHART NOs. 17315, 17300, 16016.
 2. ELEVATIONS AND DEPTHS ARE IN FEET AND REFER TO MEAN LOWER LOW WATER (MLLW=0.0').

FEET		METERS	
1	0.3048	28.4	8.656
1.5	0.4572	430	131.06
3	0.9144	530	161.54
4	1.219	670	204.21
5	1.524	1150	350.52
8	2.438	1500	457.20
10	3.048	1540	469.39
12	3.657		
13.8	4.208	ACRES HECTARES	
14	4.267	.75	.3035
18.4	4.998	11.5	4.653
24	7.315	19	7.689
28	7.924		



Condition of Improvements
 30 December 2014
Harris & Aurora Harbors
 Juneau, Alaska
 (CWIS No. 020960 & 072797)

Authorization (1) Rivers and Harbors Act, 26 August 1937 (House Doc. 249, 75th Congress, 1st Session) as adopted, provides for a small boat basin 11.5 acres in area, just north of the Juneau-Douglas bridge, by construction of two rock mound breakwaters of 430 and 1,540 feet in length, and by dredging to a depth of -12 feet MLLW; (2) Rivers and Harbors Act, 3 July 1958 (House Doc. 286, 84th Congress, 2nd Session) as adopted, provides for an adjacent basin 19 acres in area dredged to depths of -12 feet MLLW and -14 feet MLLW, protected by a jetty 530 feet long and a breakwater 1,150 feet long.

Table 1

Existing Project	Length ft.	Width ft.	Depth ft.
Harris Harbor			
Basin	11.5 acres		-12
South Breakwater	430		
North Breakwater	1540		
Aurora Harbor			
Basin	19 acres		-12,-14
Main Breakwater	1500		
North Jetty	670		

Project Usage Harris harbor is used as a base of operations for approximately 250 vessels. Aurora harbor provides protected moorage for approximately 550 small craft and seaplanes. The combined Juneau-Douglas complex (see also Douglas Harbor and Gastineau Channel) gives protection and moorage to approximately 1,000 vessels, half of which are active in commercial fishing. All transportation to the area is by sea or air.

Progress of Work

Harris Harbor

- 1939 The original project adjacent to the Juneau/Douglas bridge, Harris Harbor, is completed to its present dimensions.
- 1950 The first maintenance dredging contract is completed in the summer for Harris Harbor.
- 1962 Limited maintenance dredging at the entrance of Harris Basin is performed in July.
- 1968 Harris Basin is dredged north of the alignment of the entrance channel with 39,353 cubic yards reportedly removed from July through September.
- 1973 A contract for the repair of the main northerly breakwater at Harris Harbor is awarded in June and completed in December.
- 2002 A condition survey of the harbor is conducted in April.
- 2003 Vertical and oblique aerial photography is taken of Harris harbor.
- 2005 A condition survey of the harbor is conducted in April.
- 2009 A condition survey of the harbor is conducted in August.
- 2012 "Comprehensive Evaluation of Project Datums" Compliance report completed and recorded in September.
- 2013 A condition survey of the harbor is conducted in May.
- 2014 A control survey was performed to update all horizontal and vertical project control.

Aurora Harbor

- 1962 Aurora Harbor: Design modifications increase the length of the jetty to 670 feet and the main breakwater to 1500 feet. Work commences on the North Jetty in August and is completed in September. Dredging of the new basin begins in December.
- 1963 Dredging of Aurora Basin is completed in March with the exception of the most northerly corner where hard bottom prevents dredging. Contract for the main breakwater is awarded in June and begins in July.
- 1964 The main breakwater for Aurora Harbor is completed in February.
- 2002 A condition survey of the harbor is conducted in April.
- 2003 Vertical and oblique aerial photography is taken of Aurora harbor.
- 2005 A condition survey of the harbor is conducted in April.
- 2009 A condition survey of the harbor is conducted in August.
- 2012 USACE Comprehensive Evaluation of Project Datums Compliance report completed and recorded in September.
- 2013 A condition survey of the harbor is conducted in May.
- 2014 A control survey was performed to update all horizontal and vertical project control.

Table 2 Cost to Date

Project	Description	Cost \$
087219/087227	CG Appropriation	1,910,563
	CG Costs	1,910,563
	O&M Appropriation	429,023
	O&M Costs	429,023

Table 3 Range of Tides in feet

Tide Station	Mean Range	Diurnal Range	Extreme Range
945 2210 Juneau AK	13.74	16.31	30.71

Controlling Depth In 2013 at Harris Harbor, a depth of -5.1 feet MLLW controls along the eastern float in an area accessible only by small aircraft, and a depth of 8.4 feet MLLW controls the transient float. There is minor shoaling around the harbor perimeter. In 2013 at Aurora Harbor, a depth of -5.7 feet controls the -12 feet MLLW area along the northern float at the gangway and a depth of -10.0 feet controls the -12 feet MLLW area. There is minor shoaling along the harbor perimeter.

Juneau Harbors, Juneau, Alaska



Oblique of Aurora Harbor, 2 August 2013.



The breakwater at Aurora Harbor, 6 August 2013.

Juneau Harbors, Juneau, Alaska



Oblique of Harris Harbor, 2 August 2013.



Harris Harbor, 2 August 2013.