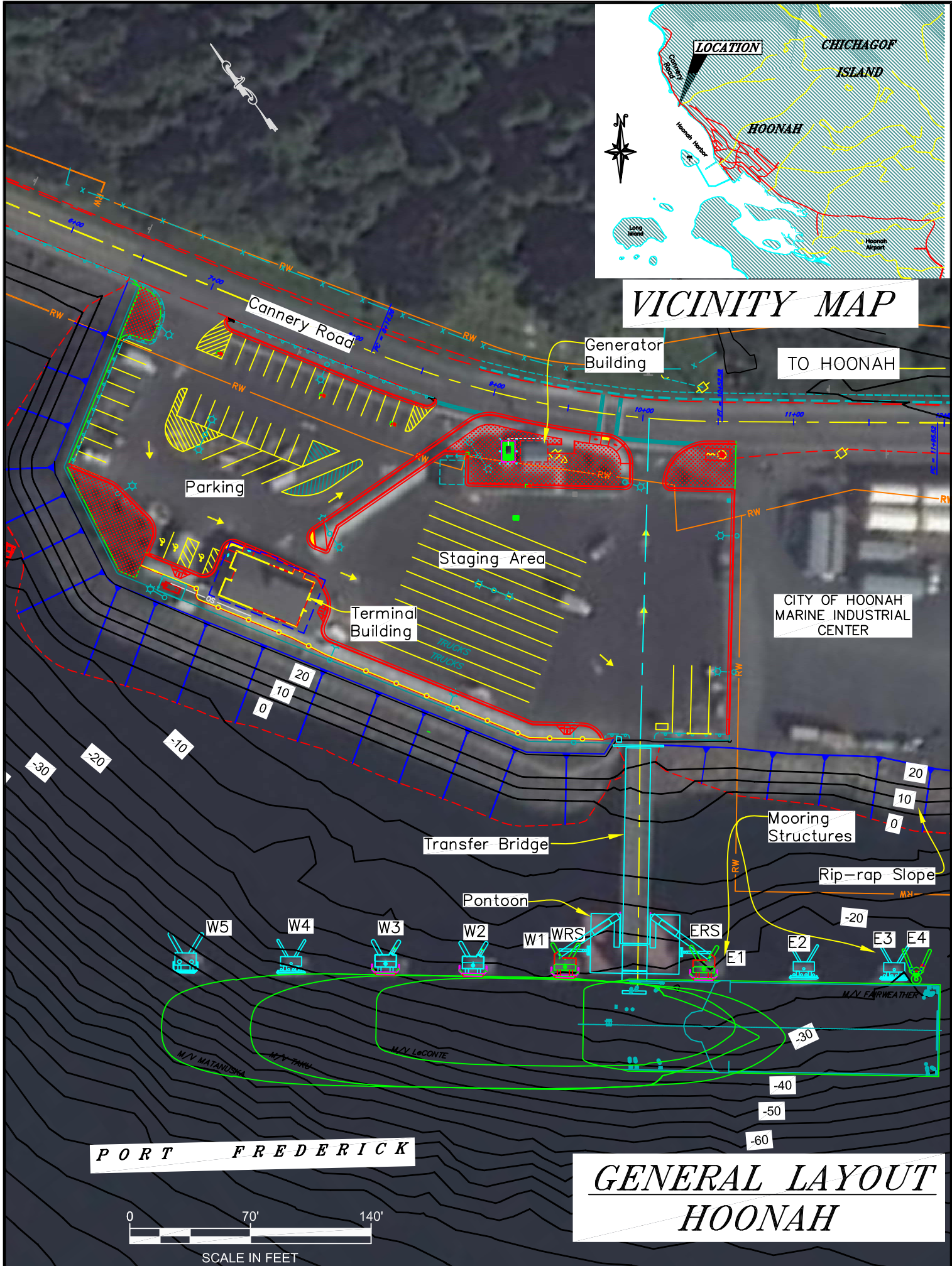


VICINITY MAP



PORT FREDERICK

GENERAL LAYOUT HOONAH

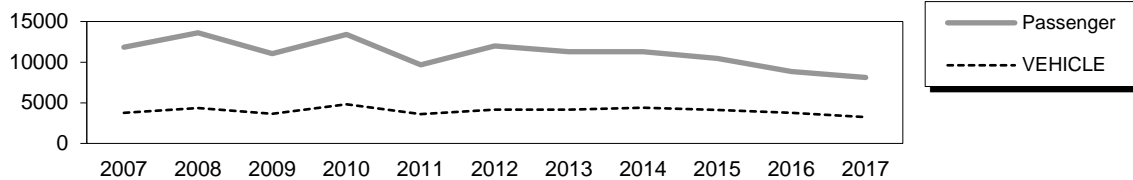
Hoonah Ferry Terminal

1 Mile Cannery Road

Owner: State of Alaska

Terminal Manager: Lyna Johanson – 907-945-3543

Terminal Description: Hoonah Ferry Terminal was originally constructed in 1974. The current facility is a side-berth facility consisting of a transfer bridge, steel support float, and eight steel mooring dolphins. The uplands and terminal building was reconstructed in 2010/11. The transfer bridge, float system and five new mooring dolphins were constructed in 2011. This terminal is now capable of servicing all AMHS vessels including the FVF. Uplands include terminal and generator buildings, paved parking and overhead lighting. Hoonah's past 10 years of total passenger and vehicle traffic counts are shown below.



The most recent above water survey was completed on August 14, 2017. The underwater inspection occurred on August 10, 2016.

Vessels	
Name	Berthing, Alignment
Mat / Mal / Taku/ Leconte	Port
FVF	Starboard

Tidal Data (MLLW 0.0 feet)	
EHW	20.0
MHHW	14.8
MHW	13.9
ELW	-5.1

Generator & Building	
Year Built:	1992 (exterior siding - 2010)
Square Footage:	360 s.f.
Heating System:	Electric
Fuel Storage:	UST
Fire Protection:	N/A
Condition:	Good

Vehicle Transfer Bridge - #0179	
Type:	16' x 130' steel multi-girder
Year Built:	2011
Shoreward support:	Concrete abutment (1973)
Seaward support:	Steel Support Float
Coating:	Spray metallized w/topcoat
Pedestrian Access:	Concrete 4' wide on bridge
Lighting:	(3) Overhead Light Posts
Condition:	New
Load Posting Sign:	N/A
Original Design Load:	HL93

Uplands	
Short-Term Parking:	22 cars
Long-Term Parking:	0
Staging Area:	610 lineal feet, 4 lanes
Paint Striping:	Yes
Driving Surface:	Asphalt
Terminal Building	
Year Built:	2011
Square Footage:	1472 s.f.
Heating System:	Monitor
Fuel Storage:	500 gal UST
Fire Protection:	None
Condition:	New
Bridge Support Float	
Type:	40' x 60' Steel Flexi-float
Year Built:	2011 (Intermediate Ramp & Apron reused).
Ballasted:	No
Ramp lift:	Hydraulic/Cable (1994)
Apron lift:	Hydraulic/Cable (1994)
Anodes:	Yes
Float Condition:	New

Utilities		
	at Terminal	at Ramp
Electrical:	Yes, city & backup power	
Water:	Yes	No
Sewer:	Yes (City)	No
Telephone:	Yes	No
Cable TV:	Yes	No
Fuel:	Yes	No
Wireless Bridge:	Yes	N/A

Dolphins							
Dolphins	Dolphin Piles	Fender Support	Fender Face	Anodes	Built	Cond.	Notes
W5	2B, 2V	Hanging	UHMW	-	2006	Good	Windsock & Red navlight
W4	2B, 1V	4V	Ekki Timber	-	1993	Fair	
W3	2B, 2V	Hanging	UHMW	Yes	2010	New	
W2	2B, 2V	Hanging	UHMW	Yes	2010	New	
W1	2B, 2V	Hanging	UHMW	Yes	2010	New	
E1	2B, 2V	Hanging	UHMW	Yes	2010	New	
E2	2B, 1V	4V	Ekki Timber	-	1993	Fair	
E3	2B, 1V	4V	Ekki Timber	-	1993	Fair	
E4	2B, 3V	Floating	Rubber	Yes	2010	New	White nav light
ERS	1B, 1V	-	-	-	1993	Fair	
WRS	1B, 1V	-	-	-	1993	Fair	

LEGEND

ERS = East Float Restraint Structure
V = Vertical Steel Pipe Piles

B = Battered Steel Pipe Piles
H = Vertical Steel H-Piles

Terminal Projects			
Year	Project #	Project Name	Description
1973	S-0918(1)	HNH Ferry Terminal Construction	Original fill onto tidelands, with Shelter and separate vault toilet on uplands; built transfer bridge, flexifloat seaward support (w/ concrete anchors), ramp lift system and four concrete capped, steel pile mooring dolphins (E1, W1-3).
1975	??	HNH Ferry Terminal Building	Construct the terminal building.
1986	X-70006	HNH Ferry Terminal North Dolphin Repair	Remove existing and install new fender panel from dolphin W3; Loosen existing concrete cap from existing dolphin piles and level.
1987	RS-0005(78)	Southeast Secondary Upgrade	Recoated and installed new zincs on flexi-floats; Recoated ramp, apron, transfer bridge; Replaced expanded metal mesh on bridge; Upgrade to dolphin fenders.
1992	74905 -RS-0918 (5)	HNH Ferry Terminal	Expanded the staging and parking areas, along with grading, paving, lighting and drainage improvements.
1993	75130 - RS0989	HNH Ferry Terminal Mooring	Installed new mooring structures W4 & E2-3; Replaced fender on W1; Installed new barge fenders and restraint structures.
1996	75455 - STP-0918 (6)	HNH Ferry Terminal Ramp & Apron Upgrade	Replace ramp and apron with newer hydraulically controlled units.
2006	67488	Kake & Hoonah Ferry Terminal Dolphins	Install new lead-in dolphin W5.

Terminal Projects (continued)			
Year	Project #	Project Name	Description
2010	67813	HNH Ferry Terminal Improvements	Expanded the staging & parking areas, constructed new terminal building, connected building to City sewer system.
2011	69311	HNH FT Marine Structures	Replaced the vehicle transfer bridge, float system, mooring dolphins E1 & W1, W2 and W3, installed new gangways & platforms to access dolphins E1 & W1 for line handling. Installed new dolphin E4 for all-tide mooring of the FVF.

Observations

1. The uplands, terminal building and most marine structures were reconstructed in 2010-11. Most components are in like new condition.
2. The generator shed has a hole in the roof that was not properly sealed from water intrusion. A dark spot is a sign of decay in the timber roof panel.
3. The terminal manager commented that parking space becomes insufficient on holidays, special event days and at funerals.
4. Several roofing screws were found on the ground adjacent to the covered walkway. Settlement at the walkway foundation has resulted in a height variation of over 1-inch between it and the adjacent sidewalk.
5. At low tide conditions the shoreward transition plate between the transfer bridge & uplands becomes a break over issue. In combination with the down grade to the pavement, this causes clearance issues for some AML vehicles.
6. The connection bolts between the concrete backwall and the steel support beam have been severed. Likely occurred during the 2011 improvement project.
7. The intermediate bridge ramp and apron were replaced in 1996. The ramp & apron were re-used on the 2011 Marine Structures project and are currently in service. They are in good condition. The hydraulic cylinder cap for the apron lift system is actively corroding. There is a weld indication at the connection between the RT lift beam for the intermediate ramp and the Girder.
Paint is peeling on the side of the hydraulic power unit, which needs a containment pan for potential oil leaks.
8. The bridge floats were replaced on the '11 project. Algae/mold growing on the floats produces a slippery walking surface.
9. Mooring is provided by five (5) recently built steel-capped structures with hanging fender panels (E1, W1-W3 and W5), a new floating fender dolphin (E4) and three older steel capped structures with 4-pile supported fender panels (W4 and E2-E3). Gangways provide access to W1 and E1 for assistance in line handling.
10. The galvanized coatings on the older dolphins have approximately 40% remaining. No anodes are installed on the older mooring structures (except for W5). The cathodic protection readings on dolphins W4, E2 – E3 are below -0.8V, which means the steel is actively corroding. Depth to mudline elevations, taken with leadline readings at locations along the fender line in 2015, range from -19' to -22' MLLW.
11. All exposed steel and concrete surfaces are stained green/brown from algae on the uplands and marine structures. Recommend power wash the facility on a regular basis.

Inspection Summary		
Structure	Priority	Recommendations
<i>Category I - Safety Repairs</i>		
Nothing required.		
<i>Category II - Rehabilitation Work</i>		
Abutment	1	Re-establish structural connection between concrete backwall and steel support beam.
Covered Walkway	2	Monitor the ground around the walkway for roofing screws. Fill in the sunken concrete pads at the post foundations with grout.
Hydraulics	3	Repaint hydraulic power unit where coating has failed and install containment pan.
Dolphin anodes	4	Replace anodes on dolphins W4, and E2 - 3.
Staging Area	5	Monitor break-over issue at the shoreward bridge abutment transition plate.
<i>Category III - Upgrades Needed</i>		
Nothing required.		

