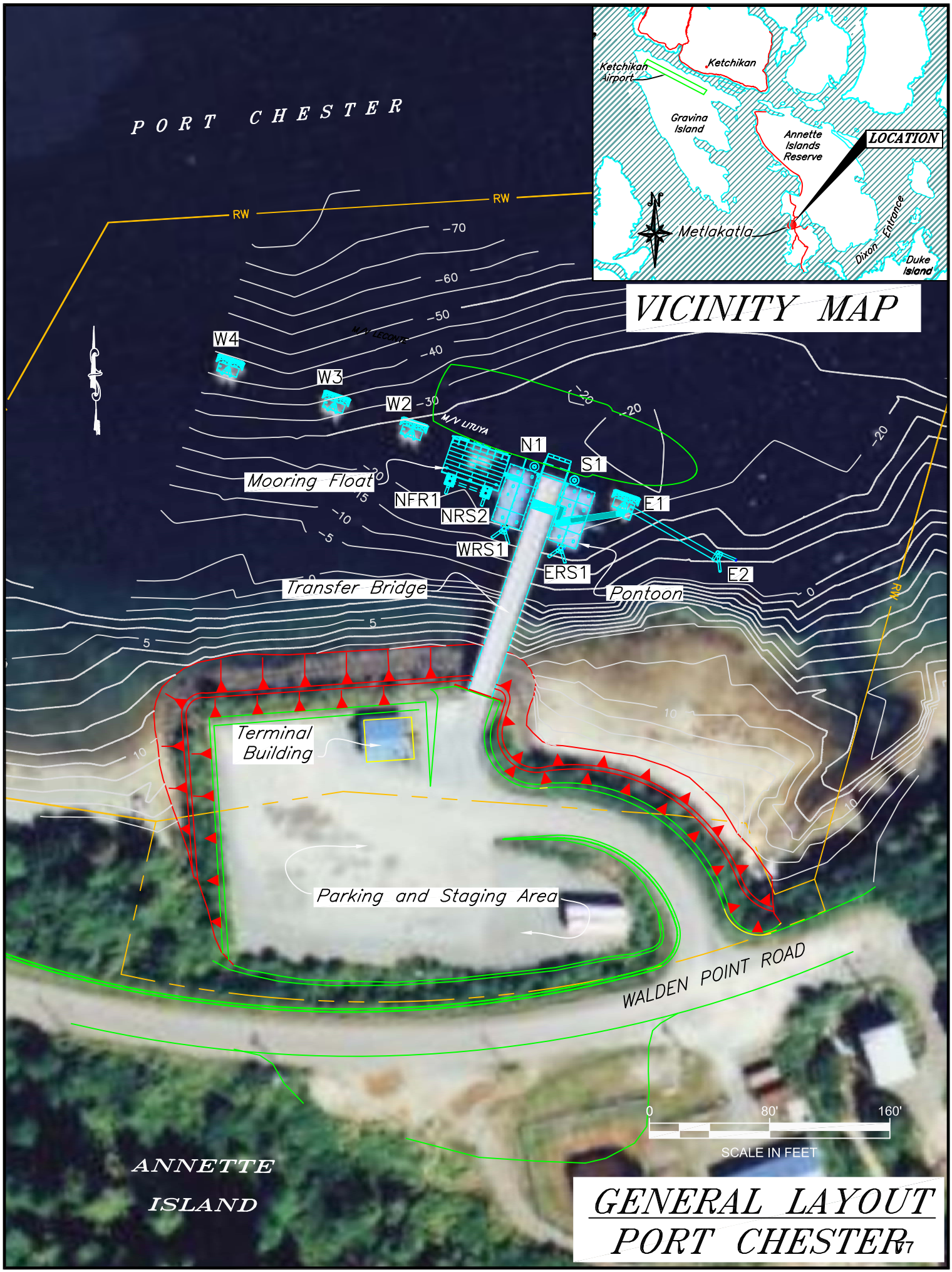

PORT CHESTER
RW
RW
-70
-60
-50
-40
-30
-20
-20
-20
-20
-15
-10
-5
0
0
5
5
10
10
10
M/V LEDOUX
M/V LITUYA
W4
W3
W2
N1
S1
E1
E2
NFR1
NRS2
WRS1
ERS1
Mooring Float
Transfer Bridge
Pontoon
Terminal Building
Parking and Staging Area
WALDEN POINT ROAD
ANNETTE ISLAND
0
80'
160'
SCALE IN FEET
Ketchikan
Ketchikan Airport
Gravina Island
Annette Islands Reserve
LOCATION
Metlakatla
Dixon Entrance
Duke Island
VICINITY MAP
GENERAL LAYOUT
PORT CHESTER

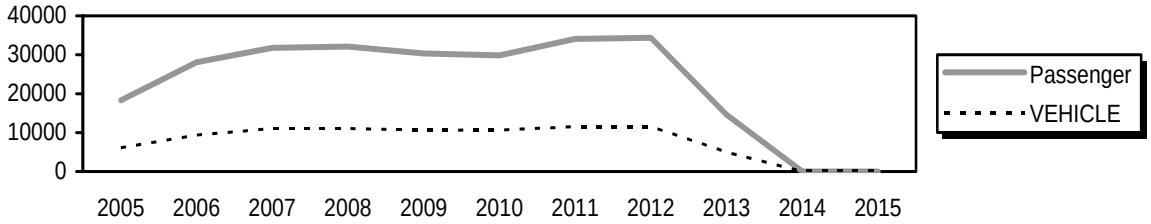
Port Chester Ferry Terminal (Metlakatla)

Mile 3 Walden Point Road

Owner: State of Alaska

Contact: Simon Bradley, AMHS Terminal Ops Manager (Ketchikan) – 907-228-7290

Terminal Description: The Port Chester terminal was constructed in 1987 and is approximately two miles from town. The facility is a side berth designed for LeConte class vessels, and consists of an orthotropic steel deck bridge, seven steel pipe pile dolphins (six breasting and one mooring), an HDPE mooring float, and a steel bridge pontoon. In 2003, the terminal was modified to serve as a homeport for the M/V Lituya, a shuttle ferry operating between Metlakatla and Ketchikan. The past 10 years of total passenger and vehicle traffic for Port Chester is shown below.



A new ferry terminal in Annette Bay has been completed, and ferry operations have moved there; however, the Port Chester facility remains in active operation status. The most recent topside and underwater inspections were conducted July 22, 2015 and August 14, 2011, respectively. The most recent fracture critical inspection occurred on September 14, 2014.

Vessels	
Name	Berthing, Alignment
Lituya / LeConte	Starboard

Tidal Data (MLLW 0.0 feet)	
EHW	19.5
MHHW	15.4
MHW	14.4
ELW	-4.5

Terminal Building	
Year Built:	1987
Square Footage:	576 s.f.
Heating System:	Electric
Condition:	Poor, out of service

Vehicle Transfer Bridge - #0178	
Type:	16' x 132' steel orthotropic deck
Year Built:	1973
Shoreward support:	Steel Beam/Driven Piling
Seaward support:	Steel Support Float
Coating:	Spray Metallizing
Pedestrian Access:	Concrete 4' wide on bridge
Lighting:	Jelly Jars, left guardrail
Condition:	Poor
Load Posting Sign:	N/A
Original Design Load:	HS 20-44

Uplands	
Short-Term Parking:	8
Long-Term Parking:	30
Staging Area:	150 ft
Paint Striping:	No
Driving Surface:	Chip seal

Generator & Building
This facility does not have a generator.

Utilities
The terminal building and bridge ramp have city Electric.

Bridge Support Float	
Type:	40' x 60' Steel Flexi-float
Year Built:	1996
Ballasted:	Yes
Ramp lift:	Hydraulic/Cable
Apron lift:	Hydraulic/Cable
Condition:	Fair

Dolphins							
Dolphins	**Dolphin Piles**	**Fender Support**	**Fender Face**	**Anodes**	**Built**	**Cond.**	**Notes**
W4	2B, 1V	4V	Ekki Timber	No	1987	Fair	Red Navlight
W3	2B, 1V	4V	Ekki Timber	No	1987	Fair	
W2	2B, 1V	4V	Ekki Timber	No	1987	Fair	
MFR2	1B, 1V	See Mooring Float		No	2003	Good	
MRF1	1B, 1V			No	2003	Good	
WRS1	2B, 1V	See Bridge Support Float		No	2003	Good	
N1	1V	Floating Fender		No	2003	Good	
S1	1V	Floating Fender		No	2003	Good	
ERS1	2B, 1V	See Bridge Support Float		No	2003	Good	
E1	2B, 1V	4V	Ekki Timber	No	1987	Fair	
E2	2B, 1V	-	-	No	2003	Good	Windsock & Red Navlight

LEGEND
ERS1 = East Bridge Support Float Restraint Dolphin
V = Vertical Steel Pipe Piling
MFR1 = Mooring Float Restraint Dolphin
B = Battered Steel Pipe Piling

Mooring Float							
Platform	**Size**	**Fender Face**	**Float**	**Built**	**Decking**	**Cond.**	**Notes**
MF	40' x 25'	UHMW	Steel Pontoon	2003	Fiberglass	Good	

Catwalks / Gangways / Platforms							
#	**From**	**To**	**Length / Style / Main Members**	**Built**	**Safety Chains?**	**Cond.**	**Notes**
P1	Bridge Float		22' / Platform	2003	_	Good	
G1	P1	E1	57'4" / Gangway / 2.5"x2.5" Bottom Chord	2003	No	Good	
C1	E1	E2	40' / Catwalk / 10"x10" Tube Girders	2003	Yes	Good	

Terminal Projects			
Year	**Project #**	**Project Name**	**Description**
1974	S-0927(1)	Ferry Terminal Facilities at Metlakatla	Original construction of terminal uplands, vehicle transfer and mooring structures.
1987	A70002	Metlakala Ferry Terminal	Relocated the terminal roughly 1/2 mile to the east. Removed existing timber dolphins; reinstalled steel transfer bridge and support float. Constructed new float platform, apron & lift system, and five steel mooring dolphins. Installed new electrical & lighting systems.
1996	75269 / STP-0927 (4)	Metlakatla Ferry Terminal Pontoon Upgrade	Removed and replaced the original bridge support float. Installed a re-designed bridge-barge connection weldment and new hinge to seaward end of the bridge.
2004	68208 / STP-0927 (6)	Metlakatla Ferry Termial Modifications	Removed dolphin W1 and the bridge support float restraint dolphins. Installed new restraint dolphins for the bridge float on south ends. Constructed new mooring float east of the bridge and two floating fender dolphins on either side of the bridge for all-tide mooring. Installing access gangway & catwalk to east dolphins. Upgraded the electrical power utilities on the bridge.

Observations

1. The chip seal surface on the staging area placed in 1994 has failed and has numerous large potholes. The roadway requires additional aggregate surface course and should be graded to drain.
2. A modular terminal building was installed in 1985 but the facility sits unused. The building has been vandalized and is in need of maintenance. There are many deficiencies such as, rotting siding and door framing, broken windows, no stairs and ramp at the entrance, and failed exterior finish. Water and sewer services are needed and the building should be modified to comply with ADA requirements, if the terminal building is to be used in the future. Building heating and security features have been added to the facility, but at present, no operating agreement exists between AMHS and the community covering operation, maintenance, or security, so the building remains unused.
3. The transfer bridge was built in 1974 and used in an earlier terminal located closer to town. The bridge was salvaged, re-coated with spray metalizing in 1996, and relocated to the present site. The bridge appears to have reverse camber along its length. Currently, 85% of the coating is covered in white rust and 25% bare corroded patches, while the remaining surface is freely corroding. The bridge abutment is a tied-back spread footing that supports the approach bearings. The shoreward bridge bearing beam swivels around a pin, which has corroded and worn a jagged and elongated hole on the top flange of the beam. Looking shoreward, the right box girder bearing at the abutment has 1/4-inch wear into the bearing pin with minor surface corrosion. There are sections of expanded metal on the deck that are loose, while some sections are torn. The bridge alignment cables are slack.
4. The seaward bridge bearings, intermediate ramp, and apron are supported by a Flexifloat pontoon system. The pontoon is guided by two 3-pile restraint dolphins and the bridge bears on rollers mounted to the float. The bearings and restraints are in good condition. Touch-up paint coatings have failed on the topside of the Flexifloats, and rust covers 10% of the surface area. Rubbing from the UHMW skids of the mooring float gangway have worn away the coating of the float in this area.
5. The deck of the mooring float appears to be in good condition. The hawse mast on deck is bent, may have been too high & impacted the ship while berthing. The 2011 underwater report found that bolts for hanger strops are loose on mooring float pontoons, and the most recent abovewater inspection found the majority of the hanger strap bolts covered in a light surface rust.
6. All mooring structures are in good condition. Previous inspections noted the dolphin caps were spray metallized in the past and they now show signs of light surface rust. All the piling are brown in color due to bleed-through corrosion. The pilings are not protected with sacrificial zinc anodes. There are extra/old mooring cables that are lying on the caps of dolphin E1. There is no hawse mast on dolphin W2. Masts are bent on dolphin W3.
7. Gangway lights were turned on during daylight hours during our inspection.
8. The M/V Lituya broke loose from her moorings while tied up overnight at this terminal on January 30, 2009 and went aground on Scrub Island nearby. She was safely re-floated and taken to ASD shipyard for repairs later on that day.

Inspection Summary		
Structure	Priority	Recommendations
Category I - Safety Repairs		
Mooring Float	1	Tighten the bolts to the hanger strops on the mooring float pontoons.
Category II - Rehabilitation Work		
Dolphins	2	Install and maintain anodes on all submerged steel.
Transfer Bridge	3	Re-paint bridge, repair shoreside bearing beam, and replace the shoreward hinge pins and plates. Tighten the bridge alignment cables at the seaward bridge bearing. Rehab the non-skid coating on the transition plate between the bridge and apron. Replace damaged sections of expanded metal on the apron. Repair broken conduit leading from the apron to the ramp. Discourage recreational skiffs from tying up to the float and tapping in to the catwalk lighting circuit.
Waiting Shelter	4	Refurbish/replace or remove existing waiting shelter. Existing building structure is not being utilized.

Inspection Summary (continued)		
Structure	Priority	Recommendations
Category II - Rehabilitation Work		
Bridge Pontoon	5	Replace the surface paint coating on all Flexifloat units. Install channel skids beneath the mooring float gangway.
Dolphin E1	6	Remove the extra/old mooring cables.
Mooring Float	7	Straighten/replace bent & damaged hawse masts.
Category III - Upgrades Needed		
All Facilities	8	The new Annette Bay facility is the home-port location for the M/V Lituya. IFA is currently berthing at Port Chester, until modifications at Annette Bay are made for the IFA vessels. Eventually the Port Chester facility will no longer be needed. Existing structures could be removed/relocated or facility may be abandoned in near future. Deficiencies noted will be obsolete if this terminal is removed.