

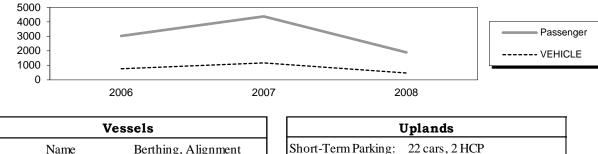
Coffman Cove Ferry Terminal

Owner:

City of Coffman Cove - 907-329-2233

Terminal Description: Coffman Cove is a stern-loading facility consisting of a terminal building, maintenance shop, paved parking area, secure (fenced) staging area, steel approach trestle, transfer bridge, steel support float and four steel pile all-tide mooring dolphins. The Coffman Cove facility, constructed in 2006, serves the Prince of Wales Island communities by linking them via the IFA's M/V Prince of Wales to AMHS mainline service in Petersburg. The most recent above water survey was completed on October 26, 2015. The most recent fracture critical & underwater inspections occurred on August 2, 2016. The IFA northern route has not been operational since 2008.

Coffman Cove's total passenger and vehicle traffic from 2006 through 2008 is shown below.



vessels					
Name Berthing, Alignment					
Prince of Wales / Stikine /	Stern				
FVF	Stern				

Tidal Data (MLLW 0.0 feet)				
EHW 20.0				
MHHW	15.5			
MHW 14.3				
ELW	-4.5			

Terminal Building			
Year Built:	2006		
Square Footage:	1800 s.f.		
Heating System: Oil Furnace			
Fuel Storage:	300 gal. AST		
Fire Protection:	Alarm		
Condition:	New		

Generator & Building						
Building / Generator: 2006						
Square Footage:	N/A					
Heating System:	Electric					
Fuel Storage:	150 gal AST					
Fire Protection: N/A						
Condition:	Good					

Uplands			
Short-Term Parking:	22 cars, 2 HCP		
Long-Term Parking: 27 cars, 2 HCP			
Staging Area: 1000 lineal feet, 8 lanes			
Paint Striping: Yes			
Driving Surface: Asphalt			

Bridge Approach					
Type: 4000 s.f. pile-supported					
	steel frame				
Year Built:	2006				
Shoreward support:	Steel Beam/Driven Piling				
Seaward support:	Steel Beam/Driven Piling				
Anodes on piles:	Yes				
Condition:	New				

Bridge Support Float				
Type:	40' x 70' Steel Pontoon			
Year Built:	2006			
Ballasted:	Yes			
Ramp lift:	Hydraulic			
Apron lift:	Hydraulic			
Anodes:	Yes			
Condition:	New			

Maintenance Building			
Year Built:	2006		
Square Footage:	720 s.f.		
Heating System: Oil Furnace			
Fuel Storage: 275 gal. AST			
Fire Protection: Alarm			
Condition: New			

Vehicle Transfer Bridge #193				
Type:	14' x 143' twin box girder			
Year Built:	2006			
Shoreward support:	Steel Beam/Driven Piling			
Seaward support:	Steel Support Float			
Coating:	Wasser Paint			
Pedestrian Access:	Concrete 3' wide on bridge			
Lighting:	Tubuloid Fixtures			
Condition:	New			
Load Posting Sign:	N/A			
Original Design Load:	HS-20			

Pedestrian Trestle			
Tupo	4000 s.f. pile-supported		
Туре:	steel frame		
Year Built: 2006			
Shoreward support: Concrete Abutment			
Seaward support:	PT		
Anodes on piles:	Yes		

	Utilities	
	at Terminal	at Ramp
Electrical:	Yes	Yes
Water:	Yes	Yes
Sewer:	Yes (City)	Yes
Telephone:	Yes	Yes
Cable TV:	No	No
Fuel:	Yes (AST)	No
Wireless Bridge:	No	No

Dolphins						
Dolphins	Dolphin Piles	Fender Type	Anodes	Built	Cond.	Notes
S4	2B, 3V	UHMW Floating	Yes	2006	New	
S 3	2B, 3V	UHMW Floating	Yes	2006	New	
S2	2B, 3V	UHMW Floating	Yes	2006	New	
S 1	2B, 3V	UHMW Floating	Yes	2006	New	
ER	2B, 2V	-	Yes	2006	New	
WR	2B, 2V	-	Yes	2006	New	
РТ	2B, 2V	-	Yes	2006	New	

LEGEND V = Vertical Steel Pipe Piling ER = East Bridge Support Float Restraint Dolphin

B = Battered Steel Pipe Piling PT = Pedestrian Trestle Support Pier G1 = Gangway

Catwalks / Gangways											
#	From Struct.	To Struct.	Length / Style / Main Members	Built	Safety Chains?	Cond.	Lighting	Notes			
C1	Shore	РТ	51' / Steel Trestle / TS 6x4 Bottom Chord	2006	No	New	Overhead Fixtures				
Gl	РТ	PP	106' / Aluminum Gangway / TS 6x10 Bottom Chord	2006	No	New	Overhead Fixtures				

	Terminal Projects							
Year	Project #	Project Name	Description					
2006	67844 7 67667 / STP - 003 (66)	Coffman Cove Ferry Terminal	New ferry terminal construction. Uplands consisted of blasting and filling earthwork; parking lot/staging area paving; security fencing. Built new terminal building & maintenance shop; all mooring and vehicle transfer structures.					

Observations

- 1. The IFA has not operated the northern route since 2008. AMHS scheduled monthly RT sailings from Juneau to South Mitkof (Petersburg) and Coffman Cove between July and September of 2016 & 2017.
- 2. Grease fittings at all bridge bearings are dry.
- 3. The canvas roof cover has been removed from both the pedestrian gangway & catwalk.
- 4. Electrical & hydraulic cabinets mounted on the bridge pontoon are sealed to protect from rainwater, but condensation has caused the bottom pans to pond with water. All terminal posts & metal fittings inside the cabinets exhibit white or freckle rust.

City maintenance drilled drain holes in the bottom of all utility cabinets in '11, to eliminate standing water & reduce condensation.

- 5. A water line was disconnected from the seaward end of the pedestrian gangway, where it connects to the intermediate ramp, and was lying in the ocean.
- 6. The intermediate ramp was constructed without a hydraulic lift system, since there was only one design vessel using the port. The ramp may be manually lifted with a crane or heavy-duty jacks, and elevation fixed at 5 different levels, each separated by 12-inches. The ramp is currently fixed at the lowest level.
- 7. A timber work float has been tied between dolphin S1 & ER since shortly after the terminal was opened.
- 8. The bridge float is listing 5-inches to the south and the anodes are all depleted.
- 9. The anodes connected to mooring dolphins are all lying on the shore bottom covered in mud, not protecting the steel.
- 10. All overhead light post base fasteners are loose, allowing the poles to rock back & forth. Repeated rocking motions may induce bending in the base plates. City maintenance tightened down the light post base bolts on all but one light pole. Jam or lock nuts also need to be installed to keep the nuts from turning.
- 11. Two (2) sections of UHMW plastic facing are missing from the southwest float guide pile structure. Likely these 1st generation plastic panels fell into the ocean when their steel anchor bolts sheared off due to thermal expansion, and lack of proper overbore at bolt hole to allow movement.

Inspection Summary							
Structure Priority		Recommendations					
Category I - Safety Repairs							
Nothing recommended.							
Category II - Rehabilitation Work							
Float restraint guide		Hire a diver to recover the UHMW facing panels from the ocean floor and re-install on the southwest float guide pile.					
Light Posts	2	Install jam or lock nuts on base bolts.					
Bridge Float	3	Evaluate causes of float listing 5-inches (ballast water levels, friction at float restraints, etc) and perform work to level freeboard. Install new 50# anodes on float.					
Anodes	4	Cut the length of the hanging cables so the anodes hang in the water without touching the shore bottom.					
Grease Fittings	5	Grease all bearings as soon as possible.					
Utility Cabinets	6	Spray all electrical connections with corrosion-proof dielectric grease.					
Fuel Supply line	7	Replace disconnected fuel line lying in salt water with a new hose. Fasten securely.					
Pedestrian Gangway	8	Move the conduit away from the batter pile. Replace the canvas roof cover when service is restored, prior to allowing public use.					
Category III - Upgrades Needed							
Nothing recommended.							