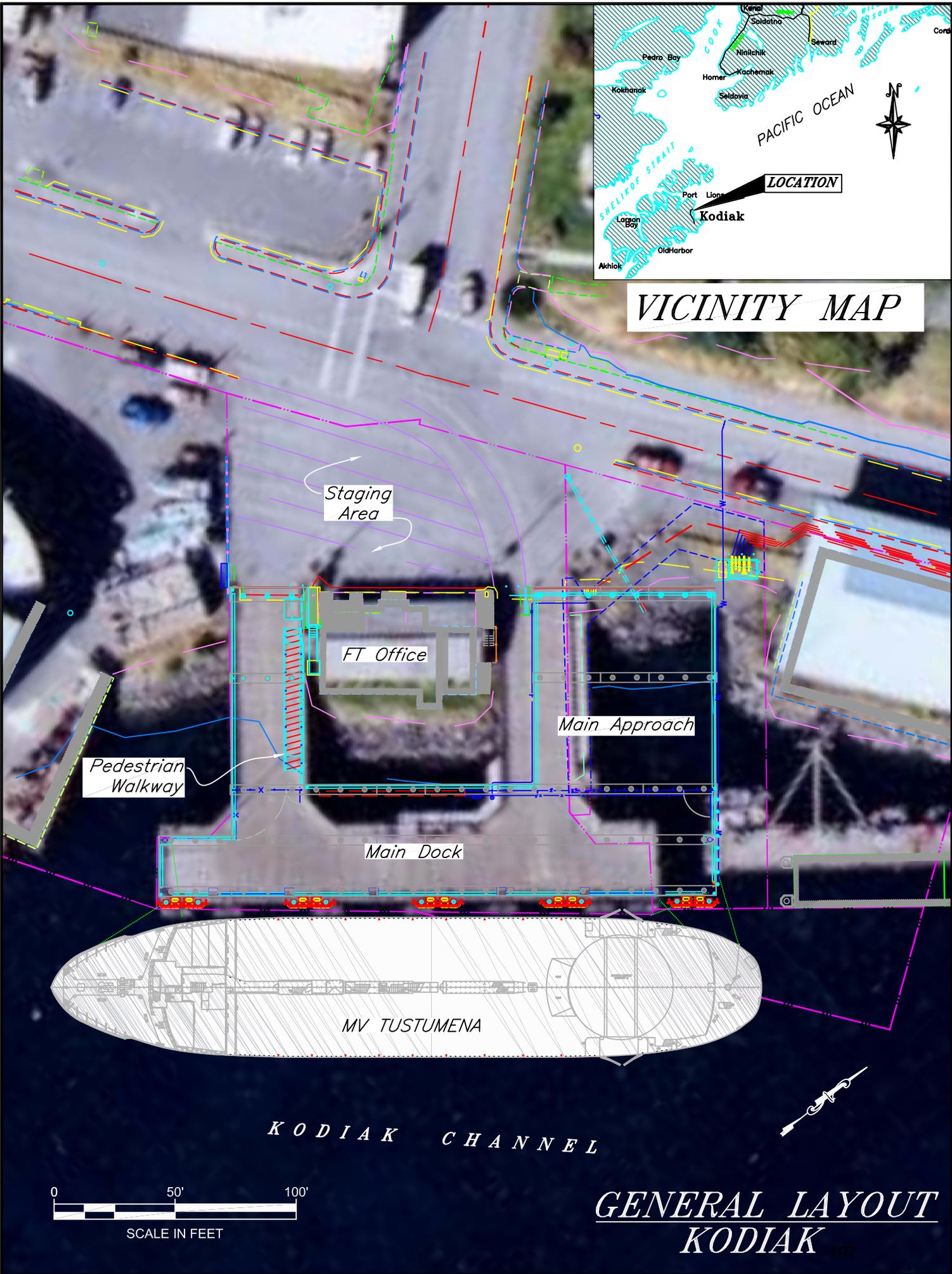


VICINITY MAP



SCALE IN FEET

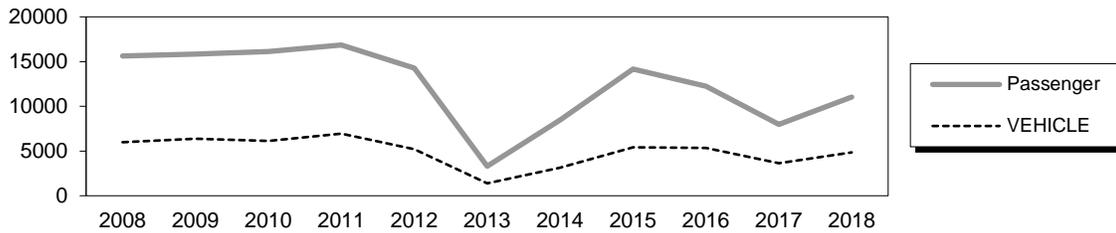
GENERAL LAYOUT KODIAK

Kodiak City Dock (Pier 1)

100 Marine Way

Owner: City of Kodiak
Terminal Manager: Steve Penn, AMHS Terminal Manager, 907-486-4443
 Martin Owen, Harbormaster, City of Kodiak, 907-486-8080

Terminal Description: The M/V Tustumena docks at the Kodiak City Dock (also called Pier 1) on its east/west passage between Homer and the Aleutian Chain. The Kodiak City Dock structure is supported by steel pipe piles, with concrete pier caps, p/c concrete channel beams (approach), & p/c concrete haunched deck panels (main dock). The fender system consists of five pin-pile supported fender panels. The facility is a U-shaped concrete structure with a main dock section approximately 230' x 25', and two 103' approach trestles, one at each end of the dock. The dock is currently used for transfer of general cargo and fuel, in addition to ferry operations. The paved area between the street and the terminal building has a shared use for parking and vehicle staging. Embarking vehicles line up on the adjacent city street, in the paved area and along the 75'-wide north approach trestle. The contractor operated ticket office is located in a city owned building, on shore, between the two approach trestles. The wharf is crowded between a marine fuel service depot to the north and a shore based seafood processor to the south. Vessels moored at the adjacent facilities encroach on berthing the dock. The past 10 years of total passenger and vehicle traffic at Kodiak City Dock is shown below. The M/V Tustumena was out of service most of 2013, causing a steep dropoff in traffic at the terminal.



The most recent above water survey was completed on August 13, 2018. The underwater inspection occurred on July 8, 2014.

Vessels	
Name	Berthing, Alignment
Tustumena	Port / Starboard

Tidal Data (MLLW=0.0 feet)	
EHW	13.1
MHHW	8.7
MHW	7.8
ELW	-3.5

Terminal Building
The ticket office is located in a city-owned building, on shore, between the two access trestles.

Generator & Building
NA

Utilities @ Dock
Water: Yes

Uplands	
Short-Term Parking:	N/A
Long-Term Parking:	N/A
Staging Area:	150 lineal feet

U-Shaped Dock - #1425	
Year Built:	2016
Dock Structure:	Steel pile supports, concrete pier caps, p/c concrete channel beams (approach), & p/c concrete haunched deck panels (main dock)
Fenders:	Five (5) pin pile supported fender panels
Mooring Bollards/Cleats:	Bollard mounted at both ends of dock; several cleats mounted to bullrail along the dock face.
Lighting:	Yes
Condition:	New

Terminal Projects			
Year	Project #	Project Name	Description
1964	P-Alaska-3107	City of Kodiak Ferry Terminal	Construct new timber dock.
2014	68938	Kodiak Ferry Terminal & Dock Improvements	Replace aging timber dock with new concrete dock.

Observations

1. The moveable bullrail hinge is seizing when closed, making it difficult to swing open. Once the bullrail starts to swing, it moves easily. May be alignment of hinge plates and/or size or alignment of hinge pin.
2. There are several small spalls along the seaward edge of the dock, in the vicinity of the bullrail opening. No reinforcement is exposed. There are several hairline longitudinal cracks emanating from the edge of the dock in this same vicinity.
3. The M/V Tustumena overhangs approximately 50' on the south end of the dock (during starboard side berthing), which can be an issue when a packer is offloading at the fish plant next door.
4. Soundings taken along the face of the dock from North to South resulted in mudline elevations ranging from -29 to -20 below MLLW (0.0').
5. The 90-foot long double-truss aluminum security gate has been damaged and requires sensitive care when in use. The terminal manager said this was the longest gate the manufacturer had ever built. Two-thirds of the gate, sixty-feet, is left in a cantilevered state, as the only portion supported is 30-feet between gate posts. We found minor weld cracks at the leading edge corners. The gate requires guide brackets to be deployed when closing, removed when opening. These brackets fit into holes in the concrete deck, which freeze over in the winter. There have been reinforcement improvements made to the gate in the past year, mainly adding diagonal tension cables between all frame members.
6. Transverse cracks are spaced approx. 3-feet apart in the concrete sidewalk at the south approach pedestrian canopy.
7. The terminal building is owned by the City of Kodiak, and space is shared with other tourism-related businesses. The exterior cedar shake siding is heavily weathered and needs to be replaced. Cracks are evident in the building foundation and indicate previous settlement of the fill. Wood decks adjacent to the terminal building have severe structural deficiencies. Rot is prevalent in the framing and sheet metal hangers are corroded or missing.
8. The overall stability of the terminal building embankment was investigated during design of the new dock facility. This analysis indicates the embankment may be unstable during a design seismic event. The riprap slope under the dock is stable with no obvious signs of erosion.

Inspection Summary		
Structure	Priority	Recommendations
<i>Category I - Safety Repairs</i>		
Nothing required		
<i>Category II - Rehabilitation Work</i>		
Dock	1	Take a closer look at the bullrail hinge, and repair the sticky pin/hinge plates. Repair patch the spalls at the dock edge; monitor the hairline cracks. Monitor the transverse cracks in the south approach sidewalk. Hire a welder to make repairs to the security gate. Install intermediate supports along the shoreward bullrail to eliminate cantilever loads while in the open position.
<i>Category III - Upgrades Needed</i>		
Nothing required		