



# Seward East Dock Expansion & Security

## PROJECT FACTS

### Project Scope

#### Dock Expansion

The Alaska Railroad Corporation (ARRC) is expanding its East Dock in Seward, Alaska, in phases to improve the safety, efficiency and capacity of freight intermodal operations (ship-to-train, ship-to-truck or ship-to-barge). Expansion will occur entirely within ARRC's land reserves.

The dock was originally constructed between 2000 and 2002. It is supported by a sheet pile bulkhead on the west side, a riprap and armor rock fill slope on the east side, and a combination of the two on the south side. It has a series of fenders on the west side. The dock footprint, including the approach, is approximately 5.3 acres (200-by-620 feet), and was constructed with about 143,700 cubic yards (CY) of fill material. A catwalk and mooring dolphin were installed at the end of the dock to aid in berthing vessels, and the basin adjacent to the new dock was dredged.

To aid in the safe berthing of vessels, a steel-pile mooring dolphin with appropriate navigational lighting was installed approximately 400 feet south of the East Dock. To provide power for a motorized capstan and lighting, an electric line was extended from the dock to the dolphin in an underground trench through the tideflats. The dolphin and trench footprint is about 0.1 acres.

The first phase of expansion in 2007 widened a portion of the dock from 200 feet to 320 feet. Later phases will widen the full length of the dock, providing an operating area to accommodate a complete truck circuit from ships to the area where trailers are loaded/unloaded to/from railcars. Additional rip-rap and armor rock will protect the dock's east and south sides from wave action.

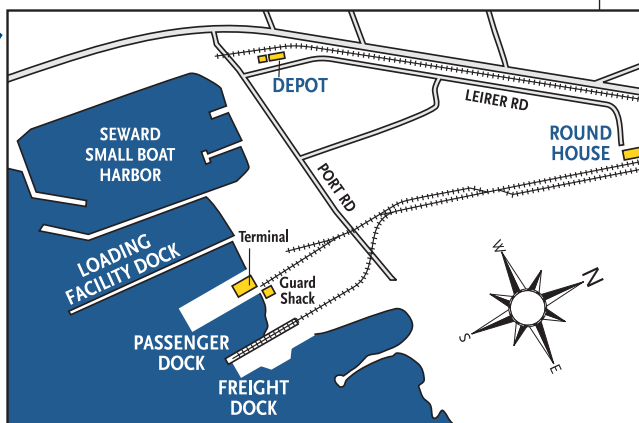
Widening would double the dock footprint to about 10.6 acres, and will require another 115,000 CY of fill material brought to the site using rail cars and trucks. Existing rip-rap and armor rock will be removed and reused as new fill is placed. Of the 115,000 CY of fill, 92,000 CY will be below the high tide line — 86,000 of this is planned to be gravel, and 6,000 CY will be comprised of new and used rip-rap and armor rock.

Dock expansion will also entail extending the length of the dock by about 400 feet. When complete, the expanded dock will measure just over 1,000 feet long by 320 feet wide.

#### Dock Security

In line with national port security efforts, the East Dock's security is being enhanced as well.

In 2005 ARRC installed a video surveillance system to augment security at the East and West docks and the coal loading facility.



The Alaska Railroad's West and East docks.

In 2010, 13 concrete portable jersey barriers topped with fence panels were purchased. These are placed as dock security needs dictate.

In 2011, an 8-foot chain-link security fence was installed around the East Dock. The 1,600-foot-long fence includes three 30-foot roller entry control gates situated at roadways leading to the dock.

In 2013, two of the three gates will be upgraded to with card-reader control access and security cameras. ARRC will also replace outdated fixed position surveillance cameras with more efficient and reliable pan-tilt-zoom (PTZ) cameras. Cameras are used to monitor areas surrounding the terminal and vessels moored at the docks.

## Benefits

- The expansion's first phase immediately improved capacity, safety and efficiency of cargo ship loading and unloading operations.
- Construction of later expansion phases will improve service to marine customers, enhancing local economic development efforts to grow freight business activity.
- The access barrier allows security personnel to monitor dock access and barge areas at one point versus an open 400-foot entry area.
- Security fencing protects assets and helps to prevent unauthorized access to dock shipments.

## Status/Schedule

- A City of Seward floodplain development permit was obtained in February 2007. The U.S. Army Corps of Engineers and Alaska Department of Natural Resources modified an existing permit to include the expansion in June 2007. Gravel fill and rip-rap were placed to expand the dock by filling in two-thirds of an acre in summer 2007.
- The dock expansion work will be accomplished as business needs and funding warrant. Environmental work and preliminary engineering for the extension will occur in 2013 and 2014.
- The access barrier was placed in 2010. Security fence procurement and installation occurred 2010 and 2011. Gate upgrades and replacement of outdated security cameras will occur in 2013.



## Project Cost

- Partial dock widening and fill (two-thirds of an acre) in 2007 cost \$248,000, funded by ARRC.
- 2010 East Dock access barrier \$15,500 budget funded by Port Security Grant Program (PSGP).
- 2010-2011 East Dock security fencing \$162,400 budget funded by PSGP through the American Recovery & Reinvestment Act.
- 2013 gate upgrades funded by \$295,000 PSGP and camera upgrades funded by \$80,400 PSGP.
- 2013-2014 dock lengthening environmental and preliminary engineering budget of \$1.7 million funded by ARRC.
- Funding is not yet identified for later East Dock expansion phases to include additional widening and lengthening of the dock surface, electric and water utility upgrades, new mooring dolphin, further track work and other upgrades and modifications.