



# LEED Renovation of Historic Freight Shed

## Project Scope

The Alaska Railroad (ARRC) is renovating an historic freight shed located at 155 W. First Avenue in Anchorage's Ship Creek District. It will be Alaska's first historic building to be reconstructed with the high environmental standards established by Leadership Energy and Environmental Design (LEED) criteria.

The project includes site improvements, utility upgrades, and selective demolition and renovation of the 36,000-square-foot structure. Originally built in 1941, the Historic Freight Shed is primarily constructed with a heavy timber frame over a raised concrete slab. About 3,000 square feet are enclosed by masonry block with a flat roof.

Site improvements include a new raised and heated walkway (also known as a "plinth") for pedestrian access, along with installation of curb and gutter along First Avenue. Utility upgrades include new gas, water and wastewater services and relocation of the electrical services underground. The core-and-shell improvements include significant reinforcement to the structural supports, roof and wall systems, as well as upgrades to mechanical and electrical systems.

These renovations fall under the LEED "core and shell" category. As such, design and construction activity will meet stringent LEED standards with regard to site sustainability, water efficiency, energy conservation, material reuse, and indoor environmental quality, among other certification requirements. The Freight Shed's historic designation is verified by the Alaska State Historic Preservation Officer (SHPO), and SHPO expertise is being used to maintain the building's historic integrity during the renovation.

## Benefits

- The project offers Alaska businesses a unique, "green" commercial real estate option in lower downtown Anchorage.
- The Freight Shed is a cornerstone of the first phase of the Ship Creek revitalization plan, which aims to develop the area for multi-use and livability, and to promote a pedestrian destination for visitors and residents alike.
- Preserving a historic building helps to maintain a sense of place in the community that is important to future generations.



Figure 1. The architectural firm's rendition of a cross-section of the renovated freight shed, looking west from the east side of the building.

## Project Status

- Anchorage architectural firm ECI/Hyer was hired in 2007 to develop a LEED-oriented design that also retained the building's historic nature.
- Conceptual design was complete by early 2008. Final design and engineering was accomplished by the end of 2008.
- Waterson Construction Inc. was awarded the construction contract. Demolition and indoor renovation began in January 2009. Utility and major site work began in spring 2009. Building core-and-shell was completed November 2009. Site construction is expected to be complete by July 2010.
- Tenants that have committed to lease a portion of the Freight Shed can move in as early as January 2010. Lease holders have the opportunity to further renovate their space to meet business needs and add to the green environment.

## Project Cost

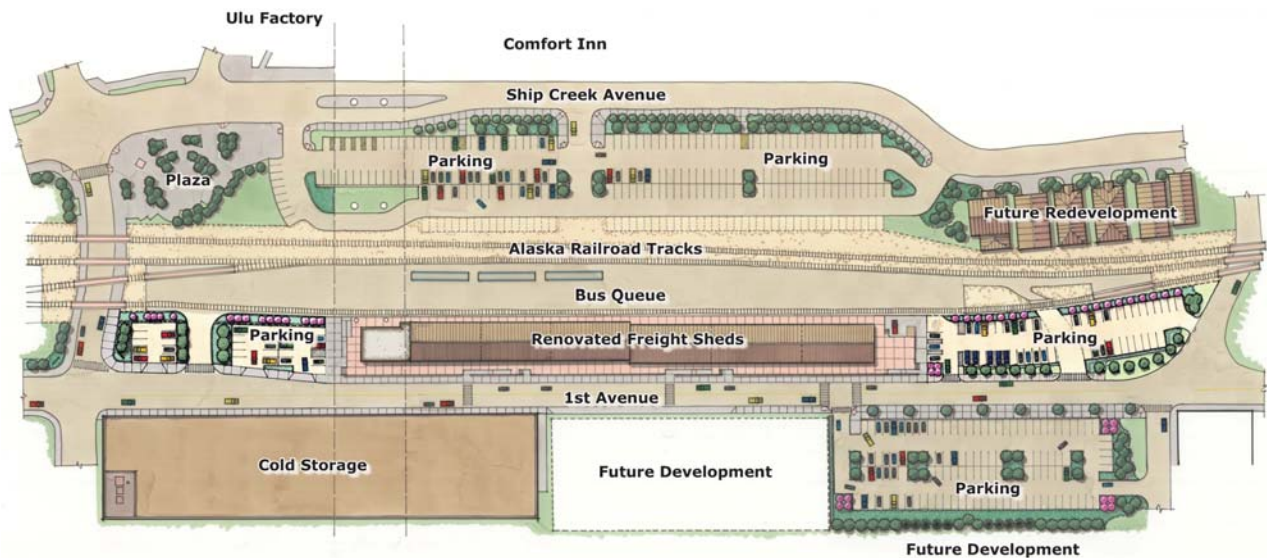
Cost for design and construction is estimated to be \$10.1 million, funded entirely by the Alaska Railroad.



*August 2009: After installing substantial insulation, contractors erect new siding on the front side of the shed.*

*Below: Figure 2.*

*The architectural firm's area site plan, to include proposed facility parking and area Ship Creek revitalization plans.*



*New siding gives the shed's back side a facelift.*



*Large-timber rafters remain as a prominent interior feature.*