



US Army Corps
of Engineers®
Seattle District

Project Location: Joint
Base Lewis-McChord,
Wash.

FY 2024 Sustainable Materials Barracks

Purpose: Enhance quality of life for unaccompanied U.S. Army Soldiers assigned to the 1st Multi-Domain Task Force on Joint Base Lewis-McChord (JBLM), Wash.

USACE Seattle District Program: Military Construction



Artistic design rendering of the “twin barracks” style barracks. The combined 89,000 square foot barracks will house 168 soldiers when complete in fiscal year 2027 and utilize sustainable materials for the first-of-its-kind U.S. Army sustainable barracks pilot project.

Background

The Fiscal Year (FY) 2024 Sustainable Building Material Pilot Program is an opportunity to both enhance soldier quality of life and evaluate the effectiveness of sustainable building materials on environmental sustainability, infrastructure resilience, cost-effectiveness and construction timeliness.

The Assistant Secretary of the Army for Installations, Energy and Environment, in partnership with the Deputy Chief of the Staff of the Army, and U.S. Army Corps of Engineers selected JBLM out of 130 worldwide Army installations for the continental United States-based pilot project.

As directed in the FY22 National Defense Authorization Act, the project’s goal is to reduce embodied carbon by at least 30% – emissions from manufacturing, transportation and installation of building materials. Lessons learned will be applied to future barracks, such as USACE Seattle District’s FY25 JBLM Mass Timber Barracks project.

Working in support of JBLM Directorate of Public Works and the U.S. Army, USACE Seattle District is responsible for design, acquisition, and construction oversight.

Funding

\$100 million is the construction programmed amount (PA) as authorized in the FY24 National Defense Authorization Act appropriations for military construction. The project was awarded in April 2024 at roughly 67% of the PA.

DoD and Army Climate Resiliency

The pilot program supports U.S. Army and Department of Defense climate change mitigation efforts through the DoD’s Climate Adaptation Plan and the U.S. Army’s Climate Strategy. USACE’s Engineering Research and Development Center (ERDC) will provide additional support and sustainable materials analysis throughout the pilot project’s life. Project research can be applied to other DoD projects that have sustainable materials and embodied carbon reduction goals.

Project Features

- 89,000 square foot, three-story barracks
 - o “twin barracks” style construction with two 44,500 square foot structures
- Enhanced quality of life housing for 168 unaccompanied soldiers
- Follows U.S. Army’s 4/2 module standard
 - o Four-bedroom, two bath units
 - o Two-bedroom, one bath units
 - o Shared kitchen/living area
 - o Recreational/sport and picnic areas
- Air-conditioned rooms
- Proposed sustainable materials include Portland Limestone Cement, recycled steel, cellulose wool batt/high-performance XPS insulation and metal wall paneling in place of brick.

Schedule

Fiscal Year 2021

- Project Code 2 Scope & Cost Validation Directive Released (September 2021)

Fiscal Year 2022

- Conduct Full project stakeholder Design Charrette and begin design (December 2021)
- Parametric Design Report completed (February 2022)
- 35% Design & Cost Validation completed (June 2022)
- Department of the Army Memorandum to USACE referencing FY22 National Defense Authorization Act, Sec. 2861 – Pilot program on increased use of sustainable building materials in military construction

Fiscal Year 2023

- 65% Design complete (March 2023)
- 95% Design complete (June 2023)
- 100% Design/RTA complete (August 2023)
- Contract solicitation (September 2023)

Fiscal Year 2024

- Construction contract awarded April 2024 to Absher Construction Company (Puyallup, Wash.).
- Groundbreaking (August 2024)

Fiscal Year 2025

- Construction

Fiscal Year 2027

- Project complete and ready for soldier occupancy

Additional Rendering

