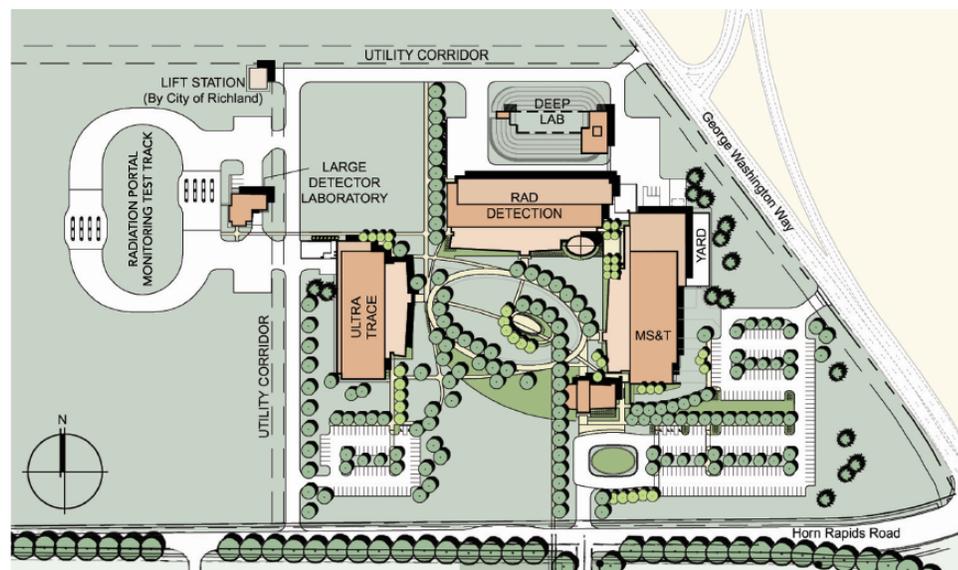


Enhancing national security while maintaining the flow of commerce

Radiation Portal Monitoring Test Area and Large Detector Laboratory

Science to Protect Our Homeland



The Physical Sciences Facility research complex being built at PNNL on the Horn Rapids Triangle.

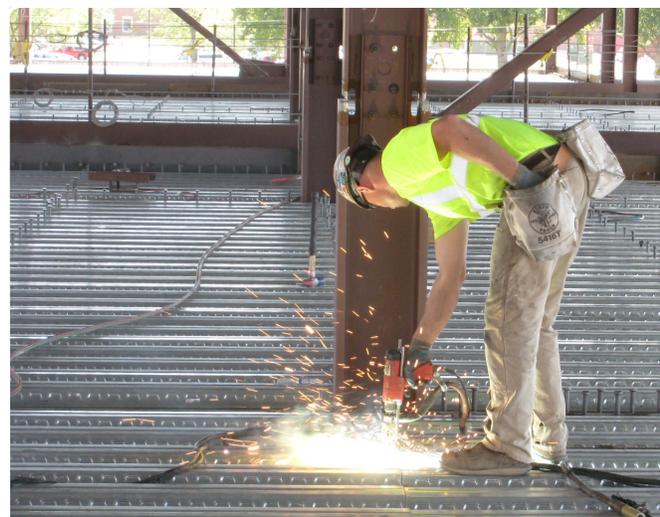
PNNL MODERNIZING INFRASTRUCTURE

The Radiation Portal Monitoring Test Track and the Large Detector Laboratory are part of a major construction effort at PNNL. The Laboratory currently is undergoing a transformation.

In the summer of 2007, work began on the nearly 200,000-square-foot Physical Sciences Facility (PSF) complex that will house important national and homeland security scientific capabilities, equipment and staff displaced from accelerated cleanup of Hanford's 300 Area. This federally financed replacement facility is jointly sponsored by the U.S. Department of Energy's Office of Science (SC), National Nuclear Security Administration (NNSA) and the U.S. Department of Homeland Security (DHS).

RELOCATING RESEARCH CAPABILITIES

Much of this scientific research and about 450 staff will be transitioned by 2011 to the largest replacement facility to be built, the PSF. This modern complex will contain three



laboratories—Materials Science and Technology, Ultra-Trace and Radiation Detection—as well as a low-level underground laboratory, a large detector laboratory, and a radiation portal monitoring test track. Once complete, this new infrastructure will enable PNNL researchers to better create interdisciplinary teams across multiple scientific disciplines. It also will make PNNL the most modern multiprogram national laboratory in the DOE complex.

FACILITY DESIGN FEATURES

- ▶ 20-foot high ceilings in high-bay area
- ▶ Mock border crossing for up to 18 sets of portal monitoring technologies
- ▶ Asphalt test track, about the size of a high school football field
- ▶ Control room for testing technologies



Once complete, this new laboratory will support vital homeland security missions.

▶ RADIATION PORTAL MONITORING TEST TRACK AND LARGE DETECTOR LABORATORY DESIGN FEATURES

Scientific Capabilities

- Ultra-low background radiation detection and advanced radiation detection and testing
- Border and interdiction technology
- Materials development and engineering
- Radiochemistry and quantitative radiation counting
- Data analysis

Key Programmatic Research

- Department of Homeland Security
- National Nuclear Security Administration

Total Square Feet: 68,306

Relocated from 300 Area

- 331 Building
- 338 Building



ABOUT PNNL

Pacific Northwest National Laboratory is a Department of Energy Office of Science national laboratory where interdisciplinary teams advance science and technology and deliver solutions to America's most intractable problems in energy, national security, and the environment. PNNL employs 4,000 staff, has a \$855 million annual budget, and has been managed by Ohio-based Battelle since the Lab's inception in 1965.

For more information about the Radiation Portal Monitoring Test Track and Large Detector Laboratory, contact:

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