



BERNER CONSTRUCTION, INCORPORATED PROJECT SUMMARY

Project Title: Installation of RPMs at Horne's Ferry

Location: Cape Vincent, New York

Scope: Installation of radiation portal monitor (RPM) systems and ancillary equipment at the Cape Vincent, NY Ferry Landing

Berner Construction, Inc. was contracted by Pacific Northwest National Laboratory (PNNL), which is operated by Battelle Memorial Institute for the Department of Energy, to complete the installation of RPMs for the ferry landing in Cape Vincent, New York. At the completion of the project, PNNL, transferred the ownership of installed systems to the U.S. Government under the U.S. Customs and Border Protection (CBP) under the Department of Homeland Security.



The project scope was to install primary and secondary RPM pairs and ancillary equipment to monitor a single inbound traffic lane. The ferry landing is privately owned and operated by Horne's Ferry. During the summer months, the ferry operates continuously from Cape Vincent to Wolfe Island, Canada. The project required uninterrupted ferry operations. This was accomplished by off-shift trenching activities followed by the placement of steel road plates to protect open trenches. Berner also provided traffic control to avoid the construction area during loading and unloading ferry operations.

Prior to intrusive activities, a third party utility locating service was utilized to identify and mark-out underground utilities inside the work area. The work scope included the construction of grout pads for the RPMs, erection of the RPMs, and installation of electrical conduit, wiring, and vaults for operation of the monitors.



The initial design of the foundations and electrical installation did not account for the shallow thickness of the existing ferry landing nor for the water level proximity to the landing. Therefore, the grout pad design, the vault dimensions, and the method of backfill were all field-adjusted to accommodate the existing conditions. For stability, reinforced concrete foundations were installed for the RPMs. The electrical installation was modified to include additional water-tight connectors and the below grade trenches were backfilled to grade with concrete. Berner installed the government-furnished equipment including RPMs, traffic lights, PLC and control boxes. The power and signal cables and wires were installed from the RPMs to the existing CBP booth on the property.