



618-10 Site Infrastructure, Hanford Nuclear Reservation, WA; Washington Closure Hanford, LLC for the US Department of Energy

The 618-10 burial ground is one of the most hazardous and complex waste burial grounds on the Hanford site. This site received low and high level radioactive waste from 1954 through 1963 from the 300-area laboratories and nuclear fuel development facilities. Low-activity wastes were primarily disposed of in 12 trenches, while moderate and high activity wastes were disposed of in 94 buried vertical pipe units. The site is over 6 acres in size, and it is estimate that there are from 2000 to 6000 drums buried on the site. This infrastructure project was required to provide a staging area to process the contaminated materials and drums.

The White Shield-Apollo Joint Venture provided construction services for site infrastructure in support of remediation efforts for the 618-10 Burial Ground at the Hanford Nuclear Reservation. These services included site preparation, grading, and roadwork; installation of a dust suppression water system; installation of electrical power to the site; and direct oversight of all lower-tier subcontractors.



Site preparation consisted of improving and widening the existing access road, and enlarging the existing container transfer area for entire 6 acres. Crews processed over 125,000 tons of material, including on-site excavation material, import gravel, base, and top course. All necessary access roads, facility pads, parking and equipment laydown areas were established.

Electrical work involved the installation of approximately two miles of overhead 13.8 kVA power line, including access, and 53 overhead poles and hardware. Transformers and the connections to the office trailers were also provided. The dust suppression system consisted of the installation of nearly one mile of underground lines from two new extraction wells (installed by others) to the temporary storage tanks and the truck-fill tank, and all associated tank piping, valves, controls, and above-ground freeze protection. Sanitary pipes were installed from fifteen permanent trailers to underground septic storage tanks. Deliverables included “as-built” records of construction, and civil survey to verify quantities.

The management of this project required coordination with more than 15 stakeholders including Department of Energy, the client (Washington Closure Hanford), and existing contractors that were performing testing and other support tasks. Additionally, a robust NQA-1 Quality Assurance Plan was required to ensure that the execution and delivery of work in this highly contaminated site was performed at the highest standards.