

SMUD East Campus Operations Center

The Sacramento Municipal Utility District (SMUD) is a publicly-owned utility founded in 1946. In 2008, SMUD planned for a new state-of-the-art corporation yard that would include office space, service vehicle fleet and equipment storage, and vehicle maintenance facilities for its Sacramento operations. The project is being designed as a zero-net energy facility and seeks to achieve Platinum LEED certification.

PROJECT RESULTS

In addition to comprehensive geotechnical and design consultation, Kleinfelder recommended best stormwater practices during major storm events. We also worked with the contractors, owner's representatives, and Sacramento County officials to make emergency repairs and avoiding possible notices of violation, which resulted further in reduced risk for SMUD.



SIGNIFICANT GRADE CHANGE

The project site is situated 32-35 feet below the adjacent street grades. During construction, the site grade was raised approximately 20 feet by filling with excess materials derived from aggregate mining excavations at a nearby site. SMUD looked to Kleinfelder to assist with identifying acceptable fill for such a large area. Since the site is located within the Morrison Creek Floodplain, the project design required a floodwall along the southern and eastern perimeters of the mass fill and lower yard area.

MAINTAINING FEMA COMPLIANCE

Kleinfelder provided geotechnical engineering consultation and design recommendations for the proposed floodwall and supporting perimeter fill slope. The floodwall and fill slope were designed to meet Federal Emergency Management Agency (FEMA) requirements for flood protection facilities. Also the site contained an environmentally sensitive area consisting of wetlands and vernal pools, which resulted in the creation of a stormwater detention/infiltration basin that remained throughout construction. When the basin neared capacity, Kleinfelder provided a series of recommendations to alleviate the basin from spilling water to adjacent properties and sewer systems.

Location:

Sacramento, California

Owner:

Sacramento Municipal Utility District (SMUD)

