

HIGHLAND HOSPITAL ACUTE CARE TOWER REPLACEMENT | OAKLAND, CA



Aerial view of Highland hospital before demolition



92,500 SF, 5-Story Concrete Auditorium & Clinic



November 2010 to August 2011



\$1,300,000



Vanir Construction Management
Clark Design-Build of California



Mechanical Demolition
Torch Cutting Demolition
Managed Falls



Debris Recycling



Zero OSHA Recordables

As part of the Highland Hospital Acute Care Tower Replacement project awarded to Clark Construction, LVI served as a subcontractor to successfully demolish two concrete buildings totaling 92,500 square feet adjacent an occupied hospital and densely residential area.

Close proximity to occupied spaces required a combination of mechanical demolition, manual torch cutting demolition, and managed falls to complete the work. The first building to be demolished was the V Building (clinic) - a five-story, 75,000 SF reinforced concrete structure - once all soft gut, roof removal, shoring, and building separation activities were completed. It was wrecked utilizing a high reach excavator equipped with a 13,000 lb shear/processor with a reach of 85 feet. The high reach excavator was assisted by a second excavator equipped with a processing shear or a thumb and bucket attachment, along with a track loader and bobcat.

An exclusion zone was established inside of the shearing area for the high reach operations to ensure safety. The above grade structure of a glass walkway was demolished to the structural slab, which was left in place to assure the integrity of the former structure remained intact.

Wrecking of the smaller, 17,500 SF VA Building (auditorium) continued until only the



EARNED MAXIMUM OF 3 LEED POINTS FOR WASTE DIVERSION



Aerial view near the completion of demolition and hardscape removal

Photo courtesy Clark Construction



During demolition



LVI staff monitoring mechanical demolition efforts

Photo courtesy Clark Construction

slab and foundation remained. The slab and foundations of the clinic and auditorium were completed concurrently. Finally, LVI removed the surrounding asphalt parking area along with selected hardscapes, and vaults followed by clearing and grading.

DEBRIS RE-USE AND RECYCLING

The remaining concrete rubble was sized and utilized as needed to create an access road through the site to assist in load-out and disposal activities. All waste streams were separated on-site then hauled off-site to an approved recycling center for final disposition. LVI earned the maximum of 3 LEED credits for waste diversion.

DUST AND VIBRATION CONTROL

Of primary concern to the owner was dust control due to the location of the occupied hospital, clinics, and residential area. Great care was taken to implement vibration monitoring and dust control along with the extreme safety measures executed throughout the duration of the project.

Project Managed By LVI Environmental Services Inc., a Hayward, California-based subsidiary of LVI Services Inc. | **Client Contact** David Turner, Vanir Construction Management, (510) 663-1800