

American Society of Civil Engineers
Los Angeles Section
2009 Awards

Outstanding Architectural Engineering Project

John Spoor Broome Library

California State University Channel Islands

The John Spoor Broome Library is a 137,000-square foot facility on the California State University Channel Islands campus. Designed by Lord Norman Foster, it was completed in 2008. Following the Chancellor's mandate to preserve and incorporate existing structures into new construction whenever possible, the design concept sought to integrate the adjacent 1950's-era State Hospital Research and Treatment Building with the addition of a modern library building that would fit the University's current needs and could expand to meet the needs of a growing student population for many years to come. The new Broome Library building incorporates about 75,000 square feet of the original Research and Treatment Building in its final 137,000 square feet. The success of the project was due to a collaborative effort by the entire team: designer, builder, consultant representatives, and librarian.



The site soil was highly expansive and was not a desirable substrate. Compounding the issue was the concern of differential settlement between the new structure and the existing 60-year old building to which the new structure would be joined. The engineering solution was to remove and replace the foundation soil under the entire 72,000-square foot new building footprint with structural fill. The excavation was completed during the 2005 - 2006 winter. That winter it rained 35 inches in Camarillo. The rain severely impacted the project progress; however, the concrete was completed on schedule, which allowed the overall project to be completed on time.

Many of the new library's features are in-line with the University's commitment to developing and maintaining a sustainable campus, including the use of carpet that is 100 percent recyclable and has a 100 percent recycled backing. Environmental considerations and special steps were taken to preserve and protect the environment and endangered species during the construction phase. All of the demolished concrete was crushed and reused for road base for a housing project on the east campus.

As completed, the building contains 7,000 cubic yards of concrete, 300 tons of structural steel, 600 tons of rebar, 40,000 square feet of glass and allows a seating capacity of 1,300. The facility has the capacity of 250,000 to 300,000 bound volumes and can accommodate more than 1,800 users at a time