

BUILDING & CONSTRUCTION

SOUTHWEST

BUILDING A STRONGER REGION

ROCK STEADY

Connolly-Pacific battles erosion on the California coast. *Page 70*

SMOOTH SAILING

DPR leads a rebuild of the San Diego Yacht Club. *Page 72*

NEW HEIGHTS

North Las Vegas builds a high-rise city hall. *Page 52*



Power Forward

Rosendin Electric expands its reach through acquisitions and international work. *Page 58*

Beyond Construction

+ LCS Constructors Inc. supports laboratory and technical facilities from concept to completion while maintaining high standards. *By Vicki Martinka Petersen*



LCS Constructors Inc. specializes in highly technical laboratory projects.

"There are unique safety, environmental and health issues that [we] encounter."
 > David Skinner, executive vice president

LCS Constructors Inc.
www.lcslab.com
 2009 sales: \$40 million
 Headquarters: Irvine, Calif.
 Employees: 75
 Service: General contractor/laboratory systems subcontractor

> **While many companies strive to achieve LEED certification for their general construction projects, it is no simple task to construct a green laboratory or technical facility. Yet, LCS Constructors Inc. is one construction company that strives to achieve this balance between environmental responsibility and upholding the high safety standards of laboratories and technical facilities.**

Based in Irvine, Calif., LCS specializes in the construction of laboratory and technical facilities for clients within spe-

cific industry sectors, such as biotechnology, pharmaceutical, manufacturing, life sciences and petrochemical. It constructs new facilities and performs renovations, remodels, interior build-outs and tenant improvements in an arena that demands knowledge and experience with these complex facilities.

Laboratories and technical facilities require special systems and "are big consumers of power," Executive Vice President David Skinner explains. "Our clients want to be more green, which can present challenges in lab design [to find a] way to still follow safety guidelines and meet their research goals while being greener. There are unique safety, environmental and health issues that contractors of laboratories and technical facilities encounter."

For instance, labs require special safe-

ty features, such as eye wash stations for staffers to rinse acids or other contaminants from their eyes, or an industrial waste line from lab sinks to allow for the dilution and testing of pollutants.

Skinner attributes new initiatives in construction to helping laboratories become more environmentally friendly while meeting safety guidelines. For example, while air is recirculated in a regular office building, in a lab, it must be exhausted due to the presence of airborne contaminants. This results in a continuous flow of supply and exhaust air. "[This is] not very energy-efficient," Skinner notes.

But by adding variable air volume controls in lab areas, air conditioning volume can be automatically turned down when lab processes don't require a high exhaust demand. "In a laboratory

there is concern for human comfort but also constant movement of air volume," says Skinner.

From Design to Completion

LCS Constructors was founded in 1991 by a group of specialists who had worked together on laboratory and technical facility projects since 1980. The company's goal was to support laboratory owners throughout Southern California. In 1993, the company expanded with the opening of a new office in Houston to meet the needs of laboratory owners in Texas. Today, the company mostly works with clients in Southern California, Houston and the Gulf Coast region.

Skinner says that LCS is one of the few companies that not only constructs laboratories and technical facilities, but also provides design and facility support.

LCS serves as either the lead member of a design/build team or works as a team member with its client's architect or engineer. LCS also has its own service department that inspects labs after the construction is completed to make sure not only the finished products meet compliance, but provides ongoing facility support and maintenance programs to meet its client's individual needs.

Abraxis BioScience

Currently, LCS is in the final stages of a multi-phase renovation for Abraxis BioScience – a biotechnology company that delivers therapeutics and technologies to treat cancer and other critical illnesses. LCS was charged with completing significant seismic upgrades as well as restoring and renovating existing laboratory space.

Skinner states that the project presented many challenges. For example, the sophisticated mechanical systems controls located on the second floor were badly damaged during the first floor abatement process. This required the installation of a new building automation system before the laboratory could be deemed functional. Additionally, seismic structural upgrades were recommended for the entire building, which included the installation of viscous fluid dampers, or large shock absorbers, to minimize structural damage from earthquakes.

"LCS works with its clients on a variety of levels to solve problems and to work through challenges to produce an end-result: a lab or technical facility that meets or exceeds the needs of each individual client," Skinner says. ●

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