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ARCHITECTS & ENGINEERS

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STRETCHING THE IMAGINATION

13 | *Architects relish the truly unique projects*

Heather Frank, executive director of the Sacramento Society for the Blind, looks over the braille-enhanced plans for its new headquarters.

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Architects dive into projects that demand innovation

Some are so unusual, they require thinking outside the mermaid tank

MICHAEL SHAW | STAFF WRITER

When the clients can't see the end result — literally — an architecture firm has to get innovative.

That was the case for the designers at HMC Architects, who wanted to help create a new space for Sacramento Society for the Blind, where workers were elbow-to-elbow in their former offices. Most of the nonprofit's clients wouldn't be able to see the design drawings for its new headquarters being built in phases on R Street.

"We got very excited about the possibilities," said Arturo Levenfeld, project manager with HMC, after receiving the go-ahead from principal Phil Nemeth to work on the project a few years ago. "The question became how we communicate these ideas to our users."

The answer turned out to be a plastic model that allowed the Society's clients to explore with their hands, complete with braille labels identifying the building's features.

"It was one of the most rewarding experiences I've had," Nemeth said of the project, which is still under way.

While architects work hard to cultivate expertise in various fields, such as health care or education, some projects are so unusual, they require a stretch of the imagination.

Take the new K Street bar that features a saltwater aquarium for exotic fish and splashing mermaids and mermen. Rauschenbach Marvelli Becker Architects designed Dive Bar, and they worked hard to ensure patrons don't see the fruits of their labor — a massive support system to brace the aquarium that weighs 110,000 pounds when filled.

"This is one of those commissions that comes along every five to 10 years that you're stretched beyond what you think your creativity is," said Mark Marvelli, principal at the firm. In addition to making the aquarium eye-catching to bar patrons, the project was complicated by a century-old building constructed with unreinforced masonry. The structure itself couldn't support such a heavy addition, let alone pass the seismic standards of today.

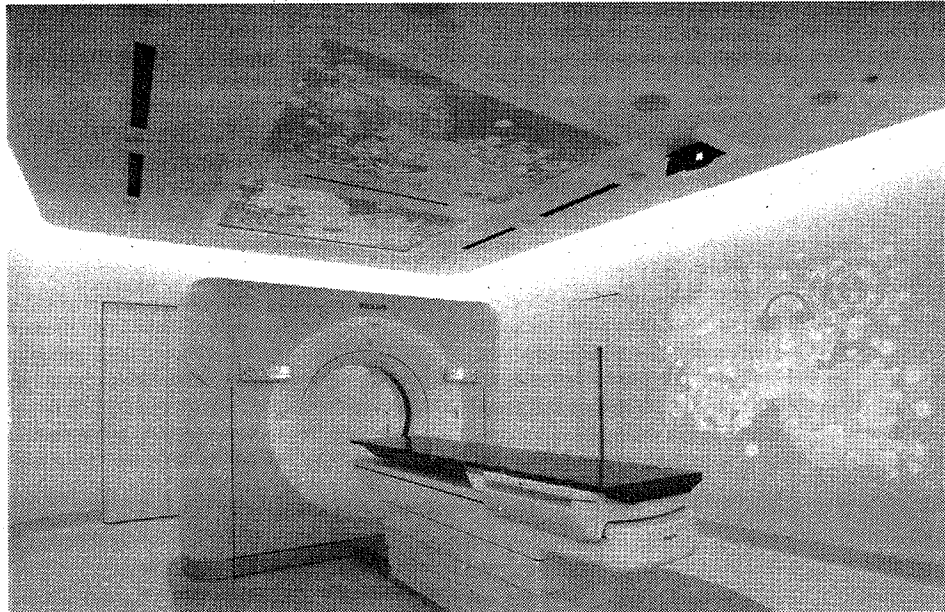
The firm came up with a system of steel I-beams, resembling a cage, that runs stealthily throughout the entire building; the tank hangs from beams on a higher story and is supported by columns from the basement below. Along with reinforcement of the building itself, the system is designed to withstand the lateral movement of an earthquake that could wreak havoc with such a large volume of water.

The aquarium sits above the bar, backlit and surrounded by mirrors so that customers who aren't facing it can still see she-creatures and the occasional he-creature swimming around. The project also required the architecture firm to accommodate changing rooms, showers and a "weir box" through which the mermaids and mermen slide into the tank, Marvelli said.

CALMING LIGHTS, NO SHOCKS

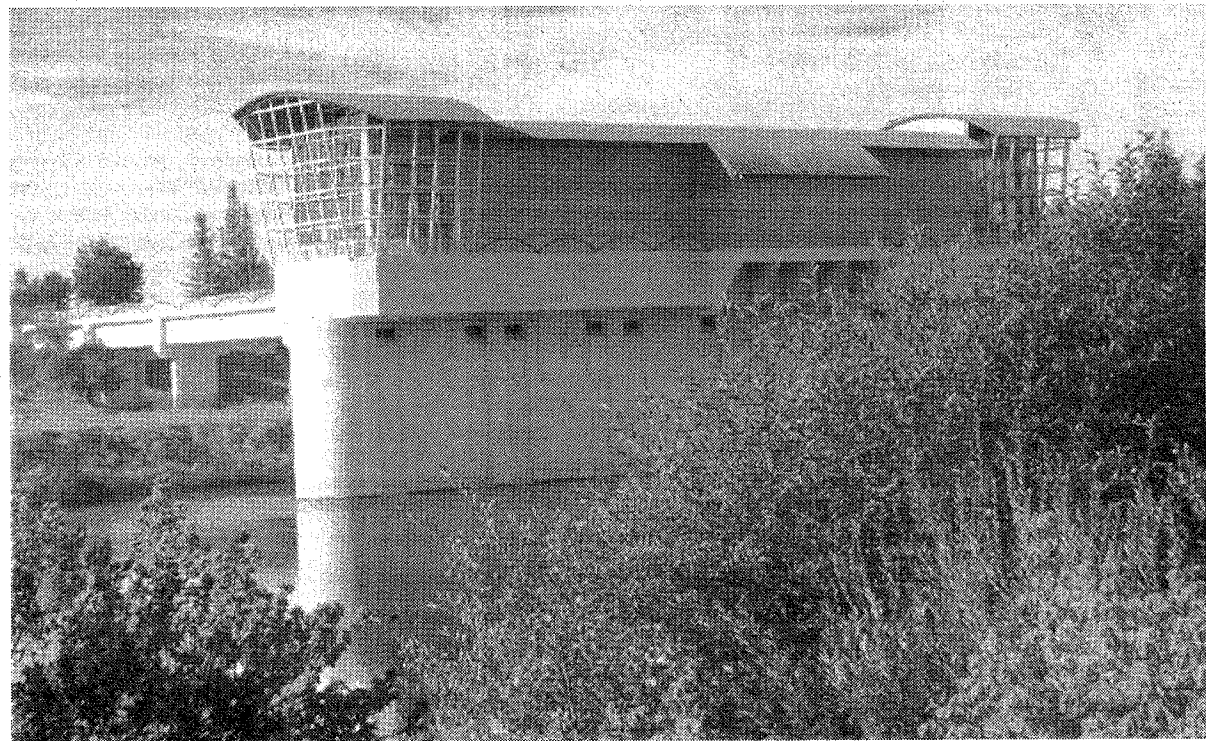
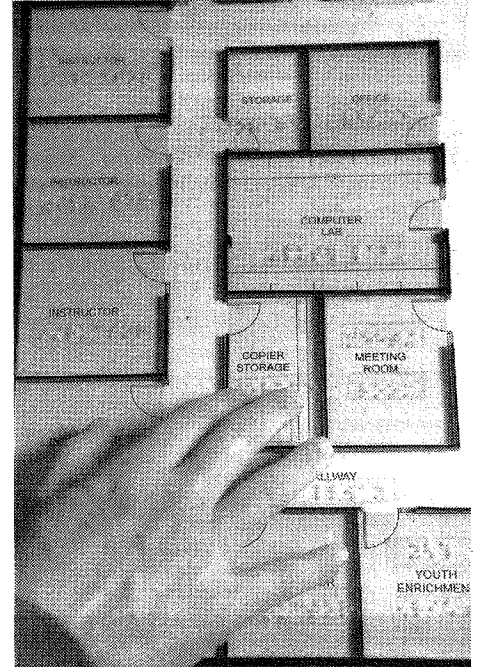
Some projects inspire innovation. Others bring with them another type of reward.

For Scott Shannon, health care director at Dreyfuss & Blackford Architects, a memorable project makes hospital



PETER SAUCERMAN | COURTESY OF DREYFUSS & BLACKFORD ARCHITECTS

The radiation and oncology suite at the UC Davis Medical Center has lights to keep patients calm.



Heather Frank, above, displays the braille type and raised-wall diagram of the new space for the Sacramento Society for the Blind. At left, the Fairbairn water intake structure was designed to look like two lanterns poised over the American River.

DENNIS MCCOY
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patients feel more comfortable.

Shannon worked on a full renovation of the radiation and oncology suite opened last year at UC Davis Medical Center, which includes a calming lighting system to keep patients relaxed and still. The suite is for patients needing CT scans, for which they must remain nearly motionless for long periods of time. A projection system offers nature scenes, deserts and rainforests as well as patterns, colors and calming sounds.

"People think this is just aesthetics, but it's about the patients," Shannon said.

The system allows technicians to give visual cues, such as telling patients to stare at a palm tree until a coconut drops. The room is designed with no hard edges as floor, walls and ceiling merge through curves, Shannon said.

In some cases, unique requests didn't materialize — for good reasons. Kelly Architecture and Planning noted a client wanted the firm to design a fountain inside a rather expensive piece of medical equipment. Luckily, the firm said, the request was "value engineered" out of the project before it was built, avoiding any mixing of water and electricity.

WATER INTAKES GIVE BACK

At the Fairbairn water intake structure, which sits in the American River between

the Howe Avenue and pedestrian bridges, CRM Architects initially was asked to make the structure available to visitors. But the commission came concurrently with the Sept. 11 terrorist attacks and the plan for public visitation was abandoned for fear that the structure would be vulnerable to attack, said Bruce LaRose, partner at CRM. Instead, the structure was designed to look like two lanterns poised over the river.

But visitors are allowed at the Sacramento River water intake, built around the same time period. That structure, situated along a popular bike path, includes a central mobile sculpture that rotates with the wind. And the newly opened Freeport water intake has multiple public art displays, such as a poetry wall, said Matthew Shigihara, a principal at Lionakis, which designed the structures. That's not typical for civic projects, Shigihara noted.

For Rainforth Grau Architects, a memorable project involved designing the public pool in Roseville around a retractable roof designed to accommodate year-round swimmers. The roof is pre-made by a Canadian company, but Rainforth Grau created bookend portions to the building and added a solar thermal system to heat the water on cold days.

"These types of projects are few and far

between," said principal Jeffrey Grau, whose firm concentrates on designing schools. "Way too many projects go forward without a vision."

Letting the visually impaired clients experience HMC's vision for the Society for the Blind's new headquarters was a thrill, Levenfeld said, even though the project remains incomplete.

The offices and teaching facility are up and running, but there is still fundraising and construction work to be done on the building's interior.

The project consisted of improvements to an existing two-story building for administrative offices, a supply store and a low-vision clinic. But there were also aesthetic embellishments that haven't yet been implemented due to cost, such as a steel sculptural band encompassing the building that spells out the agency's mission statement in braille. Levenfeld said he hopes such features become part of the finished product.

HMC provided the work for free, and other donations have helped spur the project forward. The Society purchased the building in 2005 from developer Buzz Oates, who provided a \$1 million in-kind gift, reducing the price to \$2.1 million, executive director Heather Frank said.

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