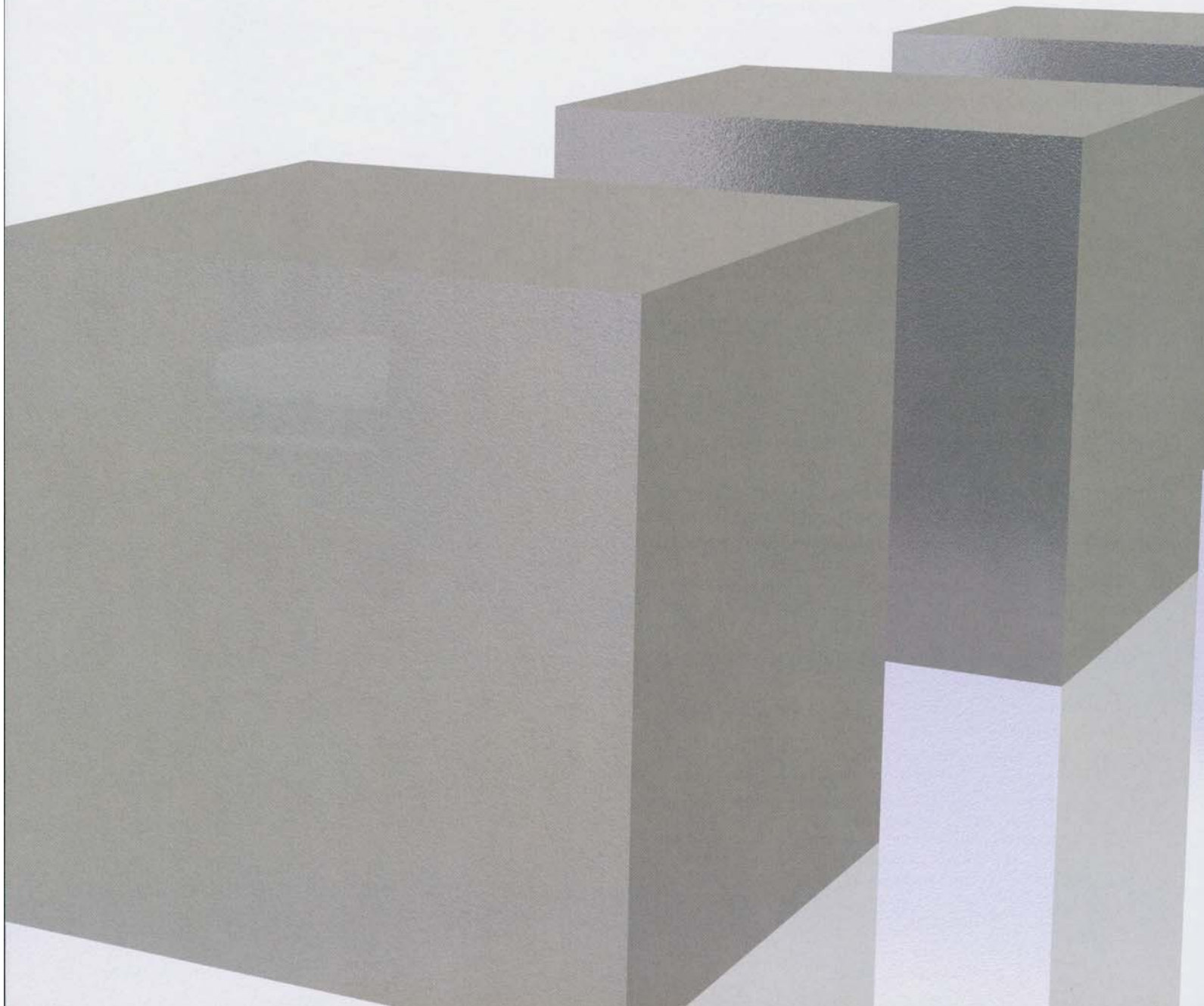


FEATURE

Building for growth in a

Tacoma, Washington's MultiCare Medical Center

BY RICHARD L. PECK, CONTRIBUTING EDITOR; PHOTOGRAPHY BY: ECKERT AND ECKERT; DRAWINGS COURTESY OF GBJ ARCHITECTURE



very tight space

The words “hospital expansion” conjure up images of spacious new buildings with lots of natural light, welcoming interiors, modern patient-centered amenities, and the latest in clinical technologies. The new multiple-award-winning Milgard Pavilion at the MultiCare Health System main campus in Tacoma, Washington, is no exception. Encompassing a new emergency department and cancer treatment center for radiation and infusion therapies, the pavilion boasts all these features and more.

However, the project included one complicating factor: The facility’s 194,000 square feet occupy an unusually tight site on a hillside rising three levels in one city block. “It was probably the most challenging project of my 25-year career,” says Kim Ritter, associate/project director for Portland, Oregon-based GBJ Architecture, which designed the new facility. She and the GBJ design team of Steve O’Shea, design principal; David Pugh, principal/project manager; and Herb Giffin, principal/medical planning, spent many long hours planning and constructing the four floors housing the pavilion’s offerings. These include new and renovated radiation therapy on the first level; a vastly expanded and modernized emergency department/outpatient entrance and plaza at the second level; less acute emergency services at the third level; and a fourth story of custom-designed spaces for oncology examinations, infusion therapy, and complementary spa-type treatments.

Laying all this out on a tight site—constrained by existing buildings, topography, and urban infrastructure—without claustrophobic effect required detailed attention. “It is all carefully orchestrated and wasn’t as easy as it looks,” Ritter says. But the end result, built by Skanska USA, was the emergence of a modern hospital facility within a traditional urban campus.

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Here, level by level, are the highlights of how it happened.

The basement: Radiation therapy

"This was very typical of a dense urban campus, where you are encountering primary infrastructure every step of the way," Ritter says. "Large city sanitary and storm sewers, as well as a fuel tank for emergency generators, had to be worked into the design and the size of the steam lines we brought in was tremendous. Then we didn't have the floor-to-ceiling heights we needed to accommodate normal six-foot concrete shielding for the two radiation vaults, so we used a lead block shielding product that was half the height. It all fits into a very tight package."

Second and third levels: The emergency department

Replacing an overcrowded ER serving both adults and children, the new ED—about the size of a football field—separates adult and child emergencies and is laid out linearly, with nurses' stations along one side and examining rooms along the other. Each examining room is a uniform and large-sized 165 square feet to accommodate families and multiple procedures without having to bounce patients from one room to another. Because the rooms are uniform, they can be "flexed" from one end of the ED to the other in order of current intensity of need, with trauma and CT located nearest the ambulance entrance. Point-of-care pharmacies are also strategically located to limit travel distance for ED staff. "Staff convenience and high visibility were two goals for this design," O'Shea says. "In contrast to hub-centered EDs, with examining rooms surrounding a central nursing station from which they are sometimes visible and sometimes not, all examining rooms here are consistently visible to personnel at the nursing station from one end to the other."

Another goal was to construct the ED from highly cleanable and durable materials. "We got a great deal of input from cleaning staff, for example," Ritter says. "And as a result, we have porcelain tile wall cladding in public areas that are both pleasantly colored and easily cleaned." The floor, meanwhile, is terrazzo that, O'Shea says, "is cleanable with detergent and water. Other than that, it will last without major upkeep for a very



CB MultiCare Medical Center Radiation Therapy
Level One Floor Plan



CB MultiCare Medical Center Emergency Department
Level 2 Floor Plan

long time, a well-justified expense on a life-cycle basis. We were also able to incorporate into the floor embedded images, such as starfish, sand dollars, sea shells, and water bubbles reflective of the Puget Sound located not a mile away." Above it all, Ritter adds,

are acoustically sensitive wall and ceiling panels, sculpted ceiling features, and sound-insulated walls to significantly reduce the clamor and clatter of the typical ED.

To shield youthful eyes from some of the grimmer scenes of ED life, waiting areas are



Waiting areas in the ED are enclosed by glass panels carefully patterned to screen out views of the ED entrance at children's eye level.



CBJ MultiCare Medical Center Emergency Department Level Three Floor Plan



The new ED provides separate waiting and treatment areas for adults and children.

enclosed by partially frosted glass paneling rising above eye level for most children. “We had long discussions figuring out the ‘magic height’ for the frosted glass,” O’Shea says. “These glass panels also wind their way to the nursing stations where they define work

spaces for medical and nursing staff.”

Another soothing feature of the new ED, Ritter notes, is the prevalence of indirect lighting so that no patient lying prone on a gurney or examining table is forced to stare at a glaring overhead light. “We used cove

lighting, sconces, and linear lighting with a strong up component and lesser down component to accomplish this. This is a highly practical step, by the way, as it frees up the ceiling for ready access to overhead mechanical and electrical systems.”



The infusion therapy areas on the fourth floor of the new cancer center are light-filled spaces with expansive views.



CB MultiCare Medical Center Cancer Center
Level Four Floor Plan

The fourth level: Cancer therapies

Along with the oncology examination rooms are themed pods for infusion therapy, as well as spa-like spaces for complementary therapies, such as aromatherapy and massage, “featuring lots of earth colors and dimmable lighting,” O’Shea says. The infusion therapy pods are themed by color and photographic images to invoke a forest or seashore, Ritter notes. “These rooms often become specific destinations for the patients. And along with large windows providing terrific views, they offer a lot of pleasant distractions.”

The chapel

Using modern technology to invoke traditional architecture was the process that yielded The Simon Chapel at the south end of the site. It replaces a Methodist church that was highly recognized and respected in the community. The hospital owners and designers acknowledged this by creating a small but powerful new chapel that captured many of the traditional features of the old church, while using contemporary materials and methods. “The flooring of sheet-mounted porcelain tiles,” Ritter says, “resembles medieval church flooring but provides better resistance to

wear and tear, and is less absorptive.” O’Shea points to the doors that offer a handcrafted look with high-density particleboard scored by computerized routers and milled aluminum handles custom designed to reflect the scored patterns. Glass panels in the narthex

offer historical symbolism meaningful to visitors. A dome skylight was crafted with radial-arranged plywood panels shaping and shadowing light coming in through the art glass above. The chapel, narthex, and adjoining consult office occupy only 1,100 square feet.



A domed light diffuser was crafted from radial plywood panels that allow light to stream into the chapel from the glass skylight.





(Above and right): The exterior of the building combines glass, brick, metal panels, and concrete, and uses wood screens to identify entrances.

Building exterior

“Overall, the scale of this building appears small for its size,” Ritter says. “From the street level, it seems to have a reduced volume and avoids the institutional look.” The exterior combines glass, brick, metal panels, and concrete. Along the wall at street level are seven fiberglass medallions depicting local and historic figures important to the community. “This historical allusion was highly favored by MultiCare’s CEO and was picked up from MultiCare’s central utility plant project that we worked on,” O’Shea says (see “Good neighbor,” *Healthcare Building Ideas*, Summer 2010). Ritter adds, “The artist did great work on these reliefs, the contractor was very creative in mounting them, and the masons did incredible work in installing them and in crafting the detailed brickwork in general. The owners wanted a building that showed craft, appropriate scale, and refinement, and it turned out that everyone was sensitive to that.”

“This building worked out well—from the ED and the cancer center, to the exterior features, to the chapel,” says Fred Russell, senior project manager for CB Richard Ellis. “The end result of this project shows the importance of working with the community



and keeping communication flowing despite the inevitable personnel turnover that occurs during a project of this size.”

O’Shea agrees: “Even though this was the most complicated project I’ve worked on in my career, accommodating several level changes and some 20 connecting points to other buildings on campus, the project worked because the entire design and construction team took the time to invite everyone’s ideas early in the process. We all

worked hard to get everything right from the start rather than trying to fix things later.” **HCD**

For more information on the MultiCare Health System, please visit www.multicare.org. For more information on GBJ Architecture, please visit www.gbjarch.com.