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RICHARD BEAM

Above: Entrance to Providence Newberg Medical Center
Photo by Benjamin Benschneider



PROVIDENCE NEWBERG MEDICAL CENTER

LIVING LIGHTLY ON THE LAND

BY MIKE ANTRIM

Psalm 24:1 says, “The earth is the Lord’s and all that is in it.” At Providence Health & Services, we believe that everything entrusted to us is for the common good. We strive to care wisely for our people, our resources and our earth. We seek simplicity in our lives and in our work.

This guiding philosophy of being good stewards with our resources helped shape construction of what would be named one of the greenest hospitals in the country, Providence Newberg Medical Center, the Seattle-based health system’s first hospital in 30 years to be built from the ground up. Nestled in the heart of Oregon wine country, the \$70.6 million facility opened in 2006 and is the first sustainably built hospital on the West Coast. It also was the first hospital in the country to earn Leadership in Energy and Environmental Design (LEED) Gold certification from the U. S. Green Building Council.

In the fall of 2001, the Providence system completed a feasibility study and decided to replace its aging hospital in Newberg, Ore., with an environmentally friendly facility on a 56-acre campus.

Providence’s energy director, Richard Beam — who had been researching everything from walls to roofing to glazing — helped push for design plans which took LEED certification into account. Earning LEED designation is based on a point system; in essence, the more green points you achieve, the higher your designation. Approaching the design, architecture and equipment selection as part of a LEED framework would help save energy costs over the life of the building, thus significantly

lower the total cost of ownership, he concluded.

“It’s a smart way to build,” Beam explained. “We use our natural resource respon-

sibly, we reduce our energy costs and as a result, we can put more money back into fulfilling our mission. On top of it all, we created a healthy building for patients and employees.”

LAYING THE FOUNDATION

Beam pulled together two groups that were essential in building Providence Newberg Medical Center: the design and construction team and Providence leadership. The meeting was called an eco-charrette — an intense brainstorm-

ing forum — with a collaborative objective. This forum encouraged all members of the design and management teams to propose green strategies and ideas that would

GUINNESS WORLD RECORD GROUNDBREAKING

Thanks to strong community support, Providence Newberg Medical Center set a Guinness World Record on Sept. 27, 2003, when 2,453 people grabbed shovels and broke ground for the new hospital. The groundbreaking event also launched a fundraising campaign that garnered more than \$5.2 million for the project.

create an exemplary, high-performance building.

One of the big questions to come out of the eco-charrette was about affordability. It costs more up front to build green. But Beam was confident that establishing green goals from the start would be a financially sound decision, based on his and his team's experience over the years with replacing old equipment with newer, more energy-efficient products throughout Providence facilities. While much of the original equipment was less expensive at purchase, over time it was not the best investment, they agreed, nor did it help Providence fulfill its desire of being environmentally sound and safe.

To help offset the nearly half-million dollars called for in additional construction costs, Providence went to

ECO-CHARRETTE

The French word "charrette" means "cart." It also describes the final, intense effort by art and architecture students to meet a project deadline. The term originates from the École des Beaux Arts in Paris during the 19th century when proctors circulated a cart, or "charrette," to collect final drawings while students frantically put finishing touches on their work.

work unearthing financial support by way of grants, incentives and tax credits for building green. Energy Trust of Oregon approved a grant for \$199,858 through its building efficiency program, while Portland General Electric's Earth Advantage Program approved a

\$156,000 proposal to fund the upgrade of the hospital's auxiliary generators in return for distributed generation capacity — that is, sharing energy with the community in the event of power outages. A \$15,000 grant from Northwest Energy Efficiency Alliance for commissioning the building qualified the hospital for a \$141,000 business energy tax credit from the Oregon Office of Energy. Combined, this support coupled with the expected energy savings made the investment possible.

Many of the features truly help benefit the patient experience. For example, the building location maximizes views and daylight for heating and cooling efficiency. The many courtyards increase natural light inside the building, and every patient room has natural light. The ventilation system does not re-

BLESSING OF THE LAND

"The place where you are standing is holy ground." This quotation from Exodus 3 was written on the cover of the worship bulletin for the "Blessing of the Land" service in Newberg, Ore. That open land — 53 acres — on the outskirts of town was to become the site of Providence Newberg Medical Center, a facility built to replace the aging Providence Newberg Hospital. This is the first entirely new hospital built by the Providence Health System (now "Providence Health & Services") since 1978.

Before any earth was moved, plans were made to gather in solemn prayer on the site with the intent to honor the land's history and its peoples, and to bless the site for a future of healing and peace. The ceremony, developed by the Rev. Gregg Selander, an ordained Lutheran Minister and director of Mission Integration and Spiritual Care, would include representatives of those who lived on that land and honor their cultures and spiritualities.

Thus, Bobby Mercier, a representative of the Confederated Tribes of Grand Ronde came; in both his native tongue and in English, he blessed and gave an offering to the land and offered prayers for those who would build the hospital and those who would seek healing there. Kimberly Dunn, a descendent of the first white settler on that land — Sebastian Brutscher — spoke of the family's history and how her great-great-grandfather named the city of Newberg. Four other elderly descendants of Brutscher also attended the ceremony.

Brutscher was a Catholic immigrant from Bavaria, and his daughter married a Quaker in the first Quaker wedding in Oregon. Quakers are now the largest religious group in the Newberg area. To honor those spiritualities, Fr. Greg Gage of St. Peter's Catholic Church and Pastor Gregg Koskela of Newberg Friends Church also took leadership roles in the ceremony. And because this would be a hospital sponsored by

the Sisters of Providence, Sr. Katherine Smith, SP, led a prayer from her congregation's tradition. The ceremony also included the chief architects for the project, the area president of the contractors and three of his crew members and a few members of the hospital's leadership team and community board. Each participant led a portion of the service and shared a brief personal thought about the meaning of this ceremony to them, their family, their congregation and their people.

Before the benediction, the Rev. Selander led the group in a meditation during which they walked in silent prayer, blessing the soil with each step.

Since the hospital staff could not all come to the site for this blessing, a ceremony was held in the lobby of the existing hospital. Selected readings and prayers from the "Blessing of the Land" were used in order to connect as many as possible to the event and to send their blessing along to the new site.

cycle air inside the building, so the air everyone breathes indoors is 100 percent fresh outdoor air. In addition to a beautiful and healthy interior, a healing garden offers employees and visitors the chance to enjoy the outdoors in a calming, peaceful space. The garden also acts as a natural filtration system through which runoff water collected from the roof makes its way to bioswales — landscape elements designed to remove pollutants from runoff water.

Thanks to the hard work undertaken to include LEED into the infrastructure of the design plans, Providence was extremely excited over being recognized as a national leader in creating a healthy hospital environment for patients, visitors and employees through design, construction and material selection.

“All the evidence shows that green hospitals help people heal faster,” said Rick Fedrizzi, president, chief executive officer and founding chair, of the U.S. Green Building Council. “As the first LEED Gold hospital, Providence Newberg Medical Center is proving their commitment not only to the health of their patients, but also to the well-being of their staff, their community and the environment.”

Providence Newberg Medical Center is a model for the U.S. Green Building Rating System, a voluntary national standard for developing high-performance, sustainable buildings. The rating system now has a set of standards specific to health care construction, making it easier for other health care organizations to practice stewardship when it comes to the environment.

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Benjamin Benschneider

View from second-floor window at Providence Newberg Medical Center

HIGHLIGHTS OF THIS STATE-OF-THE-ART GREEN MEDICAL FACILITY INCLUDE:

- Consumes 20 percent less water than before, averaging under 50,000 cubic feet of water each month. Through the use of such things as automated water fixtures and low-flow toilets, savings exceed \$8,000 on the water bill each year.
- Purchases more than 183,000 kilowatt hours each month of renewable power from Portland General Electric, offsetting the need for conventional power generation, which would have sent more than three million pounds of carbon dioxide emissions into the atmosphere each year.
- Operates on 100 percent green power. All electrical needs are supplied by renewable energy — a combination of wind, hydroelectric and geothermal power.
- Participates in the Dispatchable Standby Generation program through Portland General Electric, which allows power produced by two emergency generators to be shared with the electric company in times of peak demand or in an emergency. The energy produced by the generators can power up to 3,000 homes.
- Utilizes occupancy sensors and centralized lighting control systems that turn off lights when spaces are unoccupied.
- Incorporates courtyards to increase natural lighting inside the building. All patient rooms have windows allowing natural light.
- Offers special parking to employees who drive energy-efficient cars.
- Recycled more than 85 percent of the waste generated during construction. The project used recycled and environmentally friendly materials inside and out.
- Fills the building with 100 percent outdoor air through a unique ventilation system, creating a dramatically healthier indoor air quality for patients, visitors and employees.

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