NOVATO, CALIFORNIA

LEED®- CI v2.0 Gold



Sutter Health opened the doors to their first LEED project in October 2008. The 9,700 square foot North Bay Regional Surgery Center located in Novato, CA includes three operating rooms and one procedure room, and was designed to easily expand into the adjacent first floor area to support the facilities long-term growth plans. Working towards a goal of LEED certification from the project's onset, the team effort between the owner, designers and contractors resulted in the achievement of LEED-CI v2.0 Gold certification.

The project's ownership structure—a joint venture between Sutter Health (the building's owner) and the physicians of North Bay Regional Surgery Center, LLC -and timing, presented unique opportunities to influence other tenant fit-outs as well as core and shell and site upgrades. For example, Sutter was able to designate preferred parking spaces for carpools, add bicycle racks onsite, and designate no-smoking areas at building entrances as part of ongoing site upgrades, encouraging surgery center staff and other tenants alike to use alternative transportation for their commute and work together to limit secondhand smoke. Core and shell faucets, flush valves and showers were readily upgraded, and new tenant's fixture selections carefully overseen, to bring the overall building water use down to 47% below the Energy Policy Act of 1992. During the process, a meeting with the City Water Department brought to light their mutual interest in water savings, which impacts Sonoma County's ability to release water stored in Lake Mendocino to the Russian River for Chinook salmon migration and spawning.



BOULDER ASSOCIATES

**ARCHITECTS** 

# PROJECT INFORMATION

#### Scope

• 9,700 s.f. tenant improvement

#### Completion

• September 2008

#### **Project Type**

 Ambulatory Surgery Center

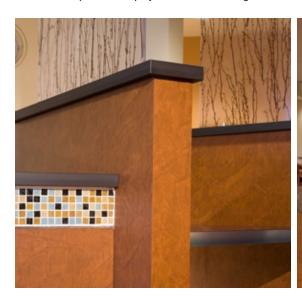
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A structural reality of the building also came into play—the building had been built with a mat slab foundation due to extremely poor soil conditions, making penetrations limited and costly for the first floor tenant. Research, and a field trip to Chino, CA, brought about a unique solution that served all interests. A vacuum plumbing system that flushes toilets using just ½ gallon of water per flush, manages all wastewater above grade, and completely eliminates slab penetrations for fixtures served by it was implemented. In addition to toilets, the system was engineered by Acorn Engineering to accommodate faucets, scrub sinks, the sterilizer, the washer-disinfector and the staff dishwasher. Only the two staff showers required a slab penetration. The end result: a tenant fit-out with water savings of 66%!

The project also boasts another kind of savings. Of the construction, demolition and packaging debris, 73% was diverted from the landfill. Wright Contracting hired Novato Disposal Services to take comingled debris and sort it off-site, reducing the need for space at the project site and ensuring a focused recycling effort.





# SUSTAINABLE HIGHLIGHTS

- 100% Indoor Advantage Gold IAQ Certified Office Furniture
- 100% Greenguard Certified Task Chairs
- 100% PVC-free Flooring
- 100% PVC-free Impact Protection
- Low-Mercury Lamping Throughout
- 66% Water-use Reduction
- 73% Demolition and Construction Waste Recycled
- 100% of Spaces Near Windows Have Daylight Responsive Controls (ORs exempted)
- 100% ENERGY STAR Compliant Equipment & Appliances
- 100% Green Power
- 34% Locally Manufactured Materials
- 20% Recycled Content (6% post-consumer, 14% pre-consumer)
- 3.4% SMART/California Gold Certified Materials
- Low-VOC Paints, Adhesives, Carpets and Composite Wood Products
- CA 01350 Compliant Insulation
- MERV 14 to HEPA filtration

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Addressing the challenge of providing a healthy, safe and sterile environment, indoor air quality was logically emphasized. A construction indoor air quality management plan required a clean construction site and protection of ductwork. Low-VOC products, teamed with a 3-week flush-out helped to reduce airborne toxins. All paints used in the project met Green Seal standards, all adhesives met the SCAQMD standards for emissions, all composite wood products contained no-added urea formaldehyde, and the systems furniture selected was certified by Scientific Certification Systems as Indoor Advantage Gold for Indoor Air Quality, conforming to BIFMA M7.1-2005 and X7.1-2005 testing protocol.

Going beyond the indoor air quality impacts and taking a broader view of the global impact of materials production with heavy metals and the dioxin formation caused by the manufacture of organochlorides, the facility selected rubber, polyolefin, and ceramic tile flooring in conjunction with reinforced polyolefin-backed carpet tile, in lieu of more common flooring products. They also mandated the use of low-mercury lamping throughout, reducing the use of the neurotoxin in the products themselves while simultaneously reducing the need for power from mercury-emitting power plants. A formal policy was subsequently established to ensure low-mercury lamping is utilized on an ongoing basis, and proper disposal methods are followed.

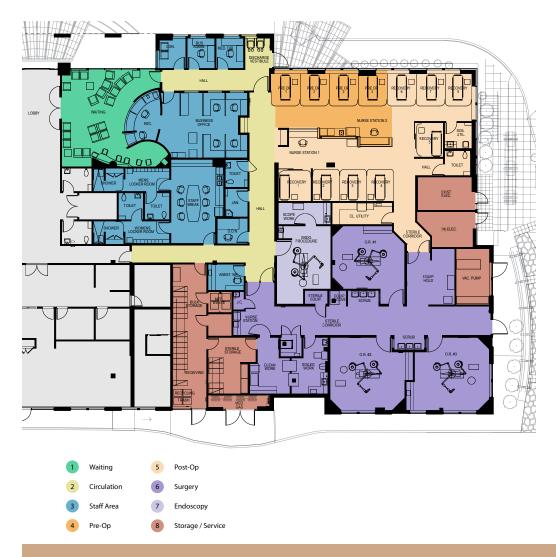
Lighting control strategies formed the foundation of the approach to energy-reduction. Taking advantage of natural lighting, controls monitor the light levels in the waiting room, pre-op and recovery bays and make adjustments as necessary. Individually zoned by cubicle, the system provides flexibility for each patient and accounts for the prevailing light conditions in each bay created by the current position of cubicle curtains. A rarity in healthcare facilities, the operating rooms also have daylighting opportunities with large windows in two of the rooms that take advantage of the existing reflective glass to obscure views.

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FF&E also factored highly in to the success of the tenant fit-out, and the management team stepped up to the challenge. From selection of Cradle-to-Cradle (C2C) certified task chairs, to mandating 100% ENERGY STAR compliant equipment and appliances, to purchase of systems furniture certified by Scientific Certification Systems as Indoor Advantage Gold for Indoor Air Quality, they took the sustainability initiative to a new level. Recognizing the value of a comfortable environment, the facility director committed to conducting a thermal comfort survey of the Surgery Center staff to ensure satisfaction and identify if any modifications to systems need to be made.

Early planning, continuous collaboration and a commitment to implement sustainable building strategies from the design team, contractor and owner, materialized into a LEED project that exceeded client expectations with a Gold plaque.



### Project Team:

Architecture: Boulder Associates, Inc.

Interior Design: Boulder Associates, Inc.

General Contractor: Wright Contracting

Mechanical & Plumbing Engineer: Axiom Engineers

Electrical Engineer: Aurum Consulting Engineers

Structural Engineer: Miyamoto

Commissioning Agent: Architectural Energy Corporation

Equipment: HELP Equipment Planning

#### **Boulder Associates**

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#### visit us

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