LEED Newsletter

DOWNTOWN COURT TOWER

ISSUE #1 April 2009

PROJECT FACTS

LOCATION
Phoenix, Arizona

CERTIFICATION TARGET:
LEED–NC v2.2 Silver

GROSS SQUARE FOOTAGE
695,000 ft^2

TOTAL PROJECT COST
$340 million

CONSTRUCTION COST
$259 million

OCCUPANCY
First Quarter 2012

ANNUAL ENERGY USE
(as designed): 66 $kBtu/ft^2$
(12% baseline reduction)

ANNUAL CARBON FOOTPRINT
(as designed): 57 lbs. CO_2/ft^2
(75% baseline reduction)

PROJECT TEAM

OWNER
Maricopa County

ARCHITECT
Gould Evans+DMJM Design

LANDSCAPE
Ten Eyck Landscape Architects

ENGINEERS
MEP: Syska Hennessy Group
Structural: Paragon Structural Design
Civil : PK Kland

SECURITY ELECTRONICS
Buford Goff & Associates

ACOUSTIC & AV
McKay Conant Hoover

LIGHTING: Candela

LEED CONSULTANT: Green Ideas

COMMISSIONING AGENT
Enovity, Inc.

PROGRAM MANAGER: Parsons C Technology Group & HDR

CONSTRUCTION MANAGER @ RISK
Gilbane/Ryan

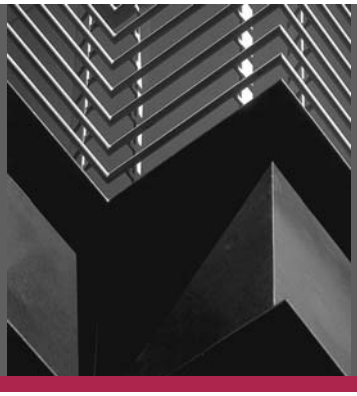
PROJECT INFORMATION

In 2007 the Maricopa County Board of Supervisors decided to address the county's growing backlog of criminal cases in the courts by building a new courthouse in downtown Phoenix to handle criminal cases. At the time the decision was made more than 40,000 criminal cases were being filed annually in Maricopa County, and that number is expected to grow as the County's population is expected to exceed four million.

The tower is the single largest project in the County's history with a total project cost of about $340 million.

The new facility will allow for speedier trials, thereby reducing incarceration time and the subsequent jail costs caused by inmates needing housing, food and other care. By locating the new court building in the downtown complex it will be more efficient for the movement of prisoners from the Fourth Avenue Jail. It will also be safer for the public as the inmates will be transferred using tunnels under the buildings.

The plan is to construct the building to eventually hold 32 courtrooms, but will house 22 at the beginning. It is much more cost efficient to construct the building this way, leaving some of the floors as shells, so the additional ten courtrooms can be added later.



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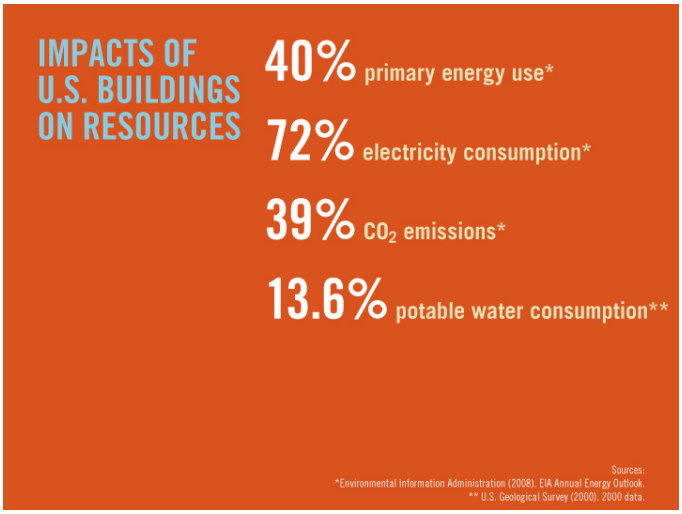
This courthouse has some unique features which make it much more efficient and more user friendly for the public. These include putting judges' chambers on separate floors to allow for better use of courtrooms for visiting judges and other special circumstances. Additionally, there will be a cafeteria inside the courthouse so jurors don't have to leave and return through security, information desks, and clearly marked seating areas, allowing victims, defendants and witnesses to remain separate.

The Maricopa County Green Government Initiative was approved by the Board of Supervisors to promote an environmentally-sensitive approach to county business and saving money. The program contains short and long-term strategies to reduce energy and material use and save money, all while reducing the County's carbon footprint. The County's new way of doing business includes actions to help improve the region's air quality, improve water quality and quantity, and make better decisions leading to efficient, economical and environmentally sensitive buildings, land use and development patterns.

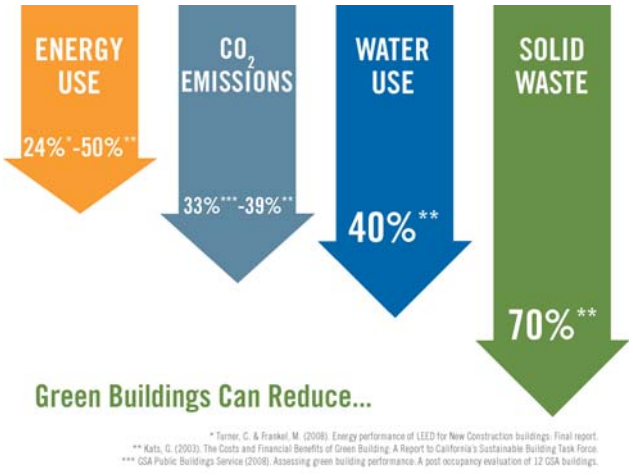
The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a voluntary, consensus-based national rating system for developing high-performance, sustainable buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

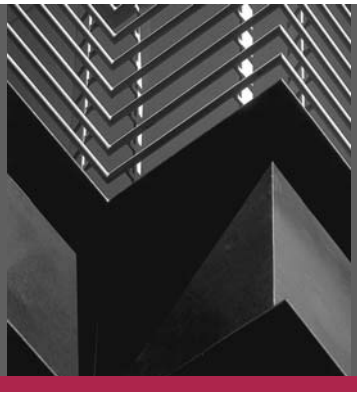
In the United States, the built environment contributes to major impacts on the environment. According to the Energy Information Administration, buildings are the #1 source of



global CO_2 emissions. LEED Certified buildings have the potential to reduce energy and water use, CO_2 emissions and solid waste destined for landfills.

In addition, LEED Certified buildings have greater occupant satisfaction with noted improvement in indoor air quality from the use of low-VOC (volatile organic compounds) materials. Occupants also benefit from enhanced daylight levels through the use of high performance glazing, light shelves and shading.





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LEED CERTIFICATION MEASURES

The Court Tower was conceived as a green building and sustainable design concepts have been incorporated into the project since the programming phase. The County has recently registered the building in order to obtain LEED Silver Certification. The registration process will give the County the tools necessary to have an immediate and measurable impact on the building's ability to save energy.

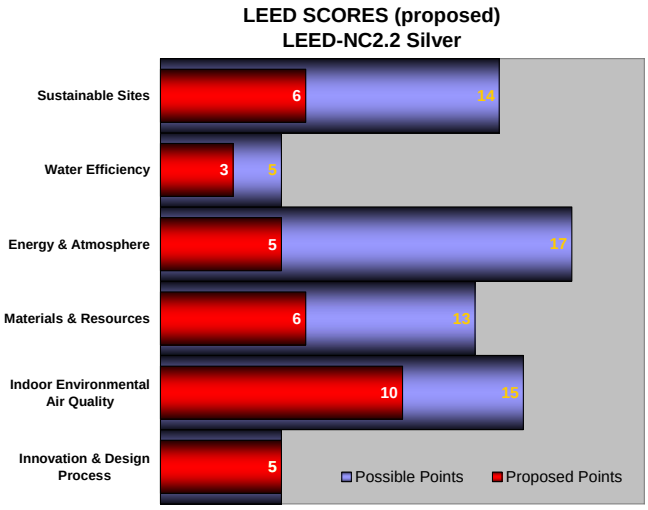
The measures that the County is implementing on the Downtown Court Tower that will gain LEED Silver certification correspond to the key areas of human and environmental health.

SUSTAINABLE SITES The measures that will contribute to sustainable site development include minimizing the pollution from construction activities, locating the building on a site that was previously developed, having nearby access to public transportation, providing reserved parking for both fuel efficient and carpooling vehicles, and reducing the heat island effect by locating the parking underground.

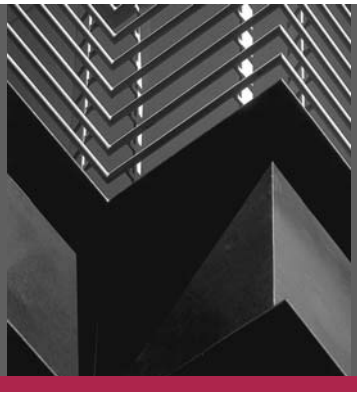
WATER SAVINGS Water will be saved by reducing water used in the landscaping and the amount of water used in the building. Landscape water will be reduced by 50% through the use of low water use planting materials and highly efficient drip irrigation systems. Inside the building as much as 20% of water will be saved via the use of ultra efficient plumbing fixtures.

ENERGY EFFICIENCY Energy will be saved in the operation of the building through a variety of ways. By connecting into the Northwind district cooling system, the HVAC loads will be significantly decreased. Other energy savings strategies include high performance glazing and high efficiency lighting complimented with the use of daylighting. All energy related systems will be installed and calibrated to perform properly. The building is projected to reduce energy use by more than 12% of the accepted standard.

MATERIALS AND RESOURCES The construction process and the operation of the building will facilitate the reduction of landfill waste. This will be achieved during construction through a Construction Waste Management Plan



that will divert 50% of the construction and demolition debris from disposal, redirect recyclable recovered resources back to the manufacturing process and redirect reusable materials to appropriate sites. Over 90% of the demolition waste has been diverted from the landfill. Additionally the products (fly ash, carpeting, insulation, etc.) will be used in the building so that a total of 10% of the total material cost will have recycled content. Likewise, regional materials will be selected so that 10% of the total material cost will consist of products that have been extracted, processed and manufactured with 500 miles of the site.



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INDOOR ENVIRONMENTAL QUALITY During construction and the ongoing operations of the building, measures will be taken to ensure that the indoor air quality will contribute to the comfort and well-being of the occupants. A carbon dioxide monitoring system will be installed that will ensure an adequate amount of fresh air is introduced into the building. A Construction Indoor Air Quality Plan will be implemented during construction and the air in the building will be flushed out before the building is occupied. To help insure that the building will have a healthy indoor environment, all the adhesives, sealants, paints, coatings, carpeting and composite wood products will meet standards restricting the amount of harmful chemical released into the breathing zone. Also, there will be a high level of lighting system control by individual occupants and lighting sensors will be installed to dim lighting to take advantage of day lighting, where possible.

COMMISSIONING The building commissioning will focus on verifying and documenting that the facility and all of its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements. The commissioning activities will follow the construction process from pre-design planning through design, construction and operations. As an integral part of the building team the commissioning agent will participate in the review and testing of all building systems (security, fire, life and safety, HVAC, lighting, electrical, etc.)

Commissioning ends with assuring the operators are trained and Operations & Maintenance manuals are available and accurate. The Operations & Maintenance personnel will assist in the through participation in functional testing and OM training.

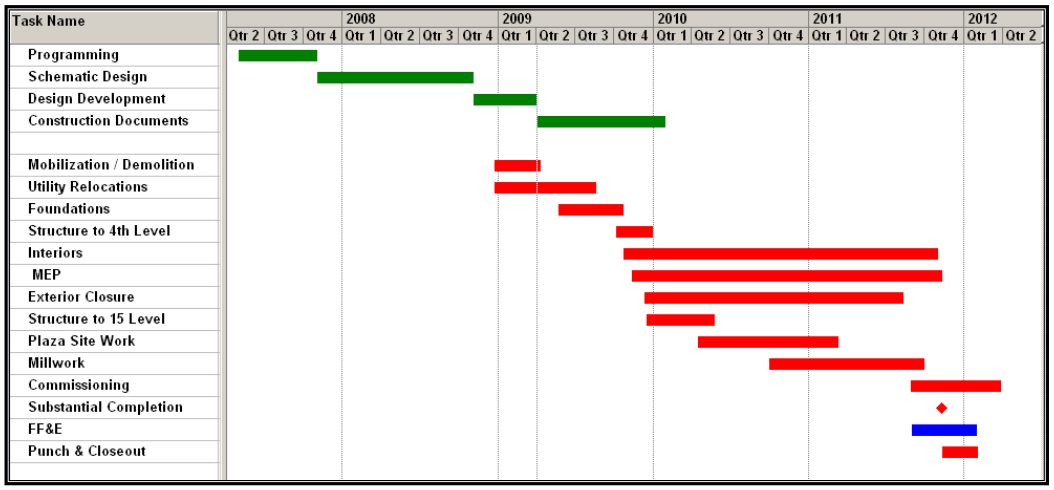
The commissioning process will provide many benefits to the project that will help it gain LEED points. Some of the benefits include:

- A fully functional building at first occupancy
- Lower energy and maintenance costs
- Safer and more comfortable buildings
- Fewer disputes between building owner and contractor
- Fewer change orders
- Problems discovered early when they are less expensive to correct

CONSTRUCTION PROGRESS

STORM DRAIN INSTALLATION Preliminary work to prepare the site for the construction of the building has already begun. A storm drain is being installed along West Jackson Street between 1st Avenue and 3rd Avenue.

MADISON STREET GARAGE DEMOLITION
The demolition of the Madison Street Parking Garage is complete. Over 98% of the steel and concrete in the structure was hauled to a recycling center where it will be processed and reused.



PROJECT SCHEDULE

Excavation and foundation work began this spring. The level of construction activity will continue to increase over the next twelve months as the steel for the sixteen story building is erected and the building exterior cladding is placed. The exterior cladding will be comprised of locally mined materials for precast concrete and copper panels.