

Company Profile & Project Highlights

KMI BUILDING INDUSTRY CONSULTING, INC. APRIL 23, 2009

Tetons Panorama

Caltrans District 9 Headquarters

Tetons Lilies

Century Avenue of the Stars

African Wildlife

260 Homer Street

Architectural Salvage Lamp

Tucson Bridge

Bioswale

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April 2009

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Project Highlights

Completed Projects	Client	Completion
POLB Security Center	FTR International	2009
County Fire Station 156	Kajima Associates	2010
Century 2055 Avenue of the Stars	The Related Companies	2009
Vallejo Health Services Center	Clark Design Build of California	2009
Harbor LAPD	Pinner Construction	2009
Capitol Area East End Complex	CA Dept of General Services	2003
Caltrans District 7 Headquarters	CA Dept. of Transportation	2004
Caltrans District 7 Tenant Improvements	Procon Development	2007
Greenspun College Urban Affairs	Clark Construction	2008
Solano County Government Center	County of Solano	2005
Santa Monica College-North	Pinner Construction	2006
Santa Monica College -South	Pinner Construction	2007
Pasadena City Hall	Clark Construction	2008

Current Projects	Client	Completion
County Fire Station 143	Kajima Associates	2010
UCSB Education and Social Sciences	UC Santa Barbara	2009
Hollenbeck LAPD	City of Los Angeles	2009
260 Homer Street	Menlo Equities	2009
820 Ramona Street	Menlo Equities	2009
525 Almanor Street	Menlo Equities	2009
705 West Ninth Street	Meruelo-Maddux Properties	2009
County Fire Station 143	Osborn Architects	2010
Hemet Family Care Center	County of Riverside	2010
South LA City Hall	CTP Construction	2010
POLA	FTR International	2010
POLB Administration Building	FTR International	2010
POLB Operations Building	FTR International	2010
West Valley Refuse	Sparano and Mooney Architecture	2009



APRIL 22, 2009

Best Wishes for Earth Day

Welcome to KMI Building Industry Consulting, Inc. KMI was established in March 1998 as an independent consulting practice specializing in sustainable design measures and construction waste management and recycling for the building industry. In October 2002, KMI became a California S-Type corporation, and services were expanded to include U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED®) projects. KMI now consults almost exclusively on LEED projects, particularly with LEED for New Construction (LEED-NC), LEED Commercial Interiors (LEED-CI), and LEED Core and Shell (LEED-CS). KMI has completed over six (6) major LEED-NC projects and one (1) LEED CI project; another three (3) projects are in final review with USGBC. Six (6) projects will be submitted to the USGBC in 2009.

KMI consults with owners and developers, architects, and general contractors to coordinate LEED certifications from USGBC/Green Building Certification Institute (GBCI). Depending on the scope and project phase, KMI may have one of several roles: KMI may act as the project LEED Accredited Professional (LEED AP) from early design phase through project completion and final certification. We may act as the design-phase LEED AP, preparing LEED bridging documents or carrying the project through Design Application Review with USGBC/GBCI. KMI works extensively with general contractors as the LEED AP for the Contractor's LEED responsibilities.

KMI includes a highly skilled team of LEED Accredited Professionals, associates, and associate firms. We work effectively with clients and project LEED team members to assure that project goals and timetables are met. KMI forms project LEED teams, bringing together the responsible parties including the owner, architect, civil engineer, MEP engineers, energy modeling, commissioning agent, and others. KMI works with the LEED team to evaluate projects to determine the best fit for LEED rating system, to establish the LEED scoresheet, and develop the LEED Responsibility and Coordination Matrix. KMI helps not only to envision the project's sustainable design and construction features; our firm acts as a problem-solver and has extensive experience with the nuts-and-bolts of LEED. KMI assists its clients and the LEED team to evaluate feasibility and cost impacts. KMI coordinates LEED On-Line project management from project registration, design and construction reviews, and final certification.

Types of LEED projects that KMI has completed - or is in the process of completing include major governmental centers, police, fire, and security centers, universities and colleges, high-rise residential condominiums and apartments, tenant improvements, and core and shell developments. [Click here for the KMI Company and Project Brochure](#) or go to the [Project Profiles](#) page. KMI also works with architects, construction specifiers, and industry professionals to develop sustainable design and LEED specifications. KMI is a specialist in construction waste management and recycling. Kelly Ingalls has 18 years experience in C&D and sustainable design, with nine year's experience with LEED. Kelly Ingalls is a LEED-NC Version 2.0, Version 2.1, and Version 2.2 GBCI Accredited Professional, as well as a LEED-CI GBCI Version 2.0 AP.

Where We're Going

In June 2009, the USGBC/GBCI will embark upon LEED Version 3. Put simply, USGBC began as a platform to develop high-efficiency buildings and low-impact sites. Now the vision is to reduce global effects of the built environment and to link green buildings to sustainable communities. KMI

is poised to expand its services to include the new LEED Version 3 rating systems. As localities begin to require LEED certification for both public and private sector projects, and private developers chose LEED certification, and sustainability becomes the industry standard, KMI will continue to provide LEED services to meet the increasing demand.

It is all connected.

As a visitor to our website, you may notice the panorama of the Grand Tetons in Yellowstone National Park in Wyoming. What is the connection to the Caltrans Building in Los Angeles? As a Wyoming native, I feel a great personal connection with the grand open spaces ranging from the Pacific Northwest, the Sonora Desert in Tucson, Arizona, the Salzkammergut of Austria, to the Great Barrier Reef in Cairns, Australia, which I have visited and snorkeled with great awe. Each of us has our moments, and one of my most notable ones was last September 2008 as I listened just before dusk to a the call of a bull elk in Yellowstone. I was speechless. And moments in the Disney Hall during an evening of chamber music (Beethoven's Piano Trios come to mind). In 2002, in an article I wrote for the Construction Specifier, I stated that "The built environment is inseparable from the natural environment." Rather than going into an extensive essay to elucidate that concept here, I will state that the principle of KMI is this: It is all connected.

We appreciate the opportunity to have had a key role in the development and certification of such important LEED projects as Capitol Area East End Complex, the Caltrans Building, Greenspun College of Urban Affairs, the LAPD Replacement Stations, The Century, and the Menlo mixed use projects in Palo Alto.

Best Regards,

KMI

Kelly McArthur Ingalls,

President



Project Highlights

Capitol Area East End Complex Blocks 171-174 Sacramento, California

Project Team

Project Owner:	California Department of General Services Real Estate Division
Design/Build Entity:	Clark/Gruen Design Build, Inc.
Architect:	Gruen Associates, Architects and Planners, Los Angeles, California
MEP Engineer:	Flack + Kurtz, San Francisco, California
Structural Engineer:	John A. Martin, Los Angeles, California
Contractor:	Clark Construction Inc., Costa Mesa
Commissioning Agent:	National Air Balancing Corporation, Fairfield, California
Sustainable Design Consultant:	Rocky Mountain Institute, Snowmass, Colorado
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, California

Project Metrics

Location:	Sacramento, California
Completion Date:	March 2003
Construction Cost:	\$225 million
Building Size:	1,672,180 building square feet
Site Area:	8.89 Acres
Project Delivery:	RFP/Design Build

LEED Project Profile

The Capitol Area East End Complex (CAEE Project) is located at the East end of the State Capitol in Sacramento, California. It is a complex of four buildings with a central plaza, consisting of 1.2 million gross square feet including the buildings, plaza, and parking structures. The project was developed by the State of California to provide office consolidation for three large state agencies: the Departments of General Services, Health, and Education. The project cost was \$225 million dollars, with a budget of about \$135 per square feet.

Johnson Fain Partners in Los Angeles, California was the master architect. The state included a set of sustainable design measures in the project's request for proposals, which included

requirements for energy efficiency, water conservation, recycled content products, construction and demolition waste recycling, and indoor air quality. The state coordinated its sustainable design efforts for the project through its Green Team, which included members of the state Department of General Services, Department of Energy, Department of Health/Indoor Air Quality Section, and representatives from the Integrated Waste Management Board.

Clark/Gruen Design Build, Inc. was the design and construction team. Recognizing the importance of sustainable design and construction measures, Clark/Gruen included the Rocky Mountain Institute and KMI Associates/Building Industry and Solid Waste Consulting, Inc. on the design/build team. Flack + Kurtz played a key role in effecting sustainable measures for MEP, and National Air Balancing Corporation was commissioning consultant. Recognizing the potential to develop a comprehensive sustainable design approach, the project was registered with the U.S. Green Building Council in 2001.

Preliminary construction activities started in January 2000 and occupancy began in March 2003

Project LEED® Highlights

- A total of 32 credit items were achieved, qualifying the project for a LEED Certified rating. Some of outstanding achievements are:
- Sustainable Sites. In addition to sustainable site selection, 100% of the parking areas were placed underground. The project included an Energy-Star compliant cool roof system, and the non-roof site areas were designed to reduce the heat island effect. This design approach was in accordance with Sacramento's cool roof program.
- Energy Efficiency. The energy use in the building was designed to reduce the energy cost budget 35% lower than the requirements of ASHRAE. The state has realized substantial energy cost savings during the operational phase of the building.
- C&D Recycling. A comprehensive reuse and recycling program for demolition and construction materials was implemented. This included relocation of ten historic palms to Capitol Park, relocation of an entire historic art-deco apartment building to a nearby site, and recycling of nearly 88% of the demolition site debris generated by a 3-block area site clearance. Construction phase materials were recycled at a local mixed debris recycling facility, and a monitoring program was implemented to maximize construction debris diversion. The combined demolition and construction reuse and recycling rate was over 86%, diverting more than 12,000 tons of materials from Sacramento area landfills. The project was awarded with Waste Reduction Awards Program (WRAP Awards) from the California Integrated Waste Management Board in 2001 and 2002 in recognition of these achievements.
- Recycled Content Materials. The project included over \$10 million in post-consumer and post-industrial recycled content materials, nearly 14% of the cost of materials for the project. The construction documents required manufacturers of recycled products to comply with the State Agency Buy Recycled Campaign (SABRC). This not only assisted Clark/Gruen to track and document to use of RCPs on the project; it raised awareness among RCP manufacturers of the importance that the State, as well as the Design/Builder placed on using recycled materials.
- Regionally Manufactured Materials. The project included over \$22.5 million in regionally manufactured materials, nearly 30% of the cost of all materials for the project. Of those materials, nearly 49.50% were regionally extracted.
- Clark/Gruen implemented an IAQ testing program for an extensive list of materials that may cause indoor air quality problems. The construction documents included an IAQ specification (Section 01352 Environmental Procedures) which required manufacturers to provide IAQ emissions tests for a broad range of indoor materials, and to test for an extensive list of VOCs. The list of materials met and exceeded the list of materials (Adhesives/Sealants, Carpet, Paint, and Composite wood) required for LEED as well as the types of VOCs for which products were tested. Submittals of products for IAQ testing were evaluated by Clark/Gruen and KMI Associates, and IAQ test results were reviewed

to ensure that products met strict project IAQ standards. In addition, Clark Construction hired an independent industrial hygienist to perform IAQ monitoring at critical points during construction.

- The Design/Builder identified four Innovation and Design items that are qualified for LEED credits:
- Additional IAQ testing for indoor air quality for materials, exceeding LEED requirements. Implementation of an Indoor Air Quality monitoring program by an on-site independent industrial hygienist during construction phase.
- Additional demolition and construction phase waste reduction and recycling, resulting in landfill diversion, exceeding LEED requirements. Implementation of a construction phase monitoring, documentation, and reporting program by a local independent solid waste consultant during the entire construction phase.
- Innovative technologies for ventilation pre-cooling and air monitoring. Each of the 4 buildings include air handling units that are equipped with an integral dedicated ventilation unit that reduces cooling loads during peak mechanical loads, provides CO2 monitoring of return air, as well as other efficacies in the air delivery system.
- Integrated Central Plant. The central plant provides heating and cooling for the entire complex from a single source. The sustainable benefits include increased energy efficiency for the entire complex; flexibility for the owner to schedule chiller operation based on current utility availability and costs; incorporation of a heat recovery system for the domestic water supply; and other benefits.

Project Economics

The project cost was \$392 million, with a construction cost of \$225 million. At 1,672,180 square feet, the construction cost was \$135/SF.

Impact of CAEEP LEED Accomplishments

The achievements made by incorporating LEED measures on the Capitol Area East End Complex are significant for several reasons. The project will be one of the largest LEED projects to be certified by the US Green Building Council. The State of California DGS placed a very high importance on sustainable design measures in the project requirements, and included its Green Team to oversee their implementation. Clark/Gruen was committed to incorporating the sustainable design requirements throughout all of the project's design and construction stages. The result is a building complex that has met the requirements to obtain a LEED rating, and has exceeded many LEED credit items.

On a broader scale, the success of the CAEEP project in achieving a LEED rating demonstrates that a well-planned sustainable design approach can be applied to other large governmental office projects and other private sector developments. It has raised awareness about sustainability not only within Clark Gruen Design/Build, Inc. It has an impact on the building occupants and users by providing them with a healthy building. Manufacturers that provided products and equipment have also learned about the importance of sustainability. But most importantly, it has set a foundation upon which designers, builders, and others can apply LEED on other projects, with even greater success.

Prepared by:

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Prepared: June 1, 2003



Project Highlights

Caltrans District 7 Headquarters Replacement Building, Los Angeles, California

Project Team

Project Owner:	California Department of Transportation (Caltrans)
Design/Build Entity:	First and Main Design Build, Inc.
Architect:	Morphosis/Thomas Mayne
MEP Engineer:	Ove Arup & Partners California Ltd., Los Angeles, CA
Civil Engineer:	Fusco Engineering, Inc., Irvine, California
Landscape Architect:	Campbell and Campbell
Geotechnical Engineering:	Leighton and Associates, Irvine, California
Structural Engineer:	John A. Martin Associates, LA
Contractor:	Clark Construction Group, LLC, Costa Mesa
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, California

Project Metrics

Location:	First and Main Street, Los Angeles, California
Completion Date:	December 2004
Construction Cost:	\$141.7 million
Building Size:	1.175 million building square feet
Site Area:	63.87 Acres
Occupancy:	1,800
Project Delivery:	RFP/Design Build

Project Description

The CalTrans District 7 Headquarters replacement building is located in downtown Los Angeles, California at the corner of First and Main Streets. It is a 13-story building consisting of 1.175 million gross square feet including the building, a parking structure below ground, and plaza. The project cost was \$171 million; with budget of \$152/SF. Total construction cost was \$141,717. Completed in December 2004, CTD7HQ is the first state-owned building certified as LEED Silver under California's Executive Order S-20-04 requiring that design, construction and operation of all new and renovated state-owned buildings be rated LEED Silver or higher. As such, it is an important benchmark for all future public and private sector office buildings designed and constructed under principles of sustainability and to achieve LEED ratings.

Project LEED® Highlights

- Reduced heat island effect result of 100% underground parking
- 75% Energy STAR compliant roof and plaza (not LEED rated)
- Demolition & construction recycling rate over 92%; diverted 12,000 tons from Los Angeles area landfills
- Building energy systems exceed ASHRAE 90.1-1999 requirements by 44%
- LEED Energy & Atmosphere Credit Savings earned of 34.26% below Title 24
- Innovative photovoltaic system design provides shade and renewable energy to building
- Mechanical perforated metal panels shade windows, reduce heating & cooling demands, eliminate need for interior window shades
- LEED Exemplary Performance in Green Power earned when project purchased 2 year contract for 100% green power supply
- 10.73% of construction materials certified recycled material
- 32% regionally manufactured (within 500 mile radius) products used in construction; 11% regionally extracted materials
- LEED Exemplary Performance in Low-Emitting Furnishings earned through purchase of low VOC interior materials to meet LEED healthy interior air quality standards
- LEED team utilized project as Sustainable Building Public Education tool

Lessons Learned

Project Owner included LEED Silver requirements in the project RFP, and sustainable design was incorporated throughout all design phases and construction activities. Sustainable design and LEED informed decisions about energy systems and materials selection. The contractor coordinated an integrated LEED team that involved all responsible parties for tracking LEED credit achievement and documenting compliance. To assure that the contractor and its subcontractors complied with LEED in terms of processes and products used, the contractor implemented a procurement tracking system to review submittals for LEED, and regularly updated progress reports and held LEED meetings on a monthly basis. The contractor provided staff members dedicated to coordinating LEED activities with all LEED team members. Meetings with key subcontractors included education about the LEED rating system and specific LEED project requirements and goals. There were some challenges in documenting LEED compliance at the end of the project when efforts focused on substantial completion, indicating the importance of early evaluation of product submittals and documentation of LEED-compliant materials. The sustainable design public education program was a two-pronged approach that focused not only on design and construction staff but the building industry and general public as well.

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Prepared: February 1, 2009



Project Highlights

Caltrans District 7 Headquarters

11th Floor Tenant Improvements, Los Angeles, California

LEED[®] Project Highlights

Project Team

Project Owner:	California Department of Transportation, CA
Design Architect/MEP:	State Department of General Services, Los Angeles, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
General Contractor:	Procon Development and Engineering Inc., Tarzana, CA
Commissioning Agent:	American Commissioning Group, Anaheim, CA
Indoor IAQ Consultant:	Healthy Buildings International, Lake Forest, CA

Project Metrics

Location:	100 South Main Street, 11 th Floor, Los Angeles, CA
Completion Date:	October 2007
Building Size:	17,000 square feet
Site Area:	4 acres (building site)
Occupancy:	300
Project Delivery:	Design/Public Bid/Build

Project Description

The Cal Trans District 7 Headquarters 11th Floor state government commercial office space tenant improvement is located at 100 South Main Street in Los Angeles, California. The project is a LEED for Commercial Interiors (LEED-CI) Version 2.0 project and achieved a LEED Silver rating.

Project LEED® Highlights

- Project was fully commissioned by an independent commissioning agent, with enhanced commissioning 8 months after construction completion.
- Building energy systems met the stringent requirement of California's Title 24 Energy Code.
- Construction waste management practices diverted 76% of construction waste from disposal.
- 100% of project systems furniture and furnishings (such as shelving) were salvaged, refurbished, or reused.
- Recycled content products comprised 20.73% of the cost of construction materials.
- Regionally extracted products comprised 80.79% of construction materials.
- Regionally manufactured products comprised 84.85% of materials; reused furniture saved the state over \$400K.
- 100% of wood products used are FSC certified.
- Energy Star-related equipment and appliances equal 73% by rated power are installed in the project.
- Project met the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction protected HVAC and building materials.
- Two week building flush out was implemented prior to occupancy to manage residual construction pollutants.
- Low-VOC materials were included for adhesives, sealants, paints, carpeting composite wood and agrifiber materials to assure healthy building IAQ.
- Innovation in design credits include: exemplary performance for 100% reused project furniture, 80% regionally extracted and manufactured materials, and the creation of a public education program to teach the corporate community about the importance of sustainable building.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, the Architect, MEP Engineers, the commissioning agent, and others associated with LEED design and construction.

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Prepared: March 31, 2009



Project Highlights

The Greenspun College of Urban Affairs

Research and Classroom Building, Las Vegas, Nevada

Project Team

Project Owner:	Board of Regents of the Nevada System of Higher Education on behalf of UNLV, Las Vegas, NV
Design Architect:	Robert A.M. Stern Architects, New York, NY
Executive Architect:	HKS Architects, Los Angeles, CA
LEED Consultant/Project LEED AP:	Atelier Ten, New York, NY
MEP Engineer:	R.G. Vanderweil Engineers, Los Angeles, CA
Civil Engineering:	Loscha Engineering, Las Vegas, NV
Structural Engineer:	Walter P. Moore and Associates, Las Vegas, NV
Landscape Architect:	SWA Group Los Angeles, CA
Contractor:	Clark Construction Group, Las Vegas, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	Test Marcx, Los Angeles, CA
IAQ Testing Consultant:	Healthy Buildings International, Lake Forest, CA

Project Metrics

Location:	Las Vegas, Nevada
Completion Date:	August 2008
Construction Cost:	\$ 64.7M
Building Size:	121,000 gross square feet
Site Area:	5.3 acres
Occupancy:	100 FTE (faculty/staff); 1000 students/visitors
Project Delivery:	Design/Bid/Build

Project Description

The UNLV College of Urban Affairs building is located at the campus of University of Nevada Las Vegas campus in Las Vegas, Nevada. The second of two LEED projects on the UNLV campus this 120,000 square foot building provides classrooms, labs, departmental suites, faculty offices, and radio and television broadcasting facilities for the College. Funded largely by a \$37M grant from the Greenspun Family Foundation the building is an educational resource that teaches the public about the importance of sustainable building. The project achieved a LEED for New Construction (LEED-NC) Version 2.1 Gold rating in Spring 2009. The project LEED team is currently working to determine the feasibility of qualifying for a Platinum rating.

Project LEED® Highlights

- Reduced light pollution by not allowing direct beam illumination to escape from the site.
- Reduced heat island effect by using natural grey concrete as a paving material.
- Energy STAR compliant cool roof.
- Water used for landscaping is reduced by 50% with high-efficiency irrigation equipment (drip irrigation and low-flow sprinkler heads), and drought-tolerant planting.
- Water efficient dual-flush and low-flow restroom fixtures reduce water consumption by 38% over the Energy Policy Act of 1991 standard.
- A photovoltaic array canopy harnesses solar energy and provides the building with 15% of the total electrical energy needed.
- Project will be fully commissioned by an independent commissioning agent, with enhanced commissioning scheduled 8 months after construction completion.
- Buildings HVAC and central plant equipment are free of ozone-depleting CFC's and other refrigerants that would contribute to ozone depletion.
- A chilled beam system is used for heating and cooling the building. This system reduces energy consumption by 10% and will result in an annual savings of \$12,000. Chilled beam systems also increase the air quality by running a low risk of mixing the local air with other contaminants.
- Occupancy sensors for classroom lighting controls automatically turn lights off when there is no movement in the room.
- Building energy systems will exceed ASHRAE 90.1-2004 requirements by 50.7%.
- Demolition & construction recycling diversion exceeds over 75%.
- Over 12% of construction materials include post-consumer and pre-consumer recycled content. Recycled content materials include reinforcing bar, structural steel, building insulation, and acoustic ceiling tiles.
- 63% of construction material costs were locally manufactured materials (within a 500 mile radius).
- 86% of construction material costs were regionally extracted or recovered materials.
- Construction IAQ Management Plan during construction protects HVAC ductwork, and construction materials, and included baseline air quality testing before occupancy.
- Low-VOC materials such as adhesives, paints, carpeting, and composite wood and agrifiber products that are free of added-urea-formaldehyde are incorporated into the project.
- The University's facilities management group will implement the use of environmentally-safe cleaning products to reduce chemical pollutants during building operation.
- A sustainable building education program includes a web site that allows people to learn about the building, and tours of Greenspun Hall are available to the public.

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Prepared: July 22, 2009



Project Highlights

Santa Monica College Humanities and Social Sciences North Building, Santa Monica, California

Project Team

Project Owner	Santa Monica Community College District
Design Architect	Renzo Zecchetto Architects
Architect	Gensler Associates, Santa Monica, California
MEP Engineer	Mazzetti & Associates,
Energy Consultant/Energy Modeling	Brummitt Energy Associates, Inc., San Diego, California
Civil Engineer	Stantec, Encino, California
Landscape Architect	SWA Group, Laguna Beach, California
Contractor	Pinner Construction, Anaheim, California
LEED Consultant/Project LEED AP	Gensler Associates, Santa Monica, California
Contractor's LEED AP	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent	American Commissioning Group, Anaheim, California

Project Metrics

Location	1900 Pico Boulevard, Santa Monica, California
Completion Date	August 2006
Building Size	25,114 SF
Site Area	27,050 SF
Occupancy	418 FTE including faculty, staff, and students
Project Delivery:	Design/Bid/Build

Project Team

Project Owner:	Santa Monica Community College District
Architect:	Gensler Associates, Santa Monica, California
MEP Engineer	Mazzetti & Associates,
Energy Consultant/Energy Modeling	Brummitt Energy Associates, Inc., San Diego, California
Civil Engineer	Stantec/Burton Bradley
Landscape Architect	Renzo Zecchetto Architects, Santa Monica, California
Contractor	Pinner Construction, Anaheim, California
LEED Consultant/Project LEED AP	Gensler Associates, Santa Monica, California
Contractor's LEED AP	KMI Building Industry Consulting, Inc., Glendale, California

Commissioning Agent

American Commissioning Group, Anaheim, California

Project Metrics

Location	Santa Monica, California
Completion Date	August 2007
Construction Cost	\$9,951,000
Construction Cost/ SF	\$396/SF
Building Size	25,114 SF
Site Area	27,050 SF
Occupancy	418 FTE including faculty, staff, and students
Project Delivery:	Design/Bid/Build

Project Description

The Santa Monica College Liberal Arts North Building is located at the Santa Monica College campus at 1900 Pico Boulevard in Santa Monica, California. It was the first phase of a two-building liberal arts project which included the Liberal Arts South Building. The 3-story building consists of 25,114 gross square feet. Completed in August 2007, the building achieved LEED Silver certification from USGBC in June 2008. The building is an important benchmark for the college's future building program to be designed and constructed under principles of sustainability and to achieve LEED ratings.

Project LEED® Highlights

- Community Connectivity to 10 basic services within ½ mile walking distance of the project site.
- Alternative transportation to reduce vehicle use included bus stops and bike racks as well as changing rooms and showers for faculty and staff. The project includes no added parking.
- Vegetative open space in 53,979 SF.
- Reduced heat island effect for non-roof surfaces through use of light-colored concrete.
- 75% Energy STAR compliant cool roof.
- Interior and exterior lighting designed to reduce night sky light pollution.
- Water efficient landscaping included high-efficiency irrigation systems, draught-tolerant planting for potable water use reduction of more than 50% over baseline.
- Building water use reduction is over 25% from the baseline Energy Policy Act of 1991. This was achieved by using low-flow water closets, low-flow lavatory, and low-flow sinks throughout the building.
- Independent commissioning agent coordinated commissioning of building systems to assure that owner's project systems requirements were met, and to assure that systems operate at optimal efficiency.
- Energy efficient building systems for space cooling, lighting systems, and lighting controls reduced the building's energy cost budget by 29% over California's Energy Title 24 Energy Code (design case versus baseline case ECB).
- Space allocation was provided for collection and storage of recyclable materials generated by building users.
- Demolition & construction materials recycling rate was over 82.55%; contractor diverted over 443 tons from area landfills.
- 10.44% of construction product costs were post-consumer + ½ post-industrial recycled content material; project included over \$467K in recycled content materials.
- 30.89% regionally manufactured and 51.83% regionally extracted materials (within 500 mile radius) were used in construction. Over \$1.3M were regionally manufactured; and over \$716K were regionally extracted.
- FSC-certified wood was used for over 85% of the wood costs for the project; over \$10,000 FSC certified wood was purchased for the project. This included some treated lumber purchased from FSC-certified sources that required special handling to be treated per project specifications.

- Comprehensive Indoor Environmental Quality program included CO2 monitoring, compliance with ASHRAE 62.1 Standard for Ventilation Rate and ASHRAE 55 Standards for Thermal Comfort.
- Low-VOC Materials were incorporated for adhesives, sealants, paints, coatings, carpeting, and composite wood and agrifiber products (free of added-urea formaldehyde resins).
- Natural ventilation was provided from operable windows for all regularly-occupied spaces. The project's close proximity to the ocean provided the opportunity to use natural ventilation combined with fan-driven cooling systems.
- Daylighting for 75%, and views to the outside for 95% of regularly occupied spaces. Studies show that daylight and views contribute to increased productivity and student attendance.
- Innovation in Design was achieved for providing open space that is greater than 5 times the size of the building footprint, and exemplary performance for more than 95% daylighting.

Project Economics

The construction cost was \$9,951,000, with construction cost of \$396/SF.

Lessons Learned

Project owner included LEED certification requirements in the project RFP, and sustainable design was incorporated throughout all design phases and construction activities. Sustainable design and LEED informed decisions about energy systems and materials selection. The owner coordinated an integrated LEED team that involved all responsible parties for tracking LEED credit achievement and documenting compliance. An independent commissioning agent coordinated systems commissioning and assured functional performance. To assure that the contractor and its subcontractors complied with LEED in terms of processes and products used, the contractor closely tracked product submittals to assure compliance with LEED, and provided regularly updated progress reports. Meetings with key subcontractors included education about the LEED rating system and specific LEED project requirements and goals.

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Prepared: February 17, 2009



Project Highlights

Santa Monica College Humanities and Social Sciences South Building, Santa Monica, California

Project Team

Project Owner:	Santa Monica Community College District
Architect:	Gensler Associates, Santa Monica, California
MEP Engineer:	Syska Hennessy Group, Santa Monica, California
Energy Consultant/Energy Modeling:	Syska Hennessy Group, Santa Monica, California
Civil Engineer:	Stantec, Encino, California
Landscape Architect:	SWA Group, Laguna Beach, California
Contractor:	Pinner Construction, Anaheim, California
LEED Consultant/Project LEED AP:	Gensler Associates, Santa Monica, California
Contractor's LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Building Systems Commissioning:	Syska Hennessy Group, Santa Monica, California

Project Metrics

Location:	Santa Monica, California
Completion Date:	August 2007
Building Size:	40,628
Site Area:	34,640
Occupancy:	525 FTE including faculty, staff, and students
Project Delivery:	Design/Bid/Build

Project Description

The Santa Monica College Humanities Social Sciences South Building is located at the Santa Monica College campus at 1900 Pico Boulevard in Santa Monica, California. It was the second phase of a two-building humanities and social sciences project which included the Humanities and Social Sciences North Building. The 3-story building consists of 40,628 gross square feet. Completed in August 2007, the building achieved LEED Silver certification from USGBC in October 2008. The building is an important benchmark for the college's building program to be designed and constructed under principles of sustainability and to achieve LEED ratings.

Project LEED® Highlights

- Community Connectivity to 10 basic services within ½ mile walking distance of the project site.
- Alternative transportation to reduce vehicle use included bus stops and bike racks as well as changing rooms and showers for faculty and staff. The project includes no new added parking.
- Vegetative open space in 53,970 SF.
- Reduced heat island effect for non-roof surfaces through use of light-colored concrete.
- 75% Energy STAR compliant cool roof.
- Interior and exterior lighting designed to reduce night sky light pollution.
- Water efficient landscaping included high-efficiency irrigation systems, draught-tolerant planting for potable water use reduction of more than 50% over baseline.
- Building water use reduction is over 30% from the baseline Energy Policy Act of 1991. This was achieved by using low-flow water closets, low-flow lavatory, and low-flow sinks throughout the building.
- Building systems were commissioned to assure that owner's project systems requirements were met, and to assure that systems operate at optimal efficiency.
- Energy efficient building systems for space cooling, lighting systems, and lighting controls reduced the building's energy cost budget by 30% over California's Energy Title 24 Energy Code (design case versus baseline case ECB).
- Space allocation was provided for collection and storage of recyclable materials generated by building users.
- 24.63% of construction product costs were post-consumer + ½ post-industrial recycled content material; project included over \$1,462,497 in recycled content materials.
- 41% regionally manufactured materials (within 500 mile radius) were used in construction. Over \$1,344,685 were regionally manufactured. Over \$689,181 or 21% of the cost of materials were regionally extracted.
- Comprehensive Indoor Environmental Quality program included CO2 monitoring, compliance with ASHRAE 62.1 Standard for Ventilation Rate and ASHRAE 55 Standards for Thermal Comfort.
- Baseline Indoor Air Quality Testing consultant performed on-site air testing for total volatile organic compounds (TVOCs) after construction and prior to occupancy.
- Low-VOC Materials were incorporated for adhesives, sealants, paints, coatings, carpeting, and composite wood and agrifiber products (free of added-urea formaldehyde resins).
- Indoor chemical and pollutant source control included walk-off mats and special ventilation for copying rooms and custodial closets.
- Natural ventilation was provided from operable windows for all regularly-occupied spaces. The project's close proximity to the ocean provided the opportunity to use natural ventilation combined with fan-driven cooling systems.
- Daylighting for 75%, and views to the outside for 95% of regularly occupied spaces. Studies show that daylight and views contribute to increased productivity and student attendance.
- Innovation in Design was achieved for providing open space that is greater than 5 times the size of the building footprint; exemplary performance for more than 24% recycled content products; exemplary performance for more that 41% of building materials manufactured within 500 miles of the project site; and more that 21% of materials extracted within 500 miles of the project site.

Lessons Learned

Project owner included LEED certification requirements in the project RFP, and sustainable design was incorporated throughout all design phases and construction activities. Sustainable design and LEED informed decisions about energy systems and materials selection. The owner coordinated an integrated LEED team that involved all responsible parties for tracking LEED credit achievement and documenting compliance. Building systems were commissioned to

assure that systems design met the owner's requirements and assured functional performance. To assure that the contractor and its subcontractors complied with LEED in terms of processes and the use of green building materials, the contractor closely tracked product submittals to assure compliance with LEED, and provided regularly updated progress reports to the architect. Meetings with key subcontractors included education about the LEED rating system and specific LEED project requirements and goals.

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Prepared: February 17, 2009

Project Highlights

Solano County

Government Center, Fairfield, California

Project Team

Project Owner:	County of Solano California
Design/Build Entity:	Clark Construction of California
Design Architect:	Johnson Fain Architects, Los Angeles, CA
Architect if Record:	Kaplan McLaughlin Diaz (KMD), San Francisco, CA
MEP Engineer:	Flack + Kurtz, San Francisco, Ca
Contractor:	Clark Design Build of California, Inc., Oakland, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, California

Project Metrics

Location:	675 Texas Streets, Fairfield, CA
Completion Date:	January 2005
Total Project Cost:	\$82.3 million
Building Size:	342,000 square feet
Parking Structure, Plaza & Courthouse:	375,000 square feet
Site Area:	8 Acres
Project Delivery:	RFP/Design Build

Project Description

The Solano County Government Center is located at 675 Texas Street in Fairfield, California. It is an 8-acre complex consisting of two office buildings, including the County Administration Center (CAC) and County Probation Building. The project has a combined total of 342,000 square feet, as well as a 375,000 square foot above-grade parking structure, plaza, and courtyard features around the government center facilities. The project was developed by Solano County to provide office consolidation for 16 county agencies. The project cost for the design/build delivery was \$82.3 million dollars, with a budget for the office buildings at a cost of \$160 per square foot.

Johnson Fain in Los Angeles, California was the master architect. In the project's Request for Proposals, the County included a set of sustainable design measures, which included recommendations for energy efficiency, water conservation, recycled content products, construction and demolition waste recycling, and indoor air quality. KDM was the executive architect.

Clark Design Build of California, Inc. was chosen by the County utilizing a bridging delivery to complete the design and construction of the project. Recognizing the importance of sustainable design and construction measures, the Clark team offered an enhancement to the original contract requirements and proposed to complete the design and construction in support of LEED certification requirements. The Clark team coordinated sustainable design and LEED efforts with Solano County, URS (CM), Johnson Fain (Master Architect), KMI Associates/Building Industry and Solid Waste Consulting, Inc., (LEED AP), Kaplan McLaughlin Diaz Architects (Bridging Architect), and Flack + Kurtz (MEP Engineer). The project was registered with the U.S. Green Building Council in March 2003.

Preliminary construction activities started in March 2003 and occupancy was completed in January 2005.

Project LEED® Highlights

- A total of 30 credit items were achieved, qualifying the project for a LEED Certified rating. Some of the outstanding achievements are:
- The project was sited in the central downtown redevelopment zone of Fairfield, California, as part of the 50-acre County government offices campus that includes the court building, County Administration Center (CAC) and County Probation Office. The project is part of the urban redevelopment plan for the area, which includes one and two-story buildings in the central business district. The County redevelopment plan includes the consolidation of government functions in a modern office setting that will support future growth and development in the area. The CAC was designed to be a catalyst to spark new development in the area because of the centralized availability of government offices, including building permitting functions, as well as the presence of over 600 county employees who will be patrons of neighborhood services such as eating establishments, the post office, banks, florists, dry cleaners, and other retailers and service businesses.
- The project included guidelines for maintaining the historic existing county building at the northwest end of the campus. The County is reviewing multiple options related to the reuse of the building.
- In addition to sustainable site selection, 90% of the parking around the complex is located in an above-grade parking structure. The project included an Energy-Star compliant cool roof system, and the non-roof site areas were designed to reduce the heat island effect. The cool roof and structured parking features were important design approaches to reduce heat island effect in the local area.
- Energy Efficiency. The energy use in the building was designed to reduce the energy cost budget in the CAC and in the Probation Building, for a combined average of 19% lower than the Title 24 requirements. The County will realize substantial energy cost savings during the operational phase of the buildings as a result of the energy efficiency design initiatives.
- Energy Efficiency. The energy use in the building was designed to reduce the energy cost budget in the CAC and in the Probation Building, for a combined average of 19% lower than the Title 24 requirements. The County will realize substantial energy cost savings during the operational phase of the buildings as a result of the energy efficiency design initiatives.
- In addition the County developed a new co-generation facility to serve all of its government buildings. This is a privately run facility, with an emphasis on efficiency and energy self reliance. The co-generation plant generates energy from natural gas sources with electrical power as a backup to the turbines. The use of residual heat that is piped from the plant to the CAC for heating is an innovative feature of the plant.
- Regionally Manufactured Materials. The project included nearly \$15 million in regionally manufactured materials, over 52% of the cost of all materials for the project. Of these materials, over \$8.5 million, or 58% were regionally extracted.
- Recycled Content Materials. The project included nearly \$3 million in recycled content products and materials, over 10.5% of the cost of all materials for the project. Nearly 10% of that cost was for products with post-consumer content, and nearly 2% was for post-industrial products.
- Indoor Environmental Quality. Clark DB implemented an IAQ program for materials that may cause indoor air quality problems, including Adhesives/Sealants, Carpet, Paint, and Composite Wood as required for LEED. Submittals of products for IAQ testing were evaluated by Clark DB and reviewed for LEED compliance to ensure that products met strict project IAQ standards. In addition, Clark DB instituted a construction sequence of material installation and building flush out that supported the highest indoor air quality standards.
- Innovation and Design: Sustainable Building Public Education Program. A program brochure was developed for Solano County by KMI Associates, Inc. The brochure is available to the public and from KMI's website. In addition, building occupants will receive

information on the sustainable features of the building, including how to participate in the building's office recycling program.

Project Economics

The project cost for the design/build delivery was \$82.3 million dollars, with a budget for the office buildings of \$160 per square foot.

Impact of Solano County Administration Center LEED Accomplishments

The achievements associated with incorporating LEED measures on the Solano County Government Center are significant for several reasons. The County of Solano placed a very high importance on sustainable design measures in the project requirements. In addition these high standards are considered to be in support of a more productive workplace for County Government employees. Clark was committed to incorporating the sustainable design requirements and construction practices throughout all stages of the project. The result is a building complex that has met the requirements to obtain a LEED certified rating, and has exceeded many LEED credit items.

On a broader scale, the success of the Solano County Government Center project in achieving a LEED rating demonstrates that a well-planned sustainable design approach can be applied to other large governmental office projects and other private sector developments. It has raised awareness about sustainability not only within Clark Design Build, Inc. but it also has an impact on the building. Manufacturers that provided products and equipment have also learned about the importance of sustainability. But most importantly, it has set a foundation upon which designers, builders, and others can apply LEED on other projects, with even greater success. Note that the Solano County South Government Center's Vallejo Health Services Center, currently under construction, has been designed to achieve a LEED Certified rating.

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Prepared: April 1, 2005



Project Highlights

University of Santa Barbara Education & Social Sciences South Buildings, Santa Barbara, California

Project Team

Project Owner:	University of California Santa Barbara
Design Architect:	Kallmann, McKinnell & Wood Architects, Boston MA
Executive Architect:	Leo A. Daly, Los Angeles, CA
EP Engineer:	Ove Arup & Partners, Los Angeles, CA
Civil Engineer:	Penfield & Smith, Santa Barbara, CA
Structural Engineer:	Ove Arup & Partners, Los Angeles, CA
Landscape Architect:	Katharine Spitz Associates, Marina Del Rey, CA
Contractor:	McCarthy Building Companies, Inc., Newport Beach, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	The Palt Company, Santa Barbara, CA

Project Metrics

Location:	University Drive, UCSB, Santa Barbara, CA
Completion Date:	August 2009
Construction Cost:	\$ 83M
Building Size:	205,830 assignable square feet
Site Area:	232,593 SF
Occupancy:	1093 FTE (faculty/staff); 1359 student/visitors: 2452
Project Delivery:	Design/Bid/Build

Project Description

The UCSB Education and Social Sciences buildings are located at the campus of University of California Santa Barbara campus in Santa Barbara California. The project consists of three buildings including the Gurvitz Graduate School of Education (GGSE) in 93,400 gsf; the Letters and Sciences (LSS) in 96,950 gsf; and the Center for Film, TV and New Media (CFTVNM) in 15,500 gsf. Together the buildings total 205,830 asf. The project is a LEED for New Construction (LEED-NC) Version 2.2 project and will attempt a minimum of 36 LEED points for a LEED Silver rating.

Project LEED Team

The project LEED program is part of the University's campus-wide sustainable design and LEED program, which includes multiple new buildings at UCSB and will include some of the existing buildings under the LEED for Existing Buildings rating program. The LEED project for the ESSB buildings included incorporating LEED requirements in the planning and design of the building; LEED requirements for the general contractor were included in the construction documents; and an ongoing series of LEED coordination meetings have been taking place with the owner, architect, LEED project accredited professional, contractor, and the commissioning agent.

Project LEED® Highlights

- Project is included in the UCSB campus-wide portfolio program for sustainability and LEED. The portfolio program includes community connectivity, in which the buildings have pedestrian access to local basic services; bicycle storage; public transportation access; and a recycling program for campus-generated waste materials.
- Reduced heat island effect is achieved by using light colored site paving materials.
- The buildings have Energy STAR compliant cool roofs.
- Water used for landscaping will be reduced by at least 50% by using high-efficiency irrigation equipment (drip irrigation and low-flow sprinkler heads), drought-tolerant planting. 100% of the water used to irrigate the landscaping will come from municipally-supplied recycled water.
- Water efficient dual-flush and low-flow restroom fixtures used in the buildings will achieve a 44% water use reduction from the Energy Policy Act of 1991 baseline.
Atmosphere and Energy Efficiency
- Buildings will be commissioned by an independent commissioning agent who has guided the project's commissioned systems from the beginning of design through project completion.
- Buildings HVAC and central plant equipment are free of ozone-depleting CFS and other refrigerants that would contribute to global warming.
- Building energy systems will meet and exceed California Energy Code Title 24 and ASHRAE 90.1-2004 requirements.
Recycling and Sustainable Materials
- Demolition & construction recycling diversion is projected to exceed over 95%. Over XXX tons are expected to be diverted from landfills by using local source separated and mixed C&D recycling facilities.
- Over 12% of construction materials include post-consumer and pre-consumer recycled content, totaling over \$2.9M of recycled content materials. Recycled content materials include reinforcing bar, structural steel, building insulation, and acoustic ceiling tiles.
Indoor Environmental Quality and Low-VOC Products
- Construction IAQ Management Plan during construction includes protection of HVAC ductwork, protecting stored materials from moisture damage, and maintaining a clean work site.
- Construction IAQ Management Plan before occupancy will include a building flush out to reduce the levels of volatile organic compounds (VOCs) from wet and dry building materials before the buildings are occupied.
- Low-VOC materials such as adhesives, sealants, paints, coatings, carpeting, and composite wood and agrifiber products that are free of added-urea-formaldehyde are being incorporated into the project.
- The University's facilities management group will use environmentally-safe cleaning

- products to reduce chemical pollutants during building operation.
- The University's landscape program will include a green landscape management program.
- The project expects to achieve LEED exemplary performance for 44% building water use reduction.
- The ESSB will participate in a sustainable building public education program that will include a project case study and guided/self-guided tours.

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Prepared: February 17, 2009



Project Highlights

525 Almanor Street

Commercial Office Space, Sunnyvale, California

Project Team

Project Owner:	Menlo Equities, Sunnyvale, CA
Architect:	RMW Architecture and Interiors, San Jose, CA
Contractor:	Webcor Builders, San Francisco, CA
HVAC Engineer:	ACCO Engineered Systems, Glendale, CA
Civil Engineer:	BKF Engineers, San Jose, CA
Landscape Architect:	Cottong & Taniguchi Landscape Architects, Burlingame, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	525 Almanor Street, Sunnyvale, California
Completion Date:	March 2009
Building Size:	166,000 square feet
Site Area:	6.1 acres
Units:	5 stories
Parking:	665 stalls
Occupancy:	665
Project Delivery:	Design/Bid/Build

Project Description

The 525 Almanor Street office space development consists of approximately 166,000 square feet of prime office space. The project is pursuing a LEED Gold certification. The owner and the LEED team have coordinated a comprehensive sustainable design and construction program to maximize the green building opportunities to achieve a high LEED rating. The project provides a green building program for the building occupant that satisfies the needs of all occupants and will have an important impact on future core and shell development projects in the greater Sunnyvale/San Francisco Bay area.

Project LEED® Highlights

- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to basic services such as shopping, banks, restaurants, medical offices, and cleaners.
- Bicycle storage is provided for 3% of building occupants. Shower and changing facilities for 5% of building occupants encourage bicycle use.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscaping reduces potable water use consumption by 82% over baseline.
- Dual flush toilets in tenant spaces and other water conserving features are required of occupants to reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building has been fully commissioned by an independent commissioning agent.
- Building energy systems meet the stringent requirement of California's Title 24 Energy Code.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices diverted 98% of construction waste from disposal.
- Recycled content products are being tracked to include 10-20% of the cost of construction materials.
- Regionally extracted and manufactured products are being tracked to include 10-20% of construction material costs.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan will be implemented to track carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction was implemented to protect HVAC and building materials.
- Low-VOC for adhesives, sealants, paints, and coating materials assure healthy building IAQ.
- Daylight and views enhance natural day lighting and views to the outdoor environment for building occupants in over 90% of regularly occupied spaces.
- Tenant Improvement Guidelines for Sustainability are included to ensure the building continues to perform and develop sustainably. Guidelines consist of requirements such as low flow fixtures, recommendations such as the use of local materials, and information on complimenting this Gold LEED Core and Shell project with a LEED for Commercial Interiors rating.
- Innovation in design credits include exemplary performance for construction recycling, 2-year 70% green power contract, the implementation of green cleaning products and sustainable landscape maintenance programs.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, MEP, builder, commissioning agent, and others associated with LEED design and construction.

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Project Highlights

Related Properties

The Century / 2055 Avenue of the Stars, Los Angeles, California

Project Team

Project Owner:	The Related Companies, New York, New York
Architect:	Robert A.M. Stern Associates, New York, New York
Executive Architect:	HKS Architects, Beverly Hills, CA
MEP Engineer:	CB Engineers, San Francisco, CA
Structural Engineer:	Magnusson Klemnecic Associates, Seattle, WA
Civil Engineer:	KPFF Engineers, Los Angeles, CA
Landscape Architect:	Burton and Company, Santa Monica, CA
Contractor:	Webcor Builders, San Francisco, CA
Commissioning Agent:	American Commissioning Group, Anaheim, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	2055 Avenue of the Stars, Century City, California
Completion Date:	November 2009
Building Size:	639,374 square feet
Site Area:	161,544 square feet
Units:	147 residential units on 41 floors
Parking:	3 levels below grade/covered parking
Occupancy:	441 Residential, 80 building maintenance
Project Delivery:	Design Build

Project Description

The Century/Avenue of the Stars high-rise residential condominiums project is located in Century City, California at 2055 Avenue of the Stars, near the corner of AOS and Constellation Boulevard. It is a 41-story building consisting of nearly 640K gross square feet of building area, a three-level parking structure below ground, and public parking spaces. To be completed in November 2009, the Century/AOS will submit for LEED-NC Silver certification. The owner and the LEED team have coordinated a comprehensive sustainable design and construction program to maximize the green building opportunities to achieve a high LEED rating. The project provides a green building program for the building occupants and will have an important impact on future high-rise residential multi-family projects in the greater Los Angeles area. It reflects a clear commitment by the Related Companies and the entire LEED team to implement sustainability and LEED for major building developments.

Project LEED® Highlights

- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to more than ten (10) basic services such as shops, banks, restaurants, medical offices, and cleaners.
- The project's Alternative Transportation Plan includes access to numerous bus lines, which will increase public transportation ridership.
- Bicycle storage will be provided to encourage bicycle use by building occupants and operations staff.
- Preferred parking will be included for fuel-efficient vehicles, carpools and vanpools.
- Native and adaptive vegetation has been designed for nearly 70% of the site areas.
- Open space exceeds the local zoning requirement for open space by over 240%.
- Reduced heat island effect is achieved by designing for 100% underground parking.
- 75% Energy STAR compliant roofing surfaces will be included.
- Water-efficient landscaping will reduce potable water consumption by 79% over baseline.
- Water-efficient building fixtures will reduce potable water consumption by 24% over the Energy Policy Act of 1992.
- Building will be fully commissioned by an independent commissioning agent.
- Building energy systems meet the stringent requirement of California's Title 24 Energy Code.
- Green Power will include purchase of a 2-year contract for 35% green power from wind energy sources.
- Recycled content products for over 10% of the cost of construction materials are expected.
- Regionally extracted and manufactured products for over 20% of construction materials are expected.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan will be implemented to track carbon dioxide levels in the building as with the base building annual monitoring program.
- A Comprehensive Construction IAQ Management Plan during construction and prior to occupancy is being implemented to assure healthy indoor air quality.
- Low-VOC materials are included for adhesives, sealants, paints, coatings, and carpeting materials to assure healthy building IAQ.
- Daylight and views will enhance natural daylighting for 75% of the occupied spaces; and views to the outdoor environment are available for over 90% of building occupants.
- Project will include a Sustainable Building Public Education program to inform building users, the public, and the building industry about the project's sustainable building features and LEED.
- Innovation in design will include exemplary performance in design for 100% underground parking, 240% open space, and quadrupling public transportation ridership.
- Project LEED team includes LEED Accredited Professionals at all levels including the Owner, its LEED AP, the Architect, MEP, the builder, the commissioning agent, and others associated with LEED design and construction.

Notes Regarding LEED Project Limits for Mixed Use and Delayed Construction Areas

Mixed Use Areas: The Century will eventually become a mixed-use development. The LEED project excludes the following areas: the restaurant and the gym. The restaurant and Equinox gym are located on the ground floor as shown on the highlighted site drawing. The Equinox gym will be built out several months after the project's completion, and operated by an independent contractor, available for use by tenants only. The scope of the gym project and the budget for construction are not included by Related Companies' in the base building LEED project. The restaurant will also be privately developed, budgeted, and operated. There is no known schedule for the design and construction of these amenities. However, Related has a strong commitment to

LEED and will provide LEED and sustainable design and construction guidelines to prospective developers in all LEED categories.

Delayed Construction Areas: Due to current economic conditions, Floors 35-41 of the Century will not be built out at the time of substantial completion of the project, anticipated for November 2009. They will remain "white boxes," which means that the entire floor areas will not be built out until a future date, yet to be scheduled. Related will have direct control over all aspects of the future tenant build-out of those floors and they will strictly comply with all LEED prerequisites and credits that are included in the project LEED submittal. This will include, but not be limited to:

- To verify that the buildings energy related systems are installed, calibrated and perform properly, commissioning activities must be conducted by the Operator of the fitness center and restaurant before occupancy. (LEED NC 2.2 EA Prerequisite 1)
- Building energy systems must meet California Energy Code Title 24 and ASHRAE 90.1-2004 established minimum level of efficiency. (Reference LEED NC 2.2 EA Prerequisite 2)
- Provide an easily accessible area that is dedicated to the collection and storage of non-hazardous materials for recycling, include (at a minimum) paper, corrugated cardboard, glass, plastics and metals. (LEED NC 2.2 MR Prerequisite 1)
- Increase breathing zone outdoor air ventilation rates to all occupied spaces above the minimum rates required by ASHRAE 62.1-2004 to provide air ventilation to improve indoor air quality for occupant comfort, well-being, and productivity. (LEED NC 2.2 EQ Prerequisite 1)
- Minimize the exposure of occupants, indoor surfaces and ventilation air distribution systems to Environmental Tobacco Smoke by prohibiting smoking in all common areas of the building, locating exterior smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows opening to common areas, weather stripping doors, sealing wall penetrations, and blower door testing conducted by an independent IAQ consultant. (LEED NC 2.2 EQ Prerequisite 2)

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Prepared: June 4, 2009



Project Highlights

Harbor LAPD

Community Police Station and Jail, San Pedro, California

Project Team

Project Owner:	City of Los Angeles Bureau of Engineering, Los Angeles, CA
Design Architect:	Perkins & Will, Los Angeles, CA
LEED Consultant/Project LEED AP:	Perkins & Will, Los Angeles, CA
Associate Architect:	Roth + Sheppard Architects, Denver, CO
Landscape Architect:	Melendrez Design Partners, Los Angeles, CA
Contractor:	Pinner Construction, Anaheim, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	Test Marcx California, Inc., Los Angeles, CA

Project Metrics

Location:	1241 John S. Gibson Blvd, San Pedro, CA
Completion Date:	March 2009
Building Size:	183,700 gross square feet
Site Area:	4.58 acres
Parking:	283 stalls in structure, 36 police/fire, 14 public/visitor
Occupancy:	300 staff
Project Delivery:	Design/Public Bid/Build

Project Description

The Harbor LAPD Community Police Station and Jail complex is located at 1241 John S. Gibson Boulevard in San Pedro, California. The new station and jail replaces the outdated and undersized facility entirely and consists of a 50,700 square foot police station, 17,500 square foot jail, 8,400 square foot vehicle maintenance center, 107,000 square foot parking structure, helipad and communication tower. This new facility has a public lobby and community room, which will accommodate community events and allow the building to be an educational resource to teach the public about the importance of sustainable building. KMI's role as the LEED AP was to consult on LEED design and construction. The project achieved 36 points out of a required 33 to receive a LEED for New Construction (LEED-NC) Version 2.1 Silver rating.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops provides easy access to public transportation and increases bus ridership.
- Bicycle storage is provided for 5% of occupants to encourage bicycle use.
- As a brownfield site this development reduces pressure on undeveloped land.
- 100% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Provided 44,182 SF of vegetated open space (22% of site area) to conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.
- Water-efficient landscape irrigation controls allow multiple programs and advanced monitoring to reduce potable water consumption by 58% over baseline.
- Sustainable landscape design decreases the rate and quality of stormwater runoff by 35% over baseline, with 61% of the site area pervious.
- Dual flush toilets and other water conserving features reduce water usage by 35% over the Energy Policy Act of 1991 standard.
- Building was fully commissioned by an independent commissioning agent.
- Building energy systems exceeded the stringent requirement of California's Title 24 Energy Code by 25% over baseline.
- Permanent temperature and humidity monitoring systems configure to provide operators control over thermal comfort performance.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices diverted 96% of construction waste from disposal.
- Post consumer recycled content products comprised 22% of the total cost of all materials.
- Post consumer plus half of post industrial content recycled content products comprised 28% of the total cost of all materials.
- Regionally manufactured materials comprised 54% of the total cost of all materials.
- Regionally extracted materials comprised 71% of the total cost of all materials.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- Chemicals and pollutants with the potential to adversely impact air quality are controlled at the source to minimize pollutant cross-contamination of regularly occupied areas by employing permanent entry way systems, exhausting spaces where chemicals may be present or used, and replacing air filtration media prior to occupancy.
- A comprehensive Construction IAQ Management Plan was implemented to protect HVAC and building materials during construction and before occupancy.
- Two week building flush out was conducted prior to occupancy to rid the air of pollutants.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting coatings and composite wood and agrifiber products to assure healthy building IAQ.
- Innovation in design credits were achieved for recycling 96% of a required 75% construction and demolition waste, using 28% out of a required 15% recycled content materials, using 54% out of a required 40% regionally manufactured materials and using 39% out of a required 20% regionally extracted materials.
- Project LEED team includes LEED Accredited Professionals at all levels including the Contractor's LEED AP, Architect, Engineer, Builder, and others associated with LEED design and construction

Prepared by:

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Prepared: June 3, 2009



Project Highlights

Hollenbeck LAPD

Community Police Station, Los Angeles, California

Project Team

Project Owner:	City of Los Angeles Bureau of Engineering
Design Architect:	A.C. Martin, Los Angeles, CA
LEED Consultant/Project LEED AP:	TMAD Engineers, Pasadena, CA
Associate Architect:	Roth + Sheppard Architects, Denver, CO
Mechanical Engineer:	William J. Yang and Associates, Burbank, CA
Electrical Engineer:	CALPEC Engineering, Pasadena, CA
Civil Engineer:	VCA Engineers, Los Angeles
Structural Engineer:	Miyamoto International, Los Angeles, CA
Landscape Architect:	Melendrez Design Partners, Los Angeles, CA
Contractor:	FTR International, Irvine, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	Test Marcx California, Los Angeles, CA

Project Metrics

Location:	2111 E First Street, Los Angeles, CA
Completion Date:	March 2009
Construction Cost:	\$15.6M
Building Size:	176,000 square feet
Site Area:	1.43 acres
Parking:	346 stalls
Occupancy:	346 FTE
Project Delivery:	Design/Public Bid/Build

Project Description

The Hollenbeck LAPD Community Police Station is located at 2111 E First Street, Los Angeles, CA in Los Angeles, California. The new station replaces the outdated and undersized facility entirely and consists of a 54,000 square foot police station, 7,000 square foot vehicle maintenance center and 115,000 square foot parking structure. As part of the LAPD's mission to be community serving the new station is an educational resource that teaches the public about the importance of sustainable building. The project is a LEED for New Construction (LEED-NC) Version 2.1 project and is attempting a LEED Silver rating.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation to increase bus ridership and decrease automobile use.
- Bicycle storage, showers and changing facilities are provided for 5% of occupants to encourage bicycle use.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscape irrigation reduces potable water consumption by 33% over baseline.
- Dual flush toilets and other water conserving features reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Project will be fully commissioned by an independent commissioning agent, with enhanced commissioning scheduled 8 months after construction completion.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 25% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices divert 79% of construction waste from disposal.
- Recycled content products comprise 34% of the cost of construction materials.
- Regionally extracted and manufactured products comprise 62% of construction material cost.
- 98% of wood products used are FSC certified.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan has been implemented to track carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction protected HVAC and building materials, followed by a 2 week building flush out prior to occupancy.
- Low-VOC materials for adhesives, sealants, paints, carpeting, composite wood, and agrifiber materials assure healthy building IAQ.
- Innovation in design credits include exemplary performance for the use of 98% certified wood, 62% regionally extracted and manufactured materials and 34% recycled content as a percent of the total costs of all materials.
- Project LEED team includes LEED Accredited Professionals at all levels including the owner, project LEED AP, Architect, Engineer, builder's LEED AP, commissioning agent, and others associated with LEED design and construction.

Prepared by:

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Project Highlights

260 Homer Street

Commercial Office Space and Townhomes, Palo Alto, California

Project Team

Project Owner:	Menlo Equities, Palo Alto, CA
Architect:	RMW Architecture and Interiors, San Jose, CA
Contractor:	Webcor Builders, San Francisco, CA
HVAC Engineer:	ACCO Engineered Systems, Glendale, CA
Civil Engineer:	BKF Engineers, San Jose, CA
Landscape Architect:	Cottong & Taniguchi Landscape Architects, Burlingame, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	260 Homer Street, Palo Alto, California
Completion Date:	February 2009
Building Size:	34,000 square feet office space, 2 townhomes
Units:	2 townhomes, plus 2 commercial spaces
Parking:	144 stalls
Occupancy:	136 commercial, 2 residential
Project Delivery:	Design/Bid/Build

Project Description

The 260 Homer Street office space and townhome development consists of five parcels that are being redeveloped into four townhomes and approximately 34,000 square feet of prime office space. The owner and the LEED team have coordinated a comprehensive sustainable design and construction program to maximize the green building opportunities to achieve a LEED Gold rating. The project provides a green building program for the building occupant that satisfies the needs of all occupants and will have an important impact on future core and shell development projects in the greater Palo Alto/San Francisco Bay area.

Project LEED® Highlights

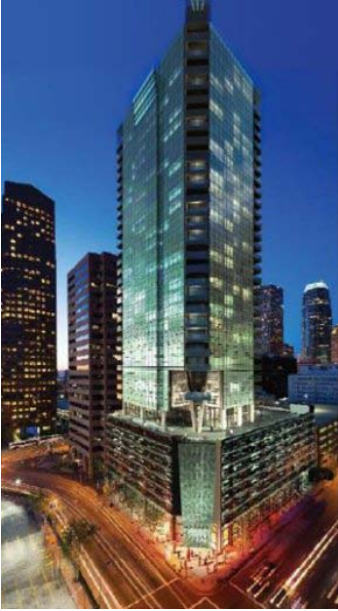
- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to basic services such as shopping, banks, restaurants, medical offices, and cleaners.
- An Alternative Transportation Plan provides access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and residents with easy access to public transportation and increase bus ridership.
- Bicycle storage is provided for commercial users and residential occupants to encourage bicycle use.
- 100% underground parking reduces the heat-island effect and qualifies the project for an Innovation in Design credit for Exemplary Performance.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscaping reduces potable water consumption by 50% over baseline.
- Dual flush toilets in residential units and other water conserving features reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building energy systems meet the stringent requirements of California's Title 24 Energy Code.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices divert 75% of construction waste from disposal.
- Recycled content products are being tracked to include 10-15% of the cost of construction materials.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan will be implemented to track carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan protects HVAC and building materials during construction.
- Low-VOC materials were included for adhesives, sealants, paints, and coating materials to assure healthy building IAQ.
- Daylight and views will enhance natural daylighting and views to the outdoor environment for building occupants in over 90% of regularly occupied spaces.
- Tenant Improvement Guidelines for Sustainability are included to ensure the building continues to perform and develop sustainably. Guidelines consist of requirements such as low flow fixtures, recommendations such as the use of local materials, and information on complimenting this Gold LEED Core and Shell project with a LEED for Commercial Interiors rating.
- Innovation in design credits include exemplary performance in design for 100% underground parking, increase in public transportation ridership, and the implementation of green cleaning products and landscape maintenance programs.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, and others associated with LEED design and construction.

Prepared by:

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Project Highlights

705 West Ninth Street

High Rise Residential Apartments, Los Angeles, California

Project Team

Project Owner:	Meruelo-Maddux, Los Angeles, CA
Architect:	Funes Architectural, Los Angeles, CA
Construction Management:	KCS West, Los Angeles, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	Engineering Economics, Inc., Los Angeles, CA

Project Metrics

Location:	705 Ninth Street, Los Angeles, California
Completion Date:	September 2009 (expected)
Building Size:	264,172 square feet
Site Area:	.67 acres
Units:	214 residential units on 34 floors
Parking:	322 covered stalls
Occupancy:	214 residential
Project Delivery:	Design/Bid/Build

Project Description

The 705 Ninth Street residential apartment tower is located in the heart of downtown Los Angeles on nearly 2/3 of an acre. It is a 35-story building consisting of 214 residential loft style units, 322 parking stalls, and approximately 6,800 square feet of restaurant use. The building will submit for LEED-NC Silver certification. The owner and the LEED team have coordinated a comprehensive sustainable design and construction program to maximize the green building opportunities to achieve a high LEED rating. The project provides a green building program for the building occupants that satisfies the needs of all occupants-residential and restaurant-and will have an important impact on future high-rise residential multi-family projects in the greater Los Angeles area.

Project LEED® Highlights

- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to basic services such as shopping, banks, restaurants, medical offices, and cleaners.
- An alternative transportation plan provides access within a half mile to Metro Rail subway stations and access within a quarter mile to bus lines, which is projected to increase ridership by over 200 riders per day.
- Bicycle storage will be provided for 15% of residential occupants to encourage bicycle use.
- 100% covered parking spaces eliminate the heat-island effect and qualify the project for an Innovation in Design credit for Exemplary Performance.
- 75% Energy STAR compliant roofing surfaces will be included to reduce roof heat-island effects.
- Water-efficient landscaping will reduce potable water consumption by 50% over baseline.
- Dual flush toilets in residential units and other water conserving features will reduce water usage by 20% over the Energy Policy Act of 1991 standard.
- Building energy systems meet the stringent requirements of California's Title 24 Energy Code.
- A designated area will provide occupants with easy collection and storage of recyclables.
- Construction waste management practices will divert up to 75% of construction waste from disposal.
- Recycled content products are being tracked to include 10-15% of the cost of construction materials.
- Regionally extracted and manufactured products are being tracked to include 10-20% of construction material costs.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan will be included to track carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction protects HVAC and building materials.
- Low-VOC materials for adhesives, sealants, paints, coatings, and carpeting materials assure healthy building IAQ.
- Daylight and views will enhance natural day lighting and views to the outdoor environment for building occupants.
- Innovation in design credits include exemplary performance in design for 100% underground parking, and quadrupling public transportation ridership.
- Project LEED team includes LEED Accredited Professionals at all levels including the, Architect, project LEED AP and others associated with LEED design and construction.

Prepared by:

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Project Highlights

Port of Long Beach Security

Command and Control Center, Long Beach, California

Project Team

Project Owner:	The Port of Long Beach, Long Beach, CA
Design Architect:	CH2Mill Lockwood Greene, Long Beach, CA
LEED Consultant/Project LEED AP:	CH2Mill Lockwood Greene, Long Beach, CA
Mechanical Engineer:	Air Flow Mechanical, Walnut, CA
Contractor:	FTR International, Irvine, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	Port of Long Beach, Pier F, Long Beach, CA
Completion Date:	August 2009
Construction Cost:	\$15 M
Building Size:	25,000 square feet
Site Area:	.46 acres
Parking:	60 stalls
Occupancy:	60 FTE
Project Delivery:	Design/Public Bid/Build

Project Description

The Port of Long Beach (POLB) Security Command and Control Center is located at the Port Complex Pier F in Long Beach, California. As the first LEED project in the POLB Complex, it represents the ports commitment to state of the art technology and operational techniques. The center is a regional resource which teaches the Port community about the importance of sustainable building. The project achieved a LEED for a New Construction (LEED-NC) Version 2.1 Silver rating in July 2009.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation to increase bus ridership and decrease automobile use.
- Bicycle storage, showers and changing facilities are provided for 5% of occupants to encourage bicycle use.
- Pervious concrete on 50% of site areas and a 75% Energy STAR compliant roofing surfaces reduce heat-island effects.
- Zero irrigation landscape reduces potable water consumption.
- Dual flush toilets and other water conserving features reduce water usage by 40% over the Energy Policy Act of 1991 standard.
- Storm water management plan resulted in a 25% decrease in rate and quantity of storm water runoff from the site.
- Building is being fully commissioned by an independent commissioning agent.
- Daylight and views will enhance natural day lighting and views to the outdoor environment for building occupants in over 90% of regularly occupied spaces.
- Chemical use areas and copy rooms have been physically separated with deck-to-deck partitions, and permanent entryway systems capture particulates as indoor chemical and pollutant source control measures.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 15% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices diverted 91% of construction waste from disposal.
- Recycled content products comprise 34% of the cost of construction materials.
- Regionally extracted and manufactured products comprise 25% of construction materials.
- 81% of wood products used are FSC certified.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction was implemented to protect HVAC and building materials.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting and coating materials to assure healthy building IAQ, and a 2 week building flush out prior to occupancy will further reduce pollutants.
- Innovation in design credits include exemplary performance for the use of 34% recycled content materials, and 25% regionally extracted and manufactured materials.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, Engineer, builder's LEED AP, commissioning agent, and others associated with LEED design and construction.

Prepared by:

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Project Highlights

820 Ramona Street

Commercial Office Space and Townhomes, Palo Alto, California

Project Team

Project Owner:	Menlo Equities, Palo Alto, CA
Architect:	RMW Architecture and Interiors, San Jose, CA
Contractor:	Webcor Builders, San Francisco, CA
HVAC Engineer:	ACCO Engineered Systems, Glendale, CA
Civil Engineer:	BKF Engineers, San Jose, CA
Landscape Architect:	Cottong & Taniguchi Landscape Architects, Burlingame, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	820 Ramona Street, San Jose, California
Completion Date:	est. March 2009
Building Size:	6,400 square feet
Units:	2 stories commercial, 1 story residential
Parking:	24 stalls, 2 car residential garage
Occupancy:	26 commercial, 2 residential
Project Delivery:	Design/Bid/Build

Project Description

The 820 Ramona Street development consists of approximately 6,400 square feet of prime office space and two residential units. To be completed in March 2009, the owner and the LEED team have coordinated a comprehensive sustainable design and construction program to maximize the green building opportunities to achieve a Gold LEED rating. The project provides a green building program for the building occupant that satisfies the needs of all occupants and will have an important impact on future core and shell development projects in the greater Palo Alto/San Francisco Bay area.

Project LEED® Highlights

- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to basic services such as shopping, banks, restaurants, medical offices, and cleaners.
- An Alternative Transportation Plan provides access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features will provide visitors and residents with easy access to public transportation and quadruple ridership.
- Bicycle storage is provided for 15% of occupants to encourage bicycle use.
- 100% underground parking reduces the heat-island effect and qualifies the project for an Innovation in Design credit for Exemplary Performance.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscaping reduces potable water consumption by 50% over baseline.
- Dual flush toilets will be required for the commercial and residential units and other water conserving features reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building energy systems meet the stringent requirement of California's Title 24 Energy Code.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices will divert 75% of construction waste from disposal.
- Recycled content products are being tracked to include 10-15% of the cost of construction materials.
- Regionally extracted and manufactured products are being tracked to include 10-20% of construction material costs.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan will be implemented to track carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction has been implemented to protect HVAC and building materials.
- Low-VOC materials were included for adhesives, sealants, paints, and coating materials to assure healthy building IAQ.
- Daylight and views will provide natural day lighting and views to the outdoor environment for building occupants in over 90% of regularly occupied spaces.
- Tenant Improvement Guidelines for Sustainability are included to ensure the building continues to perform and develop sustainably. Guidelines consist of requirements such as low flow fixtures, recommendations such as the use of local materials, and information on complimenting this Gold LEED Core and Shell project with a LEED for Commercial Interiors rating.
- Innovation in design credits will include exemplary performance in design for 100% underground parking, quadrupling public transportation ridership, implementing green cleaning products and sustainable landscape maintenance programs.

Prepared by:

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Prepared: March 25, 2009

Project Highlights

West Valley Refuse

Collection Yard Administration Building, Northridge, California

Project Team

Project Owner:	Los Angeles County Bureau of Engineering, Los Angeles, CA
Design Architect:	R2 Arch, Los Angeles, CA
Associate Architect:	Sparano and Mooney Architecture, Los Angeles, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Engineering:	Department of General Services, Los Angeles, CA
Contractor:	G-2000 Construction, Calabasas, CA
Commissioning Agent:	Engineering Economics Inc., South Los Angeles, CA

Project Metrics

Location:	8840 Vanalden Avenue, Northridge, CA
Completion Date:	June 2009
Construction Cost:	\$ 4.5M
Building Size:	20,000 square feet
Site Area:	5.5 acres
Occupancy:	32
Project Delivery:	Design/Public Bid/Build

Project Description

The West Valley Refuse Collection Yard is located at 8840 Vanalden Avenue in Northridge, California. The new building is part of a City of Los Angeles LEED and sustainable design program that requires a LEED rating on all city buildings of 10,000 square feet or larger. The project is pursuing a LEED for New Construction (LEED-NC) Version 2.1 Certified rating.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops provide visitors with easy access to public transportation to increase bus ridership and decrease automobile use.
- Bicycle storage, showers and changing facilities are provided for 10% of occupants to encourage bicycle use.
- Light colored paving materials and a 100% Energy STAR compliant roofing surface reduce heat-island effects.
- Water-efficient landscape irrigation reduces potable water consumption by 50% over baseline.
- Dual flush toilets and other water conserving features reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building is being fully commissioned by an independent commissioning agent.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 17% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- Baseline IAQ testing after construction and before occupancy prevents indoor air quality problems resulting from the construction process.

- Two week building flush out prior to occupancy will reduce residual construction pollutants.
- Low-VOC materials are included for adhesives, sealants, paints, coatings, composite wood and agrifiber materials, which are all free of added urea and formaldehyde to assure healthy building IAQ.
- Innovations in design credits include exemplary performance for increased bike rider shower/changing facilities and 60% reduction in surfaces that contribute to the heat island effect.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, commissioning agent, and others associated with LEED design and construction.

Prepared by:

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Project Highlights

Hemet Family Care Center

Community Health Care Center, Hemet, California

Project Team

Project Owner:	County of Riverside, Riverside, CA
Design Architect:	Hill Partnership, Newport Beach, CA
Mechanical Engineer:	United Mechanical Consultants, Costa Mesa, CA
Electrical Engineer:	OMB Electrical Engineers, Irvine, CA
Civil Engineer:	Merit Civil Engineering, Orange, CA
Structural Engineer:	RGF Engineering, Brea, CA
Landscape Architect:	IAN Davidson Landscape Architecture, Riverside, CA
Cost Consultant:	O'Connor Construction Management, Irvine, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Commissioning Agent:	Glumac, Los Angeles, CA

Project Metrics

Location:	864 North State Street, Hemet, CA
Completion Date:	est. 2010
Building Size:	20,750 gross square feet
Site Area:	2.28 acres
Parking:	176 stalls
Occupancy:	70 staff
Project Delivery:	Design/Public Bid/Build

Project Description

The Hemet Family Care Center will be located at 864 North State Street in Hemet, California. The facility is being designed to provide public health nursing, maternal health, adolescent health, and disease control. Sustainable design concepts are being implemented at the request of the owner, the County of Riverside. The building is pursuing a LEED for New Construction (LEED-NC) certification.

Project LEED® Highlights

- Community connectivity of building to nearby residential multi-family occupancies, and pedestrian access to basic services such as shopping, banks, restaurants, medical offices, and cleaners.
- Bicycle storage is provided for 5% of occupants to encourage bicycle use.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscape irrigation will reduce potable water consumption.
- Dual flush toilets in residential units and other water conserving features reduce water usage by 20% over the Energy Policy Act of 1991 standard.
- Project will be fully commissioned by an independent commissioning agent, with enhanced commissioning scheduled 8 months after construction completion.
- Building energy systems will exceed the stringent requirement of California's Title 24 Energy Code by at least 17%.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices are expected to divert over 75% of construction waste from disposal.
- Regionally extracted and manufactured products are expected to comprise 10-20% of construction material costs.

- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction will protect HVAC and building materials during construction.
- Low-VOC materials will be included for adhesives, sealants, paints, carpeting, composite wood and agrifiber materials to assure healthy building IAQ.
- Project will include a Sustainable Building Public Education program to inform building users, the public, and the building industry about the project's sustainable building features and LEED.
- Innovation in Design credits include exemplary performance for a sustainable landscape maintenance program and the use of green cleaning products.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, Engineer, the commissioning agent, and others associated with LEED design and construction.

Prepared by:

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Prepared: March 25, 2009



Project Highlights

Port of Los Angeles

Police Headquarters, Los Angeles, California

Project Team

Project Owner:	The Port of Los Angeles, San Pedro, CA
Design Architect:	MVE Architects, Irvine, CA
Associate Architect:	McLarand Vasquez Emsiek & Partners, Inc., Irvine, CA
Commissioning Agent:	CTG Energetics Inc, Irvine, CA
LEED Consultant/Project LEED AP:	Constructive Technologies Group, Irvine, CA
Contractor:	FTR International, Irvine, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	425 S. Palos Verdes Street, San Pedro, CA
Completion Date:	2010
Construction Cost:	\$ 21M
Building Size:	5,036 square feet
Site Area:	2.3 acres
Parking:	36 surface stalls, 37 structure stalls
Occupancy:	203 FTE
Project Delivery:	Design/Public Bid/Build

Project Description

The Port of Los Angeles Police Headquarters project is located at the Port Complex in Los Angeles, California. As part of the Port of Los Angeles' commitment to sustainable design, the project is attempting a LEED for New Construction (LEED-NC) Version 2.1 Gold rating.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation to increase bus ridership and decrease automobile use.
- Bicycle storage, showers and changing facilities are provided for 5% of occupants to encourage bicycle use.
- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- 50% Covered parking to reduce heat island effects in non-roof surfaces.
- Zero irrigation landscape reduces potable water consumption.
- Dual flush toilets and other water conserving features reduce water usage by 40% over the Energy Policy Act of 1991 standard, which qualifies the project for an innovation in design credit.
- Building is being fully commissioned by an independent commissioning agent.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 40% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices will divert 75% of construction waste from disposal.
- Recycled content products will comprise over 10% of the cost of construction materials.
- Regionally extracted and manufactured products will comprise 20% of construction material costs.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction is being implemented to protect HVAC and building materials during construction.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting, coatings and composite wood and agrifiber products free of added urea and formaldehyde to assure healthy building IAQ.
- Over 50% of the wood products used in construction will be FSC (Forest Stewardship Council) certified.
- Project LEED team includes LEED Accredited Professionals at all levels including the owner, project LEED AP, contractor's LEED AP, commissioning agent, and others associated with LEED design and construction.

Prepared by:

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Project Highlights

Port of Long Beach Pier G

Administration Building, Long Beach, California

Project Team

Project Owner:	The Port of Long Beach, Long Beach, CA
Design Architect:	Robert Stewart Associates, Long Beach, CA
Associate Architect:	Caldwell Architects, Marina del Ray, CA
Commissioning Agent:	MCS/Ca, Inc., Citrus Heights, CA
Mechanical Engineer:	Maroko & Shwe, Inc., Mission Hills, CA
Electrical Engineer:	MDC Engineers, Los Angeles, CA
Structural Engineer:	McLean & Schultz Inc., Brea, CA
Landscape Architect:	Melendrez Design Partners, Los Angeles, CA
Contractor:	FTR International, Inc., Irvine, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA
LEED Consultant/Project LEED AP:	Gaia Development, Playa Del Ray, CA

Project Metrics

Location:	Pier G Berths 230-236, Long Beach, CA
Completion Date:	2010
Building Size:	47,393 square feet
Site Area:	est. 2 acres
Parking:	184 stalls
Occupancy:	179 FTE
Project Delivery:	Design/Public Bid/Build

Project Description

The Port of Long Beach (POLB) Pier G Administration Building is located at the Port Complex in Long Beach, California. This project reflects the Port of Long Beach's Commitment to sustainable building and is pursuing a LEED for New Construction (LEED-NC) Version 2.2 Silver rating project.

Project LEED® Highlights

- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscape irrigation reduces potable water consumption by 55%.
- Dual flush toilets and other water conserving features reduce water usage by 45% over the Energy Policy Act of 1991 standard.
- Building is being fully commissioned by an independent commissioning agent.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 23% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices will divert over 75% of construction waste from disposal, exceeding the City of Long Beach construction and demolition recycling ordinance, which requires 60% diversion of waste materials.
- Recycled content products will comprise over 20% of the cost of construction materials.
- Regionally extracted and manufactured products will comprise over 20% of construction materials.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.

- A comprehensive Construction IAQ Management Plan during construction will be implemented to protect HVAC and building materials during construction.
- Building flush out will be implemented prior to occupancy to prevent indoor air quality problems resulting from the construction process.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting, coatings and composite wood and agrifiber products free of added urea and formaldehyde to assure healthy building IAQ.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, contractor's LEED AP, commissioning agent, and others associated with LEED design and construction.

Prepared by:

KMI

Kelly McArthur Ingalls, LEED-NC GBCI Version 2.2 Accredited Professional
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Prepared: April 16, 2009

Project Highlights

Port of Long Beach Pier G

Operations Building, Long Beach, California

Project Team

Project Owner:	The Port of Long Beach, Long Beach, CA
Design Architect:	Robert Stewart Associates, Long Beach, CA
Associate Architect:	Caldwell Architects, Marina Del Ray, CA
Commissioning Agent:	MCS/Ca, Inc., Citrus Heights, CA
Mechanical Engineer:	Maroko & Shwe, Inc., Mission Hills, CA
Electrical Engineer:	MDC Engineers, Los Angeles, CA
Structural Engineer:	McLean & Schultz, Inc., Brea, CA
Landscape Architect:	Melendrez Design Partners, Los Angeles, CA
Contractor:	FTR International, Inc., Irvine, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA
LEED Consultant/Project LEED AP:	Gaia Development, Playa Del Ray, CA

Project Metrics

Location:	Pier G Berths 230-236, Long Beach, CA
Completion Date:	2010
Building Size:	30,088 gross square feet
Site Area:	est. 2 acres
Parking:	121 stalls
Occupancy:	78 FTE
Project Delivery:	Design/Public Bid/Build

Project Description

The Port of Long Beach (POLB) Pier G Operations Building is located at the Port Complex in Long Beach, California. The project consists of the 3-level operations building, generator enclosure, driver service building with truck driver facilities and restrooms, and a highly controlled site with lighting, security, and access control systems. This project reflects the Port of Long Beach's Commitment to sustainable building and is pursuing a LEED for New Construction (LEED-NC) Version 2.2 Silver rating.

Project LEED® Highlights

- 75% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Efficient landscape irrigation eliminates potable water use.
- Dual flush toilets and other water conserving features reduce water usage by 45% over the Energy Policy Act of 1991 standard.
- Building is being fully commissioned by an independent commissioning agent.
- Building energy systems exceed the stringent requirements of California's Title 24 Energy Code by 20% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices will divert over 75% of construction waste from disposal, exceeding the City of Long Beach construction and demolition recycling ordinance, which requires 60% diversion of waste materials.
- Recycled content products will comprise over 20% of the cost of construction materials.
- Regionally extracted and manufactured products comprise over 20% of construction materials.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.

- A CO² monitoring plan tracks carbon dioxide levels in the building.
- A comprehensive Construction IAQ Management Plan during construction will be implemented to protect HVAC and building materials during construction.
- Building flush out will be implemented prior to occupancy to prevent indoor air quality problems resulting from the construction process.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting, coatings and composite wood and agrifiber products free of added urea and formaldehyde to assure healthy building IAQ.
- Project LEED team includes LEED Accredited Professionals at all levels including the project LEED AP, Architect, contractor's LEED AP, commissioning agent, and others associated with LEED design and construction.

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Project Highlights

Los Angeles County

Fire Station 143, Valencia, California

Project Team

Project Owner:	Los Angeles County Department of Public Works
Design Architect:	Osborn Architects, Glendale, CA
Project Management:	Los Angeles County Department of Public Works
MEP Engineer:	Sy Lee Associates, Glendale, CA
Civil Engineer:	Barbara Hall, Monrovia, CA
Landscape Architect:	Steven Ormenyi, Woodland Hills, CA
Commissioning Agent:	Glumac, Irvine, CA
Design Phase LEED Consultant/ AP:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	28580 Hasley Canyon Road, Valencia, CA
Completion Date:	March 2010
Construction Cost:	\$10.75 M
Building Size:	9,700 square feet
Site Size:	1.1 acres
Occupancy:	10 FTE
Project Delivery:	Design/Bid/Build

Project Description

The Los Angeles County Fire Station 143 is located on the corner of Hasley Canyon Road and Gibraltar Lane in Valencia, California. The station is part of a Los Angeles County LEED and sustainable design program that requires a minimum LEED silver rating on all county buildings of 10,000 square feet or larger.

Project LEED® Highlights

- Bicycle storage, showers, and changing rooms are provided to encourage bicycle use.
- Parking spaces are provided for vanpools, carpools, and alternative parking for fuel efficient vehicles.
- To reduce heat island effects, light colored paving for 100% of the hard-scape, and an Energy-Star compliant cool roof will be included.
- Water-efficient landscape irrigation will reduce potable water use consumption by 58% over baseline.
- Dual flush toilets and other water conserving features will reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building systems will be free of CFCs, HCFCs, and Halons.
- Fundamental and enhanced commissioning will be performed by the County's independent commissioning agent. The commissioning process will start during the design development phase, and continue throughout construction. Additional commissioning services will continue eight to ten months after substantial completion.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by a minimum 17% over baseline.
- A recycling program for demolition and construction materials will be required during the construction phase to divert 75% of landfill waste.
- Regionally Extracted and Manufactured Materials: The prospective Contractor will be required to achieve over 20% regionally extracted and manufactured materials.

- A comprehensive Construction IAQ Management Plan will protect HVAC and building materials during construction, including a two week building flush prior to occupancy to manage residual airborne pollutants.
- Innovation in Design credits will include exemplary performance for light-colored paving materials.
- Project LEED team includes LEED Accredited Professionals at all levels including the Owner, project LEED AP, Architect, Engineer, commissioning agent, the contractor's LEED AP and others associated with LEED design and construction.

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Prepared: March 31, 2009



Project Highlights

Los Angeles County

Fire Station 156, Valencia, California

Project Team

Project Owner:	Los Angeles County Department of Public Works
Design Architect:	Kajima Associates, Los Angeles, CA
Project Management:	Los Angeles County Department of Public Works
MEP Engineer:	RPM Engineers, Irvine, California
Civil Engineer:	Psomas Engineering, Los Angeles, CA
Landscape Architect:	HRP Studio, Santa Ana, CA
LEED Consultant/Project LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
County LEED AP:	Green Works Studio, Los Angeles, CA
Commissioning Agent:	MCS/Ca, Inc., Citrus Heights, CA

Project Metrics

Location:	24505 Copper Hill Drive, Valencia, CA 91354
Completion Date:	March 2010
Building Size:	10,750 square feet
Site Size:	1.3 acres
Occupancy:	10 FTE
Project Delivery:	Design/Bid/Build

Project Description

The Los Angeles County Fire Station 156 is a new fire station to be located at 24505 Copper Hill Drive in Valencia, California. Fire Station 156 is part of a Los Angeles County LEED and sustainable design program that requires a minimum LEED silver rating on all county buildings of 10,000 square feet or larger.

Project LEED® Highlights

- Bicycle storage, showers, and changing rooms are provided to encourage bicycle use.
- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation and increase bus ridership.
- Parking spaces are provided for vanpools, carpools, and alternative parking for fuel efficient vehicles.
- To reduce heat island effects, light colored paving for 100% of the hard-scape, and an Energy-Star compliant cool roof will be included.
- Water-efficient landscape irrigation reduces potable water consumption by 60% over baseline.
- Dual flush toilets and other water conserving fixtures will reduce water usage by 32% over the Energy Policy Act of 1991 standard.
- Building systems will be free of CFCs, HCFCs, and Halons.
- Fundamental and enhanced commissioning will be performed by the County's independent commissioning agent. The commissioning process starts during the design development phase, and will continue throughout construction. Additional commissioning services continue eight to ten months after substantial completion.
- Building energy systems meet the stringent requirement of California's Title 24 Energy Code.
- A designated area provides occupants with easy collection and storage of recyclables.
- A recycling program for demolition and construction materials during the construction phase diverts 75% of landfill waste.
- The prospective Contractor will be required to achieve over 10% regionally extracted and manufactured materials in construction bid.
- A comprehensive Construction IAQ Management Plan will protect HVAC and building materials during construction, including a two week building flush prior to occupancy to manage residual airborne pollutants.
- Low-VOC materials such as adhesives, paints and composite wood and agrifiber products that are free of added-urea-formaldehyde are incorporated into the project.
- Chemicals and pollutants with the potential to adversely impact air quality are controlled at the source to minimize pollutant cross-contamination of regularly occupied areas by employing permanent entry way systems, exhausting spaces where chemicals may be present or used, and replacing air filtration media prior to occupancy.
- Lighting systems suit individual occupants as well as groups in multi occupant spaces by providing individual lighting controls for at least 90% of the building occupants and controllability of lighting in all shared multi-occupant spaces.
- Thermal comfort systems suit individual occupants as well as groups in multi occupant spaces by providing individual thermal comfort controls for at least 50% of the building occupants and controllability of comfort systems in all shared multi-occupant spaces.
- Thermal comfort survey of building occupants 6-18 months after occupancy will collect anonymous information regarding thermal comfort; if more than 305 of building occupants are dissatisfied with their thermal comfort then a plan will be developed regarding corrective action.

- Daylight and views will enhance natural day lighting and views to the outdoor environment for building occupants in over 90% of regularly occupied spaces.
- Innovation in Design credits include exemplary performance for designing non-roof surfaces with 100% light-colored paving materials.
- Project LEED team includes LEED Accredited Professionals at all levels including the owner, project LEED AP, Architect, Engineer, builder, commissioning agent, and others associated with LEED design and construction.

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Prepared: March 26, 2009

Project Highlights

South Los Angeles

Neighborhood City Hall, Los Angeles, California

Project Team

Project Owner:	City of Los Angeles, Los Angeles, CA
Design Architect:	Paul Murdoch Architects, Los Angeles, CA
Project LEED AP:	Paul Murdoch Architects, Los Angeles, CA
Commissioning Agent:	Expedient Energy, Inc., Tustin, CA
Contractor:	CTP Construction, Anaheim, CA
Contractor LEED Consultant:	KMI Building Industry Consulting, Inc., Glendale, CA

Project Metrics

Location:	4301 South Central Avenue, Los Angeles, CA
Completion Date:	2010
Construction Cost:	\$8M
Building Size:	8,600 square feet
Site Area:	.87 acres
Project Delivery:	Design/Public Bid/Build

Project Description

The South Los Angeles City Hall is located at 4301-4325 South Central Avenue in Los Angeles, California. The building is a LEED for New Construction (LEED-NC) Version 2.2 Gold rating project.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation and increase bus ridership.
- Bicycle storage, showers and changing facilities are provided for 5% of occupants to encourage bicycle use.
- Light colored concrete and 75% Energy STAR compliant and vegetative roofing surfaces reduce roof heat-island effects.
- Water-efficient landscape irrigation reduces potable water consumption by 50% over baseline.
- Dual flush toilets and other water conserving features reduce water usage by 30% over the Energy Policy Act of 1991 standard.
- Building is fully commissioned by an independent commissioning agent with enhanced commissioning scheduled for 8 months after construction completion.
- Building energy systems exceed the stringent requirement of California's Title 24 Energy Code by 72% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices divert 75% of construction waste from disposal.
- Recycled content products comprise 20% of the cost of construction materials.
- Regionally extracted and manufactured products comprise 40% of construction material costs.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.

- A comprehensive Construction IAQ Management Plan during construction protects HVAC and building materials, and is followed by a 2 week building flush out prior to occupancy to reduce residual contaminants.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting and coating materials to assure healthy building IAQ.
- Innovation in design credits include 50% potable water use reduction.
- Project LEED team includes LEED Accredited Professionals at all levels including the owner, project LEED AP, Architect, commissioning agent, contractor's LEED AP, and others associated with LEED design and construction.

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Prepared: March 26, 2009

Project Highlights

South County Government Center

Vallejo Health Services Center, Vallejo, California

Project Team

Project Owner:	County of Solano, Fairfield, California
Design Architect:	Johnson Fain, Los Angeles, CA
Design Phase LEED AP:	KMI Building Industry Consulting, Inc., Glendale, CA
Contractor:	Clark Design Build of California, Los Angeles, CA

Project Metrics

Location:	355 Tuolumne Street, Vallejo, CA
Completion Date:	2009
Building Size:	70,000 square feet
Site Area:	8 acres
Project Delivery:	Design/Public Bid/Build

Project Description

The Vallejo Health Services Center is located at 355 Tuolumne Street in Vallejo, California. The Health Services Center building uses vary from clinic and lab to office and meeting. KMI's role as the Design Phase LEED Technical Advisor was to consult the Project LEED Team through the Design Phase. KMI provided LEED related specifications and consulted between the Contractor and Project LEED AP. The project is expected to receive a LEED for New Construction (LEED-NC) Version 2.1 Certified level rating in late 2009.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation and increase bus ridership.
- Bicycle storage and changing facilities are provided for employees to encourage bicycle use.
- 100% Energy STAR compliant roofing surfaces reduce roof heat-island effects.
- Water-efficient landscape irrigation controls allow multiple programs and advanced monitoring to reduce potable water consumption.
- Dual flush toilets and other water conserving features reduce water usage by 35% over the Energy Policy Act of 1992 standard.
- Building energy systems exceeded the stringent requirement of California's Title 24 Energy Code by 30% over baseline.
- A designated area provides occupants with easy collection and storage of recyclables.
- Construction waste management practices diverted over 75% of construction waste from disposal.
- Post consumer plus half of post industrial content recycled content products comprised 10% of the total cost of all materials.
- Regionally manufactured materials comprised over 10% of the construction materials cost.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.

- A CO² monitoring plan tracks carbon dioxide levels in the building.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting coatings and composite wood and agrifiber products to assure healthy building IAQ.
- Project will include a Sustainable Building Public Education program to inform building users, the public, and the building industry about the project's sustainable building features and LEED.
- Project LEED team includes LEED Accredited Professionals at all levels including the Contractor's LEED AP, Contractors LEED Technical Advisor, Architect, Engineer, Builder, and others associated with LEED design and construction.

Prepared by:

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Prepared: June 4, 2009



Project Highlights

City of Pasadena

Pasadena City Hall, Pasadena, California

Project Team

Project Owner:	City of Pasadena, Pasadena, CA
Architect:	Architectural Resources Group, Pasadena, CA
MP Engineer:	Glumac International Consulting Engineers, Los Angeles, CA
Contractor's LEED Technical Advisor:	KMI Building Industry Consulting, Inc., Glendale, CA
Project LEED AP:	Soltierra, Carlsbad, CA
Contractor:	Clark Construction Group, LLC, Los Angeles, CA
Landscape Architect:	Melendrez Design Partners, Los Angeles, CA
Structural Engineer:	Forell/Elsesser Engineers Inc., San Francisco, CA
Electrical Engineer:	F.W. Associates Inc., San Francisco, CA
Civil Engineer:	GKC Engineering Corporation, Irwindale, CA
Construction Management:	DMJMH+N AECOM Management, Los Angeles, CA
Commissioning Agent:	Glumac, Los Angeles, CA

Project Metrics

Location:	100 N Garfield Ave, Pasadena, California
Completion Date:	March 2008
Construction Cost:	\$ 117.5 million
Building Size:	170,000 square feet
Site Area:	2 acres
Project Delivery:	Design/Public Bid/Build

Project Description

The Pasadena City Hall, built in 1927, is located at 100 N Garfield Ave in Pasadena, California. The project is part of a City of Pasadena Green Building Ordinance which requires LEED Silver Certification for municipal buildings with 5,000 SF or more of new construction. KMI's role as the Contractor's LEED Technical Advisor was to prepare all bridging documents required of the contractor for LEED submittals. KMI provided specifications and consulted between the Contractor and Project LEED AP. In March 2008 the project received a LEED for New Construction (LEED-NC) Version 2.1 Gold rating.

Project LEED® Highlights

- Access within a half mile to public transportation stations and access within a quarter mile to bus stops. These features provide visitors and employees with easy access to public transportation and increase bus ridership.
- Bicycle storage and changing facilities are provided for employees to encourage bicycle use.
- Preferred parking spaces are provided for vanpools, carpools, and fuel efficient vehicles.
- Dual flush toilets and other water conserving features reduce water usage by 40% over the Energy Policy Act of 1992 fixture performance requirements.
- Green Power will include purchase of a 2-year contract for 100% green power from wind energy sources.
- Permanent temperature and humidity monitoring systems configure to provide operators control over thermal comfort performance.
- Restoration of historic windows and skylights for increased day lighting in the building.
- A designated area provides occupants with easy collection and storage of recyclables.
- Salvaged, refurbished, or reused materials were used for over 5% of building materials and products to reduce waste.
- Regionally manufactured materials comprised over 20% of the construction materials cost.
- Regionally extracted materials comprised over 50% of the construction materials cost.
- Project meets the stringent requirements of ASHRAE 62.1 Ventilation Rate requirements and ASHRAE 55 thermal comfort conditions.
- A CO² monitoring plan tracks carbon dioxide levels in the building.
- Low-VOC materials are included for adhesives, sealants, paints, carpeting coatings and composite wood and agrifiber products to assure healthy building IAQ.
- Day lighting for 75% of spaces occupied for critical visual tasks was provided by re-establishing the historic window and ceiling heights within the building.
- Project will include a Sustainable Building Public Education program to inform building users, the public, and the building industry about the project's sustainable building features and LEED.
- Innovation in design credits were achieved for a green building public education program and the use of green cleaning products and landscape maintenance programs.
- Project LEED team includes LEED Accredited Professionals at all levels including the Contractor's LEED Technical Advisor, Project LEED AP, Architect, Engineer, Builder, and others associated with LEED design and construction.

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Prepared: June 4, 2009