Best of California 2007

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A panel of 10 contractor, architecture, developer and association professionals selected 36 projects as the best in California during the past year. Additionally, this year we are honoring other firms and individuals that have contributed greatly to the California construction industry in the past year.

This year's impressive lineup of projects includes a super-green museum, an innovative learning complex, a sleek and highly efficient bridge, a sustainable animal services center and a whole downtown neighborhood. These and all the other winners are the result of outstanding teams of professionals overcoming daunting challenges to achieve a successful project.

Judges

Roger O. Williams, McCarthy Building Cos.

Robert J. York, JCM Group/Heery International

Hraztan Zeitlian, LEO A DALY

Andrew Wiktorowicz, Western Council of Construction Consumers

J. Guadalupe Flores, Flewelling & Moody Architects

Mark Gudenas, Swinerton Builders

Brett Young, Cahill Constructors

David Avila, Avila Design

Russell Snyder, Associated General Contractors of California

Larry Hollis, Rosendin Electric

Best of 2007 Northern California

California Academy of Sciences, San Francisco

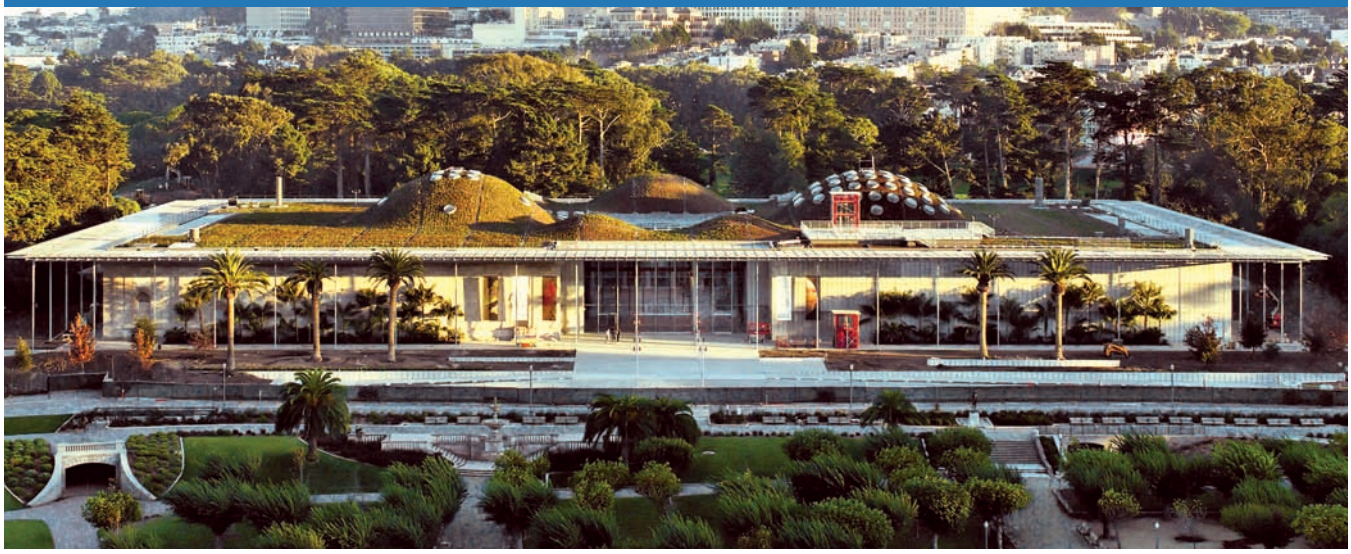
Top Overall Project

Outstanding Architectural Design

Winner

Green Building

Winner



Everything about the new academy is big – from its 409,000 sq ft of research, exhibition, educational and office space, to the 60,000 photovoltaic cells on the "living roof" that also features 1.7 million native California plants, from its $400 million price tag to the seven miles of pipe in the Steinhart Aquarium.

But what the owners really want to promote is the facility's sustainability – it will be the country's first LEED platinum museum and it will definitively express the academy's mission to explore, explain and protect the natural world.

This world-renowned natural history museum will house the Steinhart Aquarium (the oldest such facility in the U.S.), Morrison Planetarium, millions of scientific specimens and thousands of live animals. It consists of a five-story structural concrete research/collections/administration building with floor-to-ceiling glass walls; three-story structural steel/concrete African Hall exhibit; three-story structural concrete retail/restaurant/auditorium space; glass-enclosed rainforest dome; planetarium dome; 53,000 sq ft of radiant floor exhibition hall; split-level basement housing aquarium life support systems; and a concrete-topped structural steel frame topographical garden roof.

Judges' Comments

"Totally unique."

"The top project of the year, no doubt about it."

The main sustainable features include:

- Energy efficiency – 5% of the building's total energy use will be supplied through the photovoltaic cells installed in the perimeter canopy system of the roof.
- Daylight – 90% of all spaces occupied for critical visual tasks (research, collection and administration) will be provided with a minimum daylight and view factor of 2%.
- Innovation – exhibits to promote sustainability will be showcased within the museum, including displays of the building itself as an example of sustainable practices. Modern programs for alternative transportation will also be incorporated for employees and visitors.

• Water efficiency – the use of high-efficiency irrigation technology, such as micro-irrigation systems, moisture sensors, and weather database controllers will be incorporated to reduce water usage.

• Indoor Air Quality – a permanent entryway system will be installed to capture dirt, particulate matter, and other pollutants from entering the building at all high volume entryways. The new building will rely on extensive natural ventilation for cooling. The openings in the roof domes will create a stack effect on the exhibit floors, drawing in fresh cool air from below and exhaling warm air out the roof. Academy staff will enjoy operable windows in their offices.

• The living roof – the largest in the nation (2.5 acres), with the 1.7 million plants providing a thermal insulating layer for the building while reducing storm water run-off (estimated at 2 million gallons per year).

• Wood use – at least 50% of the wood is Forest Stewardship Council-certified.

• Insulation – the buildings walls are insulated with recycled cotton fiber from blue jeans.

• Reduced heat island effect – in addition to the living roof system, a minimum of 30% of non-roof impervious surfaces (including parking lots, walkways, and plazas) will be under shade. <<

Project Team

Owner

California Academy of Sciences, San Francisco

General Contractor

Webcor Builders, San Francisco

Architects

Designed by Renzo Piano Building Workshop in collaboration with Stantec Architecture (formerly Chong Partners), Genoa, Italy, and San Francisco, respectively. Landscape architect is SWA Group, San Francisco

Engineering and Sustainability Consulting

Arup, San Francisco

Major subcontractors: Alcal Roofing & Insulation, Hayward; Architectural Glass & Aluminum, Oakland; Jos. J. Albanese Inc., Santa Clara; ACCO Engineered Systems, San Leandro; AD-In Inc., Fremont; Andrew M. Jordan Inc. (dba A&B Construction), San Francisco; Alliance Roofing, San Jose; Avar Construction Systems, Campbell; Bigge Crane & Rigging, San Leandro; Blue's Roofing Co., San Jose; Big D Metalworks, Dallas; COMTEL, Santa Clara; Concourse Landscape, San Francisco; Control Air Conditioning Corp., Hayward; Dees Hennessey Inc., San Carlos; Dolan Concrete, San Jose; D&J Tile, San Carlos; Stuart Dean Co., San Francisco; Deck West Inc., Stockton; Environmental Tree & Design, Tomball, Texas; Geo Grout Inc., South San Francisco; Josef Gartner USA, Schaumburg, Ill.; ISEC, Fremont; Irwin Seating Co., Camino; Irwin Telescopic Seating Co., Altamont, Ill.; Jensen Corp., Cupertino; Kadee Industries, Cleveland; KHS&S, Concord; BT Mancini Co., Milpitas; Martin M. Ron Associates, San Francisco; McGill Erection and Welding, Hayward; Monterey Mechanical, Oakland; Northstar Fire Protection, Egan, Minn.; Otis Elevator, San Francisco; Partition Specialties, San Rafael; Peninsulators Inc., San Jose; Pacific States Environmental, Dublin; Regional Steel Corp., Tracy; Rosendin Electric, San Jose; Rana Creek Habitat Restoration, Carmel Valley; Rite Hite Corp., Milwaukee; Reynolds Polymer Technology, Grand Junction, Colo.; Ralto Inc., San Leandro; Service Metal Products, Oakland; Sheedy Drayage Co., San Francisco; SME/Steel Contractors, West Jordon, Utah; Systems Concepts Inc., South San Francisco; Sky Rider Equipment Co., Anaheim; CE Toland & Son, Benicia; Tera Lite Inc., San Jose; Tuan & Robinson Structural Engineers, San Francisco; United California Glass & Door, San Francisco; Valley Sheet Metal Co., South San Francisco; Visual Acuity Ltd., Virginia Beach, Vir.; Won Door Corp., Salt Lake City; Weatherly Striping Co., San Carlos; Webcor Concrete Group, San Mateo; Xypex, Novato

Best of 2007 Northern California

Berkeley City College, Berkeley

Higher Education

Winner

Project architect Mike Matson of Ratcliff says expansive, high performance glass curtain walls were used to convey transparency and openness to the community while admitting northern light and views of the nearby hills.

This new $46 million, six-story college building houses 20 lecture rooms, 15 labs and a 250-seat auditorium.

A challenge for a single building on a landlocked, tight site was replicating such desirable campus amenities as courtyards and plazas that offer sunlight, air and common gathering ground. The oval six-story atrium is the campus quad and social gathering spot, a circulation hub and central entryway with elevators and open stairs arriving and departing at all six floors. The atrium is crowned by a monumental 80-ft by 50-ft skylight, which floods the building with natural light. And an exhaust grille ringing the skylight turns the atrium into a very efficient ductless air return system for the entire building.

The U.S. Green Building Council recently awarded the building a LEED Silver designation, earning the honor by its promotion of urban redevelopment and incorporation of various energy-efficient design elements.

In addition to the life-cycle savings of its energy-efficient design, the new building has already earned the district $129,000 in cash incentives from Pacific Gas & Electric Co.'s Savings by Design program.

Other green elements include:

• Energy Efficiency -- The building is over 40% more energy efficient than the baseline. The keys to this accomplishment are intelligent building controls, and energy-efficient mechanical systems, lighting, and building "envelope" design, such as white roofing to reduce the "urban heat island effect."

• Water Efficiency -- Berkeley City College is 34% more water efficient than a comparable building, due to low-flow sensor-controlled plumbing fixtures.

• Indoor Air Quality -- Indoor air contaminants were reduced through a rigorous selection process of interior finishes, adhesives, and sealants that limit the emission of volatile organic compounds (VOCs) and the design of mechanical systems that respond to heightened carbon dioxide levels.

• Construction Waste Diversion -- This project diverted 998 tons (77%) of construction waste from landfill.

• Recycled Content and Local/Regional Materials -- Ratcliff says it selected building materials and finishes with high recycled content and 30% of those materials were manufactured from raw materials within the region. <<

Project Team

Owner

Peralta Community College District, Oakland

General Contractor

SJ Amoroso Construction, Redwood City

Architect

Ratcliff, Emeryville

Project Management

Swinerton Management & Consulting, San Francisco

Key subcontractors: Forell/Elsesser (structural and civil engineers), San Francisco; Taylor Engineering (mechanical engineer), Alameda; The Engineering Enterprise (electrical engineer), Alameda; SJ Engineers (plumbing engineer), Oakland

Judges' Comments

"It's unusual that in a tight site a totally vertical building can provide so much natural daylighting."

Best of 2007 Northern California

North Tower Addition, Memorial Medical Center, Modesto

Healthcare

Winner

Located at the heart of the existing Memorial Medical Center campus, this project consists of a seven-story, 376,000-sq-ft surgical center with a below grade basement and a fully enclosed mechanical penthouse.

In addition, the North Tower Addition is supported by a new 33,000-sq-ft central utility plant connected to the North Tower by a 300-ft precast utility tunnel.

In order to fit up the addition, there was remodeling of the existing dietary building required as well as complete campus utility upgrades.

Due to the positioning of this addition, all demolition and construction occurred directly adjacent to the active dietary facility, labor and delivery unit and administration services. Although just a few feet away from these services, general contractor Skanska USA Building was able to not only successfully orchestrate the work, it self-performed the erection of 3,300 tons of structural steel with the support of the firm's Washington division without incident (and very little staging).

Additionally, the recast utilidor was placed without any impact to the existing facility while relocating or rerouting more than 72 unidentified utility services. <<

Project Team

Owner

Sutter Health, Sacramento

General Contractor

Skanska USA Building, Oakland

Architect

Chong Partners, San Francisco

Main Engineers

KPFF, San Francisco; Ainsworth & Associates, Sacramento; Mazzetti & Associates, Sacramento

Key subcontractors: Anning Johnson, San Francisco; Bergelectric, Sacramento; Solecon, Modesto; Conco, Concord; California Drywall, San Francisco; Apex Painting, Modesto; Capitol Builders Hardware, Sacramento; Clark Pacific, West Sacramento; Kings Roofing, Patterson; Trane, Sacramento; Otis Elevator, North Highlands; J.S. Perrott and Co., Portland, Ore.

Judges' Comments

"Understated, subtle blending of form and function."

Best of 2007 Northern California

Hilton San Francisco Financial District

Hospitality

Winner

Project Team

Owner

Justice Investors LP, San Francisco

General Contractor

Cahill Construction, San Francisco

Architect

Gensler, San Francisco

Major subcontractors: KPFF (structural engineers), San Francisco; Marx-Okubo Associates (construction consultant), San Francisco; Revolver Design (lighting consultant), San Francisco

The goal of this renovation project was to reposition the hotel from a tourist-based property to a four-star business property. The scope of work encompassed partial exterior renovation of the hotel's base and a complete remodel of the public spaces.

The existing architectural base, according to the architect, Gensler, was "fortress-like": dark, uninviting and disconnected from the interior. The design team responded by capturing a portion of the existing outdoor area as a glass enclosed transition from the valet drop-off to the registration desk. New aluminum cladding on the underside of the existing bridge entrance extends to this new area, as does the paving, creating a seamless transition from outside to in.

The entry feature is a millstone that floats between the elevator masses, incorporating a water feature, and setting the tone for the Asian-inspired interior.

The existing lobby interior was wide open, dominated by a set of escalators. The design team's objective was to zone the expanse into smaller, discreet nooks, creating a more intimate experience for the guests. Seating alcoves were placed against the escalators, redirecting guests' attention to the restaurant and bar.

An "infinity box" was placed to separate the restaurant and bar, becoming an architectural anchor for the new fireplace. This Mascassar Ebony wood enclosure with bronze mirror creates a dramatic backdrop for dining. The dining room is clad in butterscotch colored glass panels, complimenting the red, bronze and oak palette. <<

Judges' Comments

"The challenge was taking a rather dumpy former hotel and re-energizing it. Well done.

Best of 2007 Northern California

Bay Street Emeryville

Mixed Use

Winner

Project Team

Owner

MacFarlane Partners, San Francisco

General Contractor

Devcon Construction, Milpitas

Architect

SB Architects, San Francisco

Structural Engineer

KPFF Consulting Engineers, San Francisco

MEP Engineer

Flack + Kurtz, San Francisco

Landscape Architects

April Phillips Designworks, Sausalito, and The Guzzardo Partnership, San Francisco

Interiors

CDC, Costa Mesa

Bay Street Emeryville converts an underutilized infill site – a vacant industrial brownfield on the edge of San Francisco Bay – into a lively mixed-use district.

Sited on a 5.67-acre site, the $100 million project combines three blocks of main street retail with a mixture of 284 rental apartments and 95 for-sale townhomes.

The project features 387,000 sq ft of residential space atop an eclectic mix of ground-floor retail shops that were completed several years ago; the owner of this retail phase is Madison Marquette, Jerde Partnership/Charles Group was the architect and DPR Construction was the general contractor.

The residential design team, led by SB Architects, faced the challenge of creating a new community above the podiums, with little connection to the retail or street life below. In the new design, the team created smaller-scale buildings, with numerous courtyards of different sizes, as well as trellised overlooks and raised bridges that create a physical and psychological connection to the street below.

The design team employed a panelized tube steel bearing wall system, pre-fabricated then assembled on site, which allowed them to redirect and spread the weight of the new structures across the existing support system.

By locating the residential podiums on either side of the main street on different levels, the design team maximized access to valuable bay views from residences on both sides of the street.

These residential podiums offer an opportunity to create a sense of community above street level, providing quieter, semi-public spaces for residents – larger, shared courtyards for the rental units, and more intimately-scaled, private courts with individual entries for the townhomes.

At street level, broad sidewalks and a landscaped plaza provide opportunities to gather. <<

Best of 2007 Northern California

Munger House Relocation, Palo Alto

Restoration

Winner

Project Team

Owner

Stanford University, Palo Alto

General Contractor

Hathaway Dinwiddie, Santa Clara

Architect

Cody Anderson Wasney Architects, Palo Alto

Engineers & Consultants

BKF Engineers, Redwood City; DCI Engineers, Bellevue, Wash.; SWA Group, Sausalito

Upon the approval of the new Munger Graduate Residences, Stanford University began working with Hathaway Dinwiddie in relocating and renovating five historical houses (Rogers, Mariposa, Serra, Owen and Drell) that were located on the site. The five houses were all constructed as student residences between 1890 and 1925 in an area of the Stanford campus known as The Row.

Preparing the houses for the move was a lengthy process in itself. The five structures were dislocated from existing utilities and cut from their foundations. Bracing and under-building support systems were put into place and the houses were jacked up. The Serra House had to be cut in half and a temporary interior frame was put in place at the seam.

Determining the path of travel for the houses was the biggest challenge. While the Owen and Drell houses had to move only a few hundred ft, the Rogers, Mariposa and Serra houses had to move 1.4 mi to their final resting place. A temporary road had to be built in a swampy lawn area along the determined path. While students were away on spring break, Hathaway Dinwiddie began to make room for the new Munger Graduate Residences. Light posts and signs were removed, and shrubs along the path of travel were trimmed down to 3 1/2 ft tall to allow the houses to travel over them. Once all the prep work was completed, the houses were hoisted onto trailers and hauled to their new locations.

Once the structures were set onto their new foundations, the renovation work began. The effort included construction and site prep, foundations, seismic upgrades, interior improvements, landscaping and additional associated site work. The intent of the renovation work was to preserve the architectural qualities while bringing the buildings up to code. Ramps and elevators were added, making the houses ADA accessible. Samples of the original paint were chipped off, studies done and new paint made to match the original. The original hardwood floors were restored and hand rails were raised to current standard height. A few pocket doors that had been previously covered were found hidden in the walls and restored to their original functions.

Construction on the new Munger Graduate Residence has since begun, making Stanford the only university in the country to guarantee three years of apartment style housing to its law students. <<

Best of 2007 Northern California

Theatre Square

Residential

Winner

After the closure of Petaluma's last movie theater, a group of local teenage girls petitioned and campaigned for a new community cinema. Responding to the challenge, Basin Street Properties became the vanguard of Petaluma's urban redevelopment in the downtown core.

Immediately following Basin Street's opening of a new cinema, the Theatre Square project broke ground, planned to become a vibrant mixed-use development. While the historic portion of downtown has been preserved, the six blocks of the Theatre District has become a new area for residential, commercial, retail and entertainment establishments. Among the projects is Theatre Square.

Completed in April 2007, Theatre Square contains 46,000 sq ft of retail space along the first floor with 56 apartments above and a separate office building of 34,500 sq ft.

BDE Architecture and Strauss Architects (planner) were presented with the opportunity to turn an urban brownfield site into a successful development. Once a used car lot, the Theatre Square site was a challenge from the beginning. A passively vented vapor barrier was used under the foundation to mitigate the condition of the soil. The design also called for making the ground floor plan as flexible as possible for the retail component while including future connections to plumbing, gas and electrical systems. Residential unit plans took into consideration the tenant's privacy from the public atmosphere of the courtyard and surrounding streets and at the same time, providing adequate natural light and ventilation.

Judges' Comments

"An attractive recreation of an entire downtown."

One of the development's main features is a courtyard plaza flanked by a clock tower and fountain at one end and the cinema at the other. The design allows for all retail spaces to open onto the courtyard, creating outdoor dining and gathering areas. A project of the Petaluma Chamber of Commerce, the "Faces of Petaluma" fountain was created by members of the community. <<

Project Team

Owner

Petaluma Theatre District LLC (c/o Basin Street Properties), Petaluma

General Contractor

Midstate Construction, Petaluma

Architect

BDE Architecture Inc., San Francisco

Project Manager

Conversion Management Associates, Petaluma

Structural Engineer

ATM Engineering, Rancho Cordova

Mechanical Engineer

Cal-Air Inc., Santa Rosa

Electrical Engineer

E&L Electric, Windsor

Plumbing Engineer

The Engineering Partnership, Santa Rosa

Civil Engineer

Brian Kangas Foulk, San Jose

Landscape Architect

Sasaki Walker Associates, Sausalito

Best of 2007 Northern California

Placer Co. Community Development Resource Center, Auburn

Civic/Institutional

Winner

The Placer County Community Development Resource Center was designed to bring together several different agencies that had previously been housed separately. The two-story, 97,400-sq-ft center is one component of the county's Comprehensive Facilities Master Plan.

Located in the Dewitt Center, the $22 million resource center's tenants are the Building Department, Planning Department, Public Works, Administration, Environmental Health and Air Pollution Control.

The design of the building focuses on functionality for the users and the flexibility of the space for the lifetime of the building.

Longevity, durability and ease of maintenance were important criteria.

The character of the building reflects the special environmental qualities of Placer County itself. Much of California's history was written by the immigrants' trek over the Sierra Nevadas, through the foothill gold country and into the fertile Sacramento Valley. This rich history inspired the question: Could a building devoted to land planning and building services become an example of how the Placer County-built environment should develop?

Sustainable design considerations were important, including energy-conserving features in all facets of the building's construction and operation that resulted in a building that exceeds the state's Title 24 Energy Efficiency Standards by 44%. Underfloor air distribution, extensive daylighting, generous perimeter (low-emissivity) glazing, high insulation levels and an advanced HVAC system utilizing evaporative precooling of outside air all contribute to the high performance. <<

Project Team

Owner

Placer County, Auburn

General Contractor

HMH, Sacramento

Architect

Williams + Paddon Architects + Planners, Roseville

Construction Manager

Turner Construction, Sacramento

Mechanical Engineering Consultant

Capital Engineering Consultants Inc., Rancho Cordova

Electrical Engineering Consultant

Glumac, Sacramento

Structural Engineering Consultant

Buehler & Buehler, Roseville

Civil Engineer

A.R. Associates, Auburn

Landscape Architect

Yamasaki Landscape Architecture, Auburn

Best of 2007 Northern California

CCP-2 Manufacturing Expansion, Vacaville

Industrial/Manufacturing

Winner

At 450,000 sq ft, the expansion of Genentech's facility in Vacaville makes it the largest biotechnology fermentation facility of its kind in the world. The project added a new manufacturing facility and a new infill building. It doubled the size of the central utility plant, added an existing warehouse and extended the spine.

To meet the aggressive June 27, 2007 contractual delivery date set in late 2005, when DPR Construction started as the general contractor, sticking to an aggressive schedule was imperative. To accomplish it, 3 million craft and management hours were worked in just 65 weeks with some work going on 24 hours a day, seven days a week for a full year. In all that time, there was only one lost-time safety incident.

In addition to the accelerated schedule, part of the project was constructed within an operating facility and had to be performed without disrupting ongoing operations. The central utility plant, which affects all of the systems Genentech uses to produce its validated biopharmaceutical drugs, had to double in size. DPR accomplished this without a single un-planned shutdown.

Throughout the entire project, there was a 70% overlap of construction crews and Genentech start-up and validation staff. Both contractor and owner fostered an extremely collaborative and cooperative effort.

Maintaining operations and meeting the schedule required creative phasing. Innovation and flexibility were a must. A unique approach was necessary to accommodate Genentech's request that DPR's first order of business on site be the re-bid of the entire build-out. The re-bid needed to be done while all the equipment remained on schedule for fabrication and delivery, which occurred prior to the interior build-out start. Because the equipment had already been procured and fabricated, DPR developed and executed a plan to install it first; then built out the facility around it.

Validation was another issue. There were more than 300 subsystems to complete, start up and validate. Looking at the process from a purely mechanical perspective, Genentech and DPR developed a plan to begin validation of specific systems before final completion of the overall project. Thus, the facility was turned over system by system, piece by piece not by area or building as would occur during a normal construction turnover process. <<

Project Team

Owner

Genentech, South San Francisco

General Contractor

DPR Construction Inc., Redwood City

Architect/Engineer

Fluor Corp., Irving, Texas

Judges' Comments

"An amazingly complex project coupled with an aggressive schedule."

Best of 2007 Northern California

Dougherty Valley High School, San Ramon

K-12
Winner

This massive, 54-acre high school project utilized a little-used construction finance alternative – a developer-built school. This novel approach addresses the lengthy cost and process of building a school in California. It's the result of a collaborative effort between the city, school district, developer, community and the state. It was financed by Shapell Industries and Windemere BLC, local developers and homebuilders, and was designed to complement the homes around it and the overall feel of the community.

start-to-finish construction was completed in 16 months – five months less than originally budgeted.

There are 80 high-tech classrooms, a performing arts center with a 600-seat auditorium and multiple athletic facilities, including a gymnasium, softball fields, tennis courts and Olympic-size swimming pool. The school also has a commons building, library, cafeteria, all-weather field and 2,800-seat outdoor stadium.

Construction manager Roebbelen says it was challenged to keep up with the speed of the fast-track construction while utilizing the multi-prime delivery method. None of the trade contractors on the project used it before. The wood framing required was enormous and required crews of 150-plus as well as considerable overtime. Structural steel was erected within 90 days after receiving a notice to proceed and pre-detailing the steel was necessary.

This compact work schedule forced many site work activities to occur out of sequence, which required continuous adjustments to the team's schedule.

Roebbelen says everyone pulled together to keep things moving, adjust schedules and accommodate the fast pace. <<

Judges' Comments

"This project impresses us with its developer-built approach and completion five months ahead of schedule."

"Visually, it has a nice presentation up front."

Project Team

Owner

San Ramon Valley Unified School District, San Ramon

Construction Manager

Roebbelen Construction Management Services, El Dorado Hills

Architect

Akol & Yoshii Architects and Engineers, Walnut Creek

Structural Consultant

Tipping-Mar & Associates, Berkeley

Civil Engineers

Carlson, Barbee & Gibson Inc., San Ramon

Key subcontractor: John Nichol & Associates (landscape architect), Walnut Creek; WHM Inc (electrical consultant), Moraga; Mechanical Design Studio Inc. (mechanical consultant), Walnut Creek; ValleyCrest (landscape), Pleasanton; Urata & Son's Cement, Rancho Cordova; McClone Construction (wood framing), Shingle Springs; Armour Steel Co. (structural steel), Rio Linda; Cupertino Electric, San Jose; F.W. Spencer & Son Inc. (mechanical), Brisbane

Best of 2007 Northern California

San Francisco Conservatory of Music

Performing Arts

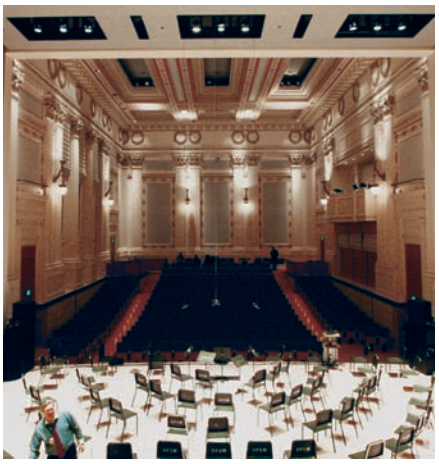
Winner

This complicated conservatory project incorporates three efforts – new construction, adaptive re-use and historic preservation - and succeeds grandly with all three.

Swinerton Builders, as general contractor, converted the six-story, steel-framed 1920s-era building into a modern educational facility. There are three state-of-the-art performance spaces, with the largest seating 450; recording studios; rehearsal and practice rooms; classrooms; a library; and rooftop courtyard. All of the finishes are Class A, with hardwood and limestone flooring, hardwood and limestone wall treatments, full theatrical and acoustic complements, acoustic drapes, sound doors, stage lifts, state lighting, seating and high-tech audio-visual and lighting systems.

With the help of structural engineer Forell/Elsesser, the main challenge of shoring the existing historic structure (façade and ballroom) and the transfer of loads of the existing historic plaster ceiling were accomplished without a hitch.

In order to create outstanding acoustical performance, the engineers used heavy CMU (concrete masonry unit) partitions throughout the building as well as special treatment of the historic plaster cavity with acoustic fill.



Construction innovations on the project also included the use of metal stud framing as formwork and screeds for tapered acoustic shotcrete walls.

Forell/Elsesser notes that the largest space is the concert hall, which incorporates the historic ornate plaster of the former ballroom. Since the existing exterior wall of the ballroom occupied space between the planned seating area and stage of the new concert hall, a large transfer truss was engineered to resupport the existing ceiling and create a large, column-free space. <<

Project Team

Owner

San Francisco Conservatory of Music

General Contractor

Swinerton Builders, San Francisco

Architect

SMWM, San Francisco

Historical Architect

Page & Turnbull, San Francisco

Structural Engineer

Forell/Elsesser, San Francisco

Project Manager

Oppenheim/Lewis, San Francisco

M/E/P

Flack + Kurtz, San Francisco

Major subcontractors: Morrow-Meadows (electrical), South San Francisco; Critchfield Mechanical, Menlo Park; Raymond Drywall, Concord; Strocal Steel, Stockton

Judges' Comments

"An incredible use of space."

"An excellent, beautiful performance building."

Best of 2007 Northern California

New Benicia-Martinez Bridge

Transportation/Bridges

Winner

Project Team

Owner

Caltrans

General Contractor

Kiewit Corp., Omaha, Neb.

Engineer-of-Record

T.Y. Lin International/CH2M Hill, a Joint Venture

Key subcontractors: SDI, San Jose; V-Structural, Hanover, Md.; D.S. Brown, North Baltimore, Ohio; Sika Corp., Lyndhurst, N.J.; Parsons, San Francisco

The new Benicia-Martinez Bridge is built to withstand earthquakes in a high-seismic zone and is a lifeline structure for Bay Area residents – meaning it must remain open to emergency traffic immediately following a major earthquake.

The new $800-million, five-lane toll bridge is more than 83 ft wide and is aligned with the existing Benicia-Martinez Bridge and Union Pacific Railroad Bridge. Despite prior expansions, the existing bridge was prone to congestion from the 100,000 vehicles that cross I-680 daily.

The new bridge is 7,400 ft in length and encompasses 22 spans, with 12 over water. The post-tensioned concrete box girder structure was primarily constructed by a balanced segmental cast-in-place construction technique.

A significant portion of the bridge was constructed using high-performance lightweight concrete to lower mass and reduce seismic demand. The lighter the segment, the less the impact is on the piers during an earthquake.

The design was originally for a 528-ft-long span, but the Coast Guard required 656 ft for navigation. The result: a lightweight, extra-long span length structure that pushes the boundary for any segmental span.

For a bridge of this size to endure a seismic event, it required using concrete that weighed approximately 20% less than normal structural concrete. At the same time, a high concrete strength was required for the segmental portion. After months of research and more than 100 test mixes, a concrete mix meeting all of the requirements was developed, but with one complication. The lightweight mix did not dissipate heat very well, resulting in unacceptably high internal concrete temperatures. The team worked closely with the owner to design an internal cooling coil system to reduce internal concrete temperatures to acceptable levels.

One of the significant features of the bridge includes the two moment-resisting midspan hinges between the three-span continuous frames, a unique application especially in a high-seismic zone.

The combination of features, innovative construction methods and seismically-tough design makes this bridge a world-class structure and the largest of its type built in California. <<

Judges' Comments

"Functional, streamlined – an excellent solution to congestion."

Best of 2007 Northern California

Pacific Ethanol Plant, Madera

Industrial/Manufacturing

Award of Merit

Proactive management techniques including an on-site pipe fabrication facility and an impeccable safety record that, together, saved the owner months in the construction schedule, highlight the Pacific Ethanol Production Plant project.

Originally, the owner, Pacific Ethanol, contracted general contractor W.M. Lyles Co. to complete work on the fully automated, five-building, 60,000-sq-ft facility on April 30, 2007, but later changed the completion date to have the plant on-line and operational by the fourth quarter of 2006, five months ahead of schedule.

The $68 million project includes a four-story steel structure suspending five major processing vessels housing three large distillation columns. Other structures include a cooling tower, a final ethanol storage area, cold-lime water softening treatment plant and 15 other storage tanks with a 3-million gallon storage capacity.

W.M. Lyles says construction materials consisted of approximately 750 tons of various steel, 10,000 cu yds of concrete, 500,000 ft of wire and more than 45,000 lineal ft of pipe.

Judges' Comments

"This is a state-of-the-art design-build project that also shows a strong commitment to safety."

Once the new construction deadline was announced, W.M. Lyles managed an accelerated schedule that contained more than 2,000 activities and covered everything from design to owner milestones, delivery and eventual start-up and performance testing.

It was apparent that the acceleration in construction with the available design would complicate and challenge Madera County's permitting process and available inspection services. W.M. Lyles says it immediately became the owner's agent in preparing and securing permits for all design review and eventual fast-tracking of construction activities.

The project also received the California OSHA Golden Gate Partnership Recognition Award for Safety Excellence. <<

Project Team

Owner

Pacific Ethanol Inc., Sacramento

General Contractor

W.M. Lyles Co., Fresno

Designer

Delta T Corp., Williamsburg, Va.

Key subcontractors: Boyle Engineering Corp. (civil), Newport Beach; T.E. Ibberson Engineers (structural), Hopkins, Minn.; Collins Electrical Co., Stockton; F. Rogers Specialty Contractor (pipe and equipment insulation), Livermore; Olson & Co. Steel, San Leandro; Jerico Fire Protection, Fresno; Ford, Bacon and Davis (additional design work), Baton Rouge, La.; U.S. Water Services (additional design work), Cambridge, Minn.; Valley Steel Corp., Bakersfield; Winbco (tank constructor), Ottumwa, Ia.

Best of 2007 Northern California

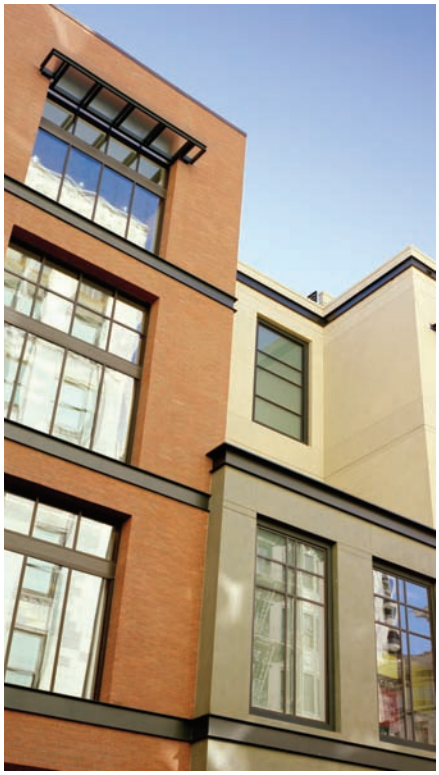
The Odeon, San Francisco

Redevelopment

Winner

Mixed-Use

Award of Merit



The Odeon at 150 Powell is a six-story mixed-use project of approximately 104,000 sq ft that includes a two-story H&M flagship store, 29 residential units, 12,000 sq ft of office space and a basement storage space. The $30 million project retained the street fronts of a historic four-story corner building and married its volume into a six-story horizontal extension.

The original four-story building was built in 1906 and designated as the "Elevated Shops." Dwarfed between the "Elevated Shops" and a city parking garage sat three small buildings containing dilapidated restaurants and offices. The historic façade of the "Elevated Shops" was shored, saved and the adjacent smaller buildings were removed. A new six-story horizontal addition took place on the footprint of the demolished O'Farrell Street buildings. Behind the historical façade and in place of the missing smaller buildings, a six-story mixed-use development was created. The first two floors (plus basement) became a single 45,000-sq-ft retail space. Floors three through six were converted into market-rate townhouse lofts that range in size from 981 sq ft to 2,100 sq ft.

Judges' Comments

"Takes redevelopment to a new level."

The project is located on the southeast corner of Powell and O'Farrell streets in the busy Union Square shopping district. Adhering to the city's downtown retail construction laws, deliveries and lane blockages could only occur at night. The dense site requirements and historical nature of this restoration project made off street parking and staging areas non-existent. To tackle these restrictions, the builders used a system called Conxtech to temporarily shore up the building. The structural system is made from pre-cast planks and beams, which were manufactured by an outside source and dropped in one at a time. Concrete was then poured on top to make the structure solid. This system is quick and not common for a housing project.

Despite the extremely limited and restricted construction zone, the project was successfully completed. <<

Project Team

Owner

Union Property Capital Inc., San Francisco

General Contractor

Suffolk Construction Co., San Francisco

Architect

MBH Architects, Alameda

Structural Engineer

Magnusson Klemencic Associates, Seattle

MEP Engineer

Critchfield Mechanical, Cotati

Civil Engineer

Luk + Associates

Key subcontractors: Decker Electric, San Francisco; Clark Pacific, West Sacramento; Broadway Mechanical, Oakland; Olson & Co. Steel, San Leandro

Best of 2007 Northern California

I-880/Coleman Avenue Interchange, San Jose

Transportation/Bridges

Award of Merit

The 880/Coleman Avenue Interchange project included the realignment and widening of existing ramps, adding a new direct connector ramp from Airport Boulevard to southbound I-880, and widening Coleman Avenue to six lanes from north of Airport Boulevard to Heddin Street.

The scope and schedule of these improvements were directly linked to the planned expansion of Mineta San Jose International Airport.

Santa Clara Valley Transportation Authority and the city of San Jose worked closely together to develop a scope and design to meet the needs of freeway traffic, the adjacent operating airport and private property owners. VTA's design consultant, URS Corp., developed a creative solution that provided a new freeway ramp connection for vehicles coming from the airport to directly access southbound I-880 via an underpass, thus removing one-half of the historical traffic that clogged a critical intersection providing airport access.

The VTA awarded the main construction contract to FCI/Pavex, a joint venture, in March 2004, which quickly identified a value engineering construction method approach for the new direct connector underpass.

Despite many challenges – including a fast-paced schedule, strict airport and FAA height regulations and high water table – the project was successfully completed safely and within the expected time frame and budget. Through thoughtful planning, close coordination, careful selection of equipment, innovative construction sequencing and improved system applications, relationships between FCI/Pavex, the subcontractors, the Santa Clara Valley Transportation Authority, Caltrans and the city have been strengthened. <<

Project Team

Owner

Santa Clara Valley Transportation Authority (with Caltrans and the city of San Jose)

General Contractor

FCI/Pavex, joint venture, Benicia and San Jose

Design Consultant

URS Corp., San Jose

Best of 2007 Northern California

College of San Mateo Science Building & Planetarium, San Mateo

Higher Education

Award of Merit

The Science Building and Planetarium project was one of five community college facility construction projects allowed under the design-build pilot program created by the passage of Assembly Bill 1000. The design-build team on the project was McCarthy Building Cos. and LPA Inc.

The 62,000-sq-ft, three-story, $24 million building serves as the anchor to the campus' north entrance. It features a planetarium and an observatory with a retractable roof for several fixed telescopes and houses lecture halls, offices and laboratories.

McCarthy/LPA say they dedicated the effort to following the legacy of world-renowned architect, John Carl Warnecke. The new facility's design is consistent with the campus' architectural signature of large windows and stately vertical lines. The project team ensured that the final design had Warnecke "DNA," but also suggested improvements. For example, instead of cast-concrete, synthetic plaster was used. The ceiling tiles also have high light reflecting capabilities that lessen the need for energy-consuming mechanical lighting. Additionally, the ceiling panels are made from recycled and non-petroleum based materials.

Sustainable elements include a reflective roof, auto flush valves to reduce water use, low VOC products, rainwater retention, "direct/indirect" evaporative cooling system, occupancy and daylight sensors, high efficiency glazing with shading to reduce head gain and natural lighting in all occupied spaces.

To accommodate CSM's schedule, McCarthy used a multi-stage "fast track" approach. Since the facility is located in the central part of the campus, the project team implemented a construction and site specific plan that overcame the obstacles of pedestrian traffic and other safety issues.

The excavation occurred on a hillside that featured large pieces of bedrock, requiring a comprehensive removal and site landscape restoration strategy. The plan included the replacement of 40-year-old utilities and the relocation of the main utility lines running directly beneath the location of the new building. <<

Project Team

Owner

College of San Mateo

General Contractor

McCarthy Building Cos., San Francisco

Architect

LPA Inc., Roseville

Structural Engineer

Rutherford & Chekene, San Francisco

Judges' Comments

"An innovative campus project with green elements and a neat planetarium."

Best of 2007 Northern California

Alameda County Juvenile Justice Center, San Leandro

Green Building
Award of Merit

Photo by John Swain

Alameda County officials and the project team who delivered the highly successful new juvenile justice center received the news recently that the facility has been certified LEED Gold, making it the first and only detention center in the nation to achieve this status. It has also exceeded the county's goal of a LEED Silver building.

Opened in April, the Juvenile Hall (providing capacity for 360 minors), administration building, and courts building cover 379,000 sq ft.

The United States Green Building Council awarded the project 43 points (out of 45 submitted) towards the certification, with a perfect score in the categories of Energy and Atmosphere, and Innovation and Design Process.

Exceptional levels of efficiency were achieved in the following areas:

- Water-efficient irrigation technology reduces site water consumption by more than 50%; saving over 5,000,000 gallons annually.
- Waterless urinals and water-efficient plumbing fixtures reduce water consumption by 41%; saving more than 2,000,000 gallons annually.
- The building complies with Title 24 requirements (more stringent than national standards), but is nearly 66% more efficient than the baseline; saving 500 kW annually.
- An 850 kW solar panel array on the rooftop provides over 60% of the building energy demands, over 1000 MW annually.
- The project contracted to purchase 100% of the building energy needs equivalent to 2,629 MWh from wind generation.
- 93% of construction waste was recycled and diverted from landfill disposal.
- 23,800 gallons of bio-diesel fuel were used in the site grading equipment saving 200 tons of CO2.

Along with meeting LEED requirements, additional challenges with the project included the availability of specified products, unforeseen site conditions, and inclement weather. The team provided sound direction to minimize these impacts and the project was delivered 57 calendar days ahead of schedule.

In addition, the project was completed within budget; the original contract amount presented by the design-build team was $135 million. An additional $7.1 million (5.3% of the contract) was originated in change orders, with 1.3% of the changes being owner requested, 1.2% material escalation costs, and 1% in differing site conditions. <<

Project Team

Owner

County of Alameda GSA, Oakland

Construction Management

Vanir/Cornerstone, San Francisco

Design-Builder

Hensel Phelps, San Jose, and HOK, San Francisco

Key subcontractors: Beverly Prior Architects (associate architect), San Francisco; Gerson/Overstreet (consulting architect), San Francisco; KPA Group (structural engineer), Oakland ; Telemon Engineering (civil engineer), San Francisco; MCT Engineers (mechanical, electrical engineer), San Francisco; Taylor Engineering (mechanical engineer), Alameda; Marelich Mechanical (design-build mechanical engineer), Hayward; Rosendin Electric (design-build electrical contractor), San Jose; Loisos + Ubbelohde (energy consultant), Alameda; Keller Mitchell & Co. (landscape contractor), Oakland.

Judges' Comments

"The builders fought hard to get green elements in what is essentially a prison."

Best of 2007 Northern California

Grace Episcopal Church Phase II, St. Helena

Restoration

Award of Merit

The original 1,118-sq-ft stone sanctuary, which was built in 1885, was partially dismantled and reconstructed to comply with current building code requirements, according to the general contractor on the project, James Nolan Construction, part of Hearn Pacific Corp.

The work involved pouring new footings against the stone foundation and stripping off the interior stone so a shotcrete structural wall could be added to stabilize the exterior stone walls.

The existing redwood trusses were reinforced with tube steel frames. All of the new structural work was carefully hidden by the addition of new finish carpentry work crafted to match the existing redwood trim.

The original stained glass windows were removed, cleaned, re-framed and installed in the now seismically stabilized stone structure.

At the same time the church reconstruction was taking place, James Nolan was adding a 4,228-sq-ft expansion, which houses additional sanctuary space with a balcony, a kitchen, restrooms and clergy support rooms. The limestone and redwood building materials used on this expansion were hand selected to match the materials used in the original building.

James Nolan says the quarry where the 1885 stone was mined was reopened temporarily to furnish material for the interior and exterior stone veneers. <<

Project Team

Owner

Grace Church, St. Helena

General Contractor

James Nolan Construction, Napa

Architect

Lemmon/Woodruff Architecture, Santa Rosa

Key subcontractors: Ahlborn Structural Steel, Santa Rosa; R. McClure Electric Co., Cotati; Leduc & Dexter (plumbing), Santa Rosa; J.M.S. Mechanical, Rohnert Park

Judges' Comments

"This was a small, but intricate, project that resulted in a beautiful restoration."

Best of 2007 Northern California

SFSU at Westfield Centre, San Francisco

Higher Education
Award of Merit

Project Team

Owner

Westfield Corp., Los Angeles

General Contractor

Swinerton Builders, San Francisco

Architect

Huntsman Architectural Group, San Francisco

Engineer

Flack + Kurtz, San Francisco

Key subcontractors: Cupertino Electric, San Jose; Marelich Mechanical, Hayward; Anderson Rowe & Buckley, San Francisco; Raymond Interiors, Concord; Paganini Communications, San Francisco

San Francisco State University's new downtown campus opened in January at 835 Market Street, part of the new Westfield San Francisco Centre development.

The campus includes office and administrative space, classrooms, and common areas, many built around the Westfield Centre's historic glass-enclosed atrium.

A portion of the fifth floor, and the entire sixth floor, are devoted to university activities and programs related to business, continuing education and community outreach. Two of the university's nine colleges are present at the campus: the College of Extended Learning, and all graduate programs in the College of Business are now located at the new facility. Together, the programs serve approximately 7,700 students per year at that location.

The new 107,000-sq-ft campus boasts 33 classrooms, nine computer labs, five breakout rooms, and wireless Internet access throughout.

The downtown campus offers more than 25 programs, most leading to professional and academic certificates. Extended learning students include mid-career professionals seeking to enhance their career potential, as well as lifelong learners pursuing personal development and enrichment. The College of Extended Learning offers a variety of programs including financial planning, paralegal studies and human resource management.

As this was a San Francisco Redevelopment Agency project, Swinerton Builders, the general contractor, did outreach to the community in terms of contract work and local labor pool. <<

Best of 2007 Private Owner of the Year

Donahue Schriber

Costa Mesa-based Donahue Schriber's innovations have transformed the experience of shopping for millions of people – not only in California, but all over America.

Founded in 1969 by Tom Schriber and the late Dan Donahue, the Private Owner of the Year Donahue Schriber owns or operates 91 retail centers in the U.S. with more than 15 million sq ft of space.

Over the years, the company has transformed the regional mall as it is known today into what is considered a destination or lifestyle center, such as Anaheim Plaza, an enclosed regional mall that was demolished and redeveloped into a successful power center, and the three-year, $100 million renovation of Fashion Island in Newport Beach into a lifestyle center.

Pat Donahue & Tom Schriber

While a major financial success (as of January 2007, its development pipeline exceeded $500 million), the company's leaders also maintain a strong commitment to charitable giving in the community.

Furthermore, they exercise great sensitivity to the preferences of residents where the company operates centers.

Donahue Schriber makes a concerted effort to engage adjacent property owners, city planners and local government to ascertain any aesthetic or functional issues important to community members.

Prior to his death in 2002, Dan Donahue tirelessly supported KidWorks, a nonprofit founded to improve the future of inner-city youth. Tom Schriber, Donahue Schriber's board chairman, sits on the board of KidWorks, which operates the Donahue Center in central Santa Ana. In addition, the Dan Donahue Keeping Kids on Track Award is presented annually through the Orange County United Way.

Patrick Donahue, Dan's brother, serves as president and CEO. <<

Best of 2007 Public Owner of the Year

Los Angeles Community College District

As our Public Owner of the Year, the Los Angeles Community College District is currently holding sway over a $2.2 billion building program thanks to the passages of Proposition A and AA in 2001 and 2003, respectively.

LACCD has made tremendous efforts to involve local businesses through small business fairs and community outreach programs. The district is partnering with local economic development organizations and other agencies to sponsor "boot camps" and seminars to give small contractors the information and skills they need to successfully bid and participate in the program.

Larry Eisenberg

These efforts are paying off: to date, small businesses have earned 86% of the construction contracts funded through the bond program.

Overseeing a program that includes 457 projects is Larry Eisenberg, the district's executive director of facilities planning and development.

Additionally, the region's workforce has benefited from the district's internship

and jobs programs. The internship program has placed hundreds of students in numerous professional fields where they acquire hands-on training and receive job placement opportunities. The district is also facilitating the hiring of at-risk adults for construction jobs through the successful PVJOBS program.

The Allied Health and Sciences Building at L.A. Valley College is one of a number of projects ongoing in the District.

And the district's sustainability program aims to maximize its positive effect on the environment by conserving natural resources through environmentally-sound selection of building materials, landscaping, water-smart plumbing systems; developing a plan to produce enough of its own energy to take its nine campuses "off the power grid" using only renewable sources; and exceeding California's Green Energy requirements by a minimum of 20%.

LACCD's green policies have resulted in an increase in demand for materials and furniture with a high concentration of recycled content. The district has offered a bulk procurement purchasing process to all non-profit and public agencies in California, giving them the ability to purchase sustainable products at discounted rates. <<

Best of 2007 Project Manager of the Year

Dennis Breen

Clark Construction Group – California LP

"Very effective," "strong leadership," "'can do' attitude," "calm and professional approach" – these are just a few descriptions from Pasadena city officials, consultants, subcontractors and contractors about Dennis Breen, Clark Construction Group's project executive on the high-profile Pasadena City Hall Seismic Retrofit project.

Overseeing this challenging project, Breen overcame many obstacles. The retrofit required work activities to progress in a regimented and highly sequenced manner. Initially a 5,000 activity construction schedule was established to provide direction for the subcontractors. Breen organized a system with a four-week look-ahead schedule that was reviewed with the participating subcontractors every morning.

Breen made it a point to know everyone on the project, and those he knew by name came to him with ideas and/or problems. It is Breen's philosophy that some of the best ideas come from the people who actually do the work.

Dennis Breen

Refusing to stay stuck behind his desk, Breen spent much of his time in the field and became an asset to the superintendent staff in the field developing ideas to improve conditions for the workers, make operations more efficient and gain productivity. An example is his innovative idea for a temporary bridge across the excavation site that allowed access from two sides instead of one.

Breen, starting his career as a structural steel subcontractor, made a commitment that he would create a subcontractor-friendly atmosphere on the project by insisting that Clark and the onsite subcontractors shared office space, a very unusual arrangement on a project site. He knew that if he created trust on the project, people would work together, share ideas and help each other.

As Clark Construction Group put it when nominating Breen as Project Manager of the Year: "His exceptional planning, management and communication skills resulted in an extremely happy client and a positive impact on the local community, completing the project 2 1/2 months ahead of schedule." <<

Best of 2007 Project Manager of the Year

Don Fischbeck

Bluefin Construction

Honorable Mention

As president of a small, 10-employee Capistrano Beach general contractor, Don Fischbeck was selected in 2004 to oversee the construction of the J Serra Catholic High School in San Juan Capistrano by Pueblo Serra Worship Holdings Group, the school's board.

From the beginning, this project was to be a tremendous undertaking.

First there was issue of a Native American burial site on a portion of the project's 39 acres. Then the Army Corp of Engineers claimed that a small trickle of water that flowed onto the property from a pipe installed when the state built the I-5 freeway created a "wetlands," which meant protection of the local habitat. Then there was a small vocal opposition to the school, which made every city meeting an ongoing argument.

Don Fischbeck

Fischbeck was instrumental in getting the project completed, even at one point getting into a serious car accident in his Quad and ending up with a collapsed lung and a bruised back. He was back on the job the next day.

Corporate officer Monica Nelson says Fischbeck "oversaw the entire project; he was not only the project manager, but also the general superintendent, tradesman, operator, laborer and designer." <<

Best of 2007 Architect of the Year

Anshen + Allen

Anshen + Allen's healthcare work – critical in booming California – combined with its continued revenue growth and expansion in the U.S. and the world has earned it the designation as the Architect of the Year from the staff at California Construction.

As California hospitals rush to meet the requirements of SB 1953, San Francisco-based Anshen + Allen has assembled a staff of nearly 400 employees to help design critically needed medical facilities.

The design firm, which designs both academic and healthcare projects, assigns about 20 architects to a typical project, with larger projects requiring more.

Roger Swanson

Hospitals' need to meet the requirements of SB 1953 has allowed Anshen + Allen to pick up some additional healthcare work this year, says Roger Swanson, chairman and CEO of the firm.

"Getting those projects under the deadline is straining everybody, including OSHPA," Swanson says.

One of the advantages Anshen + Allen offers is its healthcare expertise does give its staff something of an edge when designing hospitals, Swanson adds.

"You do pick up skills and a sixth sense on how to put these things together," Swanson says.

One of Anshen + Allen's successes in 2007 was the completion of the Kaiser Permanente Santa Clara Medical Center. The project, which originally began 12 years ago, was a series of buildings on a medical campus; the last building was completed this year.

"It's gotten a lot of positive reaction in the community," Swanson says.

Future plans for Anshen + Allen include the design of the UC San Francisco Mission Bay Hospital and office expansion. The design firm plans to open an office in Ohio early in 2008. <<

Best of 2007 General Contractor of the Year

DPR Construction, Inc.

DPR Construction's waste management diversion program, its technically complex projects and a strong safety record are among the factors that earned the Redwood City-based company General Contractor of the Year honors from the staff of California Construction.

DPR also reported strong revenue growth in 2006 compared with 2005 and the company has continued to refine its virtual building programs to keep up with the construction industry's growing reliance on building information modeling.

In 2007, DPR is having one of its strongest years ever, says George Pfeffer, regional manager.

"We've overcome industry changes," Pfeffer says. "We have worked harder to become better builders."

Pfeffer cited a recently completed project for biotech company Genentech as one of the company's successes in 2007. DPR took over the project, which involved the building of highly sensitive clean labs and other facilities that presented technical challenges, about halfway through the construction process. The contractor finished the job 13 days ahead of schedule despite having to come up to speed on the project very quickly.

"It was absolutely a huge success," Pfeffer says.

DPR has also begun a waste diversion program that seeks to better track the amount of waste recycled and/or sent to a landfill on project sites. In an era where sustainable building practices are becoming more accepted, DPR is reporting increased diversion of waste from landfills. For example, a corporate office completed in South San Francisco in September 2006 reported that 93% of its jobsite waste was recycled or diverted. <<

Best of 2007 Southern California

Miguel Contreras Learning Complex, Los Angeles

Top Overall Project
Outstanding Architectural Design
Winner

K-12
Winner

The Los Angeles Unified School District's Miguel Contreras Learning Complex was built to handle overcrowding from nearby high schools. But this $106 million project may have trouble keeping crowds away, judging by the community response to the school.

The 213,000-sq-ft high school can handle more than 1,700 students, including overflow students from nearby Belmont and Marshall high schools.

The 72-classroom, eight-building school was built on 19 redeveloped acres west of downtown Los Angeles. The campus includes two classroom wings, cafeteria, library, parking facility and an administration building. Each building varies in height from two to four stories.

Because the school was also built to handle crowds from other high schools, it has expanded athletic facilities, including two large gyms, an Olympic-sized swimming pool and a full-feature stadium.

Despite various construction challenges and change orders, the school opened on time for its first students in September 2007.

One of the challenges the project team encountered when building the school was working with various grade differentials. The project team worked with the school district to value engineer the site retaining wall system and opted to change some final grading plans to suit site conditions.

Another challenge the building team faced was working with the various structural systems across the project. Some of these structural systems included cast-in-place post-tensioned concrete parking decks, slanted reinforced masonry gymnasium walls and structural steel frame roofs. The project team created a plan to handle the site logistics of bringing certain materials on site and staging. For example, the school's pedestrian bridge was shipped in parts and welded and pieced together on the school's athletic field area. The bridge was then move into place using cranes, lifts and trucks from one side of the school to the other.

Another project challenge was changes made by the district throughout the process. The school district issued more than 950 construction directives throughout the process as well as 15 major bulletins. The changes requested added $13 million to the original contract value of $81 million.

The general contractor worked seven days a week – sometimes 12 to 16 hour days – in order to complete the original contract.

On the design side, the project team also created a school meant to stand out and seem less like a school and more like an urban village.

Project Team

Owner

Los Angeles Unified School District

General Contractor

Clark Construction, Costa Mesa

Architect

Johnson Fain, Los Angeles

Structural Engineer

Nabih Youssef & Associates, Los Angeles

Electrical Engineer

Silver Roth & Associates, Los Angeles

MEP Engineer

William Yang & Associates, Burbank

Civil Engineer

RBA Partners, Los Angeles

On-Site Civil Engineer

John M. Cruikshank Consultants, San Pedro

Landscape Architect

Mia Lehrer & Associates, Los Angeles

Judges' Comments

"Very clever design." "Great architecture." "Here's a project that actually improves the community."

The school was designed to feel more open and color schemes avoided staid colors such as green. Instead, exterior plaster walls were painted in bright colors to enliven the campus. Exposed shear walls were shaped to give them character.

Classroom wings were made to look more distinct by including open-air vertical circulation stairs and open-air corridors with corrugated steel roof elements. Butterfly-shaped beams rise above the central circulation spine of the buildings and provide protection from the elements.

The courtyard between the classroom wings was designed to enhance the learning experience of the nearby classrooms. For instance, an outdoor music garden was placed next to the instrumental classroom while an outdoor stage platform was built next to the school's dance classroom. <<

Best of 2007 Southern California

Archstone Apartments

Mixed-Use

Winner

Project Team

Owner

Archstone-Smith Operating Trust, Colorado

General Contractor

Benchmark Contractors, Inc., Santa Monica

Design Architect

Howard Laks Architects, Santa Monica

Architect of Record

Alan S. Boivin, AIA

Structural Engineer

Masoud Dejban, Inc., Encino

Mechanical Engineer

Airplus Engineering Consultants

Electrical Engineer

Hanzlik & Associates

Civil Engineer

KHR Associates, Irvine

Geotechnical Engineer

Geotechnologies, Inc., Colorado

Archstone Santa Monica was designed to accommodate residents who don't want to drive to the store to get what they need. The mixed-use development was built to encourage pedestrian traffic and de-emphasize vehicular traffic in a busy corridor of Santa Monica.

The two-building project consists of 133 residential units, 15,700 sq ft of retail space and a three-level parking garage with 396 spaces.

The architect and builders used a variety of architectural features to blend the project in with the existing Santa Monica neighborhood.

Rather than use a cookie cutter approach to the development, the project team used different materials, varied roof heights and setbacks and other architectural details to give the housing styles within the development their own unique appearance. More than 40 different styles of townhome units were built in the development.

The retail area was built using steel-framing, the residential built using wood-framing and the parking garage was built using cast-in-place concrete.

The residential units also received roof terraces, large patios/open spaces and a common rooftop pool.

Green building techniques were also used during the building's construction. A photovoltaic system was installed and major building materials used recycled material. A waste management program diverted nearly 170 tons of waste from landfills.

Some of the challenges builders faced were minimal floor-to-ceiling heights in the parking garage, but it required intense MEP coordination with the ducted ventilation system. The project's close location to the ocean required temporary dewatering to areas such as the below-slab foundations and structure. Construction of the parking garage required extensive shoring with a combination of tie-backs and rakers. <<

Best of 2007 Southern California

LAX Runway 25L Relocation

Transportation/Bridges
Winner

Project Team

Owner

Los Angeles World Airports, Los Angeles

Construction Manager

CH2M Hill, Los Angeles

Architect/Engineer

HNTB, Los Angeles

General Contractor

Tutor-Saliba, O&G Industries, Sylmar

Sub-Consultants: Pinnacle One, Los Angeles; KDG Consultants, Pasadena; Lee Andrews Group, Los Angeles; Parsons Brinckerhoff, Los Angeles

Los Angeles International Airport is the fifth-busiest airport in the world. Eliminating a runway for the airport could have a significant impact on operations at an airport with 1,800 flights per day.

However, the project team that completed the runway 25L relocation finished the job in eight months, minimizing disruptions to airport traffic throughout the construction schedule.

Runway 25L was demolished and moved 25 ft south in an effort to minimize runway incursions.

The $181.6 million project required the demolition of 316,000 sq yds of asphalt and 276,000 sq yds of Portland cement concrete pavement. The project team installed a crusher on site to process the demolished material to be used as a processed miscellaneous base for the new runway. The ability to recycle material on site drastically reduced truck traffic at the job and minimized construction impacts on the surrounding community.

After the demolition, a new 11,095-ft-long, 200-ft-wide runway was built. The new runway required excavation, grading, storm drain system and runway lighting, as well as some other steps. Quality control meetings were held each week during the construction process to confirm testing requirements, job memos and noncompliance notices. The construction manager prepared monthly reports that outlined cost and schedule status. Work was done seven days a week on an around-the-clock schedule to meet the project deadline.

One of the challenges the project faced was the discovery during construction of a 1,300-ft-long, 100-ft-wide and 12-in-thick existing runway buried underneath the runway that was being demolished. The old runway did not appear on any construction documents and also needed to be demolished.

The demolition of the new runway caused a 23-calendar-day delay. The project team created a recovery schedule to mitigate the delay. That schedule allowed the project team to finish the project eight days late, rather than much later and allowing all four of LAX's runways to resume operating. <<

Judges' Comments

"An extremely complicated, challenging project."
"Lots of activity around this project."

Best of 2007 Southern California

Los Angeles North Central Animal Services Center

Green Building
Winner

The four-footed residents who wait to be adopted at the Los Angeles North Central Animal Services Center home now have a much greener place to call home.

The $7.9 million project consists of a 74,200-sq-ft expansion of the existing animal shelter. Various small animal, bird, and reptile holding facilities were built in addition to 170 outdoor dog kennels. A behavior assessment room was created to monitor animals and new training yards were also built.

The expansion has allowed the center to move from a simple warehouse-style operation to a facility that can focus on adoptions more.

But one of the key features of the building was its sustainable design. Photovoltaic panels provide shade above kennel aisles. The nearly 800 panels provide enough energy to power the entire facility.

The center also maximized the use of recycled construction waste, used steel with 25% recycled content and its front wall is made from 100% recycled wood.

The project team built the facility using sustainable building practices in an effort to win Gold level certification from the U.S. Green Building Council.

The center was also designed to attract more visitors by becoming more visitor friendly. For instance, the western end of the building contains an illuminated glass tower that serves as a landmark. Water fountains were built for appearance and to provide a pleasing audible background for when visitors look at animals. Benches were built near puppy kennels to allow young children to view the dogs at a better level. A series of art-glass enclosures with animal images was created to also improve the facility's appeal. Kennel runs were designed to draw visitors throughout the facility, allowing them to see all of the animals.

Additionally, each aisle is distinguished by a color, animal subject and landscape palette in order to ensure that potential adopters can find their way back to certain animals. <<

Project Team

Owner

City of Los Angeles

General Contractor

Sinanian Development Inc., Tarzana

Architects

Choy Associates, South Pasadena; Tracy A. Stone Architects, Los Angeles

Structural Engineer

Kanda & Tso Associates, South Pasadena

Civil Engineer

Ashba Engineers Ltd., Signal Hill

Mechanical and Electrical Engineer

Gotama Building Engineers Inc., Marina del Rey

Landscape Architect

Cornerstone Studios, Inc., Los Angeles

Judges' Comments

"Nice design.
"Creative use for an unusual service."
"Very natural to combine green with animals."

Best of 2007 Southern California

St. Joseph Hospital Patient Care Center

Healthcare
Winner

The St. Joseph Hospital Patient Care Center in Orange was built to accommodate growth at the nearly 80-year-old hospital, but to also provide a new entrance and public face for the existing St. Joseph Hospital.

The 248,000-sq-ft, four-story care center includes a basement and an underground connection to the adjacent Children's Hospital of Orange County. The Patient Care Center has 150 patient rooms, 14 operating sites and a central sterile and supply suite.

A 13,000-sq-ft remote central plant was built to power the Patient Care Center and a garden was installed on the second floor of the hospital

One of the significant challenges of the project was coordinating with the surrounding hospitals about the construction. The general contractor developed a site-logistics plan for traffic. The project team created re-routed roads, off-site staging areas for construction materials and scheduled construction deliveries at opportune times. The $130 million project also needed to be built on a tight site, surrounded by two operational hospitals.

The Patient Care center is clad in aluminum, plaster and a fretted glass curtain wall that wraps around three sides of the building. One of the challenges of installing the curtain wall was the etchings on the 247 panels. Because the etchings needed to spell out a message, the builders had to ensure that every piece fit in perfectly.

The facility was built using a steel, braced-frame and was designed for zone four seismic considerations. The project also featured several "green" features including a sustainable wood breezeway in the courtyard entry, an energy-efficient PVC roof and energy-efficient windows.

One of the reasons for the project's success was the project team developed numerous mock-ups of the facility's exterior, interior and MEP systems. The general contractor also implemented an overhead coordination/construction verification program.

Safety was a priority on the project, as well. The project totaled more than 700,000 man hours and had a zero recordable safety incident rate and a zero lost-time rate. <<

Project Team

Owner

St. Joseph Health System, La Palma

General Contractor

McCarthy Building Cos., Newport Beach

Architect

NBBJ, Seattle

Engineers

KPFF Consulting Engineers, Los Angeles; Syska Hennessy Group, Inc., Los Angeles

Landscape Architect

Site Workshop Landscape Architect, Seattle

Key subcontractors: Berger Brothers, Inc. (interior and exterior work), Azusa; Briggs Electric Inc., Tustin; Control Air, Anaheim; The Herrick Co. (steel), Pleasanton; Pan Pacific Plumbing, Irvine

Judges' Comments

"A complicated project."
"A very tight site with difficult working conditions."

Best of 2007 Southern California

New Music and Performing Arts Center-Santa Monica

Higher Education

Winner

Project Team

Owner

Santa Monica Community College District

General Contractor

FTR International Inc., Irvine

Architect

Renzo Zecchetto Architects, Santa Monica

Structural Steel

Palmer Steel Supplies, Texas

Plumbing/HVAC

Integrated Mechanical Systems Inc., Irwindale

Soil and Drilling

Anderson Drilling, Chino

Grading/Framing/Drywall/Concrete/

Electrical

FTR International Inc., Irvine

The New Music and Performing Arts Center at Santa Monica College was designed to serve not only the campus but to serve as a centerpiece for the greater Santa Monica community.

The $32.5 million project was a challenge to build because of the unique design of the 550-seat theater.

The 52,000-sq-ft building includes more than 2,000 ft of rehearsal rooms, four dressing rooms and a class and performance practice rooms. An orchestra lift, two lighting bridges and a full-fly space with 37 lines of counterweight rigging were also installed.

The building's multi-tiered non-orthogonal structure and the various construction changes were challenging. The project team had to convert the design plan into a structurally sound building and use a number of advanced construction techniques.

One of the tools the project team used was a 3-D radius track installation system. This process was used to construct the unorthodox-shaped metal stud framing patterns of the reflector walls in the main theater hall. The process was also used to place the sheathing and wood paneling covering the specialized metal framing system.

Judges' Comments

"Good use of forms."

The installation system will allow the project to install state-of-the-art acoustic and lighting systems in the theater.

One of the other innovative techniques the project team developed was a localized heating and cooling system attached to each seat, allowing cool and warm air to be circulated to each theater patron.

The building's design incorporates a number of exterior materials including special woods, specialized concrete, smooth-coat colored plasters and exposed steel.

One of the construction challenges that occurred was the location of a major sewer line that served the Santa Monica area. The sewer line was located on the north side of the construction site. The project team installed major shoring around the sewer line so construction could continue unabated. <<

Ivy Hotel

Hospitality
Winner

Project Team

Owner/Developer
Kelly Capital, San Diego

General Contractor
Krump Construction, San Diego

Architect
SB Architects, San Francisco

Interior Designer
Powerstrip Studio, Hollywood

Civil Engineer
Nasland Engineering, San Diego

Structural Engineer
DCI Engineers, San Diego

MEP Engineer
Glumac International, Irvine

Fire Protection Engineers
Schirmer Engineering Corp., San Diego

Exterior Lighting Consultant
Francis Krahe & Associates, Los Angeles

While the Ivy Hotel may look new, don't be fooled.

The $75 million project in San Diego was originally the site of the Maryland Hotel, built in 1913. The owners took the old building and transformed it into a high-end boutique hotel in the heart of San Diego's thriving Gaslamp Quarter.

While the inside of the building was remodeled, little was done to the outside, leaving the original brick structure intact. But because the original brick structure was in place, the hotel's architects and contractor had to figure out a way to create a brand new hotel inside limited space.

The renovations transformed the 120,000-sq-ft, six-story building into a modern-looking hotel that fits in with the bustling vibe of the Gaslamp.

The architect and contractor worked to upgrade the existing structure base of the original hotel. For example, structural columns in the lobby were refurbished with braided leather. Steel crossbraces that provide earthquake support were painted silver and are used to hang silver drapes. Two lightwells inside the building were used to create outdoor lounges.

The hotel makeover added a nightclub, ballroom and meeting space in the basement.

The 17,000,000-sq-ft roof was redone to include a pool with a private cabana area, rooftop bar and 225-seat outdoor restaurant.

The 159 guestrooms were redone to add glassed-in baths and strategic lighting to make the rooms seem larger. Modern furniture and amenities, including flat-screen televisions were also placed in rooms.

A number of details were added to make the hotel look ultra-chic. A spiral staircase was added to take visitors to the basement nightclub. Mezzanines were added in the lounges, restaurant and nightclub. The hotel's interior designers have worked on a number of upscale hotels throughout the U.S.

The hotel's site, located on a busy corner, allows many hotel guests to peer out their windows to the street or onto the two open-air lounges in the hotel. <<

Judges' Comments

"Great design, beautiful design."

Best of 2007 Southern California

Pasadena City Hall Renovation

Restoration
Winner

Project Team

Owner

City of Pasadena

General Contractor

Clark Construction Group, Costa Mesa

Architect

Architectural Resource Group, Pasadena

Structural Engineer

Forell/Elsesser Engineers Inc., San Francisco

Construction Manager

DMJM Management, Los Angeles

An $80 million renovation has returned Pasadena City Hall to its former glory.

Built in 1927, Pasadena City Hall was showing signs of age inside. The building, listed on the National Register of Historic Places, had a large number of deep cracks and two stair towers and the lantern in the building's dome were damaged. The building also had water damage and several architectural elements had to be improved to comply with the Americans with Disabilities Act. The building also needed a seismic upgrade.

The project team completely rehabilitated the interior of the building, installing new MEP and sprinkler systems and did major renovations to the building's plaster ceilings. Some exterior renovations were also done.

The seismic retrofit used a base isolation system – a construction technique that removed the original basement floor slab and required the excavation and installation of new foundations and the installation of 240 double concave friction pendulum isolators between the foundations and basement floor framing.

The base isolation system permits building movement during a major earthquake while minimizing damage. New shear walls were installed as part of the seismic retrofit as well as a "moat" to isolate the perimeter.

Working in the basement, the project team found they had limited access to work so they created a third access point to transport construction materials. Creating a third access point allowed the project team to shave months off the construction schedule.

Installing a new seismic system also meant the project team had to limit the intrusion of the seismic upgrade into the building's historic elements.

The project team also had to integrate new MEP and sprinkler systems into the building without affecting the building's historic elements. To accomplish this the team used a number of innovative techniques, including using a significant amount of coring through concrete and steel to run utility lines where needed.

The project began in spring of 2005 and was finished a little more than two years later. <<

Judges' Comments

"Had to preserve an existing, seismically unfit building."

"State-of-the-art techniques used under the building."

Best of 2007 Southern California

The Market at Ninth and Flower

Residential
Winner

Project Team

Owner

The Lee Group/CIM Group, Los Angeles

General Contractor

PCL Construction Services, Los Angeles

Architect

KTGY Group Inc., Irvine

Civil Engineer

Kimley-Horn & Associates, Woodland Hills

Structural Engineer

Nabih Youssef & Associates, Los Angeles

Acoustical

VSA n Associates, Whittier

Landscape Architect

ah'be landscape architects, Culver City

Like many developments in California, Market Lofts was designed to keep people out of their cars and on their feet.

The six-story condominium project is situated directly above a number of retail shops, including a Ralph's supermarket.

Judges' Comments

"A historic project for downtown L.A."

The $70 million project contains 270 lofts on the corner of Ninth and Flower streets. But besides offering retail on the bottom floor, Market Lofts was also built with a fitness center, social meeting area and community theater. The one- to two-bedroom lofts have nearly 10-ft-high ceilings and are between 700 and 1,600 sq ft in size. The units also feature such amenities as private residential entrances, access to Internet and modern kitchens and bathrooms.

The project faced some unusual challenges throughout the construction process. One of the first was the changing of the architect during the preconstruction phase. Because of this architect change, the contractor was unable finalize its work scope with its subcontractors. The contractor and new architect had to work more closely with the subcontractors to understand the scope of the project in order to minimize costs and avoid delays.

The project team also had to work with partial design and late changes in the design process. The architect and contractor had to remain in constant communication throughout the construction process; at some points, the two worked on site to build without complete drawings.

One of the more unique aspects of the project is that the Lofts pool is located directly above the Ralph's supermarket. The project team had to work carefully to ensure that a barrier between the pool and the supermarket was safe and secure.

Despite the construction challenges, the project was able to open in July, a few days before the Ralph's supermarket opened. <<

Best of 2007 Southern California

Eastern Columbia Lofts

Redevelopment
Winner

Where Los Angeles once shopped, it now lives.

Eastern Columbia Lofts, once a shopping destination for Angelenos, now serves as a redeveloped home in busy downtown Los Angeles.

Built in 1929, Eastern Columbia Lofts is a registered Los Angeles Cultural Monument and was one of the tallest buildings in Los Angeles before World War II. The building is one of the city's best surviving examples of Zig-Zag Moderne, an architectural style that is identified by such styles as sunburst patterns, geometric shapes, zigzags and chevrons.

The 13-story building originally served as the home for two L.A. department stores, including Eastern Columbia Outfitting Co., and later as an office building until its renovation.

The office space was transformed into 147-loft-style condominiums; the top stories and clock tower serve as five penthouse units.

Transforming the building into living units required many interior improvements, including seismically retrofitting the foundations, widening and adding footings and building a new concrete shear wall from the basement to the roof.

The building was gutted with the exception of the art deco passenger elevators and the lobby floor.

New windows were added to bring light into the units and two freight elevators were eliminated to add more living space using structural steel and concrete.

Most of the new additions to the lofts were to the roof where a swimming pool, exercise room and sun deck were added. Incorporating those amenities meant builders had to raise the roof deck by six feet.

Redeveloping the project also entailed restoring one of the building's most striking features – its turquoise and gold exterior. The project team worked to restore the building's glazed terra cotta façade, steel-framed windows and a decorative terrazzo floor in the main lobby. The clock tower was not left out of the redevelopment either – the "Eastern" and clock features now light up at night for this long-time L.A. landmark.

The project earned a "Certificate of Recognition" from the city of Los Angeles for the building's redevelopment. <<

Judges' Comments

"They maintained the beauty and integrity of the original design."

"Retained the flavor of the era."

Project Team

Owner

The Kor Group, Los Angeles

General Contractor

Charles Pankow Builders, Pasadena

Interior Design

Kelly Wearstler Interior Design, Los Angeles

Landscape Architect

Mia Lehrer & Associates, Los Angeles

Façade Restoration

CK Arts, Inc., Los Angeles and Bielski Services, Anaheim

Structural Engineer

Nabih Youssef & Associates, Los Angeles

Civil Egineer

Kimley-Horn and Associates, Woodland Hills

Key design-build subcontractors: RLH Fire Protection, Bakersfield; Environmental Comfort Systems, San Clemente (mechanical); DK Mechanical Contractors, Inc., Anaheim (plumbing); Journey Electrical Technologies, Orange County (electrical)

Best of 2007 Southern California

Santa Monica College Theatre Arts Building

Performing Arts
Winner

Project Team

Owner

Santa Monica Community College District

General Contractor

Turner Construction, Los Angeles

Architect

LEO A DALY, Los Angeles

Structural Engineer

Saiful/Bouqet Structural Engineers Inc., Pasadena

Civil Engineer

RT Quinn & Associates, Torrance

M/E/P Engineer

Integrated Engineering Consulting Engineers Inc., Los Angeles

Landscape Architect

DRY Design, Los Angeles

Acoustical Consultant

Dohn & Associates, Morro Bay

The Theatre Arts Building at Santa Monica College was designed to not only be a teaching tool, but to also provide space for campus events and productions. The campus worked with the project team to create a building that offered expanded space for faculty as well as create additional space for the theater program.

The $17 million project contains a 300-seat performance theater, box office, classrooms and faculty offices. The theater offers fly-loft and rigging, lighting and sound systems a backstage prop and set shop, and dressing and costuming areas.

The project team worked with campus officials to create a building that would provide the necessary services for the school and also blend into the existing campus.

The project team used silver-finished metal siding and roofing designed to reflect origami-like folding, concrete walls and columns and expansive glass throughout the building.

The building's entry plaza is sheltered by two large pre-existing coral trees and provides access to the two-story lobby. Inside, a grand stairway leads to upper-level theater access and outdoor balcony gathering place that can be used for patrons during intermissions.

The project team also used natural details to enhance the building. For example, they added an actor's garden at the back of the site to allow cast and crew to gather. They also added a tree-lined courtyard and outdoor seating around the coral trees.

The building also features a number of sustainable elements, including fritted glass and operable windows in the faculty offices. The fritted glass window maximizes energy efficiency while the faculty windows provide for natural ventilation and energy savings. <<

Best of 2007 Southern California

West Basin Water Recycling Facility

Public Works
Award of Merit

Project Team

Owner

West Basin Municipal Water District, Carson

General Contractor

J.R. Filanc Construction Co. Inc., Escondido

Architect/Engineer

HDR Engineering Inc., Nebraska

Electrical Contractor

Doty Electrical Inc., Valencia

Concrete Tank Contractor

DYK Inc., El Cajon

Painting Contractor

Parada Painting Inc., Poway

Structural Engineer

Simon Wong Engineering, San Diego

Geotechnical Engineering

Kleinfelder, San Diego

A lack of rainfall in the past two years in Southern California has some cities looking for in-house solutions instead of importing costly water from elsewhere in the state.

The phase 4 expansion of the West Basin Water Recycling Facility in El Segundo is one of the projects that helps provide an in-house solution.

The goal of the West Basin Water Recycling Facility phase 4 expansion was to improve the plant to the point where it could continue to provide potable water and manage water resources to encourage conservation.

The $52 million project consisted of a design-build expansion of two parts of the recycled water facility – a sea water intrusion barrier and changes to the Title 22 recycled water system. The construction also upgraded such systems as solids handling, chemical facilities, power supply and distribution facilities.

One of the major challenges the contractor faced was a change requested by the owner two months into the project. The contractor had to add a clarification system to improve the filtration process. The new system increased the contract amount by $5.7 million and added 18 months to the construction schedule.

Some of the other challenges the contractor faced was a compact construction site as well as the facility's need to remain operational while construction was underway.

The recycling facility expansion also needed 41 tie-ins to the existing facility and there was a significant amount of underground piping and construction.

Some of the innovations of the project included the use of submerged micro-filtration membranes – earlier phases used pressure micro-filtration systems. The membranes allowed for a slight reduction in capital costs and also lowered the energy need of the facility.

The project is a finalist in the Design-Build Institute of America's Western Pacific chapter awards. <<

Best of 2007 Southern California

Liberty Station Marketplace

Redevelopment
Award of Merit

A former naval base has been reborn as a thriving retail center and has managed to keep much of its sense of history and architectural style.

Liberty Station Marketplace was once home to millions of Navy trainees for about 70 years as part of the Naval Training Center in San Diego. Like many military bases in the 1990s, the training center was shut down in 1993.

About 350 acres of the former naval base was targeted as a place for a mixed-use development. Liberty Station Marketplace represents the retail aspect of the project; Liberty Station has areas designated for residential, office and hotel space.

The development is one of the few areas in San Diego that gives residents access to the waterfront.

The project team transformed historic sleeping barracks and a mess hall into 170,000-sq-ft of retail shops, anchor tenants, restaurants and office space. Vons, Trader Joe's and Starbucks are among the retail establishments that moved into the site. The base's chapel was completely renovated and converted into a commercial wedding chapel.

The Marketplace was designed to respect and reflect the military heritage of the former base and to blend in with the surrounding historic neighborhood.

Much of the design and feel of the training center was kept and the NTC symbol can still be found in certain areas of the Marketplace.

A central plaza was kept and connects to landscaped courtyards along the original historic promenade. Restored chapel bells ring throughout the promenade and Marketplace.

Some of the challenges the project team faced was working with older buildings that needed to be brought up to seismic code. The team also was faced with the task of converting many of the existing buildings from their primarily residential and kitchen uses and making them fit for retail use.

The retail development is one of the final pieces in revitalizing the former Naval base into a thriving community. <<

Judges' Comments

"Still has that naval feel."

"Hip atmosphere."

Project Team

Master Developer
McMillin Cos., San Diego (with the city of San Diego)

Developer
C.W. Clark, La Jolla

Contractor
Legacy Building Services, San Diego

Architect
Nadel Architects, Los Angeles

Historic Consultant
Heritage Architecture, San Diego

Structural Engineer
Curry Price Court, San Diego

Mechanical/Plumbing
Michael Akavan Engineers, San Diego

Electrical
Michael Wall Engineering, San Diego

Civil Engineering
Flores Lund Consultants, San Diego

Landscape
ONA Landscape Architects, San Diego

Best of 2007 Southern California

UCSD Student Academic Services Building

Higher Education
Award of Merit

Project Team

Owner

University of California, San Diego

General Contractor

McCarthy Building Cos., San Diego

Architect

Rob Wellington Quigley, AIA, San Diego

Structural Engineer

KPFF Consulting Engineers, San Diego

Mechanical and Electrical Engineer

Bechard Long & Associates, Poway

Civil Engineer

Boyle Engineering Corp., San Diego

Landscape Architect

Wallace, Roberts & Todd, San Diego

Earthwork

Whitlock Contracting Inc., El Cajon

Structural Steel

Myrex Industries, Houston

Key subcontractors: Progressive Steel, Spring Valley; La Mesa Glass, Lemon Grove; Standard Drywall Inc., Lakeside; Bonita Pipeline (plumbing), National City; University Mechanical (HVAC), Livermore; Bergelectric, Escondido

The University of California San Diego Student Academic Services building provides a new home for many of the university's academic administration departments.

The five-story, 141,000-sq-ft building houses multiple departments for the university including admissions, financial aid and graduate studies. A 300-seat multipurpose room, two restaurants and retail space were also added into the $32.2 million building.

The project team used building information modeling to detect potential clashes and modify ducts before they were installed; clashes were kept to a minimum using this process.

One of the most significant challenges of the project was the high volume of concrete work. McCarthy self-performed the concrete work, which required delicate and careful planning as the project went more vertical. The ground floor is covered by a tall arcade structure consisting of 114 42-in-square, 28-ft high exposed columns. Levels three though five are steel-framed with composite metal decking and concrete floors, with steel-braced frames providing lateral resistance.

The L-shaped building was designed to create an open airy feel and integrate with the outdoor spaces. The design also incorporates natural, unfinished materials, open ceilings with exposed mechanical and electrical systems and residential-quality finishes.

The building also has some green features, including high-performance glazing, low-emitting materials and high-efficiency irrigation systems. Much of the reusable construction waste was donated.

McCarthy worked more than 82,000 man-hours on the project and had zero recordable safety incident rate and zero lost-time injuries. The project also received an "Honor Award' from the San Diego chapter of the American Institute for Architects. <<

Best of 2007 Southern California

Dos Lagos Heart

Sports/Recreation

Award of Merit

When it came to building Dos Lagos Heart, the team for this award-winning project came up with a way to mix water bodies with unique architectural design.

This 10-acre park is located inside the large mixed-use development known as Dos Lagos in Corona.

The $11.2-million project features two four-acre manmade lakes with a built-in biological filter to keep the lakes clean. A nine-foot high waterfall, illuminated by fiber-optic lighting flows on one side of the bridge and underneath the bridge connecting to the other lake.

The bridge also serves as a pathway between the lakes and connects to an outdoor amphitheater. A variety of flowers, trees and landscaping was put in place around the project, as well.

The most interesting feature of this project and the most challenging to develop was the bridge that separates the two lakes.

The bridge is covered by a garden trellis consisting of bamboo, concrete and rolled steel beams.

Constructing the trellis was difficult because of the different materials used. The 200 rolled steel beams that provide the base for the trellis first had to be specially manufactured and shipped to the project site. The beams also had to be specially designed using a 3-D model so that they would fit together perfectly over the curving bridge's walkway – like a puzzle. The steel beams were then painted to give them the appearance of rusting metal.

The project team could not find bamboo big enough and durable enough for the garden trellis so they went to Vietnam for the material. However, the bamboo was delayed in customs for three months. When it finally reached the project, the bamboo had to be hand-oiled to weather the elements before each piece was secured horizontally for the trellis.

Additionally, the project team had to install several poured-in-place concrete piles to ensure the structure will remain stabilized. The piles were then connected by steel tubes. <<

Project Team

Owner

SE Corp., Corona

General Contractor

Consolidated Contracting Services Inc., San Clemente

Architect

Nardi Associates LLP, Monrovia

Civil Engineer

Hunsaker & Associates, Irvine

Landscape Architect

Kammeyer & Associates, Corona

Structural Engineer

Costa & Associates, West Covina

Lake Engineer

Pacific Advanced Civil Engineering Inc., Fountain Valley

Electrical Engineer

OMB Electrical Engineers, Inc.

Mechanical and Plumbing Engineers

ATI Architects & Engineers, Costa Mesa

Judges' Comments

"It has a very playful way of creating circulation."

"The interplay of shade and shadow is welcome in this environment."

Best of 2007 Southern California

DiamondView Tower

Office

Award of Merit

Employees in San Diego's DiamondView Tower may be forgiven if they don't want to leave work when the clock strikes five.

Built near Petco Park, the 15-story DiamondView Tower was designed with balconies that allow tenants to watch the San Diego Padres play.

The 325,000-sq-ft, $53.2-million office building sits on a corner adjacent to the stadium; it's estimated that the view from the building to home plate is about 550 ft – close enough that a tape measure home run could reach the building.

The project features three to four stories of brick-clad buildings at the bottom of the structure while the top stories more closely resemble offices, being clad in glass and metal. The top floor is an indoor/outdoor penthouse and entertainment area that can be used by tenants of the building if they want to host events and parties and check out a ball game while they are at it. The development features nearly 250,000-sq-ft of office space.

The development also has a mixed-use aspect and includes an athletic club and restaurant and retail space. The development also features a three-level parking garage.

Baseball-inspired graphics line the lobby walls inside the building while the development also includes floor-to-ceiling glass on every floor.

DiamondView Tower is among a number of projects, including the ballpark itself, which incorporates the existing historic East Village neighborhood into the development. Project architect Carrier Johnson worked with several groups and the city to develop master plan studies. Those studies encouraged the development of buildings that created pedestrian activity and views.

DiamondView Tower is one of only a few office projects built in San Diego's downtown area; it is located closer to the city's restaurant and retail area, the Gaslamp Quarter, than it is to the city's more northern office developments. The office building was built in part to drive more daytime traffic to San Diego's East Village area, a portion of the city that does not receive as much foot traffic during non-game days. <<

Judges' Comments

"Nice-looking"; "Great composition"

Project Team

Owner

Right Field Office Partners, LLC with Cisterra Partners, San Diego

General Contractor

Reno Contracting, San Diego

Architect/Interior Designer of public spaces

Carrier Johnson, San Diego

Civil Engineer

Partners Planning and Engineering, San Diego

Landscape Architect

Michael Peltz and Associates, Solana Beach

Structural Engineer

KPFF Consulting Engineers, San Diego

Mechanical/Plumbing Engineer

McParlane and Associates, San Diego

Electrical Engineer

MPE Consulting, San Diego

Key subcontractors: VSA n Associates, Whittier (acoustical consultant); Curtainwall Design Consultants (curtain wall consultant); Construction Testing & Engineering, Riverside (soils engineer); CA Comfort Systems, San Diego (design build mechanical contractor); Dynalectric, San Diego (design build electrical contractor); Paschall Mechanical (design build plumbing contractor); Schmidt Fire Protection; San Diego (design build fire protection contractor)

Best of 2007 Southern California

Kelly Residence

Residential
Award of Merit

Project Team

Owner

Undisclosed

General Contractor

Eric Engheben, Topanga

Architect

Abramson Teiger Architects, Culver City

Landscape Architect

Steve Silva, Los Angeles

Panel Walls

Trespa North America, Poway

The project team that built the Kelly residence in Los Angeles had to incorporate many factors, including green design and construction, when constructing the home.

The two-story home was divided into two areas – the bottom floor is designed for public space, to be used for parties, guests and includes a family room. The second floor is designed for the private side of family life and includes the bedrooms. Furthermore, the house has two sides – one designated for children – and the noise they bring – and one for adults – and the quiet they seek.

An additional elements of the design was that the house was built as a series of "boxes" that had to be designed and put in place to maximize views and allow sunlight.

The home also features a number of green elements, including photovoltaic cells on the roof, an artificial lawn and a grey-water reclamation drip irrigation system. Other green features included: a reflecting pond at the face of a glass wall to allow cool air circulation, coating on skylights to reduce heat/cooling loss and a zoned heating and air conditioning system.

Judges' Comments

"I want to live there."
"A beautiful house."

Some of the construction challenges the project team dealt with was the structural steel framing of the house, custom-designed steel rails, fences and gates, and the exterior concrete that required specific design specifications.

Installing some of the interior pieces was also difficult. Glass doors and windows were generally large panes that required specific installation and had to be anchored to the structural supports of the building. Some of the green-building elements also posed problems, such as coordinating times for the electrician, utility company and solar provider to meet to discuss the photovoltaic system. The grey-water reclamation system also had to be coordinated with the landscape irrigation system.

Despite these construction challenges, the home was built on time and on budget. <<