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# **Concrete Masonry Association of California and Nevada**



### Inside this issue:

2

3 4 5

6 7

8 9

10

11

12

Recreation Center Expansion and Remodel
San Pedro High School John M. and Muriel Olguin Campus
St. Maria Goretti Parish Center
Twin Cities Police Station
Escena Golf Club House
Paso Robles Residence
Tutor Family Center for the Performing Arts
A.R.F.F. 80
Our Lady of Fatima Catholic Church New Parish Center
Monrovia High School Addition/Modernization
2013 Design Awards "Call for Entries /RequestforBinders" Information

#### **CMACN Producer Members** 12

# **Red Rock Canyon Visitor Center**

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#### RECREATION CENTER EXPANSION AND REMODEL San Luis Obispo, California

ARCHITECT: CANNON DESIGN 1901 Avenue of the Stars, Suite 175 Los Angeles, CA 90067

Craig Hamilton, AIA Prinicpal-in-Charge

STRUCTURAL ENGINEER: Saiful Bouquet, Inc. GENERAL CONTRACTOR Sundt Construction, Inc. MASONRY CONTRACTOR: Winegardner Masonry, Inc. BLOCK PRODUCER: Air Vol Block, Inc. OWNER: California Polytechnic State University, San Luis Obispo ©PHOTOGRAPHY: Tim Griffith, Architectural Photographer



Architect's Commentary: The Student Recreation Center Expansion and Remodel at California Polytechnic State University, San Luis Obispo is designed to meet the evolving recreational needs of the student population. This facility helped relieve the increasing demands on existing recreation facilities. Its innovative design and program include a variety of spaces that reflect the latest trends in student recreation activities.

Creating a strong sense of arrival that enhances the building's presence on campus is one of the fundamental ideas that the University expressed in the planning and design of the building. Maximizing views into the building and between activities expresses the dynamic nature of activities. The silhouette of the curved metal roof echoes the surrounding Central California Coast topography.

Green building strategies (for pending LEED Silver rating) include maximized use of natural light to improve the quality of the space, connect to its surroundings, and reduce energy use. Operation and maintenance costs are lessened with energy efficient mechanical systems and low flow plumbing fixtures. A green cleaning program and education and outreach program will promote awareness of the sustainable components of the building.







The renovated and remodeled Recreation Center is 165,717 gross square feet. 95,029 square feet of the existing recreation center was partially demolished, renovated and expanded. Remodeled areas include: locker rooms, showers, storage, gymnastics, exercise/dance, weight rooms, and outdoor terrace. New construction includes: main lobby, 2-court gymnasium, administrative offices, racquetball courts, multi-athletic court (MAC), weight fitness, outdoor equipment center, cardio fitness, exercise and fitness rooms, a jogging track and roof garden.

Why Masonry? Concrete masonry is one of the few construction materials that embody many of the sustainable and design goals in one product. Concrete masonry contains recycled material, is regionally manufactured, doesn't adversely affect indoor air quality, is aesthetically pleasing, minimizes construction waste, and is very durable and economical.



CMACN 2013 January Issue of "CMU Profiles in Architecture"





Architect's Commentary: The school was designed to achieve "grid neutrality," meaning the facility produces as much electricity as it consumes. It's anticipated to receive about 70 percent of electrical needs from photovoltaic panels and 30 percent from wind turbines. Building energy performance is better than rigorous State of California Title 24 energy consumption standards by 24% and the school is designed to reach LEED Gold certification.

While remaining consistent with LAUSD Guidelines, materials were chosen that contain a high recycled content. In addition, materials such as ceiling tiles, insulation, carpet and other floor coverings were specified to be low emitting. Indoor pollution has been further reduced through the use of walk-off mats, ducted returns, and MERV 11 filters at air handlers.

The new high school offers a collaborative learning environment and stands as a physical example of highly responsible and sustainable design. Main teaching space is organized into small-school groupings of free-standing, two-story clusters of classroom buildings surrounding sunken courtyards that serve as social spaces. Five additional buildings house food services, library, performing arts, gymnasium, administrative, office, and service/maintenance functions. The L-shaped placement of the buildings forms a campus quadrangle focusing on an amphitheater with views of Catalina Island. The built area was minimized to conserve as much of the natural environment as possible and to maximize the area for playing fields.





#### SAN PEDRO HIGH SCHOOL JOHN M. AND **MURIEL OLGUIN CAMPUS** SAN PEDRO, CALIFORNIA

ARCHITECT OF RECORD: **CO** Architects 5055 Wilshire Blvd. Suite 900 Los Angeles, CA 90036

Scott P. Kelsey, FAIA Project Principal

Jorge de la Cal, AIA, LEED® AP Project Director

Dennis McFadden, FAIA Design Principal

Tony Moretti, FAIA Technical Principal Jill Cheng, AIA Architect Youngsoo Kwon Architect Philip Kim Designer Marie Malone Specifications Eduardo Martinez Construction Administrator Project Team

STRUCTURAL ENGINEER: KPFF Consulting Engineers GENERAL CONTRACTOR: Pinner Construction Co., Inc. MASONRY CONTRACTOR: Industrial Masonry, Inc. **BLOCK PRODUCER:** Angelus Block Company, Inc. Trenwyth Industries, Inc. (an Oldcastle Company) **OWNER:** Los Angeles Unified School District ©PHOTOGRAPHY: Tom Bonner, Tom Bonner Photography

Why Masonry? Concrete masonry units (CMUs) were chosen for their ability to merge aesthetics with practicality. Their wide range of appearance in color and texture was appealing, as was their resistance to graffiti; an important factor for a high school. The variety of installation options available with respect to look of joints provides subtle differences with a single material. In addition, they are an economical and durable material able to withstand the school's coastal setting. They are installed by one trade, which has schedule benefits and simplifies maintenance. In short, the combination of versatility and resilience CMUs provide is ideally suited for both the location and uses of this building.



#### ST. MARIA GORETTI PARISH CENTER Elk Grove California

ARCHITECT: Comstock Johnson Architects, Inc. 10520 Armstrong Ave. Mather, California 95655

Duane Johnson, FCSI, AIA Principal

STRUCTURAL ENGINEER: Wood Rodgers, Inc. GENERAL CONTRACTOR: Jackson Construction MASONRY CONTRACTOR: John Jackson Masonry BLOCK PRODUCER: Basalite Concrete Products, LLC OwnER: Diocese of Sacramento PHOTOGRAPHY: Cathy Kelly, C K Architectural Photography







*Architect's Commentary:* This is the first building on a 19 acre project to serve the northeast portions of this growing area just south of Sacramento. Although located on a major transportation artery, it is also in a zoned "rural area" that has restrictions against connecting to the public water, sewer or storm drainage systems. It is surrounded by large lot residential homes with agricultural and livestock uses.

The initial phase of this project consists of a 16,500 square-foot Parish Center that includes a 600 seat "First Church", Parish Offices, full-serve Kitchen and flexible Meeting Rooms. The site's Masterplan includes a complementary, detached 2,800 square-foot Rectory, plus a future K-8 School and Final Church. At completion, the "First Church" will be converted to a Parish Hall/Gymnasium. Thus, the original Sanctuary's finishes and design had to be suitable for a basketball court with small stage used by both the school children and adults.

The "First Church" challenge is it cannot be just a utilitarian "box", but must convey the Parish pride of finally having their own Church. The design needs to be understated so not to compete with, but complement the "Final Church". The low-key Mediterranean style also goes well with the existing residences in both materials used and the scale of the building's many elements.

**Why Masonry?** Budget concerns and a low maintenance desire were key factors, along with the architect's desire for a versatile product with an upgraded look now, but can take the future Gym abuse. The ground face concrete masonry unit (CMU) does all of this with an 8"X16" single score for an 8" X 8" look as the typical interior Church wall, and an "implied" chair rail from a double course of 4" X 16" double score, both in standard light beige/tan with black, grey and quartz aggregate. The small scale of the 4" X 16" CMU was also used at the altar sides for texture behind future liturgical banners. Finally, the colors of the low maintenance polished concrete floor were taken from the concrete masonry unit aggregate for a great low maintenance thermal mass with a harmonious look.







CMACN 2013 January Issue of "CMU Profiles in Architecture"



*Architect's Commentary:* The Twin Cities Police Authority's new LEED Platinum certified Police Station is located on the site of the former 'temporary' police station and city corporation yard. The new station sits adjacent to a year-round creek within a city park and located on a former landfill. The project includes creek bank restoration, restoring native habitat and protecting endangered species within the creek and the adjacent salt marsh habitat.

The Police Station is designed as a two-story building of approximately 18,000 square feet. Exterior finish materials include split-faced concrete block wainscot, painted cement fiber sidewall shingles, and standing seam metal roofing. The interior spaces feature recycled tile and carpet-tile floors, recycled glass countertops and laminated wall and wainscot paneling. Abundant natural light from windows, clerestories and cupolas bring daylight into 75% of the building areas and provide views to the exterior from 90% of occupied spaces. Pervious concrete paving was utilized in all parking areas to pre-filter storm water runoff which is then filtered through a system of bio-swales to a retention pond all re-vegetated with native drought tolerant plant materials.

The LEED Platinum certified building exceeds the energy efficiency of a typical similar building by 47% and includes on-site power generation through photovoltaic roof panels producing 29% of the building's total annual energy usage. 90% of the wood used on the project is Forest Stewardship Council (FSC) certified as coming from sustainable and responsibly managed forests. More than 90% of the construction waste was recycled and diverted from local landfills. The building reduces domestic water usage by 38% using high efficiency plumbing fixtures, valves, and occupancy sensors. The site landscaping includes drought tolerant adaptive plant materials and climate-based controllers; the irrigation system uses 72% less water than a typical system. These strategies, and other similar concepts, help to dramatically reduce the building's carbon footprint and impact on the natural surroundings.

Why Masonry? The concrete masonry units (CMUs) used on the project, combined with the high fly ash content grout, contributed to two important LEED credits earned by the project: 28% of the building materials used on the project were composed of recycled content (triple the LEED minimum requirement for this credit); and 50% of building materials used on the project were harvested and manufactured within 500 miles of the project site (over double the LEED minimum requirement for this credit). Other considerations in selecting concrete masonry include the integral color and durable nature of the split-faced block wainscot. Used on the interior of the building, concrete masonry provides a durable and easily maintainable finish material for the detention, sallyport and garage areas. A low curving CMU wall surrounds a patio area adjacent to the creek and forms a base for a unique aluminum screen enclosing the patio and built-in barbecue.



# **TWIN CITIES POLICE STATION**

LARKSPUR, CALIFORNIA

ARCHITECT: GLASS ARCHITECTS 200 E Street Santa Rosa, CA 95404

Eric M. Glass, AIA, LEED® AP Principal

STRUCTURAL ENGINEER: Thornton Tomasetti, Inc. GENERAL CONTRACTOR: Jeff Luchetti Construction, Inc. MASONRY CONTRACTOR: Creative Masonry, Inc. BLOCK PRODUCER: Calstone Company, Inc. OWNER: Twin Cities Police Authority ©PHOTOGRAPHY: Lenny Siegel, Siegel Photographic







# ESCENA GOLF CLUB HOUSE

PALM SPRINGS, CALIFORNIA

ARCHITECT: Douglas Fredrikson Architects 727 E. Bethany Home Road, Suite D-123 Phoenix, AZ 85014

Douglas W. Fredrikson, AIA Principal-in-Charge

STRUCTURAL ENGINEER: Vertex Consulting Structural Engineers, LLC GENERAL CONTRACTOR: M K Development Corporation MASONRY CONTRACTOR: Fedor Masonry BLOCK PRODUCER: ORCO Block Co., Inc. OWNER: Escena Golf Club ©PHOTOGRAPHY: Chris Miller, Imagine Imagery



**Architect's Commentary:** Mid-Century modern architecture responded to demands and challenges of a particular time, becoming iconic in minimalist expression, elegance and affordable design. An omnipresent style in this desert community, the Developer desired this theme for a Master Planned Golf Course Community encouraged by designer conscious buyer profiling and demand.

This signature Golf Clubhouse is the Community centerpiece and not only services the golf functions, but becomes an entertainment lounge at night. Oriented towards striking mountain and golf views, the building is split between golf and dining, and connected by covered walkways sheltering from the heat. The main feature is the large exterior covered patio hovering over a reflecting water feature while shading the allglass dining rooms. It is supported by a roof and floor piercing "swizzle stick", also seen at the Porte Cochere. The circular sports bar organizes the interior space and connects directly to the outside patios.







A desert modern icon, playful, historically respectful, environmentally sensitive through orientation, sustainable materials and shading, makes this not only old school, but also new school responding to today's challenges and desires.

Why Masonry? White steel, energy conscious glass, stacked bond concrete masonry units (CMUs), wood ceilings and historic dry stacked stone define the material palette. Exposed structure and systems add to the simplified approach and ambiance. While concerned with long term sustainability, the CMU was also selected as a building finish to provide a true glimpse into that Mid-Century modern architecture with clean and simple lines that provide a very geometric look to the building structure. In today's economy is a extremely important to find the right material at the right price point and CMU was selected and the most effect approach to the structure of this building, not only for aesthetics, but for value that it bring to the project relating to long term sustainability.





*Architect's Commentary:* This rural home sits on an 80acre agricultural site in California's Central Coast wine region. From the plan to the details, the building responds to the extreme climate of its desert locale, to the social dynamic of an extended family, and to the indoor-outdoor continuity of rural life.

The design organizes activity around the passage of the sun throughout the day, choreographing the rhythm of life on the land. This rhythm - and the plan of the building - is centered around a covered outdoor living and dining room, the heart of the home and the hub of family activity. Open living spaces adjoin the outdoor living zone, creating casual gathering spaces for both the nuclear family and larger groups. Removed from the primary living zone, intimate bedrooms offer privacy when desired, each with its own outdoor domain.





# PASO ROBLES RESIDENCE

PASO ROBLES, CALIFORNIA

ARCHITECT: Aidlin Darling Design 500 3rd Street, Suite 410 San Francisco, CA 94107

Joshua Aidlin, AIA David Darling, AIA Partners-in-Charge

Peter Larsen Principal and Project Architect

Michael Pierry Project Team/Designer

STRUCTURAL ENGINEER: Berkeley Structural Design GENERAL CONTRACTOR: Semmes and Company Builders MASONRY CONTRACTOR: Calvin Craig Masonry BLOCK PRODUCER: Basalite Concrete Products, LLC ©PHOTOGRAPHY: Matthew Millman, Matthew Millman Photography



In addition to creating an enjoyable rural retreat, the house was designed with ecological responsibility as a principal goal. Despite 115° summer temperatures, the house was built without air conditioning. Thermal mass, building orientation, shading, and intelligent ventilation (borrowing the "night cooling" concept from area wineries) allow a bright, open home that remains comfortable throughout the day and year. Energy-efficient performance allows solar photovoltaic and thermal panels to provide electricity, heating, and how water. Each design element performs multiple functions, achieving maximum benefit from minimal means and embedding sustainability throughout the project.

Why Masonry? The making of the home is grounded in the primal act of masonry walling. Masonry was chosen for its elemental presence, its link to historic building traditions, and its visual and textural harmony with the surrounding natural environment. Concrete masonry walls provide the spatial, social, and ecological organization of the building. They create the primary spaces of the home, defining private and public zones and anchoring them into the land. Their vectoral arrangement structures views outward, framing distant landmarks, while their tough muscularity provides both physical and psychological shelter.



## TUTOR FAMILY CENTER FOR THE PERFORMING ARTS

Chaminade College Preparatory West Hills, California

ARCHITECT: JP Darling Associates Architects 20331 Irvine Avenue, Suite E-6 Newport Beach, CA 92660

James Paul Darling Principal Architect, Project Designer

STRUCTURAL ENGINEER: STB Structural Engineers, Inc. GENERAL CONTRACTOR: EPI Construction, Inc. MASONRY CONTRACTOR: Nibbelink Masonry Construction BLOCK PRODUCER: Angelus Block Company, Inc. OWNER/PROJECT MANAGEMENT: Chaminade College Preparatory ©PHOTOGRAPHY: Keith Gaynes, Keith Gaynes Photography



Architect's Commentary: The newly opened Tutor Family Center for the Performing Arts has become the signature building for the West Hills High School campus of Chaminade College Preparatory. For the past fifty years, the school's performing arts program used the cafeteria to hold stage plays, recitals and concerts; converting back to a cafeteria between performances. The new 23,000 square foot center now provides a permanent home for the performing arts students and faculty, as well as a venue for many of the school functions formerly held in the gymnasium.

The building plan of the Performing Arts Center was developed for a constricted site that sloped eighteen feet from front to back and an average of twelve feet laterally from the existing adjacent buildings to the street. The optimum auditorium sight lines were determined to be less than the slope differential so a transitional amphitheater with a gathering terrace was utilized at the main entrance.

The project goal was to have each classroom of the Performing Arts Center be an independent teaching station for each of the institution's performing arts curriculum. The resulting plan allowed use of all the classrooms individually and simultaneously without opening the main auditorium. This allowed for maximum building use interface and flexibility (with the added benefit of sound isolation by solid concrete masonry walls) of each use from the adjacent space and from the auditorium proper.

The main auditorium was programmed for more varied uses than stage plays and music so a standard theatertype suspended "cloud" ceiling was replaced with a solid sculpted ceiling. The ceiling design has curved elements that are sound reflectors with concealed sound absorptive materials on the flat planes. Since many intended functions require the house lights to be lit during the performance, the rolling ceiling adds visual drama to the space.



The modulated exterior elevations were derived from designing the exterior walls only as high as they needed to be for the interior use. The building outer elements "step" down the hill with the main auditorium anchoring the assemblage at its central core and splaying the adjacent secondary structures away from the higher auditorium walls.

The split face CMU elements in differing configurations provided the necessary acoustic, structural and most importantly the aesthetic character of the building. With the ability to use the same structural CMU for the site retaining walls and the various planters and stairs, the split face concrete masonry units produced a cohesive and tightly grouped architectural statement.

The stage house height of over sixty-five feet was constructed of twelve and sixteen-inch wide CMUs built with 4score concrete masonry units centered on three sides of the stage structure to alleviate a high, broad and plain expanse of masonry on the exterior. The stage house, with catwalks and scene rigging, required interior clear height roughly two and half times the proscenium opening. The masonry wall spans between interior concrete structural columns that delineate the proscenium arch downstage and the overhead access door backstage.



The split face masonry recurs on the interior of the auditorium with structural elements of built up, split face columns alternating with wood veneer acoustical wall undulations. The auditorium and the public spaces leading to the theater proper, use many of the exterior masonry design cues that repeat and reinforce the architectural rhythm of the exterior.

Why Masonry? The nature of student activity on a high school campus is a natural testament for the use of integral color concrete masonry units (CMUs) for its initial and ongoing durability and rustic beauty.



CMACN 2013 January Issue of "CMU Profiles in Architecture"



*Architect's Commentary:* LAX Fire Station No. 80 is the new Aircraft Rescue and Fire Fighting (A.R.F.F.) Station located at the Los Angeles International Airport.

Programming efforts indicated that the new facility should have at least 25,000 square feet of functional area, i.e., administration and training, apparatus room, living area, workroom, storage, and ancillary support spaces. All living components of the fire station such as the dormitory, kitchen, dining, and dayroom are located on the first floor. The second floor is dedicated for administrative areas as well as areas for training and exercise.

Massing of the fire station is kept simple to blend with adjacent existing structures. Due to site constraints and other functional reasons, the fire station is long and linear. The barrel roof over the apparatus bays is enhanced by a protruding "wing" element, which also serves as an entrance piece to the staff parking and receiving area to the north. A matching canopy is also provided over the main entrance on the west elevation. Canopies are provided over the apparatus doors per FAA requirements; they are simple in design and enhance the linear quality of the of the design.

**Why Masonry?** The main building exterior is constructed of single score precision concrete masonry units (CMUs). All other non-concrete masonry exterior walls are finished with boxed rib-style metal siding. The barrel roofs are finished with standing seam metal roofing. We've chosen to utilize masonry over other building materials due to its beauty, sound insulating properties, durability and because concrete masonry units have made a significant impact on the sustainability of the LAX ARFF Station and the allocation of LEED® points for Gold Certification.

Our ability to obtain a LEED<sup>®</sup> Gold Certification focused on value-driven sustainability that was inherent on site and in the building type. Buildings consume an enormous amount of material resources and generate a significant amount of waste during the construction process. This fact implored us to select environmentally-responsible products and materials for this project. We concentrated on specifying products and materials that were locally produced and those containing a high degree of recycled content. Choosing CMU for our building allowed us to utilize a durable product being locally extracted and manufactured less than 100 miles away from the project site and containing over 20% recycled material. The contractor even recycled all of the unused CMU scraps from the construction site.

Most significantly, the use of CMU reduced the amount of energy consumed by our building. Energy calculations showed the thermal properties of our CMU wall assembly contributed to an energy cost savings of 36% without incorporating photovoltaic arrays or an ultra-efficient HVAC system.



### A.R.F.F. 80

LOS ANGELES, CALIFORNIA

LEAD ENGINEERING AND DESIGN CONSULTANT: Hatch Mott McDonald 6151 West Century Blvd., Suite 800 Los Angeles, CA 90045

Paul Nolan Principal-in Charge

ARCHITECT OF RECORD/DESIGN CONSULTANT: WLC Architects, Inc. 8163 Rochester Avenue, Suite 100 Rancho Cucamonga, CA 91730

Kelley Needham Principal-in Charge

Simon Chang Designer

STRUCTURAL ENGINEER: R.M. Byrd and Associates, Inc. GENERAL CONTRACTOR: Tobo Construction, Inc. MASONRY CONTRACTOR: Twin Brothers Construction Company BLOCK PRODUCER: ORCO Block Co., Inc. OWNER: Los Angeles World Airports ©Photography: Fred Daly, Daly Architectural Photography







#### Our Lady of Fatima Catholic Church New Parish Center San Clemente, Caliornia

ARCHITECT OF RECORD: domusstudio architecture 2150 W. Washington, Suite 303

San Diego, CA 92110 David Pfeifer, AIA, LEED<sup>®</sup> AP

Principal Architect

Lisa D'Ambrosia, AIA Project Architect

Jon Dominy Associate Designer

STRUCTURAL ENGINEER: Structural Engineering Solutions GENERAL CONTRACTOR: Bluefin Construction CONSTRUCTION MANAGER: MPA, Inc. MASONRY CONTRACTOR: Steve French Masonry BLOCK PRODUCER: RCP Block & Brick, Inc. OwnER: Our Lady of Fatima Catholic Church @Photography: Jay Dominy, Jay Dominy Photography

Architect's Commentary: The recently completed Parish Hall project is the first phase of a Master Plan developed for Our Lady of Fatima Catholic Church in San Clemente, California. The 10,000 square-foot Parish Hall replaces a much smaller, less functional and flexible space. The new Parish Hall is designed to function as a large open space that can seat 500 for a lecture/play or 300 for dinner. The space can also be divided up into four smaller rooms to accommodate multiple, smaller events. The main assembly space is supported by a large full service kitchen, beverage station and elevated platform/stage.

The Parish Hall opens up onto a large patio on the Southwestern side to capture the views of the Pacific Ocean and the San Clemente downtown rooftops. This patio has a deep trellis to temper and shade the spaces from the afternoon sun. There are additional built-in seating elements and an exterior coffee service to accent the patio. The exterior space is framed by a large curving concrete masonry wall.





The exterior design of the building was developed from the unique aspects of the sloping site. The Master Plan is developed with multiple levels that terrace with the sloping grades. This project is the first of a multiple phased Master Plan. At each level there are outdoor gathering spaces to link the buildings. The rooflines of the structures are sloped parallel to the site. The materials are of a natural palette, developed from the chaparral, sandstone and other geologic features unique to San Clemente.

The interior of the Parish Hall was designed to accommodate and adapt to the many different functions that will occur within the space. All of the interior finishes were selected not only for their beauty, but for their durability and ease of maintenance. The interior finishes were selected to create a warm, relaxing environment using the colors and textures of, beach grass and driftwood.

The most striking of the interior features are the custom designed ceiling clouds. These are crafted from lightweight MDF and finished with an Abet Laminati plastic laminate. They also serve multiple functions. As an acoustic element they reflect sound back down to the audience so the congregation can feel and hear themselves sing. Above the clouds is acoustic absorptive material. The clouds are open to the stage, allowing the excess sound to be absorbed, eliminating unwanted reverberation. The clouds also mask and provide a discrete location for the lighting, fire sprinklers and sound system.

**Why Masonry?** The curving site wall serves to create an identity element for the campus when viewed from the nearby Interstate 5 Freeway, and also acts as a shield for the exterior patio from the noise and view of the freeway. The wall height was set to screen the freeway below yet allow the beautiful vistas of the downtown San Clemente rooftops and the Pacific Ocean. This wall is made up of alternating bands of integrally colored split faced and burnished concrete masonry units (CMUs). There are inset panels on the exterior face of the wall that contain Padre Gold Sandstone. The wall was designed to emulate the strata, colors, textures, features and formations of the coastal bluffs in San Clemente. The curved masonry site wall flows into the interior of the structure and creates one of the focal point walls of the space. The wall retains grade, screens unsightly views, blocks noise, connects the interior and exterior use areas, and gives identity to the campus.



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*Architect's Commentary:* Originally constructed in 1928, Monrovia High School was an undersized campus composed of randomly placed structures of various heights. In dire need of state-of-the-art facilities that would meet their academic, athletic, artistic, and aesthetic requirements, the community passed a measure valued at \$45 million. The new facilities would include a new science-technology center, track and field stadium, satellite kitchen and student services facility, and a new athletics facility.

With the goal of transforming the campus, our solution was to strategically organize new building structures and outdoor spaces, utilizing durable aesthetically pleasing masonry construction materials.

Why Masonry? Because of their economy, durability, and ease of maintenance, a system of concrete masonry units and veneer were chosen for the new athletics facility. Compatible with other construction methods, this system was chosen for the main competition gymnasium shell. The colors were selected by the client to reflect the nearby foothills and to create a rich color palette for the entire campus. Inherently impact-resistant, exterior and interior surfaces were left exposed throughout.

Located within a residential neighborhood, the use of masonry walls dramatically minimizes sound transmission while complying with State building and life safety codes.

To further enhance and unify both new and existing building and spaces on campus, multi-colored interlocking concrete pavers were constructed in herringbone patterned bands throughout the campus.



# Monrovia High School Addition/Modernization

MONROVIA, CALIFORNIA

ARCHITECT: WLC ARCHITECTS, INC. 8163 Rochester Avenue Rancho Cucamonga, CA 91730

Glenn Ueda Architect, AIA Principal

Bruce Ou Project Manager

STRUCTURAL ENGINEER: Byrd and Associates CONSTRUCTION MANAGER: Tilden-Coil Constructors MASONRY CONTRACTOR: Nibbelink Masonry Construction BLOCK PRODUCER: Angelus Block Company, Inc. Owner: Monrovia Unified School District ©PHOTOGRAPHY: Genevieve Wolff WLC Architects, Inc.





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# 2013

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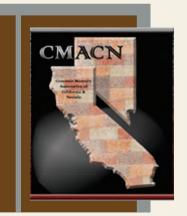
The 2013 CMACN/AIACC Concrete Masonry Design Awards competition "Call for Entries/Request for Binders" is now available at <u>www.cmacn.org</u>.

Last day to request binders: March 15, 2013

Last day to ship completed binders: April 15, 2013

Jury Deliberations: May 17, 2013

Design Awards Banquet Friday, September 20, 2013



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- Technical information on concrete masonry for design professionals.
- Protect and advance the interests of the concrete masonry industry.
- Develop new and existing markets for concrete masonry products.
- Coordinate members' efforts in solving common challenges within the masonry industry.

For further information contact us at: Concrete Masonry Association of California and Nevada 6060 Sunrise Vista Drive, Suite 1990 Citrus Heights, CA 95610-7004

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