The Science II Building has added much needed interdisciplinary classroom and office space to the campus of California State University, Fresno. This 72,000 square foot, $16,800,000 complex bid at 7% below budget and was occupied in spring of 2005.

Science II is the home for the departments of Geology, Psychology, Earth Science, Criminology and the College of Science and Mathematics. Before Science II was constructed, students on the east side of the campus studied in their cars waiting for class because there were no study spaces nearby.

By developing an efficient plan, the architects were able to justify the design of a large glass enclosed study hall that was not called for in the building program. The program called for faculty offices, dry labs, and lecture halls. The three program components were each assigned to a “wing,” thus reducing the amount of gross area consumed by circulation. This strategy afforded the large study hall and smaller study spaces that are dispersed throughout the building. The courtyard formed by the three wings features power and data to facilitate lectures and performances. Furthermore, an “outdoor classroom” in the courtyard offers a teaching mode not previously provided on campus.

University buildings are “built for the ages,” and few other materials possess the durability and sense of aesthetic permanence as concrete masonry. Four different types of CMU were specified for the Science II building.

The base material is gray precision block with 2-coat plaster applied as accent. Natural gray split face block is the main exterior material. Window and door lintels are expressed by precision face cream tinted block. An exposed steel canopy shades upper level windows from the harsh summer sun. The canopy is supported by steel struts that mount to a knee plate bolted to the sloped top of columns and pilasters made of ground face red concrete masonry block. The canopy support columns anchor the overall composition to the site and unify the three wings of the building.
This elementary school is located in the “town center” of Carmel Valley. It is an important place for learning, play, and community because of the close proximity of the Carmel Valley Public Library, Recreational Center, Middle School, and Shopping Center. The District’s mission statement, “To provide a child-centered education...using the unique vision and resources of home, school and community to ensure a(n)... environment...developing children who are confident, competent and creative learners,” was our inspiration.

The “pyro-therm” concrete masonry used throughout the school provided both enhanced aesthetics and added resilience. The block was used for its durability, lightweight quality (for minimal weight added to the frame), and ease of maintenance and cleaning. The block also added contrast and counterpoint to the stucco finish, which help ground the building. The masonry is located at the classroom patios and stair exists as way-finding.

All second floor classrooms, resource areas and kindergarten classrooms have clerestories that allow daylight to replace fluorescent lighting. The clerestory windows are operable to help dissipate heat build-up and promote fresh air circulation.

The campus was designed to enhance the overall learning experience and enjoyment of its students. The playground equipment at the school could easily pass for contemporary abstract sculptures. The unique-shaped, moveable and interactive equipment was actually selected by the elementary school students through collaborative student task force meetings. The exploratory playground areas provide a unique experience with the combination of kinetic and balancing equipment that are both health-promoting and interesting to the students.
NEVADA STATE COMMAND HEADQUARTERS & BASE SUPPLY, NVANG, 152ND AW
RENO, NEVADA

The Base Supply Complex Project is a mix-use project consisting of the State Command Headquarters, administrative offices for the base, and a supply warehouse. These different components are expressed in the massing of the building. The design team also researched green solutions to fit within the budget and complement the overall appearance of the facility.

The complex is at the entrance of the base and the most prominent building on the base. This project establishes the defining image of the base to both visitors and military personnel. This is the first structure that can be seen upon the approach and it is intended to leave a lasting impression of strength and order. The use of various forms of masonry, including split-face, honed and glazed block, allowed the designers to use forms and textures to identify distinct areas of the building.

Green solutions include the use of local materials and materials manufactured with recycled content. Large windows provide natural light in the warehouse. Operable windows are placed in all administrative areas. Tinted, low-E insulated glass reduces heat gain. The roof over the plaza is an open trellis to provide shading and sun screening for the users and customers. In addition, a cool roof is used for the warehouse portion of the building. Because of the design solutions, energy efficient, non-CFC-based HVAC systems will not be overstressed in keeping the interior environment comfortable. The design also ensured that indoor air quality met ASHRAE requirements.

The use of concrete masonry block helped the team reach its goals of creating a progressive architecture within budget. In addition, CMU was incorporated into the design solution for its ability to relate to the surrounding landscape, as well as create a new image for the base: subtle monumentality, strength and order. Its bold use of color and form set a new standard for the base and created a solid, stable and enduring statement that worked well with this building and its purpose.

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Photography: Swanson Images
EAST VALLEY SOLID RESOURCES MANAGEMENT COMPLEX
Sun Valley, California

The East Valley Solid Resources Management Complex is sited on a former dump site, which was rehabilitated by excavating and re-compacting existing soil. This new complex, which was constructed to replace a conglomeration of temporary facilities, is now used as a permanent, multi-agency site by the City of Los Angeles’ Bureau of Sanitation and Department of General Services.

The complex consists of a two-story Bureau of Sanitation administration building housing offices, a training center, vehicle dispatch center, fitness/wellness facility and locker rooms. There is also a General Services vehicle maintenance facility, waste container storage building, and a container repair building. The complex was constructed with a hazardous waste drop-off facility and an alternative fueling center with multiple fueling types, including diesel, LNG, CNG, and gasoline.

The City of Los Angeles, selected concrete masonry block as the main material for this project based on its proven track record of other CMU buildings previously designed and constructed for its facilities. CMU conveys a sense of performance and is a particularly appropriate material for this complex. It was chosen for its extended life-cycle, low maintenance, thermal mass advantage, improved air handling efficiency, reduced potential for mold growth, greater fire safety, and improved acoustical performance.

A very wide palette of concrete masonry block products was ultimately employed throughout as perimeter, fence, and building walls, including split-face, precision and burnished block in an array of colors.

The administration building is constructed of burnished block to emphasize the building’s importance and its inviting aesthetic quality. Among the buildings on site, this building will have the highest occupancy, therefore the designer wanted the most refined material used here. A matrix of colors was employed in the building wall design to aesthetically pull in and reflect the great variety of colors used throughout the site. This building uses light and shade, mass and void, indoors and outdoors, to create a vocabulary of contrasts in the architecture.

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33 South Third engages the street and sidewalk with stoop-style townhouse units. Architectural details for these units quickly revealed a critical design challenge: the upscale, luxury market for the townhouses demand stone or cast stone quality materials at street level. Predictably, the project budget could not afford a stone or cast stone system for the entire first story.

A locally-produced ground face CMU surpassed stone in its beauty, depth, and richness, and also solved the construction budget problem by combining a structural wall and finish system into the same design element.

The developer had a vision of an “International Style” building in the strictest modernist tradition. The initial client meeting outlined themes including streamlined, simple massing, modern life style, and high ceilings with floor to ceiling glass. The design challenge was clear: design a modern style apartment building that provided tenants with warm, inviting and comfortable units and public spaces.

The irregular in-fill site, comprised of several vacant lots, compelled a response of two separate residential structures sitting on podium parking. The main building features a central mass, with stacked townhouse apartments. A large landscaped “green roof” courtyard is provided for tenants and creates a buffer between the main building and the second “saw-tooth” shaped building. The second building is comprised of three stories of apartments over ground floor retail.

The architectural response strives to embody the elegance and quiet sophistication of the Modern and Art Deco styles. Clean geometry and uncomplicated detailing, combined with a bold color scheme, serve to reinforce the vision.
The MSA Consulting Building houses a large civil engineering and planning firm in Rancho Mirage, California, near Palm Springs. The building is designed to provide optimum views of the surrounding desert and mountains. As you enter the building from the east, the western view through the two-story lobby frames the San Jacinto Mountains in the distance. The necessary sun protection is provided by roof overhangs on the south, east and even the north to a lesser degree. Sun protection on the west is provided by a large, cantilevered overhang and a sloping perforated metal screen in front of the two-story lobby glass, which filters in the direct sunlight, yet does not interrupt the dynamic vista.

Masonry walls of alternating courses of split-face and precision concrete masonry block are used throughout the project’s exterior and interior as well. The dual surfaced masonry property line walls terminate into the matching main building walls, which rise up two stories at the north and south ends of the structure. The heavy texture and shadow created by the split-face block, when contrasted against the smooth finish of the precision block, make it appear more exaggerated. Even with the two types of block being the same soft desert color, a strong horizontality is created. The horizontality is desired to tie the building itself to the site, reflecting the character of a desert architecture.
The program for Nanometer Technology Park consisted of both client-specific and speculative technological, commercial and industrial space set on a rural 7.39 acre parcel. The project encompassed three individual parcels build in three phases, of which this project is phase I.

Given the “high-tech” nature of the clients’ needs, as well as the rural, undeveloped nature of the site with its historically agricultural use, the design objective for the campus was to conceive a nexus of three components: 1) An industrial/agrarian construction sensibility 2) The adoption of common materials 3) The incorporation of urban “loft-style” interior spaces.

These components create an analogous representation of the seemingly incongruous “fiber optic cable end polishing” manufacturer located in a non-urban context.

The project is intended to invoke a sense of immediacy and purpose, respectful of the agrarian vernacular of the area. It endeavors not to ignore basic rules of design for congruency, harmony, unity, so much as to extend those rules to include serendipity and spontaneity as well. In much the same way that a farmer might build with materials immediately available on hand to create continual additions to his constructions throughout the years, this design vocabulary lends a sculptural collage of quality to the Nanometer campus as well.

Construction materials used to achieve the design objective include cement plaster, concrete masonry block, both split face and precision, “color fin-ply” plywood panels, painted wood siding, galvanized corrugated metal panels, exposed structural steel, natural and stained concretes, internally illuminated coroplast panels, stainless steel cable railings, and expanded catwalk gratings.

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CMACN Announces Executive Director Position Search for 2006

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Please mark your calendar for our “Call-For-Entry” brochure to be received by mail in January, 2006. Requests for submittal binders will also be downloadable from our web site in January at www.cmacn.org or can be obtained by calling the CMACN office at (916) 722-1700.

Cost: $100

Tentative Schedule:

- Last date to request submittal binders: March 31, 2006
- Last date for receipt of completed submittal binders: May 1, 2006
- Concrete Masonry Design Awards Banquet: October 20, 2006

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