

MURRAY & DOWNS Newsletter

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CRC Arch. & Const. Building - Sacramento, CA

The Future of the Built Environment Growing Tomorrow's Leaders

Hammers pounding. Power tools humming. Hard hatted heads bent over a makeshift table, poring over blueprints. It's a typical scene and all in a day's work on any construction site. The difference is this

construction site happens on the campus of Cosumnes River College, and it's an educational assignment. "Concept to completion" construction projects provide hands-on experience that has been integral to the training of Architecture and Construction Management students at Cosumnes River College (CRC) in Sacramento for 30 years. In addition to honing technical proficiencies, students learn analytical problem-solving, teamwork, and management skills. From its award-winning, distinguished

"For many students, it's a first-time chance for a career featuring steady advancement and competitive salaries."

faculty to its notable alumni, the CRC Institute of Architecture and Construction Technology is providing the workforce of future draftspersons, architects, construction site supervisors and building inspectors for our region's booming housing and commercial construction market.

CRC is building a new vision for the growth of the architecture and construction industries in Sacramento. First on the strategic planning agenda

for strengthening Architecture and Construction management will be growth. Cosumnes River College plans to more than double its enrollment and graduation rates in Architecture and Construction Technologies. Growth is critical because not only is the number of student applicants to the program growing, but so is the demand for graduates from employers in the community. The construction industry is especially well known as an industry with critical workforce shortages, a condition that can slow down the pace of economic growth for the entire region. Growth is also important for the Architecture program. Many regional architectural firms report large expenditures on recruitment efforts to draw qualified architectural applicants to their open positions.

In addition to planning for growth of the student body, faculty are planning to modernize programmatic curriculum to reflect the growing teamwork demands of the industry between construction and architecture firms. Many new contracting methodologies are being widely used in the industry in California, and teaming concepts between construction and architecture are becoming increasingly common.

Students enter the program at CRC seeking a variety of educational goals in proficiency certificates, 2-year degrees or 4-year transfers. The program has a high reputation in providing transfer students in

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Black Gold Oil's Toil on Construction Costs

With the recent record-setting price for a barrel of crude oil hovering around \$70, the supply and demand of oil has gained increased attention from the global economy, including the construction industry.

According to BP, 2005 world consumption of oil totaled over 84 million barrels per day (84 mbpd), that's right, *eighty four million barrels per day, or thirty billion six hundred sixty million barrels per year!*

In 2005, the US consumed around 20.6 mbpd, while China, the second largest consumer of oil, used around 7 mbpd. It should be noted that more than half of China's energy is derived from coal, not crude oil. Japan came in third, consuming 5.3 mbpd last year.

The standard 42 gallon barrel of crude oil can yield anywhere from 14 to 28 gallons of gasoline – enough to fill an average tank of gas in our car. The remaining products include LPG (*liquefied petroleum gas, or propane*), methane, butane,

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Tidbit

(Internal Office Communications)

Glass Breaks Warranty

When your spec calls for factory installed view lites (also applies to louvers and panels) the door warranty remains intact if the entire assembly comes to the field from the factory. If the view lite frames and/or the glazing is field-installed, the door warranty may likely be voided. This is critical when talking about exterior doors. A sub-contractor on a recent renovation project learned this the hard way – after ordering his doors from the factory without the glazing, he was recently informed by the manufacturer that his field-installed windows voided the doors' warranty.

Oil's Toil

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kerosene, diesel, industrial fuel oil, lubricating oil, and several other grades of petroleum that can be further refined for a myriad of uses.

Common everyday products that are derived in part from crude oil include: asphalt, tar, wax, fertilizers, pesticides, herbicides, cosmetics, plastics, synthetic clothing (including Gortex®, nylon, polyester, and polypropylene), paints, perfumes, Vaseline® (petroleum jelly), antifreeze, PVC (polyvinyl chloride), Styrofoam, tires, rubbing alcohol, contact lenses, ammonia, heart valves, bubble gum, crayons, and several pharmaceuticals.

From the design and construction industry perspective, it becomes clear just how large of an impact rising prices for crude oil can have on the overall cost of a construction project. The increased cost in producing roofing materials, asphalt, roof insulation foam, PVC, plastics and several other petroleum-based materials coupled with higher fuel costs for the transportation and delivery of these construction materials are all major factors in the rising costs of construction. □

Tomorrow's Leaders

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Architecture or Construction Management majors to respected programs such as California State Polytechnic University at San Luis Obispo and UC Berkeley. In fact, this spring UC Berkeley notified ten CRC students of their acceptance as transfer students to the Architecture Program this fall. While student transfers to four-year institutions generally are accepted, the acceptance of ten students by UCB is a significant achievement for the CRC Architectural program.

The very successful construction pre-apprenticeship program prepares scores of students for entry into the construction field. For many students, it's a first-time chance for a career featuring steady advancement and competitive salaries. Through the touted architecture program and construction management program, many students secure internships with local construction or architectural firms and enhance

their skills with real-life experience.

To ensure the workforce needs of our community will be met as our region's housing needs continue to expand, the North State Building Industry Association has established an endowed scholarship fund with the Los Rios Community College Foundation for CRC architectural and construction management students. Each year the North State BIA awards 3 to 5 \$1,000 scholarships to continuing and transfer students. The big challenge for the industry is finding an educated and trained workforce. The scholarship awards enable the students to achieve their educational goals and successfully enter the architectural or construction-related fields.

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Fun Facts

Bees collect nectar from 2 million flowers to make a 1-pound comb of honey.

About 10% of the world's population is left-handed (in our office there are 8 lefties, which is 17% of our staff)

There are no words in the dictionary that rhyme with the words orange, purple, silver or month.

Tigers have striped skin, not striped fur.

Laughing lowers levels of stress hormones and strengthens the immune system. Six-year-olds laugh an average of 300 times a day. Adults only laugh 15 to 100 times a day.

Lemons contain more sugar than strawberries.

Alaska has more caribou than people.

¼ of the bones in your body are in your feet.

90% of all garlic consumed in the US comes from Gilroy, CA.

Strawberries are the only fruit whose seeds grow on the outside.

Did You Know ...?

1. The Eiffel Tower receives a fresh coat of 300 tons of reddish-green paint every seven years.
2. The largest religious building in the world is a Hindu temple, Angkor Wat, in Cambodia.
3. By the year 2035, three quarters of the built environment in the U.S. will be either new or renovated. □

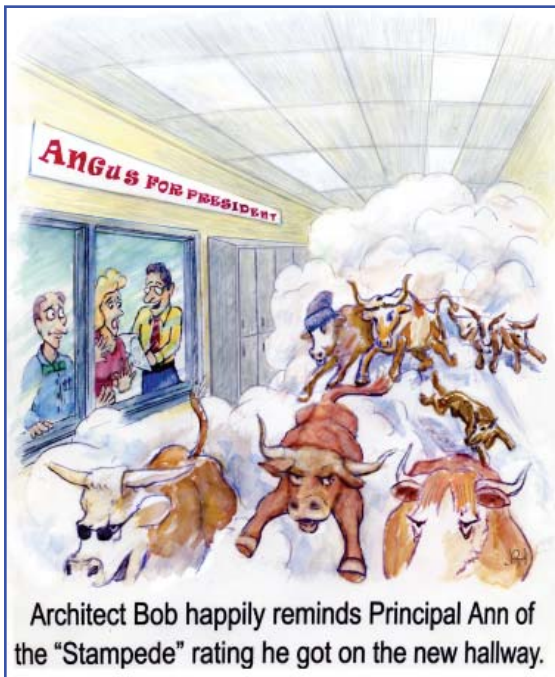
Tomorrow's Leaders

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With these strategic directions in mind, Cosumnes River College is working hard to create an "Institute for Architecture and Construction Technologies." This Institute will be a new building on campus, just at the gateway to the college inside the Bruceville Road entrance. It will house both the Architecture and Construction programs, and will include plenty of space for construction workshops and architecture studio work to go on side by side. In another innovation, the building will also house public exhibit space that can be used by students and industry groups alike. CRC is very excited about partnering with local industry groups and employers to bring students and employers into closer proximity through professional associations and other industry-sponsored events. Such partnering will bring continuous industry advice to the curriculum planning process and it will give students an opportunity to meet and work with local professionals.

In the next newsletter, we'll profile the journey of former CRC Architecture & Construction Management students as they progressed through the program and went on to 4 year universities where they are currently pursuing architectural or construction related degrees. □

Contributions from Sandy Kirschenmann, Ed.D. & Leslie Dougherty Tripp of the Los Rios Foundation



Staff News

Introducing Our New Staff:



Vincent Maloney – Vince recently earned his Masters of Architecture from Washington University School of Architecture in St. Louis, Missouri. He is our newest Project Coordinator with over seven years of experience in the industry. He is only two exams away from registered architect status.



Theresa Bailey – Terry is our new Architect Assistant. Her background is in administrative roles such as; office manager, liaison, organizer and retirement plans administrator. She is quickly learning the ins and outs of submittals and DSA processing. She will be assisting our project architects as they weave their way through the paper processes that the construction administration phase of our work requires. Welcome Terry!



Tapati Bose – Our newest Architectural Intern, Tapati is a recent graduate from the Masters of Architecture program at Texas A&M University. She brings with her over 3 years of experience in the industry between her work in India as well as the work she performed for the Planning Department at Texas A&M. We welcome her enthusiasm for architecture as well as her talent for design.



William Brown – Bill is a Project Architect and alumni of Cal Poly Pomona. He is joining our firm from Santa Rosa where he worked with Quattrocchi Kwok Architects for six years. He has an extensive background in K-12 education projects and we are pleased that he will now bring that knowledge and experience to Murray & Downs. Welcome Bill!

Other Staff News



Many of you know Chris Branco, our Support Services Supervisor and member of our firm for the past 9 years. He and his wife Amy have decided that with the impending birth of their second child, they should move closer to their old home stomping grounds. Chris is leaving Murray & Downs to move his family back to Michigan to be closer to both of their families. He will certainly be missed, but we wish him and all of his family the very best! To truly appreciate Chris's great sense of humor, read his article entitled "A Day in the Life" in our Winter 2005 Newsletter posted on our website. □

Tidbit

(Internal Office Communications)

Screen Play

When specifying hopper windows you have a choice of two types, in-swinging and out-swinging. Low windows are operable with a hand operated latch while upper windows are operable with a pole made to mate with the latch.

At out-swinging windows, where the screen is on the room side of the window, the latch is positioned between the screen and window. This is where wickets must be specified. A wicket is a small hinged, screened frame located immediately in front of the latch. By lifting the wicket, you gain access to the latch. On a low window you can lift the wicket by hand to operate the latch. On a high window you need to open the wicket with the pole that is provided, insert the pole in the wicket opening and access the latch. It is suggested that you specify one pole per room where required. We have now identified two items that need to be specified if you have a high screened project-out window – a pole operator and a wicket at each screen.

You may be wondering why we don't just make all windows the project-in type thereby negating the need to add wickets to the screens. If you have window coverings such as vertical louvers or mini-blinds, you do not want the window operation to conflict with the window covering operation.

Featured Project



El Dorado Hills Branch Library El Dorado County General Services

Our newest completed project, named “Project of the Year” by the El Dorado Forum, is the County of El Dorado-El Dorado Hills Branch Library. The project is a welcomed replacement for the undersized joint-use library formally operated in conjunction with nearby Oak Ridge High School. Since opening in February, the library has quickly become the most utilized branch in the El Dorado County library system.

Construction of the project was funded by a combination of Federal and State money along with local contributions including county funds and development company donations. A community parcel tax helps fund the ongoing operational expenses.

With a slight hint of Frank Lloyd Wright’s Prairie-School style, the design was tailored to complement the existing architecture of the upscale Serrano Development Visitor’s Center and other surrounding facilities.

The exterior façade features concrete tile roofing, high quality Idaho quartzite columns, and window walls allowing unobstructed view of the nearby lake. The interior offers a relaxing setting with soothing color choices, stone work, high ceilings, natural lighting and beautifully finished wood trim. In addition, each reading and study area is placed near perimeter windows so patrons can enjoy the landscaping and natural daylighting.



With over 16,000 square feet, the library spaces include:

- Children’s Collection & Reading Areas
- Browsing Alcove for New Selections
- Copy Center
- Young Adult Reading Area
- Internet/Technology Workstations
- Adult Collection & Reading Areas

New to the County of El Dorado library system is the Radio Frequency Identification (RFID) system. This technology is used to track library items using radio waves and microchip technology. RFID also automatically sorts items and checks them back into the library system.

Additional project features include high-efficiency HVAC and lighting systems, photocell & occupancy sensors for lighting control, natural daylighting, operable windows, electronic sensor lavatory fixtures, R-38 roof insulation, high performance glazing, and a water efficient landscape irrigation system.

For further information including directions and hours of operation, visit <http://www.eldoradolibrary.org/edh.htm> □



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