

Blakeslee helps West Point seniors create stairway project

Four senior cadets at the U.S. Military Academy at West Point, N.Y., created a lasting structure for the school as their independent-study project. The result was a new precast concrete stairway alongside the cadet chapel. When they approached Blakeslee Prestress Inc. to solicit design input, the precaster agreed to help design and cast the project as a donation to the school.

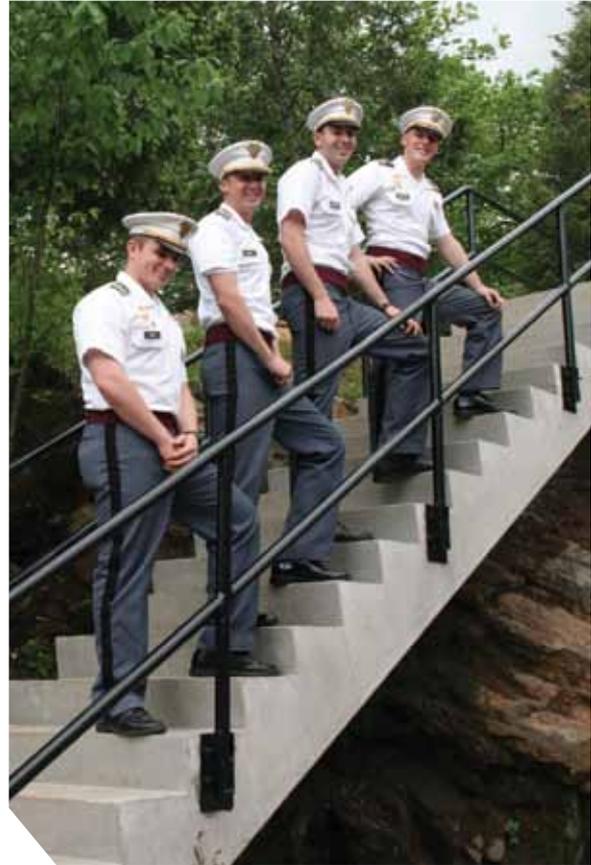
The stairway was needed to provide safe and convenient access along an incline, replacing a dirt path that was heavily trafficked, especially during fall football weekends. After receiving approval on the project from administrators, the cadets—James Vidal, Marc Orozco, Lukas Rennebaum, and Philip Neumann—surveyed and staked their project and worked with Blakeslee on the final design. The cadets had previously visited Blakeslee to tour the plant and to participate in educational seminars, so they were familiar with the precaster's operation.

The precaster modeled and designed the stairway as a simply supported beam. The stairway, featuring 7000 psi (50 MPa) concrete, is 1 ft (0.3 m) thick with a 9 ft (2.7 m) landing, over which 5 ft (1.5 m) rests on the upper foundation. The 20 treads are 6¾ in. (170 mm) in height and 11 in. (280 mm) in length with a 1 in. (25 mm) overhang (sloped outwards). The cadets' thorough surveying and cross coordination with Blakeslee ensured that the dimensions perfectly matched the site while still meeting code requirements for stairway slope and tread dimensions.

After cast-in-place foundations were set at the top and bottom, the precast concrete stairway was delivered and erected using a crane from the Department of Public Works. The completed structure was grouted into place, and railings were designed, fabricated on campus, and attached to the stairs.

"This venture was arguably the most unique cadet capstone project this year and one of the few that will leave a physical impact upon our academy," the cadets said in their final report. "The project was an invaluable leadership, business, and engineering experience. We continuously coordinated and modified our stairway design with Blakeslee, and they patiently and enthusiastically helped us at all times and demonstrated their professionalism."

—Source: Craig Schutt and Blakeslee Prestress Inc.



U.S. Military Academy cadets at West Point, N.Y., try out the staircase they helped design and construct with the help of Blakeslee Prestress Inc., which donated time and materials for the project. The participating cadets, from left, are James Vidal, Marc Orozco, Lukas Rennebaum, and Philip Neumann. Courtesy of United States Military Academy (West Point).



Angela R. San Martin

Tindall hires San Martin as sales engineer

Tindall Corp. has appointed Angela R. San Martin to the position of sales engineer.

San Martin is responsible primarily for sales in Georgia, Florida, and Alabama, reporting jointly to Tony Smith, vice president/general manager of the South Carolina division and Jeff Woodruff, vice president/general manager of the Mississippi division. With the consolidation last year of the Tindall Corp. South Carolina and Georgia divisions, Smith has oversight responsibility for work in Georgia, Tennessee, and northern Alabama, in addition to the Carolinas.

San Martin brings to her position more than 10 years of precast/prestressed concrete industry experience in project management, design, sales, and business development. San Martin, with BS and MS degrees in civil engineering from Clemson University, is a registered professional engineer and a LEED accredited professional.

—Source: Tindall Corp.



Matthew Westgaard

Molin Concrete adds COO Westgaard

Molin Concrete Products Co. recently added the new position of chief operations officer to its management structure. The new position will be responsible for overall safety, quality, productivity, customer satisfaction, and profitability of the manufacturing operations of the company.

Matthew Westgaard has been hired to fill this new position. Westgaard has more than 21 years of experience in the precast concrete industry.

Westgaard has a BA in fine arts/graphics from the University of Minnesota. He has also completed extensive management training through an MBA program.

—Source: Molin Concrete Products Co.



Paul Inglese

Metromont adds Chez, promotes Inglese on sales and business development team

Metromont Corp. has promoted Paul Inglese to the role of sales and business development in Bartow, Fla. With a background in specialized technology, Inglese brings to Metromont his experience in glass-fiber-reinforced concrete and architectural precast concrete.

In addition, Metromont has hired Debbi Chez to take the role of sales and business development in the Charlotte, N.C., market. Chez has a degree in civil engineering with more than 20 years of experience in project management and business development in the construction industry.

—Source: Metromont Corp.



High Concrete Group delivers double-tees with drain bodies already cast in, saving field labor.
Courtesy of High Concrete Group.

High Concrete drain innovation enables puddle-free parking structures

High Concrete Group LLC now casts drains directly into new double-tee driving surfaces. The innovation takes away the guesswork of field installations that may improperly locate or grade the drains.

Standing water can seep into and eventually weaken structural joints. Chloride-laden water can permeate low-strength field-applied concrete and corrode the reinforcing steel inside. Getting the storm water and snowmelt out of a parking structure is a priority.

To cast in the drains, High positions heavy-duty cast iron drain bodies based on the parking structure area each must serve. The drain bodies are then cast into the corners of the double-tees that make up the driving and parking surfaces of the structure. Washes, or drainage channels, are also created on the precast concrete members while they are in High's factory, rather than on-site. After the precast concrete members are delivered and erected, plumbers complete the drain connections.

The cast-in drain bodies provide a safer on-site working environment because there is no cutting and there are no holes for workers to step into during construction.

—Source: High Concrete Group

Spancrete hires Linse as contracts manager

Spancrete has given Michael Linse the role of contracts manager, in which he will work with the Contracts and Administration group.

In his new role, Linse is responsible for reviewing, revising, and finalizing all commercial aspects of sales contracts. In addition, he will monitor contract performance and compliance as well as resolve contractual problems.

—Source: Spancrete



Michael Linse

Finfrock signs parking structure contracts in Winter Park and Sunrise, Fla.

Finfrock Construction Inc. has signed contracts for complete design-build services with Westminster Services Inc. to deliver a 383-stall parking structure at Winter Park Towers in Winter Park, Fla., and with Equity Residential for a 315-stall structure at Sunrise Village in Sunrise, Fla.

The two structures total more than \$8 million. Design work is under way on each parking structure, and both projects are scheduled to be completed in June 2012.

—Source: Finfrock Design-Manufacture-Construct Inc.

Metromont names new director of estimating

Metromont Corp. recently named Tony Smith director of estimating. Smith has a background in drafting, estimating, and most recently sales and development. He has been with Metromont for 20 years.

—Source: Metromont Corp.

Dayton Superior adds single-use void former

Dayton Superior recently introduced a single-use void former as a cost-effective, high-performance alternative to the standard urethane void former.

During peak production cycles, a balanced value-to-cost ratio for urethane void formers is often difficult to achieve because of factors such as jobsite conditions and less control of materials on-site.

The single-use void former has a two-part, snap-together design and is made of high-density polyethylene plastic.

The single-use void former uses standard lifting hardware and is available for both 0.444 in. (11.3 mm) and 0.671 in. (17.0 mm) P75 utility anchors.

—Source: Dayton Superior Corp.

Spancrete project manager earns PMI credential

Brian Forston, a project manager in Spancrete's Precast Concrete division, has earned his Project Management Professional (PMP) credential from the Project Management Institute.

The PMP credential is a globally recognized certification that signifies a project manager's proficiency at leading a project from conception through completion. To earn this credential, candidates must have three to five years of project management experience, 4500 to 7500 hours of experience leading and directing projects, and 35 hours of project management education and must pass an exam.

Forston has been with Spancrete more than 10 years and has more than 25 years of construction management experience.

—Source: Spancrete



Brian Forston



Oldcastle Precast Inc. in Croydon, Pa., is providing reinforced precast concrete pipe for a large drainage project along Route 93 in Luzerne County, Pa., as part of the local Broad Street Betterment Program. Courtesy of Oldcastle Precast Inc.

Oldcastle Precast replaces drainage pipe to support traffic in Pennsylvania town

Oldcastle Precast Inc. in Croydon, Pa., is providing about 15,000 ft (4600 m) of reinforced precast concrete pipe and 62 reinforced concrete pipe fittings for the large drainage project along Route 93 in Luzerne County, Pa., as part of the Broad Street Betterment Program.

Precast concrete drainage pipe with diameters ranging from 12 in. to 27 in. (0.30 m to 0.69 m) is placed alongside the underground businesses that are located beneath Broad Street and were in use at the turn of the century. The 15 vault-like stores will be opened up, supported from below, and then filled in to support the sidewalk and curb/roadway traffic.

The precast concrete drainage pipe will effectively protect groundwater by conveying storm water through the underground infrastructure system. The precast concrete pipe is expected to last more than 100 years.

Oldcastle Precast is supplying all precast concrete drainage pipe and fittings for this \$27.4 million project. The project should be completed by late 2013.

The Broad Street Betterment Program, administered by PennDOT District 4, is designed to help improve the safety of the drivers and pedestrians in Hazelton, Pa. The plan includes the construction of a large drainage project, lighting crosswalks, updated traffic signals, pavement markings, and restoration of the downtown area parking spaces and sidewalks.

—Source: Oldcastle Precast Inc.



Bob Bertig

Bertig assumes role as Thermomass sales manager

Thermomass has promoted Bob Bertig to the position of South East region sales manager. Bertig will have the primary responsibility of managing Thermomass's South East region, which includes Florida, Georgia, Alabama, Tennessee, North Carolina, and South Carolina.

Bertig has been with Thermomass for 5 years and has spent 25 years in the construction industry. He is the incoming president of the Tampa Bay chapter of the Construction Specifiers Institute.

—Source: Thermomass

Oldcastle Precast provides nuclear canister vaults for new Department of Energy facility

Oldcastle Precast Inc. secured a \$1.1 million nuclear vault project involving the construction of 36 nuclear canister storage vaults for the Department of Energy's new Idaho National Laboratory Facility (INL) Integrated Waste Treatment Unit (IWTU). The nuclear canister storage vaults are part of the \$570 million INL IWTU, which will start processing 900,000 gal. (3,400,000 l) of sodium-bearing liquid waste into a stable granular material for permanent disposal.

Oldcastle manufactures the precast concrete base and lid of each vault, while Stoller Inc., a local contractor, casts the concrete walls on site. Each completed vault weighs 255,000 lb (116 tonnes). The vault base weighs 67,000 lb (30 tonnes), and the vault lid weighs an additional 70,000 lb (32 tonnes). The vaults are 14.5 ft × 14.5 ft × 13 ft (4.42 m × 4.42 m × 4.0 m) tall. Each completed vault holds 16 nuclear canisters. Once the vault is loaded with the canisters, the precast concrete lid is lowered into position and the vault is transferred to the separate interim storage building.

Oldcastle developed solutions for several challenges related to this project. For instance, Oldcastle provides cradle-to-grave documentation on all parts and components—aggregate, water, cement, and reinforcing bar—going into the finished product to satisfy NQA-1 nuclear quality control requirements in the project specifications. In addition, the NQA-1 specification requires a concrete unit weight of 143 lb/ft³ (2290 kg/m³). To ensure compliance, Oldcastle designed a new mixture that incorporates a distinct fine aggregate from Jack B. Parsons, a sister company in Utah. All of the nuclear canister storage vaults have passed the on-site gamma scan test. The gamma scan tests for voids and cracks and gives a density profile of the internal components.

Oldcastle, with Stoller Inc., will manufacture the vaults for the project through 2011.
—Source: Oldcastle Precast Inc.

Bentley opens new U.K. headquarters

Bentley Systems Inc. recently celebrated the opening of its new U.K. headquarters in London. CEO Greg Bentley and COO Malcolm Walter hosted the event, which included a reception for Bentley users and colleagues and more than 30 members of the media. Bentley's new premises, in the former Barclay's Bank headquarters building, were designed by BDP, and the project is expected to achieve a very good BRE Environmental Assessment Method rating and silver LEED certification.

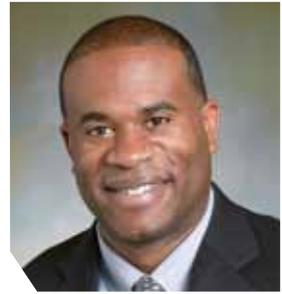
—Source: Bentley Systems Inc.

High Concrete promotes Pullen to president

Melvin D. Pullen Jr. has been promoted to president with High Concrete Group LLC. In this role, Pullen is responsible for the overall operating effectiveness, strategy, and leadership of High Concrete Group LLC, headquartered in Denver, Pa.

Pullen joined High in 2005 and most recently served as vice president of Estimating and Construction Services. He holds a bachelor's degree in civil engineering from the Massachusetts Institute of Technology (MIT) and an MBA from the Florida Institute of Technology. In addition, he is a PCI-certified field auditor and is certified as a Fall Protection Qualified Person through Gravitec Systems Inc.

—Source: High Concrete Group



Melvin D. Pullen Jr.

AltusGroup puts on daylong precast concrete educational programs

AltusGroup is presenting free, full-day educational programs this fall to educate architects and other building team members about modern precast concrete design and new precast concrete technologies.

The “More With Less” program will offer six AIA Health, Safety, and Welfare (HSW) learning unit credits at 16 locations nationwide. Three of the programs will center on effectively evaluating, designing, and specifying carbon-fiber-grid reinforced precast concrete enclosure systems.

The presentations will explain the use of new precast concrete reinforcing materials, mixture designs, rigid insulation profiles, nanotechnology-enabled coatings, and unitized construction. Attendees will learn how to design low-CO_{2e} exterior wall systems that control moisture and improve energy efficiency and sustainability.

Programs presented by veteran building-industry professionals will include Precast Enclosure Possibilities, Sustainable Design and Precast Enclosure Systems, Precast Aesthetics: Managing Cost and Quality, Introduction to CarbonCast Enclosure Systems, Designing with CarbonCast Enclosure Systems, and Project Case Studies.

Interested building professionals can view dates and locations and register for the seminar at www.morewithlesstour.com. A \$50 registration fee will be refunded upon attendance.

—Source: AltusGroup



Oldcastle Precast acquires Enviro-Systems

Oldcastle Precast Inc. has acquired Enviro-Systems Corp. Enviro-Systems, an Arizona-based precast concrete company, specializes in the design, manufacture, and installation of precast concrete sewage treatment systems and equipment, water and wastewater treatment supply and disposal, water treatment consumables, water treatment, and supply equipment products. Enviro-Systems has a 3 acre (1.2 hectare) production site near Scottsdale, Ariz., in the city of Apache Junction, Ariz.. It has served the Arizona market for over 20 years.

The acquisition will provide the Oldcastle Precast–Chandler division in the Phoenix, Ariz., metropolitan area with additional precast concrete products.

—Source: Oldcastle Precast Inc.

Several Brazilian universities join Bentley's Be Careers Network

Federal University of São Carlos and Federal University of Rio de Janeiro in Brazil have joined Bentley's Be Careers Network.

Through this program, students and educators gain access to professional-grade software and training. The Be Careers Network provides a software suite that encompasses the full range of infrastructure disciplines, blended learning that includes technology training via online learning, professional networking via the Be Communities networking site, scholarships, and more.

—Source: Bentley Systems Inc.

Tekla North America BIM winners announced

Tekla Structures has chosen the winners of its 2011 North America BIM Awards held in conjunction with Tekla's annual North America User Meeting, August 11–13, 2011, in Las Vegas, Nev.

The competition is open to all Tekla users who have modeled projects with the software during the preceding year.

This year drew a record number of Tekla Structures users, who submitted their three-dimensional models in the categories of BIM, Steel, and Concrete. Participants submitted web models, descriptions of their projects, photos, and other supporting material. Online voting opened to the public before the 2011 Tekla North American User Meeting. The top projects then went to a panel of three industry judges.

The BIM winner was the DPR Construction and IPD Team with the Sutter Alta Bates Patient Care Pavilion addition in Oakland, Calif., a \$298 million, 13-story patient care pavilion and future home of more than 200 licensed beds beginning January 2014.

The Concrete winner was Contratistas Civiles y Mecánicos SA with Galería 360, a 1,045,175 ft² (97,100 m²) commercial mall currently under construction in Santo Domingo, Dominican Republic.

The Steel winner was InteliBuild, a division of Canam Group, with the new Marlins ball-park retractable roof in Miami, Fla.

Winners and all submissions are posted online at www.tekla.com/us/Documents/BIM-awards-2011/categories.html.

—Source: Tekla Corp.

International Precast Solutions becomes 14th member of AltusGroup

International Precast Solutions of River Rouge, Mich., has become the 14th precaster in AltusGroup and has begun marketing CarbonCast Enclosure System products in the upper Midwest.

International Precast Solutions is a member of The Prestressed Group, and the company will be licensed to sell CarbonCast Insulated Architectural Cladding, CarbonCast High Performance Insulated Wall Panels, and CarbonCast Architectural Cladding.

—Source: AltusGroup

Geospatial World honors Bentley with Lifetime Achievement Award

Geospatial World, published by India-based Geospatial Media and Communications Pvt. Ltd., has honored Greg Bentley, CEO of Bentley Systems, with its Lifetime Achievement Award. The award recognizes individuals for their outstanding contributions to geospatial communities worldwide.

Geospatial World holds conferences around the globe and presented the award to Bentley at its first Latin American Geospatial Forum in Rio de Janeiro, Brazil. It recognizes and honors mapping agencies, professional societies, companies, individuals, and programs for their contribution toward the inception, development, and growth of geographic information tools, products, and applications that help make geographic information a public commodity.

—Source: Bentley Systems Inc.

Enerpac acquires PocketSHEAR and PocketCAP product lines

Enerpac has acquired all manufacturing and commercial rights to the PocketSHEAR and PocketCAP product lines for use in the installation of post-tensioned concrete. PocketSHEAR products cut the metal steel unbonded tendon tails after post-tensioned concrete is formed, placed, and stressed. PocketCAP can then be used to seal the tendons, providing a protective cap for moderate to highly corrosive environment applications and delivering an additional level of protection against corrosion.

These two tendon finishing product lines compliment the Precision SURE-LOCK prestressed and post-tensioning wedge and anchor lines currently produced by Enerpac. Engineering control and manufacturing for PocketSHEAR and PocketCAP have now been moved to the Precision SURE-LOCK facility in Dallas, Tex. When shipments begin this fall, all PocketSHEAR and PocketCAP products produced by Enerpac will be backed by the Enerpac Global Lifetime Warranty.

— Source: Enerpac

Bentley to offer educational user sessions at Ecobuild America in December

Bentley Systems is offering new technology user sessions at Ecobuild America, December 5–9, 2011, in Washington, D.C. As part of Ecobuild's Conference within a Conference series, the Tech Users Sessions will run throughout the event.

The educational sessions are oriented toward current and prospective users of Bentley software systems.

The sessions include Sustainable Parametric Design, Environmentally Sustainable Design: Going from Green to Truly High-Performance, BIM to SIM, Big BIM-Connecting Project Teams, Information Modeling in Transportation and Site Design, and Inspiring Project Case Studies—Sustaining Infrastructure.

— Source: AEC Science & Technology LLC

Tindall announces promotions and hires



Joel A. Sheets

Joel A. Sheets has been promoted to vice president and general manager of the Utilities Business of Tindall Corp. in Spartanburg, S.C., and Robert A. Smith Jr. was promoted from plant manager to operations manager for the South Carolina division of Tindall Corp. Scott Boling joined Tindall Corp. in July of this year as plant manager for the South Carolina division manufacturing operations.

Sheets graduated from Clemson University in 2001 with a bachelor's degree in civil engineering and joined Tindall following graduation.

Smith is a 2003 graduate of Virginia Polytechnic Institute and State University with a bachelor's degree in industrial and systems engineering. In his new role, he will be responsible for manufacturing operations, field services, and project management.

Boling brings more than 34 years of industry experience to Tindall.

—Source: Tindall Corp.



Robert A. Smith Jr.

Lafarge introduces PLC in Canada

Lafarge recently introduced a new portland-limestone cement (PLC) in Canada. Widely used in Europe for more than 25 years, PLC is a new category of cement that provides performance similar to conventional portland cement with up to 10% less carbon dioxide emissions.

Approved for use by the Canadian Standards Association, the National Building Code of Canada, and the British Columbia, Ontario, and Quebec Building Codes, PLC is produced by intergrinding portland cement clinker with between 6% and 15% limestone, well below the 35% maximum limestone content in European cements. The new cement will achieve performance comparable to regular portland cement in terms of concrete workability, set time, durability, and strength development at all ages. Because of these performance similarities and the significant sustainability advantages, Lafarge will start the transition from regular portland cement to PLC this year. Customers in British Columbia, Ontario, and Quebec are currently being supplied PLC from Lafarge's plants in Richmond, BC, and Bath, ON. Product introduction to other provinces will occur as additional testing and updates to local building codes are completed, which is expected to occur by the end of 2012.

With the potential to bring about a 10% reduction in greenhouse gas emissions, the production of PLC at Lafarge's Richmond and Bath Cement Plants alone is expected to reduce carbon dioxide emissions by 160,000 tonnes (180,000 tons) annually, which is equivalent to taking more than 30,000 cars off the road. In addition, concrete containing combinations of PLC and varying levels of supplementary cementing materials (up to 50%) will permit further reductions in the carbon footprint.

— Source: Lafarge North America



Scott Boling

High introduces high-solar-reflectance precast concrete

High Concrete Group LLC of Denver, Pa., has introduced a new high-solar-reflectance concrete mixture design that significantly improves the heat reflectance of precast concrete surfaces, causing them to stay cooler. The mixture design has a solar reflective index (SRI) of 82, nearly doubling the SRI of the company's conventional gray concrete mixtures.

High-solar-reflectance precast concrete helps buildings reflect rather than absorb solar radiation, supporting the sustainable design goals of project teams working in new commercial, institutional, and other construction. The solar reflectance of a building's exterior surfaces affects its contribution to the urban heat island effect. High-solar-reflectance precast concrete can also be used to reverse the urban heat island effect.

High developed the high-solar-reflectance concrete mixture design with partner BASF using 75% white cement and 25% slag cement, a recycled material, for the cementitious content. Local limestone aggregates provided a neutral-colored base. The SRI of 82 was achieved on a form-finished, white concrete block sample.

The high-SRI concrete mixture is available for specification in High's architectural precast concrete wall panels. Precast concrete sandwich panels, including the company's line of CarbonCast and traditional insulated architectural precast concrete enclosure products, can be used to build a thermally efficient enclosure. The mixture can also be specified for High's MEGA-Tee precast concrete double-tees, and CarbonCast double-tees, which make up the driving surface of precast concrete parking structures.

—Source: High Concrete Group [f](#)



This white concrete block sample of High Concrete Group's new high-solar-reflectance precast concrete has a solar reflective index of 82. Courtesy of High Concrete Group.

Compiled by K. Michelle Burgess (mburgess@pci.org)