

### >>

## Bentley gets structural analysis software business

Bentley Systems Inc. recently announced that it has acquired the Structural Analysis Computer System (SACS) business from Engineering Dynamics Inc.

SACS is an integrated finite element structural analysis suite of programs that provides for the design, fabrication, installation, operations, and maintenance of offshore structures, including oil platforms and wind farms.

—Source: Bentley Systems Inc.

## EnCon Utah awarded Tooele County Correctional Facility project

EnCon Utah, a precast concrete manufacturer and supplier of architectural and structural precast, prestressed concrete products, located in Tooele, Utah, was recently awarded the Tooele County Correctional Facility project by Sahara Inc., a professional construction services company in Bountiful, Utah.

EnCon Utah is an integral part of the design-build delivery process for this project. This process requires coordination of building information management efforts among EnCon Utah; GSBS Architects and DUNN and Associates Engineers, both in Salt Lake City, Utah; and EnCon Design LLC, in Denver, Colo. EnCon Utah is a member of the design team, participating in budget decisions and working closely with the design-build team to maintain budget and schedule during the delivery of this project.

This design-build project, which will use a three-dimensional overlay solution for project geometry and erection sequencing, will be made up of 273 precast concrete pieces and a total of 57,000 ft<sup>2</sup> (5300 m<sup>2</sup>) of wall panels. It will consist of interior solid precast concrete wall panels and exterior CarbonCast insulated thermally efficient load-bearing structural shear wall panels—the first in Utah.

Erection is expected to begin at the end of April.

—Source: EnCon Design LLC

## Spancrete Machinery names Willems vice president, general manager

Spancrete has named Dan Willems vice president and general manager of Spancrete Machinery Corp., where he will oversee every operational aspect, including sales initiatives and manufacturing excellence.

Willems is now responsible for developing corporate strategy and improving business operations for the machinery division, which includes increasing sales, identifying new revenue streams, improving manufacturing quality, and growing the parts and service business.

—Source: Spancrete



**A \$275,000 investment in water temperature control reduces emissions from High Concrete Group's Denver, Pa., batching operations. Courtesy of High Concrete Group.**

## High Concrete Group greens water delivery

High Concrete Group LLC has invested \$275,000 in high-efficiency water heating, chilling, and recovery equipment for its Denver, Pa., headquarters manufacturing operations.

The new system delivers water to the company's concrete batching operations for ideal concrete casting temperature throughout the year and in cold weather supplies process water for heat curing of precast concrete double-tees for parking structures.

The system scavenges heat from exhaust gases and supplements primary heating in a tank. Redundant burners ensure fail-safe operation. The system significantly reduces natural-gas consumption during reheat mode, which occurs during about 50% of the plant's wintertime operating hours.

In summer, chilled water overcomes excess temperatures of powder products and sand and stone aggregates, and facilitates the use of additional water from High's water-reclamation system during the summer, taking the place of potable city water.

The company also plans to use the system to achieve increased consistency in architectural finishes and to meet transportation departments' concrete mixture temperature standards for precast concrete bridge fabrication.

The water-management equipment is the latest in a series of High's investments in sustainable processes, which include a \$750,000 water-reclamation system and a \$4.1 million LEED silver-certified maintenance facility on its Denver campus constructed with the company's lightweight CarbonCast enclosure and double-tee components.

—Source: High Concrete Group LLC

## Spancrete expands sales force

Spancrete has added Augustine Chung and promoted Clinton Krell to fill its sales team in Wisconsin and Illinois.

With more than 15 years of precast concrete construction experience, Chung joined Spancrete as a sales manager for the Chicago, Ill., area. He is a LEED AP and, over the course of his career, has worked on more than 1000 precast concrete building projects, including the construction of two LEED silver-certified structures.

In his new role, Chung will provide expertise and continue to grow precast concrete sales in Illinois with a strong focus on total-precast concrete structure solutions.

Krell, who began his career at Spancrete 11 years ago, was recently promoted to sales representative covering southwest Wisconsin. Most recently, he served as the director of precast project development and education.

In his new role, Krell will use his technical engineering background coupled with knowledge of precast concrete structure design to promote Spancrete and the precast concrete value solution.

—Source: Spancrete



**Augustine Chung**



**Clinton Krell**

## Wells Concrete welcomes Juntunen as CEO

Wells Concrete has named Dan Juntunen president and chief executive officer of Wells Cos., including Wells Concrete.

Juntunen is charged with meeting revenue and profit goals while maintaining Wells Concrete's core competencies with the fiscal responsibility his experience as chief financial officer affords him.

Juntunen joined Wells Concrete as chief financial officer in March 2007. The financial role Juntunen vacated will be filled as he completes his transition.

—Source: Wells Concrete

## Bentley wins awards for software, social media

Bentley Systems Inc.'s GenerativeComponents V8i technology preview and use of social media received top honors at the Construction Computing Awards 2010 event also known as The Hammers V) at the Tower Hotel in London, England. The GenerativeComponents V8i technology preview was named CAD Product of the Year, and Bentley also won the award for Best Use of Social Media 2010.

Bentley's STAAD(X) software was recognized as runner-up in the Structural Analysis of the Year category, and its Hevacomp building performance products were named runner-up in the Building Services Product of the Year 2010 category.

In addition, the Bentley Navigator V8i software for iterative project review won a 2011 *Constructech* Top Products Award in the Trusted Product category during the Associated General Contractors of America's 92nd annual convention in Las Vegas, Nev. The award honors technology solutions that have demonstrated the greatest innovations geared toward the construction market.

—Source: Bentley Systems Inc.

## Waffle-Crete system used in Haiti reconstruction

Waffle-Crete International Inc. recently announced that international construction company Construction Demathieu & Bard (CDB) has selected the Waffle-Crete portable precast concrete building system as one of the core elements of its strategy to secure a lead role in Haiti's reconstruction effort.

Haiti suffered extensive damage from a deadly earthquake in January 2010 and widespread flooding caused by a hurricane the following November. Based in Metz, France, CDB is currently working with government and commercial contacts in Haiti to develop a reconstruction strategy in response to these disasters.

Waffle-Crete construction has passed rigorous testing for extreme wind and seismic loads, a prerequisite for its selection by CDB. In addition, Waffle-Crete wall and roof panels can be cast directly on the jobsite one day and then erected the next.

The Waffle-Crete system requires only half of the concrete and steel of solid panels of the same thickness while providing comparable structural strength. Waffle-Crete's combination of disaster resistance, short construction time, and low material costs will help CDB deliver affordable, long-lasting homes. The system's reduction in raw-material use also makes construction more sustainable than many alternatives.

—Source: Waffle-Crete International Inc.

## Oldcastle plant celebrates safety milestone

On February 4, 2011, employees of Oldcastle Precast Inc.'s Toccoa, Ga., plant celebrated 10 years without recording an OSHA-regulated lost-time accident, a streak that began on January 22, 2001.

The company manufactures precast concrete utility vaults, sanitary and storm manholes, and box culverts that are used in multiple industries.

Oldcastle Precast's safety and health program includes significant employer commitment, an active safety and health committee, job-safety analysis, identifying hazards, near-miss hazard reports, behavior-based safety observations, and regular safety and health training.

The company also has in place a Safety Program Ownership system composed of 21 separate safety programs, each of which has a specific owner who is responsible for implementation and success of his or her program. In addition, extensive audits and inspections of the facility are completed on a regular basis.

The Oldcastle Precast manufacturing plant in Toccoa employs about 20 people.

—Source: Oldcastle Precast Modular

### HENRY R. MANIACE SR.



Henry R. Maniace Sr., a lifelong member of PCI and a pioneer in the precast concrete industry, died March 11, 2011. He was 86.

Maniace was president and owner of New England Concrete Pipe Corp. in Newton, Mass., one of the first companies to use prestressed concrete in modern building construction.



**This rendering shows plans for the new Dulles Corridor Metrorail Project. High Concrete Group is producing architectural cladding enclosures for the project. Courtesy of High Concrete Group LLC.**

## Dulles Metrorail selects High Concrete Group

High Concrete Group LLC is producing architectural cladding enclosures for the new Dulles Corridor Metrorail Project. Planned for completion in 2013, the 325,000 ft<sup>2</sup> (30,200 m<sup>2</sup>) transit project includes thermally efficient precast concrete enclosures for five new metro station buildings, six entrance pavilions, and two ventilation structures. Erection will start in spring 2011.

The precast concrete panels and related components are being produced at High Concrete Group's Denver, Pa., plant. The cladding will feature a utility-sized brick veneer finish in two colors. About one-third of the panels will be CarbonCast insulated sandwich designs that provide continuous insulation for thermal efficiency. Made with C-GRID shear trusses, the sandwich panels provide fully structural composite action and high insulation value by sandwiching a layer of rigid extruded polystyrene foam.

High Concrete Group was awarded the contract of more than \$20 million by Dulles Transit Partners LLC of Vienna, Va., which is the project designer, engineer, and general contractor. The contract is part of the first phase of the Metropolitan Washington Airports Authority's two-phase 23 mi (37 km) extension of the existing Metrorail system from East Falls Church, Va., to Washington Dulles International Airport west to Ashburn, Va. The first phase is under way with efforts concentrated in Tysons Corner, Va., and is scheduled for completion in 2013.

—Source: High Concrete Group LLC



**Justin Lyons**



**Hendrik Bennink**

## Lyons takes over Nitterhouse sales in New Jersey and New York

Nitterhouse Concrete Products Inc. in Chambersburg, Pa., recently announced the transition of sales coverage for New Jersey and New York, N.Y.

Hendrik Bennink, a Nitterhouse sales consultant from Red Bank, N.J., covering the New Jersey and New York City areas, will be turning over the reins to Justin J. Lyons. Bennink will remain involved with Lyons on a limited, consultative basis.

Lyons, a five-year Nitterhouse veteran, will handle all new inquiries for precast concrete design assistance and proposals in New Jersey and New York City.

As Bennink's interim partner, Lyons's main responsibilities will include providing service to new and existing clients; personal consultation with developers, designers, and other construction professionals in the design of precast, prestressed concrete structures; and providing guidance and construction recommendations for users of precast, prestressed concrete products.

—Source: Nitterhouse Concrete Products Inc.

## Chatham County Detention Center expands with Oldcastle Precast Modular cells

Oldcastle Precast Modular, currently working with Hunt/Mills, a joint venture, will provide the precast concrete prison cells and building components for the new \$71 million, 330,000 ft<sup>2</sup> (31,000 m<sup>2</sup>) expansion of the Chatham County Detention Center in Georgia.

There are 1901 inmates in the Chatham County Detention Center, which was designed to hold only 1224 inmates. Another 300 beds have been added in a temporary housing unit. The expansion project will include precast concrete prison cells to accommodate 852 new inmate beds in two- and four-level housing pods, which will bring the total number of inmate beds to 2100.

The expanded facility will also include courtrooms, court holding, prebooking, a medical clinic and infirmary, laundry, a plating kitchen, street operations, a warehouse, a commissary, and a building for freestanding video visitation, which will replace in-person visitation.

Oldcastle Precast Modular is supplying fully outfitted rear chase precast concrete cells that will include electrical fixtures, detention furniture, plumbing fixtures, and interior wall paint. Each of the 280 two-bunk precast concrete cells is designed with a rear chase to allow maintenance personnel access to the mechanical systems without disrupting the prison population's daily routines.

Oldcastle Precast will also supply 144 rear-chase, 4-bed dorm rooms; 80 multipurpose rooms; and 88 plenum modules.

The detention center is expected to be the most costly capital project in Chatham County's history.

The detention center was designed by Pennsylvania-based L. Robert Kimball & Associates.

—Source: Oldcastle Precast Inc.



Montclair State University dorms in Montclair, N.J., will be clad with load-bearing, thermally efficient CarbonCast walls. Rendering: Design Collective, Inc.

## High Concrete dorm uses horizontal load-bearing enclosure panel

At Montclair State University in Montclair, N.J., many incoming students will be living in a dormitory enclosed with a load-bearing, thermally efficient CarbonCast exterior wall system. This proven design, based on the system from the AltusGroup Inc. partnership of precasters, is being fabricated by AltusGroup founding member High Concrete Group LLC of Denver, Pa.

The CarbonCast wall system encapsulates 3 in. (7.6 cm) of rigid foam insulation between concrete wythes that are secured with AltusGroup's proprietary C-GRID carbon fiber shear truss to deliver a uniform *R*-value of 15. The low thermal conductivity trusses transfer shear forces between the concrete wythes, making panels fully composite with both wythes handling wind and seismic loads.

While AltusGroup pioneered the use of patented interior pilasters for load-bearing vertical wall panel applications, the interior wythes of these architecturally detailed horizontal panels are thickened to 6 in. (150 mm) to accommodate their unique structural load-bearing condition.

The design architect on the project is Design Collective Inc. of Baltimore, Md., and PS&S of Warren, N.J., is the architect of record. The general contractor on the project is Terminal Construction Co. of Wood-Ridge, N.J.

—Source: High Concrete Group

## Tindall appoints Howell energy sales representative

Tindall Corp. has appointed Peyton Howell, LEED AP, to the position of energy sales representative within its Utilities Division. Howell has assumed responsibility for business development and technical sales encompassing the power industry and energy markets, with a specific focus on nuclear, fossil, and wind.

—Source: Tindall Corp.



Peyton Howell



**This rendering shows the DASH William B. Hurd Maintenance Operations and Administration facility in Alexandria, Va. High Concrete Group LLC was subcontracted to fabricate insulated wall panels and precast concrete double tees for the project. Courtesy of High Concrete Group.**

## High Concrete project receives contractor award

The new \$35 million, 160,000 ft<sup>2</sup> (15,000 m<sup>2</sup>) DASH William B. Hurd Maintenance, Operations and Administration facility in Alexandria, Va., won recognition for Hensel Phelps Construction Co. in the 10th Annual Washington Contractor Awards.

High Concrete Group LLC was subcontracted to Hensel Phelps to fabricate thermally efficient CarbonCast high-performance insulated wall panels and precast concrete double tees for the project.

Dedicated in the fall of 2009, the new DASH facility is the first transit facility in Virginia to be constructed using the design-build method of delivery. The facility was designed to achieve LEED silver certification. Named for Alexandria civic leader and Alexandria Transit Co. board member William B. Hurd, the facility was completed on time and below budget.

—Source: High Concrete Group LLC



**Dirk McClure**

## Enterprise names McClure regional director of Sales and Business Development

Enterprise Precast Concrete Inc. has opened a new sales office in Kansas City, Mo., and has hired Dirk McClure, LEED AP, Assoc. AIA, CSI, to manage the sales territory of Missouri, Kansas, and Oklahoma.

McClure will work with John Arehart, Enterprise's vice president and general manager, in the areas of sales and developing client relationships.

McClure is a member of the Leadership PCI Class of 2009 and currently sits on PCI's Sustainability Committee.

—Source: Enterprise Precast Concrete Inc.

## Oldcastle manufactures sewer pipes and fittings for I-95 ramp in Philadelphia

Oldcastle Precast Inc. of Croydon, Pa., has been contracted by Tony DePaul & Son of Blue Bell, Pa., to design, engineer, and manufacture custom precast concrete pipe and fittings to replace a proposed junction chamber at the Interstate 95 (I-95) Cottman Avenue Interchange in northeast Philadelphia, Pa. The contract is part of a \$31.9 million project, financed with 90% federal and 10% state funds, to reconstruct I-95.

New water, sewer, and gas mains are mostly in place beneath Cottman Avenue, and work is continuing on the first of two phases in the Cottman Avenue interstate improvement plan. The project involves building two new highway ramps, replacing sewer lines, and relocating water and gas lines as work is done on the roadways and improving surface roads, including two one-way roads that became two-way, to divert traffic away from residential areas and improve access to I-95.

Oldcastle Precast manufactured 1154 linear ft (351.7 m) of precast concrete pipe for the new sewer line: 352 linear ft (107 m) of 48 in. (1220 mm) pipe, 472 linear ft (144 m) of 54 in. (1370 mm) pipe, and 330 linear ft (100.6 m) of 84 in. (2130 mm) pipe.

In addition, Oldcastle Precast worked with DePaul to produce special precast concrete fittings for the sewer line. Their challenges included an 84 in. (2130 mm) bend, 84 in. × 54 in. (2130 mm × 1370 mm) wye fittings, and two 84 in. × 15 in. (2130 mm × 380 mm) fittings. The custom precast concrete fittings for the sewer line eliminated the need for a poured-in-place concrete junction chamber, allowing the work to get done as soon as possible. All pipe and fittings were installed by Nello Construction Co., a subcontractor of Tony DePaul & Son.

Crews expect to complete the first phase of the work in August 2011.

—Source: Oldcastle Precast Inc.

## Metromont names Pastorius VP of Sales and Estimating

Chris Pastorius has accepted the position of vice president of Sales and Estimating for Metromont Corp. Pastorius will lead the sales, estimating, and marketing teams.

Prior to joining Metromont, Chris spent 20 years with Oldcastle Precast. He held several senior management positions, most recently vice president of Sales and Marketing for Oldcastle Precast Building Systems. Chris also serves as a board member for PCI and is the immediate past chairman of AltusGroup.

—Source: Metromont Corp.



Chris Pastorius

## Finrock signs contract for Virginia parking structure

Finrock Construction Inc. has signed a contract with Edens & Avant to deliver a parking structure for Mosaic, a 31-acre (12.5 ha) mixed-use development designed to revitalize the Merrifield area of Fairfax County, Va.

Mosaic will comprise more than 400,000 ft<sup>2</sup> (37,000 m<sup>2</sup>) of retail, 1000 residential units, 65,000 ft<sup>2</sup> (6000 m<sup>2</sup>) of offices, two parks, two boutique hotels, and an eight-screen art-house cinema.

Finrock is providing complete design-build services for the \$12 million, seven-level parking structure.

—Source: Finrock



**Tindall Corp. has received certification from Germanischer Lloyd for the Atlas CTB concrete tower base. Courtesy of Tindall Corp.**

## Tindall wind tower base earns GL certification

Tindall Corp., in Spartanburg, S.C., has received certification from Germanischer Lloyd (GL) for the Atlas CTB concrete tower base.

The certification is an important milestone in the development of advanced wind-tower technology that will allow the wind industry to extend hub heights above 100 m (328 ft) to generate more power.

The Atlas CTB has met guidelines for erection of a prototype based on a plausibility check of the design documentation.

—Source: Tindall Corp.

## Francies moves to A. L. Patterson

Skip Francies has joined A. L. Patterson Inc., in Fairless Hills, Pa., as president of the newly formed ALP Precast Division.

Francies has been involved with the precast, prestressed concrete industry for more than 40 years and is known for many publications on the lifting and handling of precast concrete products.

During his distinguished career, he has established himself as one of the leading experts in the industry, holding 14 patents and developing many products that have improved the way precast concrete products are manufactured.

Francies will be responsible for sales, marketing, product development, and services for ALP Precast Division throughout North America.

A 30-year PCI member who has served on PCI's Board of Directors, Francies has contributed his time and knowledge by participating on many technical committees as well as holding seminars on how to safely lift precast concrete products.

—Source: A. L. Patterson Inc.

## AdvancED uses CarbonCast

Educational accreditation organization AdvancED is manufacturing its \$10.5 million, 60,000 ft<sup>2</sup> (5600 m<sup>2</sup>), worldwide corporate office building in Alpharetta, Ga., with 15,100 ft<sup>2</sup> (1400 m<sup>2</sup>) of CarbonCast high-performance insulated wall panels.

Each exterior precast concrete panel is composed of inner and outer concrete wythes connected by C-GRID epoxy-coated fiber grid for shear transfer. The relatively low conductivity of C-GRID prevents thermal bridging and enables edge-to-edge, continuous insulation for a thermally efficient building envelope. The wall panels incorporated 4 in. (102 mm) of expanded polystyrene insulation for an *R*-value of 12 to meet ASHRAE-90.1 requirements for a mass wall with continuous insulation.

The facade incorporates both a retarded and sandblasted finish. For the entryways, polished granite veneer was cast into the wall panel and attached with stainless steel pins. Casting the granite into the wall at the plant sped the schedule and reduced the number of workers on site.

The CarbonCast panels also incorporate recycled materials and are strategically positioned towards the sun to increase energy efficiency.

—Source: AltusGroup



**Stresscon erects precast concrete walls for the new Fort Collins Museum and Discovery Science Center in Fort Collins, Colo. Courtesy of Encon Design LLC.**

## Stresscon erects museum and science center

Stresscon Corp., one of the EnCon Cos.' fabrication plants, is in the midst of erecting walls for the new Fort Collins Museum and Discovery Science Center in Fort Collins, Colo.

Hensel Phelps, the general contractor for the project, is constructing the building for the City of Fort Collins and is using EnCon's 7-in.-thick (180 mm) Structural Plus Walls in cinnamon color for the shell. The walls, which were manufactured at the Stresscon plant in Dacono, Colo., consist of 97 individual precast concrete sections, the largest of which is 42 ft (12.8 m) tall. Installation was finished six days ahead of schedule.

The unique building that will house the museum is laid out like a piano.

The City of Fort Collins Museum and the nonprofit Discovery Science Center, which merged in 2009, plan on installing several exhibits in the 47,000 ft<sup>2</sup> (4400 m<sup>2</sup>) building shell, including the world's most technologically advanced large-format 360-degree theater, called a digital dome.

—Source: EnCon Design LLC

## Gate Concrete Products Co. changes name

Gate Construction Materials Group, a provider of architectural and structural precast concrete products, recently announced that all of its eight manufacturing facilities will operate under the name Gate Precast Co.

The Gate Concrete Products Co. name has been used since 1980 on Gate's structural precast concrete plants in Jacksonville, Fla., and Pearland, Tex.

The name change reinforces the company's long-term strategy to advance its management, operational, sales, and technical capabilities and more closely aligns and strengthens the identity of each of its manufacturing facilities.

—Source: Gate Precast Co.

## Oldcastle awarded contract for Graterford prison cells

Oldcastle Precast Modular has been awarded the precast concrete cell contract for the new State Correctional Institution Graterford East and West project in Pennsylvania. The new \$365 million prison will be one of the largest correctional projects in progress in the United States. The new east facility will incorporate more than 2100 level-4/level-5 maximum-security beds and the new west facility will include 2000 level-3 medium-security beds.

Oldcastle Precast is contracted to design, engineer, manufacture, and erect the 2112 precast concrete cells and 68 bare shower modules for the main housing units, which will incorporate single- and double-occupancy cells.

A special feature of the precast concrete cells will be a secure, monolithically cast ceiling. Oldcastle is manufacturing the 7 ft 6 in. (2.3 m) secure ceiling by casting monolithically with the upper cell modules to prevent inmate access to the mechanical areas. In addition, Oldcastle is installing the detention furniture, sliding door frames, lights, windows, interior wall paint, exterior wall insulation, and formliner finish. The cells will be delivered to the site and erected.

Walsh Construction and Heery International are the principal builders of the new prison, which is designed as a multibuilding complex including main housing units, administration, security, health services, dietary services, maintenance shops, chapel and treatment, learning resources, inmate activities and recreation, guard stations, sally ports, and a central plant.

The new facility, with a total capacity of just over 4000 male inmates, will be designed to achieve LEED certification, utilizing stormwater runoff and local, low-impact materials.

This will be Pennsylvania's first LEED-certified prison and is tentatively expected to open in 2014.

The project architect of record is Astorino, Heery Design Group, and KZF Design.

—Source: Oldcastle Precast Modular



**Wally Sanger**

## Metromont acquires Royal Concrete Concepts

Metromont Corp. has acquired a majority interest in Royal Concrete Concepts (RCC) in West Palm Beach, Fla.

Royal Concrete Concepts was founded by Wally Sanger in south Florida in 1989. The company manufactures custom precast concrete modular building systems for residential, educational, commercial, and military projects and provides turnkey construction services for domestic and international markets.

RCC recently expanded with a new state-of-the-art manufacturing facility on a 180 acre (73 ha) site in Okeechobee, Fla.

Metromont currently has manufacturing facilities in Greenville, S.C.; Atlanta, Ga.; Nashville, Tenn.; Charlotte, N.C.; Richmond, Va; and Bartow, Fla. Metromont's primary market segments include schools, office buildings, data centers, parking structures, industrial plants, justice facilities, and stadiums.

—Source: Metromont Corp. ¶

**Compiled by K. Michelle Burgess (mburgess@pci.org) and Rory Cleveland**