Molin Concrete Products 415 Lilac St. Lino Lakes, MN 55014

651-786-7722 651-786-0229 Fax 1-800-336-6546 www.molin.com

July 2008 Volume 45

#### INSIDE:

Molin Engineering Highlight: Saint Paul Monastery

<u>Project</u> DSF Ice Arena Addition Prior Lake, MN

## Molin Welcomes Marc Mueller

New Additions to our Website

Molin Volunteers with 35W Bridge Education



## "Building" Customer Satisfaction Through Generations of Teamwork



## DSF Ice Arena Addition Prior Lake, MN

## **REMINDER!**

Mark your calendars for September 17th to attend our Molin <u>Open House and Plant Tour</u> from 10am - 2pm!



# www.molin.com

## MOLIN DESIGN/ENGINEERING DEPT. SAINT PAUL MONASTERY

Van Sickle, Allen, & Associates, Pope Associates, McGough Construction, and Molin Concrete Products Co. recently teamed up to develop a new monastery that meets the needs of the Benedictine community. The facility, located in Maplewood, MN will include housing, a health fitness center, a chapel, and a dining area. In addition to the new monastery, affordable family and senior housing is also being planned for the site. The old monastery will be remodeled for use by the Tubman Family Alliance.

During the two years that the monastery was in development, there were many revisions to the design of the project. The engineering challenge was the removal of columns that were necessary to the structure, but blocked the drive path in the underground parking. The design team at Molin Concrete was able to offer a design solution with structural precast, which allowed a 66' column-free space. Precast concrete transfer beams spanning from the elevator shaft to the exterior foundation walls were used to support the main beam line. This solution allowed 4 columns to be eliminated which would have supported nearly 1 million pounds.

Structural wall panels also played a key role in the monastery structure. The project utilized structural foundation wall panels that were able to be installed quickly. Due to the nature of precast concrete installation: the beams, columns, and hollow core were all set concurrently. A unique feature was the use of precast structural wall panels to create the Bell Tower. The Bell Tower was made up of 24' tall panels stacked on top of 50' tall panels, which were tied together by a precast slab. The Bell Tower is designed to be structurally independent from the rest of the building and is a brilliant focal point for the structure.



The Bell Tower stands almost 80' high



Precast transfer beams allowed the elimination of various columns

### INTRODUCING MARC MUELLER MIDWEST BUSINESS DEVELOPMENT



Marc Mueller

Molin Concrete Products would like to welcome Marc Mueller to the Business Development Team. Marc will be playing an integral role for the company as the company further develops its market position in the Midwest.

Marc's background in the construction industry will compliment his position at Molin. Marc graduated from the University of Central Missouri with a degree in Construction Management. Upon graduation Marc was employed with Walton Construction in Missouri as a project manager. Projects that Marc had the pleasure of working on included: the Harry S. Truman Library, the Kansas City International Airport, the Rockhurst High School Football Stadium, as well as various waste water treatment plants.

When not working, Marc likes to stay active with family activities and being outdoors. Marc has been married 11 years to his wife Ellen, and they have a 6 year old daughter Emma. He enjoys fishing, camping, and SCUBA diving. He lives in the Kansas City area. Welcome Marc!

## PROJECT HIGHLIGHT

#### DSF ICE ARENA ADDITION - PRIOR LAKE, MN

Molin Concrete is working with Shingobee Builders on an expansion on the Dakotah! Sport and Fitness Facility in Prior Lake, MN. The Dakotah! Sport and Fitness Facility is a vast 160,000 Sq. Ft. structure that houses an indoor track, aquatic center, ice arenas, and many other fitness amenities.

This new facility will feature a new sheet of ice, multiple mezzanine levels, seven locker rooms, new concession areas, and various offices and meeting rooms. The space will be completely changeable to allow use in the off-season. It will also offer space for events to take place while the original DSF Ice Arena will be renovated. The future renovation is also planning on using precast concrete stadia components to use the space more efficiently below the bleachers.

The owner and designers worked early on to make this a "green" project and has many "green" features. The roof will consist of a 30,000 Sq. ft. Green Roof, which will include live plants, will also effectively treat storm water. Skylights are included to provide more natural lighting to the arena space. The project will also feature an innovative process of recovering and converting waste heat from the ice-making process in to heating for the bleacher seating.

Precast Concrete played a significant role in the project: aiding the short time line, as well as demonstrating how precasters can team up for projects. The timeline for construction was less than a year, in order to open on October 1st, 2008. Precast, with its short lead times, dramatically shortened the schedule for the project. Molin Concrete Products provided the structural precast components: Hollow Core Plank, Raker Beams, Columns and Stadia sections. Fabcon provided serpentine Architectural Wall Panels which gave the building a beautiful radius look.

Architect: HTG Architects Engineer: Clark Engineering GC: Shingobee Builders Inc. Precasters: Molin Concrete Products, Fabcon Owner: Shakopee Mdewakanton Sioux Community

<u>Product:</u> Hollow Core Plank: 24,830 Sq. Ft Beams & Columns: 977 L.F. Stadia: 2,382 Sq. Ft.



WEBSITE UPDATES STADIA DETAILS & SUSTAINABLE BUILDING VIDEO

## www.molin.com

Molin Concrete Products is proud to announce that we have recently updated our website with some additions. First, we have updated the Stadia Design section to include an updated Stadia Cross Section as well as 10 new Stadia Connection Details. Also, we have uploaded a video to our Sustainable Design section (on the Home Page). The video is from the Precast/Prestressed Concrete Institute and explains how Precast Concrete lends itself well to Green Building practices. Visit the site today! TOURS/EVENTS SCHEDULE YOURS NOW

#### Upcoming Events

Sept. 17th	
Oct. 5-9	
Nov. 11-13	

MOLIN OPEN HOUSE PCI National Convention MN AIA Convention

Call Molin to schedule a lunch box presentation or plant tour today! 651-786-7722

#### MOLIN VOLUNTEERS WITH 35W BRIDGE EDUCATION

Employees of Molin Concrete Products recently volunteered in an educational event that featured the 35W bridge construction project. The purpose of the event was to educate the public and school children in the construction process and all of the elements involved. The event was coordinated in part with AGC Minnesota as well as the Construction Leaders Council.

The 5th Graders from the metro area that took part in this program were exposed to a wealth of information. The students were treated to a PowerPoint presentation that went over the basics of the bridge construction. By the end of the talk, the kids were able to understand the process of how the bridge was being constructed, as well as job safety, and the materials that went in to the project. After the PowerPoint, the students made tiles with decorative recycled glass pieces. After, the glass design was formed, the students would screed off the excess concrete that was poured in by the volunteers. Afterwards, they were able to write their names on the back of the tiles. These tiles will be affixed to the 2nd Street Overpass.

Having been staffed with some representatives from Cemstone, the kids were given a lesson in concrete basics: aggregates, cement and flyash mixes, as well as new admixtures that aid the concrete workability and curing cycle.



From Molin Concrete (L to R): Jason Becker (Estimating), Tanya Griffin (Shipping), Erik Molin (Sales/Marketing), Scott Schrom (Production), and Adam Stenberg (Engineering) participated.

Fax Back Information Form					
For more information, fax this form to (651) 786-0229	Please have a representative call me:	If you know of someone who should be added as a newsletter recipient, or taken off the list, please let us know.			
Hollow Core Plank	I have immediate needs.	Name:			
Foundation Wall Panels	□ Please call in months.	Company:			
Structural Wall Panels	□ Interested in having a lunch box seminar.	Address			
Prestressed Beams/Columns	□ Interested in having a plant tour.	City:	State:	Zip	
Prestressed Stadia		Comment:			
Residential					

#### please fill out the appropriate information on this page and fax it to us. Thanks

to add or delete someone as a newsletter recipient, change your e-mail address, or wish to be notified of our newsletter via e-mail, It you're looking for product information, want to schedule a plant tour or box lunch, need an address/company change, need

#### Your wish is our command with our tax back torm!



NIJOM