Notes From The Director

The NPCA 49th annual convention was held in Montreal during the week of October 22-26 and I was pleased to be in attendance to participate in committee meetings, talk with industry leaders, and stay on top of what is happening in the world of precast concrete. Some of the initiatives being taken on by the association include a marketing tool-kit titled “Take a New Look at Precast”, a board appointed task force to improve industry outreach to the engineering community, and a collaboration effort with PCI regarding plant certifications and The Precast Show. The marketing tool-kit is available for use by producer members and appears to be an effective way to create flyers and brochures to highlight your products.

I was particularly interested in the outreach task force and expressed to the association leadership that any such efforts in New York State must include PCANY and our producer members.

The Lifting Systems Task Force, of which I was a member, completed its mission during the convention of developing a certification document for lifting products and making recommendations for changes to the QC manual. The work is far from over but will be continued in the technical and education committees.

Warmest Regards,

Ronald E. Thornton, P.E.

On a walking tour of Old Montreal we found on display a section of the Berlin Wall that was dismantled in 1990 at the end of the cold war. The wall was constructed by the East Germans beginning in 1961 and consisted of some 41 miles of wire fencing and 66 miles of concrete walls. The segment on display appears to be a precast element known as “Stutzwandellement UL 12.11”, which was part of the 4th generation of wall constructed around 1975. While its history is quite storied, it was interesting to see this 40 year old section of precast concrete in remarkably good condition.
Lakelands Concrete Products Hosts ABCD Meeting

Submitted by Gina Lathan of Lakelands Concrete Products, Inc.

On September 18, 2014, Lakelands Concrete Products, Inc. had the pleasure of hosting the Association of Bridge Construction Designers September meeting. Over 30 designers attended to learn more about precast options for bridge design. Precast solutions highlighted included various Contech series bridges, bridge decking and slabs, box culverts, wing walls and Stone Strong abutment and retaining wall applications. Attendees earned continued education credits for participating in an informative presentation by Dan Logel of Contech.

The presentation was followed by a guided tour of Lakelands PCI certified facility and yard where attendees were able to learn more about the processes, procedures and quality assurance that goes into producing precast products. Engineers and designers were exposed to the intricate details, multi-faceted procedures and incredible teamwork that is required to produce quality products in a PCI certified facility.

Stations were set up to educate designers on the reinforcement fabrication, woodworking/carpentry, batching, raw material handling, production processes, storage and shipping. Numerous products were highlighted on the tour including bridges, box culverts, architec-

Fort Miller Awarded by PCI for Best Transportation Solution Bridge

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The upgrade of the New York Avenue Bridge in Washington, D.C., was viewed as a significant improvement project for the District Department of Transportation. The bridge is one of the major transportation corridors into the city from Maryland and is used by more than 87,000 vehicles each day. The upgrade would add redundancy and longevity to the existing two-girder superstructure, but the design team faced many obstacles in meeting the owner’s expectations.

"We were confronted with several challenges," says Inmar Badwan, senior bridge engineer with T. Y. Lin International, the engineer of record for the project. "There were site constraints and restrictions imposed by multiple owners of commuter and freight rail lines located beneath the bridge, constructability issues caused by active electrified catenary overhead wires, demolition of existing deck and grillage of floor beams and stringers, and maintenance of vehicular and train traffic."
They also had to meet an extremely tight design-build schedule.

The owners of the bridge originally considered many design options and materials to manage costs and expedite construction time, Badwan says. The design had to be rugged and quick to construct, all while accommodating site constraints and construction complications related to the existing bridge substructure. T. Y. Lin came up with an innovative design that addressed many of these issues using precast, posttensioned concrete deck panels that cantilever 12 ft 10 in. (4 m) over the exterior girders.

"The precast deck panels enhanced the construction acceleration given the impact by the railroads and eliminated long delays associated with formwork construction and concrete curing time," he says. It also facilitated deck replacement and caused less disruption to the train traffic underneath the bridge. "The benefits gained through construction schedule offset the potential cost increase in comparison with the traditional deck-girder system."

The improvements to the superstructure were achieved by replacing the bearings and by erecting a new girder line between existing twin girders to create a multibeam system with structural redundancy.

Rehabilitation and repair of the existing substructure to sustain the multibeam superstructure systems was accomplished by constructing posttensioned pier caps that rest on the retrofitted pier columns. The deck replacement was achieved through the innovative erection of longitudinally and transversely posttensioned precast concrete deck panels.

"This required extensive coordination in conjunction with a complicated construction sequence involving multiple stages," Badwan says. "A closely coordinated effort between all members of the project team and stakeholders was instrumental in ensuring the construction flow was resumed despite the complexities involved."

The ungraded bridge opened in October 2013, and the owners are very pleased with the result.

The redesign extended the service life of this major structure, which is vital to the safety and continuing prosperity of the rapidly developing neighborhood. "The completion of this bridge has resparked the improvement of this section of the city by serving as a focal point and entrance into a developing neighborhood," he says. "Moreover, the project satisfies the client's goals to provide multimodal transportation and ensures an ability to accommodate anticipated local and regional vehicular transportation needs over the next 50 years."

<table>
<thead>
<tr>
<th>Project Credits:</th>
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<tbody>
<tr>
<td>Owner: District Department of Transportation, Washington, DC</td>
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<tr>
<td>Engineer-of-Record: T.Y. Lin International</td>
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<tr>
<td>Contractor: Fort Myer Construction Corp</td>
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<tr>
<td>Precast Manufacturer: The Fort Miller Co., Inc.</td>
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All Photos Courtesy of PCI
NYSDOT to Host AASHTO SCOBS 2015

The AASHTO Subcommittee on Bridges and Structures has announced it will hold its annual meeting at the Hilton Hotel in downtown Saratoga Springs during the week of April 19-24, 2015. The New York State Department of Transportation will be hosting this event and NYSDOT’s Richard Marchione, PE will be serving as meeting chair.

ACI CNY to Hold Dinner Presentation

David A. Orzel, Manager of FRC Orzel, LLC will be telling us “Why Fibers Should Excite You” at ACI Central New York Chapter’s monthly meeting to be held November 19 at the DoubleTree Hotel in East Syracuse. For more information visit www.acicny.org

AGC Construction Industry Conference

The 28th Annual Construction Industry Conference will be held at the Saratoga Hilton & Conference Center December 9-11. Visit www.agcnys.org for information

ASTM C27 Committee to Meet in New Orleans

The ASTM C27 Committee oversees many standards related to precast concrete. The standards are continually monitored and updated, as necessary. Also, new standards are in the development process. Committee and subcommittee meetings will be held December 9-10 at the Sheraton Inn, New Orleans, LA.