Notes From The Director

The New York Chapter of ASCE has issued its latest report card (read the report) for our state’s infrastructure and, as usual, it is nothing to write home about. The overall grade of C-minus was buoyed by decent marks for park systems, solid waste disposal, and recycling efforts. However, because “One-third of New York’s major highways are considered to be in poor or fair condition…”, our road networks only rated a D-minus. This report continues to underscore the need for action both in Washington and in Albany to adequately fund bridge and highway infrastructure projects. Please visit www.rebuildnynow.org for information on how to get involved.

Our fall 2015 PCANY membership and joint meeting with NYSDOT has been scheduled for Thursday, November 19. Due to scheduling conflicts, we will be holding the morning session at the Day's Inn Albany Airport in Latham followed by an afternoon meeting with NYSDOT at their offices on Wolf Rd. Please let me know if there are any specific agenda items you would like to have brought up.

Warmest Regards,

Ronald E. Thornton, P.E.
Belmont Park Railroad Platform—Elmont, NY

Submitted by Jim Willis of LHV Precast, Inc

Thanks to an exemplary coordination effort between Long Island Railroad and LHV Precast, a $5 million improvement project at Belmont Park Station was completed in time for the 147th running of the Belmont Stakes on June 6th, 2015. The project included ten car level platforms consisting of over 200 precast slabs and 430 precast piers.

The old platform could only accommodate eight cars and was not handicap accessible.

Although adverse winter weather had placed the project behind schedule, LHV was able to accelerate delivery of the platform slab units as the weather improved allowing the project to get back on “track” (pun intended).

Project Credits:
Owner: Long Island Railroad
Design Engineer: LIRR Engineering Department
Specialty Precast Engineer: Delta Engineers, Architects, & Land Surveyors, Endwell, NY
Precast Manufacturer: LHV Precast, Inc. Kingston, NY

Precast piers stored on site for installation

Precast piers and platform slabs

Finished platforms
Assuring Structural Integrity and Reliability of Precast Box Culverts

Source: www.boxculvert.com

Precast box culverts have gained in popularity in recent years for use as underpasses, tunnels, subways, bridges, stream culverts, material handling, storage, watertight tanks and more. Available in a variety of standard sizes as well as custom designs, precast box culverts can be built with features meeting the exact needs of any project: toe walls, manhole openings, headwalls, wingwalls, pipe openings, keyed ends, watertight joints and more. While precast box culverts promise an extended service life, how can an engineer/specifier assure that precast box culverts are in fact manufactured to the exacting standards that assure service longevity? How can the engineer/specifier mitigate any risk of premature failure and its associated liability? To answer these questions, it is important to consider several factors that affect the quality and performance of a precast box culvert.

Engineering Design

Design of a box culvert by a qualified structural engineer is critical to its performance and avoidance of premature failure. While a box culvert appears to be a rather simple four-sided structure (three sides in special applications), a box culvert is subjected to complex loads in its typical application. These loads include:

- Lateral earth loads from soil and hydrostatic loads,
- Vertical loads from the cover soil and live loads above,
- Surcharge loads from nearby impact loads, and
- Seismic loads where applicable.

Because the rectangular shape of a box culvert lacks inherent rigidity, specification of sufficient circumferential reinforcement areas is critical to maintaining structural integrity under the application of these normal loads. Other critical design factors include the compressive strength of the concrete, use of sufficient structural steel reinforcement, and proper application of joint seals. Furthermore, the box culvert design must also specify a maximum depth of cover to assure that loading remains within design parameters. To assure the integrity of a box culvert design, it must conform to the applicable ASTM and AASHTO standards.
LHV Precast Named Small Business of the Year
The Ulster County Chamber of Commerce and Economic Development Alliance will honor PCANY Producer Member LHV Precast, Inc. at its annual Awards Dinner on October 22 in Kingston.

ASTM C27 Committee meeting.
ASTM C27 Committee on Precast Concrete Products will meet during ASTM Committee Week on December 9 at the Tampa Marriott Waterside Hotel, Tampa, FL (Information)

NPCA Annual Convention.
The National Precast Concrete Association’s 50th Annual Convention will be held October 21-24, 2015 at the Marriott City Center in Minneapolis, MN. (Information)

PCANY/DOT Fall Meeting Scheduled.
Thursday, November 19. Members will meet at the Days Inn in Latham at 9AM. The PCANY/NYS DOT joint meeting will start at 1:30PM at DOT headquarters 50 Wolf Rd, Albany.