



Little Caesars Arena - Home of the Detroit Red Wings and Detroit Pistons



Location

Detroit, MI

Owner

Olympia Development of Michigan

Development Manager

Hines

Plumbing Engineer

Sellinger Associates

Naum Popovski
Michael Sellinger, PE

Construction Manager

Barton Malow Hunt White

Detroit, MI

Plumbing Contractor

Limbach Company LLC

Dave Zach - Pontiac, MI

The RLD Project Team

Paul Prentice
Chris Lieder

Challenge

This 8-story world class arena is capable of seating 21,000 spectators at events. During intermissions and period ends, restroom usage would place a massive demand on the plumbing system. The owner and engineer were looking for a variable speed pressure booster system that could respond to both very low demand times as well as very high plumbing demands during events. To test systems, the owner required all fixtures to be flushed simultaneously (dubbed the SUPER FLUSH). This test would encompass all 235 water closets (toilets) and 120 urinals within seconds.

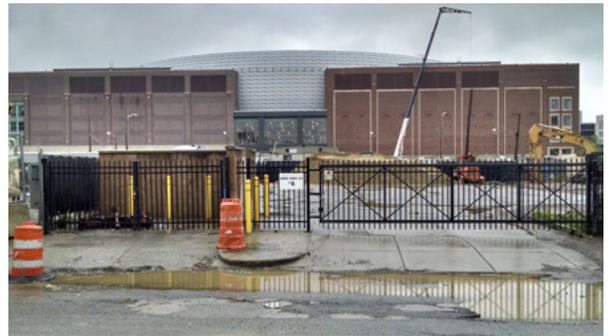
Why R.L. Deppmann?

Deppmann has extensive design experience, in-depth product knowledge, and the ability to apply these things to solving unique project challenges. The engineer was able to quickly and accurately verify his design by using a proprietary easy pressure booster selection application to confirm required flows and pressures. In addition, Deppmann Team would actively support the SUPER FLUSH test.

Solution

Deppmann provided a Bell & Gossett Technoforce four pump variable speed pressure booster pumping system with graphic display for owner ease of operation. RLD staff were on hand for the SUPER FLUSH where the system staged pumps performed beautifully.

Speed and flow increased to large demand without any problems.



“Sellinger Associates is very pleased with the technical engineering support provided by R.L. Deppmann with the assistance of determining the flow rate of this uniquely diverse used building, analyzing differential pressure from cold water / hot water systems, sizing of the hydropneumatic tank, and controlling of the booster pumps to operate in case of the failure of any three PRV stations.”

- Naum Popovski, Sellinger Associates

