

### **Lined Manhole Remains Intact after Sewer Collapses**

In late July, the City of Chicago experienced unusually heavy rainfall with accumulations exceeding 7 inches in just a few short hours. Such heavy storm events overburden systems causing uncommonly high erosion of pipe and manholes in combination systems that convey both storm water and sanitary waste. Wastewater treatment providers are very familiar with the high cost of treatment and transportation resulting from “inflow and infiltration” and cities invest millions to control it. But, an even more serious problem that has immediate and costly consequences is “infiltration” ... below grade erosion caused by the in-washing of soil through joints and defects in pipe and manholes.

On August 4th just such a severe storm event resulted in the collapse of an old sewer line in downtown Chicago. The collapsed pipe in the middle of busy Marquette Avenue sank its surrounding pavement by two feet.

The good news is that the old brick manhole had been recently lined by Benchmark Construction Company with Permacast® MS-10,000 cement fortified with ConShield. The manhole did not sink but remained intact and in place! This minimized street damage and avoided the immediate danger to pedestrian and vehicular traffic.



“We are proud of the performance of our Permacast system but, frankly, it’s no surprise to us”, stated Bill Shook, President of APM PERMAFORM, the manufacturer of the Permacast® system. “Our materials and their placement with our patented bi-directional SpinCaster are engineered to be fully structural.” Benchmark Construction Company has installed the Permacast liner system in more than 100,000 manholes and catch basins in Chicago since 2004 when the City started its comprehensive NO DIG structural replacement program.

#### **About AP/M Permaform**

AP/M PERMAFORM provides its trenchless solutions technologies through a professional network of licensed applicators world-wide. For more information visit [www.permaform.net](http://www.permaform.net) or contact Raylee Melton at 800.662.6465.