The Situation
When developers sought to create a new apartment development at the site of a longtime Minneapolis lumber yard, they knew that the supporting infrastructure would be a challenge. Spanning nearly a city block, the complex needed a state-of-the-art underground stormwater management system to support the construction, within the constraints of limited space. Additionally, the construction was going to take place in a busy urban area – closing streets or otherwise impeding daily traffic would be difficult and expensive.

The Challenge
To meet the requirements of the project, 14,131 cubic feet of stormwater storage was needed. Because of the site’s constraints, project engineers chose to place two separate systems on opposite sides of the building.

Ultimately, the biggest hurdle the development team faced was the need to limit the project footprint during construction. A crane (pictured above and to the left) was required to handle materials for the building itself, creating a potential problem. Since the Triton chambers were already in place, it would be necessary to place the crane over them – or face the cost of closing down a busy street to have the crane located on its surface.
The Solution
Triton Stormwater Solutions underground chambers delivered on every metric – strength, storage capacity and flexibility!

A thorough FEA study showed that the Triton system could withstand the burden of the crane and counterweights of 139,687 pounds. This saved the developers a huge amount of hassle – and considerable money, as well!

The Triton Stormwater Solutions underground chambers were placed in two, 260 foot straight-line configurations along the east and west sides of the building to achieve the required storage. Each system utilized a Main Header Row to control sediments and debris.

In addition, convenient maintenance ports and the easy-to-service s...