

Day One - Track One

Wednesday, March 22nd, 2017

9:00 a.m. – 9:30 a.m.

Designing a City of Zero Stormwater Runoff

Presenters: Jay Michels, Emmons & Olivier Resources, Inc.

Biography



Jay Michels, CPESC, is a Project Manager with Emmons & Olivier Resources in Oakdale, MN with over 30 years of experience in construction management, erosion control and stormwater management. The emphasis of his work is in LID design and implementation, ordinance and storm water policy and outreach and education development. Jay is known for his work throughout the upper Midwest and Canada as an educator on LID, stormwater management and erosion and sediment control.

Abstract

Significant new development was planned for the Northwest Area of Inver Grove Heights, Minnesota. The landlocked nature and rolling topography of the area traditionally would have required a large infrastructure of pumps and pipes that was very costly and had significant environmental impacts. EOR developed a unique stormwater management plan and has implemented a series of new, creative approaches in stormwater management generating a new framework for the city to become the first in the country to rely solely on Enhanced LID-type technologies to mimic natural-conditions and achieve zero-runoff discharge. This LID-led approach greatly reduced infrastructure cost, improved community amenities (such as green and open spaces), and helped reduce pollution impacts on the area's lakes and adjacent Mississippi River. In 2015, this project was awarded American Council of Engineering Companies (ACEC) National Engineering Excellence Grant Award and was recently awarded International Federation of Consulting Engineers (FIDIC) for an Engineering Award of Merit

Learning Objectives

1. Looking outside of the box for answers;
2. Implementing a big picture approach to a project that includes policy, manuals, and project design; and
3. The cost of LID can be and usually is a bargain compared to traditional approaches.