Day Two - Track One
Wednesday, March 22nd, 2017
11:00 a.m. – 11:30 a.m.

Minnesota Low Impact Development Comparison Study: A Case Study Comparison of Costs, Water Quality and Quantity Benefits, and Quality of Life

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

Low Impact Development (LID) is often touted as a solution which permits growth, while maintaining or improving environmental quality – having your cake and eating it too. While there are many proponents of this advancement in land development and redevelopment, many have questioned the validity and viability of LID. To address some of the doubts, fears and unanswered questions surrounding LID, this project undertook an apple-to-apples comparison of three development approaches for the same 217 acre multi-land use parcel.

To get at comparable numbers, numerous quantitative (development cost, 30-year maintenance cost, stormwater quality and quantity performance) and qualitative measures (additional quality of life benefits) were evaluated and compared across three development scenarios.

The Low Impact Design performed better on all of the evaluated parameters. In short the LID scenario was cheaper to build, cheaper to maintain, more profitable, had superior water quality and quantity and afforded a higher quality of life.

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.