

Introduction

Low Impact Development (LID) is an approach to development that uses a site's natural features to mimic the hydrology of the site in an undeveloped state.

Benefits include:

- Lower infrastructure costs
- Reduced wetland impacts & costs
- Aesthetics
- Decreased runoff
- Improved water quality
- Potential property value increase



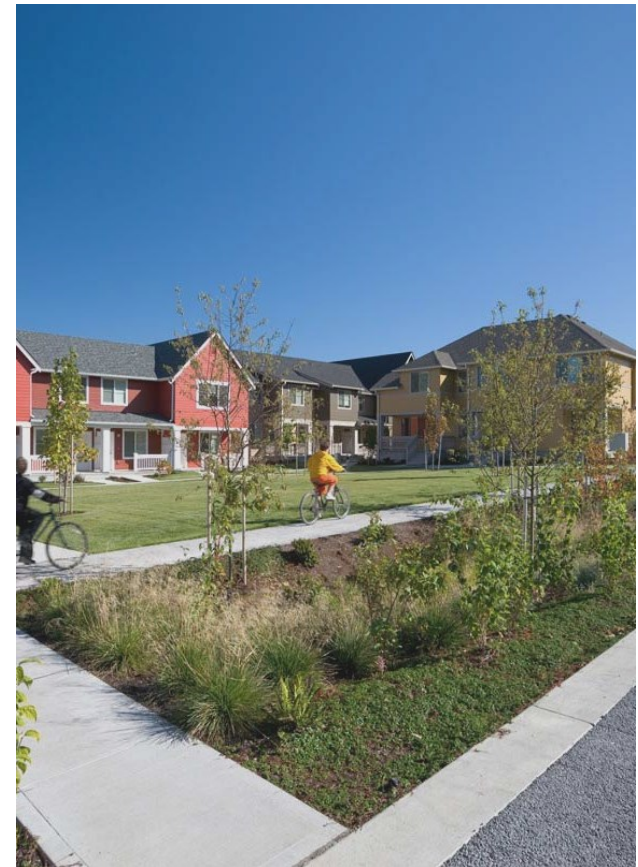
The goal of LID is to reduce runoff and improve water quality.

Sources

- Low Impact Development Center
- USEPA Nonpoint Source Control Branch
- UW Extension
- Southwest Michigan Planning Commission



Environmental Services Division
Public Works Department
City of Superior
51 E 1st Street
Superior, WI 54880
715-394-0392



Low Impact Development

An introduction to the concept and methods of low impact development (LID)

Permeable Pavement

Permeable pavement replaces impervious surfaces such as roads and driveways. Unlike regular pavement, water can filter down into the ground.



Bioretention

Water is transported to areas where it can either be taken up by plants or soak into the ground. Rain gardens, native plant gardens built in depressions, are an example of bioretention.



Green Roofs

A green roof is a layer of vegetation on top of a waterproofed roof. Green roofs filter and store rain water. They also mitigate the heat island effect in cities and absorb CO₂.



Natural Feature Protection

Leaving natural features such as mature trees, slopes, & wetlands protects the site's ability to keep water onsite. This provides aesthetic and recreational value as well.



Site Design

Impervious area can be minimized by making small changes. Some changes could include: smaller homes, narrow streets & sidewalks, reducing use of cul de sacs, & creating fewer parking areas.



Swales

A swale is a long, narrow depression that is vegetated. Swales decrease runoff velocity, volume, and pollution by allowing stormwater to infiltrate and be filtered by vegetation.



Methods