

## 7.4 Low Impact Development Strategies

Use low impact development strategies to integrate stormwater management through absorbent landscapes, detention areas, infiltration swales, pervious paving, rain gardens, rainwater harvesting, and tree pits and trenches.

### General Guidelines

- Incorporate natural water flows to work in harmony with the site and its surrounding areas.
- Meet water needs through captured precipitation or other natural closed-loop water systems, and/or by recycling grey and black water.
- Utilize natural purifying systems (e.g., helophyte filters or phytoremediation) without the need for synthetic solutions or chemicals.
- Treat stormwater and water discharge (including grey and black water) through reuse, a closed-loop system, or infiltration.
- Integrate porous surfaces that recharge groundwater where subsurface conditions permit.
- Utilize porous surface treatments for vehicles.
- Conserve existing site permeability.
- Decentralize stormwater controls.
- Develop a maintenance plan.
- Maintain the existing hydrological functions on the site.



Pond system at the Centre for Sustainable Landscapes replicates the natural water treatment process in wetlands, Pittsburgh. Source: Phipps Conservatory



Rain garden stormwater management at Bridgestone Americas, Akron, Ohio. Source: Federation of Canadian Municipalities



Rain garden stormwater management at Bridgestone Americas, Akron, Ohio. Source: Environmental Design Group