

Chapter 1 General Requirements

1.1 Objectives

The goal of low impact development is to manage stormwater generated from new development and redevelopment on-site so there will be no negative impacts to adjacent or downstream properties and no degradation to ground or surface waters.

The following are objectives for low impact design:

- Minimize the impacts of increased stormwater runoff from new development and redevelopment by maintaining peak flow frequencies and durations of the site's undisturbed hydrologic condition.
- Retain and/or restore native soils and vegetation to the maximum extent practicable.
- Retain and incorporate natural site features that promote infiltration of stormwater on the developed site.
- Manage stormwater as close to the source as possible.
- Promote groundwater recharge.
- Provide visible sustainable facilities.

1.2 Site Assessment

Before implementing LID practices it is necessary to perform a site assessment which includes an assessment of both on-site and off-site conditions and features. See Chapter 2 of the "Low Impact Development: Technical Guidance Manual for Puget Sound" for more information on steps for performing a site assessment.

1.3 Site Planning and Layout

Sites should be configured to reduce impervious surfaces and utilize natural drainage features. Chapter 3 of the "Low Impact Development: Technical Guidance Manual for Puget Sound" contains information and techniques for site planning. City of Tacoma codes must be adhered to.

1.4 Retain Native Vegetation

Retain native vegetation to the maximum extent practicable in order to:

- Reduce total impervious surface coverage
- Provide infiltration areas for overland flows generated in adjacent developed portions of the project
- Maintain the natural hydrology of the site.

See BMP L620 in Chapter 2 of this volume, Tree Retention and Planning BMPs in Volume 3, Chapter 5, and Chapter 4 of "Low Impact Development: Technical Guidance Manual for Puget Sound" for techniques on retaining native vegetation and trees.

1.5 Minimize Clearing and Grading Impacts

- Conduct a soils analysis prior to clearing and grading to identify predevelopment soil types and infiltration capabilities.
- Keep grading to a minimum by incorporating natural topography.
- Always use appropriate erosion and sediment control techniques when clearing and grading. See Volume 2 of this manual for erosion and sediment control measures.
- Utilize techniques from Chapter 5 of “Low Impact Development: Technical Guidance Manual for Puget Sound”.