

**Port Townsend:
Project Summary**



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Scope of Assistance:

Prior to the policy review meeting on February 24, 2009, Port Townsend and AHBL staff agreed on a scope of services for the regulations to be reviewed. The following are the sections of the code that City staff directed the consultant team to review:

- ◆ Title 12 – Streets and Sidewalks
 - 12.04 – Transportation and Rights-of-Way Improvement Standards
 - 12.12 – Sidewalk Maintenance, Construction, and Repair
 - 12.24 – Street and Park Trees
- ◆ Title 13 – Water, Sewer, and Stormwater
 - 13.05 – Utility Rates and Charges
 - 13.31 – Utility Service-General Provisions
 - 13.32 – Stormwater Management Requirements
- ◆ Title 17 – Zoning
 - 17.32 – Planned Unit Developments (PUD)
 - 17.34 – Cottage Housing Development Design Standards
 - 17.36 – Multifamily Residential Development Standards
 - 17.44 – Commercial and Mixed Use Architectural and Site Design Standards
 - 17.46 – Commercial, Multifamily, Cottage Housing Developments, and Mixed Use Architectural and Site Design Review Processes
- ◆ Title 18 – Land Division
 - 18.24 – Subdivision and Development Standards
- ◆ Engineering Design Standards (EDS)
 - Chapter 4 – Stormwater
 - Chapter 6 – Transportation
 - Chapter 5 – Clearing, Grading, and Erosion Control
- ◆ Additional Work Products:
Port Townsend staff requested that AHBL prepare the following additional items:
 - A list of incentives that will facilitate the use of LID BMPs.
 - A list of street trees and plants that are appropriate for Port Townsend
 - Bioretention soil mix composition and field testing procedures.
 - A guidance manual for design, implementation, and maintenance of raingardens, bioretention swales, and other LID stormwater management techniques.
 - A new section in the EDS with warranty and maintenance provisions for plants and LID stormwater management facilities.
 - Resources for hydrologic modeling software that are user-friendly for the public.

This direction resulted in the review of the following City Codes and standards by the consultant team:

- ◆ Title 12 – Streets and Sidewalks
 - 12.04 – Transportation and Rights-of-Way Improvement Standards

- ◆ Title 13 – Water, Sewer, and Stormwater
 - 13.32 – Stormwater Management Requirements
- ◆ Title 17 – Zoning
 - 17.32 – Planned Unit Developments (PUD)
 - 17.34 – Cottage Housing Development Design Standards
 - 17.36 – Multifamily Residential Development Standards
 - 17.44 – Commercial and Mixed Use Architectural and Site Design Standards
 - 17.46 – Commercial, Multifamily, Cottage Housing Developments, and Mixed Use Architectural and Site Design Review Processes
- ◆ Title 18 – Land Division
 - 18.24 – Subdivision and Development Standards
- ◆ Engineering Design Standards (EDS)
 - Chapter 4 – Stormwater
 - Chapter 6 – Transportation
 - Chapter 5 – Clearing, Grading, and Erosion Control
- ◆ Additional Work Products:

Port Townsend staff requested that AHBL prepare the following additional items:

 - A list of incentives that will facilitate the use of LID BMPs.
 - A guidance manual for design, implementation, and maintenance of raingardens, bioretention swales, and other LID stormwater management techniques.
 - A document that outlines how edible landscapes relate to native vegetation and LID.

The policy review meeting with City staff occurred on February 24, 2009. At the meeting, Port Townsend staff directed the consultant team on the content of the desired technical assistance. This direction resulted in the preparation of several work products to be reviewed by City staff with the consultant team at the regulatory amendments meeting on April 30, 2009. An outline of these work products is presented below in a topical manner with the full text of the updates attached separately.

Work Products:

1. Title 12 – Streets and Sidewalks
 - 1.04 – Transportation and Rights-of-Way Improvement Standards*
 - The consultant team recommended adding language to this Chapter emphasizing the use of LID BMPs in streets and sidewalks, particularly permeable surfacing where appropriate and feasible.
2. Title 13 – Water, Sewer, and Stormwater
 - 13.32 – Stormwater Management Requirements*
 - A new LID-focused “Purpose” section was added to this Chapter to make it an integral part of stormwater management and to help facilitate the use of LID BMPs as the preferred stormwater management technique.
 - The consultant team developed additional new sections, including two that reference the LID requirements for large and small development activities that are outlined in Chapter Four of the EDS. Another new section briefly addresses maintenance responsibilities of LID stormwater management facilities. The recommended language gives the City the right to inspect facilities annually and bill the appropriate party for labor and materials if the facility is not functioning properly. Per the City’s request, the consultant team also added a new section addressing financial securities for LID facilities, which gives the City the ability to require a financial guarantee, when deemed necessary, in order to help ensure the success of LID facilities.
3. Title 17 – Zoning
 - 17.32 – Planned Unit Developments (PUD)*

Recommendations for this Chapter were relatively minor and included language facilitating LID and referencing the LID site analysis and stormwater management requirements in Chapter Four of the EDS. Native vegetation retention standards were also added as optional/preferred standards.

17.34 – Cottage Housing Development Design Standards

Recommendations for this Chapter were relatively minor and included language facilitating LID and referencing the LID site analysis and stormwater management requirements in Chapter Four of the EDS.

17.36 – Multifamily Residential Development Standards and 17.44 – Commercial and Mixed Use Architectural and Site Design Standards

Language was added to both of the Chapters that facilitate the use of LID BMPs for parking areas.

17.46 – Commercial, Multifamily, Cottage Housing Developments, and Mixed Use Architectural and Site Design Review Processes

References to the required LID site analysis and performance standards were added as recommendations for this Chapter.

4. Title 18 – Land Division

18.24 – Subdivision and Development Standards

References to the required LID site analysis and performance standards were added as recommendations for this Chapter.

5. Engineering Design Standards (EDS)

Chapter 4 – Stormwater

Two of the primary additions to this Chapter were requirements for an LID site analysis and LID performance standards. The LID site analysis focuses on assessing the site and soil conditions in the early stages of project conception. The LID performance standards require conventional volume reduction based on land use and density using any combination of LID BMPs, and serve as the foundation for implementing LID throughout the rest of the code.

Current development patterns in Port Townsend, like Island County, include a considerable amount of infill on single-family residential lots. As such, Port Townsend requested new policy language that would require LID on small, residential projects that fall under the Department of Ecology's threshold for flow control and/or treatment of stormwater. AHBL developed a new section which requires new development on existing single-family lots to manage stormwater through a combination of LID BMPs unless infeasible.

Other significant additions to this Chapter include:

- A new 'Purpose' Section to reinforce the goals behind the new, proposed LID standards;
- Raingarden site analysis, design, and construction procedures;
- Maintenance procedures and guidelines for the primary LID BMPs, including bioretention swales, permeable paving; vegetated roofs; and rainwater harvesting collection systems.

Chapter 5 – Clearing, Grading, and Erosion Control

Per the City's request, new LID-focused performance standards were integrated in this Chapter to supplement and enhance the existing performance standards. Some of the recommended performance standards include site containment, construction phasing, native vegetation retention and restoration, and more.

Chapter 6 – Transportation

Per the City's request, the consultant team moved language from Chapter 12.12 – Sidewalk Maintenance, Construction, and Repair to this Chapter of the EDS. The addition was relatively

minor and promoted the use of LID techniques, particularly permeable surfacing, where site and soil conditions make it feasible.

6. LID Road Standards

AHBL provided several LID road sections for the City to add to the existing engineering design standards. The new road sections will serve as a guide for LID road design and construction.

7. Additional Work Products:

AHBL prepared the following additional items:

- A list of incentives that will facilitate the use of LID BMPs.
- A document that outlines how edible landscapes relate to native vegetation and LID.
- A user's guide to the LID performance standards table and modeling.

Supplemental Information:

In addition, the consultant team provided the following:

1. Tree species table listing Pacific Northwest native and near native species appropriate for native vegetation requirements, tree protection, and landscaping requirements.
2. "Draft Protection of LID IMPs During Construction" – a document prepared by AHBL that outlines construction sequencing and practices that protect pervious areas and LID BMPs during construction.
3. "Maintenance of LID Facilities" – Guidelines for the maintenance of pervious pavement, rain gardens and other LID management techniques.
4. "Criteria for Determining When LID is Feasible" – Outlines criteria to help local government staff determine when LID is feasible.
5. "Background on the LID Performance Standards" – Describes the background and general methodology behind the development of the conventional stormwater volume reduction standards, minimum native vegetation retention, and maximum impervious surface standards and modeling assumptions.
6. "Frequently Asked Questions About LID."

Findings:

Port Townsend staff chose to concentrate the majority of recommendations, including an LID site analysis and performance standards, in the Engineering and Design Standards. These new requirements were then referenced where applicable throughout the Code. For Port Townsend staff, like other jurisdictions participating in this round of the LID Local Government Regulation Assistance Project, the new LID performance standards and LID site analysis are critical components that will form the backbone for implementing LID BMPs throughout the City. The addition of new clearing and grading performance standards was also a valuable addition to the existing code, which is a critical component in carrying-out LID design and construction properly from start to finish. Port Townsend staff were committed to making LID standard practice in the City, while still maintaining site design flexibility and development efficiency for project applicants.