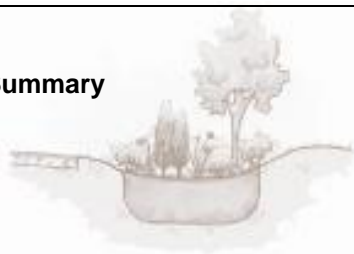




**Sequim:  
Project Summary**



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Scope of Assistance:

Prior to the policy review meeting on February 24, 2009, Sequim 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, Sidewalks, and Public Places
- ◆ Title 13 – Public Services
  - 13.104 – Stormwater Management
  - 13.108 – Stormwater Maintenance
- ◆ Title 17 – Subdivisions
  - 17.12 – Administration and Enforcement
  - 17.20 – Subdivisions
  - 17.24 – Binding Site Plans
  - 17.28 – General Design Standards
  - 17.32 – Street Design Standards
- ◆ Title 18 – Zoning
  - 18.22 – Development Standards
  - 18.24 – Design Standards
  - 18.40 - PUD
  - 18.44 – Bulk and Dimensional Requirements
  - 18.46 – Landscaping
  - 18.48 – Off-Street Parking

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

- ◆ Title 12 – Streets, Sidewalks, and Public Places
- ◆ Title 13 – Public Services
  - 13.108 – Stormwater Maintenance
- ◆ Title 17 – Subdivisions
  - 17.12 – Administration and Enforcement
  - 17.20 – Subdivisions
  - 17.24 – Binding Site Plans
  - 17.28 – General Design Standards
  - 17.32 – Street Design Standards
- ◆ Title 18 – Zoning
  - 18.22 – Development Standards
  - 18.24 – Design Standards
  - 18.40 - PUD
  - 18.44 – Bulk and Dimensional Requirements
  - 18.48 – Off-Street Parking

- ◆ Additional Work Products  
Sequim staff requested that AHBL prepare the following additional items:



- Revise the existing tree retention standards in Chapter 18.28 and add native vegetation standards to reflect LID standards.
- Revise the existing Clear and Grade standards and/or provide a draft ordinance.
- Develop standards or criteria to determine when it is appropriate to retrofit existing conventional facilities with LID BMPs.
- Provide appropriate LID street sections or engineering standard drawings based on those referenced in Chapter 17.32.

The policy review meeting with City staff occurred on February 24, 2009. At the meeting, Sequim 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. City made additional updates to the work products that were not necessarily LID-related.

Work Products:

1. Title 12 – Streets, Sidewalks, and Public Places  
The majority of recommendations to this Title include new sections and language that facilitates permeable surfacing for sidewalks and right-of-ways, where site and soil conditions make LID feasible. A new section was added to encourage alternative street design that incorporates LID BMPs, particularly bioretention swales, where site and soil conditions make LID feasible.
2. Title 13 – Public Services  
  
*13.108 – Stormwater Maintenance*  
Revisions to this Chapter were minimal as the existing maintenance requirements already included the provisions necessary for adequately maintaining LID facilities.
3. Title 17 – Subdivisions  
*17.12 – Administration and Enforcement*  
The consultant team recommended that applicants conduct an LID site analysis and bring the results of this analysis to the required pre-application conference. City staff agreed that requiring more site analysis during the early stages of project conception was important. Several LID components were also added to the application procedures, including the LID site analysis findings, identification of significant trees and trees of local significance, and identification of proposed LID BMPs where applicable.  
  
*17.20 – Subdivisions*  
Recommended revisions to this Chapter were minor, and include language that makes the use of LID BMPs, when feasible, part of the review and approval criteria for subdivisions.  
  
*17.24 – Binding Site Plans*  
Recommended revisions to this Chapter were minor, and include language that makes the use of LID BMPs, when feasible, part of the review and approval criteria for binding site plans.  
  
*17.28 – General Design Standards*  
The consultant team recommended replacing the existing site analysis requirements for subdivisions with the LID site analysis requirements proposed in Section 18.22.015. Additional language was added that discusses native vegetation retention standards and facilitates the integration of required landscaping and bioretention swales, where feasible and appropriate based on site and soil conditions.  
  
*17.32 – Street Design Standards*



Revisions to this Chapter include language that facilitates permeable surfacing for sidewalks and in rights-of-way where site and soil conditions make it feasible. Language facilitating shared driveways and alternative street design to accommodate various LID BMPs was added as well.

4. Title 18 – Zoning

*18.22 – Development Standards*

A new section was added to this Chapter, *18.22.015 – Site analysis required*, which requires an LID-focused site analysis for certain projects. Per the City's request, LID requirements were added to the Chapter that provides specific standards for the reduction of conventional stormwater volumes through a combination of LID BMPs. These proposed standards and the LID site analysis would provide a strong foundation for LID throughout Sequim's Code.

The City's existing Grading standards in this Chapter are minimal, and therefore the consultant team prepared a new draft Clearing and Grading Chapter – 18.23, at the request of City staff. A reference to the new draft Chapter was added to the existing Section.

Additional recommendations include revision of the existing tree standards and other minor additions to facilitate the use of LID BMPs in multifamily, commercial, mixed-use, and other uses.

*18.23 – Land Clearing and Grading (new draft Chapter)*

The draft Clearing and Grading Chapter, which was prepared by AHBL and approved by the Department of Ecology, provides LID-focused performance standards that include site containment, construction phasing, native vegetation retention and restoration, and more.

*18.24 – Design Standards*

Additions to this Chapter were fairly minor and include a plan to be submitted as part of the design review which shows any proposed LID BMPs. References to the *LID Technical Guidance Manual* were added as the preferred resource for design and construction of LID stormwater management facilities.

*18.40 – PUD*

Native vegetation retention standards were added to this Chapter as a preferred/encouraged standard, as the underlying goals and flexibility of PUD design.

*18.44 – Bulk and Dimensional Requirements*

The only recommendation made to this section was a reference to the LID standards proposed in 18.22.035.

*18.48 – Off-Street Parking*

This Chapter had existing LID language under Section 18.48.080 - Parking lot location, construction and design. AHBL modified the language slightly and added references to the LID engineering standard drawings that the consultant team prepared for the city. A provision was added to allow LID stormwater management facilities to be integrated with required landscaping where site and soil conditions permit.

5. 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.

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 for 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:

Sequim staff commented that implementing LID best management practices had added importance in their community because the City has a drier climate and receives less rainfall on average than the rest of Puget Sound. Staff decided to make LID prescriptive throughout the code as a means to protect local resources, promote groundwater recharge, and provide irrigation opportunities for local agriculture. At the same time, Sequim staff were initially concerned about how effective LID could be in the City, since much of Sequim is characterized by a high groundwater table and clay soils. While these conditions can make some LID techniques difficult to implement, they do not preclude the use of LID. As such, the consultant team proposed all new code amendments with the clause that 'LID BMPs are required unless proven infeasible, as determined by the Public Works Department'.