

# PSIC

BREMERTON

## SUSTAINABLE



## **Puget Sound Industrial Center - Bremerton Subarea Plan**

**(First adopted as the South Kitsap Industrial Area Subarea Plan)**



City of Bremerton

August 2012

Minor Amendments: May 2016

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# ACKNOWLEDGEMENTS

The City of Bremerton thanks the members of the Technical Working Group and Executive Committee who volunteered their time and thoughtful perspectives to help plan for the future of PSIC. Many thanks also to the members of the public who attended public meetings and expressed their questions and ideas, contributing to this overall Plan.

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Appendix A Public Meeting Resources

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# DOCUMENT OVERVIEW

The Puget Sound Industrial Center-Bremerton (PSIC), located in southwest Bremerton, contains about 3,700 acres planned for industrial development and use (Figure A-1 Vicinity Map). Within the Puget Sound region, PSIC is recognized as an important industrial employment center. The Puget Sound Regional Council's Vision 2040 Plan has designated PSIC as one of eight Manufacturing/Industrial Centers (MICs) in the region. Vision 2040 recognizes MICs as important employment locations that serve both current and long-term regional economic objectives and calls for the provision of infrastructure and services in MICs necessary to serve intensive manufacturing and industrial activity.

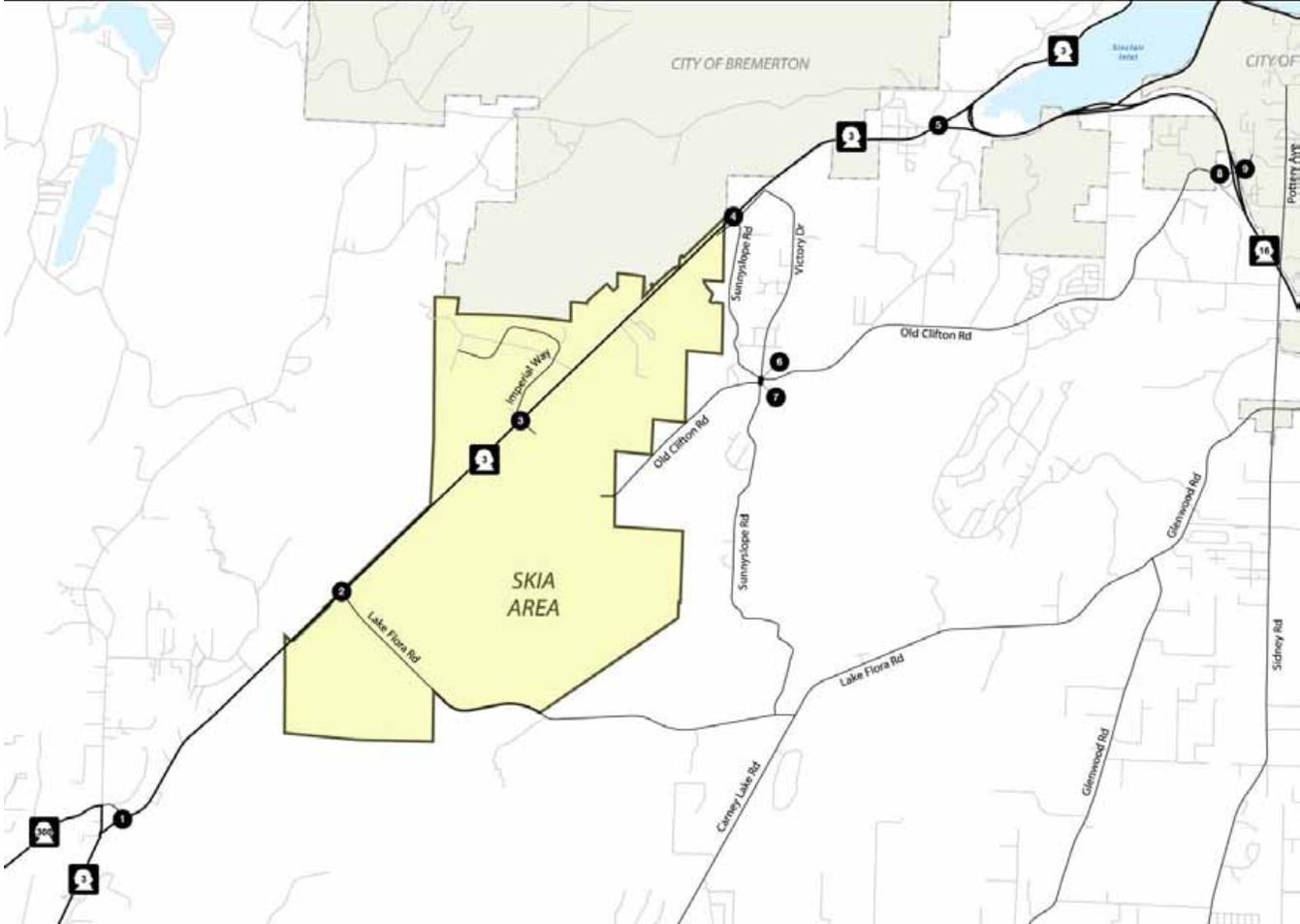
In 2008, following annexation of the majority of the PSIC subarea, the City began planning for PSIC with an amendment to the Comprehensive Plan to add the "PSIC Manufacturing/Industrial Center (PSIC MIC)" as a new type of center. In 2010, the City successfully obtained a Climate Showcase Communities Grant from the US Environmental Protection Agency to complete a Subarea Plan and Planned Action EIS for PSIC. Key project objectives include economic development and job creation; protection of natural systems, reductions in greenhouse gas emissions and more sustainable development patterns and buildings; and development of innovative and sustainable infrastructure.

This Subarea Plan is the outcome of a planning process that began in early 2011. The Plan contains five major sections:

- Section A**      Goals and Strategies
- Section B**      Implementation
- Section C**      PSIC Zoning and Development Standards
- Section D**      Sustainable Design Guidelines and Development Incentives
- Section E**      Capital Facilities Plan

Since the adoption of this subarea plan, this area has been rebranded as the "Puget Sound Industrial Center-Bremerton (PSIC-Bremerton)." Any references to the South Kitsap Industrial Area shall be now known as the Puget Sound Industrial Center-Bremerton."

Figure A-1: Vicinity Map



# **SECTION A: GOALS AND STRATEGIES**



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# SECTION A: GOALS AND STRATEGIES

## Definitions

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These definitions are provided for the reader's convenience and include key technical terms used in Section A of the Subarea Plan.

<b>Bioretention cells</b>	Shallow excavated or natural depressions designed to filter and store stormwater and generally seen as cost effective stormwater management tools. Also known as raingardens.
<b>Clean tech</b>	Business activities that work in clean energy, green building, smart grid, alternative fuels, advanced materials and environmental products, and environmental remediation and pollution prevention.
<b>Eco-industrial development</b>	Emphasizes networks among businesses and communities to optimize resource use and reduce economic and environmental costs.
<b>Foreign Trade Zone</b>	Designated areas in which special customs procedures are accorded to U.S. plants engaged in international trade-related activities. Firms in the foreign trade zone do not pay tariffs on imported raw materials if they are processed, stored, reassembled or otherwise manipulated in FTZs and then re-exported, and duty payment is deferred on items until they are brought out of the FTZ for sale in the U.S. market.
<b>Leadership in Energy and Environmental Design (LEED)</b>	An internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across a range of metrics.
<b>Low Impact Development (LID)</b>	An approach to land development where stormwater is managed as close to its source as possible. LID employs



SKIA's diverse character

principles such as minimizing vegetation clearing and soil disturbance and promoting infiltration of stormwater into the soil. LID reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.

**Neighborhood electric vehicles** Small, street-legal electric vehicles that can provide mobility around the PSIC site without greenhouse gas emissions.

**Sequestration** The natural removal and storage of carbon from the atmosphere by the soil and plants

**Phytoremediation** Use of plants and trees to remove or neutralize contaminants, as in polluted soil or water.

**Planned Action** A type of action identified in the Washington State Environmental Policy Act and available to local governments planning under the Growth Management Act. The planned action process allows local governments to provide a more streamlined environmental review process at the project stage by requiring more detailed analysis through an EIS during the planning stage. After completing the EIS, the local government designates by ordinance or resolution those types of projects to be considered planned actions, including mitigation measures that will be applied.

**Transportation Management Association** Association that assists members in establish commute trip reduction programs, identifying carpools, and providing information for other transportation options, such as buses, vanpools, and cycling.

## **Goals and Strategies Introduction**

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The Puget Sound Industrial Center-Bremerton (PSIC), located in southwest Bremerton, contains about 3,700 acres planned for industrial development and use (Figure A-1 Vicinity Map). Existing development in PSIC includes the Bremerton National Airport, the Olympic View Industrial Park and scattered other industrial and commercial uses. Much of the area is in managed forest practice and is characterized by forest lands, streams and wetlands. The goals and strategies in this section of the Subarea Plan support a vibrant industrial center that is a model of environmental stewardship and sustainability.

Within the Puget Sound region, PSIC is recognized as an important industrial employment center. The Puget Sound Regional Council's Vision 2040 Plan has designated PSIC as one of eight Manufacturing/Industrial Centers (MICs) in the region. Vision 2040 recognizes MICs as important employment locations that serve both current and long-term regional economic objectives and calls for the provision of infrastructure and services in MICs necessary to serve intensive manufacturing and industrial activity. MICs are given PSRC funding priority both for transportation infrastructure and for economic development.

In 2008, following annexation of the majority of the PSIC subarea, the City began planning for PSIC with an amendment to the Comprehensive Plan to add the "PSIC Manufacturing/Industrial Center (PSIC MIC)" as a new type of center. As stated in the 2008 amendment, the PSIC MIC is "expected to retain a different form of urban development than Bremerton's current regional or district centers. The physical size and location of this center allows strategic focused economic growth and it is expected to receive a significant proportion of Kitsap County's employment growth in the manufacturing and industrial sectors."

In 2010, the City successfully obtained a Climate Showcase Communities Grant from the US Environmental Protection Agency to complete a Subarea Plan and Planned Action Environmental Impact Statement (EIS) for PSIC. Key project objectives include economic development and job creation; protection of natural systems, reductions in greenhouse gas emissions and more sustainable development patterns and buildings; and development of innovative and sustainable infrastructure.

## **Public Outreach**

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Public involvement, review, and comment are an important element of the City's PSIC planning process. The public involvement program was designed to meet the following objectives:

- To obtain input from all interested members of the community through all aspects of plan development.
- To encourage two-way communication between the City, its partner agencies, and community stakeholders.
- To develop a Subarea Plan that will have the support of the community and guide development in PSIC over the next 20 years.

The following discussion summarizes public involvement activities that were an integral part of the planning process.

### Sustainable PSIC Webpage

The Sustainable PSIC website, located at <http://www.SustainableSKIA.com> on the City's website, provides information on project status, meeting dates, published documents and analysis, contact people and other key information.



PSIC public workshops

### Stakeholder Meetings

In September 2010, the project team conducted interviews with individual stakeholders, property owners, businesses and special interest group representatives. The interviews provided the project team with an expanded understanding of priorities and concerns in the area as well as an opportunity to provide updated project information to those who were interviewed about the planning process.

### Scoping and Vision Public Meeting

A workshop was held on October 13, 2010 to invite comments on the scope of the Draft EIS and the Comprehensive Plan vision statement. This meeting included an informal open house, with informational displays and staff available to meet one-on-one with participants, as well as a short presentation and question/answer session.

### Advisory Group Meetings

In order to provide input on the planning process, the City created two advisory groups, the Technical Working Group and the Executive Committee. Each is described below:

- **Technical Working Group (TWG).** The TWG was created to review technical information, provide input and recommendations, and work collectively to refine components of the Subarea Plan. This group is comprised of senior technical staff from each of the regional jurisdictions, Port of Bremerton, PSIC property owners, Suquamish Tribe, Port Gamble/S'Klallam Tribe, South Kitsap Economic Development Alliance, Sustainable Bremerton, Kitsap Regional Coordinating Council, Hood Canal

Coordinating Council, and the Puget Sound Naval Shipyard/Naval Base Kitsap.

The TWG met six times over the course of preparation of the Subarea Plan and to review alternatives and provide technical input on aspects of plan development.

- **Executive Committee (EC).** The EC was created to provide policy-level input to the PSIC Subarea Plan project team and City of Bremerton. Relying on the TWG's technical expertise and review of work products before each EC meeting, the EC's focus is to provide input about key decision points, address different views shared by TWG members, and bring EC organizations' interests and concerns to the table. The EC includes elected and appointed officials from the following organizations: Bremerton City Council, Bremerton Planning Commission, Port of Bremerton Port Commission, Kitsap County, Puget Sound Naval Shipyard, Suquamish Tribal Council, Port Orchard City Council, and Naval Base Kitsap.

The EC met seven times over the course of preparation of the Subarea Plan and EIS to review alternatives and overall plan direction.

Several TWG and EC meetings were conducted jointly. This had the benefits of an expanded discussion of key issues and sharing of different perspectives. Please see Section B of this Subarea Plan for a discussion of implementation strategies that have been developed in response TWG/EC recommendations.

### **Draft EIS and Subarea Plan Meeting**

On June 16, 2011, the City of Bremerton hosted a public meeting on the Draft EIS and Subarea Plan. The meeting included an open house, presentation, question and answer session and additional time for one-on-one discussion with City of Bremerton staff and consultants. Twenty-three individuals completed the meeting sign-in sheet.

The open house included the following information stations: Project Overview, Subarea Plan, EIS, Land Use, Infrastructure, Sustainability, Natural Environment, and Economic Development.

Following the open house portion of the meeting, the project team presented a slide show overview of key Subarea Plan and EIS elements and noted that the public comment period would be open until July 21, 2011. The presentation can be viewed at [www.sustainableskia.com](http://www.sustainableskia.com).

## **Draft Subarea Plan Public Meeting**

On May 7, 2012, the City of Bremerton hosted a public meeting to present the revised Draft Puget Sound Industrial Center (PSIC) Subarea Plan and Planned Action EIS. The meeting included an open house, presentation, question and answer session and additional time for one-on-one discussion with City of Bremerton staff and consultants. Following the presentation, participants were encouraged to post comments related to key strengths and weaknesses that they saw in the plan. Fifteen individuals completed the meeting sign-in sheet.

On June 19, 2012, the Bremerton Planning Commission conducted a public hearing and made their formal recommendation to the City Council. Please see the project website at [www.sustainableskia.com](http://www.sustainableskia.com) for additional information.

Appendix A contains additional information about public meetings, including meeting materials and summaries.

## Vision

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In 2030, PSIC is a vibrant and lively industrial employment center, distinguished for success in recruiting, growing, and retaining industrial employment in an attractive and sustainable setting. The vision for PSIC encourages industrial uses, clean tech uses and green industrial development. By embracing a diverse range of industrial activity, the PSIC industrial employment center has assured its long-term viability and significantly expanded employment opportunities for residents throughout Kitsap County and beyond.

The City's commitment to environmental stewardship has ensured long-term sustainability as well as an attractive and healthy environment. Critical areas have been retained and enhanced and new development is located and constructed to ensure long-term energy efficiency. Over time, development in PSIC has been successful in minimizing greenhouse gas emissions, reducing energy costs to businesses and creating an attractive work environment.

SKIA's industrial development demonstrates that an integrated approach to economic development and environmental sustainability can achieve a successful industrial center.

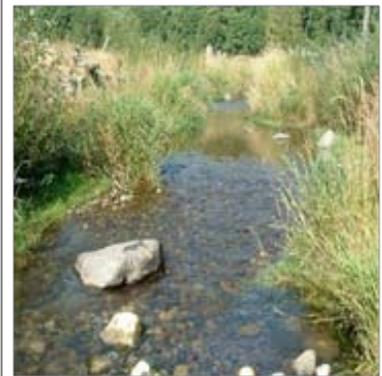
## Goals and Strategies Overview

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The next few pages provide an overview of the plan goals and strategies. Following the vision statement, pages A-8 and A-9 list the goals contained in the plan. Following this overview, each goal is introduced, with an expanded description of supporting strategies. The following goals are not listed in order of priority and are intended to be equally weighted.

Goals and strategies are organized under the following headings:

- Natural Environment
- Economic Development
- Land Use
- Transportation
- Greenhouse Gases
- Utilities
- Capital Facilities



### Shared Vision, Shared Direction

This plan lays out a set of integrated goals and strategies to achieve the PSIC vision. Plan elements recognize and build upon each other for a robust interdisciplinary approach to achieving the vision.

Please look for the Shared Vision, Shared Direction text boxes that highlight this integrated shared approach.

# SUMMARY OF GOALS

## Natural Environment

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- NE 1.** Promote sustainability of ecosystem functions through protection, restoration, and enhancement of native vegetation, waterways, wetlands, and buffers.
- NE 2.** Promote sustainability of ecosystem functions through protection of aquifer recharge areas.

## Economic Development

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- ED 1.** Establish PSIC as a leader in sustainable industrial initiatives in the West Sound region.
- ED 2.** Recruit, grow and retain a wide spectrum of industrial employment opportunities in PSIC.
- ED 3.** Track performance and celebrate success.

## Land Use

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- LU 1.** Promote a compact intensive industrial land use pattern and development phasing to minimize impacts on natural systems, maximize returns on infrastructure investment, and reduce greenhouse gas emissions.
- LU 2.** Restrict uses that are incompatible with intensive industrial development, encourage compatibility with airport operations, and ensure consistency with regional planning policies and criteria for designated Manufacturing/Industrial Centers.
- LU 3.** Provide clear development standards and incentives.

## Transportation

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- T 1.** Develop a complete transportation system that supports all modes of travel and all potential users of the site.
- T 2.** Develop a transportation system that is financially feasible.

## Greenhouse Gases

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- GG 1.** Manage vegetated areas to promote reduced greenhouse gas emissions.
- GG 2.** Coordinate transportation and land use planning to reduce greenhouse gas emissions from vehicles.
- GG 3.** Adopt site and building standards that contribute to reduced greenhouse gas emissions and result in more sustainable development.
- GG 4.** Develop public capital infrastructure that supports reductions in greenhouse gas emissions.

## Utilities

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- U 1.** Water and wastewater systems should conserve resources and maximize efficiency.
- U 2.** Ensure new development does not negatively impact surface and ground water quality.
- U 3.** Promote innovation, safety, reliability, and cost effectiveness in the delivery of utility services.

## Capital Facilities

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- CF 1.** Use capital improvements as an economic development measure to encourage private business investment in PSIC.
- CF 2.** Seek funding for public facilities that are needed to support development in PSIC.



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# NATURAL ENVIRONMENT

## Goal NE 1

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*Promote sustainability of ecosystem functions through protection, restoration, and enhancement of native vegetation, waterways, wetlands and buffers.*

**Native vegetation.** Much of PSIC is in managed forest practice lands. However, remaining areas that contain native vegetation provide value to fish and other wildlife. Maintaining connections between natural habitats can be important for preserving ecosystem functions and existing habitats with native vegetation can be incorporated into design to support sustainable development.

**Waterways.** Fish passage barriers include gradients (natural barriers), culverts, and dams. Potential areas of habitat improvement in PSIC waterways include improvements to gradients, stormwater control structures, erosion control features and culverts in Gorst Creek and tributaries, the Northeast Fork Union River and an unnamed tributary to Coulter Creek. These features are described in more detail in the PSIC Subarea Plan EIS (2012).

**Wetlands.** Wetlands can be both sources and sinks of greenhouse gas, depending on age, hydrologic, vegetative, and climate conditions. According to published estimates of greenhouse gas emissions from constructed and natural wetlands, emission fluctuations from constructed wetlands are higher than those from natural wetlands, and natural wetlands have more carbon sequestration capacity. Protection of existing wetlands and buffers assist in maintaining water quality and likely sequester more carbon than created wetlands. Restoration and enhancement of degraded wetland systems and buffers would support water quality and sequestration services.

### Desired Outcomes

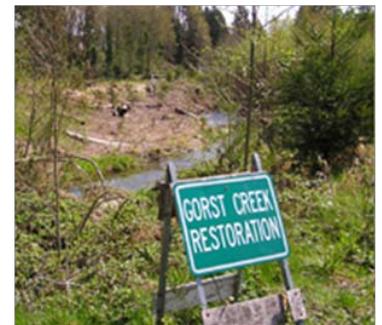
- As new development occurs, native vegetation is preserved in critical habitat areas.
- The integrity of habitat corridors is preserved and, where needed, enhanced or restored.
- Wetlands, stream and buffers and associated habitat are preserved, restored and enhanced.



#### Shared Vision, Shared Direction

See goals LU1, GG1, and U2 and their supporting strategies for related actions to support protection of habitats, native vegetation, and aquifer recharge.

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© Kelsie Donleycott  
Gorst Creek restoration

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Natural habitat area

## Strategies

- NE 1.1 Establish site planning and design standards to minimize impacts to native plants.
- NE 1.2 Apply landscape architectural standards applicable to native vegetation protection.
- NE 1.3 Enhance vegetated areas by replacing invasive plants/noxious weeds with native plants.
- NE 1.4 Require a comprehensive vegetation management plan during and after construction to ensure the vegetation remains healthy and free of invasive/undesirable plants. Encourage development to incorporate Integrated Pest Management (IPM) into landscape plans.
- NE 1.5 Promote appropriate planting of trees and shrubs in stream buffers to provide inputs of large woody debris into stream systems for fish and wildlife habitat.
- NE 1.6 Improve fish access through redesigned culvert crossings of roads with existing fish passage barriers.

## Goal NE 2

*Promote sustainability of ecosystem functions through protection of aquifer recharge areas.*

Groundwater from aquifers provides a source of potable water and contributes to stream discharge and flow. Critical aquifer recharge areas are also susceptible to contamination and are regulated under the Critical Areas chapter of the Bremerton Municipal Code.

### Desired Outcomes

- Aquifer recharge areas are protected from contamination.
- Aquifer recharge for supply of potable water and stream flows is maintained or improved.

### Strategy

- NE 2.1 Incorporate Low Impact Development (LID) stormwater features as a means to manage stormwater and optimize the local hydrologic cycle. Examples of LID stormwater measures include underground injection control, bioretention cells, bioswales, porous pavement, green roofs, rainwater harvesting, stormwater dispersion, sustainable site planning and layout, and phytoremediation.

# ECONOMIC DEVELOPMENT

Successful economic development does more than just create jobs, it also increases wealth, promotes education, expands economic diversification and provides for long-term economic and environmental sustainability. The economic development goals and strategies for PSIC pursue a successful economic development program through focus on three general themes: 1) support for existing industries 2) recruitment of traditional industrial sectors, and 3) development of an evolving and entrepreneurial clean tech industrial sector.

These themes are not mutually exclusive and should be pursued in an integrated and coordinated manner. The following goals and strategies seek to support existing assets, attract new general industrial opportunities and conceptualize the creation and attraction of a clean tech sector, all with the objective of creating jobs and establishing a sustainable, vibrant economy.

## Goal ED 1

*Establish PSIC as a leader in sustainable industrial initiatives in the West Sound region.*

### Desired Outcomes

- A positive community image of PSIC as a successful industrial center.
- Increased regional awareness of PSIC as an attractive industrial center.

### Strategies

- ED 1.1 Partner with existing agencies and groups as a forum to develop and implement a coordinated PSIC marketing plan.
- ED 1.2 Incorporate PSIC branding and recruitment into the City's broader communications strategy.
- ED 1.3 Create a targeted, comprehensive marketing campaign for both regional and national audiences which can include: designing a web portal expressing the Sustainable PSIC vision, advertising available land opportunities, performing branding for the area, and sponsoring educational events.



**Shared Vision,  
Shared Direction**

See section LU1, CF1 to see how capital improvements can be planned to support economic development.



PSIC available land for development

- ED 1.4 Research, develop and encourage the implementation of sector specific green innovation initiatives. Examples of innovative initiatives include use of recycled water and waste products, shared energy and other measures. See the Case Studies in Section B for additional ideas.
- ED 1.5 Conduct outreach to the Washington State legislative delegation to identify possible state incentives to promote sustainable industrial development.
- ED 1.6 Develop and implement a coordinated outreach program and incentives targeted to existing industrial uses to support energy efficiency and conservation to make PSIC businesses industry leaders in energy conservation.

## Goal ED 2

*Recruit, grow and retain a wide spectrum of industrial employment opportunities in PSIC.*

### Desired Outcomes

- Demonstrated progress toward 10,000 PSIC employees in the future.
- Demonstrated progress toward a long-term goal of 20,000 PSIC employees, as established by the PSRC MIC designation.
- Expanded tax base to support necessary infrastructure improvements to support continued growth.

### Strategies

- ED 2.1 As part of a regional economic development initiative, provide a focused balance on traditional industrial activity and the expanding clean tech sector. Identify and target specific industries for recruitment.
- Ed 2.2 Promote small business growth through incentives, recruitment and other forms of start-up support.
- ED 2.3 Collaborate with the Washington State Department of Commerce, the Kitsap Economic Development Alliance and local and regional academic institutions to recruit clean tech/eco-industrial development.
- ED 2.4 Identify and implement incentives that would encourage new development to locate in PSIC. Incentives can be packaged as site-specific strategies as well as industry-specific strategies. For example, site-specific strategies may include tax increment



PSIC businesses

financing (pending legislative action and eligibility), land acquisition, transfer or write-downs, special improvement district financing, industrial revenue bonds (IRBs) and capital improvements such as infrastructure, parking garages, and amenities. Industry-specific incentives may include debt financing, grants for pre-development studies, and below-market interest rates. Incentive packages may also include regulatory assistance, such as creation of a 'green industrial team' to expedite approvals, and reduced permit processing times.

- ED 2.5 Continue to foster partnership with the US Navy local installation to pursue complementary sectors for their expansion.
- ED 2.6 Create a federal advocacy team to pursue and respond to federal site searches and to provide congressional delegation and national organizations with information and marketing materials emphasizing SKIA's competitive advantages for future military installation growth.
- ED 2.7 Expand outreach to the business community, including a regular program of face-to-face meetings with business owners and managers, ongoing outreach to industry organizations, and continued contact with area business associations.
- ED 2.8 Promote regional workforce skills and consumer capacity as an economic development recruitment tool.
- ED 2.9 Foster and enhance a culture of entrepreneurship by generating collaboration among researchers, venture capitalists, academics and experienced start-up business executives.
- ED 2.10 Recognize and support the Bremerton National Airport's potential as a significant economic driver in the region. Seek shared opportunities to recruit complementary industries.
- ED 2.11 Leverage the PSIC Foreign Trade Zone (FTZ) designation to encourage import/export industrial activity in PSIC.

---

## Goal ED 3

*Track performance and celebrate success.*

### Desired Outcomes

- Increased understanding of success measures to evaluate achievement of established goals.
- Greater public recognition of successful businesses in PSIC.



Planes landing at the Bremerton National Airport

## Strategies

- ED 3.1 Develop a PSIC Scorecard that establishes benchmarks for economic development in terms of industry diversity, new employment, employment retention, measures of sustainability, lead generation and capture performance based on recruitment and marketing efforts.
- ED 3.2 Develop initiatives to encourage businesses to improve their environmental performance, achieve cost savings and increase competitiveness.
- ED 3.3 Recognize companies that improve the City's environment and reduce their ecological impact.

# LAND USE

## Goal LU 1

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*Promote a compact intensive industrial land use pattern and development phasing to minimize impacts on natural systems, maximize return on infrastructure investment and reduce greenhouse gas emissions.*

Approximately 50% of the land area in PSIC is undeveloped managed forest land, with wetlands, streams, ravines and other natural features. A key challenge is to minimize impacts on natural systems by accommodating intensive planned industrial growth in a compact land use pattern, with improvements sited, shared, clustered and constructed using low impact development techniques.

Development phasing and restrictions on speculative clearing preserves vegetative cover and wildlife habitat and minimizes impacts on the broader environment. Compact development can be served more efficiently by roads, rail, waterlines and sewer systems, reducing overall infrastructure costs and energy consumption. A compact, intensive industrial land use pattern with small scale services located within and near employment areas will help reduce vehicle miles traveled and greenhouse gas emissions.

Retaining areas of natural vegetation between and within development pods, preserving significant native landscaping and limits on effective impervious surface are key strategies related to this goal.

### Desired Outcomes

- PSIC is developed with a compact mix of industrial development and compatible uses.
- Job densities within PSIC are sufficient to achieve identified job targets over time, with a target of 10 jobs or more per developed acre for new growth.
- Land uses are clustered and sites are designed and integrated in a manner that makes walking, cycling and transit feasible.
- Return on infrastructure investment is maximized because roads and utilities are designed and located to efficiently serve multiple users.
- Functional native habitat areas in and around PSIC are maintained, including habitat corridors through PSIC, to minimize overall impact of industrial development on plants, habitat, and fish and wildlife.



### Shared Vision, Shared Direction

See goals GG2, GG3 and U1 and supporting strategies for sustainable development standards.

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Compact development pattern

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### Why promote a compact mix of uses?

A compact, intensive industrial land use pattern with small scale services integrated within employment areas will minimize impacts on natural areas and help reduce greenhouse gas emissions.

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Kitsap County Public Works Annex retained existing trees

By allowing transfer of development potential within PSIC, the overall development potential of the MIC can be maximized while preserving valuable critical areas.

## Strategies

- LU 1.1 Promote development of environmentally suitable sites near existing and planned infrastructure.
- LU 1.2 Support standards and incentives to promote compact development with strong pedestrian connections and amenities.
- LU 1.3 Promote a business park design with shared parking, loading and outdoor storage areas located to the rear and sides of buildings where possible.
- LU 1.4 Conserve and enhance areas of native vegetation along public roads, between development clusters and within and between critical areas, while recognizing the operational needs of industrial uses and site limitations.
- LU 1.5 Prioritize specific areas for near term development that are served by existing and planned roads, including the Olympic View Industrial Park, underused portions of the Bremerton National Airport, and properties served by the PSIC Connector and SW Lake Flora Road.
- LU 1.6 Encourage compact development and protection of critical areas through a program that allows transfer of development capacity within PSIC. For example, areas with significant critical areas or other constraints could send their development capacity to suitable receiving sites that can be served by existing or planned infrastructure.
- LU 1.7 Within the designated MIC, encourage limited small scale retail, restaurant, child care and other supporting uses near employment and connected to the non-motorized transportation network, in order to provide convenient services and reduce vehicle miles traveled by employees and customers in PSIC.
- LU 1.8 In the area south of Lake Flora Road and outside of the MIC, promote a broader range of employment uses, including office, light industrial, larger retail development, and essential public facilities as defined in RCW 36.70A.200.

## Goal LU 2

*Restrict uses that are incompatible with intensive industrial development, encourage compatibility with airport operations, and ensure consistency with regional planning policies and criteria for designated Manufacturing/Industrial Centers.*

PSIC is targeted for focused regional employment growth and is one of

eight Manufacturing/Industrial Centers (MIC) designated by the PSRC for intensive industrial development and priority funding for transportation improvements and economic development. Residential uses and large non-related retail and office uses are generally incompatible with these purposes based on PSRC policy and criteria for MIC designation and Subarea Plan certification because they can negatively impact and displace industrial uses. Restrictions on incompatible uses within PSIC and buffering industrial uses from incompatible uses outside of PSIC with setbacks, vegetative screening and other methods will address potential incompatibilities.

Bremerton National Airport is a critical asset and its continued viability and growth are central to the success of the PSIC Subarea Plan. The airport should be protected from incompatible uses and structures that pose a safety concern to airport operations, including those with impacts as described in C.3.050(b). The City will determine whether proposed land uses are compatible with airport operations, based on individualized study of proposals, input from the Port of Bremerton, and relevant technical guidance documents.

### Desired Outcomes

- Bremerton National Airport achieves the development envisioned in the Airport Master Plan and development in adjacent areas of PSIC is compatible with aircraft operations.
- PSIC continues to be designated as a Regional Manufacturing/Industrial Center and receives priority funding for transportation infrastructure.
- PSIC achieves its full potential as a regional scale industrial center that provides a significant percentage of countywide employment growth and family wage jobs.
- PSIC is recognized as an important center for jobs and innovation in the traditional industrial and clean-tech industrial sectors.

### Strategies

LU 2.1 Maintain restrictions on large scale retail, residential and other non-industrial uses within the MIC that are incompatible with intensive industrial development.

LU 2.2 Support a broad range of employment uses in the Mixed Employment zone south of Lake Flora Road, including large office and retail uses that should be located outside of the MIC.



Compatible development will support the continued viability of the Bremerton National Airport.

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Access to rail corridors and roadways for industrial uses should be maintained, traffic mitigation and access restrictions should be considered and buffers provided.



Rail corridor

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- LU 2.3 Consistent with FAA and WSDOT guidance, promote controls on land uses and development that are incompatible with Bremerton National Airport.
- LU 2.4 Ensure traditional office development does not displace existing or potential industrial development in the MIC, while recognizing the hybrid nature of certain uses and goals for encouraging high job densities and living wage employment.
- LU 2.5 Ensure that large recreation, entertainment and other non-industrial uses are located, designed and operated in a manner that does not adversely impact industrial uses.
- LU 2.6 The freight rail corridor should be reserved for industrial uses to promote the movement of materials and finished goods by rail.
- LU 2.7 Maintain transition area(s). Transition areas will help buffer adjacent residential development and provide additional services for PSIC and the surrounding area.

### **Goal LU 3**

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*Provide clear development standards and incentives for projects.*

The City has designated PSIC as a "Planned Action" area pursuant to the State Environmental Policy Act. A Planned Action is an innovative, incentive technique that combines subarea planning with up-front environmental review as a means to simplify and expedite land use review and permitting for implementing projects. The Planned Action is a tangible incentive for potential applicants to develop their projects in PSIC.

The review of land use permit applications in Washington is circumscribed by State law, which includes, among other things, time limits for review and limitations on the number of public hearings. Within this framework, however, local review procedures may still express a jurisdiction's attitudes toward providing service to applicants, and its desire to encourage economic development. Clear permit standards, streamlined review processes, expedited review and other incentives for projects that embody key Subarea Plan objectives will help demonstrate the City's commitment to and priorities for the PSIC Subarea.

In addition to these procedural incentives, the City has also committed to providing a financial incentive to projects that fully embrace SKIA's sustainability goals. Through a pilot program that provides a partial building permit rebate to qualifying projects, the City is expressing its

willingness to be a partner with developers in creating a sustainable PSIC. The City has selected PSIC for this demonstration pilot program in recognition that the upfront costs of sustainable development may be somewhat higher than traditional development, that sustainable development practices may be unknown or uncertain for some developers. Because much of PSIC is not developed, there is great potential for future development to have a significant impact on sustainability and greenhouse gas reductions. The City will monitor this pilot program and, if successful, consider expansion to other areas in the City.

### **Desired Outcomes**

- PSIC is recognized as a location that actively encourages new industrial activity and compatible development.
- Standards for development, regulatory incentives, for sustainable features and the approval process are clear and objective.
- PSIC offers a competitive advantage with streamlined review and approval for compliant projects, standards that ensure compatible development, and a progressive image as a sustainable business location.

### **Strategy**

- LU 3.1 Establish a prioritized land use and building permit process for development in PSIC that meets specified criteria for sustainable development.
- LU 3.2 Monitor and update the optional building permit fee rebate pilot program to provide incentives for sustainable development. The City has developed this program as a way to express commitment to PSIC sustainability goals and to support those who undertake sustainable development endeavors. This pilot program will be assessed in the future for its merit as a citywide program.
- LU 3.3 Monitor and update development standards and guidelines to make sure that standards and guidelines continue to (1) provide flexibility in defining industrial uses and (2) emphasize performance thresholds, such as emissions, noise, glare, stormwater run-off, instead of regulating specific uses.

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# TRANSPORTATION

## Goal T 1

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*Develop a complete transportation system that supports all modes of travel and all potential users of the site.*

The transportation system is more than the infrastructure to move employees and goods, it can be a vital public amenity for the PSIC site. A complete transportation network that serves all modes of travel (walk, bicycle, transit, automobiles, and trucks) is critical to develop a vibrant and sustainable employment center for the region.

### Desired Outcomes

- A robust active transportation system that encourages walking and bicycling.
- Ambitious mode split goals for commute trips are achieved.
- Freight rail is used to ship goods to and from the site.
- Trucks are accommodated throughout the site to efficiently transport goods.
- Future public transit service can be accommodated.

### Strategies

- T 1.1 Develop an off-street trail network that directly connects clusters of development to encourage walking and cycling between development areas in PSIC. The concept is for the network to be a "loop trail" at full build-out, making connections throughout PSIC.
- T 1.2 Develop a Neighborhood Electric Vehicle plan to encourage alternative modes of internal site transportation and an alternative link between more distant portions of the site.
- T 1.3 Develop commute trip mode split goals for the site and conduct regular surveys to monitor progress.
- T 1.4 Build on the region's successful vanpool program.
- T 1.5 Establish a Transportation Management Association for PSIC that can monitor commute trip patterns, coordinate vanpool, carpool, and other transit services, and provide information and assistance to PSIC employers.

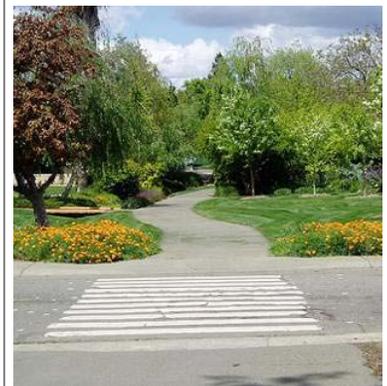


**Shared Vision,  
Shared Direction**

See goals LU1, GG2 and GG4 and their supporting strategies for compact, sustainable development standards and transportation related greenhouse gas reduction measures.

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**Off-street trails** are separate multi-use bicycle and pedestrian paths that can more directly link areas of development than the roadway network.

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Freight and rail access

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Railroad crossing

T 1.6 Use the freight corridor efficiently to move materials and finished goods.

## Goal T 2

*Develop a transportation system that is financially feasible.*

Transportation infrastructure can be costly to build and maintain. It is important that the City work with regional partners and property owners to share the cost of new infrastructure and develop an efficient transportation system that minimizes maintenance costs.

### Desired Outcomes

- New transportation facilities are constructed based on a land use plan that concentrates growth around existing infrastructure.
- New transportation facilities are designed with the intent of minimizing long-term maintenance costs.
- Development pays its fair share toward new transportation infrastructure.

### Strategies

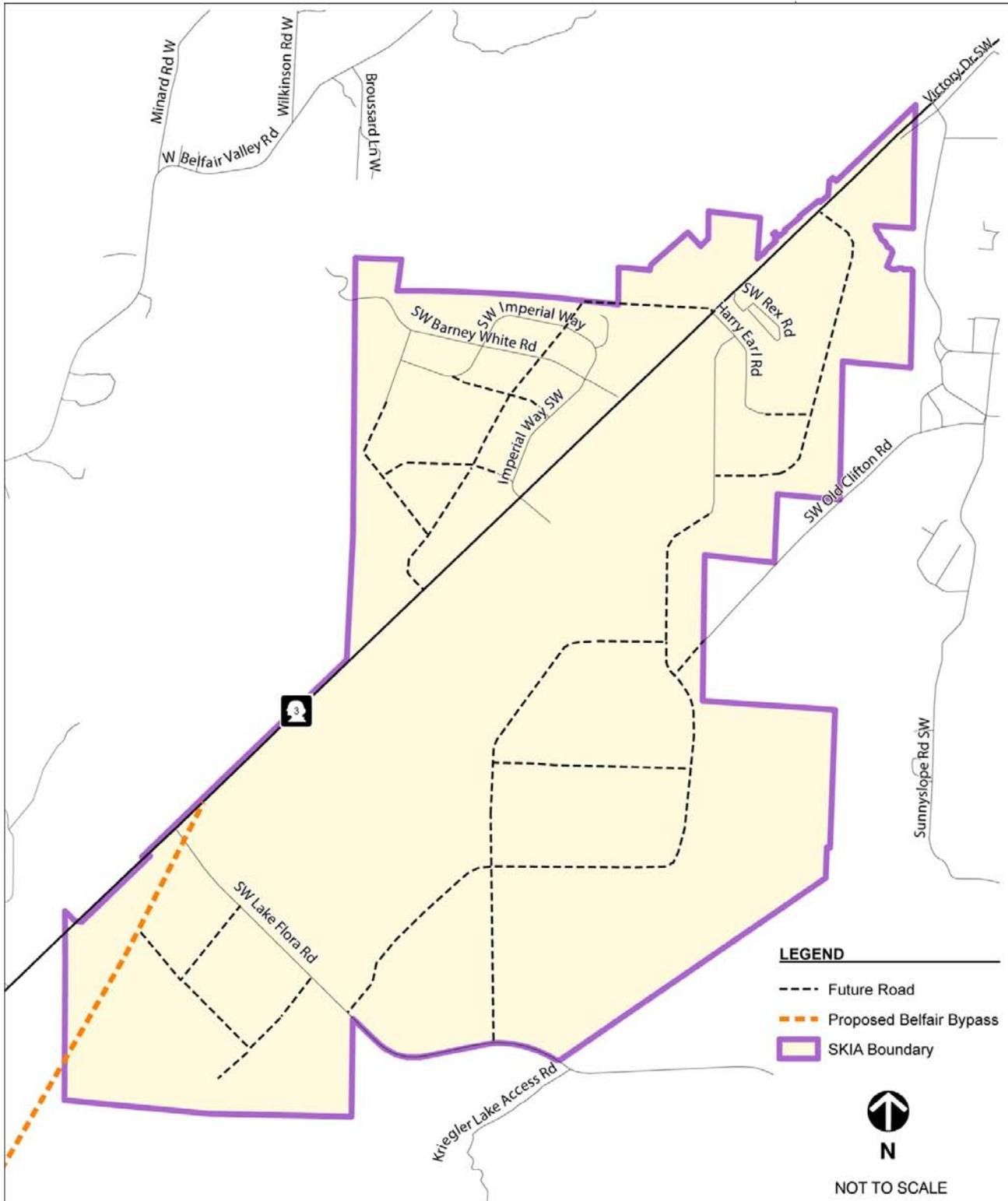
- T 2.1 Seek funding for transportation infrastructure in a manner that provides a financial incentive to locate adjacent to existing infrastructure.
- T 2.2 Minimize paved parking areas through measures that use parking areas as efficiently as possible.
- T 2.3 Develop an efficient roadway circulation plan, as shown in Figure A-2. This plan is conceptual and precise roadway alignments and specific site access details will be provided as development occurs. Roadway design details (e.g., number of lanes required to serve traffic flows) will also be determined as the site develops.
- T 2.4 Review and maintain level of service (LOS) standards that do not require the construction of large roadway facilities to accommodate short-term congestion issues.
- T 2.5 Incorporate low-maintenance transportation infrastructure such as roundabouts and LED lighting.

Encourage shared parking, review and revise parking standards to meet average rather than peak demand and to reflect changing technology, etc.



Cross SKIA Connector roundabout

**Figure A-2: Conceptual Roadway Network**



Note: This map illustrates a conceptual plan for a preferred future roadway network in PSIC. Actual street alignments may vary depending on development proposals and project review and approval by the City.

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# GREENHOUSE GASES

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation and temperature. Greenhouse gases, such as carbon dioxide, methane, and nitrous oxide, trap heat in the atmosphere and contribute to climate change. In the Pacific Northwest, some potential consequences of climate change associated with a continuation of greenhouse gas emission trends include decreased snowpack and water for irrigation, changes in salmon migration and reproduction, changes in forest growth and species diversity, increase in forest fires, increased coastal flooding, increased landslides, and permanent inundation of some areas. Reductions in greenhouse gas emissions can help to slow or reduce the magnitude of these impacts.

In addition, reduction of greenhouse gas emissions provides many public benefits, including supporting improved air quality, supporting efficient use of scarce public resources, reducing traffic, reducing dependence on uncertain energy sources, and invigorating the economy by helping the region become a center for the emerging clean energy industry.

Recognizing these benefits, the reduction of greenhouse gas emissions by approximately 30%, compared to traditional industrial development, is one of the primary goals of this Subarea Plan. This is an ambitious goal that calls for a vigorous and coordinated approach by the City, the business community and residents. As described in the *PSIC Environmental Impact Statement (draft June 2011)*, compact development and green building standards could achieve over 75% of the City's greenhouse gas reduction goal. Other actions that contribute to the remaining reduction include greater use of renewable electricity, additional housing near PSIC, implementation of a commute trip reduction program, use of energy efficient outdoor lighting, expanded vanpool/transit service, location of nearby support retail and services, and implementation of efficient transportation design standards. If implemented in a coordinated manner, these measures work together to achieve the City's greenhouse gas reduction goal for PSIC. Through a variety of incentives, the City supports development that incorporates these measures (also see Goal LU 3 and supporting strategies).

Goals and strategies below focus on the natural environment, transportation systems, land use and development, and infrastructure services as means to reduce greenhouse gas emissions.



## Shared Vision, Shared Direction

See goals NE1, LU1, LU3 and U1 and their supporting strategies for measures to support reduction in greenhouse gas reduction.



Forest plants and soils can store carbon

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Online tools for quantifying greenhouse gas emissions and sequestration from various sources include:

World Resources Institute/World Business Council for Sustainable Development - <http://www.ghgprotocol.org/>

IPCC Emissions Factor Database - <http://www.ipcc-nggip.iges.or.jp/EFDB/main.php>

The Climate Action Reserve - <http://www.climateactionreserve.org>

U.S Department of Energy 1605b - [http://www.eia.doe.gov/oiaf/1605/reporting\\_tools.html](http://www.eia.doe.gov/oiaf/1605/reporting_tools.html)

U.S Forest Service Carbon Lookup Tables - <http://nrs.fs.fed.us/pubs/8192>

Source: Washington

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Industries with short shipping distances, such as to PSNS, contribute to reduced greenhouse gas emissions

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## Goal GG 1

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*Manage vegetated areas to promote reduced greenhouse gas emissions.*

Plants are a source and sink of carbon dioxide and they sequester carbon dioxide from the atmosphere in above ground and below ground biomass. Sequestration occurs during plant growth, but release of carbon occurs through decomposition of woody debris, plant material as litter, and respiration. As plant materials decay, the stored carbon is released over time as carbon dioxide and methane. Forest soils also sequester carbon, and can also be a source of accelerated carbon emissions upon disturbance/clearing, which removes carbon inputs and speeds decomposition. The vegetated areas within PSIC should be considered in minimizing and/or mitigating carbon emissions from development.

### Desired Outcomes

- Use of vegetated areas to assist in mitigating for carbon emitted from construction and operations of development in PSIC.

### Strategies

GG 1.1 Outside of managed forest practice areas, promote and/or develop a City-approved forest/vegetation management program quantifying current carbon sequestration and anticipated growth for meeting carbon sequestration goals.

GG 1.2 Incorporate a City-approved carbon accounting program for efforts in minimizing carbon emissions through sustainable design techniques, construction methods, and operations.

## Goal GG 2

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*Coordinate transportation and land use planning to reduce greenhouse gas emissions from vehicles.*

The transportation sector is a major contributor to a development's greenhouse gas emissions. Coordinating transportation and land use planning strategies can lead to substantial reductions in transportation-related greenhouse gas emissions.

### Desired Outcomes

- Land uses are clustered to increase the viability of walking, cycling, and transit.
- Within the industrial development clusters, include key support services such as retail, banking, and child care.

- Incentives are provided to encourage the development of support retail and service uses, which will reduce greenhouse gas emissions related to goods movement.
- The transportation system design incorporates best practices related to energy conservation and greenhouse gas emissions reductions.

## Strategies

GG 2.1 Maximize opportunities for shared parking.

GG 2.2 Coordinate with adjoining jurisdictions to encourage housing development on compatible properties outside of the MIC boundary that do not conflict with FAA standards for airport operations.

GG 2.3 Support development of support services and retail within major employment areas, consistent with the MIC designation for PSIC.

GG 2.4 Target recruitment to industries that have relatively short shipping distances (e.g., local suppliers to the Navy and other major entities in the area).

GG 2.5 Implement greenhouse gas emissions reducing transportation design features wherever feasible. Examples include roundabouts and LED traffic signals while retaining market competitiveness.

GG 2.6 Require the use of energy efficient lighting technologies for roadways, trails, parking areas, and loading facilities.

GG 2.7 Develop and implement access (driveway spacing) standards that minimize conflicts with pedestrians and cyclists.

GG 2.8 Support the use of fuel-efficient and alternative fuel vehicles.

## Goal GG 3

*Adopt site and building standards that contribute to reduced greenhouse gas emissions and result in more sustainable development.*

Sustainable development refers to compact development that is resource and energy efficient, results in reduced greenhouse gas emissions, and protects and sustains the natural environment. This Subarea Plan promotes development that is environmentally responsible and resource-efficient throughout a building's life-cycle: from siting to design, construction, operation, maintenance and reuse or demolition. It also promotes LID native landscaping, alternative energy and water reuse.

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The International Green Construction Code is a model code focused on green building design and performance.

ASHRE Standard 189.1 addresses site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere, materials and resources.

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## Desired Outcomes

- At least 50% of new private buildings are recognized as high performance, efficient buildings.
- New site development adheres to sustainable development standards, including LID guidelines.

## Strategies

GG 3.1 Adopt energy conservation goals for new development in PSIC.

GG 3.2 Adopt the International Green Construction Code, including the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRE) Standard 189.1, as a voluntary pathway for public and private development. Over time, consider making this standard a minimum requirement.

GG 3.3 Maximize implementation of green building and LID in PSIC through landowner outreach, incentives, specific technical information targeted towards permitting clients, advanced staff training and adoption of an ordinance that allows innovative pilot projects.

GG 3.4 Encourage the adoption of new technologies that reduce greenhouse gas emissions.

GG 3.5 Work with Puget Sound Energy to monitor the energy usage of the PSIC site and determine if energy conservation goals are being met.

GG 3.6 Periodically update climate change goals and policies to respond to changes in technology, best management practices, and building techniques.

## Goal GG 4

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*Develop public capital infrastructure that seeks to reduce greenhouse gas emissions.*

## Desired Outcomes

- New public infrastructure adheres to sustainable development standards, including Low Impact Development guidelines.

## **Strategies**

GG 4.1 Utilize LID in the development of public roadways and pathways to the maximum extent practicable to serve as models and signature elements for PSIC.

GG 4.2 Look for grant opportunities to bring renewable power generation to PSIC.

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# UTILITIES

## Goal U 1

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*Water and wastewater systems should conserve resources and maximize efficiency.*

The water and wastewater systems selected should use the latest technology in sustainable treatment approaches to maximize the efficient use and reuse of water. Similarly, techniques to support energy conservation should be encouraged. Recognizing that portions of PSIC have been designated as critical aquifer recharge areas, the stormwater systems should maximize groundwater recharge. These systems should also be managed and operated in such a way as to promote the conservation and reuse of resources through policies and rate and fee structures.

### Desired Outcomes

- Water and energy is conserved
- Groundwater recharge is maximized
- Total water usage in PSIC is reduced by 50% compared to similar industrial areas and uses.
- In new development, primarily non-potable sources are used for non-potable applications (e.g. rainwater catchment, reclaimed process water and grey water reuse for industrial activities, toilets and irrigation).

### Strategies

- U 1.1 Incentivize green building standards, including certain water efficiency performance requirements, for new buildings
- U 1.2 Where public reclaimed water infrastructure is nearby, encourage dual plumbing of buildings. Many industrial users could have a need for reclaimed water treated to Class A standards (as regulated by the Washington State Department of Health and Ecology) for certain manufacturing processes. New development in nodes identified to have a reclaimed water plant should be plumbed to reuse this water. Buildings outside of these node areas should be dual plumbed to make use of rainwater for these non-potable uses.
- U 1.3 Provide reclaimed water distribution infrastructure when streets are built or sewer lines are laid.



### Shared Vision, Shared Direction

See goals LU1, T1 and T2 and supporting strategies for sustainable infrastructure measures.

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Most buildings can achieve up to 30% water conservation over a code compliant typical building simply by using efficient fixtures.

Many commercial buildings use over 50% of their water use (outside of any process water use) in non-potable uses such as toilets, cooling tower make-up, and irrigation.

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- U 1.4 Promote Membrane Bioreactor (MBR) wastewater treatment. MBR treatment uses membrane micro- or ultra-filtration and biological reaction to treat wastewater and can produce effluent with sufficiently high quality as to be reused as reclaimed water.
- U 1.5 Allow rainwater reuse in areas where reclaimed water is not available. Industrial buildings tend to have very large roof areas relative to the number of occupants making them ideal candidates for cost-effective rainwater catchment systems. These systems should be encouraged for use in areas where reclaimed water is not available for non-potable supply.
- U 1.6 Consider modification of the stormwater utility fee to promote low impact development, calibrate for true system impact and environmental cost, and encourage natural drainage improvements.

## Goal U 2

*Ensure new development does not negatively impact surface and ground water quality.*

The wastewater collection, treatment and reuse/disposal systems should minimize the release of pollutants into the environment (i.e. groundwater & surface water). The stormwater management systems should employ the latest technology in LID Best Management Practices (BMPs) to provide high levels of stormwater treatment.

### Desired Outcomes

- Water quality is measurably improved.

### Strategies

- U 2.1 Maximize the implementation of LID stormwater treatment as a cost effective method for stormwater treatment and disposal to the greatest extent feasible under current market conditions. Where soils are conducive, infiltration can be used in lieu of traditional conveyance, detention, and flow control. Even in areas where the soils do not infiltrate well, the use of bioretention for stormwater treatment in landscape areas is a relatively inexpensive and effective stormwater treatment approach.



LID Stormwater Control

U 2.2 Limit hazardous material or hazardous waste storage on pervious pavement or LID areas to structures that are enclosed and protected from the weather, Ensure the containment system with prevent any release to the environment.

## Goal U 3

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*Promote innovation, safety, reliability, and cost effectiveness in the delivery of utility services.*

Utility services should be implemented by the City to encourage or allow the use of innovative sustainable on-site water systems by tenants and owners within PSIC. The water, wastewater, and stormwater systems should be provided such as to meet the industry standard levels of reliability and safety and at a reasonable economic cost.

### Desired Outcomes

- The PSIC industrial center is a recognized leader in innovative sustainable infrastructure.
- Life safety and reliability expectations for the utility system are maximized.

### Strategies

U 3.1 Design infrastructure to meet the expected performance levels. Sustainable infrastructure should be designed to meet comparable industry standard performance and reliability standards of the remainder of the City's infrastructure.

U 3.2 Encourage innovative sustainable development measures on projects

U 3.3 Create a water, wastewater, and stormwater connection and usage fee structure to encourage innovative and ultra high performance water conservation. Establish a water rate structure to cover projects that have ultra high performing water conservation systems such as 100% rainwater for building uses but rely on fire flow by the City of Bremerton system.

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Special water rate structures to encourage water conservation may only be able to be in place outside of nodes where higher levels of service are available.

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# CAPITAL FACILITIES

## Goal CF 1

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*Seek funding for public facilities that are needed to support development in PSIC.*

Capital facilities should support the location of industrial uses that will benefit the local economy. Such facilities should include transportation, utility, and other capital facilities that support the types of uses and building types desired in PSIC.

### Desired Outcomes

- Sustainable businesses are attracted to PSIC
- Development levels support high quality and innovative infrastructure

### Strategies

- CF 1.1 Prioritize future capital improvements that serve businesses committed to locating and staying in PSIC.
- CF 1.2 Provide levels of service that are appropriate to present and future businesses in PSIC and consistent with the City's levels of service.
- CF 1.3 Provide a range of utility service levels to support a range of uses. To the extent possible, encourage uses with similar utility needs to cluster together. For example, heavy industrial uses that have a high demand for process water could locate in proximity to each other so that infrastructure could be tailored to these needs.
- CF 1.4 Street standards should be "self mitigating" for stormwater when certain soil conditions are present and with certain sizing factors developed that could ease the design and use of these standards.
- CF 1.5 Create visitor information centers at innovative capital facilities. For example, a visitor information center at a MBR wastewater plant could reinforce the sustainability brand and promote development of similar facilities.



### Shared Vision, Shared Direction

See goals ED1, ED2, ED3, T2, U3, and GG4 and supporting strategies for sustainable infrastructure measures.

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## Goal CF 2

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*Use capital improvements as an economic development measure to encourage private business investment in PSIC.*

Businesses are attracted by realistic plans that clearly identify and plan for the necessary infrastructure to support industrial growth.

### Desired Outcomes

- Build infrastructure that is financially feasible.
- Minimize cost of ongoing maintenance of infrastructure.

### Strategies

CF 2.1 Use local funding to leverage other resources, such as grants, public/private partnerships, and investments by businesses locating in PSIC.

CF 2.2 If sources of revenue are available that can be committed to future debt payments, use debt to enable early completion of priority capital improvements and to amortize the cost over the life of the public facility.

CF 2.3 In recognition of current constraints on City government funding, rely on grants and private developer funding for provision of capital facilities. Over the long term, seek to establish a public/private partnership program for the provision of capital facilities to serve the area.

CF 2.4 Provide public facilities that minimize operating and maintenance costs of the facility.

CF 2.5 If projected funding is inadequate to finance needed capital facilities that provide adequate levels of service, the level of service, the planned growth, and/or the sources of revenue will be adjusted to maintain a balance between available revenue and needed capital facilities.

CF 2.6 Provide and seek opportunities to partner with the Port in funding of infrastructure.



Development pad with available water service

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## **SECTION B: IMPLEMENTATION**



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# SECTION B: IMPLEMENTATION

This section of the Subarea Plan is focused on the essential next steps to promote a quick and vigorous start to sustainable economic development in PSIC. The first part of this section contains a discussion of priority implementation measures, based on City staff, stakeholder and broad public input. The second part contains some brief case studies that illustrate the potential opportunities associated with green, eco-industrial development.

## Implementation Measures

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From the beginning and continuing throughout planning for PSIC, the City has recognized the importance of a successful implementation strategy. Through the planning process, staff review, public meetings and stakeholder discussions have focused on implementation feasibility. As part of this focus, a key joint meeting of the Technical Working Group (TWG) and Executive Committee (EC) focused on two key implementation questions.

1. What are the underlying contradictions that could keep this Plan from being successfully implemented?
2. What are the strategic directions that could be taken to ensure Plan success?

The tables on the following pages summarize the key themes and ideas that emerged from brainstorming sessions associated with the aforementioned questions.

Table B-1 identifies the five emergent themes that may impede the future success of PSIC. A list of specific impediments further explain the themes.

Table B-2 identifies six emergent themes that would support the achievement of a successful PSIC. Measures and strategies are specified for each theme to provide direction for Plan development and implementation.

It is the group's intent that these ideas form the basis for the next steps in the Subarea Plan implementation process, including the development of the PSIC zoning code, development standards, and development incentives.

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See the Public Outreach discussion in Section A for a description of the Technical Working Group and the Executive Committee

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**Table B-1: Impediments to Success**

THEME	IMPEDIMENT
<p><b>COMPETING INTERESTS &amp; UNCLEAR BENEFITS</b></p>	<ul style="list-style-type: none"> <li>• No coordinated leadership</li> <li>• Need clear partnership between public &amp; private</li> <li>• Not enough money for infrastructure</li> <li>• Need good development incentives</li> </ul>
<p><b>GREEN INDUSTRIAL IS EXPENSIVE</b></p>	<ul style="list-style-type: none"> <li>• Cost of environment mitigation/conservation expenses too high</li> <li>• Regulations required to achieve sustainability are difficult</li> <li>• Perceptions that “green” is expensive and small businesses can’t figure it out on their own</li> </ul>
<p><b>INFLEXIBLE TRADITIONAL ZONING</b></p>	<ul style="list-style-type: none"> <li>• Potential “incompatibility” with the airport</li> <li>• Development outside critical areas could have unmitigated impacts on environment</li> </ul>
<p><b>UNDEFINED MARKET STRATEGY</b></p>	<ul style="list-style-type: none"> <li>• Need to understand what the future of green tech is</li> <li>• Competing for a market that doesn’t exist</li> <li>• Plan should not just seek to recruit, but also “keep and grow those who are here”</li> </ul>
<p><b>UNIDENTIFIED/ DISCONNECTED TRANSPORTATION ALTERNATIVES</b></p>	<ul style="list-style-type: none"> <li>• Perception of isolation—that PSIC is “far away”</li> <li>• Location, location, location—demonstrate that PSIC has some benefits of location</li> </ul>

**Table B-2: Strategic Directions for Success**

THEME	HOW TO ACHIEVE SUCCESS
<b>IMPLEMENTING</b>	<ul style="list-style-type: none"> <li>• Develop a communication plan and the benefits of PSIC</li> <li>• Beneficiaries are public – not only jurisdictions</li> </ul>
<b>DEVELOPING EFFECTIVE PARTNERSHIPS</b>	<ul style="list-style-type: none"> <li>• Government as a partner, not just as a regulator</li> <li>• Financial partnerships (public &amp; private)</li> <li>• Define partner roles</li> </ul>
<b>CONNECTING</b>	<ul style="list-style-type: none"> <li>• Develop a map showing transportation options</li> <li>• Develop Gorst “Gateway” like transportation plan and get reliable connectivity to PSIC</li> <li>• Develop a transportation plan</li> </ul>
<b>INVITING BUSINESS CLIMATE</b>	<ul style="list-style-type: none"> <li>• Mitigation friendly zoning</li> <li>• Flexible progressive zoning</li> </ul>
<b>DEVELOPING MARKET STRATEGY</b>	<ul style="list-style-type: none"> <li>• Branding of area as innovative, eco-friendly industrial</li> <li>• Develop marketing strategy               <ul style="list-style-type: none"> <li>- Local strengths (shipyard)</li> <li>- Define market weaknesses</li> <li>- Specific targets</li> </ul> </li> <li>• Define market               <ul style="list-style-type: none"> <li>- Who</li> <li>- Why different</li> </ul> </li> <li>• Economic benefit of airport (updated)</li> </ul>
<b>DEMONSTRATING BENEFIT OF PSIC PLAN</b>	<ul style="list-style-type: none"> <li>• Case studies showing green vs. traditional build</li> <li>• Green expense – show supporting information about developing green</li> <li>• Model Project, cost-benefit</li> <li>• Education (platform?)</li> </ul>

## Five-Year Implementation Strategies

Based on input from the TWG, EC and interested members of the public, this section of the Subarea Plan identifies key initial steps to effectively and proactively achieve the PSIC vision for the PSIC Subarea.

As described below, implementation strategies are focused on a solid start in the next five years and include a recommendation that the City review performance and adapt the preferred implementation approach accordingly at the end of the five-year period. This approach will keep the City's strategic outlook refreshed and flexible.

The text below identifies six key strategies. The first strategy recommends creation of an inter-agency steering committee to oversee the remaining future implementation activities. The remaining five strategies should all be viewed as having equal priority, with the success of one strategy dependent upon the success of the other four. The achievement of the future PSIC desired development intensity and character will require the City to make strategic and tactical decisions that are in alignment with each other. Therefore, the implementation strategies should be read together, as one integrated approach.

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### Shared Vision, Shared Direction

See goals ED1 and ED2 and their supporting strategies for measures to support a collaborative multi-faceted economic development approach.

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### Shared Vision, Shared Direction

See goals ED1, ED2, and ED3 and their supporting strategies for communication and outreach measures.

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### Shared Vision, Shared Direction

See goals ED1, ED2, ED3 and their supporting strategies for marketing and outreach efforts.

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#### **1. Create a Steering Committee of existing agencies and interest groups focused on establishing PSIC as a successful industrial center.**

As identified during the planning process, one of the obstacles to success of PSIC in the past has been the lack of an aligned and coordinated approach among the many different stakeholders. Creation of a Steering Committee is intended to create a forum for bringing these interests together and to provide leadership for future development of PSIC. The Steering Committee could build from the partnerships that have begun with the TWG and EC. As a first step, the Steering Committee should create a charter that clearly establishes roles, common goals and benefits of development of PSIC as a successful industrial center. Over the next five years, it is intended that the Steering Committee will oversee the remaining implementation activities outlined below.

#### **2. Develop a comprehensive outreach and communication strategy to promote PSIC.**

Discussion by the TWG and EC clearly identified the need for a comprehensive approach to communication as it relates to PSIC. As recommended by the TWG and EC, the communication plan should clearly establish the multiple benefits associated with future development in PSIC and ensure that all communication contains a clear and consistent message as to these benefits. Other elements of the

communication plan identified through the planning process include:

- Use of a PSIC web portal to conduct outreach;
- Outreach to the Washington State legislative delegation;
- Collaboration with partner agencies to achieve Subarea Plan goals, including the Washington State Department of Transportation, Washington State Department of Commerce and others;
- Expanded outreach to the business community, including business owners, organizations and associations; and
- Identification and communication of costs and benefits of sustainability measures in industrial development.

### **3. Develop a specific marketing plan to promote PSIC.**

As recommended by the TWG and EC, a PSIC marketing plan should provide a focused balance on traditional industrial development and the expanding clean tech sector. As identified during the planning process, some elements of a marketing plan could include:

- Research, identify, and implement strategies for targeted industrial sectors;
- Focused outreach and incentives for small businesses;
- Incentives to encourage a range of new development;
- Development of a PSIC brand;
- Support for businesses seeking to meet sustainability goals;
- Exploration of the opportunities provided by the PSIC Foreign Trade Zone; and
- Development initiatives to monitor and celebrate successful sustainable businesses.

The marketing plan would be implemented in conjunction with the comprehensive communication plan, described previously.

### **4. Monitor and implement planning and regulatory review improvements.**

Sections C and D of the Subarea Plan contain new development regulations, standards and guidelines intended to provide a streamlined review process and to promote sustainable industrial development. Over the next few years, the Steering Committee should monitor the success of these regulations in achieving their purpose and recommend adjustments as needed.

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#### **Shared Vision, Shared Direction**

See goals LU1 and LU3 for goals and supporting strategies for measures to support an efficient, streamlined development review process.

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#### **Shared Vision, Shared Direction**

See goals T2, GG4, U3, and CF2 and supporting strategies related to infrastructure provision and funding.

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**5. Obtain funding for key infrastructure improvements.**

Throughout the planning process, the TWG, EC, and interested stakeholders all agreed that one of the key constraints to future development in PSIC is the lack of infrastructure and high cost associated with provision of future rights-of-way, water and sewer improvements. As described in Section E of this Subarea Plan, an essential element of securing success in for PSIC will be to identify, evaluate and lead efforts to secure funding for infrastructure development.

**6. Assess progress and adjust plan for the next five-year period.**

Although the Vision, Goals and Strategies in Section A of the Subarea Plan are based on a 20-year planning horizon, the approach to implementation is focused on the next five years. It is intended that in 2017, the City will review performance and update implementation activities as needed with a new five-year set of action strategies. This will keep the City's strategic approach to PSIC current as it responds to future growth and changes. It is recommended that this process be repeated every five years.

## Case Studies

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In order to illustrate the potential opportunities associated with sustainable and eco-industrial development, the following example case studies demonstrate how other national and international locations have planned for and implemented sustainable industrial development plans.

### San Diego, California<sup>1</sup>

To cultivate and strengthen a Cleantech cluster in San Diego, the City of San Diego is:

- Working with government, academia and industry partners to eliminate challenges and enhance opportunities for growth in the emerging clean technology sector.
- Providing clean technology companies with targeted assistance such as site selection services, expedited permit processing, business incentives and access to capital.
- Offering a comprehensive incentive package to all new industries but focuses recruitment and marketing efforts on clean-tech cluster development.
- Taking advantage of proximity to transportation hubs, the border, and availability of natural resources for alternative fuels and compatibility with existing industries such as biotech, software, aerospace and defense, paired with the Mayor's commitment to the effort, which have established the clean tech sector as the highest growing of any sector in San Diego.



CleanTech San Diego Logo

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<sup>1</sup> Sources: <http://www.sandiego.gov/economic-development/business-assistance/index.shtml> ; <http://www.cleantechsandiego.org/>



Silver Bay, Minnesota

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## Silver Bay, Minnesota<sup>2</sup>

Located about 60 miles northeast of Duluth Minnesota, plans for this new eco-industrial park include a biomass heat and power facility, a greenhouse that could grow food for distribution within the city, and a fish farm that would make use of fish waste to grow algae for biodiesel fuel. The park will be subdivided geographically into industrial and business clusters in order to align commercial and industrial facilities to:

- Optimize resource productivity
- Recover energy and material byproducts
- Power facilities with an integrated renewable energy system
- Integrate conservation design and green building features
- Move toward zero waste and emissions
- Create synergies and economic benefits that will incent business growth
- Serve as a model for sustainable industrial development and tourist attraction

A keystone of the park will be the development and integration of a renewable, cyclical, self-sustaining, energy production system (electricity and heating). Project sponsors see this as a competitive advantage, with businesses attracted to the park based on the benefit of predictable renewable sustainable energy costs. In addition, the need for fossil fuel consumption will be eliminated, which ultimately results in reductions in greenhouse gas emissions and reductions in waste.

Groundbreaking was in October 2011. Council member Carlene Perfetto anticipated the effects an eco-industrial park could have on Silver Bay. "This is a start of bringing educated people from Silver Bay back home."

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### **Silver Bay Eco-Industrial Business Park Mission Statement**

To network businesses to work with each other and the Silver Bay Community in order to create and diversify living wage employment, by improving resource productivity, eliminating pollution and expanding markets through renewable sustainable energy development

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<sup>2</sup> Sources: <http://www.silverbay.com/Eco-Industrial%20Business%20Park%20Presentation.pdf>;  
<http://www.silverbay.com/MPCA%20Grant%20Project%20Summary.pdf>;

## Kalundborg, Denmark<sup>3</sup>

Kalundborg, Denmark's eco-industrial development captures 'industrial symbiosis' based on the collaboration between five primary independent industrial enterprises for mutual economic and environmental benefit. It is based on a series of bilateral commercial agreements on three different kinds of projects: recycling water, exchanging energy at different levels, and recycling waste products. The Aeneas Power Plant, for example, produces a waste stream of steam and heated water. This water warms the tanks of a fish farm, while the steam is used by the municipality for heating and by Novo Nordisk, a pharmaceutical company, who then pipes organic sludge waste to farms to use as fertilizer. Cooperation between businesses was voluntary, but conducted in close collaboration with regulatory authorities. By 1998, the Symbiosis agreements have amounted to some \$160 million in savings. This level of cost savings and improved environmental performance becomes a competitive advantage for participating companies. It is interesting to note that the success of this development is based on the people that worked together to make it happen, less than the technological innovation they harnessed.



Kalundborg, Denmark

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## Conclusions

Each of these case studies represents a different approach to green industrial development. In San Diego, the City and its partners are collaborating to position the region as a global leader in cleantech development. In Silver Bay, a new eco-industrial park is in its infancy, while the Kalundborg development is a mature development with demonstrated success in providing economic and environmental benefits to the community. These varied experiences, however, share some commonalities that may provide some helpful tips in implementation of PSIC. Some key features are described below.

**Collaboration breeds success.** Both San Diego and Kalundborg emphasize that their success is, in large part, based on the willingness of people to work together toward a common goal. The public and private sectors have joined forces to achieve the shared goals of economic development and environmental preservation. The CleanTech San Diego website notes that the area is renowned for its culture of collaboration and collegiality, making it a natural setting for a clean tech "collaboratory" and attributing much of its success to a strong partnership between local colleges/universities and the private sector. Similarly, Kalundborg representatives describe that much of their

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<sup>3</sup> Source: The National Center for Eco-Industrial Development

success is based primarily on the willingness of people to work together and less on technological innovation.

**Time and patience are needed.** The eco-industrial development in Kalundborg is widely cited as a successful eco-industrial park, but this success was not immediate. Rather, development is often described as a spontaneous but slow evolution. The web of materials and energy exchanges has developed over the last 20 years. Originally, the motivation behind most of the exchanges was to reduce costs. Gradually, the managers and area residents realized they were generating environmental benefits as well, through their transactions. In contrast, the proposed eco-industrial development in Silver Bay has not experienced significant development levels, potentially due to the recent economic downturn. However, if Kalundborg is any example, patience and attention to connections between businesses will be key to future success in Silver Bay and PSIC.

**Green industrial development is compatible with small urban settings.** While the San Diego region is a large urban center, both Kalundborg and Silver Bay are small urban areas compared to Bremerton. In the case of Kalundborg, the relatively small size of the urban area has not been a deterrent to success. Similarly, Silver Bay has generated strong private and public sector support in launching the new business park.

# **SECTION C: ZONING AND DEVELOPMENT STANDARDS**



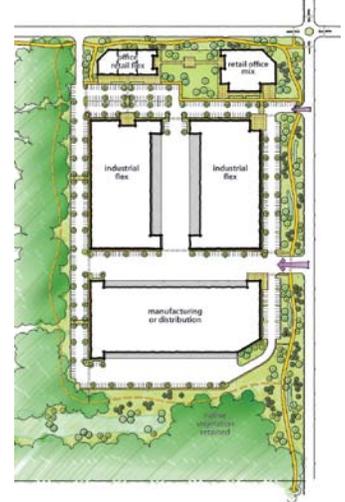
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# SECTION C: PSIC ZONING AND DEVELOPMENT STANDARDS

## Chapter 1: Introduction

### 1.010 Purpose

- a. The PSIC Zoning and Development Standards establish zoning provisions, minimum development standards, performance standards and design criteria that will guide all development in the Puget Sound Industrial Center (PSIC) Subarea, including both areas within and outside of the designated Manufacturing/Industrial Center (MIC). The purpose of these development standards is to:
  1. Implement the vision and policy direction contained in Section A;
  2. Promote environmental stewardship and reward businesses for being responsible neighbors and contributing to the sustainable character of the community;
  3. Promote compact industrial and commercial development on environmentally suitable sites near existing and planned infrastructure;
  4. Promote regional job creation and long term economic vitality through standards and guidelines that encourage and reward attractive, more sustainable development;
  5. Provide a streamlined review process for development that is consistent with Land Use Goal 3 of Section A and related SEPA Planned Action;
  6. Ensure the continued viability of industrial and aviation uses by providing restrictions and physical separation of uses that are deemed incompatible by the City;
  7. Provide a regulatory balance between predictability and flexibility to recognize the evolving nature of land uses, unique site conditions and development technologies.
- b. The standards address the following elements:
  1. Chapter 1: Introduction, including a description of the purpose, content, applicability and administration of the Zoning and Development Standards;
  2. Chapter 2: Definitions;
  3. Chapter 3: Land Use Zones, including purpose statements for each zone, zoning map, and standards for uses, height, setbacks, and other key standards;



Example of intensive, compact industrial development.



Sustainable industrial development.

4. Chapter 4: Development Standards, including standards for site clearing and development; building design; transportation, parking, circulation, and pedestrian access; landscaping; signs; exterior lighting; noise and emissions; and low impact development;
5. Chapter 5: Right-of-Way Standards

### **1.020 Applicability**

- a. The Zoning and Development Standards provide minimum requirements applicable to development in the PSIC Subarea. The purposes outlined in this subsection are intended to be achieved through compliance with all mandatory standards and consideration of the design guidelines.
- b. Conflict of Provisions and Severability
  1. The standards contained in Section C are specific to PSIC and are intended to supplement or modify standards contained in the Bremerton Municipal Code (BMC Title 20).
  2. In the event of a conflict between the standards contained in Section C and those contained in the Bremerton Municipal Code, the standards in Section C shall prevail.
  3. In the event that a provision of this Chapter is held invalid, the remaining provisions shall remain in full force.

## Chapter 2: Definitions

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### 2.010 Introduction

All definitions contained with the Bremerton Municipal Code (BMC) apply in PSIC, unless specifically modified by the definitions below. Specific land uses are defined in BMC Chapter 20.42. If a specific term is not defined or referenced herein or in BMC Chapter 20.42, it shall take its normal and customary meaning within the context of how it is used.

### 2.020 List of Defined Terms

**Critical Root Zone (CRZ)** The minimum area beneath a tree that must be left undisturbed in order to preserve sufficient root mass to give a tree a reasonable chance of survival. The CRZ is typically represented by a concentric circle centering on the tree trunk with a radius equal to the distance from the outside of the trunk to any point twelve times the trunk diameter, which is measured at four and a half feet from the ground.

**Dispersion** Release of surface and storm water runoff from a drainage facility system such that the flow spreads over a wide area and is located so as not to allow flow to concentrate anywhere upstream of a drainage channel with erodible underlying granular soils or the potential to flood downstream properties.

**Dual Supply Plumbing** A plumbing system that provides separate piping and connections for the use of either potable water or reclaimed, non-potable water at the same fixture.

**Effective Landscaping** An area that provides sufficient quantity and quality of plant materials to screen parking, building, or hardscaped areas of a project and provides color and viewing interest.

**Feasible** Actions that can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results. Additionally, the action



Example of separate piping systems for potable (blue) and reclaimed non-potable (purple) water. Image courtesy of the Water Environment Federation.

shall not physically preclude achieving the project's primary intended legal use. In cases where these standards require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the City may weigh the action's relative costs and public benefits, considered in short- and long-term time frames.

**Habitat Corridor**

A continuous area of retained, multi-layered native vegetation that provides habitat for native wildlife species and connects environmentally critical areas, such as wetlands, or other permanently preserved natural areas allowing passage of wildlife through developed areas with minimal human disturbance.

**Hard Surfaces**

Any impervious surface, as well as any pervious or partially pervious surface that is not predominantly covered with vegetation or landscape mulch.

**Infiltration**

The movement of water into the soil layer. The rate of this movement is called the infiltration rate. If rainfall intensity is greater than the infiltration rate, water will accumulate on the surface and runoff will begin.

**Infiltration facility**

A drainage facility designed to use the hydrologic process of water soaking into the ground (commonly referred to as percolation) to dispose of surface and storm water runoff.

**Low Impact Development (LID)**

A stormwater management, site design and engineering approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized small-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Specific LID tools and standards are identified in the Low

Impact Development: Technical Guidance Manual for Puget Sound.

**Multi-layered Landscaping**

Landscaping that incorporates plants of varying sizes (trees, shrubs, groundcover) to mimic the natural understory-canopy forest relationship. Such landscaping should generally be planted at densities similar to intact forest communities in the general vicinity.



Retained multilayered vegetation and habitat area.

**Neighborhood Electric Vehicles**

Battery electric vehicles that are legally limited to roads with certain posted speed limits, usually are built to have a top speed of 30 miles per hour (48 km/h), and have a maximum loaded weight of 3,000 lbs. NEVs fall under the United States Department of Transportation classification for low-speed vehicles.



Neighborhood electric vehicles (NEVs) provide quick access between buildings and work sites and can be shared by all employees. NEVs are allowed on all roads and trails in PSIC other than State Route 3.

**Off-Site Trail Connection**

A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles, that provides a connection from one development site to another or that connects to an established public regional trail system.

**On-Site Trail**

A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles, that provides access between buildings, parking, common areas, and open space within a development site.

**Pedestrian-Scaled**

The relationship between the dimensions of a building, street, outdoor space, or streetscape element and the average dimensions of the human body, as well as the space and built environment as perceived by the senses of a human being.

**Pollution Generating Impervious Surface**

An impervious surface that is a significant source of stormwater run-off pollutants. Pollution Generating Impervious Surface (PGIS) includes surface that receive direct rainfall and are regularly used for vehicular travel, storage of waste, storage of chemicals, or storage of erodible or

leachable materials (stockpiled soils, fertilizers, manure, ashes, petroleum products, etc). PGIS also includes metal roofs unless they are coated with an inert, non-leachable material.

**Setback, External**

The minimum required horizontal distance between the finished exterior wall of a structure and the nearest lot line that borders a property not located within the PSIC subarea.

**Site Clearing**

The clearing or removal of vegetative cover and other obstructions on a project site prior to undertaking construction work.

**Support Retail and Services**

Locally serving uses such as banks, child care, cafés, cleaners, medical/dental offices, and similar uses that support employees of industrial office or business uses.

**Trees, large**

A tree with a canopy that will reach at least 30 feet in diameter at maturity.

**Trees, small**

A tree with a canopy that will not exceed 30 feet in diameter at maturity.

**Vehicle Storage Area**

An outdoor area where vehicles and equipment are accumulated and stored for an indefinite period of time.

## Chapter 3: Zoning Districts and Uses

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### 3.010 Zone Establishment and Purpose

The following zones are hereby established within PSIC to protect the public health, safety and general welfare by implementing the goals and policies adopted in Section A. These goals include promoting the economic viability of manufacturing and industrial uses, encouraging employment growth, protecting Bremerton National Airport from incompatible land uses and preventing the encroachment of unplanned residential and other large non-industrial development within industrial zones. Specific purpose statements listed for each zone shall serve as a guide in determining the appropriate location of uses, conditions for development and in interpreting the standards.

a. General Industrial (GI)

The purpose of this zone is to promote a wide range of light and heavy industrial uses and compatible support retail and service uses.

b. Port Industrial Mix (PIM)

The purpose of this zone is to promote a wide range of light industrial, support retail and service uses, government uses and compatible service uses within a business park built form, as well as recreational facilities that are designed and operated in a manner that is compatible with industrial uses. Heavy industrial uses are also allowed in this zone, provided additional measures are taken to reduce the potential negative impacts of these uses on adjacent property through site design, screening, buffers and landscaping.

c. Aviation Business (AB)

The purpose of this zone is to provide areas for aviation related business, manufacturing and service-related uses, while ensuring compatibility with aircraft operations. A broad range of non-aviation industrial uses that do not include significant outdoor operations are also allowed in this zone, provided measures are taken to reduce the potential negative impacts of these uses on adjacent property through site design, screening, buffers and landscaping.

d. Mixed Employment (ME)

The purpose of this zone is to promote a range of commercial, office and light industrial uses outside of the MIC boundaries that are compatible with land uses in the MIC, with improved non-motorized connections and amenities. Light industrial activities in this zone should occur within enclosed buildings and heavy industrial uses are discouraged.

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#### Shared Vision, Shared Direction

The purpose of the PSIC Zoning and development standards is to implement key policy direction identified in the Section A, such as Strategy LU 3.1, which calls for a streamlined and expedited permitting process for development that meets sustainability criteria.

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Examples of development in the PIM Zone.

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Example of development appropriate for the Mixed Employment Zone

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### Shared Vision, Shared Direction

The Airport Compatibility Overlay (ACO) implements Policy LU 2.3 of Section A regarding controls on land uses and development that are incompatible with Bremerton National Airport.

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ADMINISTRATIVE MANUAL

## Airports and Compatible Land Use Guidebook

M 3074.00  
January 2011



Aviation Division

ACO Zones are defined based on guidance in the WSDOT Airports and Compatible Land Use Guidebook, available online at <http://www.wsdot.wa.gov/aviation/Planning/ACLUguide.htm>

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- e. Airport Compatibility Overlay (ACO)
  1. The purpose of this overlay zone is to protect the viability of Bremerton National Airport by discouraging incompatible land uses and requiring the evaluation and consideration of potential safety impacts when siting certain land uses in proximity to the airport while retaining City zoning authority.
  2. Determination of ACO. The Airport Compatibility Overlay for Bremerton National Airport is derived from the most current edition of the Washington State Department of Transportation's Airports and Compatible Land Use Guidebook. The location and mapped extent of the ACO Zones 1 through 6 are based on the WSDOT Guidebook recommended zone overlay for runways exceeding 5,000 feet as applied to Bremerton National Airport. The City retains all rights to prohibit, establish, and/or modify land uses within proximity to Bremerton National Airport. Airport compatibility zones represent areas surrounding an airport that have the potential to be affected by airport operations, including exposure to lights, noise, vibration, or increased aircraft crash hazard. To minimize safety risks, the WSDOT Guidebook contains an advisory list of sensitive land uses that generally should not be located within certain compatibility zones. In general, the most sensitive land uses should not be allowed within Zones 1-4, which are directly affected by take-off and landing procedures. Each compatibility zone corresponds to a phase of the airport traffic sequence and has an associated level of crash risk:
    - i. Zone 1 is the area immediately adjacent to either end of the runway, directly in the take-off or landing path. This zone lies on airport property and is generally kept free of structures to avoid interference with aircraft. This zone carries the highest crash risk for arriving aircraft.
    - ii. Zone 2 is an extension of Zone 1 and consists of the approach path for landing aircraft or ascent path for departing aircraft. This zone represents the most likely crash area for departing aircraft.
    - iii. Zone 3 is the inner aircraft turning zone. While crash risk is relatively low, land use compatibility is a concern due to the relatively low altitude of arriving and departing aircraft.
    - iv. Zone 4 is the outer approach/departure zone, located on a direct line from the ends of the runway. Crash risk is relatively low, but structure height should be regulated to prevent interference with aircraft landing/departure.

- v. Zone 5 represents the runway itself and land immediately adjacent to the sides of the runway.
  - vi. Zone 6 is the general traffic area for aircraft in the traffic pattern awaiting permission to land.
3. Compliance with FAA Regulations. In addition to local requirements established in the Section C, the applicant will be responsible for compliance with Federal Aviation Administration (FAA) Regulations, including, but not limited to, FAR Part 77 federal airspace regulations pertaining to the height of structures within defined areas.
  4. Consultation with the Port of Bremerton. All applicants proposing work in ACO zones 1 through 6 shall consult the Port of Bremerton after submitting a land use, site development, or building permit application. Consultation with the Port of Bremerton encourages applicants to seek input on actions that may affect Bremerton National Airport and promotes land use compatibility.

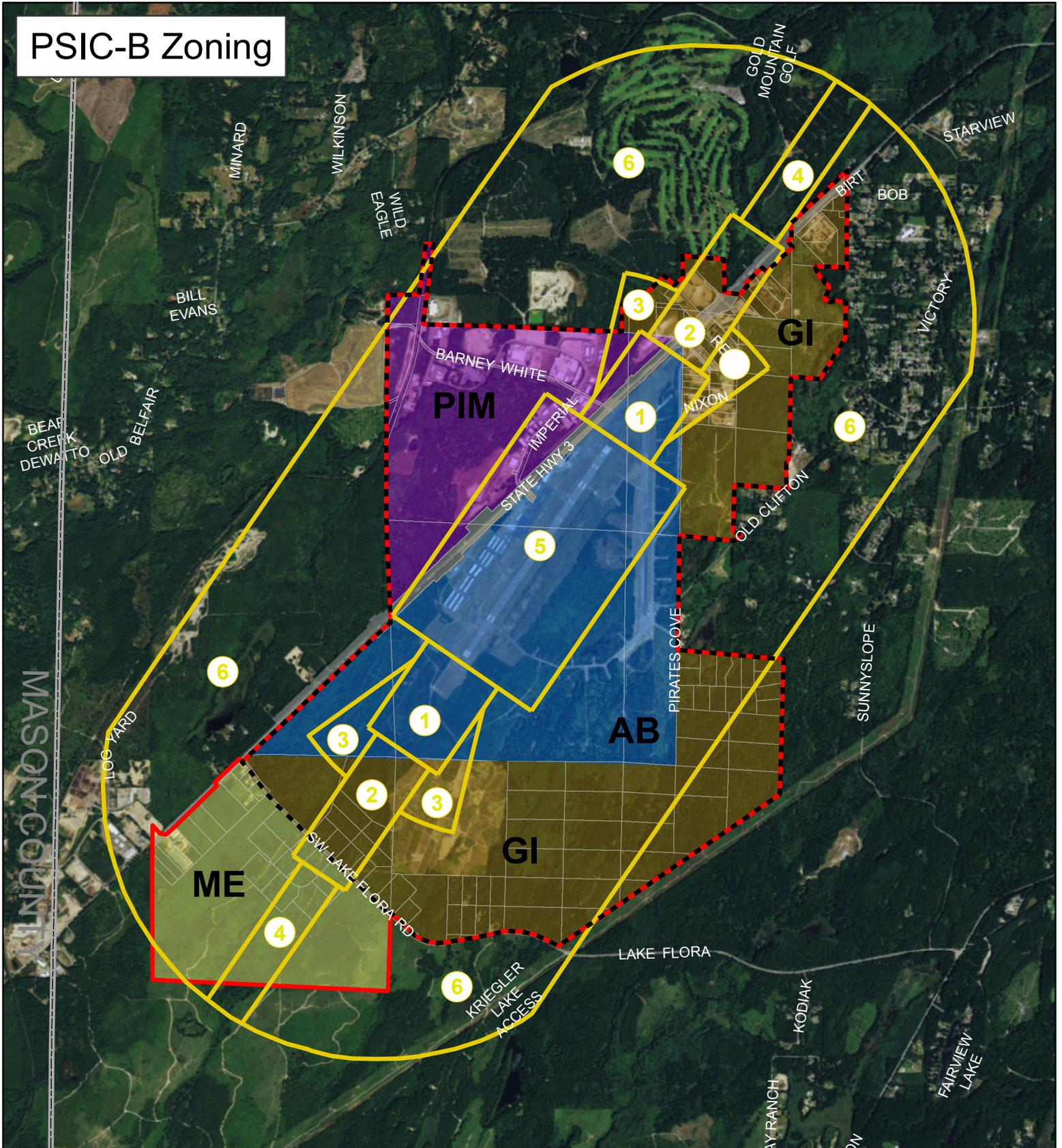
### 3.020 ZONING MAP

Figure C-1 depicts the location and extent of land use zones within the PSIC Subarea. The boundaries of the designated Manufacturing Industrial Center (MIC), which includes the General Industrial, Port Industrial Mix, and Aviation Business zones is also shown.



Development in the ACO should not conflict with airport operations.

Figure C-1: PSIC-B Zoning Map



ROW	<b>Zoning</b>	Airport Compatibility Overlay	 
PSIC-B Boundary	Aviation Business (AB)	Airport Compatibility Zone Number - Assigned per WSDOT Aviation Compatibility Guidebook	
MIC Boundary	General Industrial (GI)		
Parcel	Port Industrial Mix (PIM)		
	Mixed Employment (ME)		

### **3.030 Permitted Uses**

- a. The purpose of this section is to ensure that land uses within PSIC are compatible with manufacturing, industrial, aviation and employment uses. The following use regulations shall apply to all zones within the PSIC Subarea. All applicable requirements shall govern a use whether or not they are cross-referenced in a section.
- b. Permitted Uses. Provided that they are consistent with the intent of the Zone as specified in Section C.3.010, all uses are permitted outright, except for those uses set forth as conditional per Section C.3.040, those uses prohibited per Section C.3.050, and provided that the Development Standards specified in Chapter C.4 and C.5 of the Subarea Plan are satisfied. The applicant shall bear the burden of proving that a proposed use achieves the stated intent of the particular zone.
- c. Use Definitions. Definitions of the specific land uses are found in BMC Chapter 20.42.
- d. Decision Authority. A use determination made by the Director may be appealed to the Hearing Examiner following a Type II decision process as set forth in BMC Chapters 20.02 and 20.40.

### **3.040 Conditional Uses**

- a. Conditional Uses. A conditional use permit, which is approved pursuant to BMC 20.58.020, may permit the following uses, provided that the Development Standards specified in Chapter C.4 and C.5 of the Subarea Plan are satisfied:
  1. Group Residential Facility—Class II
  2. Adult Entertainment Business
  3. Essential public facilities, as defined in RCW 36.70A.200

### **3.050 Prohibited Uses**

- a. Prohibited Uses. Prohibited uses in the PSIC Subarea include:
  1. Junk Yard
  2. Residential as a primary use
- b. In addition to the prohibited uses listed above, any use with significant adverse impacts on less intense uses in neighboring residential zones shall be prohibited. Determination of significant adverse impact is made by the City and is based upon the following criteria:
  1. Noise encroachment. Generation of sound not meeting the provisions of the noise levels ordinance, BMC Chapter 6.32;

2. Light/glare encroachment. Unshielded glare visible during periods of darkness in an adjacent residential zone;
3. Odor, dust or smoke encroachment. Emission of an odor, dust or smoke byproduct clearly detectable in any residential zone.

### 3.060: Site Development Standards

- a. The purpose of this section is to ensure that site development is accomplished in a manner that is compatible with neighboring uses, while providing flexibility. Minimum site development standards apply as shown in Table C-1.
- b. Except those specified in Table C-1 below, there are no traditional setback requirements in PSIC. Instead, emphasis will be put on site conditions and corresponding site design to ensure safe, compatible, and effective building placement. Refer to the General Development Standards of Chapter C.4 for more specific development standards.

**Table C-1: Site Development Standards**

	<b>General Industrial</b>	<b>Port Industrial Mix</b>	<b>Aviation Business</b>	<b>Mixed Employment</b>
<b>Standards</b>				
Maximum Height <sup>1</sup>	Market Driven	Market Driven	Market Driven	Market Driven
Minimum External Setbacks when abutting an R-10 Zone or a residential use outside of PSIC boundaries. <sup>2, 3</sup>	50 feet	50 feet	50 feet	25 feet

**Notes**

1. Where building heights might affect airport operations at Bremerton National Airport applicants must demonstrate compliance with the criteria specified in Federal Aviation Regulations Part 77 and other applicable requirements.
2. This setback applies where a property line abuts another property. Refer to Section C.2.020 for additional information on where these setbacks apply.
3. An additional setback of 10 feet is required for outdoor storage use only.

## **Chapter 4: Development Standards**

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### **4.010 Purpose**

- a. The following standards apply to all zones and land uses within PSIC. They are intended to set minimum basic standards (i.e. requirements) for all development. These standards are also intended to encourage sustainable development, consistent with the policy direction contained in Section A. An applicant must satisfy the minimum requirements specified in each Subsection. Additional recommended guidance on methods to increase overall project sustainability are contained in Section D – Sustainable Development Guidelines and Development Incentives.

### **4.020 Site Clearing and Site Development**

- a. The purpose of this section is to prevent the indiscriminate removal or destruction of trees and ground cover on undeveloped and partially developed property during construction activities while also limiting hard and impervious surface coverage.
  1. Site Clearing. The maximum allowed site clearance for construction on a parcel shall not exceed the necessary area needed for construction purposes. Clearing for timber harvesting purposes shall be approved separately.
  2. Grading. On-site grading shall be limited to the greatest extent possible and shall be limited to the period between May 1st and October 1st, except when accompanied by a geotechnical report prepared by a qualified professional licensed in the State of Washington, which specifically and realistically identifies methods of erosion control for wet weather conditions.
  3. Hard Surface Coverage. The maximum allowed hard surface coverage on a parcel shall not exceed the area necessary for site development purposes and in no case shall exceed 75% of the total site area, except as specified in Tables D-1 or D-2 as appropriate.
  4. Impervious Surface Coverage. The maximum allowed impervious surface coverage on a parcel shall not exceed the area necessary for site development purposes and in no case shall exceed 65% of the total site area, except as specified in Tables D-1 or D-2 as appropriate.

### **4.030 Building Design Standards**

- a. Basic Site Development Standards. The purpose of this section is to ensure building design that enhances the architectural and aesthetic quality of buildings in PSIC. Further guidance for specific standards



Landscaping framing a building entrance and open space.



Light Industrial-Flex building featuring façade modulation, recessed entrance, and large windows facing the street.

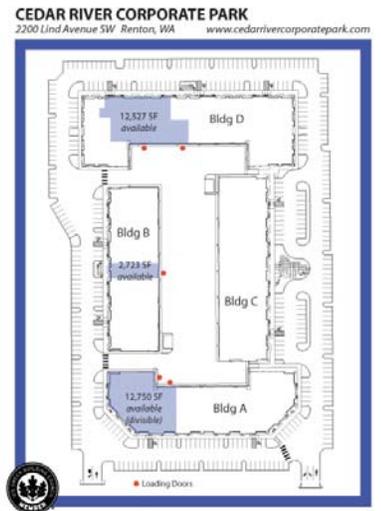
in this section can be found in the Design Guidelines located in Section D.

1. No outdoor storage in required building setbacks or easements shall be allowed.
2. Primary entrances shall be located so that they are visible and prominent from streets or access roads and parking areas.
  - i. Primary entrances shall be made visible and prominent by using architectural elements such as canopies, fixed seating, large doors, or protruding or recessed entrances.
  - ii. Avoid hidden building entrances, ensure good sight lines and well lit inset doorway and alcoves to increase personal safety.
3. The primary public entrances of all buildings shall be enhanced by one or more of the following at or near the entry:
  - i. Provide pedestrian facilities such as benches, kiosks, special paving; or
  - ii. Provide a trellis, arbor or other building element that incorporates landscaping; or
  - iii. Provide pedestrian-scaled lighting; or
  - iv. Provide adjacent window displays; or
  - v. Provide building ornamentation such as mosaic tile, relief sculpture, ornamental wood, metal trim, or other approved detailing; or
  - vi. Provide artwork or special pedestrian-scaled signs; or
  - vii. Other methods as approved by the Director as meeting the intent.
- b. Basic Building Design Standards. One of the following basic building design standards are required for building façades longer than 100 feet that are visible from the public right-of-way:
  1. A visual treatment applied for a continuous distance of at least 20 feet along the façade with the interval between treated areas not exceeding 100 feet;
  2. An offset with a minimum depth of 5 feet;
  3. A façade material, texture or color that is visually different and distinct from that of the base material, texture or color;
  4. Landscape screening or other vegetated treatment as approved by the Director;
  5. This requirement may be waived or modified for heavy industrial uses where determined not to be feasible by the Director.

- c. Minimum Building Energy Efficiency. For all new construction, development shall meet at least one of the requirements, as described in LEED-ND GIB Prerequisite 2: Minimum Building Energy Efficiency, or functional equivalent standard as determined by the Director.

#### 4.040 Transportation, Parking, Circulation, and Pedestrian Access

- a. The purpose of this section is to reduce the visual impact of parking, reduce vehicle trips, encourage alternate modes of transportation, and reduce greenhouse gas emissions within PSIC. Parking is regulated through standards that address the design, location, and size of parking areas. Right-of-way standards and requirements for sidewalks, trails, and driveways are contained in Chapter C.5. Traffic requirements and parking development shall be in accordance with the provisions of the Bremerton Municipal Code, including Title 10 (Traffic), Chapter 11.12 (Transportation Development), Chapter 20.48 (Off-Street Parking), with the following revisions and exceptions.
- b. Commute Trip Reduction
  - 1. The requirements of BMC Chapter 10.40, Commute Trip Reduction (CTR) Plan, shall apply, except as provided in paragraph (2) below.
  - 2. Once total new employment within PSIC has exceeded 2,000 new employees (resulting from actions permitted under the Planned Action Ordinance), all employers with 50 or more employees shall be required to participate in the CTR Program.
- c. Minimum Parking Requirements. Minimum parking standards shall be in accordance with BMC Chapter 20.48 Off-Street Parking Requirements, except as specified in Paragraph (1) of this subsection as well as in Subsection (e) below.
  - 1. Parking reductions may be allowed, at the discretion of the Director, if a parking analysis is completed and indicates that sufficient parking is available to meet demand.
- d. Parking Location and Design
  - 1. Parking areas that accommodate more than 125 vehicles shall be divided into a series of smaller connected lots, located behind structures, and/or fully screened with Type I landscaping.



Site plan using internal service court to avoid vehicular and pedestrian conflicts and to screen service and storage activities. Site plan courtesy of Cedar River Corporate Park, LLC.



Example of intensive, compact industrial development with shared parking and loading areas screened from rights-of-way.

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***Shared Vision,  
Shared Direction***

*See Strategies T 2.2 and LU 1.3  
for policies that support shared  
parking and coordinated access.*

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Separation of parking from pedestrian pathway with landscaping and weather covering.

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- e. Shared Parking Area Reductions
  - 1. The amount of off-street parking required in Subsection (c) above may be reduced where multiple buildings/tenants share a common, centrally-located parking area. Reduction shall be based on the type and mix of uses, as follows, except that these reductions shall not be used in conjunction with reductions specified in Subsection (c) above:
    - i. Properties with only industrial or support retail and service uses: 30% reduction
    - ii. Properties with retail or other uses: 10% reduction
    - iii. Mixed retail/office uses with at least a 4:1 ratio of retail to office: 20% reduction
    - iv. 50% reduction for retail uses of less than 5,000 sq. ft. when they are developed as part of a business park that contains at least 60% industrial or support retail and service uses.
- f. Parking Stall and Aisle Design. Shall be in accordance with BMC 20.48.080.
- g. Loading and Vehicle Storage Areas
  - 1. Loading and vehicle storage areas shall not be located within required building setbacks.
  - 2. Vehicle loading docks and long-term vehicle storage areas shall be screened from public rights-of-way with Type I Visual Screening, walls, or other methods, as approved by the Director.
  - 3. The Director may waive or modify these standards where it is deemed infeasible for a particular industrial or manufacturing use.
- h. Pedestrian Access
  - 1. Projects shall include an on-site pedestrian system connecting all parking areas and entrances to each other and the public right-of-way.
  - 2. Pedestrian paths shall be integrated with the parking lot landscaping required in BMC 20.48.080 and BMC 20.50.050(c)(3).
  - 3. Bicycle circulation shall be considered in site design and appropriate measures taken to accommodate bicycle circulation on-site.
  - 4. Where feasible, provide steps and ramps across retaining walls and slopes.
  - 5. Pedestrian paths shall be well lit.

6. Adjacent landscaping shall not block visibility to and from a pedestrian path, especially where it approaches a roadway or driveway.
  7. Refer to Chapter D.3 for more specific Design Guidelines.
- i. Bicycle Facilities. Bicycle parking shall be provided at 10% of the required automobile spaces. Please see BMC 20.48.180(b) for bicycle parking requirements and Section D.3.170 for recommended Design Guidelines.
  - j. Neighborhood Electric Vehicles. Neighborhood Electric Vehicles (NEV) and Electric Golf Carts shall be allowed on all pedestrian pathways within PSIC that are constructed to the standards contained in Section C.5.050. NEVs shall also be allowed on all public roadways in PSIC where their use is not otherwise prohibited by state or local law (e.g. roadways with a maximum speed limit of 25 miles per hour or less are suitable).

#### 4.050 Landscaping

- a. The purpose of this section is to ensure that site landscaping within PSIC reflects key goals related to sustainable development and stewardship of critical areas. The retention of existing trees and vegetation is important to help promote the utilization of natural systems for environmental benefits, reduce the impacts of development on the storm drainage system, moderate the urban heat island effect and provide a better transition between various land uses within the City. The requirements of BMC Chapter 20.50 shall apply, except as modified or supplemented in this subsection. Please also see Chapter D.4. for recommended design guidelines.
- b. Vegetation Preservation
  1. To the greatest extent feasible, existing healthy significant trees defined in BMC 20.50.050(d)(4) shall be retained on site.
  2. Site design shall attempt to preserve existing trees where feasible. However, should a proposal include the removal of all or portions of a site's significant tree cover a certified arborist or professional forester shall be retained by the applicant to inventory the tree(s) and make recommendations regarding the protection, retention, preservation, removal and replacement of the tree(s). A copy of the report and recommendations shall be submitted to the City as part of the site development process and prior to clearing.
  3. If any trees in required landscaped areas are deemed to be hazardous and must be removed, the following replacement standards are required:



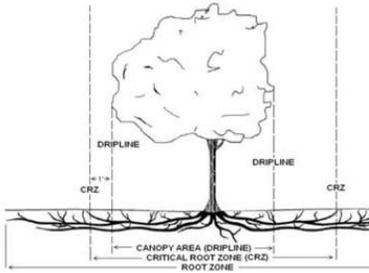
Indoor bicycle parking facility. Image courtesy of FHWA.



Multilayered landscaping used to screen industrial loading area from adjacent street.



Example of retained vegetation in an industrial parking area.



A tree's Critical Root Zone extends beyond the dripline, and disturbance in this area should be avoided to prolong the life of the tree. Photo courtesy of Urban Horticulture Institute, Cornell University. Diagram courtesy of the City of Elk Grove, CA.



Retained and planted landscaping resulting in a combination of large and small trees.

- i. Replacement trees shall be similar to the trees removed and all replacement plants in required landscaped areas are subject to native species requirement in Section C.4.050(c)(3).
  - ii. The evaluation report shall provide recommendations for methods to ensure that hazard removal and replacement planting do not harm adjacent trees and infrastructure and that harm to adjacent shrubs and groundcover is minimized.
4. Where existing trees are preserved, the Critical Root Zone (CRZ) of each tree shall be protected. No more than 30% of the CRZ may be disturbed, and ground disturbance may not occur within the inner 50% of the CRZ radius from the trunk, unless such action is approved by an arborist or professional forester and the Vegetation Management Plan (VMP) contains provisions for replacement of any affected trees that do not survive as a result of disturbance.
  5. During construction, chain link fencing, or other type as appropriate, shall be installed at or beyond the limits of the CRZ to ensure protection, except in those portions of the CRZ where ground disturbance is allowed to occur.
- c. General Landscape Requirements
1. Landscaping requirements shall be satisfied through the use of multilayered vegetation and/or retained significant vegetation, provided all other standards are also satisfied. Large areas of manicured lawn do not count toward landscaping requirement.
  2. The minimum amount of the total site area required to be landscaped by zone is described in Table C-2 below:

**Table C-2: Required Landscaping by Zone**

Zone	Required Percentage of on-site Landscaping <sup>1, 2, 3, 4</sup>
Aviation Business	10%
General Industrial	10%
Mixed Employment	15%
Port Industrial Mix	15%

Notes:

1. Areas of retained native vegetation may be counted toward landscaping requirements provided that they are not degraded by infrastructure improvements, including, but not limited to, access roads and utility corridors.
2. Landscaping, visual screening, native vegetation and vegetated low-impact development facilities required under other standards in the code shall count toward the landscaping requirements.

3. Projects containing critical areas must comply with all standards of BMC Chapter 20.14. Critical areas may be counted toward required landscaping area.
  4. Landscaping required at the base of all signs shall not count toward the required landscaping area specified in this table.
3. Landscaping shall result in tree densities consistent with one of the following criteria:
    - i. At least 8 large trees per 10,000 square feet of landscaped area;
    - ii. At least 14 small trees per 10,000 square feet of landscaped area; or
    - iii. A combination of at least 12 large and small trees per 10,000 sq. ft. of landscaped area, of which at least 4 are large trees.
  4. At least 90% of new plant material installed within designated landscaping/retention areas shall be native to the Puget Sound region.
- d. Visual Screening
1. The retention of existing multilayered native forest vegetation is preferred over planted landscaping within required landscape buffers, provided it meets the basic screening intent or is interplanted to comply with the standard. Please see BMC 20.50.050(D) for applicable credits given for retention of native vegetation.
  2. All development in the MIC shall provide a minimum 25-foot Type II visual screen where a site abuts a zone outside of PSIC other than the Industrial Park zone.
  3. Development in the ME Zone shall provide a 15-foot Type I visual screen where it abuts the R-10 Zone or a residential use.
  4. Industrial development shall provide a minimum 25-foot Type II visual screen along any portion of the property boundary that adjoins the right-of-way of State Route 3 or Lake Flora Road. Existing native vegetation in the area shall be preserved to the greatest extent feasible, and retained plants within the buffer area shall be counted toward fulfillment of this requirement.
  5. Heavy industrial development in the MIC that borders other properties within the MIC shall provide a minimum 20-foot Type II visual screen along any portion of the property boundary where the adjacent use is not also heavy industrial.
  6. Tree spacing specified in BMC 20.50.050(b) for Type I and Type II visual screens may be modified when an arborist or other qualified professional determines that vegetation densities or



Entrance landscaping using evergreen species.



Example of a retained greenbelt to separate industrial and residential development.



b. Exterior Lighting

1. Exterior lighting fixtures shall be directed in a manner that does not result in the trespass of excess light onto adjacent parcels or public rights-of-way.
2. The brightness of exterior illumination shall be the minimum necessary to ensure operational safety and security, and lighting shall be appropriately scaled for its purpose. For example, lighting for pedestrian walkways shall be smaller in scale than lighting used for security and parking, which shall be smaller in scale than lighting used for industrial operations.
3. All exterior building and site lighting (e.g. street lights and parking area lights) shall use full cut-off fixtures except where waived by the Director due to specific lighting requirements of the proposed use, e.g. industrial process equipment, outdoor recreation facilities, etc.

**4.080 Noise and Emissions**

- a. The purpose of this section is to ensure that new and expanded industrial development does not result in adverse effects on surrounding properties through the generation of excessive noise or through emission of dust, odors, or toxic substances. Development in all zones of the PSIC Subarea shall conform to BMC Title 6, except as modified herein.

b. Noise and Emissions

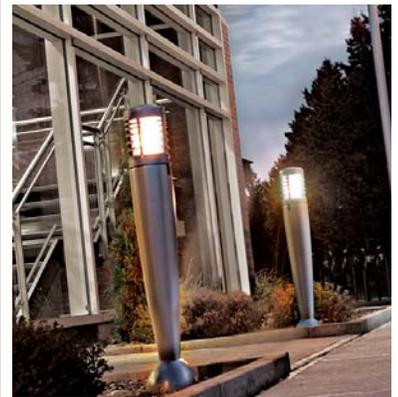
1. All zones within PSIC are hereby established as Noise Control District III, as defined in BMC Chapter 6.32. All requirements of BMC Chapter 6.32 shall apply to development within PSIC, provided that the FAA shall be the sole regulator of noise levels associated with Bremerton National Airport.
2. New or expanded development within PSIC shall not result in odors, dust, or smoke that is clearly detectable on any property outside the MIC boundaries.

**4.090 Low Impact Development**

- a. Inclusion of Low Impact Development and Feasibility Determination. All development in PSIC is encouraged to incorporate LID to the maximum extent feasible. Please refer to the Kitsap County LID Guidance Manual for further guidance.

1. Site Evaluation

- i. A site evaluation should assess the feasibility for dispersion, including topography, sensitive slopes and required set-backs. Where dispersion is feasible for all or part of the site,



Bollard lights used to illuminate pedestrian pathway. Image by Philips-Lumec.

The Kitsap County LID Guidance Manual is a comprehensive resource for localized guidance on pertinent best practices. The manual can be found at: <http://www.kitsaphba.com/LID/>



These illustrate LID features implemented at the Kitsap County Annex building in PSIC.



These illustrate LID features implemented at the Kitsap County Annex building in PSIC.



Rain gardens, a type of bioretention, used in industrial setting to capture and treat stormwater. Image courtesy of TOTE Marine, Tacoma WA.

Additional guidance for bioretention soil is provided in Washington State University, Pierce County Extension's, Technical Memorandum: Bioretention Soil Mix and Recommendations for Western Washington. Please also see additional technical guidance on LID stormwater facilities at the Puget Sound Partnership Resource Center at:  
[http://www.psparchives.com/our\\_work/stormwater/stormwater\\_resources.htm](http://www.psparchives.com/our_work/stormwater/stormwater_resources.htm)

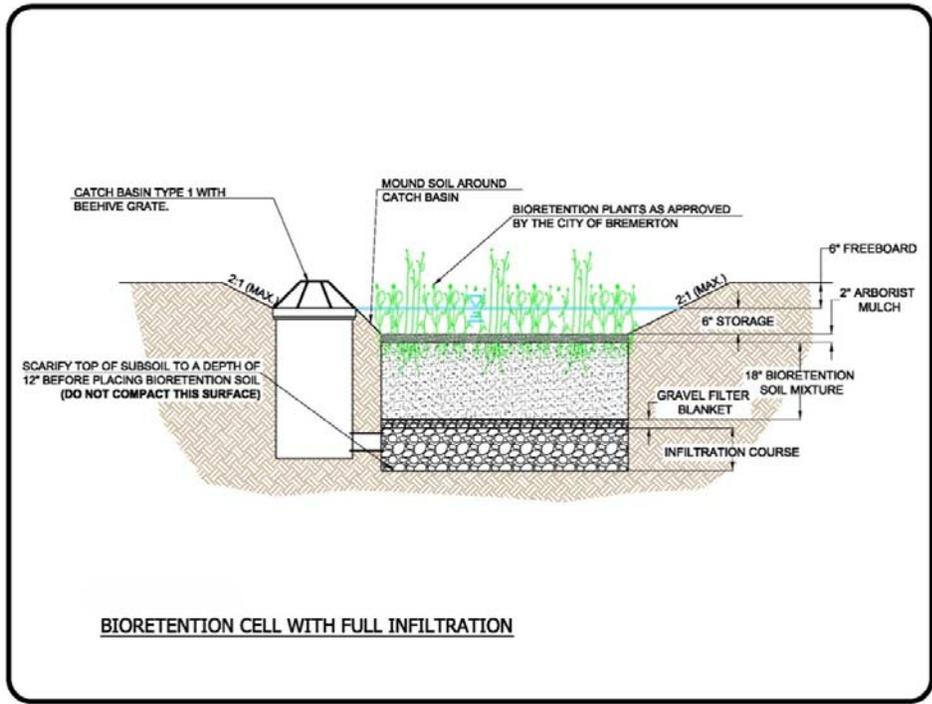
this method should be used. In areas where dispersion is not feasible, infiltration should be used if feasible.

- ii. The evaluation should assess the feasibility of infiltration, including a soils reconnaissance and Pilot Infiltration Test (PIT) for any outwash soils identified where infiltration may be possible. Where infiltration is feasible for all or part of the site, it should be implemented.
- iii. In areas where full infiltration is not feasible, LID BMPs per Subsection (b) below should be used for all water quality treatment and partial flow control. Projects should meet water quality treatment needs with LID BMP's if feasible.
- iv. Site soils in landscaped areas shall be amended pursuant to Subsection (b)(1) below.
- v. Impervious surfaces shall be limited to the greatest extent feasible and shall comply with the provisions of Section C.4.020(a)(4).

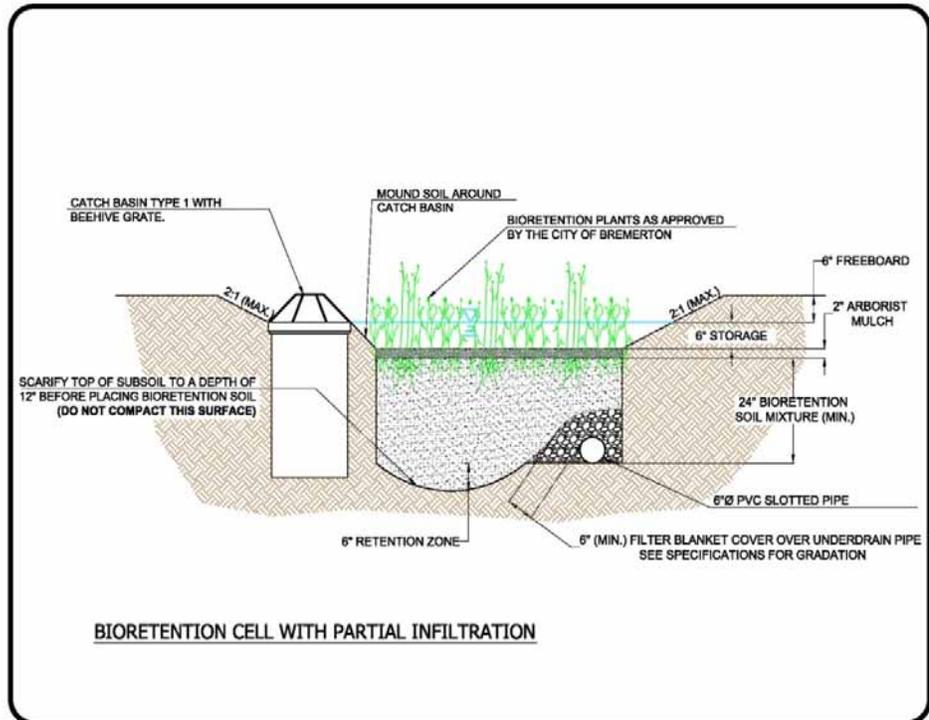
#### b. LID Design

1. Design of LID facilities such as bioretention, pervious pavements, and others shall be in accordance with the design criteria in the latest edition of the Kitsap County LID Guidance Manual. Further guidance can be found in the Puget Sound Partnership's Low Impact Development Technical Manual for Puget Sound ("the LID Manual") and the Stormwater Management Manual for Western Washington ("the Stormwater Manual"), except as provided in Chapter C.5 and this Subsection.
2. All stormwater facilities located in the Airport Compatibility Overlay Zone shown in Figure C-1 shall use BMPs detailed in the WSDOT Airport Stormwater Guidance Manual.
3. Conceptual Bioretention Facility Design. Figures C-2 and C-3 contain conceptual bioretention facility designs for PSIC. Preference shall be given to facility designs that fully infiltrate all stormwater on-site. These are provided for convenience only and specific reference should be made to the Kitsap County LID Guidance Manual for most current diagrammatic drawings.

**Figure C-2: Bioretention Cell Design – Full Infiltration**



**Figure C-3: Bioretention Cell Design – Partial Infiltration**



c. LID Implementation Standards

1. Projects should implement a comprehensive stormwater management plan for the project that manages all rainfall on-site, incorporates soil amendments in landscaped areas, utilizes permeable pavement for all pedestrian areas and uses feasible LID techniques, consistent with Subsection (b) above.
2. Projects should implement a stormwater management plan that uses LID BMPs for all required water quality treatment from Pollution Generating Surfaces (PGS), i.e. bioretention and pervious pavement.
3. All storm drains or inlets shall be clearly labeled to indicate the drain or inlet leads to a stream or groundwater and that dumping in the drain or inlet is prohibited.

## Chapter 5: Right-Of-Way Standards

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### 5.010 Purpose and Applicability

- a. SKIA's circulation system includes streets, driveways, sidewalks and multi-use paths. This system is a critical element in site design and provides connectivity on and off-site. All standards shall be in accordance with BMC Title 11 with the following additions and/or revisions as detailed in this Section.

### 5.020 Conceptual Street Standards

- a. Conceptual Street Standards. Figures C-4 through C-6 contain conceptual street designs for PSIC.
- b. Selection of Street Design. LID options are provided for design, in addition to the standard designs provided in the City of Bremerton Design and Construction Standards. The applicant shall give preference to LID designs where feasible and final street design will be dependent upon anticipated traffic volume, soils conditions and other pertinent factors.
- c. Street Typologies Map. Figure C-7 illustrates a conceptual plan for a preferred roadway network and street typologies in PSIC. Street typology details are shown in Figures C-4 through C-6. The preferred street typologies represent a preference only; other streetscapes as specified in Section C.5.020 may be used upon direction from the City Engineer. Similarly, the roadway network is conceptual only; future street alignments may vary depending on actual development proposals and review/approval by the City.

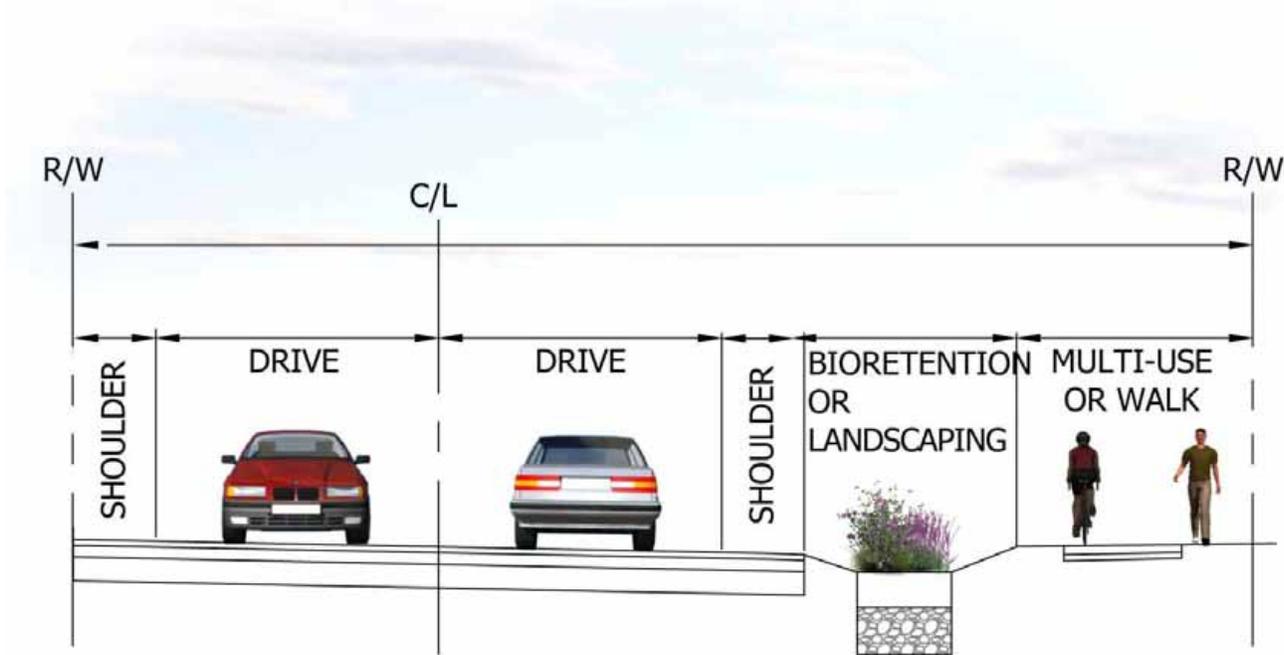


The newly constructed Phase I of the Cross-SKIA Connector incorporates a pervious concrete shoulder



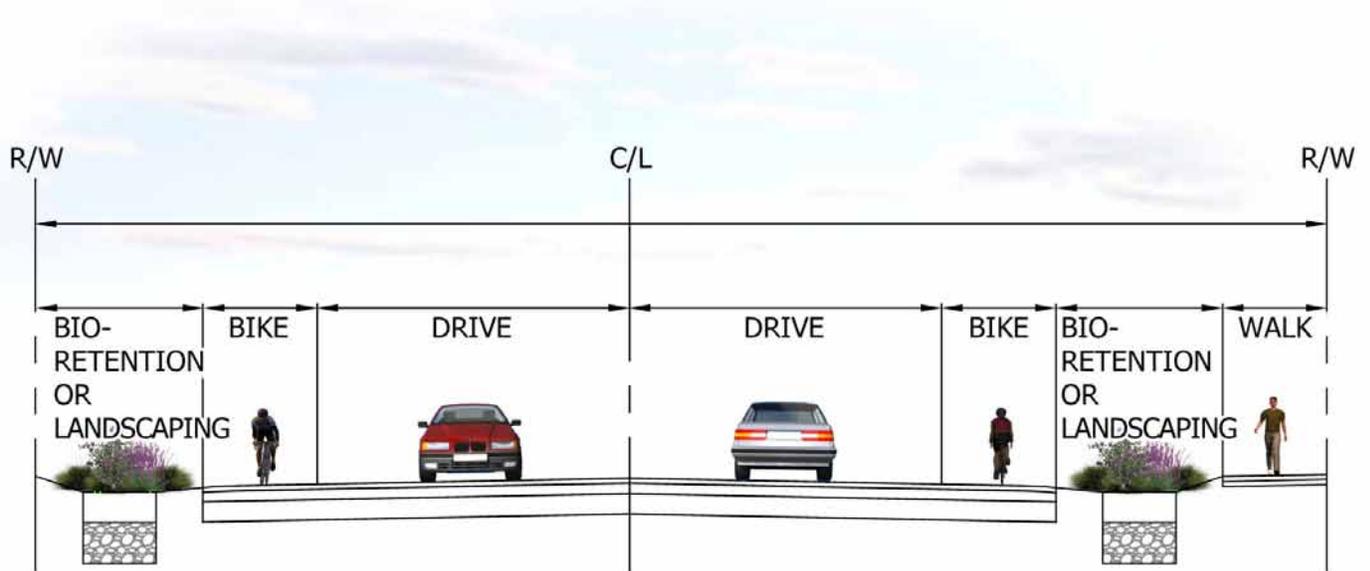
Pervious concrete adjacent to traditional concrete. Note lack of ponding or sheet flow on the pervious concrete on the left.

**Figure C-4: Local Access Street Cross-Section Typology**



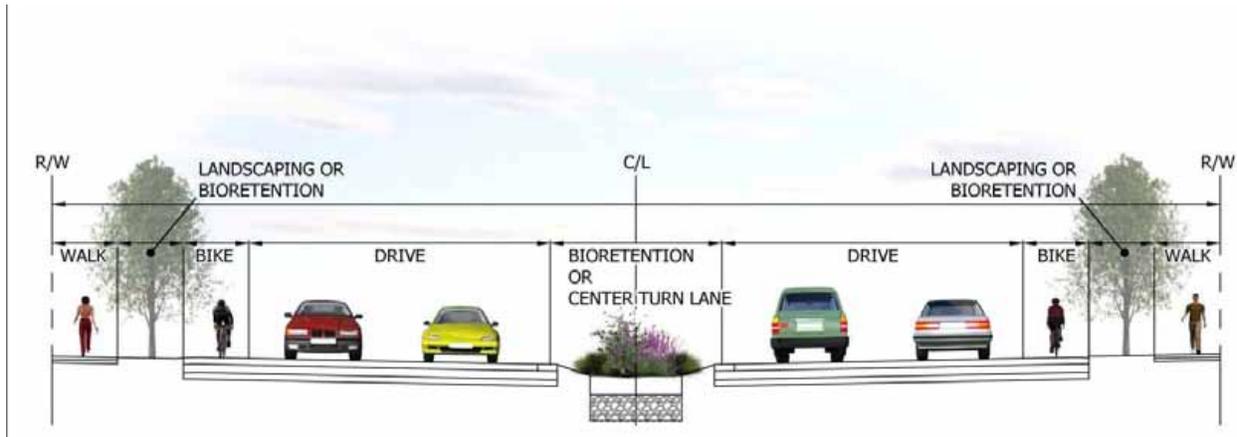
- Note: 1) Multiuse-paths, sidewalks, and shoulders should be considered for construction with pervious pavement where soil conditions are appropriate.
- 2) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.
- 3) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.
- 4) Width of the multi-use path shall be governed by usage. Paths anticipated to have heavy NEV usage may be up to 14 feet in width with a minimum trail width of 6 feet with no NEV usage anticipated.

**Figure C-5: Commercial/Industrial Street Cross-Section Typology**



- Note: 1) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.
- 2) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.
- 3) Sidewalk and bike lane should be considered for construction with pervious paving where soil conditions are appropriate. Drive lanes are to use standard impervious surfacing.

**Figure C-6: Arterial Street Cross-Section Typology**

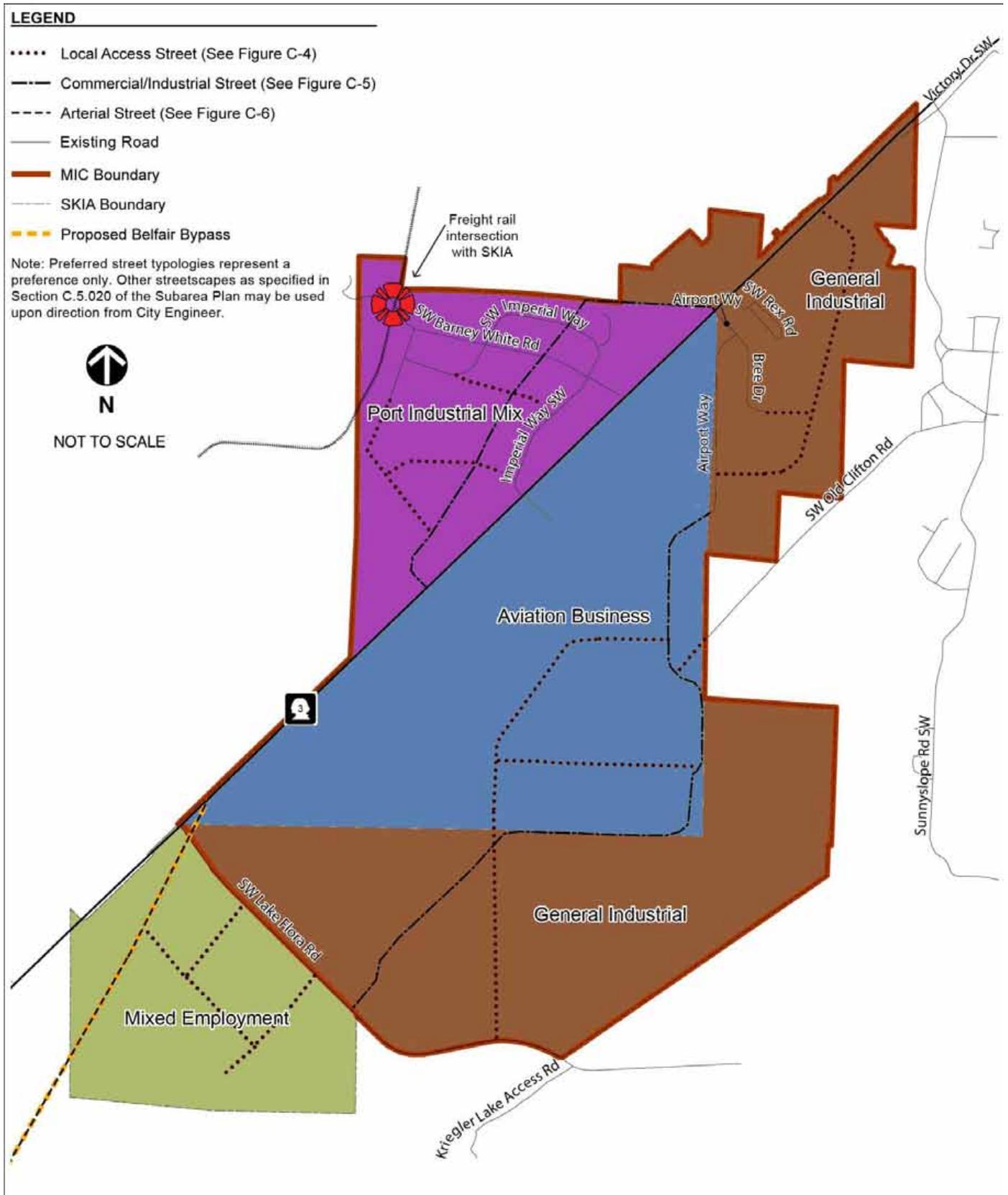


- Note: 1) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.
- 2) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.
- 3) Sidewalk may be eliminated from one side of the roadway where it is documented that a sidewalk is not needed. Consideration shall then be for a multi-use trail, either on-site or off-site, instead of the sidewalk.
- 4) Sidewalk and bike lane should be considered for construction with pervious pavement where soil conditions are appropriate. Drive lanes are to use standard impervious surfacing.
- 5) Per City of Bremerton Roadway Section 3007, the City may require a two-way left turn lane in lieu of a planted median.

## **5.030 Deferred Construction of Street Frontage Improvements**

- a. Development that is required to construct right-of-way and frontage improvements per BMC 11.12 may seek a deferment from Section C.5.020 as follows. The deferment may allow elements of the streetscape to be constructed at a future date, as determined by the City Engineer. In the case of deferment, the applicant is required to dedicate the necessary right-of-way.
- b. Conditions for deferment. Applicants may defer construction of the required street frontage improvements under the following conditions:
  1. Development is located on a dead-end street; and
  2. Development must be adjacent to vacant parcels or undeveloped lease lots.
- c. Applicant shall:
  1. Construct drive lanes as presented in Section C.5.020 for sites with substandard vehicular access; and
  2. Property owner shall dedicate sufficient right-of-way necessary to construct the required streetscape(s) presented in Section C.5.020; and
  3. Agree to construct the improvements at a future date, as determined by the City.

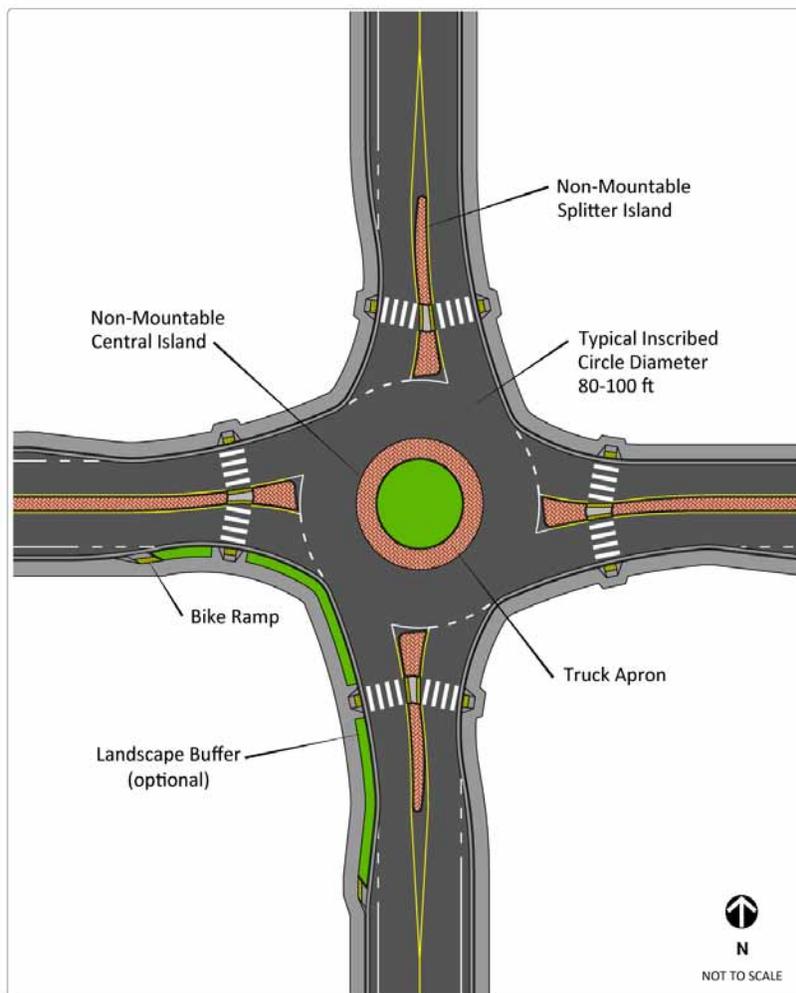
**Figure C-7: Preferred Street Typologies Map**



## 5.040 Intersections – Preference for Roundabouts

- a. Preference for Roundabouts. Roundabouts shall be used in lieu of traffic signals and all-way stop signs unless a roundabout is determined to be inappropriate by a traffic study and concurrence of the study by the City Engineer.
- b. Conceptual Roundabout Design. Figure C-8 contains a conceptual roundabout design for PSIC. This design shall be refined with additional dimensional and technical details, and then adopted as part of the revised City of Bremerton Design and Construction Standards (also referred to as the engineering standards).

**Figure C-8: Conceptual Urban Compact Roundabout**

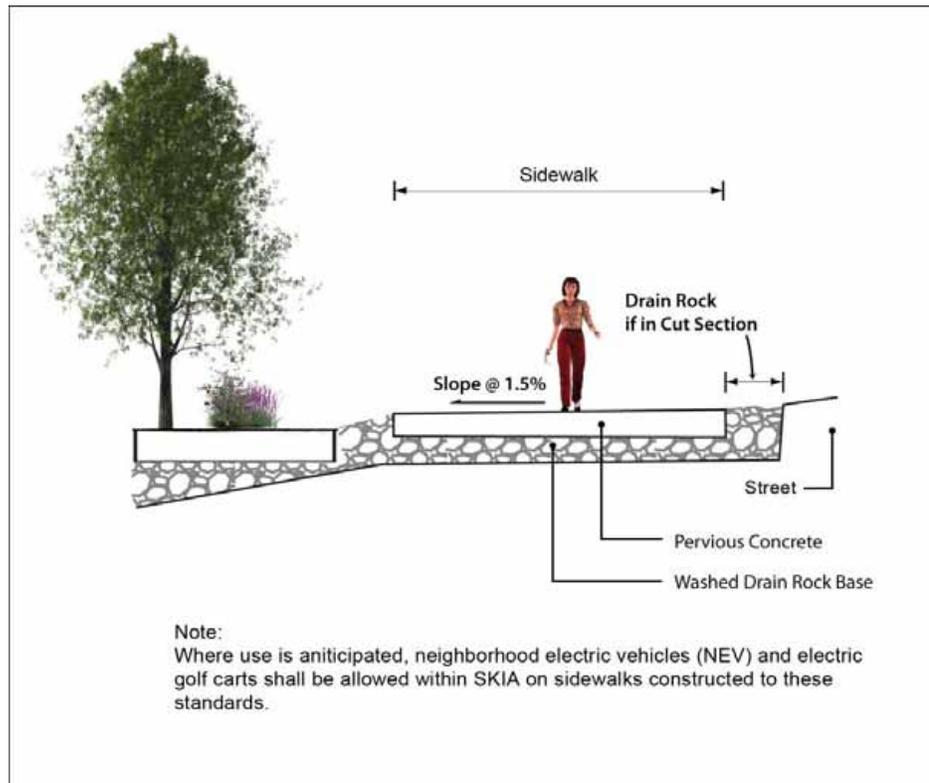


Existing roundabout in PSIC.

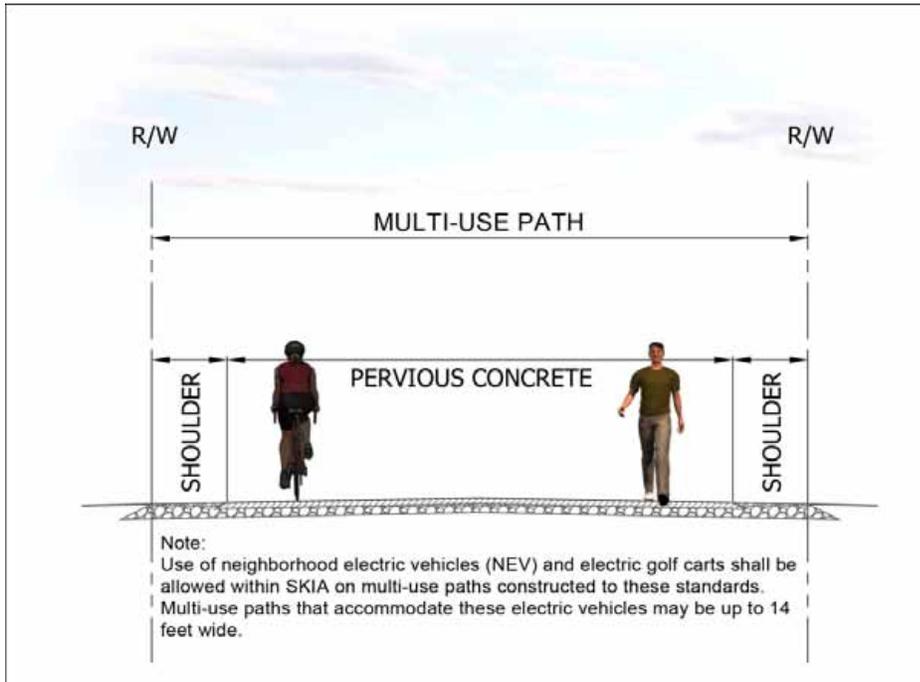
## 5.050 Non-Motorized Facilities

- a. Non-motorized facilities in PSIC can range from traditional sidewalk design to a multi-use path.
- b. Trails Concept. The trail system in PSIC is intended to form a loop, making non-motorized connections throughout the entire Subarea. As development occurs, the ideal route will be determined to best fulfill the concept. The main loop trail is intended to have individual developments feed into it with connected pathways (pursuant to Figures C-9 and C-10).
- c. Preference for Low Impact Development. The applicant shall give preference to LID sidewalk and multi-use path designs utilizing pervious pavement where feasible and shall determine final design depending on soil conditions and other pertinent factors.

**Figure C-9: Pervious Sidewalk**



**Figure C-10: Multi-Use Path Cross-Section**



### 5.060 Private Driveways

- a. Driveways on roads with a parallel multi-use trail shall have a minimum spacing of 200 feet.
- b. All other driveways shall be designed to conform to BMC 11.12.150.

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## **SECTION D: SUSTAINABLE DESIGN GUIDELINES AND DEVELOPMENT INCENTIVES**



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# SECTION D: SUSTAINABLE DESIGN GUIDELINES AND DEVELOPMENT INCENTIVES

## Chapter 1: Introduction

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### 1.010 Purpose and Applicability

- a. The following *recommended* guidelines are intended to promote more sustainable industrial and commercial development by providing specific guidance and examples of how the goals and policies of Section A can be achieved with flexibility of creative design intent. The guidelines also serve as recommended strategies for meeting the requirements established in Section C and the incentives contained in Chapter 5 of this section.
- b. All applicants are encouraged to meet the basic written purpose of each section and consider the implementation suggestions in the design of the project.
- c. Heavy Industrial Flexibility. In recognition of the unique nature of certain heavy industrial uses, including structures and activities, flexibility shall be provided for these uses. Where it is determined by the Director that it is infeasible for a particular heavy industrial use to comply with certain design guidelines, the Director may waive or modify the specific guideline(s). Such development shall comply with these guidelines to the maximum extent feasible in order to be designated as PSIC Evergreen Certified.

### 1.020 Section Structure and Contents

- a. The Sustainable Design Guidelines and Development Incentives address the following elements:
  1. Chapter 1: Introduction, including a description of the purpose and applicability of the Sustainable Design Guidelines and Development Incentives. Important project design features that advance the City's desire for sustainable project design are also outlined;
  2. Chapter 2: Definitions;
  3. Chapter 3: Site planning and building design guidelines, including purpose statements for each category followed by specific implementation measures;



Examples of sustainable design treatments.

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**Shared Vision,  
Shared Direction**

Sustainable Design Guidelines are intended to implement Goal LU1 and related strategies which promote a compact, intensive industrial land use pattern that is consistent with sustainable development goals for PSIC.

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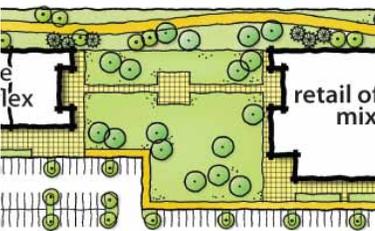


Incorporation of native vegetation and mountain views are key design objectives in the PSIC area.



Shared parking and interior service courts screened from adjacent streets by landscaping and retained vegetation.

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Shared public space between buildings.

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4. Chapter 4: Landscape design guidelines, including purpose statements for each category followed by specific implementation measures;
5. Chapter 5: Sustainable development Incentives, including:
  - i. Sustainable development tiers, measures and incentives
  - ii. PSIC Evergreen Building Permit Fee Rebate Program
  - iii. Sustainable development categories and associated point totals per measure. Categories include: Site Development and Building Design; Sustainable Transportation; Environmental Stewardship and Habitat; Low Impact Development; Water Conservation; and Energy Efficiency and Alternative Energy.

### **1.030 Basic Elements of Sustainable Project Design**

- a. The City considers the following design features to be desirable elements of project design and the guidelines set forth are intended to facilitate the incorporation of these features into projects:
  1. Compact site development that minimizes environmental impacts through reduced impervious surface creation, the use of low impact development techniques, protection of critical areas and retention of additional remnant natural areas where feasible; and
  2. Preservation of natural site features and view corridors to open areas and mountain vistas; and
  3. Site design that considers the integration of multimodal transportation, particularly provisions that address large trucks, passenger vehicles, non-motorized circulation and the potential for future transit service; and
  4. Retention of native growth areas adjacent to roadways and access drives; and
  5. Prominent shared access driveways with clear visibility of entrances and coordinated signage; and
  6. Landscaping and screened parking that capitalizes on opportunities for shared parking and loading facilities located at the rear and sides of buildings where possible to reduce hard surfaces; and
  7. Significant, coordinated, landscape, streetscape and hardscape elements with landscaping that emphasizes native and drought tolerant plantings; and

8. Placement of structures that creates opportunities for plazas, courtyards and pedestrian use areas that can be utilized as on-site gathering and recreation spaces; and
9. Connection of developments through a pedestrian trail system to provide opportunities for recreation and reduce vehicle trips; and
10. Development of support services to industrial development, such as small retail, food, automotive services and child care to reduce vehicle trips; and
11. Site design which anticipates the potential future reuse of buildings and sites for other purposes; and
12. Building and site treatments that put an emphasis toward public views, street façades and entrances that emphasize the “public zone”; and
13. Building design treatments to reduce massing where feasible and promote architectural definition and interest.

### **1.040 Sustainable Design Figures**

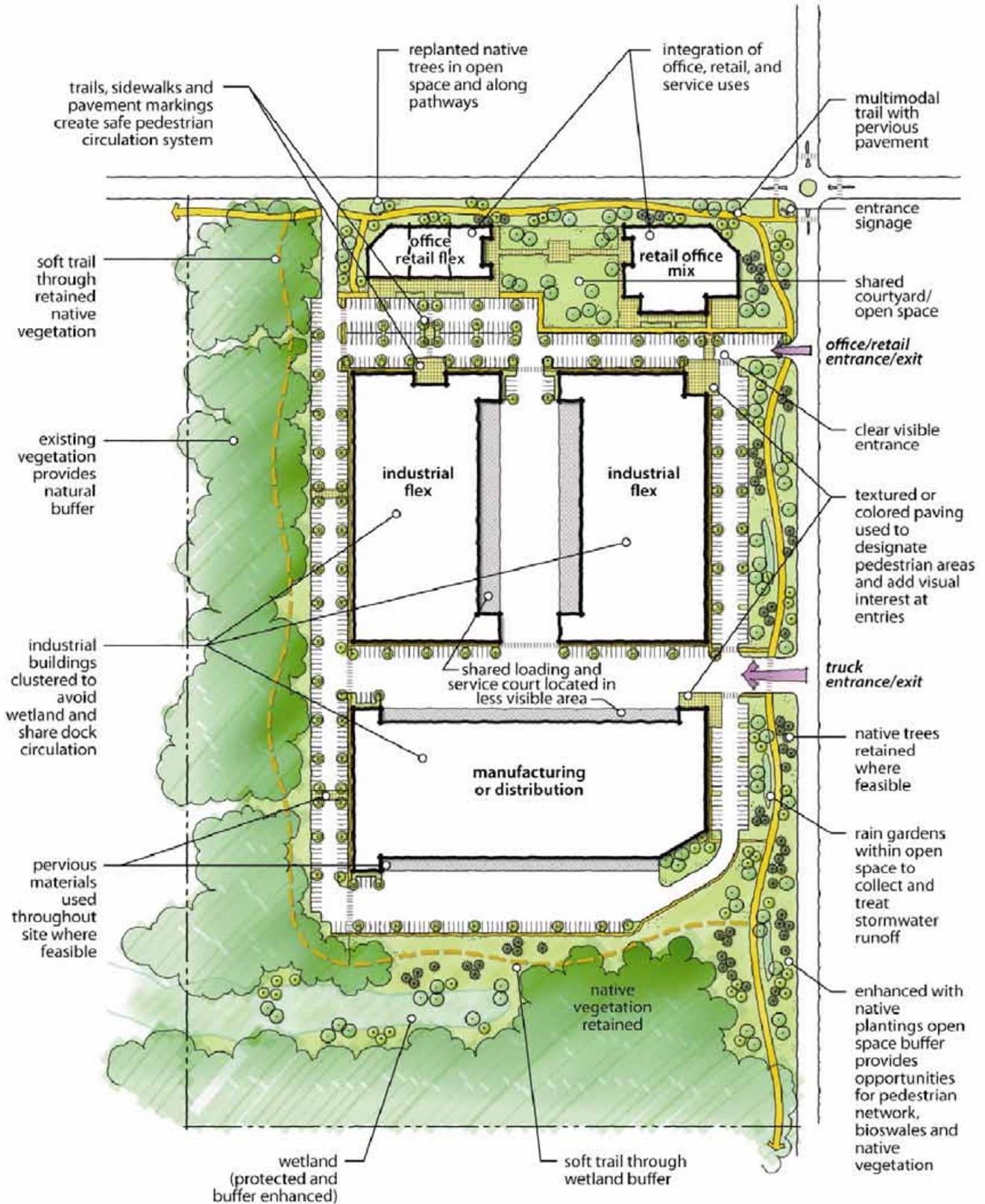
Figures D-1 and D-2 depict recommended principles of sustainable site and building design, respectively. The features and design techniques illustrated in these figures are discussed throughout the subsequent chapters of this section.



Pedestrian amenities and entrance features can create connections between the building and the public zone.

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**Figure D-1: Sustainable Site Design Techniques**



**Figure D-2: Sustainable Building Design Techniques**



## Chapter 2: Definitions

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### 2.010 Introduction

All definitions contained with the Bremerton Municipal Code apply in PSIC, unless specifically modified by the definitions below. Please see BMC Chapter 20.42. If a specific term is not defined or referenced, it shall take its normal and customary meaning within the context of how it is used.

### 2.020 List of Defined Terms

**Blank Wall**

A wall devoid of windows, doors, façade modulation, or other architectural detailing.

**Bollard**

A short post, typically constructed of metal or concrete, used in a series to delineate outdoor spaces or prevent vehicular access while allowing bicycles and pedestrians to pass. When combined with built-in illumination, it is referred to as a "bollard light."

**Canopy**

An architectural projection that provides weather protection, identity or decoration and is supported by the building to which it is attached. A canopy is comprised of a rigid structure over which a rigid covering is attached.

**Dual Supply Plumbing**

A plumbing system that provides separate piping and connections for the use of either potable water or reclaimed, non-potable water at the same fixture.

**Earth Toned**

A color scheme that draws from a color palette of browns, tans, greys, greens, oranges, whites, and some reds. The colors in an earth tone scheme are muted and flat in an emulation of the natural colors found in soil, moss, trees and rocks. Many earth tones originate from clay earth pigments, such as umber, ochre, and sienna.

**Façade**

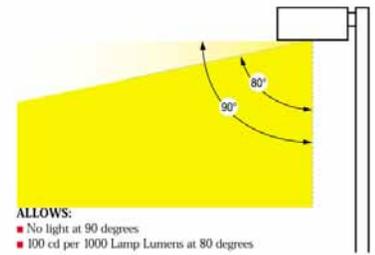
The front face of a building, or any face that is given special architectural treatment.



A concrete bollard light.

**Full Cut-Off Fixture**

A luminaire that is designed to reduce light pollution by directing all light downward. degrees above nadir and emit no more than 100 candelas per 1,000 lamp lumens at 80 degrees above Full cut-off fixtures emit no light at a vertical angle of 90 nadir, as specified by the Illuminating Engineering Society of North America.



Full Cut-Off Fixture. Image source: IESNA. 2001.

**Habitat Corridor**

A continuous area of retained, multi-layered native vegetation that provides habitat for native wildlife species and connects environmentally critical areas, such as wetlands, or other permanently preserved natural areas allowing passage of wildlife through developed areas with minimal human disturbance.

**Hard Surfaces**

Any impervious surface, as well as any pervious or partially pervious surface that is not predominantly covered with vegetation or landscape mulch.

**Impervious Surface**

Any material which reduces or prevents absorption of stormwater into previously undeveloped land.

**Massing**

The basic arrangement of a building's physical volume. The mass of a building is its three-dimensional form, perceived bulkiness, and relationship to exterior spaces. Variations in building massing can be achieved through façade offsets, upper-story setbacks, and transitions in roofline height.



Building massing variations accomplished through changes in surface texture, façade depth, and roofline treatment.

**Minimal Excavation Foundation**

A type of low impact foundation using techniques that do not disturb, or minimally disturb the natural soil profile within the footprint of the structure. This preserves most of the hydrologic properties of the native soil.

**Modulation**

Stepping back or projecting forward portions of the building façade or roofline to lessen apparent visual bulk.

**Non-Public Zone**

Buildings and other associated site improvements located on a development parcel that is located outside the Public Zone.

**Off-Site Trail Connection**

A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles, that provides a connection from one development site to another or that connects to an established public regional trail system.

**On-Site Trail**

A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles; provides access between buildings, parking, common areas, and open space within a development site.

**Parapet**

A low wall that runs along and protrudes above a roof.

**Pedestrian-Oriented**

Site and building design of such a nature that is mindful of a pedestrian's needs. Key elements of pedestrian-oriented design include building height and bulk, the placement of streetscape elements, and the mix of land uses.

**Pedestrian-Scaled**

The relationship between the dimensions of a building, street, outdoor space, or streetscape element and the average dimensions of the human body, as well as the space and built environment as perceived by the senses of a human being.

**Plaza**

An open area, usually paved, located near or adjacent to a building, and often featuring walkways, landscaping, seating, water features, or art.

**Public Space**

Any space that is accessible and usable by the general public, such as plazas, courtyards, widened sidewalks, stormwater rain gardens, or parks.

**Public Zone**

That portion of a development site that abuts a public street or lies between the primary façade of a building and a public street or parking area. The public zone is characterized by a connection between buildings on the site and the public right-of-way and may include parking and transit facilities, as well as the building façade itself. It does not include "private" or "semi-private" areas, such as building interiors or

courtyards not used to connect building entrances to the public frontage.

**Stacking Lane**

A vehicular traffic lane for a drive-through facility where cars wait to be served.

**Tilt-up Building**

A type of building and a construction technique using concrete. It is a cost-effective building technique and efficient construction method. In this method concrete elements (i.e. walls, columns, structural supports, etc.) are formed on a concrete slab; usually the building floor, but sometimes a temporary concrete casting surface near the building footprint. After the concrete has cured, the elements are tilted from horizontal to vertical with a crane and braced into position until the remaining building structural components (roofs, intermediate floors and walls) are secured.



A finished tilt-up light industrial /flex building. Image source: Wikipedia.

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**2.030 List of Defined Terms for Sustainable Development Incentives**

**Tier I**

Refers to projects that meet all required point totals identified in Table D-1. A project meeting the Tier I designation has achieved at least the Tier I point threshold in each incentive category.

**Tier II**

Refers to projects that meet all required point totals identified in Table D-2. A project meeting the Tier II designation has achieved at least the Tier II point threshold in each incentive category.

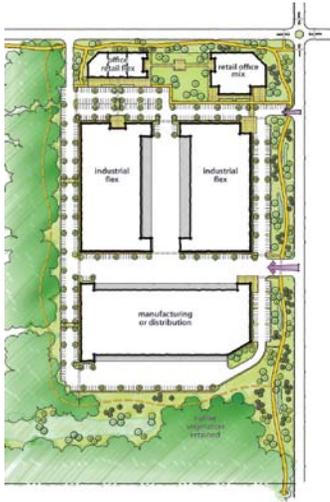
**PSIC Evergreen**

Refers to projects that meet all required point totals identified in Table D-3, include a construction waste management plan for deconstruction and demolition (in the case of renovation and/or redevelopment projects), are either constructed to meet the requirements of LEED Silver or higher or an alternative green building standard as determined by the Director, and adhere to the Sustainable Development Guidelines identified in Chapters D.3 and D.4.

## Chapter 3: Site Planning and Building Design

### 3.010 Clustered Development

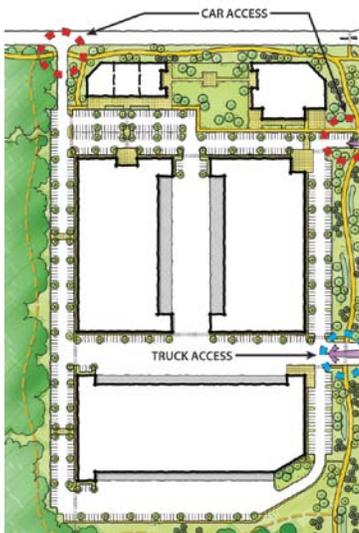
- a. The purpose of this section is to promote compact clustered industrial development.
- b. Implementing Measures
  1. Development adjacent to and utilizing existing road and utility infrastructure is preferred.
  2. The development of planned, multi-tenant developments with shared access roads, driveways, service entrances, parking, service courts, recreational amenities, stormwater facilities and coordinated storage areas is encouraged.
  3. Single user developments should consider the potential for future expansion and consider the potential for coordination with adjacent existing and future development when designing access roads, parking areas and other infrastructure.



Example of intensive, compact industrial development.



Building located close to the street with parking along the side.



Separated access points for cars and heavy trucks to minimize conflicts.

### 3.020: Building Location, Orientation, and Access

- a. The purpose of this section is to provide a clear visual distinction between public and non-public zones in site design, obvious and attractive customer entrances and delivery access areas, and a well landscaped image along the street within the MIC. Properties in the ME zone should establish an even stronger relationship between the building and the street through the use of public and semi-public space with pedestrian amenities.
- b. Implementing Measures
  1. Buildings should be located so that façades and entrances are visible and obvious from public streets or private access drive and parking areas.
  2. Parking should not dominate the streetscape in any of the PSIC zones. In the ME zone, at least 50% of the building façade should be located within 20 feet of the street. Where the building is not located at the back of a sidewalk, significant landscaping and/or public space should be provided where feasible to increase visual appeal.
  3. Parking along the side or behind buildings, as viewed from public streets or private drives, is preferred, particularly in the ME Zone.

4. In the ME Zone, on-street parking is encouraged because it alleviates some demand for larger surface lots, thus better connecting the public realm and the building.
5. Parking areas should be set back from the street, and landscaping, open space, and/or distinctive building façades should be provided in all zones in order to create an attractive image along the street.
6. Where feasible, particularly on multi-tenant developments, car and heavy truck access to the building and site should be adequately coordinated to prevent both internal and external conflicts. Where feasible, car and heavy truck access should be separated.
7. Buildings with entries not facing the street or that have parking areas between the building and the street should have a clear and obvious pedestrian path from the street to the entry.
8. Parking aisles should be designed to accommodate a central pedestrian access to building entries where parking lots exceed 25 stalls. See examples at right.
9. A specially marked or paved crosswalk should be provided through parking lots greater than 150 feet long (measured parallel to the street front) or more than two bays deep (approximately 75 feet measured perpendicular from street front). Paths should be provided every four rows and a maximum distance of 150 feet should be maintained between paths.
10. Pedestrian access routes through parking areas should be separated from vehicular parking and travel lanes by use of contrasting paving material, which may be raised above the vehicular pavement, excluding the use of speed bumps.



Separation of parking from pedestrian pathway with landscaping and weather covering.



An example of poor landscape screening of loading and service areas.



An example of effective landscape screening.

### 3.030 Compatibility with Adjacent Land Uses

- a. The purpose of this section is to promote the functional and visual compatibility between adjacent properties, while acknowledging the practical differences between the MIC where intensive uses are allowed and the ME Zone which envisions a mix of commercial, light industrial and office uses.
- b. Implementing Measures
  1. Strengthening physical and visual connections between properties should be a primary consideration during the design phase.



Site planning should integrate natural features and preserve views.

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Wood beams, kickers and earth tones in this building design reflect a Pacific Northwest aesthetic.

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2. Location of specific uses, such as outdoor storage or heavy industrial activities, such as processing of materials, should consider adjacent land uses and developments, and the potential to mitigate adverse impacts to adjacent uses through the design, placement, and screening of such activities on a site.
3. A 15-foot Type I landscape visual screen should be provided along property lines where there is the potential for land use compatibility impacts, particularly within the Port Industrial Mix Zone, which encourages a range of industrial and business service uses.
4. Pedestrian paths of six-foot minimum unobstructed width should connect all adjacent businesses.

### 3.040 Compatibility with Environmental Features

- a. The purpose of this section is to promote the retention and integration of natural features, habitat corridors and vistas and maximize the ecological benefit of remnant natural areas in site plans for the MIC where feasible. Site planning in the ME zone should focus on the creation of a development pattern that emphasizes pedestrian circulation, connection of buildings to the street, and a village atmosphere.
- b. Implementing Measures
  1. Site planning in the MIC should seek to integrate natural site features and vistas into the overall site design where feasible. For example, retention of a grove of significant trees as part of the required landscape area and orientation of site views in the public zone toward natural features, such as the Olympic Mountains.
  2. Location and design of landscaping, open space, stormwater facilities and other areas needed to meet site development standards should consider adjacent critical areas for the potential to create habitat corridors in all PSIC zones.
  3. Site design within the MIC should seek to retain native vegetation along State Route 3, Lake Flora Road, arterials, and along access drives.

### 3.050 Building Compatibility and Relationships

- a. The purpose of this section is to ensure that buildings and portions of buildings that are visible from streets are oriented on their sites to create a strong relationship to adjacent structures, access roads, parking areas and streets. This is particularly important in the ME

Zone, where building façades and primary entrances should be oriented to public streets.

b. Implementing Measures

1. A consistent architectural style should be used for buildings and their related site elements, such as walls, planters, signs, etc. This includes the use of similar materials, colors, and building forms.
2. Commercial buildings should be oriented to the public right of way or, if part of business park developments, toward access roads and/or the public zone of a site.
3. The height of new development should be compatible with the height of adjacent development, particularly in the ME Zone.
4. Expansions to existing buildings should provide for continuity between the existing building and the new addition. The addition need not strictly match the existing building, but should include prominent design elements of the existing building.

### 3.060 Building Massing, Forms, and Scale

a. The purpose of this section is to ensure that portions of buildings within the public zone respond to pedestrian scale in the immediate vicinity, including features and patterns which provide visual interest, reduce apparent mass and create a local architectural character.

b. Implementing Measures

1. Visual breaks in building massing are encouraged and should be accomplished by changes in materials, textures, forms and features. The use of entry elements as massing breaks is strongly encouraged. At a minimum, landscaping should be provided along blank walls if other forms of façade modulation are not feasible.
2. Greater attention should be paid to building massing and scale in the ME Zone. At a minimum, industrial buildings are encouraged to include changes in colors and materials, and architectural features such as columns, pilasters, canopies, etc.
3. Where heavy industrial activities and required building scale preclude these techniques, then design techniques should include the use of earth tone colors to blend with surroundings and the use of landscaping areas to break up building massing and soften building edges.
4. Structures containing general retail uses, restaurant uses, drinking place uses, or personal service business uses should have the following features:



Building massing variations accomplished through changes in surface texture, façade depth, and roofline treatment.

- i. Large windows along any façade facing the public sidewalk or a sidewalk providing circulation within the site. At least 65% of all such façades measured to 10 feet above sidewalk or surface grade shall be comprised of such windows.
- ii. Either a clearly identifiable entrance that is recessed or protruding at least 3 feet, a canopy or overhang extending at least 5 feet over the sidewalk in the entrance area, or other similar entrance feature approved by the Director.

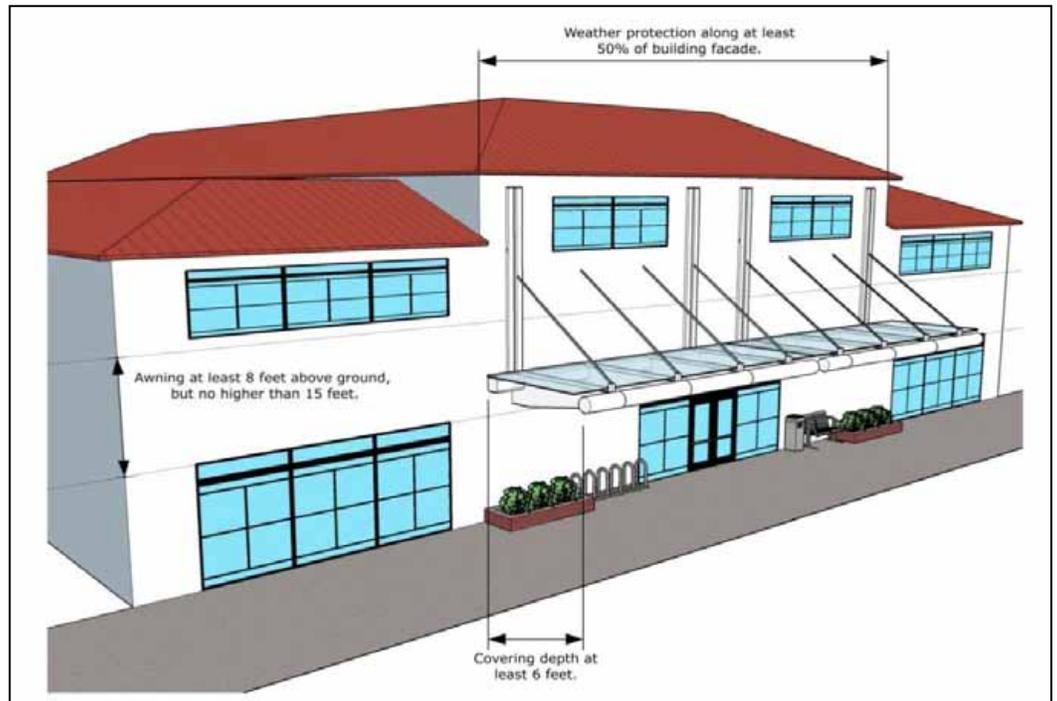
**3.070 Weather Protection**

- a. The purpose of this section is to improve comfort and pedestrian activity by providing appropriate weather protection.
- b. Implementing Measures
  - 1. All development should provide pedestrian weather protection at building entrances.
  - 1. Commercial buildings should provide pedestrian weather protection on at least 50% of the front façade. Weather protection may be in the form of awnings, marquees, canopies or overhangs and should be between 8 feet and 15 feet above the sidewalk with a minimum depth of 6 feet. An illustration of weather protection requirements is included in Figure D-3.



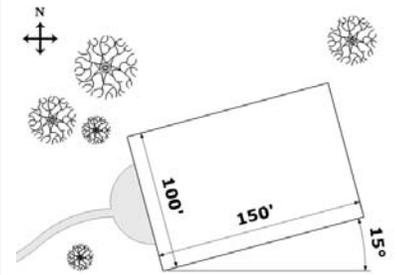
Provision of weather protection at building entrance.

**Figure D-3: Weather Protection Guidelines**



### 3.080 Green Building and Energy Conservation

- a. The purpose of this section is to promote more sustainable building construction and operation. Buildings should be designed and sited to maximize the use of solar gain for energy savings.
- b. Implementing Measures
  1. Construction is encouraged to demonstrate a commitment to sustainability by achieving the highest level of certification feasible under LEED or an equivalent green building certification system to the maximum extent feasible under current market conditions.
  2. Buildings should be constructed so that one major axis is at least 1.5 times longer than the other; the larger axis should be oriented within 15 degrees of geographic east-west. This orientation maximizes southern exposure and creates optimum conditions for the use of active and passive solar strategies for energy efficiency.



Orienting the long axis of a building within 15 degrees of east-west increases solar exposure and allows more efficient use of passive heating and natural lighting.

### 3.090 Colors and Materials

- a. The purpose of this section is to ensure that exterior building materials and colors are of high quality and durable materials that are compatible with nearby visible structures, particularly those within the same development.
- b. Implementing Measures
  1. Highly reflective materials such as glossy metal should not be used. Bright colors should be used only sparingly for accents if at all.
  2. Designs are encouraged to reflect a Pacific Northwest aesthetic, including materials, colors and building forms. The use of wood, stone, and earth-tone finishes are encouraged. At a minimum tilt up industrial buildings should be earth toned, and wood or stone façade and entry elements are encouraged.
  3. Building materials should be reusable or recyclable and should come from renewable sources to the greatest extent feasible.



A single façade containing multiple storefronts. Variation is provided through thought roofline modulation and color changes, but a consistent weather protection and fenestration pattern provide unity.



Industrial development employing variations in color and surface texture.



Internal shared service access screened from the street by buildings, parking, and landscaping.



Loading and service areas screened from public rights-of-way by multilayered landscaping.



Shared loading area located in an interior, less-visible portion of the site.



Screening for utility meters and service panels.

### 3.100 Service Delivery and Storage Areas

- a. The purpose of this section is to ensure that service, delivery and storage areas not be visually obtrusive. The visual impact of these areas should be minimized, especially views from public streets and pedestrian areas.
- b. Implementing Measures
  - 1. Loading docks, outside storage, and service areas should be located in areas of lower visibility such as the side or rear of buildings where possible and should be screened from all adjoining public rights-of-way through the use of walls and landscaping.
  - 2. When it is not possible to locate loading and service areas pursuant to Section C.4.040(g), loading docks and doors should not dominate the building frontage and should be screened from all adjoining public rights-of-way through the use of walls and landscaping.
  - 3. Loading docks and service areas for multi-tenant developments should be combined or coordinated, such as a shared service corridor or courtyard.
  - 4. Service entrances should be separated where possible for major sites and multi-tenant developments, with clear signs to discourage the use of main entrances for deliveries.

### 3.110 Utilities and Mechanical Equipment

- a. The purpose of this section is to mitigate the visual and noise impacts of utilities, mechanical equipment, communication equipment and similar facilities.
- b. Implementing Measures
  - 1. Where possible, utilities and mechanical equipment should be located away from public rights-of-way, major pedestrian routes, entrances, and outdoor seating areas.
  - 2. Utilities and mechanical equipment should be screened with landscaping and architectural screens.
  - 3. Meters should not be exposed in areas visible to the general public.
  - 4. Where feasible, the location of exterior mechanical equipment associated with industrial processing or manufacturing should seek to minimize visual and auditory impacts from public streets, adjacent property and areas used by the general public.

### 3.120 Signs

- a. The purpose of this section is to ensure that signs are consistent with overall project, site and building design, but subordinate to architectural and landscape elements.
- b. Implementing Measures
  1. Signs should use materials, colors and designs that are compatible with the associated structures within a site and development
  2. Monument and multi-tenant directory signs are preferred. Signage in multi-tenant buildings or complexes should be aesthetically pleasing and reflect a consistent design theme.
  3. Landscaping area greater than the sign area should be included at the base of all signs; landscaping shall consist of trees, shrubs and ground cover and be in excess of the required landscaping in Section C.4.050(c)(1)
  4. Signs should be visible from public streets without interfering with safe vehicular movement.
  5. When illuminated, ground mounted, concealed light sources should be used.



Monument sign with landscaping (top) and entrance façade signage (bottom). Façade signs should not extend above the roofline.

### 3.130 Fences and Walls

- a. The purpose of this section is to ensure that fences and walls contribute to the visual quality of the overall development when visible from public areas. Walls and fences should be used to screen service areas, loading areas and storage. When not required for security, screening or grade transitions, the size of walls and fences should be minimized.
- b. Implementing Measures
  1. Chain link fencing should not be used in high visibility areas.
  2. Barbed wire and razor wire should not be used in publicly visible areas and should be avoided in general unless necessary for security purposes.
  3. While wood is an allowed material for fencing, more durable materials, such as stone, brick, or wrought iron, are encouraged. Chain link, vinyl, and plastic are discouraged.
  4. Landscaping in combination with walls and fences to soften their appearance is encouraged.
  5. Breaking up long expanses of fences or walls with landscaping, architectural offsets or changes in materials is encouraged.



Use of split-rail wooden fence in conjunction with landscaping.



Example of landscaping trellis on building wall. Image courtesy of: GreenScreen©.

### 3.140 Exterior Lighting

- a. The purpose of this section is to promote the use of energy-efficient lighting to provide illumination for the security and safety of public areas, access drives, parking areas, service and loading areas, and non-motorized pathways without intruding on adjacent properties or creating unnecessary light pollution. Lighting should be architecturally compatible with main buildings.
- b. Implementing Measures
  1. LED lighting is encouraged, otherwise fluorescent, high-intensity discharge, high efficiency incandescent or metal halide lamps should be used. To the greatest extent feasible, all light fixtures and bulbs should meet the requirements for certification by the ENERGY STAR program.
  2. Maximum height of light poles should be limited to 24 feet.
  3. Separate pedestrian scaled lighting should be used along pathways and courtyards and building entrances. Bollard light fixtures and other low-level fixtures are encouraged.
  4. Building-mounted accent lighting should be directed downward onto the illuminated object or area, and not upward into the sky, or onto adjacent properties. Direct accent light emissions should not be visible above the roofline, building, or other associated structure.
  5. Search lights, laser source lights, and other high-intensity lights should not be used except by public agencies in emergencies or when necessary for security purposes.
  6. For security purposes, light levels that are adequate for visibility but not overly bright should be used. Building entrances, roadway and pathway intersections and high traffic areas should be well lit. Light sources, both direct and indirect, should be selected and placed so that glare produced by any light source does not extend beyond property boundaries, except sidewalks, essential public facilities, and where specific heavy industrial uses make it infeasible to comply with this measure. In such cases, glare shall be minimized to the greatest extent feasible.
  7. Poles and fixtures should be architecturally compatible with structures and lighting on-site and on adjacent properties, particularly in the ME Zone.



Bollard lights provide low-intensity illumination for pedestrian areas.

### 3.150 Drive-Through Facilities

- a. The purpose of this section is to reduce vehicular and pedestrian conflicts and improve the pedestrian environment.
- b. Implementing Measures
  1. Drive-through facilities and stacking lanes should not be located along a building façade that faces a right-of-way.
  2. Stacking lanes should accommodate all vehicles on site.
  3. Drive-through windows and stacking lanes should be partially screened from the street(s) by landscaping and/or architectural elements that reflect the design of the primary building.
  4. The stacking lane should be physically separated from the parking lot, sidewalk and pedestrian areas by landscaping and/or architectural elements. Where pedestrians must cross a drive-through lane or stacking lane, speed bumps should be used between the path and traffic.
  5. A bypass/escape lane should be provided.



This drive-through facility keeps the vehicle stacking behind the building and screens the drive-through lane from the street with landscaping.

### 3.160 Roof-Mounted Equipment

- a. The purpose of this section is to minimize adverse visual, olfactory and auditory impacts of building mechanical equipment and service apparatuses.
- b. Implementing Measures
  1. Roof mounted mechanical equipment should be located and screened so as not to be visible from the street or from the ground level of adjacent properties. An extended parapet wall or other roof form that is integrated with the architecture of the building should accomplish the screening.
  2. Utility meters, electrical conduit and other service and utilities apparatuses related to the building should be located and screened so as not to be visible from the street
  3. These guidelines do not apply where a specific industrial facility or process makes it infeasible to screen mechanical or utility equipment.

### 3.170 Pedestrian and Bicycle Access, Circulation, and Connections

- a. The purpose of this section is to ensure that pedestrian and bicycle systems are incorporated into all developments and are designed to be safe and inviting, avoid conflicts with freight operations and other



Pedestrian pathway through parking area clearly defined by sidewalk and striping.



Pedestrian pathway separated from vehicular areas with landscaping.

vehicles, and to provide connections within and between industrial sites, service uses, public streets and future transit stops.

b. Implementing Measures

1. Circulation systems should be located and designed to minimize pedestrian/vehicle conflicts.
2. Separate pedestrian and vehicle thoroughfares with the use of landscaping, barriers or other appropriate design solutions.
3. Differentiate areas of pedestrian, bicycle and vehicle interface with accent pavement and signage to alert drivers to potential conflicts.
4. Provide well-defined and identified connections from the primary non-motorized paths within a development to the main entrances, perimeter sidewalks, and public rights-of-way.
5. Site and building design should include provisions for bicycle parking, storage and shower facilities for bicycle commuters.
6. Site design that incorporates areas and facilities for future transit service, including vanpool loading and parking, are encouraged.

### 3.180 Street Corners

a. The purpose of this section is to enhance visual quality and create gateways to industrial and commercial areas, encourage pedestrian activity and interest and a stronger visual identity.

b. Implementing Measures

1. New development on any street corner in the MIC should enhance the corner through at least two of the following means. Developments in the ME zone should incorporate at least three of the following:
  - i. Installing substantial landscaping (at least 200 sq. ft. with trees, shrubs and ground cover) in excess of the required landscaping in Section C.4.050(c)(1) at or near the corner with coordinated signage;
  - ii. Installing a decorative screen wall, trellis or other architectural element;
  - iii. Incorporating usable open space, a pedestrian courtyard or seating area, or a trail gateway;
  - iv. Placement of a building with a distinct architectural element such as a building core setback "notch" or curved façade surface;



Emphasizing building entrances through distinct architectural corner treatments is highly encouraged.

- v. Provide a corner entrance to a courtyard, building lobby, atrium or pedestrian pathway;
  - vi. Special pedestrian weather protection at the corner of the building; or
  - vii. Other distinct, aesthetically-pleasing feature.
2. Large industrial buildings, such as clean tech and warehouse facilities, should provide similar treatments to those listed in Paragraph (1) above for building corners visible from public rights-of-way.

## Chapter 4: Landscape Design



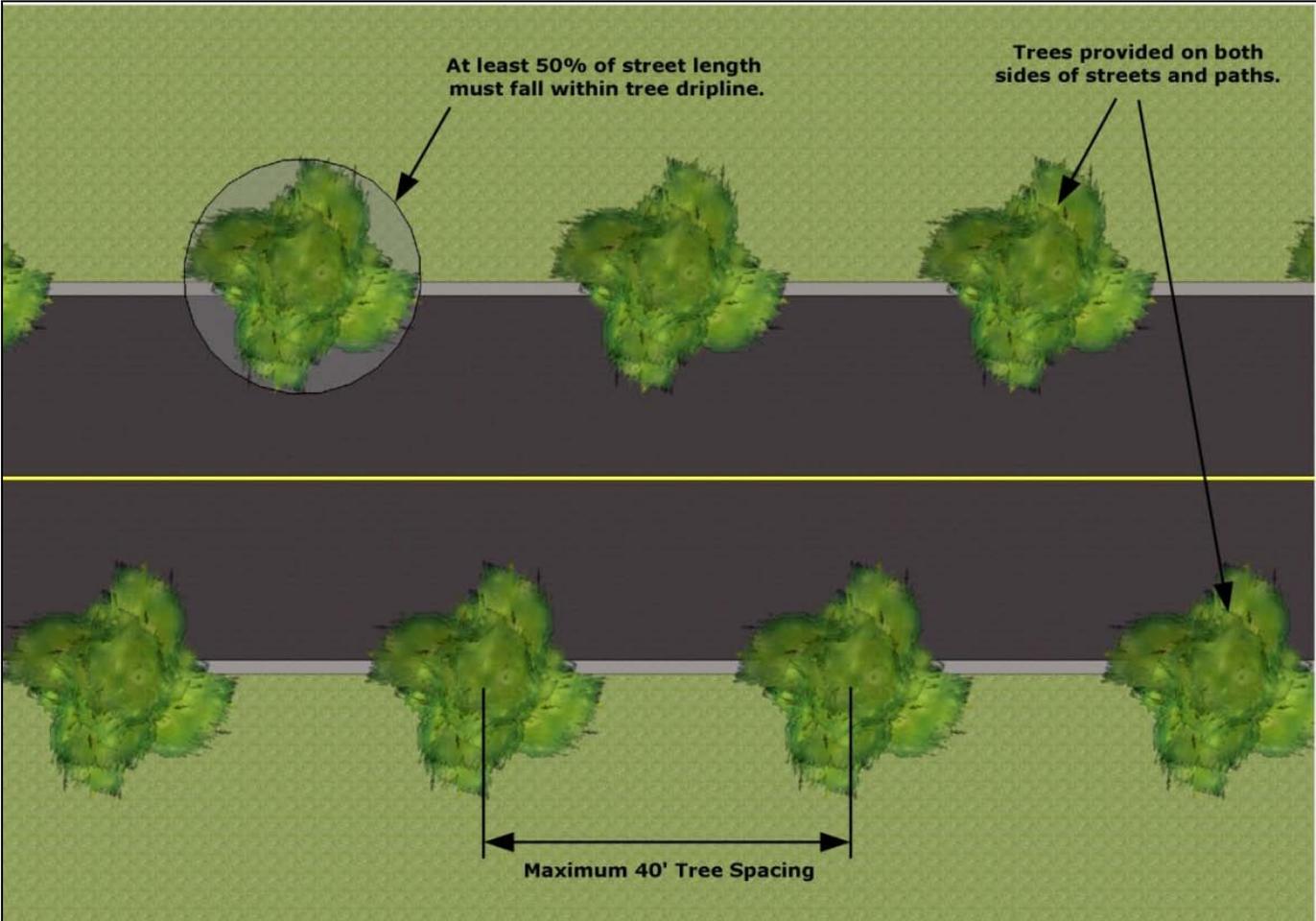
Use of preserved native vegetation and planted trees to screen development from adjacent street.

### 4.010 Landscape Design

- a. The purpose of this section is to provide direction for landscape design.
- b. Implementing Measures
  1. To the greatest extent feasible, landscape design should screen and soften the appearance of industrial development particularly from high-traffic roads and prominent public viewpoints.
  2. Establishment of habitat corridors as a means of providing landscaping on development sites is preferred.
  3. Vegetation Management Plans (VMP) prepared for new development should be updated on a regular schedule, at least every 10 years, unless specified by the Director. Evaluations by a professional arborist or forester should be conducted a minimum of every 10 years to monitor the health of trees and inform the VMP update process.
  4. At least 75% of all trees planted or preserved within designated landscaping areas should be evergreen species.
  5. At least 50% of all shrubs and groundcover planted or preserved within designated landscaping areas should be evergreen species.
  6. A minimum of 500 sq. ft. of landscaping should be provided at or immediately adjacent to the primary entrance of all buildings in the MIC.
  7. When removing significant trees, as defined in BMC Chapter 20.50, they should be replaced at a 2:1 ratio. Non-significant trees should be replaced at a 1:1 ratio.
  8. Projects should develop an integrated pest management (IPM) policy with tenant guidance related to pesticide use, housekeeping, and reporting.
  9. Areas of retained native vegetation must not be degraded by infrastructure improvements, including but not limited to, access roads and utility corridors.
  10. Development within the PSIC Subarea should provide street trees along both sides of new streets and non-motorized pathways within the project boundary at intervals of no greater than 40 feet on center. The intent of this provision is to create a tree-lined street, and as such, the trees should be planted so that half of the drip line extends over the roadway, provided that it does not conflict with utility infrastructure. Planted trees should be selected

to promote shading of the pathway within ten years of planting and must comply with minimum planting sizes as stated in BMC 20.50.050(f). Tree spacing and canopy coverage requirements are illustrated in Figure D-4.

**Figure D-4: Tree Spacing Guidelines**



#### 4.020 Open Space and Common Areas

a. The purpose of this section is to incorporate accessible, comfortable common areas and pedestrian areas in site design.

b. Implementing Measures

1. Plazas, courtyards or similar, functional, outdoor visitor and employee spaces where pedestrians can congregate and that are integrated into the overall site design are encouraged to the maximum extent feasible.
2. Projects should set aside a minimum amount of open space for use by employees and visitors equal to at least 1% of the gross floor area of all structures.
3. Well-designed public spaces as described in paragraph (1) above, should have a minimum of 15% of the total area landscaped.
4. At a minimum, small public spaces near major entrances should be provided.
5. Outdoor spaces where workers can take breaks are encouraged.
6. Seating and landscaping should be provided in public spaces.
7. Where possible, provide seating that is usable year-round, that is protected from the rain, and that is oriented to maximize solar exposure (e.g. faces south).



Public common area with landscaping and seating provided.

## Chapter 5: Sustainable Development Incentives

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### 5.010 Purpose and Applicability

- a. The incentive measures in this chapter apply to all zones and land uses within PSIC. They are intended to encourage sustainable development through voluntary incentives, consistent with the policy direction contained in Section A.
- b. Relationship with Other Standards. Nothing in this section relieves the applicant from compliance with any other standard set forth in Section C, or from compliance with any other provision of the Bremerton Municipal Code, unless specifically exempted in this document.

### 5.020 Sustainable Development Tiers, Measures and Incentives

- a. This Section contains the overview of three levels of sustainable development encouraged in PSIC—Tier I, Tier II, and PSIC Certified Evergreen. Each level of sustainability is achieved by complying with voluntary site and building development measures contained in sections 5.040 through 5.090. The applicant has the choice to participate in the sustainability program to the degree desired. The City offers development incentives commensurate with the degree to which sustainable measures are provided. Detailed descriptions, the points and measures necessary to achieve each of the levels, and the incentive (i.e. benefit) of each tier are described in the tables that follow.



**Table D-1: Tier I Measures and Incentives**

<b>Tier I—Measures</b>	<b>Required Points</b>
Site Development and Building Design Measures (See 5.040)	10
Sustainable Transportation Measures (See 5.050)	20
Environmental Stewardship and Habitat Measures (See 5.060)	10
Low Impact Development Measures (See 5.070)	10
Water Conservation Measures (See 5.080)	10
Energy Efficiency and Alternative Energy Measures (See 5.090)	10

<b>Tier I—Development Incentives</b>	<b>Relief from Code Section</b>
Hard Surface Coverage: 10% increase in coverage	C.4.020(a)
Effective Impervious Coverage: 10% increase in coverage	C.4.020(a)

**Table D-2: Tier II Measures and Incentives**

<b>Tier II—Measures</b>	<b>Required Points</b>
Site Development and Building Design Measures (See 5.040)	15
Sustainable Transportation Measures (See 5.050)	30
Environmental Stewardship and Habitat Measures (See 5.060)	15
Low Impact Development Measures (See 5.070)	15
Water Conservation Measures (See 5.080)	15
Energy Efficiency and Alternative Energy Measures (See 5.090)	15

<b>Tier II—Development Incentives</b>	<b>Relief from Code Section</b>
Hard Surface Coverage: 15% increase in coverage or up to the maximum limit identified in the section, whichever is less.	C.4.020(a)
Effective Impervious Coverage: 15% increase in coverage or up to the maximum limit identified in the section, whichever is less.	C.4.020(a)

**Table D-3: PSIC Certified Evergreen Measures, Requirements and Incentives**

<b>PSIC Certified Evergreen—Measures</b>	<b>Required Points</b>
Site Development and Building Design Measures (See 5.040)	20
Sustainable Transportation Measures (See 5.050)	40
Environmental Stewardship and Habitat Measures (See 5.060)	20
Low Impact Development Measures (See 5.070)	20
Water Conservation Measures (See 5.080)	20
Energy Efficiency and Alternative Energy Measures (See 5.090)	20
<b>PSIC Certified Evergreen—Additional Requirements</b>	
Project must achieve LEED Silver or higher (or alternative green building standard as determined by the Director)	
Renovation and/or redevelopment projects must prepare a construction waste management plan for deconstruction and demolition projects.	

<b>PSIC Certified Evergreen—Development Incentives</b>	<b>Relief from Code Section</b>
Hard Surface Coverage: 20% increase in coverage.	C.4.020(a)
Effective Impervious Coverage: 20% increase in coverage.	C.4.020(a)

<b>PSIC Certified Evergreen—Additional Incentives</b>
Priority Permit Review – The City will apply its best efforts to reduce its target times for permit reviews by 30 days.
Press Release and Economic Development Outreach – upon approval of all required land use and construction permits the City will publish a press release announcing the approval of a development as a PSIC Certified Evergreen Project.
PSIC Certified Evergreen Award – The City will issue PSIC Certified Evergreen projects a Mayor’s Sustainable Development Award.
PSIC Certified Evergreen Building Permit Fee Rebate – All qualifying projects are eligible for the building permit fee rebate program as set forth in 5.030

## 5.030 PSIC Certified Evergreen Building Permit Fee Rebate Program

### a. Introduction

1. The PSIC Evergreen Building Permit Fee Rebate program supports the City's goals for sustainable development, reduced greenhouse gas emissions, conservation of natural resources and increased energy efficiency through a financial incentive.
2. Pilot Program. The PSIC Evergreen Building Permit Fee Rebate program is a pilot program that is limited to the PSIC Subarea only. The City will assess the effectiveness of this program and, depending on the observed outcomes, may amend the program in the future, including possible expansion to other parts of the City.

b. Overview. Through this program, the City is providing an optional financial incentive commensurate with public benefits. New PSIC Evergreen Certified developments may be eligible for a rebate between 75% and 100% in building permit fees only. The criteria and process for receiving a fee rebate are described in paragraphs (1) and (2) below.

### 1. Review Criteria

- i. Qualifying criteria. Projects that meet the following four criteria area eligible for a building permit rebate.

<b>Location</b>	Project is located in the City of Bremerton PSIC Subarea (Figure C-1)
<b>Certification</b>	The project has met all requirements for PSIC Evergreen certification as identified in Table D-3
<b>Permits</b>	The project has satisfied all City of Bremerton permit fee requirements per BMC 20.02
<b>Laws and regulations</b>	The project complies with all applicable local, state and/or federal laws and regulations

- ii. Incentive Criteria. Any project that is certified PSIC Evergreen is eligible for a 75% building permit rebate. In addition, the Director may grant a rebate of up to 100% based on the use of measures that are expected to have the greatest impact on greenhouse gas emissions

reduction or other unique factors. The Director shall have substantial discretion issuing the rebate.

<b>Total Score</b>	The degree to which the applicable PSIC Evergreen Certification score exceeds the minimum 140 point certification score
<b>Greenhouse Gas Emissions</b>	Inclusion of measures that are expected have the greatest impact on long-term greenhouse gas emissions, evidenced through scores that exceed the minimum Tier II requirements in the following categories: <i>Development and Building Design Incentives (Table D-4); Low Impact Development Incentives (Table D-7); and Water Conservation Incentives (Table D-8)</i>
<b>Unique Conditions</b>	Project conditions or sustainability measures that are not included in Table D-3, but provide substantial public benefit

2. Rebate Process

- i. Development permits are submitted to the City consistent with all local requirements, including payment of the full cost of all permit fees pursuant to the Bremerton Municipal Code.
- ii. Within 6 months of issuance of the final certificate of occupancy, the applicant submits a rebate checklist to the City, demonstrating that the aforementioned review criteria have been satisfied and requesting a building permit fee rebate.
- iii. The Director will administratively review the rebate checklist subject to the aforementioned criteria and determine the appropriate rebate.
- iv. The City will notify the applicant of the rebate decision and provide the rebate in a timely manner.

**Rebate Examples**

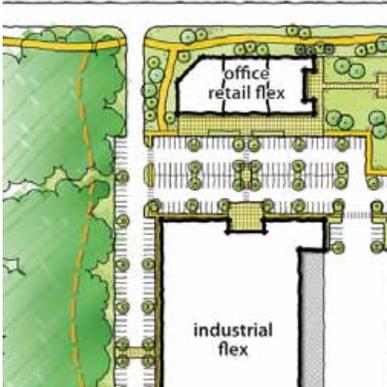
- Project A meets the certified PSIC Evergreen requirements through earning the minimum 140 total points in the six sustainability categories. Based on the applicant’s checklist, the Director concludes that there are no unique conditions that warrant an increased rebate. This project receives a 75% building permit fee rebate.
- Project B meets the certified PSIC Evergreen requirements, but provides extra LID and water conservation measures, described in the submitted checklist. This project receives a 100% building permit fee rebate.

## 5.040 Site Development and Building Design Measures

- a. The purpose of this section is to provide measures that promote compact, efficient development that maximizes the return on infrastructure investment and reduces vehicle miles traveled (VMT) consistent with Land Use Goal LU1 and related policies.

**Table D-4: Site Development and Building Design Measures and Points**

Standard	Description	Points
Access to Open Space	Project sets aside open space equal to at least 2% of the gross floor area of all structures for use by employees and visitors.	5 points
Connections to Existing Road Infrastructure	Site design for new development is configured in such a way as to allow future businesses and site occupants shared access to roads within or contiguous to the development site.	5 points
Supports and Serves Local Business	Land use is manufacturing, storage, or support retail and service uses that primarily serve customers located within Kitsap or Mason Counties or are directly related to the Puget Sound Naval Shipyard, Port of Bremerton operations, Naval Base Kitsap, or any other business that is already located within Kitsap or Mason Counties.  NOTE: The applicant must provide sales or ownership documentation to receive 10 points.	5 Points. 10 points if the business is directly related to (subsidiary of or more than 50% of gross sales to) an existing business within the Bremerton City Limits.
Support Retail and Service Uses	Allow space for support retail and service uses in development clusters with more than 100,000 sq. ft. of floor space that consist of at least 60% industrial uses. The total square footage of support retail and services shall not exceed 20,000 sq. ft. or 10% of the total development cluster building space, whichever is less.	5 Points for one local service or retail use. 10 Points for two or more.

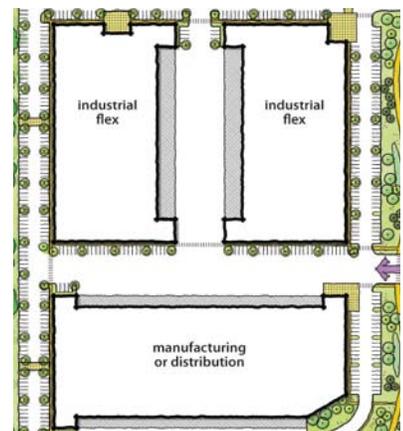


This diagram illustrates industrial development sited in proximity to existing roads and integrated with business support services, such as office and retail. Access to open space is achieved by placement of a soft trail within retained vegetation areas.



Shared access and parking for a mixed industrial/retail/office development.

Standard	Description	Points
Shared access	Shared access driveway is provided and designed to serve two or more development sites (one may be a future site), a joint tenant building is provided on a site, or the project is located within a multi-tenant industrial park.	5 Points
Shared Parking	Shared parking is provided that serves two or more tenants. No additional parking outside of the shared lot(s) may be provided. Shared parking lots shall be located within a 1,200 foot radius of the front door of the building. Number of parking stalls is no more than 50% greater than minimum requirement in Section C.4.040(c).	5 points
Shared Loading/ Service Court	Shared or consolidated loading areas are provided in a central service court or other location that is screened from public view.	5 Points
Job Density	Minimum of 10 jobs per acre employment density.	10 points
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote compact, efficient development that maximizes the return on infrastructure investment and reduces VMT.	5 points per measure; no limit on the number of measures awarded points in this category



Shared access and loading/service areas for multiple industrial buildings.

## 5.050 Sustainable Transportation Measures

- a. The purpose of this section is to provide measures that promote efficient multi-modal connections to services for employees, clients and other users while promoting increased use of transit, reduced vehicle trips, and reduction of greenhouse gas (GHG) emissions.

**Table D-5: Sustainable Transportation Measures and Points**

Standard	Description	Points
On-Site Trail Construction	Pursuant to C.5.050 or as proposed by the developer and agreed to by the City, dedication and construction of an off-street trail is provided.	5 points
Off-Site Trail Connections	Project provides a connection to an existing or future multi-modal trail system that connects site with at least one other service use or employment use.	5 points
Local Shuttle Service	Employer provides a free shuttle service that provides access to multiple work sites, services used by employees, park and ride lots and/or transit stops.	Minimum of 5 points. Up to 10 points depending on extent of service.
Neighborhood Electric Vehicles	Employer provides access to a neighborhood electric vehicle which can provide access to multiple work sites, services used by employees and other destinations.	Minimum of 5 points. Up to 10 points depending on extent of service.
Proximity to Transit	Project is located within a quarter mile of transit service that at a minimum serves peak commute periods. This condition can also be satisfied if the employer subsidizes a vanpool program for employees by paying at least 25% of the cost.	10 points

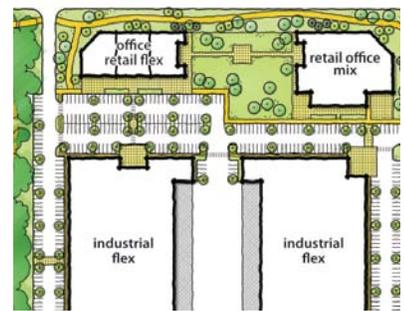


On-site trail links development and open space.



Neighborhood electric vehicles (NEVs) provide quick access between buildings and work sites and can be shared by all employees. NEVs are allowed on all roads and trails in PSIC other than State Route 3.

Standard	Description	Points
Proximity to existing services	Project is located within half a mile of an existing support service or retail use as defined in Chapter C.2. Credit for location near other support retail and service uses not listed here may be granted as determined by the Director.	5 Points
Use of Rail	Project utilizes rail transportation for shipping or receiving of goods or materials.	10 points
Idle Truck Restrictions	Prohibit trucks from idling for more than 5 minutes.	5 Points
Electric Vehicle Parking	Provide electric vehicle parking spaces with battery charging facilities, 1 per 100 standard spaces, minimum of 1 for parking lots with more than 50 stalls.	10 Points
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote efficient multi-modal connections to services for employees, clients and other users while promoting increased use of transit, reduced vehicle trips, and reduction of greenhouse gas (GHG) emissions.	5 points per measure; no limit on the number of measures awarded points in this category



Industrial development sited in proximity to existing services.



Existing Olympic View Transfer Station takes advantage of rail access for shipping solid waste. Use of rail within PSIC is encouraged.

## 5.060 Environmental Stewardship and Habitat Measures

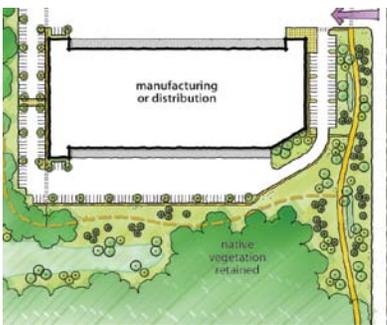
- a. The purpose of this section is to provide measures that promote the retention of forest vegetation and habitat, and strong stewardship of both retained natural areas and developed lands within PSIC.

**Table D-6: Environmental Stewardship Measures and Points**

Standard	Description	Points
Landscaping Area	Provide multilayered landscaping including trees, shrubs and groundcover per standards in Section C.4.050(c) on at least 20% of the site.	5 points
Tree Retention	Provide a landscape plan that demonstrates that at least 20% of the significant trees on the buildable area of the site are retained. Tree protection standards are contained in Section C.4.050(b).	5 points, 10 points if 40% of significant trees are retained.
Habitat Corridor	Site plan includes a minimum 35-foot habitat corridor vegetated with native trees, shrubs and groundcover that connect critical areas or permanently preserved natural areas within or adjacent to and across the project site. Site design shall ensure that lighting from adjacent development does not intrude on corridor. For guidance for landscaped areas, including habitat corridors, see Section C.4.050 and Chapter D.4.  To receive 10 or more points, the corridor shall be protected with a native growth protection or conservation easement and fencing to prevent encroachment.	5 points. 10 points if the habitat corridor constitutes more than 5% of the total site area, 20 points if more than 10% of site area is contained in the corridor.



Tree and native vegetation retention in parking area.



Native vegetation preservation areas provide valuable open space for employees and habitat for local wildlife.

<b>Standard</b>	<b>Description</b>	<b>Points</b>
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote the retention of forest vegetation and habitat, and strong stewardship of both retained natural areas and developed lands within PSIC.	5 points per measure; no limit on the number of measures awarded points in this category

## 5.070 Low Impact Development Measures

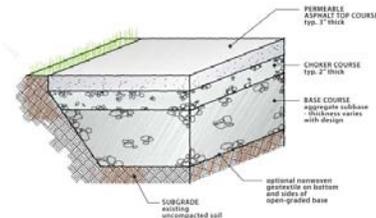
- a. The purpose of this section is to provide measures that promote protection of surface water quality through reduced pollutant loading and the treatment and infiltration of stormwater runoff on-site.

**Table D-7: Low Impact Development Measures and Points**

Standard	Description	Points
Permeable Pavement in Vehicular Areas	Project uses permeable surfacing in parking and loading areas, except where potential contamination or a specific industrial activity precludes its use. Contamination sources include vehicle fuel stations, storage of industrial chemicals, oils and grease, and other hazardous substances, dust and dirt storage, etc.	5 points  10 points where all parking and loading areas use permeable pavement, except where potential contamination precludes its use.
Bioretention	Project locates bioretention cells in publicly visible areas, includes a planting plan by a licensed landscape architect, provides a plant maintenance warranty for 1 year, and the bioretention cells treat a minimum of 10,000 sq. ft. of Pollution Generating Impervious Surfaces (PGIS).	5 points
Native vegetation	Project uses retained native vegetation areas to treat and manage stormwater and interpretive signage is provided indicating this feature. The retained native vegetation areas shall be fenced off during construction with a minimum 4 foot tall orange construction fencing.	5 points



Permeable pavement types



Where soils are appropriate, permeable pavement provides water quality treatment and reduces stormwater flows.



Rain gardens, a type of bioretention, used in industrial setting to capture and treat stormwater. Images courtesy of TOTE Marine, Tacoma WA.

<b>Standard</b>	<b>Description</b>	<b>Points</b>
Foundation Design	Project uses minimal excavation foundations for at least 50% of the building area.	10 points
Green Roof	Project incorporates a green roof covering at least 50% of the roof surface area. The green roof area should not be directed to any cistern.	10 Points
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote protection of surface water quality through reduced pollutant loading and the treatment and infiltration of stormwater runoff on-site.	5 points per measure; no limit on the number of measures awarded points in this category

## 5.080 Water Conservation Measures

- a. The purpose of this section is to provide measures that promote the conservation of potable water and reuse of treated wastewater.

**Table D-8: Water Conservation Measures and Points**

Standard	Description	Points
Advanced Building Water Efficiency	Reduce water usage by 20% compared to baseline as calculated using the methods in LEED-ND GIB Prerequisite 3: Minimum Building Water Efficiency, or functional equivalent approved by the Director. This incentive may be modified by the Director where there is not an appropriate reference standard and/or ability to meet this requirement for an industrial process.	5 Points for 20% reduction; 10 Points for 40% reduction
Water Reuse Plumbing	Install dual supply plumbing for non-potable end uses so that reclaimed water may be supplied to these fixtures in the future. Plumb these fixtures on separate run to the exterior and provide pipe labeling.	10 Points
Water Reuse Implementation	Requirements of Water Reuse Plumbing above are met, and project installs a gray water irrigation drip system per Washington Department of Health standards and RCW 90.46 or connects to reclaimed water system to meet a portion of the project's non-potable water needs.	10 Points, 15 points if reused water provides all demand for non-potable uses



Example of separate piping systems for potable (blue) and reclaimed non-potable (purple) water. Image courtesy of the Water Environment Federation.



Rain harvesting tank and piping.

<b>Standard</b>	<b>Description</b>	<b>Points</b>
Basic Rainwater Harvesting	Install a system to meet at least 60% of the project's average annual demand for non-potable water uses with collected rainwater.	5 Points, 10 points for 90% of average annual demand for non-potable water uses
Water-Efficient Landscaping	Reduce water consumption for outdoor landscaping by 50% from the calculated midsummer baseline as described in LEED-ND, GIB Credit 4: Water-Efficient Landscaping or functional equivalent approved by the Director.	5 Points
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote the conservation of potable water and reuse of treated wastewater.	5 points per measure; no limit on the number of measures awarded points in this category

## 5.090 Energy Efficiency and Alternative Energy Measures

- a. The purpose of this section is to provide measures that promote reduced energy consumption and encourage use of renewable energy.

**Table D-9: Energy Efficiency and Alternative Energy Measures and Points**

Standard	Description	Points
Building Commissioning	Complete a building commissioning process as described in LEED-NC, EA Prerequisite 1: Fundamental Commissioning of Building Energy Systems.	5 points
Water Heating	Provide water heating through the use of one of the following techniques: <ul style="list-style-type: none"> <li>• Photovoltaic-powered heaters;</li> <li>• Direct solar gain; or</li> <li>• Captured industrial waste heat.</li> </ul>	5 points if used for non-industrial water usage only. - and - 10 points if used for at least 50% of industrial water usage.
District Heating and Cooling	For sites comprised of multiple buildings, install a district heating or cooling system that is capable of providing at least 75% of the combined annual building heating or cooling consumption and incorporates at least one of the following: <ul style="list-style-type: none"> <li>• Geothermal heat source/sink;</li> <li>• Solar energy (photovoltaic, thermal massing, etc.); or</li> <li>• Captured industrial waste heat.</li> </ul>	10 points



A steam generation facility that powers a district heating system. Image courtesy of Seattle Steam.



District heating is the supply of heat to a number of buildings from a central heat source through a network of pipes carrying hot water or steam. District heating pipes are not specific to the technology used to generate the heat and so can connect to a range of sources of heat supply including combined heat and power systems, biomass, energy from waste, ground source heat pumps, geothermal heat or large power stations. Industrial process heat can also be used to power district heating systems. Image courtesy of Wikipedia.

Standard	Description	Points
On-Site Renewable Energy	Install photovoltaic (PV) panels, wind turbines, geothermal heat pumps, biomass or other renewable energy source with production capacity of at least 5% of the project's annual electrical and thermal energy cost.	5 points for 5%  10 points for 20%
Green Power Contract	Provide a defined portion of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. The Department of Energy (DOE) Commercial Buildings Energy Consumption Survey (CBECS) database or other credible source as determined by Director shall be used to determine the estimated baseline electricity use. Documentation of the signed contract as approved by the Director is required.	5 points for 25%  10 points for 50%  20 points for 100%
Innovative Measures	Points shall be awarded on a case-by-case basis, upon approval of the Director, to sustainable measures that are proven to promote the use of renewable energy and to reduce energy consumption.	5 points per measure; no limit on the number of measures awarded points in this category



Solar panels mounted on industrial roof. Image courtesy of the Port of Olympia.

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# **SECTION E: CAPITAL FACILITIES PLAN**



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# SECTION E: CAPITAL FACILITIES PLAN

This Capital Facilities Plan (CFP) contains all the elements required by Washington law for capital facilities plans that comply with Washington's Growth Management Act.

## Purpose

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Capital facilities are needed to support current development and future growth. They can include:

- roads
- water,
- sewers,
- stormwater,
- parks and open space,
- garbage disposal and recycling, and
- government buildings which house public services, such as law enforcement, fire protection, libraries and schools.

This CFP includes the transportation, water, sewer, and stormwater facilities that will be needed in the Puget Sound Industrial Center (PSIC) in order to support the preferred development plan. No other public facilities were identified as being needed in PSIC to support the Subarea Plan.

This CFP is developed in conjunction with, and is part of, the PSIC Subarea Plan and it is consistent with the requirements of the Growth Management Act (GMA).

The purpose of the CFP for PSIC is to provide adequate public facilities consistent with the development plan of the PSIC Subarea Plan. Careful planning and sound fiscal policies will provide the needed facilities that achieve and maintain the City of Bremerton's standards for level of service concurrent with, or prior to, the impacts of development.

## Growth Management Act

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The CFP is required by Washington's GMA. The GMA requires the CFP to identify specific facilities, include a realistic financing plan, and make adjustments to the plan if funding is inadequate.

The GMA requirements for the CFP are set forth in RCW 36.70A.070(3),

Each comprehensive plan shall include a plan, scheme, or design for ... the following:

A capital facilities plan element consisting of: (a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities; (b) a forecast of the future needs for such capital facilities; (c) the proposed locations and capacities of expanded or new capital facilities; (d) at least a six-year plan that will finance such capital facilities within projected

funding capacities and clearly identifies sources of public money for such purposes; and (e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.

## **Constraints on Planning for SKIA's Facilities**

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Some capital facilities plans are based on very specific growth plans. The resulting CFP contains specific facility improvements to support the growth plan. The financing plan is also detailed because specific funding sources can be matched to the timing and location of each facility project.

The CFP for PSIC is a general plan, not a specific plan, for the following reasons:

- PSIC is a very large area with significant portions that are not yet developed. The next development project could occur at many different locations in PSIC. This makes it difficult and risky to determine precisely where to provide facilities, and to estimate its cost.
- PSIC contains one of eight Manufacturing Industrial Centers (MIC) designated by the Puget Sound Regional Council. Within the designated MIC, development must be primarily manufacturing or other industrial uses. This provided a focus for planning, but limits the ability to include other uses, such as commercial, general office, or residential.
- PSIC also contains a mixed-use area, located south of Lake Flora Road, that is not part of the designated MIC. In this area, commercial and general office uses are anticipated.
- The funding for the preparation of this Subarea Plan is from a grant that included specific goals and requirements for the plan to address greenhouse gases and other environmental concerns. This provided an important focus, and created opportunities for some approaches to the plan, but also constrained other alternatives.

## **Organization of the CFP**

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The capital facilities plan for the PSIC Subarea Plan contains the following:

### **Development Assumptions**

The Development Assumptions section summarizes the type and planned amount of development in PSIC. The CFP is designed to provide adequate public facilities for the planned development.

### **Transportation, Water, Sewer, and Stormwater**

Each of the four types of public facilities is presented in a separate section that contains the following three subsections:

- Inventory of Existing Facilities

This section summarizes the current public facilities that are described in more detail in the existing conditions sections of the SKIA (South Kitsap Industrial Area) EIS.

- Forecast of Future Needs

This section summarizes the need for capital improvements that are described in more detail in the mitigation sections of the SKIA EIS.

- Capital Projects

This section lists the capital improvements that will eliminate existing deficiencies, make available adequate facilities for future growth, and repair or replace obsolete or worn out facilities.

## **Financing Plan**

The Financing Plan section addresses the question of who will pay for PSIC facilities and lists the funding sources that can pay for needed capital improvements.

## **Coordination Among Land Use, CFP and Financing Plan**

Strategy CF 2.5 in Section A addresses the statutory requirement to reassess the land use element if probable funding falls short.

CF 2.5 If projected funding is inadequate to finance needed capital facilities that provide adequate levels of service, the level of service, the planned growth, and/or the sources of revenue will be adjusted to maintain a balance between available revenue and needed capital facilities.

# **DEVELOPMENT ASSUMPTIONS**

State law requires the CFP to include an analysis of future needs. The CFP is also required to include capital improvement projects and funding that address the future needs. The needs and projects must be consistent with the proposed land use and development plan.

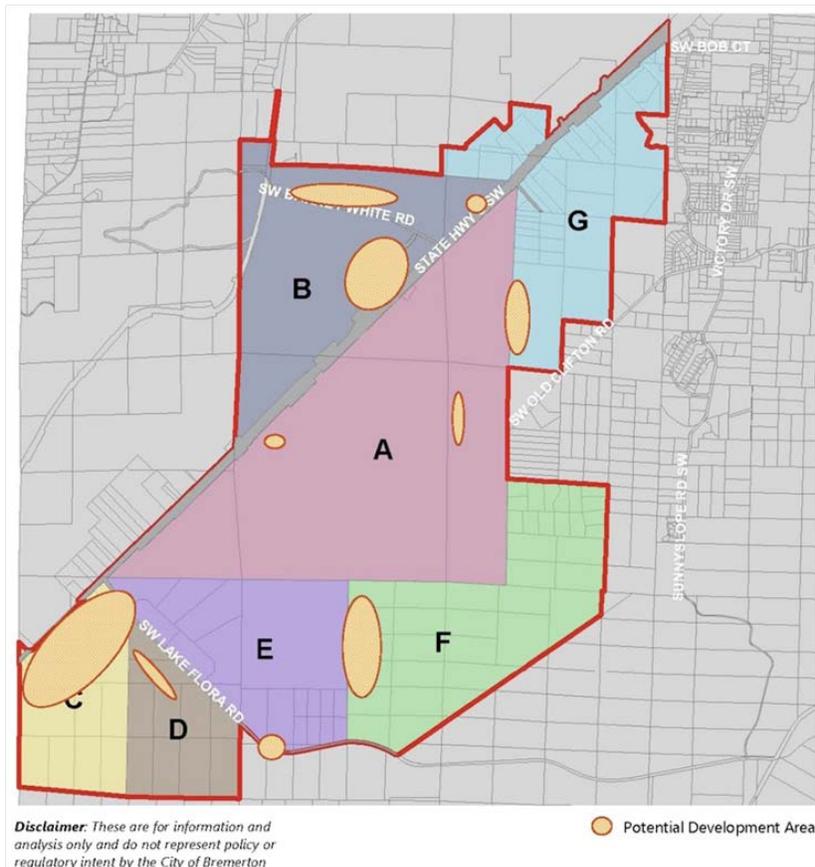
Table E-1 summarizes the distribution of the new jobs, buildings and developed acreage among seven analysis areas within the PSIC site (see Figure E-1 for the analysis areas). The distribution among the analysis areas was developed in order to identify the general location of development within PSIC so that estimates could be prepared for roadway, water, sewer and stormwater projects. The allocation among the seven areas is narrowed a bit more by identifying highly generalized locations of development within each analysis area. These locations appear as “bubbles” on maps in the roadway, water and sewer sections of this CFP. The bubbles are for general planning purposes, and are not intended to indicate specific parcels that will be developed, or others that will not be developed. Development within each area could occur on different land within the area without significantly affecting the estimated quantity and cost of roads, water and sewer facilities.

**Table E-1: Growth by PSIC Analysis Area**

PSIC Development Analysis Area	Employment	Acres Developed <sup>1</sup>	Square Feet of Buildings <sup>2</sup>
A	500	23	350,000
B	1,500	69	1,175,000
C	1,500	69	775,000
D	400	18	225,000
E	850	39	425,000
F	1,150	53	575,000
G	600	28	325,000
<b>Total</b>	<b>6,500</b>	<b>299</b>	<b>3,850,000</b>

1. The Developed Acres column is intended to show the projected total acres of developed land within each analysis area.
2. The Square Feet of Buildings column is intended to show the projected total estimated square feet of developed building area in each analysis area.

**Figure E-1: Analysis Areas and Development Assumptions**



Future employment growth is expected to be primarily industrial in nature with two notable exceptions:

- Areas in the designated MIC may contain up to 20% of employment as supporting retail/business services.
- The area south of Lake Flora Road (Areas C and D) is designated as a mixed use development with a blend of outlet center, entertainment center, and office uses. The retail development would serve populations in a 25 to 75 mile trade area.

The development and employment projections contained in the Subarea Plan are the basis for the CFP's analysis of future needs, and the capital improvements projects that will serve those needs.

## TRANSPORTATION

### Inventory of Existing Facilities

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The following is a summary of the existing transportation facilities that are described in more detail in the SKIA EIS (see Section 3.6 Transportation).

#### Roadway System

**State Route (SR) 3** is the principal north/south roadway on the Kitsap Peninsula and links US 101 near Shelton to SR 104 at the Hood Canal Bridge.

**SR 16** is a major freeway that connects the Bremerton area with Tacoma and I-5 to the east.

**Lake Flora Road** is a two-lane county road that extends between SR 3 at the southern end of the PSIC site to SR 16, approximately 8 miles east of the PSIC site.

**Imperial Way** serves as the primary access roadway for Bremerton National Airport and the Olympic View Industrial Park. West of SR 3.

**Sunnyslope Road** is a two-lane county road that primarily serves the rural residential area located to the northeast of the Bremerton National Airport.

**Old Clifton Road** is a two-lane road that extends from the eastern edge of the Bremerton National Airport to SR 16 at an interchange located about two miles south of the SR 3 interchange.

**Cross SKIA Connector** is a new two-lane road that is that extends south from SR 3 to the property line at Bremerton National Airport.

#### Transit, Bicycle, and Pedestrian System

The transit, bicycle, and pedestrian systems are very limited within the study area. Mason County Transit provides fixed route transit service between Belfair and the Bremerton Ferry terminal; however, the transit route travels along Old Belfair Highway and does not provide any transit service to the PSIC site. Kitsap Transit does not have any bus routes near the site.

Kitsap Transit operates a large vanpool program; however, there are no vanpools with any destinations within the PSIC area.

Kitsap County designates Lake Flora Road and Glenwood Road as bike routes between SR 3 and Lider Road.

## **Freight Rail**

There is a freight railroad that parallels the west side of SR 3 through the study area. The majority of the rail traffic on this route serves the military installations at Bremerton and Bangor.

## **Forecast of Future Needs**

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The following is a summary of the future transportation needs that are described in more detail in the SKIA EIS (see Section 3.6 Transportation).

### **City of Bremerton Comprehensive Plan LOS Standard**

The City of Bremerton's Comprehensive Plan defines the City's level of service (LOS) standards as D for all roadways and intersections in the study area.

### **Roadway Improvements Needed for Existing Conditions**

The signalized intersection of SR 3 / SR 16 / Sam Christopherson Avenue operates at LOS E. The two unsignalized intersections at the SR 16 interchange with Old Clifton Road perform at LOS F.

Internal to the PSIC area, the Port of Bremerton Cross SKIA Connector Phase 1 has been completed from SR 3 to the east boundary of the airport. The port is currently pursuing a variety of funding sources to extend the road south to Lake Flora Road. The Cross SKIA Connector is assumed to be constructed south to Lake Flora Road. (See Figure A-2)

In addition to the Cross SKIA Connector, other internal roadways, sidewalks, bicycle lanes, and trails will have to be constructed to support the future development.

### **Roadway Improvements Needed Because of Growth**

The following seven intersections are expected to operate at an undesirable LOS (i.e., LOS E or F) under 2030 conditions:

- SR 3 / NE Clifton Lane
- SR 3 / Lake Flora Road
- SR 3 / Imperial Way
- SR 3 / Sunnyslope Road
- SR 3 / SR 16 / Sam Christopherson Avenue
- Old Clifton Road / SR 16 Eastbound Ramps
- Old Clifton Road / SR 16 Westbound Ramps

Poor traffic operations can generally be mitigated if the following improvements are implemented:

- Construct the Belfair Bypass
- Widen SR 3 to four lanes from a point south of Lake Flora Road to SR 16 and install traffic signals at the Lake Flora Road and Sunnyslope Road intersections
- Widen Lake Flora Road between SR 3 and the SKIA Connector Road
- Grade separate the northbound and southbound SR 3 movements at SR 3 / SR 16 / Sam Christopherson Avenue intersection
- Implement minor intersection widening and signalization at the Old Clifton Road / SR 16 ramp intersections

Details on specific mitigation measures are provided below.

*Belfair Bypass – WSDOT has identified the Belfair Bypass as a high priority project to relieve traffic congestion near the PSIC site. The Belfair Bypass would construct a new segment of SR 3 east of and parallel to the existing alignment to avoid the congested intersections in Belfair and provide an alternate and less congested route. As part of this project, the traffic congestion at the SR 3 / NE Clifton Lane intersection road will be improved, but not to a LOS of D or better. In addition, this project would likely include improvements at the SR 3 / Lake Flora Road intersection, improving its operations to acceptable levels.*

*SR 3 / NE Clifton Lane – The only intersection configuration that improves this intersection to LOS D or better is the addition of northbound and southbound through lanes on “Old SR 3.” However additional lanes are inconsistent with the current Belfair Area Widening and Safety Improvements project (currently funded for construction in 2012) to add a two-way left turn lane on SR 3 south of this intersection, and may be infeasible due to right-of-way impacts and the configuration of the railroad undercrossing located north of Belfair. While WSDOT has not ruled out additional improvements at this location, constructing lanes beyond what is identified in the Belfair Area Widening and Safety Improvements plan is not considered as part of this CFP for PSIC.*

*SR 3 / Imperial Way – Widening SR 3 to four through lanes at this intersection will be required for this intersection to operate at LOS D.*

*SR 3 / Sunnyslope Road – Widening SR 3 to four lanes at this intersection along with signalization will allow the intersection to operate at LOS D.*

*SR 3 / SR 16 / Sam Christopherson Avenue – All interim improvements including additional turning lanes and through lanes on SR 3 still result in LOS F at this location. Therefore full mitigation of the traffic operations impact will require grade separation of this intersection.*

*Old Clifton Road / Tremont Street / SR 16 EB Ramps – Signalizing this intersection and adding a dedicated right-turn lane for eastbound vehicles and a dedicated left turn lane for westbound vehicles results in an acceptable LOS D.*

*Old Clifton Road / Tremont Street / SR 16 WB Ramps* – Signalizing this intersection with the current lane geometry results in LOS B operations.

In addition to existing intersections, there are five new access intersections assumed. The list below describes each of the intersections:

- New Intersection: Analysis Area C and SR 3. This intersection is necessary to provide access to Analysis Area C and is located southwest of the existing Lake Flora Road / SR 3 intersection. (Identified as Intersection 12 in the SKIA EIS Section 3.6.10, SKIA Site Access Evaluation.)
- New Intersection: Analysis Area C/D and Lake Flora Road. This intersection is necessary to provide access to parts of Analysis Areas C and D and is located southeast of the existing Lake Flora Road / SR 3 intersection. (Identified as Intersection 13 in the SKIA EIS Section 3.6.10, SKIA Site Access Evaluation.)
- New Intersection: Analysis Area E/F and Lake Flora Road. This intersection is necessary to provide access to parts of Analysis Areas E and F and is located southeast of the existing Lake Flora Road / SR 3 intersection. (Identified as Intersection 14 in the SKIA EIS Section 3.6.10, SKIA Site Access Evaluation.)
- New Intersection: Cross-SKIA Connector and Lake Flora Road. This intersection is the southern terminus of the proposed extension of the Cross SKIA Connector. It provides access to Analysis Areas E, F, A, and G. (Identified as Intersection 15 in the SKIA EIS Section 3.6.10, SKIA Site Access Evaluation.)
- New Intersection: Cross SKIA Connector / Analysis Area B Access / SR 3. This intersection is located at the current northern terminus of the Cross SKIA Connector. It is envisioned that an extension of the Cross SKIA Connector would proceed into Analysis Area B, providing additional access and circulation in the northeast portion of the Olympic View Industrial Park. (Identified as Intersection 16 in the SKIA EIS Section 3.6.10, SKIA Site Access Evaluation.)

In addition to the intersections described above, roads internal to the PSIC site are necessary to accommodate future growth. There are two broad categories of internal roadways:

- Collector Roads: These are small (generally two-to-three lane) roads that connect local access roads (described below) to major regional roads and state highways. The collector roads shown on Figure CFP-2, below, are based on an extension of the existing collector road system, best transportation planning practices, and the location of potential development areas.
- Local Access Roads: These are small roads that provide direct access from project driveways to the overall roadway network. Because of the small and localized character of these roads, they are not shown on Figure CFP-2. Their costs are based on development patterns of industrial areas in the Green River Valley (i.e., 50 lineal feet of local access road are provided for every acre of developed industrial land).

## **Transit, Bicycle and Pedestrian Improvements Needed for Existing Conditions**

There are no planned transit improvements in the PSIC area, but future growth in the PSIC region may lead to bus services provided by Mason County Transportation (which currently operates a route parallel to SR 3 along Old Belfair Road) and/or Kitsap Transit. Additionally, the Kitsap Transit vanpool program could start service in the PSIC area. For the purposes of this analysis, no new transit service was assumed in the study area.

## **Transit, Bicycle and Pedestrian Improvements Needed Because of Growth**

Internal to the site, implementation of the Plan will result in the development of a robust pedestrian and bicycle network. Roadway standards are recommended that include sidewalks and possibly bicycle lanes on both sides of the street within more developed areas. In the undeveloped areas of the site, a multi-use path and wide shoulders are recommended, similar to the current Cross SKIA Connector design to accommodate active transportation modes. In addition, the PSIC Subarea Plan recommends that development be clustered to allow employees to walk or bicycle to retail and service commercial uses that will be located adjacent to industrial uses. Furthermore, it is recommended that a separate network of multi-use paths be constructed between clusters of development to provide direct connections between development areas for active transportation modes.

Given the sparse transit, pedestrian, and bicycle network in the study area, along with the industrial character of the PSIC site, the transportation needs analysis indicates the need for capital improvement projects that address vehicular impacts on roadways.

## **Capital Projects**

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### **Roadway Improvements Projects**

There are 25 roadway improvements recommended to serve future development under the Subarea Plan. Figure E-2 shows the location of the roadway projects in the PSIC area.

A few of the projects are outside the boundaries of the PSIC subarea. They are included in this CFP because they are needed to mitigate the impacts on roads and intersections outside PSIC caused by development in PSIC. These impacts and mitigations are identified in the SKIA EIS. In the project list below the full cost of each project is listed. However, in the financing plan section of this CFP the cost is apportioned between development in PSIC and development outside PSIC. The fair share portion attributable to PSIC development is financed by sources appropriate for PSIC. The portion of the cost attributable to development outside PSIC is financed by other sources and are not the responsibility of development in PSIC.

Similarly, improvements to the SR 3 and SR 16 state facilities have been provided for information. Improvements to these facilities will likely be required as PSIC becomes more developed. However, the State is responsible for funding the cost of state facilities, except for potential local match requirements. Although the future local match is unknown, recent

experience ranges from 1% to 20%. The cost of state facilities is not included in Table E-8, summary of Local Capital Facilities Project Costs.

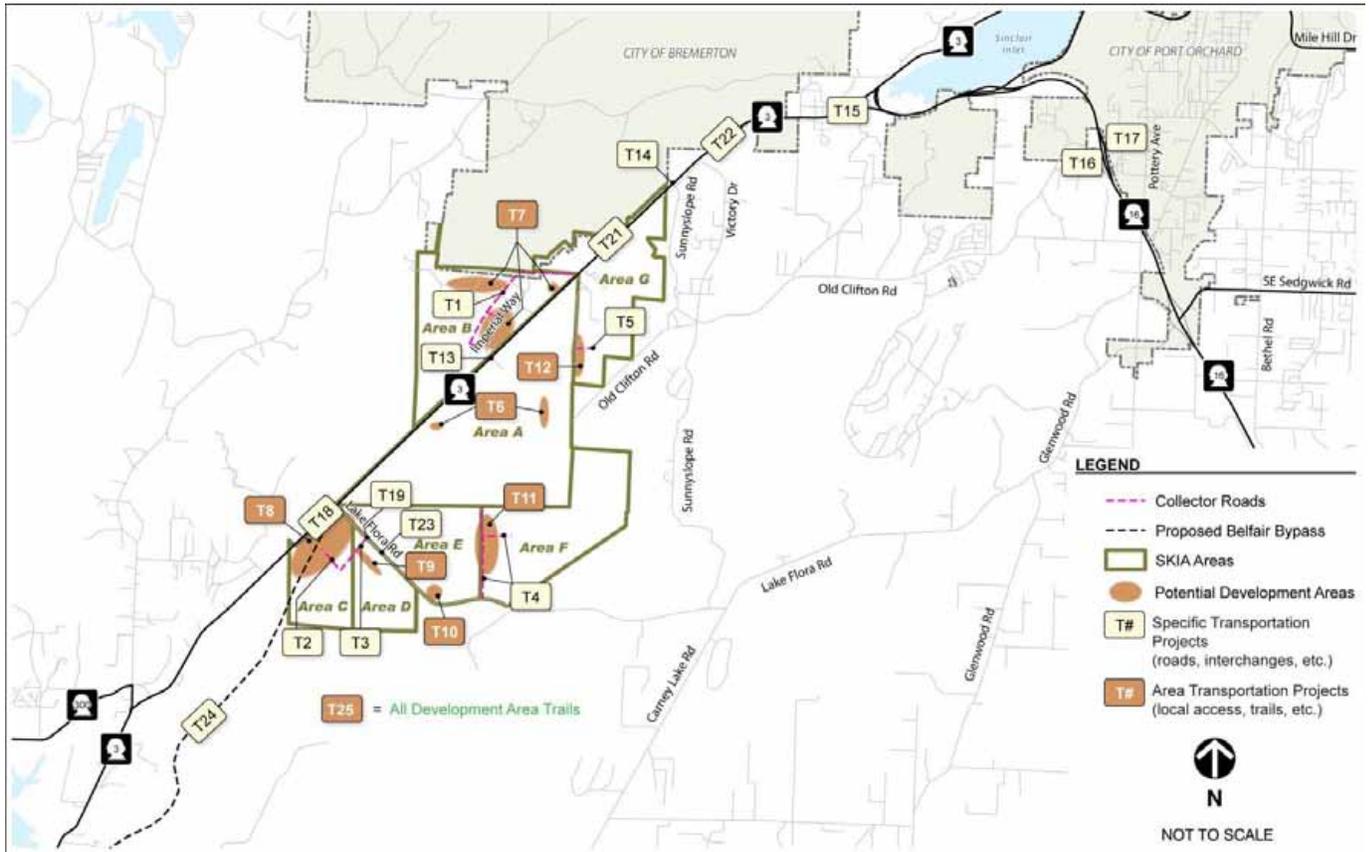
Table E-2 lists the projects with a brief description and the estimated cost of each project. Intersections with state roads may be signalized, but most intersections within PSIC can be roundabouts or traditional intersections at the discretion of the City. The cost estimates were largely based on WSDOT's "Project Bid Tabulations" and the "Highway Construction Cost Report."

**Table E-2: Roadway Project Descriptions and Costs**

#	Project	Description	Cost
<u>Local Roads</u>			
T1	Area B Collector Road	New roadway west of SR-3 at Cross SKIA intersection	\$ 4,441,400
T2	Area C Collector Road	New roadway south of Lake Flora Road to the Belfair Bypass	1,835,600
T3	Area D Collector Road	Portion of new roadway south of Lake Flora Road	498,000
T4	Area F Collector Road	New roadway north from Lake Flora Road	3,140,000
T5	Area G Collector Road	New roadway east from Cross SKIA Road	415,100
T6	Area A Local Access Road	0.43 miles of local access roads	681,100
T7	Area B Local Access Road	1.30 miles of local access roads	2,059,200
T8	Area C Local Access Road	1.30 miles of local access roads	2,059,200
T9	Area D Local Access Road	0.35 miles of local access roads	554,400
T10	Area E Local Access Road	0.74 miles of local access roads	1,172,200
T11	Area F Local Access Road	1.00 miles of local access roads	1,584,000
T12	Area G Local Access Road	0.52 miles of local access roads	823,700
T19	Analysis Area C/D and Lake Flora Road	New intersection southeast of existing Lake Flora Road / SR 3 intersection	1,000,000
T20	Cross-SKIA Connector and Lake Flora Road	New intersection at southern terminus of extension of Cross-SKIA Connector	1,000,000
T23	Lake Flora Widening	Widening to southern end of potential southern end of Cross-SKIA Road	3,201,100
T25	Trails	12 miles of trails	1,300,000
Total Cost of Local Roads			25,765,000

#	Project	Description	Cost
<u>State Roads</u>			
T13	SR 3 / Imperial Way	Signalize intersection, modify approaches	2,000,000
T14	SR 3 / Sunnyslope Road	Signalize intersection, modify approaches	2,000,000
T15	SR 3 / SR 16 / Sam Christopherson Ave	Grade separation	63,000,000
T16	Old Clifton Road / SR 16 Eastbound Ramps	Signalize intersection add dedicated right turn EB and dedicated left turn WB	1,000,000
T17	Old Clifton Road / SR 16 Westbound Ramps	Signalize intersection	500,000
T18	Analysis Area C and SR 3	New intersection southwest of existing Lake Flora Road / SR 3 intersection	2,000,000
T21	Cross-SKIA Connector / Analysis Area B / SR 3	New intersection at northern terminus of Cross-SKIA Connector	500,000
T22	SR 3 Widening	Widening from Imperial Way to Gorst	109,000,000
T24	Belfair Bypass	2-lane divided highway with capability for 4 lanes	76,000,000
Total Cost of State Roads			256,000,000

**Figure E-2: Roadway Project Locations**



Source: Fehr & Peers, 2011

## Transit, Bicycle and Pedestrian Improvements Projects

Roadway project T25 provides for 12 miles of trails within PSIC. There are no other planned and funded transit, pedestrian, or bicycle improvements anticipated within the study area. It is conceivable that Mason County Transportation or Kitsap Transit could provide bus service to the area as employment grows. It is also possible that some vanpool services could serve PSIC.

## WATER

### Inventory of Existing Facilities

The following is a summary of the existing water facilities that are described in more detail in the SKIA EIS (see Section 3.8 Utilities).

The City of Bremerton water system currently extends into the study area. The study area is part of what is known as the W517 zone of the City of Bremerton water system and is considered by the Washington State Department of Health (WSDOH) as a separate water system owned and operated by the City of Bremerton. A small part of the northwest corner of the study area is also served by the Sunnyslope Water District, which extends to the west of the study area.

## **Water Supply**

Water for the W517 zone is provided through four wells and a connection to the City of Bremerton's municipal water system.

## **Water Storage**

Water storage is provided to the W517 zone through a 1.2 million gallon reservoir, known as Reservoir 10 that consists of two ground level tanks located in the Olympic View Industrial Park.

## **Water Distribution**

The water distribution system extends from the north to serve the Port of Bremerton properties at Olympic View Industrial Park and the Airport.

## **Forecast of Future Needs**

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The following is a summary of the future water facility needs that are described in more detail in the SKIA EIS (see Section 3.8 Utilities).

### **Water Supply**

As described in the 2005 Water System Plan, the City has sufficient current water rights to serve current and future development in PSIC.

### **Water Storage**

The amount of water storage in PSIC would need to be increased to account for the new flows. Water demand is estimated to increase by 0.6 – 0.8 MGD (million gallons per day) as a result of 6,500 new jobs. Compared to the 2004 commercial water use in the West 517 zone of the City of Bremerton, this represents an increase of 1400% - 2200% over 2004 demand. Water demand under this alternative could exceed the City's storage capacity in this area.

### **Water Distribution**

Water demand described under Water Storage will also exceed the City's transmission capacity to PSIC. The water transmission main between the City of Bremerton and PSIC would require expansion and new trunk lines and distribution lines would be required to serve areas of development.

### **Water Conservation**

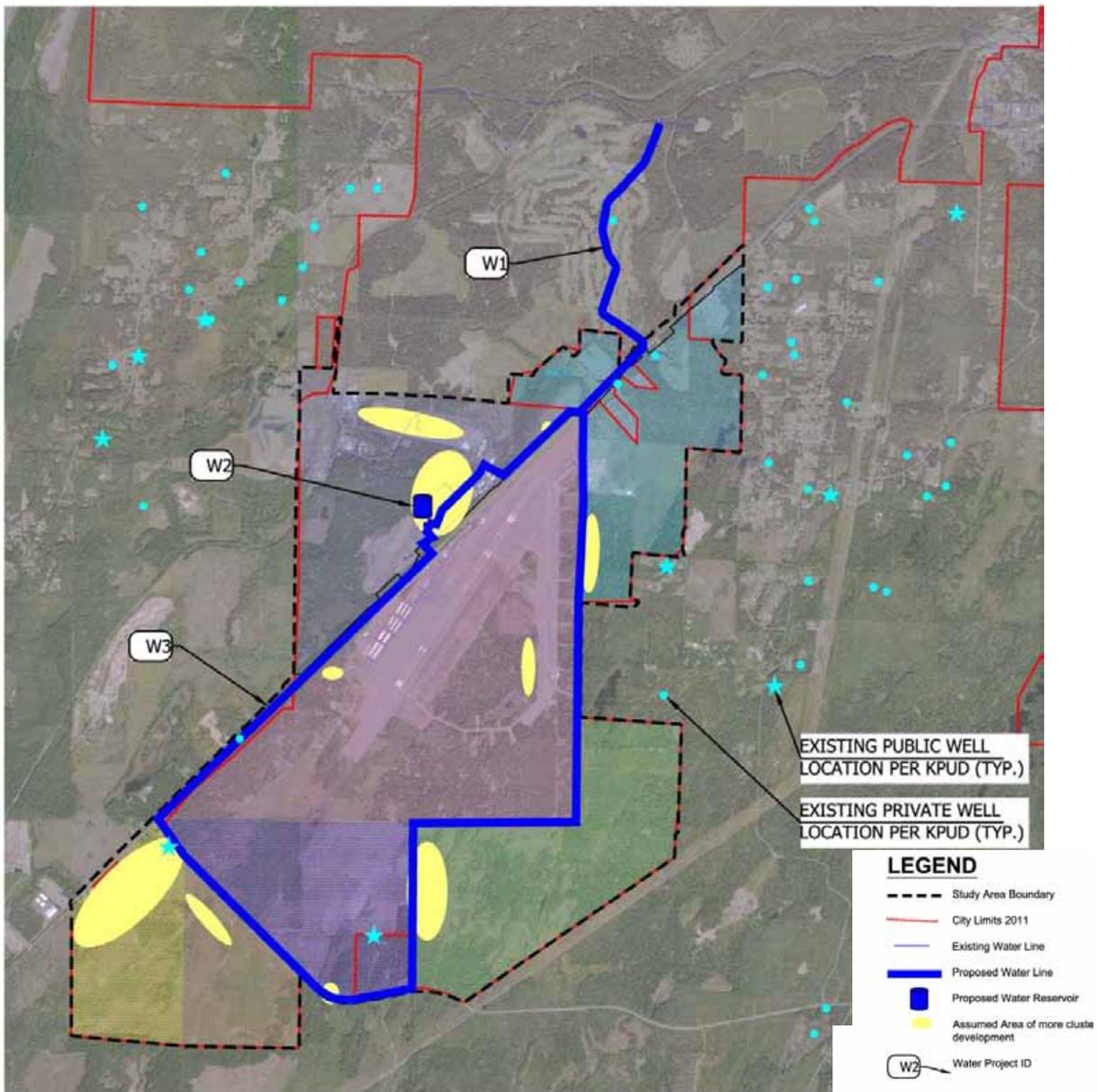
Green building standards should be encouraged or required for PSIC. Development to such standards can typically achieve 30% or more conservation for non-process related water consumption for domestic fixtures and irrigation and thus minimize the need for additional water system facilities. Process water consumption is the water used in the manufacturing process. Non-process water consumption is water used in bathrooms, kitchens and other uses not directly part of the manufacturing process.

## Capital Projects

There are four water system improvements recommended to serve future development under the Subarea Plan. Figure E-3 shows the location of the water system projects in the PSIC area.

Table E-3 lists the projects with a brief description and the estimated cost of each project. Costs are based on the annexation study, adjusted to be consistent with the development assumptions and facilities proposed in this Subarea Plan.

**Figure E-3: Water System Project Locations**



Source: Chris Webb & Associates, 2011

**Table E-3: Water System Project Descriptions and Costs**

#	Project	Cost
W1	16" Transmission Main from City system to New Reservoir	\$ 2,201,000
W2	1,000,000 Gallon Water Storage Reservoir and Miscellaneous Pump Station & Treatment Upgrades	2,545,900
W3	Primary 16" Loop	5,995,300
W4	Secondary 8" & 10" Loops Built Along with Local Access Roads	1,590,800
	Total	12,333,000

Source: Chris Webb Associates, Inc., 2011

## SEWER

### Inventory of Existing Facilities

The following is a summary of the existing sewer facilities that are described in more detail in the SKIA EIS (see Section 3.8 Utilities).

#### Sewer Treatment

The Port of Bremerton's sewer treatment plant located off of SW Barney White Road serves about 158 acres of the core Port development in the study area, including the airport, supporting facilities and the Olympic View Industrial Park. The approved capacity for this system is 0.0725 MGD (72,500 gallons per day). This plant treats an average 0.0244 MGD (24,400 gallons per day) which is 33% of its rated capacity according to the Port of Bremerton.

#### Sewer Collection

The existing Port sewer collection system primarily consists of 8-inch gravity pipes to convey flows to the sewer lagoons. Near the airport, there is a small pump station that conveys flow under Highway 3. The existing system was constructed in 1972 and upgraded in 1987.

The majority of the study area is outside of the area served by the existing sewer treatment facility and relies on onsite septic systems. The City of Bremerton has recently undertaken a project to extend sewer service to the Gorst Area.

### Forecast of Future Needs

The following is a summary of the future sewer facility needs that are described in more detail in the SKIA EIS (see Section 3.8 Utilities).

#### Sewer Treatment

The 6,500 projected new jobs are expected to result in an area wide average daily flow of 0.5 MGD. Projected sewer flows would exceed the Port's treatment capacity in this area.

In order to reduce up-front costs of constructing sewer infrastructure to support growth, this plan proposes to provide sewage treatment with satellite Membrane Bioreactor (MBR) sewer plants that can produce effluent with sufficiently high quality as to be re-used as reclaimed water and can be built in a modular way to serve development when and where it occurs in PSIC. This allows infrastructure to be phased in over time as growth occurs.

Two sewage treatment plants could be constructed with one plant located in the north in Area B serving Areas B & G and one in the south in Area C serving the balance of PSIC. The northern plant would have a rated capacity of 0.43 MGD (average daily flow 0.22 MGD). The southern plant would have a rated capacity of 0.55 MGD (average daily flow 0.27 MGD). These plants could be built separately with the plant near the growth built first, either north or south.

### **Sewer Collection**

A sewer collection system of trunk lines, pump stations, and collector lines would be needed to connect developed properties to available treatment plants. As an alternative to satellite MBR sewer plants the City may choose to extend utility infrastructure for collection and treatment. A September 2008 study prepared by HDR Engineering indicated at a "high growth scenario" at full buildout that this would cost approximately \$30.5 Million. While this cost is less than the cost of implementing satellite MBR facilities (shown in Table E-4) it is difficult to phase over time in conjunction with growth and requires up-front investment. Additionally, there may be opportunities to connect with other utility providers that have available infrastructure that allows development an affordable option.

### **Wastewater Re-Use and Disposal**

The effluent from the MBR plant would be pumped to the uses described for each project, or to the winter disposal/groundwater recharge elements.

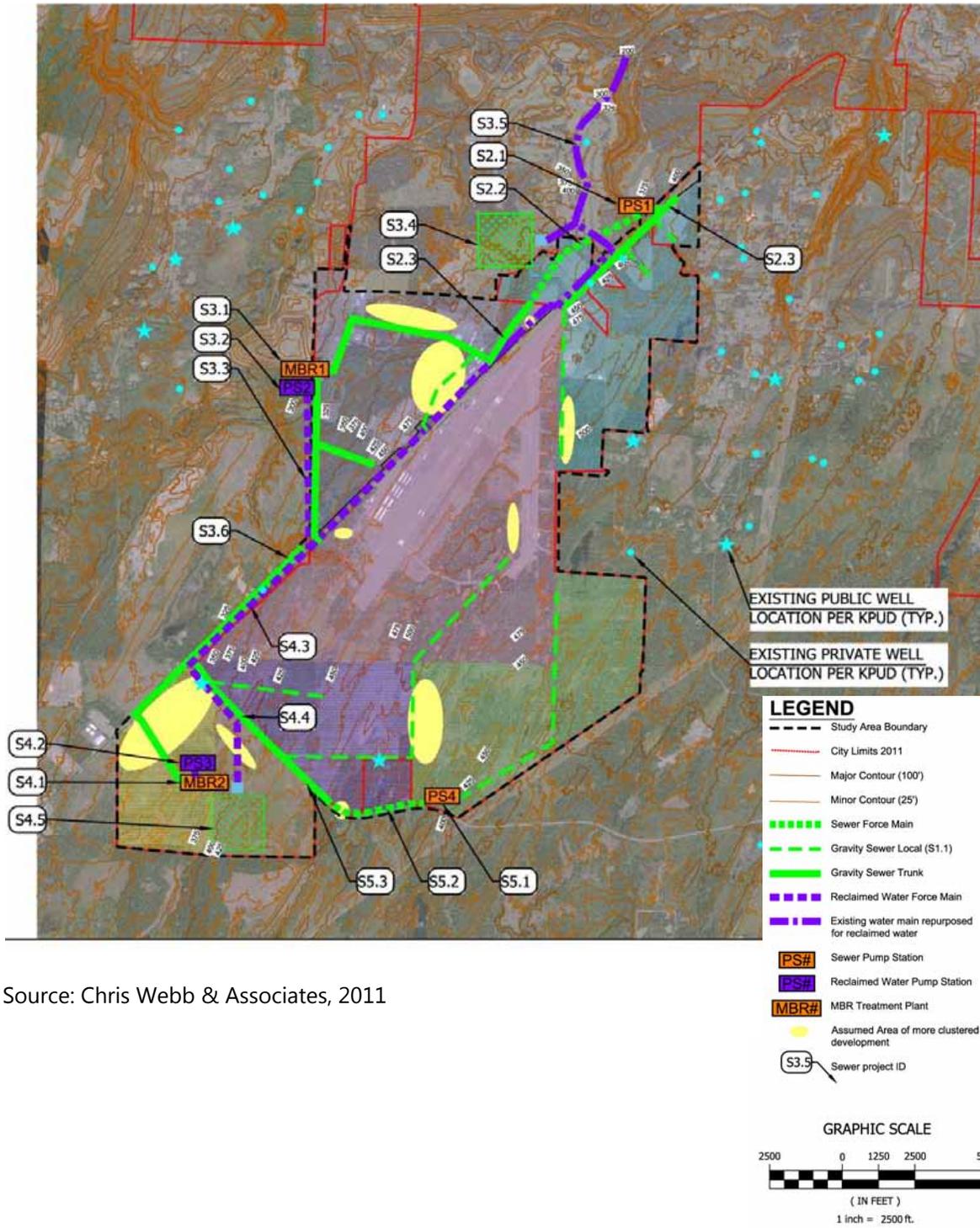
### **Capital Projects**

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There are five sewer system improvements recommended to serve projected development under the Subarea Plan. Figure E-4 shows the location of the sewer system projects in the PSIC area.

Table E-4 lists the projects with a brief description and the estimated cost of each project. Costs are based on the City's annexation study, prepare prior to the annexation of PSIC, adjusted to be consistent with the development assumptions and facilities proposed in this Subarea Plan.

**Figure E-4: Sewer System Project Locations**



Source: Chris Webb & Associates, 2011

**Table E-4: Sewer System Project Descriptions and Costs**

#	Project	Cost
S1	Secondary 8" & 10" Gravity Sewer Built Along with Local Access Roads	\$ 2,080,300
S2	Sewer Service for Area G	4,921,100
	S2.1 Pump Station 1	
	S2.2 4" Force Main	
	S2.3 8" – 10" Gravity Sewer	
S3	New Membrane Bioreactor (MBR) Plant #1 with Re-Use; Sewer Service for Areas A (partial) and B	13,499,300
	S3.1 MBR Plant	
	S3.2 Pump Station 2	
	S3.3 6" Force Main	
	S3.4 Winter Sewage Disposal / Groundwater Recharge	
	S3.5 Re-Use ex. 8" DI Water for Reclaimed Water Effluent to Golf Course	
	S3.6 8" – 10" Gravity Sewer	
S4	New MBR Plant #2 with Re-Use	12,391,000
	S4.1 MBR Plant	
	S4.2 Pump Station 3	
	S4.3 6" Force Main	
	S4.4 8" – 10" Gravity Sewer	
	S4.5 Winter Sewage Disposal / Groundwater Recharge	
S5	Sewer Service for Areas E & F	2,433,000
	S5.1 Pump Station 4	
	S5.2 4" Force Main	
	S5.3 8" – 10" Gravity Sewer	
	<b>Total</b>	<b>35,324,700</b>

Source: Chris Webb Associates, Inc., 2011

## STORMWATER

### Inventory of Existing Facilities

There are no major stormwater treatment and/or flow control facilities in PSIC. The Port of Bremerton owns two detention ponds on the west side of Highway 3 and there is another detention pond at the Waste Management property, but these do not affect the analysis of needs for stormwater facilities in SKIA.

## **Forecast of Future Needs**

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A detailed analysis of future stormwater needs in PSIC is presented in the SKIA EIS (see Section 3.8 Utilities). The following is a summary of the future stormwater needs that are described in more detail in Section 3.8 of the EIS.

Given the largely undeveloped and rural nature of the PSIC area there are no known drainage problems within the study area.

Most of the soil in PSIC is an Alderwood series gravelly sandy loam (+/- 63%) and Harstine series gravelly sandy loam (+/- 13%). These soils tend to be deep moderately well drained soils underlain in some cases by a cemented till layer.

Even assuming planned development, much of the area would remain in forest or other undeveloped state and much of the vegetated area would remain undeveloped.

Property owners that develop their land will be required to meet stormwater standards on their site, therefore there is no need for public stormwater facilities. Furthermore, site development will be required to use low impact development (LID) as the primary stormwater management approach. The emerging practice of LID has the ability to mitigate water quality impacts of development in a more effective manner than conventional stormwater treatment practices. Additionally, LID can address water quantity by reducing run-off and recharging groundwater. In till soils, LID can reduce the size of any required detention and flow control facilities and in outwash soils LID can often be used in place of detention facilities for stormwater flow control.

## **Capital Projects**

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There are no separate capital improvement projects for stormwater for PSIC. LID stormwater management is included in the design and the cost of street projects in the Transportation section of the CFP. The balance of the stormwater facilities would be private.

# **FINANCING PLAN**

## **Policies Regarding Paying for SKIA's Facilities**

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There are many sources of funds that could be used for SKIA's transportation, water, sewer and stormwater facilities. The first step in selecting the most appropriate funding sources is to determine the policies that will provide direction to the financing plan. The policies address important issues concerning who will pay for SKIA's facilities, and when the facilities will be built.

### **Who Pays?**

There are two parties that typically pay for facilities: the government, and the developer/property owner. In some situations, one party pays all the costs, in other situations each party pays a portion of the cost.

Understanding who will pay for SKIA's facilities will directly affect the selection of funding sources for the financing plan. When governments pay the costs, the funding typically comes from one or more taxes, rates, grants, or low-interest loans. When developers pay the costs, the funding usually comes from private investments.

The policy direction of who pays for PSIC facilities will also have other consequences. The City, on behalf of all of its residents and taxpayers, may be willing to underwrite part of the cost in order to support economic development and system expansions, but it may also expect the developers to share the cost so that growth pays for part of its costs, and taxpayers do not subsidize growth. Property owners and developers typically look for the lowest cost and the greatest competitive advantage in order to create incentives (or avoid disincentives) to attract potential businesses.

Lastly, the policy direction of who pays for PSIC facilities has to account for risks and benefits. The party or parties that pay for the facilities are taking the risk that they might not recoup their investment if the property does not develop. This risk can be reduced by phasing the facilities to correspond to increments of development. Alternatively, the risk can be eliminated by waiting to install the facilities until a commitment is received from a buyer or tenant. However, some facilities take significant time to design and build. If the timeline exceeds the time to build the occupant's building, this would be a significant disincentive to the prospective occupant.

Consistent with Strategy CF 2.3, this financing plan for PSIC facilities is based on the assumption that the costs will be paid with a combination of governmental and developer resources with phasing consistent with growth's demand.

### **When Will Facilities be Built?**

The most economically efficient timetable to build facilities is immediately before they are needed. This reduces or avoids carrying costs for facilities before they are used, and it also avoids lost opportunities when a potential occupant chooses a different location because they are unable to wait for facilities to be built after they select a location.

As a practical matter, many potential occupants are looking to move in to fully developed space with all facilities in place, or else to develop on a site that already has central facilities, such as collector roads and sewer treatment capacity, leaving only the local streets and water and sewer lines to be installed as the first step in developing their site.

Understanding when SKIA's facilities will be built directly affects the selection of funding sources for the financing plan. Facilities that are constructed prior to commitments to buy or lease sites requires substantial cash investments and/or the ability and willingness to incur debt by borrowing the money. Facilities that are constructed at the time the development occurs can be paid by fees associated with the development, or debt incurred for the facilities needed to serve the specific site.

This financing plan for PSIC facilities is based on the assumption that the costs of “central” or “core” facilities will be phased in targeted areas within PSIC, and the costs of “local” facilities, such as local access streets and local water and sewer lines, will be incurred when a developer or potential occupant commits to and initiates plans for a structure.

## **Sources of Funds Available for SKIA’s CFP**

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As noted in the introduction to this Financing Plan section, there are many sources of funds that can be used for SKIA’s transportation, water, sewer and stormwater facilities. The next step in selecting the most appropriate funding sources is to identify specific sources that could be used for SKIA’s facilities. The introduction identified two parties that typically pay for facilities: the government, and/or the developer/owner of the property. The following list of potential funding sources for SKIA’s CFP is organized according to the party that generates the money:

### **Government Funding Sources**

The following are sources of funding that some Washington cities use to pay for capital improvements:

- Real Estate Excise Taxes
- Motor Vehicle License Fees (Transportation Benefit District)
- Business License based on Census of Employees
- Property Taxes (pledged to repay general obligation bonds)
- Bond Proceeds (borrowed money)
- Grants (from Federal or State governments using their taxes to fund the grants)

The funding by the government can be targeted to come from specific zones for specific development (i.e., PSIC), or spread across all taxpayers in the City.

### **Developer/Property Owner Funding Sources**

The following are sources of funding that developers and property owners use to pay for capital improvements:

- Owner and/or Investor Capital
- General Facility Charges (paid to government for utilities facilities)
- Impact Fees (for transportation facilities)
- Assessments (paid to Community Facilities Districts or Local Improvement Districts until the property is occupied and the assessment transfers to the occupant)
- Tax Increments (portions of property taxes, sales & use taxes, and/or other taxes). Note: these are very limited in Washington, as described below.

The cost of funding by developers and property owners is typically passed along to occupants in the form of higher rents or higher purchase prices.

## Transportation Financing Plan

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Table E-5 lists groups of transportation projects from Table E-2, and the estimated cost of each group.

**Table E-5: Transportation Project Financing Plan**

Project Group (#)	Total
Local Roads	\$ 25,765,000
State Roads	256,000,000
Total	281,765,000

Source: Henderson, Young & Company, 2011

The financing plan for transportation projects is based on the following assumptions:

- Grants will be sought and used to pay for as much of the project costs as possible.
- PSIC developers/property owners are responsible for funding the portion of local roads that are not funded by grants.
- The state is responsible for the cost of state road projects other than local matching requirements. Note that the cost of state facilities is not included in Table E-8, Summary of Local Capital Facilities Project Costs.
- The local share of state road projects depends on the matching requirement of specific grants. Recent experience ranges from 1% to 20%.
- Specific funding to be raised by each party will be one or more of the funding sources generated by each party, as described above. A Community Facilities District (CFD) is particularly interesting in part because of the ability to establish assessments that will be paid by future occupants, thus reducing the front-end cost to the City and the developers/property owners. Another desirable feature of a CFD for PSIC is that the requirement for unanimous approval by property owners is easiest to accomplish when there are relatively few property owners, as is the case with PSIC.

## Water Financing Plan

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Table E-6 lists groups of water system projects from Table E-3, and the estimated cost of each group.

**Table E-6: Water System Project Financing Plan**

Project Group (#)	Total
Local Access Water Lines (W4)	\$ 1,590,800
Core Water System (W1-3)	10,742,200
Total	12,333,000

Source: Henderson, Young & Company, 2011

The financing plan for water system projects is based on the following assumptions:

- PSIC developers/property owners are responsible for the local access water lines that provide access to their property from the core water system.
- The cost of core water system improvements could be paid by the City and/or PSIC developers/property owners.
- Specific funding to be raised by each party will be one or more of the funding sources described above. A Utilities Local Improvement District (ULID) is a funding mechanism that is commonly used for water and sewer. A Community Facilities District (CFD) is an alternative to conventional funding of utility facilities through general facility charges and water rates. The CFD alternative would establish assessments that will be paid by future occupants. As noted in the Transportation Financing Plan, the CFD's requirement for unanimous approval by property owners is easiest to accomplish when there are relatively few property owners, as is the case with PSIC.

## Sewer Financing Plan

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Table E-7 lists groups of sewer system projects from Table E-4, and the estimated cost of each group.

**Table E-7: Sewer System Project Financing Plan**

Project Group (#)	Total
Local Access Sewer Lines (S1)	\$ 2,080,300
Core Sewer System (S2-5)	33,244,400
Total	35,324,700

Source: Henderson, Young & Company, 2011

The financing plan for sewer system projects is based on the following assumptions:

- PSIC developers/property owners are responsible for the local access sewer lines that provide access to their property from the core sewer system.
- The cost of core sewer system improvements could be paid by the City and/or PSIC developers/property owners.
- Specific funding to be raised by each party will be one or more of the funding sources described above. A utilities Local Improvement District (UUD) is a funding mechanism that is commonly used for water and sewer. A Community Facilities District (CFD) is an alternative to conventional funding of utility facilities through general facility charges and sewer rates for the same reasons described above for the Water Financing Plan.
- An example of phasing of sewer projects could be to build the projects in northern PSIC (S2 and S3) in one phase, and the projects in southern PSIC (S4 and S5) in a separate phase. Either phase could be first, depending on where potential development occurs.

## **Stormwater Financing Plan**

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There is no financing plan for stormwater because there are no separate capital improvement projects for stormwater for PSIC. The financing plan for transportation capital improvements includes the LID stormwater management costs included in street projects in the Transportation section of the CFP. All other stormwater improvements will be private investments on site by property developers and owners.

## **Notes About Other Funding Sources That May Be Infeasible or Unsuitable**

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There are some other sources of funding that are authorized by Washington law that include authorization for transportation, water, sewer, and stormwater facilities, but which are not likely to be implemented, or are not suitable to fund SKIA's facilities for the reasons listed below. The funding sources are included in the CFP in the event that circumstances change so that one or more of the funding sources becomes feasible and suitable for PSIC.

- Community Revitalization Financing (CRF) - RCW 39.89 authorizes financing through limited increments of property taxes. The requirement for approval by 75% of other taxing entities makes this difficult to implement, and therefore unlikely.
- Local Infrastructure Financing Tool (LIFT) - RCW 39.102 authorizes financing through limited increments of property taxes, sales and use taxes, and other excise taxes. LIFT requires a contract or letter of intent from a private developer, therefore LIFT funding would not be available to build infrastructure prior to such a commitment. LIFT is limited to \$1 million per year per city and \$5 million per year statewide which makes it unlikely and unsuitable. LIFT also requires approval of the other taxing entities which increases the difficulty to implement, and therefore makes it even less likely.
- Local Revitalization Financing (LRF) - RCW 39.104 102 authorizes financing through limited increments of property taxes, sales and use taxes, and other local public sources of revenue. LRF requires a contract or letter of intent from a private developer, therefore LRF funding would not be available to build infrastructure prior to such a commitment. LRF is limited to seven pilot projects in the State, and they have already been selected, therefore LRF is not available for PSIC.
- Hospital Benefit Zone (HBZ) - RCW 39.100 authorizes financing through limited increments of sales and use taxes. HBZs can only be used for an area that will be served by a hospital for which a certificate of need has been issued. The PSIC subarea is not likely to include a hospital, therefore HBZ is not suitable for PSIC.
- Public Facility District (PDF) - RCW 35.57 authorizes cities to issue bonds and charge fees and taxes that can be used for infrastructure to support the PDF's "public facility". The PFD is required to be for convention centers or special events centers. These type of centers are not likely to be developed in PSIC because of its status as one of eight MICs (Manufacturing Industrial Centers) designated by the Puget Sound Regional Council) and required to be used for manufacturing and industrial activities.

- Stadium, Convention, Arts & Tourism Facilities - RCW 67.28 authorizes revenue bonds repaid by special lodging and excise taxes. The improvements could include infrastructure. RCW 67.28 requires that the primary purpose be a “tourism-related facility” such as a public stadium, convention center, performing arts center, or visual arts center. It is unlikely that PSIC will develop such facilities, therefore this is an unlikely funding source.
- Community Renewal Area (CRA) - RCW 35.81 authorizes financing through limited increments of property taxes and sales and use taxes which are used to pay debt on bonds that fund the infrastructure. CRA’s are required to be used in “blighted” areas, or to prevent the spread of blight to another area. The PSIC area does not qualify as blighted or potentially blighted, therefore a CRA is unsuitable for PSIC.
- Main Street Tax Credit Incentive (MSTCIP) - RCW 43.360 and 82.73 authorize business and occupation tax credits or utility tax credits for donations to Main Street Program revitalization activities. MSTCIP applies only to downtown commercial and neighborhood commercial districts, neither of which are suitable for PSIC.
- Public Development Authority (PDA) - RCW 35.21.730-747 authorizes creation of PDAs to receive federal or state grants. This could be suitable for PSIC, but it is not a funding source, per se, but a mechanism for receiving grants that are the actual funding source.

## CONCLUSION

This capital facilities plan includes all the components required by state law. It includes 16 transportation projects, four water system, and five sewer system projects.

**Table E-8: Summary of Local Capital Facilities Project Costs**

Type of Facility	Cost
Local Roads	\$ 25,765,000
Water	12,333,000
Sewer	35,600,000
Stormwater	0
Total	73,698,000

In addition, there are nine state transportation projects estimated to cost \$256 million.

There are many ways to pay for these projects as described above. Each method of payment requires the City, or the owners/developers of the properties to raise revenues that they do not currently have. The City would have to charge taxes, fees, or assessments. The owners/developers would have to raise private capital.

If the City and the owners/developers of the PSIC properties expect each other to pay for the capital facilities, it is likely that future capital facilities will be developed in an unpredictable and

incremental manner. Under this approach, capital facilities may continue to serve as a constraint to future development and deterrent in achieving the PSIC vision. Alternatively, if the City and the owners/developers of the properties can work in collaboration to develop a mutually acceptable financing approach based on the resources identified in this plan, future public facilities that support the PSIC vision may be developed and serve as an incentive for future economic development. The potential for a public/private partnership to obtain public facilities funding is envisioned as a key implementation measure for this Subarea Plan, please see Section B, Implementation, of this document.

# **APPENDIX A: PUBLIC MEETING RESOURCES**



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