

Port of Bellingham

BELLINGHAM INTERNATIONAL AIRPORT

Planned Unit Development & Binding Site Plan

Landscape, Sidewalk & Signage Plan

April 7, 2010

INTRODUCTION

The purpose of this report is to summarize the landscape improvements proposed for the Bellingham International Airport as the property, including lease/lot areas, develops over the next twenty years. It addresses the Port of Bellingham's overall goals and design intent for landscape improvements and the specific landscape requirements, including sidewalk locations and way-finding signage, defined through the Planned Unit Development and Binding Site Plan process with Whatcom County. The project is located in Whatcom County, within the City of Bellingham's Urban Growth Area.

The process used to determine proposed landscape improvements included:

1. Review of 2009 Whatcom County Land Use Code;
2. Review of City of Bellingham Airport Annexation Study Final Report (as airport property may be annexed into the city);
3. Review of City of Bellingham Land Use Code that may be applied to the airport if annexed;
4. Communication with Whatcom County staff; and
5. Meetings with Port of Bellingham staff.

RECOMMENDED GOALS & OBJECTIVES

1. Goal: To integrate the airport into the surrounding community.
Objectives:
 - Retain existing mature vegetation when feasible, especially around the perimeter of the airport property to help preserve the overall natural character of the community.
 - Screen undesirable views from visitors coming to and from airport facilities.
 - Provide airport viewing areas.
2. Goal: To promote the safety and security of pedestrian, vehicular and aircraft traffic.
Objectives:
 - Reduce wildlife attractants and wildlife hazards associated with airport properties.
 - Maintain a landscape clear zone around secured Airport Operations areas.
 - Provide sidewalks adjacent to major port-owned roadways as new development occurs.
 - Provide adequate signage to clearly direct visitors to and from airport facilities.
 - Maintain adequate setbacks and height restrictions for landscape improvements on airport properties.
3. Goal: Create a more sustainable landscape.
Objectives:
 - Utilize water-wise irrigation techniques.
 - Provide methods for treating and infiltrating storm water close to its source, such as rain gardens, porous pavement or other low impact development techniques or designs.
 - Utilize native and/or drought tolerant plants adapted to the local climatic region.

RECOMMENDED REQUIREMENTS

The following landscape requirements are intended to serve as the minimum improvements required to meet the intent of the goals outlined above. Refer to Appendix A for location and typical plan and section for each landscape type with associated sidewalk locations, and Appendix B for each signage type listed.

Type 1 Landscape – 5' Wide Perimeter Landscape Buffer

A minimum 5' Wide Perimeter Landscape Buffer shall include all of the following:

1. A minimum 1 deciduous tree for every 35 linear feet of buffer. Evergreen trees may be used where additional space is available and won't conflict with adjacent pedestrian, bicycle or vehicular areas.
2. Shrubs spaced to form a partial screen, 2' to 4' height, with at least 70% evergreen.
3. Living groundcover spaced to provide immediate cover over 50% of the landscape area.

Type 2 Landscape – 15' Wide Perimeter Buffer

A minimum 15' Wide Perimeter Buffer shall include all of the following:

1. A minimum 1 tree for every 25 linear feet of buffer.
2. A mixture of evergreen and deciduous trees with a minimum of 50% evergreen trees and 30% deciduous trees, generally planted in an informal pattern utilizing a mixture of single and double rows of trees.
3. Shrubs spaced to form a continuous screen with a minimum of 50% evergreen.
4. Living groundcover spaced to provide immediate cover over 50% of the landscape area.

Type 3 Landscape – Parking Lot Buffer

A minimum 5' wide Parking Lot Buffer shall be provided:

- On the road frontage or within front yard setbacks of the parking lot area; and
- Within the interior of the parking lot separating parking stalls.

Interior parking lot buffer shall equal 2% of the total parking lot area, including driveways and access aisles. Location of landscape areas within the interior of the parking lot shall be dependent on low impact development techniques utilized and maneuvering areas required for airport-related operations, and will be determined during the site specific design and permitting process.

The Parking Lot Buffer along the road frontage or front yard setback and within the interior of the parking lot shall include all of the following:

1. A minimum 1 deciduous tree for every 35 linear feet of buffer along the road frontage or front yard setback area, and a minimum 1 deciduous tree for every 500 square feet of buffer within the interior of the parking lot. Evergreen trees may be used where additional space is available and won't conflict with adjacent pedestrian, bicycle or vehicular areas.
2. Shrubs spaced to form a partial screen, 2' to 4' height, with at least 70% evergreen.
3. Living groundcover spaced to provide immediate cover over 50% of the landscape area.

Rain gardens or other low impact development techniques to treat and/or infiltrate storm water may be utilized in Parking Lot Buffer areas, as feasible. Where rain gardens are utilized within required landscape buffer areas, a minimum 8' wide landscape area shall be provided to ensure adequate space is available to screen parking lots while still meeting applicable storm water requirements.

All Landscape Types

1. No landscape will be required inside the airport security fence.
2. Existing vegetation may be used in combination with, or in lieu of, the landscape requirements herein.
3. Irrigation or hose bibs are required, except where native or drought-tolerant plants are used or other methods approved for watering through plant establishment.
4. Trash collection areas shall be completely screened with a landscape buffer, wall and/or fence to a minimum 6' height.
5. Any landscape considered to be a wildlife hazard or attractant, as determined by the Port of Bellingham or its qualified representative, will be managed using appropriate wildlife mitigation techniques.
6. Landscape shall accommodate all sight distance requirements and shall be located on the exterior side of any wall or fence within landscape buffer areas.
7. A minimum 10' wide clear zone shall be maintained adjacent to the airport security fence. Where the security fence is located within a required landscape buffer, a variance may be required to ensure the required clear zone is provided for the safety and security of the airport operations area.
8. Tree species and spacing within any city or county owned right-of-way shall comply with the requirements of the applicable jurisdiction.
9. The existing 200' native/natural buffer adjacent to Urban Residential, Urban Residential Medium Density, Residential Rural and Rural Zone District will remain. Maintenance and management of the Alderwood Detention Pond, located within the buffer, will be allowed. Any impact to existing vegetation as a result of pond maintenance or management activities will be restored to meet the intent of the original buffer.
10. All areas not requiring a paved surface shall be landscaped with any combination of trees, shrubs and/or groundcover, including lawn.
11. Existing vegetation in designated open space areas will remain.
12. Maintenance and enforcement of landscape requirements shall be per the applicable jurisdiction.

Sidewalks

1. A sidewalk, minimum 5' wide, shall be located on both sides of the roadway along Airport Way, Mitchell Way to the terminal, and West Bakerview Road east of Mitchell Way.
2. A sidewalk, minimum 5' wide, shall be located on only one side of the roadway along Williamson Way, West Bakerview Road west of Mitchell Way, and Mitchell Way northeast of the terminal.

Signage

1. Existing monument signage shall remain and may be enhanced with additional landscape, lighting or other special design features.
2. New overhead and directional signage shall be provided as shown on the plan in Attachment A and typical sections shown in Attachment B. The purpose of these signs is to aid in the safe circulation of traffic resulting from commercial airport passengers unfamiliar with the area. Per WCC 20.85.116, these directional signs, to the extent required by emergency response officials, shall contain information for identifying the location of specific uses, industry types or tenants such as I-5, short or long term parking, rental cars, airfield gate numbers or air freight. In those instances where multiple airplane hangars are located entirely within the secured airfield, the Port of Bellingham will provide emergency responders with periodically updated locator maps.
3. Specific sign designs with textural content will be provided when construction plans are submitted in conjunction with a sign permit application.

RECOMMENDED PLANT LIST

Plant selection shall comply with all applicable FAA or TSA rules and advisory circulars including, but not limited to, restrictions on vegetation (obstruction) height, security clear zones around buildings or the Airport Operations Area, and wildlife hazard attractants.

All plants used shall comply with the current edition of the American Nursery & Landscape Association (ANLA) standards.

This list serves as a guideline. All plans and substitutions must be pre-approved by the Port of Bellingham, prior to installation.

Trees

Trees planted within a roadway right-of-way (street trees) shall be no less than 6' height for evergreen trees and 2" caliper, measured 4' above finish grade, for deciduous trees at time of planting. All other trees shall be no less than 6' height for evergreen trees and 2" caliper, measured 4' above finish grade, for deciduous trees at time of planting. In cases where the canopy or branch structure of deciduous trees may interfere with pedestrian, bicycle or vehicular traffic, deciduous trees shall have a minimum branch height of at least 7' above finish grade at time of planting.

Street trees within the City of Bellingham right-of-way shall be no less than 10' height at time of installation with a minimum caliper size of 2-1/2" measured 1' above grade. They shall be spaced and installed as recommended in the Bellingham Street Tree Plan subject to approval of the Public Works and Parks Departments.

<u>Botanical Name</u>	<u>Common Name</u>
Prunus serrulata	Kwansan cherry
Prunus x yedoensis	Yoshino cherry
Quercus palustris	Pin oak
Liquidambar styraciflua	Sweet gum
Acer circinatum	Vine maple
Acer ginnala 'October Glory'	October Glory maple
Acer saccharum 'Green Mountain'	Green Mountain maple
Pinus thunbergiana	Japanese black pine
Chamaecyparis obtusa	Hinoki false cypress
Abies lasiocarpa	Subalpine fir

Shrubs

Shrubs shall be a minimum 21" in height above finish grade at time of planting.

<u>Botanical Name</u>	<u>Common Name</u>
Berberis sp.	Barberry (varieties may vary)
Prunus laurocerasus 'Otto luyken'	Otto luyken laurel
Spiraea sp.	Spiraea (varieties may vary)
Hemerocallis sp.	Daylily (varieties may vary)
Heliototrichon sempervirens	Blue oat grass
Rosa sp. 'Flower Carpet'	Flower carpet rose
Cornus sericea 'Kelsey'	Redosier dogwood
Cornus sericea 'Flaviramea'	Yellowtwig dogwood
Physocarpus capitatus	Ninebark
Rosa rugosa	Rugosa rose
Salix purpunea 'Nana'	Purpleosier willow
Erica sp.	Heather/ Heaths (varieties may vary)

Rudbeckia sp.	Blackeyed Susan
Lupinus polyphyllus	Large-leaved lupine
Euonymus sp.	Burning bush
Hydrangea paniculata 'Pee Gee'	Pee Gee hydrangea
Pieris japonica 'Forest Flame'	Lily of the valley
Pinus mugo mugus	Mugo pine
Viburnum davidii	David's viburnum
Lavendula sp.	Lavendar (varieties may vary)

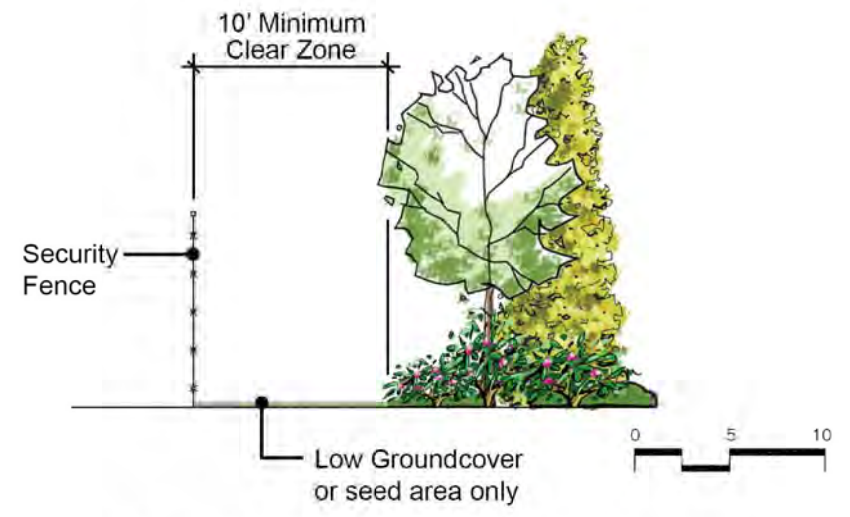
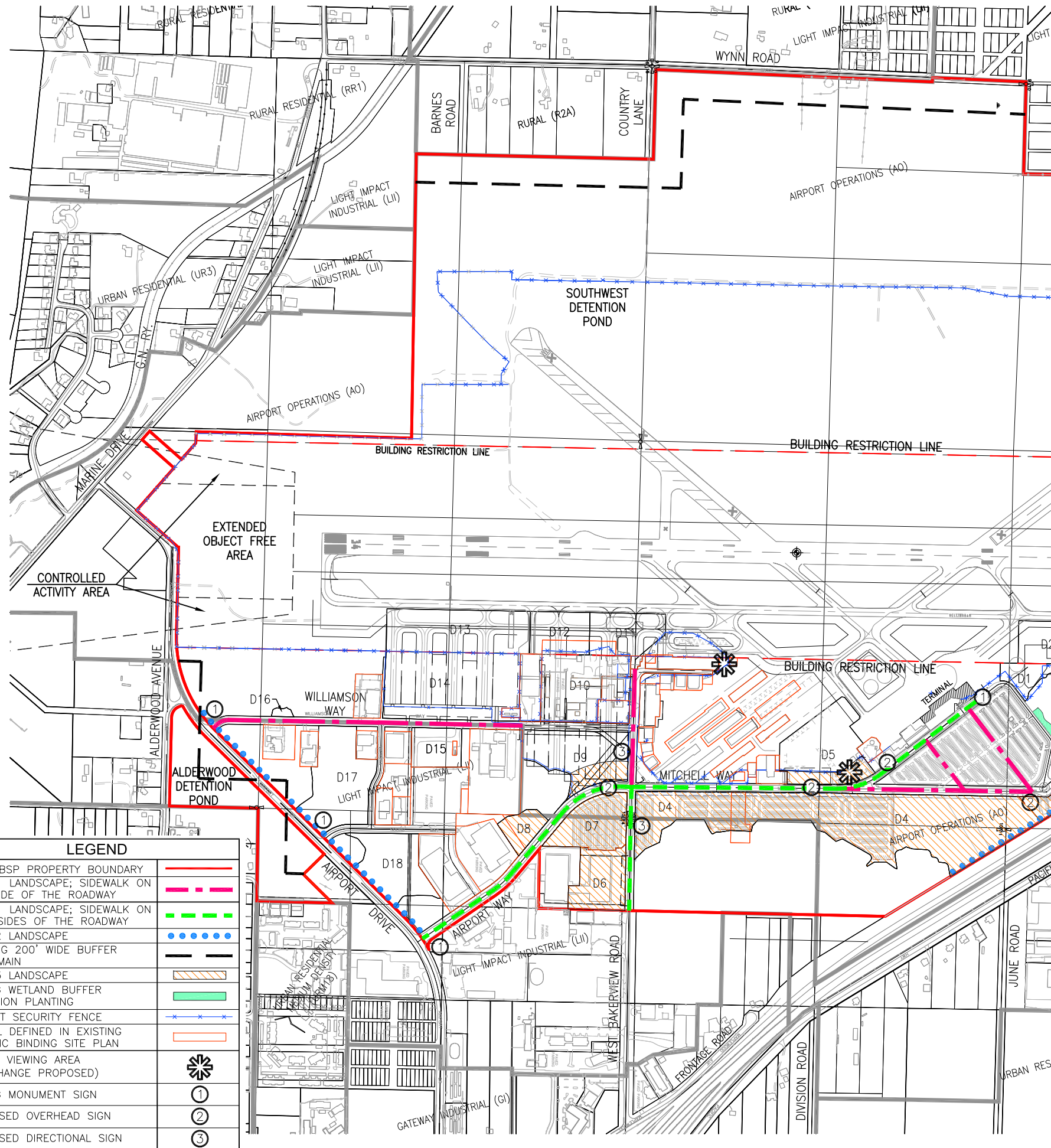
Groundcover

Groundcovers shall be a minimum 1 gallon container at time of planting.

<u>Botanical Name</u>	<u>Common Name</u>
Archostaphylos urva-ursi	Kinnikinnik
Vinca minor	Periwinkle
Hosta sp.	Hosta (varieties may vary)
Parthenocissus tricuspidata	Boston ivy

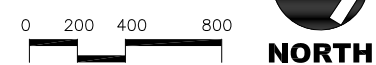
APPENDIX A

Landscape Types – Typical Plans and Sections



**SECURITY FENCE CLEAR ZONE
TYPICAL SECTION**

LEGEND	
PUD/GSP PROPERTY BOUNDARY	
TYPE 1 LANDSCAPE; SIDEWALK ON ONE SIDE OF THE ROADWAY	
TYPE 1 LANDSCAPE; SIDEWALK ON BOTH SIDES OF THE ROADWAY	
TYPE 2 LANDSCAPE	
EXISTING 200' WIDE BUFFER TO REMAIN	
TYPE 3 LANDSCAPE	
EXIST'G WETLAND BUFFER	
MITIGATION PLANTING	
AIRPORT SECURITY FENCE	
PARCEL DEFINED IN EXISTING SPECIFIC BINDING SITE PLAN	
PUBLIC VIEWING AREA (NO CHANGE PROPOSED)	
EXIST'G MONUMENT SIGN	
PROPOSED OVERHEAD SIGN	
PROPOSED DIRECTIONAL SIGN	



BELLINGHAM INTERNATIONAL AIRPORT
PLANNED UNIT DEVELOPMENT
AND
PRELIMINARY BINDING SITE PLAN NO. 2

PORTIONS OF SECTIONS 3, 10, 11, 14 AND 15
TOWNSHIP 38 NORTH, RANGE 2 EAST OF W.M. WHATCOM COUNTY,
WASHINGTON

APPD.

NO. REVISIONS:

HBB
LANDSCAPE ARCHITECTURE
1119 GRAND AVENUE, SUITE D
BELLINGHAM, WASHINGTON 98225
PHONE: 360.647.7151
FAX: 360.647.7160

DAVID EVANS AND ASSOCIATES INC.

**PORT OF BELLINGHAM
BELLINGHAM INTERNATIONAL AIRPORT
PLANNED UNIT DEVELOPMENT AND
PRELIMINARY BINDING SITE PLAN NO. 2
CONCEPTUAL LANDSCAPE PLAN**

PROJECT NUMBER:
POBM0047

DATE: April 7, 2010
DESIGN: JXWA
CHECKED: JXWA

SCALE: AS NOTED

SHEET NO.
4a

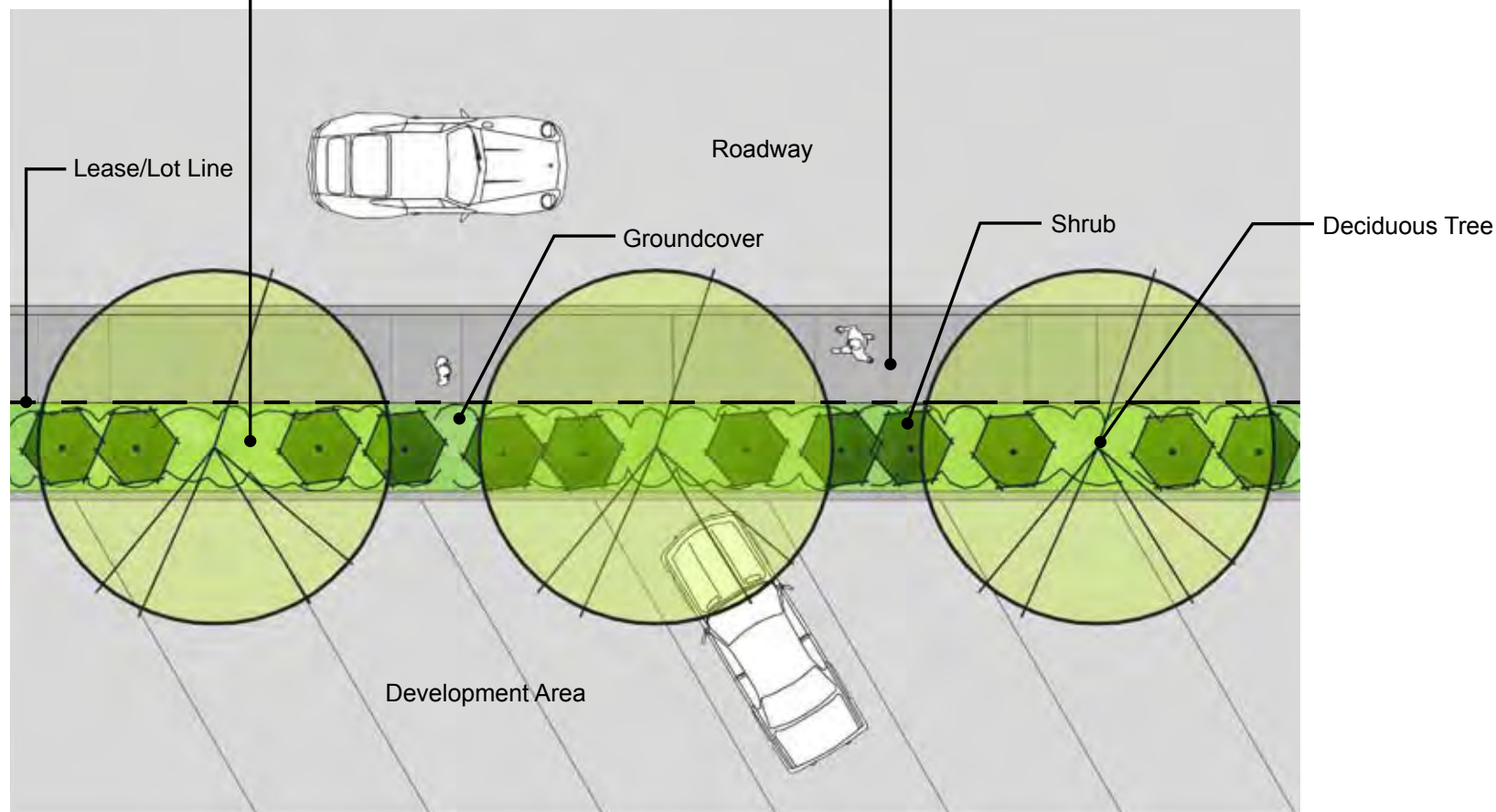
OF

5' WIDE PERIMETER BUFFER

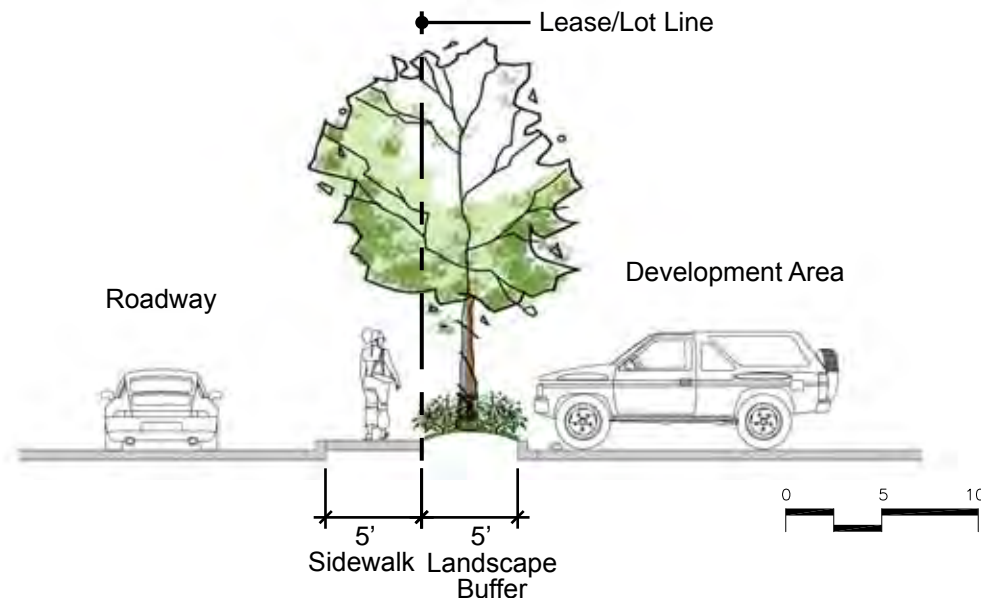
- Minimum 1 deciduous tree for every 35 linear feet of buffer
- Evergreen trees may be used where additional space is available
- Shrubs spaced to form a partial screen, 2' to 4' height, with at least 70% evergreen
- Living groundcover spaced to provide immediate cover over 50% of the landscape area.

SIDEWALK

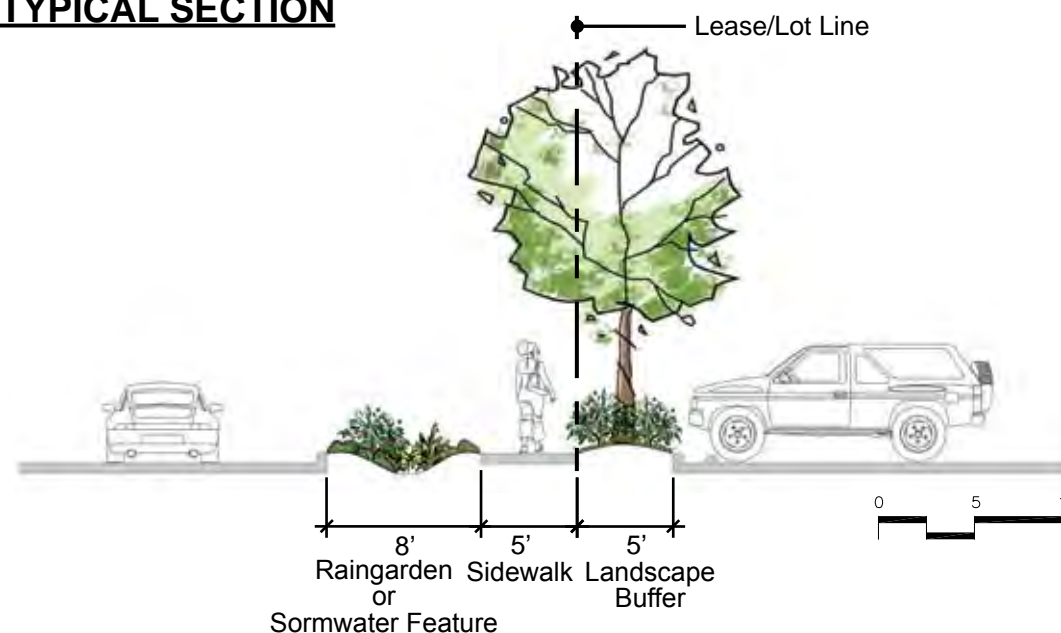
- Align with roadway (no meander)
- Adjacent to or separated from roadway
- 5' wide



**TYPE 1 LANDSCAPE
5' WIDE PERIMETER BUFFER
TYPICAL PLAN**



**TYPE 1 LANDSCAPE
5' WIDE PERIMETER BUFFER
TYPICAL SECTION**



**TYPE 1 LANDSCAPE
5' WIDE PERIMETER BUFFER OPTION
TYPICAL SECTION**



BELLINGHAM INTERNATIONAL AIRPORT
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WASHINGTON



PORT OF BELLINGHAM
BELLINGHAM INTERNATIONAL AIRPORT
PLANNED UNIT DEVELOPMENT AND
PRELIMINARY BINDING SITE PLAN NO. 2
CONCEPTUAL LANDSCAPE PLAN
TYPE 1 LANDSCAPE: 5' WIDE PERIMETER BUFFER

PROJECT NUMBER:
POBM0047
DATE: April 7, 2010
DESIGN:
DRAWN: JXWA
CHECKED:

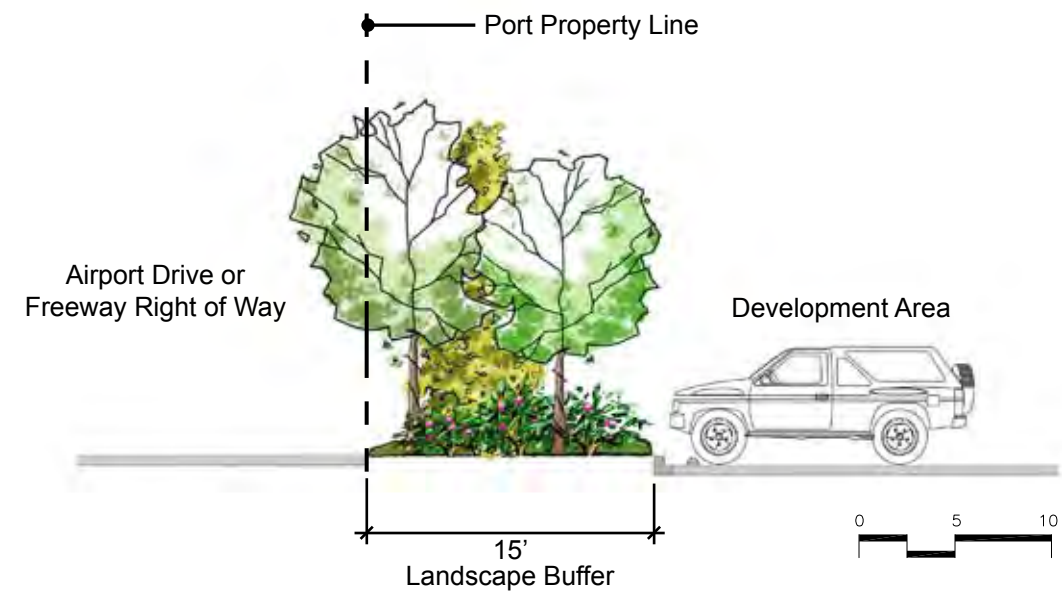
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OF

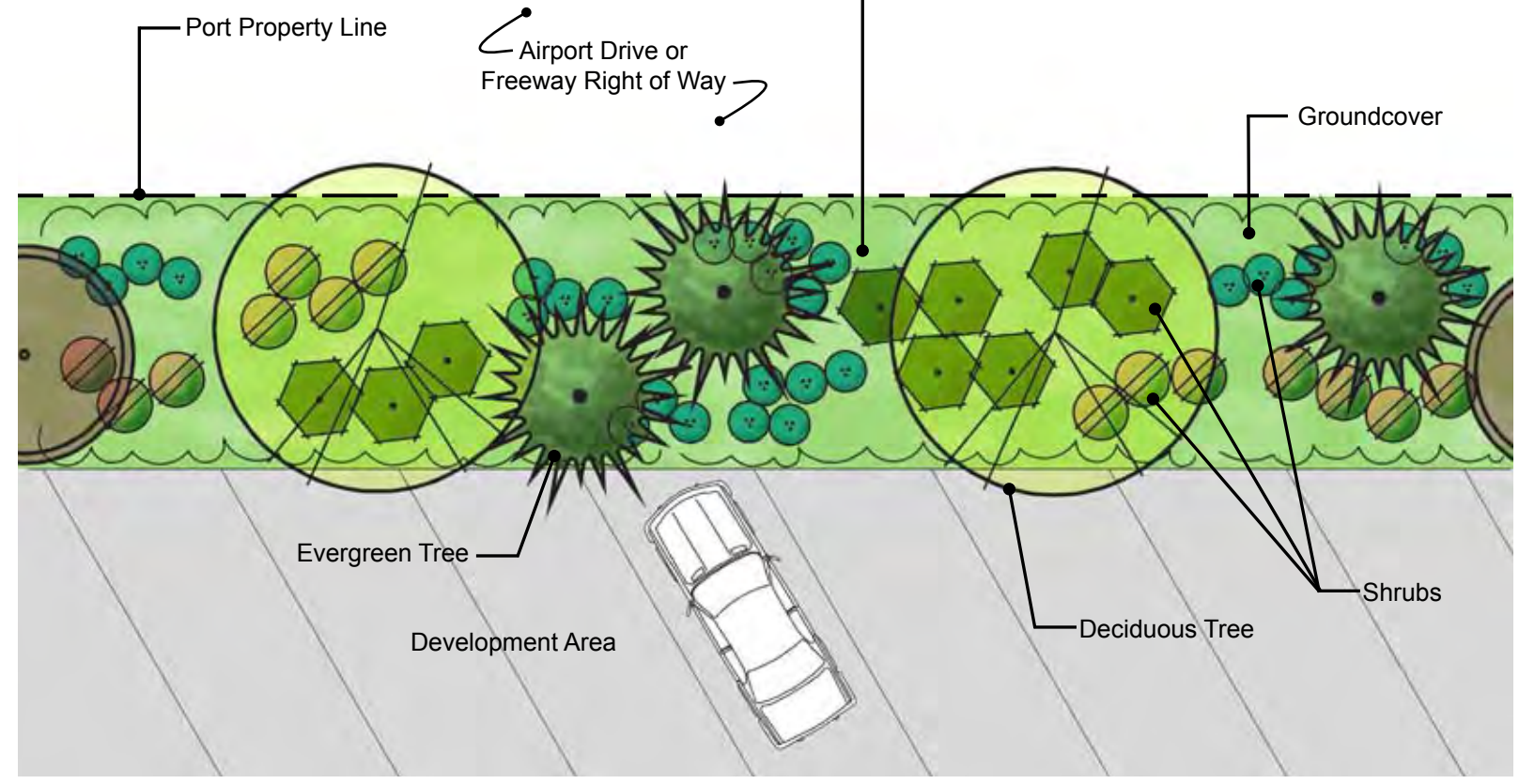
NO. REVISIONS: APPD.

NOTE:
Storm drainage, sidewalk and/or landscape within Airport Drive or Freeway Right of Way will remain.



**TYPE 2 LANDSCAPE
15' WIDE PERIMETER BUFFER
TYPICAL SECTION**

- 15' WIDE PERIMETER BUFFER**
- Minimum 1 tree for every 25 linear feet of buffer
 - Mixture of evergreen and deciduous trees
 - Minimum of 50% evergreen trees and 30% deciduous trees
 - Plant in an informal pattern utilizing a mixture of single and double rows of trees
 - Shrubs spaced to form a continuous screen with a minimum of 50% evergreen
 - Living groundcover spaced to provide immediate cover over 50% of the landscape area



**TYPE 2 LANDSCAPE
15' WIDE PERIMETER BUFFER
TYPICAL PLAN**



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PRELIMINARY BINDING SITE PLAN NO. 2

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TOWNSHIP 38 NORTH, RANGE 2 EAST OF W.M. WHATCOM COUNTY,
WASHINGTON

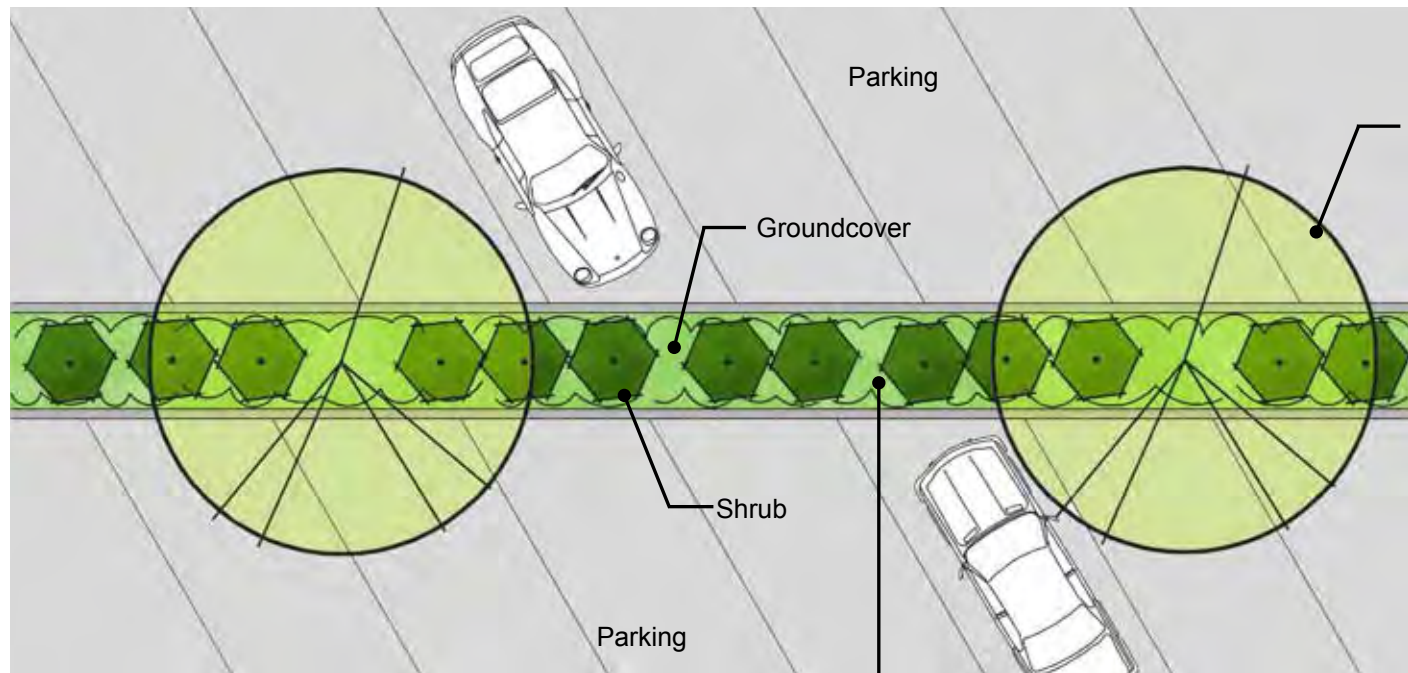


PORT OF BELLINGHAM
BELLINGHAM INTERNATIONAL AIRPORT
**PLANNED UNIT DEVELOPMENT AND
PRELIMINARY BINDING SITE PLAN NO. 2**
CONCEPTUAL LANDSCAPE PLAN
TYPE 2 LANDSCAPE: 15' WIDE PERIMETER BUFFER

PROJECT NUMBER:
POBM0047
DATE: April 7, 2010
DESIGN:
DRAWN: JXWA
CHECKED:
SCALE: AS NOTED
SHEET NO.

4c
OF

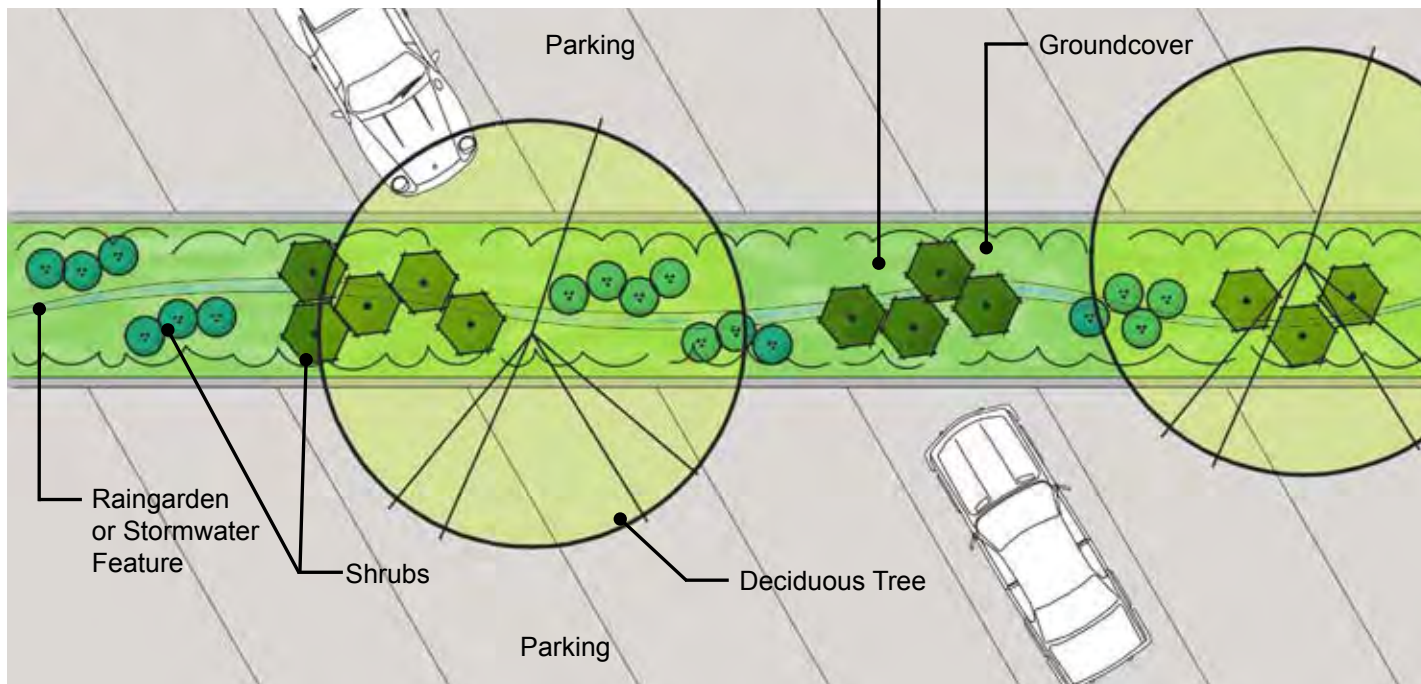
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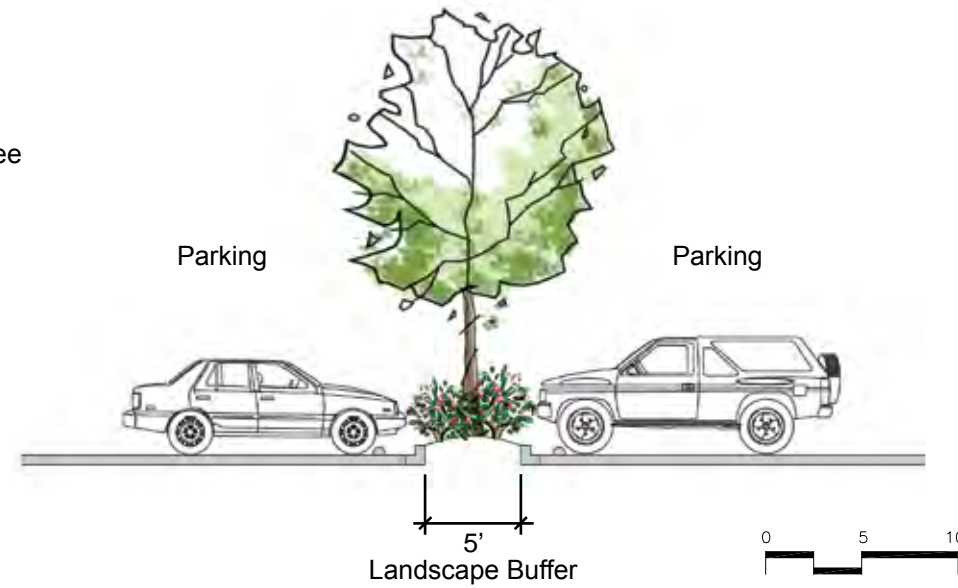
**TYPE 3 LANDSCAPE
PARKING LOT BUFFER
TYPICAL PLAN**

PARKING LOT BUFFER

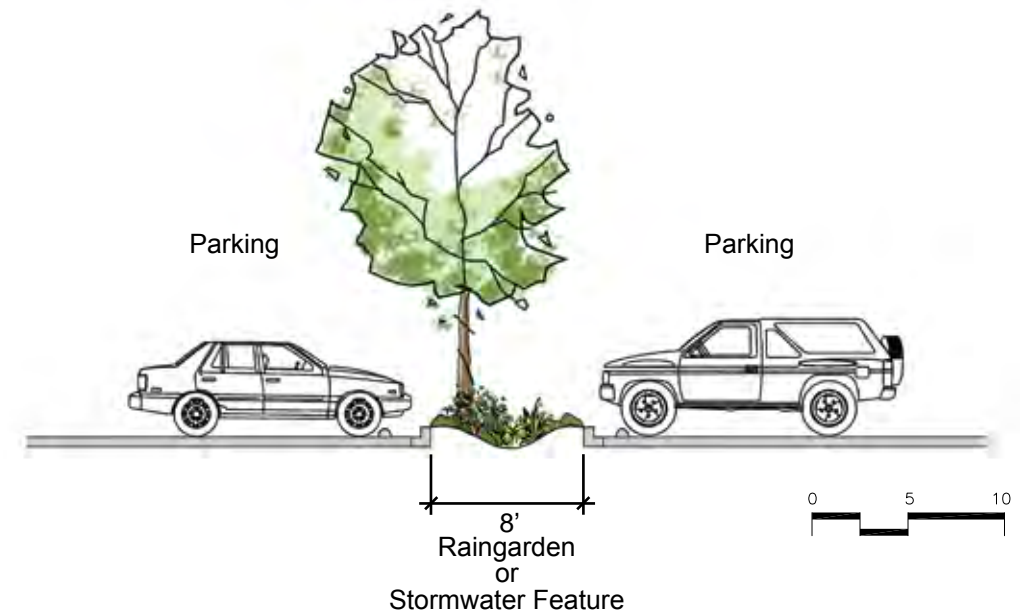
- Minimum 1 deciduous tree for every 35 linear feet of buffer along road frontage
- 1 deciduous tree for every 500 square feet of buffer within interior of parking lot
- Evergreen trees may be used where additional space is available
- Shrubs spaced to form a partial screen, 2' to 4' height, with at least 70% evergreen
- Living groundcover spaced to provide immediate cover over 50% of the landscape area



**TYPE 3 LANDSCAPE
PARKING LOT BUFFER OPTION
TYPICAL PLAN**



**TYPE 3 LANDSCAPE
PARKING LOT BUFFER
TYPICAL SECTION**

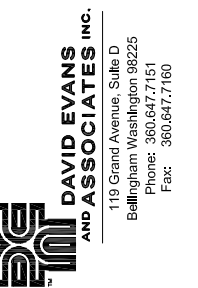


**TYPE 3 LANDSCAPE
PARKING LOT BUFFER OPTION
TYPICAL SECTION**



BELLINGHAM INTERNATIONAL AIRPORT
PLANNED UNIT DEVELOPMENT
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PLANNED UNIT DEVELOPMENT AND
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CONCEPTUAL LANDSCAPE PLAN
TYPE 3 LANDSCAPE: PARKING LOT BUFFER

PROJECT NUMBER:
POBM0047
DATE: April 7, 2010
DESIGN:
DRAWN: JXWA
CHECKED:

SCALE: AS NOTED
SHEET NO.

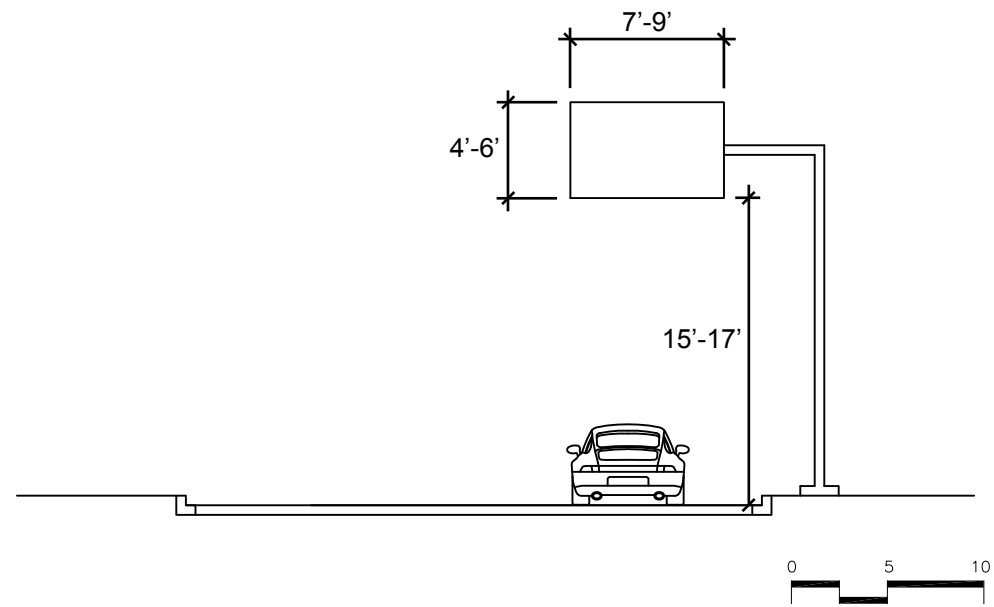
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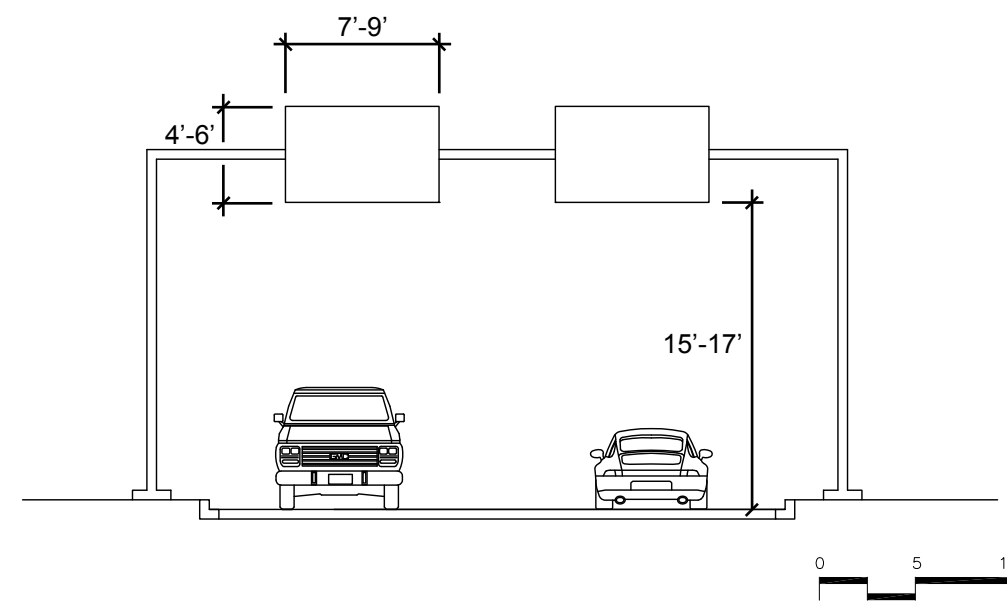
APPD.
NO. REVISIONS:

APPENDIX B

Sign Types – Typical Sections

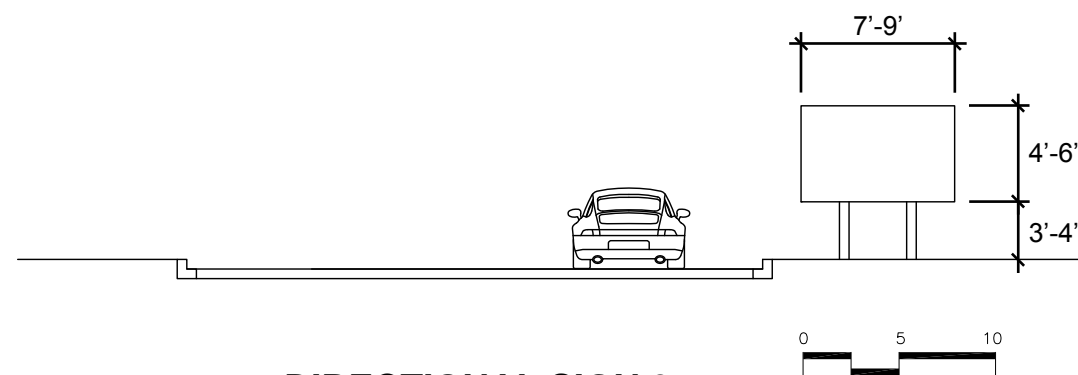


**OVERHEAD SIGN 2A
TYPICAL SECTION**



**OVERHEAD SIGN 2B
TYPICAL SECTION**

NOTE:
All dimensions shown
are approximate.

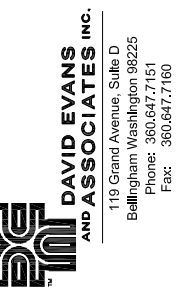


**DIRECTIONAL SIGN 3
TYPICAL SECTION**



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PLANNED UNIT DEVELOPMENT AND
PRELIMINARY BINDING SITE PLAN NO. 2
CONCEPTUAL LANDSCAPE PLAN
TYPICAL SIGN TYPES

PROJECT NUMBER:
POBM0047
DATE: April 7, 2010
DESIGN:
DRAWN: JXWA
CHECKED:

SCALE: AS NOTED
SHEET NO.

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OF

NO. REVISIONS: APPD.