# THE BINGEN POINT BUSINESS PARK

# LANDSCAPE MASTER PLAN

May, 2000

## KLICKITAT COUNTY PORT DISTRICT #1

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#### **ADOPTED OCTOBER 3, 2000**

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# PART ONE

## LANDSCAPE MASTER PLAN

The Bingen Point Business Park is comprised of 104 acres total land area with 42 acres available for light industrial, commercial and retail industry. The roadway system has been evaluated with regard to the landscape treatment needed to enhance the entire image of the Business Park, and to encourage rapid lot leases (or sales) to new businesses. This evaluation has lead to the definition of different landscape treatment areas corresponding to the use and context of the specific area, land ownership, right of way widths, setback requirements, and existing site conditions. There has been an emphasis placed on developing the landscape design standards in five areas: the main roadways of the business park, the parking areas, the traffic circles and intersections, the boundary between the wetland setback and the built frontage, and the building perimeter. The following text will describe the landscape treatment areas, provide a recommended plant material list, and show typical plan layouts.

#### **DESIGN THEME**

The design concept of the Bingen Point Business Park is based on a riverfront or harbor town theme. The planting design will reflect the theme by use of appropriate plants, materials, and landforms such as berms. The typical landscape designs presented here for the roads and public spaces will establish the groundwork for the theme and give a basis with which the new site developments can coordinate. To maintain a cohesive theme within the built areas of the Bingen Point Business Park, the planting design of the roadways and setbacks that border proposed public open space will be coordinated with the design of those open spaces as they are built.

#### PLANT MATERIAL

The following plant material list consists of plants <u>most</u> likely to survive the climatic conditions present at this location. This list is a compilation of plants recommended by the local nurserymen, the Washington State Extension Service, Underwood Conservation Service, experienced landscape contractors, landscape architects, and horticultural text books. There are some plants included here that may need to be protected from the wind and/or irrigated to reach optimum growth habit and form. Others have been selected for their drought resistance for those areas receiving limited irrigation. An attempt was made to include as many appropriate native species as possible.

# **RECOMMENDED GENERAL PLANT LIST**

Native plants to the <u>region</u> are noted in CAPITAL TYPE. Check soil conditions before planting. Some plants recommended for the wetland boundary are not mentioned here because they are sensitive to built conditions, such as parking lots. Other plants not mentioned on this list may be suitable and subject to Port approval.

<u>No</u> .	Botanical Name	Common Name	Average Size		
Tre	Trees: Deciduous				
1.	ACER CIRCINNATUM	VINE MAPLE	30' tall		
	Yellow-red fall color.				
2.	ACER MACROPHYLLLUM	BIGLEAF MAPLE	50-70' tall		
	Good shade tree.				
3.	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	40' h x20' w		
	Upright, vigorous branching pa	ttern, red fall color.			
4.	Carpinus betulus	European Hornbeam	40' tall		
	Pyramidal to broad form, yellow	w-red fall color. Tolerate	s most conditions.		
5.	Carpinus betulus 'Fastigiata' Colum	nar Hornbeam	40' h x 10 ' w		
	Columnar tree in youth, spreadi	ng with maturity.			
6.	Cornus florida	Flowering Dogwood(w	hite) 20' tall		
	Needs part shade, protect from	wind, white flowering M	ay, red fall color, red fruit in winter.		
7.	CORNUS NUTTALLII	PACIFIC DOGWOOD	30' tall		
	Plant in shade or under high bra	unching tree to prevent ba	rk from being sunburned.		
8.	Fraxinus 'Fan West' Fan We	est Ash	50' tall		
	Seedless, light olive green leaf,	tolerates cold, heat, aridi	ty, and wind.		
9.	Fraxinus pennsylvanica 'Marshall'	Marshall's Seedless As	h 40-45' tall		
	Fast growing with tapered crow	n.			
10.	Gleditsia tricanthos ' Shademaster'	Shademaster Honey Lo	cust 35-50' tall		
	Fast growing, takes any soil, moisture level.				
11.	Liquidambar styraciflua	Sweet Gum	60' tall		
	Good street tree, red-orange fall	l color.			
12.	Nyssa sylvatica	Tupelo	40' h x 15' w		

Grows well in any soil. Bright red fall color.

13.	QUERCUS GARRYANA	OREGON WHITE OAK	40-90' tall
	Glossy dark green leaves. Pictu	resque branching habit.	
14.	SAMBUCUS CERULEA	BLUE ELDERBERRY	10-12' tall
	Multi-stemmed shrubby tree. S	mall edible berries in fall good for	or native wildlife.
15.	Sorbus aucuparia	European Mountain Ash	20-30' h x 15-20' w
	Dense oval form, white flower i	n spring, tolerates strong wind.	
Trees: Coniferous			
1.	Picea abies	Norway Spruce	100' tall
	Pyramidal shape. Extremely ha	rdy and wind resistant.	
2.	PICEA ENGELMANNII	ENGELMAN PINE	100' tall
	Dense, pyramidal form, blue- gr	reen needles.	
3.	Pinus contorta	Shore Pine	20-30' tall

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	Pyramidal shape. Extremely h	ardy and wind resistant.		
2.	PICEA ENGELMANNII	ENGELMAN PINE	100' tall	
	Dense, pyramidal form, blue- g	green needles.		
3.	Pinus contorta	Shore Pine	20-30' tall	
4.	PINUS MONITCOLA	WESTERN WHITE PINE	60' tall	
5.	Pinus nigra	Austrian Pine	40' tall	
	Dense, uniform crown. Very hardy and wind resistant.			
6.	PINUS PONDEROSA	PONDEROSA PINE	70-100' tall	
7.	Pinus sylvestris	Scotch Pine	60' tall	
	Blue green needles, reddish bar	rk. Hardy and wind resistant.		
8.	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	80' tall	

## Shrubs: Deciduous

1.	AMELANCHIER ALNIFO	LIA SERVICEBERRY	10'-20' tall
	Large shrub or small m	ulti-stemmed tree. White flower	rs in early spring. Good fall color.
2.	Berberis thumbergii	Japanese Barberry	4-5' h x4-5' w
	Graceful arching branch	n pattern, red berries fall-winter.	Choose green-leafed variety.
3.	Cornus mas	Cornelian Cherry	10-12' tall
	Yellow flowers in Feb., yellow-red fall color.		
4.	CORNUS STOLONIFERA	REDTWIG DOGWOO	DD 3-6' tall
	Interest all year. White flower, red fall color, and red twig in winter. Takes wet soil.		
5.	Euonymous alata	Winged Spindle Bush	6-8' h x 7-10' w
	Dense, horizontal branching and brilliant red fall color.		
6.	HOLODISCUS DISCOLO	R OCEANSPRAY	3-6' tall
	Clusters of white flower	rs in May- June, remaining attra	ctive for a long time. Multi-stemmed.

7.	. PHILADELPHUS LEWISIIMOCK ORANGE		5-8' tall
	Erect arching habit. Fragrant white flower in June-July.		
8.	Potentilla sp.	Cinquefoil	3' h x3' w
	Good cultivars include ' Kath	erine Dykes' or 'Tangerine'.	
9.	Rhus glabra Smoo	oth Sumac	10-20' tall
10.	Rhus typhina	Stag Horn Sumac	15-25' tall
	Both rhus species: Narrow lea	flets, scarlet fall color. Needs litt	le to no water. Use among evergreens.
11.	<b>RIBES SANGIUNEUM</b>	RED FLOWERING CURRAN	NT 5-10' tall
	Red-pink flowers in early spri	ng.	
12.	ROSA NUTKANA	NOOTKA ROSE	
13.	ROSA WOODSII	PEARHIP ROSE	
	Clusters of pink flowers in mi	d-June. Red rose hips in fall.	
14.	SYMPHORICARPOS ALBUS	SNOWBERRY	2-6' tall
	Pink flowers in May-June. W	hite berries into winter.	
15.	Viburnum opulus	High Mt. Cranberry	12-15' tall
	Red fall color.		
Shi	rubs: Evergreen		
1.	CEANTOHUS INTEGERRIMUS	DEER BRUSH	
2.	MAHONIA AQUIFOLIUMORE	GON GRAPE	4-6' h
3.	MAHONIA REPENS	CREEPING MAHONIA	2-3' h
	Both look best in shade but do	o fine in sun. Good looking all ye	ear.
4.	PINUS MUGO MUGHUS	MUGHO PINE	4-5' h
5.	Rhododendrons	Selected Rhododendrons	4-8' h
	Listed are the best cultivars for	or this site: Purple Sage (purple),	America (red), PJM (purple), Ignatius
	Sargent (deep rose), Catawbiense	album (white), Boule de Neige (v	white), Rhododendron minus (rose pink),
	Roseum pink (pink).		
6.	Viburnum tinus 'Dwarf'	Dwarf Laurustinus	3-5' h x 3-5' w
	White flower, Nov-spring,		
7.	GAULTHERIA SHALLON	SALAL	3' h x 3' w
	Plant in shade.		

## Ground Covers (all evergreen):

1.	ARCTOSTAPHYLOS UVA-URSI	KINICKINICK	12 in. h x 8 <u>feet</u> w.
2.	Erica carnea	Heaths	12 in. tall
3.	MAHONIA REPENS	CREEPING MAHONIA	Spreading, to 3' tall
Use	eful Perennials and Ferns:		
1.	Hemerocallis species.	Daylily	1-3' tall
2.	BLECHNUM SPICANT	DEER FERN	1-3' tall
3.	POLYSTICHUM MUNITUM	SWORD FERN	2-4' tall
	Plant ferns in shade.		
4.	ERIOGONUM COMPOSITUM	HEARTLEAF BUCKWHEAT	
5.	ERIOGONUM STRICTUS	STRICT BUCKWHEAT	
6.	ERIOPHYLLUM LANATUM	OREGON SUNSHINE	
7.	LUPINUS SP.	NATIVE LUPINE	
8.	PENSTEMON BARRETTIAE	BARRETT'S PENSTEMON	
9.	PENSTEMON RICHARDSONII	CUT-LEAF PENSTEMON	
Use	eful Ornamental Grasses:		
1.	BROME VULGARIS	COLUMBIA BROME	
2.	DESCHAMPSIA ELONGATA	SLENDER HAIRGRASS	1-2' tall
3.	FESTUCA IDAHOENSIS	IDAHO FESCUE	20 in.
4.	FESTUCA OVIINA 'GLAUCA'	BLUE FESCUE	

 Helictotrichon sempervirens Blue Oat Grass 2-3' tall Blue-gray foliage, need full sun, some water.
Miscanthus sp. Eulalia Grass 5-6' tall

Arching habit leaves topped by feathery flower clusters. Grows in any soil, cut back in late winter.

7. Pennisetum alopecuroidesFountain Grass3-4' tallBright green foliage, pinkish flower clusters. Thrive in sun/part shade, light water.

# A. Roadway Landscaping

The main roads into the Bingen Point Business Park are Marina Road, Industrial Road, and Bingen Way. The roadway landscaping will be located within the sixty-foot right of way. The main roads average 28 feet in width leaving a 16-foot planting area on either side of the roadway. At the time of publication there are no sidewalks proposed adjacent to the roadways.

#### LANDSCAPE CONCEPT

The landscape concept for the main roadways of Bingen Point Business Park is to accentuate the harbortown theme and enhance the atmosphere of the development by preserving views out to the river and wetland areas. Strong linear plantings of large-canopy deciduous trees and turf set among low sinuous berming will allow for occasional views across the site and be an elegant contrast to the natural scenery of the site. As well as formalizing the entrances into the development, the lines of trees will mimic the traditional windrow plantings seen up and down the Columbia Gorge, tying the Park into it's river-front surroundings and giving it a presence from the Oregon side. The tree canopy will decrease heat radiance from pavement and provide protection from wind. Large street trees will result in an elevated canopy that will not interfere with business visibility yet still provide shade and a welcoming entrance into the business park. Irrigated lawn will tie the planting scheme together and help simplify maintenance in this area of the development. The parking and storage areas of the sewer treatment plant adjacent to Phase Four shall be screened from the roadway by the use of medium height evergreen shrubs or coniferous trees.

The Business Park's main entrance sign shall be located at the intersection of Industrial Way and Marina Road. The landscaping surrounding the location of the sign will complement the sign and draw attention to the corner without blocking the view across to Bingen Lake. When Phase Four is built, evergreen trees will be planted behind the sign to block the view into the adjacent parking lots. Plants with bright fall color and interesting structure will be backdropped by the evergreens to accentuate the entrance to the park.

#### **Recommended Deciduous Trees**

Acer rubrum Red Sunset'	Red Sunset Red Maple
Liquidambar styraciflua	Sweet Gum
Fraxinus pennsylvanica Marshall'	Marshall's Seedless Ash

## **Recommended Coniferous Trees**

Pinus nigra	Austrian Pine
Pinus sylvestris	Scotch Pine
Pinus ponderosa	Ponderosa Pine
Pseudotsuga menziesii	Douglas Fir

## **Recommended Evergreen Shrubs**

Mahonia aquifolium	Oregon Grape
Viburnum tinus Dwarf'	Dwarf Laurastinus

## **Recommended Deciduous Shrubs**

Cornus stolonifera	Redtwig Dogwood
Euonymus alata	Winged Euonymus

# **B.** Traffic Circle Plantings

Traffic circles are proposed in the business park at three major intersections. 'Roadway plantings' merge into 'traffic circle plantings' 35 feet back from the intersections (see figure). The central traffic circle planter is also included in this section.

### LANDSCAPE CONCEPT

The design concept for the traffic circles allows for visibility across the lanes of traffic while providing visual interest and distinction from the linear roadway plantings. Shifting the landscape design of the roadway planting into a different theme 35 feet behind each point of traffic intersection will subconsciously warn the motorist of upcoming traffic activity. A distinctive planting theme for the intersections develops a consistent 'design language' for the landscaping occurring any place in the business park where traffic merges (parking lot entrances, curb cuts, driveways, pedestrian crossings). The theme consists of groupings of two same species medium-scaled street trees with a background of evergreen shrubs, the grouping framing each intersection.

### **Recommended Street Trees**

Carpinus betulus ' Fastigiata'	Columnar Hornbeam
Gleditsia triacanthos 'Shademaster'	Shademaster Honey Locust
Nyssa sylvatica	Tupelo
Recommended Shrubs	
Mahonia aquifolium	Oregon Grape
Mahonia aquifolium 'Mayhan'	Mayhan Oregon Grape
Cornus stolonifera	Redtwig dogwood
Ornamental grasses	
Festuca occidentalis	Western Fescue

Fountain Grass

Pennisetum alopecuroides

# C. Parking Lot Plantings

The parking lots of Bingen Point Business Park are highly visible from the main roads into the park. Because the lots are so prominent they need careful planning and planting to ensure that they add aesthetically to the overall site landscape. Therefore, the Landscape Master Plan draws a set of specific guidelines to direct the development of the parking areas.

All parking areas designed to accommodate more than twenty cars shall have a minimum of eight percent of the area landscaped and maintained. This landscaping may include the landscape islands located within the park but shall not include landscaping required in the front and side setbacks. The parking lots will be planted with trees, shrubs, and groundcovers to improve appearance of the lots, to reduce impervious surfaces within parking lots, to provide shade, and to ensure safe and efficient circulation by providing barriers, and to reduce the visual impact of glare and lights.

## LANDSCAPE CONCEPT

The concept for the parking areas is to enhance the appearance of the business park by carefully landscaping the parking. One large canopy tree is to be planted for every 3,000 square feet of paved vehicular use areas on site and shall be distributed throughout the site. Vehicular use includes parking spaces, driveways, interior roadways, and loading areas.

Planting islands will be provided so that no parking stall is more than 45 feet from a planting island. Each island will have a minimum width of seven feet and be a minimum of 140 square feet. Each island will have at least one shade tree.

A mix of deciduous trees with an evergreen shrub layer and durable groundcover is recommended for the planting islands. Berming or evergreen shrub plantings are recommended to separate and visually shield the parking from the public right of way.

### **Recommended Trees**

Acer rubrum 'Red Sunset'

Red Sunset Red Maple

Fraxinus pennsylvanica 'Marshall'

Marshall's Seedless Ash

## **Recommended Shrubs**

Berberis thumbergii Euonymus alata Japanese Barberry Winged Euonymus

# **D.** Wetland/ Built Frontage Boundary

The wetland/ built boundary borders the 50' wetland setback zone. The boundary averages a 25foot width and varies in context, being bordered on the opposite of the wetland by buildings, parking lots, loading zones, trailhead parking, or roadways.

### LANDSCAPE CONCEPT

Plantings for built frontage along the wetland setback requires special design and plant choice so as be compatible with the native wetland landscape and allow for view corridors into the wetland area. Appropriate plant choice and layout will also benefit the native bird habitat and provide a buffer area between the commercial uses of the business park and the wetland environment.

Low, sinuous berms are recommended between the built areas and the wetland setback. The berms should not be a continuous linear feature but instead irregular wave-like landforms.

#### **Recommended Trees**

Acer macropyllum	Bigleaf Maple
Fraxinus latifolia	Oregon Ash
Populus trichocarpa	Black Cottonwood (for use nearer the
	wetland)
<b>Recommended Small Scale Trees</b>	
Alnus rubra	Red Alder
Salix sp.	Native Willow

Serviceberry

Amelanchier alnifolia

### **Recommended Shrubs**

Cornus stolonifera	nifera Redtwig dogwoo	
Oemleria cerasiformis	Indian Plum	
Philadelphus lewisii	Mock Orange	
Physocarpus capitatus	Pacific Ninebark	
Spirea douglasii	Douglas Spirea	

Salix sp. Symphoricarpos albus Native Willow Snowberry

# **E. Building Perimeter Landscaping**

The following text and plant recommendations are guidelines for planting design along the building perimeters. With the addition of four to five foot wide walkways, the planting area averages eight feet in width.

### LANDSCAPE CONCEPT

The planting design will enhance the architecture design and scale of the buildings and maintain the waterfront theme through use of appropriate plants and materials. Screening of parking and storage and loading areas may be included in this area. Simple schemes of small-scale trees planted with evergreen shrubs, ornamental grasses, and/or irrigated lawn will create a human-scaled atmosphere at the entrances to the businesses and mixed-use buildings.

### **Recommended Small Scale Trees**

Acer circinnatum	Vine Maple
Cornus florida	Flowering Dogwood
Cornus kousa 'Chinensis'	Chinensis Dogwood
Gleditsia triacanthos 'Shademaster"	Shademaster Honey locust
Pinus nigra	Austrian pine

### **Recommended Shrubs and Groundcover (shady sites)**

Gaultheria shallon	Salal	
Mahonia aquifolium	Oregon Grape	
Mahonia repens	Creeping Mahonia	
Rhododendron sp.	Rhododendron	
Blechnum spicant	Deer Fern	
Polystichum munitum	Sword Fern	

### **Recommended Shrubs and Ornamental Grasses (sunny sites)**

Potentilla sp. Katherine Dykes'	Katherine Dykes Cinquefoil	
Erica carnea	Heath	
Miscanthus sp.	Eulalia Grass	
Pennisetum alopecuroides	Fountain Grass	
Festuca occidentalis	Western Fescue	

# PART TWO LANDSCAPE MASTER PLAN

Site Development Standards

#### A. Landscape Plan Review

The Port shall approve all landscape work proposed for each lot. The design of all landscaping will be evaluated by the Port for its compatibility with surrounding design, the local environment and the Port's Landscape Master Plan; as well as the extent to which it enhances the building scale and form, and satisfies screening requirements. Detailed landscape plans must receive Port approval prior to installation.

#### B. Materials

Use of plants native to the region is encouraged to promote successful, healthy landscapes. Prohibited is use of any plants included on the Oregon or Washington State Noxious Weed Plant List. The principal landscape materials shall consist of thirty- percent perennial living plant materials such as ground covers, shrubs, hedges and trees. Additional landscape materials may include turf, ornamental grasses, annual plants, and decorative rock. A mixture of deciduous and evergreen plant materials is encouraged. There shall be a minimum of eight trees per acre on each lot. Vegetative ground cover or turf shall be provided in proximity to each tree. The use of berms and varying ground contours and lawn is encouraged wherever practical. The plant materials list in Part 1- Roadway Landscaping identifies the materials likely to survive in the local climatic conditions and categorizes the size and habit of the plants.

#### C. Size of Materials

 Height and screening shall be emphasized through the planting of deciduous trees. These trees shall have straight trunks, be fully branched, have a minimum caliper of 1", and a minimum height of 6 feet at time of planting. Deciduous trees can be supplied bare root, provided the roots are protected against damage and installed at the proper time of year. Each tree is to be staked for a <u>maximum</u> of one year.

- 2. Evergreen trees shall be balled and burlapped or in suitable containers in which the tree has grown for one year. The ball of each tree shall be firm and the burlap sound; neither loose ball nor made ball will be accepted. Each tree shall be a minimum of 5 feet in height, fully branched, and be staked for a <u>maximum</u> of one year
- Shrubs shall be supplied with a minimum spread of 12 inches to 14 inches in one-gallon containers or 8" burlap balls.
- 4. Ground cover planting shall be planted at a maximum of 30 inches on center and 30 inches between rows. Rows of plants are to be staggered for a more effective covering. Ground cover shall be supplied in a minimum 4-inch size container or a 2 1/2-inch container if planted 18 inches on center.

#### D. Irrigation

Permanent underground irrigation systems shall be provided in all landscaped areas. Zone plant beds according to their water needs. In landscapes designed with drought tolerant plants, irrigate until established (1-2 years) and then shut down zone or use drip line irrigation. Plants are to be replaced if they die.

#### E. Front Yard

 The minimum landscaping shall be an area equal to 100 percent of the standard 25- foot setback area excluding parking, unless the area is for parking as permitted in PART II, Section D.3.a. of the adopted Conditions, Covenants and Restrictions. This provision shall apply to all front yards and to yard areas adjacent to streets designated as front yards (see: PART II, Section B.2.d. Corner Lots). This landscaping shall be located on the street side of all walks, barriers and fences.

The landscaping in this area shall be designed to enhance the architectural design of the building.
Screening of the parking, storage and loading areas may be included in this area. On-site
landscaping should be designed to be compatible with the roadway landscape master plan.

#### F. Side Yard

Except in approved, shared parking areas, a five-foot wide landscape strip shall be provided adjacent to the full length of side property lines. Excluding connecting driveways, this landscape area shall be designed to separate the properties and provide an area for required screening of the loading, parking and storage from adjacent property.

#### G. Undeveloped Areas

All undeveloped areas not otherwise landscaped may be hydroseeded to grow hard fescue grass and maintained at an average height not to exceed six inches. Noxious weed growth and roots shall be eradicated by spraying or removing. Applications of herbicides for weed control shall be made only by approved applicator licensed in the State of Washington, and not within the wetland buffer zone.

#### H. Parking

All parking areas designed to accommodate more than twenty cars shall have a minimum of eight percent of the surfaced area landscaped and maintained. This landscaping may include the landscape islands, located within the parking area, but shall not include landscaping required in the front and side yard setback. The parking lots will be planted with trees, shrubs, and groundcovers to improve appearance of the lots, to reduce impervious surfaces within parking lots, to provide shade, and to ensure safe and efficient circulation by providing barriers, and to reduce visual impact of glare and lights. Planting islands will be provided so that no parking stall is more than 45 feet from a planting island. Each island will have a minimum width of seven feet and be a minimum of 140 square feet. Each island will have at least one shade tree and contain both live ground cover and trees.

#### I. Screening

The following list is designed as a guide in the selection of material for screening if required. All landscape material used for screening shall be of sufficient initial size to provide the required degree of screening within five years after installation unless otherwise specified. The Port will evaluate the effectiveness of the screening.

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TYPE	(FEET)	PURPOSE
Plant Material	0 - 3	Ground Cover
Plant Material	3 - 4	Screen parking areas
Plant Material	3 - 5	Enhance property
Slat Fence	6 - 8 parking and loading	Screen low storage, areas
Solid Fence	6 - 8	Screen low storage, parking and loading areas
Clipped Evergreen Hedge	6 - 10	Screen storage, parking and loading areas
Semi-open Plant Material	10 - 30	Screen parking, loading and storage of container, enhance property
Deciduous Trees	10 - 30	Screen storage,

#### Plant Material / Purposes

provide shade, wind break, enhance property

Evergreen Trees

10 - 30

Screen all uses, wind break, enhance property