TO: City Council
FROM: Ben Shumaker
DATE: June 15th, 2017
SUBJECT: Port of Skamania Stevenson Waterfront Shoreline Restoration (SHOR2017-01)

Introduction

On April 27th, 2017 the Stevenson Planning Department received an application from the Port of Skamania to arrest 450’ of severe bank erosion, restore aquatic habitat along 1,250’ of Columbia River bank and extend the shoreline on average 78’ to the south. An estimated 35,000 cu yd of rock and soil would be placed to restore the shoreline and enhance aquatic and riparian habitats. The proposed project restores the footprint of the historic river bank, which expands the riparian area by 2.15 ac (53%). The project requires a Shorelines Substantial Development Permit from the City.

Permit Procedures

Notice of the accepted application was published on May 10th and 17th, 2017 together with notice that the City Council would review the application at their meeting on June 15th, 2017 and the procedures for interested parties to submit comments, request notification of Council action, or request a public hearing be held on the application. Public comments or requests to that effect were due on June 15th, 30 days from the last publication date of the notice.

No comments or requests for a public hearing were submitted before this writing, however, the estimated total cost of the proposed development exceeds $250,000 and the City Council is required to set a public hearing under SMC 18.08.160(B).

Requested Action

According to SMC 18.08.170(A), the Council shall set a time and date for the public hearing and cause to be published a notice of the hearing, which cannot occur before June 21st, 2017. At your discretion, the application may be referred to the Planning Commission for recommendation and/or public hearing (SMC 18.08.150). Because of the advanced state of permitting and project design, staff is recommending the Council defer from requesting a Planning Commission recommendation. Unless a special meeting is desired, the Council would be able to hold its hearing on July 20th, 2017, with July 6th as the earliest possible hearing date.

Possible Motion: “...move to set a public hearing at the regularly scheduled City Council meeting on July 20th, 2017 at 6:30pm”.

Prepared by,

Ben Shumaker
Planning Director
The City of Stevenson has received a complete Shorelines Substantial Development Permit Application from the Port of Skamania County for the following project:

PROPOSAL: To arrest 450’ of severe bank erosion, restore aquatic habitat along 1,250’ of Columbia River bank and extend the shoreline on average 78’ to the south. An estimated 35,000 cu yd of rock and soil would be placed to restore the shoreline and enhance aquatic and riparian habitats. The proposed project restores the footprint of the historic river bank, which expands the riparian area by 2.15 ac (53%).

CITY COUNCIL REVIEW: The Stevenson City Council will review this application on June 15, 2017, the first regular meeting after thirty days from the date of the last publication of this notice.

INTERESTED PARTIES: Any interested person may 1) submit views on the application in writing to the Council, 2) request notification by the Council of the action taken by the Council, and/or 3) make a written request to the Council that a public hearing be held on the application. Such comments or requests must be submitted by 5:00pm on Thursday, June 15.

The Council meeting will be held in City Hall, 7121 E Loop Road, Stevenson, WA. The application and project plans are available for public review at City Hall during regular business hours or at www.ci.stevenson.wa.us/government/planning-department/current-public-notices. City Hall is accessible to persons with disabilities. Please call if you will need special accommodations to attend the hearing. (509) 427-5970.

Publish: May 10 & 17, 2017
SHORELINES PERMIT APPLICATION
Substantial Development, Timber Cutting, Conditional Uses, Variances

PO Box 371  Stevenson, Washington  98648  Phone: (509)427-5970  Fax: (509)427-8202

Request:  □ Substantial Development  □ Timber Cutting  □ Conditional Use  □ Variance

Applicant/Contact:  Brian Bair
Mailing Address:  181 NE McEvoy Lane
Phone:  360-335-4307  Fax:________________
E-Mail Address (Optional):  brian@bairllc.com

Property Owner:  Port of Skamania
Mailing Address:  PO Box 1099 Stevenson, WA 98648
Phone:  509.427.5484  Fax:  509.427.7984

If there are Additional Property Owners, Please Attach Additional Pages and Signatures as Necessary

Subject Property Address (Or Nearest Intersection):  See Attached
Tax Parcel Number:  Multiple, See Attached
Zoning:  Commercial and industrial
Name of Affected Waterbody:  Columbia River
Shoreline Designation:  Type "S" Fish Bearing
Current Use:  Water Recreation
Proposed Use:  Recreation

Brief Project Summary:  The Port of Skamania is proposing to restore and enhance 1,250 feet of Columbia River shoreline. Please see attached for project details.

Water Supply Source:  Columbia River  Sewage Disposal Method:  NA

As the property owners of the real property described in this proposal, our signatures indicate our approval of this proposal, with the understanding that the proposal is subject to review, approval, and/or denial under SMC 18.04.

I/we hereby provide written authorization for the City to reasonably access to the subject property to examine the proposal and carry out the administrative duties of the Stevenson Municipal Code.

I/we hereby certify any/or our awareness that application fees are non-refundable, there is no guarantee that a permit will be issued

Incomplete applications will not be accepted.  •  Please ensure that all submittals are included

Signature of Applicant:  Brian Bair  Date:  4/25/17

Signature of Property Owner:  Director, Port of Skamania  Date:  4/27/17

For Official Use Only:  Date Application Received  •  Date Application Complete
Shorelines Permit
Submittal Requirements

The following information is required for all Shoreline Permit Applications. Applications without the required information will not be accepted. Site plans are to be submitted on 8½"x11" or 11"x17" paper, and drawn to a standard engineering scale (e.g. 1"=10', 1"=20', 1/8"=1', etc.).

☐ Application Fee (Amount: ___________ Date: ______________ Receipt #: ______________)

☐ Completed and Signed Shorelines Permit Application

☐ Any Associated Land Use and Building Permit Applications

☐ Two (2) Complete Site Plan Proposals—Drawn to scale, showing the proposal site and all adjoining areas within 100 feet, and including the following:
  ☐ A Vicinity Map
  ☐ A North Arrow
  ☐ All property boundary lines and dimensions
  ☐ The location and width of all public and private roads
  ☐ The location and size of all existing structures, utility lines, easements, septic tanks and drainfields, wells, and other improvements
  ☐ The location and extent of all proposed structures and/or uses
  ☐ The location, species, and diameter of all significant trees
  ☐ The location and description of all critical areas and buffers

The following information is required for Timber Cutting Permits. Timber cutting permits are related to selective commercial timber cutting where no more than thirty (30) percent of the merchantable timber is harvested, or clear-cutting necessary for the preparation of land for another use.

☐ Timber Cutting Permits
  ☐ A Report Prepared by a Professional Forester Documenting the Full Amount of Merchantable Timber Existing at the Time of Application, and the Amount of Timber Proposed for Cutting
  ☐ A Description of Any Topography, Soil Conditions, or Silviculture Practices Necessary for Regeneration that May Render Selective Logging Ecologically Detrimental

The following information is required for Shoreline Conditional Use Permits. Conditional uses are those uses which either do not need a shoreline location or are considered unsuitable for siting within a particular shoreline environment. Such uses must:
- Cause no unreasonable adverse effects on the environment or other uses within the area;
- Not interfere with the public use of public shorelines;
- Have a design that is compatible with the shorelines environment in which it will be located; and
- Not be contrary to the goals, policy statements or general intent of the shoreline environments.

☐ Shoreline Conditional Use Permits
  ☐ A Narrative Explaining How the Proposal Meets the Four Criteria Above
Shorelines Permit
Submittal Requirements, Continued

The following information is required for Shoreline Variances. Variances deal with specific requirements of the Shoreline Management Master Program and their objective is to grant relief when there are practical difficulties or unnecessary hardship in the way of carrying out the strict letter of the Shoreline Management Master Program. The property owner must show that if forced to comply with the provisions then no reasonable use of the property can be made. The fact that the property owner might make a greater profit by using the property in a manner contrary to the intent of the Shoreline Management Master Program is not a sufficient reason for variance. A variance will be granted only after the applicant can demonstrate the following:

- The hardship which serves as a basis for granting of variance is specifically related to the property of the applicant;
- The hardship results from the application of the requirements of the Act and the Shoreline Management Master Program and not from for example, deed restrictions or the applicant's own actions;
- The variance granted will be in harmony with the general purpose and intent of the Shoreline Management Master Program.
- Public welfare and interest will be preserved. If more harm will be done to the area by granting the variance that would be done to the applicant by denying it, the variance will be denied.

Shoreline Variances

- A Narrative Explaining How the Proposal Meets the Four Criteria Above
- A Financial Analysis Showing that No Reasonable Use of the Property Can be Made
Stevenson Shoreline Restoration and Enhancement Project

Shoreline Substantial Development Permit Application

By

BAIR L.L.C. and Associates

For

The Port of Skamania

4/25/2017
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Introduction
Washington State’s Shoreline Management Act requires local governments to administer permits for substantial developments along shorelines (WAC 173-27-180). The City of Stevenson administers these permits for Skamania County. The Port of Skamania is proposing to restore and enhance 1,250 feet of Columbia River shoreline (Attachment A Project Plans, Figure 1). The following report provides the documentation required for the Shoreline Substantial Development Permit Application for the Port of Skamania’s Stevenson Shoreline Restoration and Enhancement Project.

Applicant and Property Owner
Port of Skamania County
Pat Albaugh, Executive Director
pat@portofskamania.org
(509) 427-5484

Project Location
The project area is located between points 45.6195 N, 121.8817 W and 45.6930 N, 121.8779 W within the city limits Section 31, T.3N., R.8E. The parcels, ownership and areas bounded within the project area total 17.9 acres and are as follows: Parcel 02070111610000, City of Stevenson, 0.11 Acres and Port of Skamania property parcels 02070111580000, 02070111570000, 02070111560000, 02070111630100, 02070111630000, 02070111620000 02070111540000, 02070110370000, 02750622010000, 02750622050000, 02750622060000 (Figure 2).

The project area is zoned for commercial and industrial. The waterbody associated with the project is the Columbia River, a Type S fish bearing system.

Project Description
The Stevenson Shoreline Restoration and Enhancement Project proposes to arrest 450 feet of severe bank erosion, restore aquatic habitat along 1,250 feet of Columbia River bank and extend the shoreline on average 78 feet to the south. An estimated 35,000 cubic yards of rock and soil would be placed to restore the shoreline and enhance aquatic and riparian habitats. The proposed project restores the footprint of the historic river bank, which expands the riparian area by 2.15 acres (53%).

Existing Vegetation
Vegetation within the project is a mix of native and non-native plant species. Significant trees within the HCA were surveyed, mapped and identified on October 14, 2013 (Figure 3). The native tree species
within the project area are: (Thuja plicata) western red cedar, (Acer macrophyllum) big leaf maple,
(Pseudotsuga menziesii) Douglas fir, (Populus trichocarpa) black cottonwood (Alnus rubra) red alder,
(Acer circinatum) vine maple. Non-native tree species within the project area HCA are: (Populus sp.)
poplar, (Prunus sp.) cherry and (Acer sp.) maple. Poplar was planted for aesthetic improvements and
quick growing characteristics for the park and hiking trail. Cherry and Maple within the area were likely
planted by historic residents for aesthetic values. Canopy cover within the project area is currently 0.46
acres or 11% canopy cover (See Figure 3).

Existing Infrastructure and Developments
Buildings within the project area include a section of a multipurpose industrial building, a restaurant, a
maintenance building and a residence. The total area of buildings within the project area is 0.35 acres.
Paved parking area associated with the existing buildings within the project area totals 1.34 acres. In
addition to the buildings and paved parking areas, a paved accessible recreation trail parallels 829.5 feet
of the shoreline covering an area of 0.25 acres. Leavens Street, which extends from Cascade Avenue
south to the shoreline, covers an additional 0.07 acres. Total area and percent area covered by buildings
and paving within the project are 1.87 acres and 46%, respectively. The remaining 2.19 acres, 54% of
the project area, are dedicated to water dependent public recreation: The Russell Street Development
Lot, East Point Kite Board Beach and Leavens Point Park (Figure 4).

Adjacent Land Uses
Land use surrounding the project area includes the following water dependent recreation facilities: the
Cascade Avenue Small Craft Boat launch (to the east) and the Stevenson Landing large vessel pier at
Russell Street (to the west). Activities at these facilities include boating, fishing, swimming, windsurfing,
kiteboarding, hiking, wildlife viewing, historic interpretation and picnicking. Additional adjacent uses
include a lodge, private residences and a significant railway transportation corridor.

Site Development Plan
For the following discussion please refer to the engineering designs Rock Creek Dredge Mitigation,
Stevenson Shoreline Enhancement, Port of Skamania, June 2008 (Attachment A).

Access Routes, Borrow, Stockpile and Staging Areas
Construction of access routes and stockpile areas will disturb the minimum amount of vegetation
practicable. Project access roads on unpaved areas total 412 feet with average widths of 14 feet (5,768
square feet). To construct the access route approaches four non-native cherry trees will be removed,
stockpiled and then incorporated into the restoration project. Two Port of Skamania buildings within the
stockpile areas will be demolished to maximize the stockpile area for the project. These structures may
be rebuilt in the future. The limits of stockpile areas will be flagged and located on areas occupied by
grass. Potential stockpile sites will occupy a total area of 0.42 acres. The staging area will be located
east of Leavens Street on 0.17 acres of the paved parking lot (see Figure 5).
Approximately 35,000 cubic yards of river rock and soil will be needed to restore the shoreline within the project area. Boulders, cobble, gravel and sand will be imported from the Rock Creek and North Bonneville borrow areas (Figure 6). The Rock Creek borrow areas are located on gravel bars within the active stream channel. Gravel bars will be scalped meaning that the top pavement layer will be excavated, sorted and then hauled to the shoreline restoration project area. The precise quantities of rock salvaged from the gravel bars cannot be determined due to two primary factors:

1) The Rock Creek landslide is an active slide purported to contain over 2,000,000 yards of soil and rock. It is uncertain from year to year and or from rain event to rain event how much material will be delivered downstream to the borrow area sites. In addition, the gravel bar elevations, size and substrate composition varies dramatically due to the magnitude of individual storms and the activity of the slide.

2) The composition of the gravel bars varies from large boulders, cobble gravel, sand and clay conglomerates. This composition also varies with precipitation and landslide activity intensity. Because of these factors reasonable rock quantity estimates cannot be made. However the location of the material at the project area will be the most cost efficient haul and is therefore the priority material for shoreline restoration.

East bank access points for the Rock Creek borrow areas are located on North and Southeast sides of the fairgrounds pedestrian bridge. West bank access sites are located on the southern extent of the fairgrounds road/pedestrian path and upstream of the Rock Creek Drive bridge and medical clinic. All access points will be rehabilitated and revegetated with native riparian vegetation.

Material within the Rock Creek borrow areas will be sorted on site with a Grizzly substrate sorter or power screen. Erosion control best management practices will be employed to prevent fine sediment from entering running water. Existing riparian vegetation will be preserved to the maximum extent practicable. Large woody debris with rootwads will be salvaged from the Rock Creek borrow area and used in the boulder-rootwad structures. All disturbed areas will be rehabilitated and contoured to promote natural deposition within Rock Creek. Finished ground elevations will be approximately one foot above the base flow elevation.

The North Bonneville borrow area will be used to supply the remaining material. The North Bonneville borrow area will be excavated in a manner to level the site for future use. Material from North Bonneville borrow will also be sorted on site. Best management erosion control practices will be employed to prevent transport of fine sediment into flowing waters. The site will be mulched and seeded at the completion of the project.

**Construction Sequencing**

Construction will begin by preparing the staging area and pioneering access routes. Sediment curtains will be installed in the Columbia River in 200-foot sections to isolate the work areas, contain fine sediment and turbidity. Boulder cobble fill will initially be imported and placed parallel to the shoreline at an elevation of at least one foot above the existing water level elevation forming the base layer. The base layer boulder and cobble fill will continue in vertical and horizontal lifts until the project fill limit to
the South is achieved. Rootwad - boulder structures will be constructed and incorporated into the base layer. Gravel and fines will then be imported in lifts to fill the interstitial spaces of the boulders and cobbles. The gravel-fine lifts will continue, sloping north to the upper limits of the project area (top of bank elevation). Gravel will be imported and placed along the toe of the project limits (southern edge) to create a gradual sloping gravel beach. Top soil will then be imported and spread throughout the planting area. Top soil will be applied in lifts with minimum depths of six inches. Top soil will be covered with coir fabric and then planted. Tree survival will be assessed every year for ten years. Dead trees/shrubs will be replaced species specifically. Access routes will be rehabilitated immediately following restoration and then de-compacted, mulched and seeded. Silt fence would be left in place and maintained until green-up the following spring.

Detailed site diagrams, grading and excavation details are provided in Attachment A Project Plans. The contractor will provide an erosion control and spill prevention plan before mobilization to the site.

The specific efforts to avoid and minimize impacts to priority habitats and their buffers will include minimizing buffer area and significant tree disturbance to the maximum extent practicable. All significant trees will be left in place and protected with the exception of four non-native cherry trees within the access corridor. The only foreseeable exception would be in the advent of hazard trees and potential compromise of worker safety (per OSHA).
**Habitat Mitigation Plan**

The Stevenson Shoreline Restoration and Enhancement Project propose to arrest 450 feet of severe bank erosion and restore aquatic habitat along 1,250 feet of Columbia River bank. The project entails extending the shoreline on average 78 feet to the south. An estimated 18,730 cubic yards of rock and soil would be placed to restore the shoreline and enhance aquatic and riparian habitats. The proposed project restores the footprint of the historic river bank, which expands the riparian area by 2.15 acres (53%).

SMC 18.13.095.E requires riparian buffer widths of 150 feet on the Columbia River a Type S fish bearing system. Base riparian habitat buffers can be reduced by 30% (reduced to 105 feet) through enhancement of degraded buffers. Buffer widths can be further reduced with off-site mitigation. This project proposes to expand the buffer by 2.15 acres by restoration of the shoreline and degraded areas. In addition 2.02 acres of off-site mitigation, vegetation rehabilitation on Slaughter House Point will also be accomplished. Therefore HCA buffer width would be reduced to 50 feet from the North edge of the shoreline restoration project area extending south. The restored shoreline within the buffer will be re-vegetated with native shrubs and grasses at densities of twenty shrubs per 1,000 ft² within the HCA (see Figure ).

The HCA buffer and transition zone is near shore riparian and, therefore, replanted with the following native species:

*(Salix lucida)* Pacific Willow

*(Salix scouleriana)* Scouler Willow

*(Salix fluviatilis)* Columbia River Willow

*(Cornus sericea)* Red osier dogwood

*(Rosa pisocarpa)* Cluster or Swamp Rose

The restored shoreline above the ordinary pool elevation to the vegetated HCA buffer will be planted with native shrubs and forbs to reduce beach erosion from waves in a manner consistent with water related recreation use. The lower planting limit or stream bank toe upslope to the HCA Buffer will be planted with seasonally submerged hydrophilic shrubs and forbs.

420 *(Salix fluviatilis Nutt.)* Multnomah Columbia River Willow
Habitat Conservation Area Delineation

The Habitat Conservation stream buffer will have a permanent physical demarcation of logs, a tree or hedgerow, wood or wood-like fencing, which will be approved by the City of Stevenson Planning Department. In addition, a sign (minimum size 1 foot x 1 foot and posted 3.5 feet above grade) worded “WILDLIFE HABITAT BUFFER – PLEASE RETAIN IN A NATURAL STATE” will be posted along the outer perimeter of the habitat buffer.

Off-Site Mitigation - Slaughter House Point

Slaughter House point would be rehabilitated by removal and treatment of invasive plant species. Himalayan black berries will be spot treated, cutting back the above-ground blackberry bramble as close to the ground as possible and then applying glyphosate-based herbicide directly to freshly cut canes. Due to the proximity of the Columbia River, only herbicides containing glyphosate such as Rodeo (Dow) or Aquamaster (Monsanto) with LI-700 surfactant will be used. Herbicide will not be applied within ten feet of the ordinary high water mark; all black berries within ten feet of the stream will be manually extracted, no herbicide will be applied. Black berry eradication will occur at least once a year for five years.

Figure 8. Slaughter House Point Off-Site Mitigation Area. City of Stevenson, Skamania County, Washington.

In summary the riparian area will be significantly improved due to the increase in area (2.15 acres, a 53% increase in HCA), increase in riparian canopy cover (1.5 additional acres and a 25% increase), increase in bank stability (450 feet stabilized), removal of 120 feet of sheet pile and rehabilitation of 680 feet of rip-rap river bank. In addition, the three rootwad structures would provide additional aquatic habitat for aquatic organisms.
References

Bing Maps
http://www.bing.com/maps/default.aspx?q=north+arrow+symbol+png&mkt=en&FORM=HDRSC4#Y3A9NDUuNTQ0NzAxf0xMjEuMTU0Mjk3Jmx2bDQ0JnNOeT1yJnE9bm9ydGglMjUyMGFyY2Fm93JT1MjBzeW1ib2wlMjUyMH8uZw=. Accessed October 15-20, 2013


Applicant Agent Qualifications

This document was completed by Brian Bair, Owner and Projects Director of BAIR L.L.C.

Education

Bachelor of Science, Biology, Montana State University

Certifications

USDA National Construction Certification for engineering related activities in watershed restoration and construction management.

Experience

Brian has worked throughout the Continental United States, Alaska, and Canada on large-scale watershed restoration and rehabilitation projects. Brian’s primary responsibilities for the past 22 years have been to assess, design, and implement watershed and stream corridor rehabilitation projects. Brian has an extensive heavy equipment and project management background.
Rock Creek Dredge Mitigation

June 20, 2008

Port of Skamania

STEVENS SHORELINE ENHANCEMENT

PROJECT DESCRIPTION