

City of Bainbridge Island  
PUBLIC WORKS DEPARTMENT



MEMORANDUM

TO: Ryan Ericson  
Shoreline Planner

Kathy Cook  
Director of Planning and Community Development

FROM: Melva Hill  
Water Resources Engineer

Cami Apfelbeck  
Water Resources Specialist

DATE: July 15, 2011

RE: Shoreline Master Program comments, City of Bainbridge Island

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Public Works, Water Resources submits the following comments and clarifications for your consideration in the update of the shoreline master program.

**Comments In section C. Environmental Impacts**

Sub paragraph under "General Regulations: Impact Analysis and No Net Loss Standard"

- i. "Utilize effective erosion and scour control methods during project construction and operation."

COMMENT: "Erosion and scour" are the same processes. The sentence should read "Utilize effective erosion and sediment control methods."

Sub paragraph under "Bonding Regulations"

Except for projects undertaken by public entities, information or other security shall be required by the City to assure that work is completed, monitored, and maintained. The bond/surety shall be refunded to the applicant/proponent upon completion of the mitigation activity and any required monitoring.

COMMENT: "Performance or maintenance bonds" are problematic for managing these types of projects. The bonding companies will often suspend or release project bonds without exoneration from the city especially if more than a few years have passed. I would recommend you consider adding language that clarifies specific time frames for maintaining assurance devices. Consider language such as: Assurance devices are to be in full force and effect for a minimum of 24 months.

Sub paragraph under "Submittal Requirements"

- vi. A description and evaluation of anticipated effectiveness of proposed measures which mitigate the impacts of the project to ensure no net loss of shoreline ecological functions, value and proposed success criteria;

COMMENT: Consider breaking this statement for clarity. A description and evaluation of anticipated effectiveness of proposed measures which mitigate the impacts of the project to ensure no net loss of shoreline ecological functions and/or value. The description and evaluation shall outline the proposed success criteria;

**Comments In section K. Water Quality**

Sub paragraph under "Regulations"

1. All shoreline development shall minimize any increase in surface runoff through control, treatment, and release of surface water runoff so that the receiving water quality and shore properties and features are not adversely affected- through compliance with the standards established in the City's adopted Stormwater Manual in effect at the time of permit application BIMC 15.20.

COMMENT: Add Management to the "Stormwater Manual"

2. Shoreline use and development shall incorporate measures to protect and maintain surface and ground water quantity and quality in accordance with all applicable laws.

3. Unless the City determines that the site is unsuitable, Low Impact Development techniques shall be considered a through -nd implemented consistent with the City's adopted Low Impact Development Manual BIMC 15.20.

- a. When a direct discharge pipe is demonstrated to be necessary, the conveyance shall consist of the following:
  - i. A welded HDPE pipe ; and

COMMENT: This should read: A continuous heat-welded High Density Polyethylene (HDPE) pipe.

5. Deviations from the required stormwater management standards of BIMC 15.20 may be approved by the City, provided it can be demonstrated that off-site facilities would provide better treatment, or where common retention, detention and/or water quality facilities meeting such standards have been approved as part of a comprehensive stormwater management plan.

COMMENT: Our code does not allow for deviations of 15.20. This paragraph needs clarification of intent and concise language. There is an allowance in the adopted manual to construct offsite facilities. If the subject parcel is served by a regional facility then the use of said facility is a vested right by the prior land use action.

6. Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all development in shorelines through an approved temporary erosion and sediment control (TESC) plan, as required by BIMC XX or administrative conditions.

COMMENT: TESC is old language and Manual publication is out of date. Revise the section to read:

Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all development in shorelines through an approved (SWPPP) Stormwater Pollution Prevention Plan, as required by BIMC 15.20 and any administrative conditions

9.4. All shoreline development shall comply with the applicable requirements of the Stormwater Management Manual for Western Washington (Washington State Department of Ecology publications #05-10-029 through 05-10-033)

COMMENT: Noted Manual publication is out of date. Revise the section to read as modified above. The City's Engineering Design and Development Standards Manual are not in conformance with the adopted Manual.

10. All materials that may come in contact with water shall be constructed of materials, such as untreated wood, concrete, approved plastic composites or steel, that will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic (CCA) or pentachlorophenol (PCP) is prohibited in or above shoreline water bodies, except where allowed in section (Piers, docks and floats).

COMMENT: Add The shortened forms to the treatment types: (CCA, PCP). It's more recognizable to the lay person.

11. As a condition of approval of a permit issued in accordance with this Master Program, the Shoreline Administrator may apply the following conditions to protect water quality: Shoreline

uses and activities shall apply Best Management Practices (BMPs) to minimize any increase in surface runoff and to control, treat and release surface water runoff so that receiving properties, receiving waters, wetlands or streams, and are not adversely affected, consistent with the City's adopted surface water design manual. All types of BMPs shall be regularly maintained to continue to function as intended, according to the BIMC XX. Such measures may include, but are not limited to:

COMMENT: Change surface water design manual to Stormwater Management Manual. The maintenance section referenced is BIMC 15.21

- a. Landscaped shoreline buffers and setbacks; and
- b. Low impact Development techniques for infiltration (rain gardens, [REDACTED] [REDACTED]); or

COMMENT: "impervious surfaces" does not belong here

- c. Methods described in the City adopted Stormwater Manual (catch basins or settling ponds, oil interceptor drains, grassy swales);

COMMENT: Remove lined through items. Let the options in the manual stand without suggestion/modification

- d. The release of oil, chemicals (including pesticides and herbicides), fertilizer or hazardous materials onto land or into the water is prohibited within the shoreline jurisdiction.

COMMENT: d. above "releases" are always prohibited in accordance with BIMC 15.22 whether in the shoreline jurisdiction or not

- e. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leak-proof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected.

COMMENT: e. above is actually a subsection of d. above so should be "d.1" or such

12. All shoreline developments and activities shall comply with the following standards in the application of pesticides, herbicides, or fertilizers:

- a. The application of pesticides, herbicides or fertilizers within shoreline buffer shall utilize Best Management Practices (BMPs) outlined in the BMPs for Landscaping and Lawn/Vegetation Management Section of the 2005 Stormwater Management Manual for Western Washington, to prevent contamination of surface and ground water and/or soils, and adverse effects on shoreline ecological functions and values.
- b. Pesticides, herbicides, or fertilizers shall be applied in a manner that minimizes their transmittal to adjacent water bodies. The direct runoff of chemical-laden waters into adjacent water bodies is prohibited. Spray application of pesticides shall not occur

within 100 feet of open waters including wetlands, ponds, and streams, sloughs and any drainage ditch or channel that leads to open water except when approved by the City.

**COMMENT:** b. above should also include closed conveyances (i.e. Piping)

## **Comments In section L. Transportation Facilities**

### Policies

**COMMENTS:** Check the wording in policy number 2.

### Prohibited

1. The following transportation facilities are prohibited:

b. Additional ~~new~~ bridges over Puget Sound waters to and from Bainbridge Island

**COMMENTS:** How can you have a blanket prohibition on a bridge over Puget Sound?

c. In the Aquatic Conservancy designation all transportation facilities, except trails

**COMMENTS:** c. should also include an exception for bike lanes added to existing roadways

### Regulations – Design, Construction and Maintenance

#### Construction and Maintenance

1. Overburden, debris, and other waste materials from both construction and maintenance activities, including drainage ditch clearance, shall not be deposited into or cast on the side of roads within a shoreline, water body, wetland, estuary, tideland, accretion beach, and other unique natural area. Such materials shall be deposited in stable locations where re-entry and erosion into such areas is prevented.

**COMMENT:** Revise 'ditch clearance' to ditch cleaning.

#### Revegetation.

1. ~~2. All shoreline areas disturbed by Transportation facility construction and maintenance shall be required to provide a Vegetation Management Plan, TESC, and/or SWPPP approved by the Administrator. ~~be replanting~~ Revegetation and stabilization shall occur with approved vegetation by seeding, mulching, or other effective means immediately upon completion of the construction or maintenance activity. Such vegetation shall be maintained by the agency or developer constructing or maintaining the road until the vegetation is established.~~

**COMMENT:** Remove reference above to TESC (old language)

2. ~~3.~~ The City shall give preference to mechanical means rather than the use of herbicides for roadside brush control on city roads in shoreline jurisdiction and by means of a city-approved integrated pest management plan.

**COMMENT:** This statement is unnecessary. The city prohibits the use of all pesticides and herbicides in the public rights-of-way or city owned properties and has an established

policy/plan:

2. 4. No machinery shall be operated within or along a stream bed, marine shoreline, lake, wetland or pond except in compliance with a hydraulics permit issued by the Washington State Department of Fish and Wildlife.

COMMENT: Please expound further in this section to include an additional exception. As currently stated the section severely restricts operations of Public Work. Many of the services provided by Public Works are essential maintenance and operations to preserve city infrastructure and ensure safety. Suggested exception language would be: "except in compliance with the Best Management Practices defined in the Road Maintenance Manual for the maintenance and repair practices of Public Work."

3. 5. Existing roads which are parallel to shoreline areas shall be adequately maintained with compatible site appropriate, self-sustaining native vegetation where feasible to provide slope stability and to enhance shoreline function. Shoreline scenic drives and viewpoints may provide breaks periodically in the vegetative buffer to allow open views of the water.

COMMENT: Please see comment above.

Road Design

4. Culverts, bridges and similar devices shall be designed to pass water, sediment, and debris loads anticipated under appropriate hydraulic analysis in compliance with the stormwater regulations of BIMC XX, and shall not impede the migration of anadromous fish.

COMMENT: BIMC 15.20 only apply to smaller pipe systems. The controlling design requirement is Washington State Department of Fish and Wildlife's *Design of Road Culverts for Fish Passage*.

**Comments In section M. Utilities (Primary and Accessory)**

**Primary Utility Regulations - Location and Design**

1. Water Systems:

- ii. Private and public intake facilities, and wells in the shoreline jurisdiction should be located where there will be no net loss in ecological functions or adverse impacts upon shoreline resources, values, natural features, or other users.

COMMENT: This only addresses location. Additional language needed to address impacts from the actual well construction and the impacts from the quality and velocity of flush test water.

4. Electrical Energy and Communication Systems:

iv. Poles or other supports treated with creosote or other wood preservatives that may mobilize contamination in water shall not be used along shorelines or associated wetlands. No new overhead wiring shall be installed between the road and OHWM, where road right-of-ways or easements are within 150 feet and also are parallel to the shoreline for more than 500 feet.

COMMENT: that may mobilize contamination in water shall not be used. Sentence needs to be changed for correct word usage. Example: "preservatives that may potentially leach contaminates into water shall not be used". If "mobilize" needs to be included it should be clear that mobilization occurs from tidal action, wave actions or wind, etc. and not as worded.

#### **Accessory Utility Regulations - Location and Design**

4. On-site sewage systems Septic fields shall be located on the landward side of any new residence or business development, where possible, or in a location approved by the Administrator and designed to meet all applicable water quality, utility, and health standards.

COMMENT: What is the problem with using the word "septic" since it's easily recognized by the community.