City of Bridgeport
Section 1.10 A
General Provisions

Sections:

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1.10 A.010 Applicability

The provisions of this title shall apply to all development activities in the shorelines within the City’s incorporated limits. Any development authorized to alter the condition of any land, water or vegetation; or to alter or construct any building, structure or improvement shall be in compliance with the requirements of these sections and shall be in conformance with the Regional Shoreline Master program.

1.10 A.020 Reference Maps and Inventories

The distribution of critical areas within the City are described and displayed in reference materials and on maps maintained by the City. These reference materials, in the most current form, are intended for general information only and do not depict site-specific designations. They are intended to advise the City, applicants and other participants in the development permit review process that a critical area may exist and that further study, review and consideration may be necessary. These reference materials shall include but are not limited to the following:

A. Maps.
   1. City of Bridgeport Critical Area Reference Map: Wetland Areas;
   2. City of Bridgeport Critical Area Reference Map: Fish & Wildlife Habitat Areas;
   3. US Fish and Wildlife Service National Wetlands Inventory;
   4. Washington State Department of Fish & Wildlife Priority Habitats and Species Maps;
   5. U.S.G.S. 7.5 Minute Series Topographic Quadrangle Maps;
   6. Shoreline Inventory and Characterization Maps, and
   7. Aerial photos.

B. Documents.
   1. Approved special reports previously completed for a subject property;
   2. Bridgeport Urban Area Comprehensive Plan;
   3. City of Bridgeport Shoreline Master Program;
   4. NRCS Soil Survey Maps for Douglas County;
   5. Federal Wetlands Delineation Manual (1987);
6. Washington State Wetlands Identification and Delineation Manual (DOE, March 1997);
7. Washington State Wetlands Rating System for Eastern Washington (DOE #04-06-15);
8. Wetland Mitigation in Washington State, Part I: Agency Policies and Guidance (Version 1, DOE Pub. #06-06-01a) and

1.10 A.030 Disclosure
The presence of any known or suspected critical areas on or within one hundred feet of property that is the subject of a development permit shall be identified by the applicant in the application materials submitted to the City.

1.10 A.040 Review Process
Provisions of this title shall be considered and applied appropriately during development permit application reviews initiated under applicable titles of the BMC.

1.10 A.050 Mitigation, Maintenance, Monitoring and Contingency
A. Mitigation, maintenance, monitoring and contingency plans shall be implemented by the developer to protect critical areas and their buffers prior to the commencement of any development activities. Where mitigation is required herein, the following performance standards shall be met:
   a. Mitigation planting survival will be 100% for the first year, and 80% for each of the 4 years following.
   b. Mitigation must be installed no later than the next growing season after completion of site improvements, unless otherwise approved by the Administrator.
   c. Where necessary, a permanent means of irrigation shall be installed for the mitigation plantings that are designed by a landscape architect or equivalent professional, as approved by the Administrator. The design shall meet the specific needs of the vegetation, as may be applicable.
   d. Onsite monitoring and monitoring reports shall be submitted to the City 1 year after mitigation installation; 3 years after mitigation installation; and 5 years after mitigation installation. Monitoring reports shall be submitted by a qualified professional biologist.
The biologist must verify that the conditions of approval and provisions in the wetland management and mitigation plan have been satisfied.

e. Monitoring reports by the biologist must include verification that the planting areas have less than 20% total non-native/invasive plant cover consisting of exotic and/or invasive species. Exotic and invasive species may include any species on the state noxious weed list, or considered a noxious or problem weed by the Natural Conservation Services Department or local conservation districts.

f. Mitigation sites shall be maintained to ensure that the mitigation and management plan objectives are successful. Maintenance shall include corrective actions to rectify problems, include rigorous, as-needed elimination of undesirable plants; protection of shrubs and small trees from competition by grasses and herbaceous plants, and repair and replacement of any dead plants.

g. Prior to site development and or building permit issuance, a performance surety agreement shall be submitted by the applicant and shall be reviewed and approved by the City, including the City Attorney. The surety agreement must include the complete costs for the mitigation and monitoring which may include but not be limited to: the cost of installation, delivery, plant material, soil amendments, permanent irrigation, seed mix, and 3 monitoring visits and reports by a qualified professional biologist, including Washington State Sales Tax. The City must approve the quote for said improvements.

h. Sequential release of funds associated with the surety agreement shall be reviewed for conformance with the conditions of approval and the mitigation and management plan. Release of funds may occur in increments of 1/3 for substantial conformance with the plan and conditions of approval. If the standards that are not met are only minimally out of compliance and contingency actions are actively being pursued by the property owner to bring the project into compliance, the City may choose to consider a partial release of the scheduled increment. Non-compliance can result in one or more of the following actions: carry-over of the surety amount to the next review period; use of funds to remedy the nonconformance; scheduling a hearing with the appropriate hearing body to review conformance with the conditions of approval and to determine what actions may be appropriate.

B. The property owner shall be responsible for reporting to the City and undertaking appropriate corrective action when monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures.

I.10 A.060 Special Reports

A. In order to maintain and protect critical areas, as well as to assist in classifying and designating such areas, site-specific environmental information will be required when evaluating a development proposal.

B. Special reports shall be submitted for review and approval in conjunction with development applications when required by the city. Each Section of this title that deals with a specific critical area also contains a description of when special reports may be required.

C. The preparation of special reports or tests required by this title is the responsibility of the applicant for a development permit. Costs incurred by the City to engage technical consultants or for staff review and interpretation of data and findings submitted by or on behalf of the developer or applicant shall be reimbursed by the applicant in accordance with a schedule adopted by the city.

D. Special studies and reports, including site plans, shall be submitted in such a manner that they conform to applicable design standards and/or formats as determined by the City.
1.10 A.070  **Wetland Boundary Survey and Ranking Evaluation**

A. A wetland boundary survey to identify and delineate a wetland, and a wetland ranking evaluation shall be conducted by a biologist who is knowledgeable of wetland conditions within North Central Washington and who derives his/her livelihood from employment in this occupation. The wetland boundary shall be field staked by the biologist and surveyed by a land surveyor for disclosure on all final plats, maps, etc.

B. The Washington State Wetlands Identification and Delineation Manual (DOE, March 1997) and the Washington State Wetlands Rating System for Eastern Washington (DOE #04-06-15) shall be used as the basis for identifying, delineating and rating the wetland boundary.

C. The wetland boundary and wetland buffer area shall be identified on all plats, maps, plans and specifications submitted for the project.

D. An evaluation of any unranked wetland is necessary when there is a proposed development or activity to be located adjacent to, or within an area containing a wetland.

E. The wetland ranking evaluation shall be used to determine if the wetland is a Level 1 Critical or a Level 2 Awareness wetland. It shall evaluate those factors identified in Section 1.10 B that are used to distinguish between these categories, and it shall take into consideration historical information on the area in question, the dynamic nature of wetlands and an evaluation of entire wetland complexes, as opposed to isolated wetlands on individual parcels.

1.10 A.080  **Wetland Management and Mitigation Plan**

A. A wetland management and mitigation plan shall be prepared by a qualified professional who is knowledgeable of wetland conditions within North Central Washington.

B. The wetland management and mitigation plan shall demonstrate, when implemented, that there shall be no net loss of the ecological function of the wetland.

C. The wetland management and mitigation plan shall identify the existing functions and values of the wetland areas, provide an assessment of the impacts from the project and how impacts from the proposed project shall be mitigated, as well as identifying the necessary monitoring and contingency actions for the continued maintenance of the classified wetland and its associated buffer. Where mitigation ratios are necessary/proposed, the Washington State Wetlands Rating System for Eastern Washington (DOE #04-06-15) will be used to provide guidance and the following ratios used:

- Wetland Type I- 6:1
- Wetland Type II- 3:1
- Wetland Type III- 2:1
- Wetland Type IV- 1.5:1
- Wetland Buffer - 1:1

D. The wetland management and mitigation plan shall contain a report that includes, but is not limited to, the following information:

1. Vicinity maps, regional 1:24,000 and local 1:4,800;
2. Location maps at a scale determined necessary and appropriate by the city;
3. A map or maps indicating the boundary of the identified wetland; the width and length of all existing and proposed structures, utilities, roads, easements; wastewater and stormwater facilities; adjacent land uses, zoning districts and comprehensive plan designations;
4. A description of the proposed project including the nature, density and intensity of the proposed development and the associated grading, structures, utilities, etc., in sufficient detail to allow analysis of such land use change upon the identified wetland;

5. A detailed discussion of surface and subsurface hydrologic features both on and adjacent to the site where the city determines appropriate;

6. A description of the vegetation in the classified wetland, on the overall project site and adjacent to the site;

7. A detailed description of the proposed project’s effect on the classified wetland, and a discussion of any federal, state or local management recommendations which have been developed for the area;

8. A discussion of the following mitigation sequencing alternatives as they relate to the proposal:
   a. Avoiding the impact altogether by not taking a certain action or parts of an action;
   b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
   c. Rectifying the impact by repairing, rehabilitaing, or restoring the affected environment to the conditions existing at the time of the initiation of the project;
   d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
   e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
   f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

9. A plan by the applicant that explains how any adverse impacts created by the proposed development will be mitigated, including without limitation the following techniques:
   a. Establishment of buffer zones,
   b. Preservation of critically important plants and trees,
   c. Limitation of access to the classified wetland area,
   d. Seasonal restriction of construction activities,
   e. Establishment of a timetable for periodic review of the plan;

10. A detailed discussion of on-going management practices which will protect the classified wetland after the project site has been fully developed, including proposed monitoring, contingency, maintenance and surety programs.

1.10 A.090 Habitat Boundary Survey and Ranking Evaluation

A. A wildlife habitat boundary survey and ranking evaluation shall be conducted by a qualified professional who is knowledgeable of wildlife habitat within North Central Washington. The wildlife habitat boundary shall be field staked by the biologist and surveyed by a land surveyor for disclosure on all final plats, maps, etc.

B. The Management Recommendations for Washington’s Priority Habitats and Species may be used as a tool for identifying and delineating the habitat boundary.

C. An evaluation of any unranked fish and wildlife habitat is necessary when there is a proposed development or activity to be located adjacent to, or within an area containing a wetland.
D. The evaluation shall be used to determine if the fish and wildlife habitat is a Level 1 Critical or a Level 2 Awareness fish and wildlife habitat conservation area. It shall evaluate those factors identified in Section 1.10 C that are used to distinguish between these categories, and it shall take into consideration historical information on the area in question, the dynamic nature of habitat conservation areas and an evaluation of the entire habitat conservation area, as opposed to isolated indicators on individual parcels.

E. The wildlife habitat boundary and associated buffer shall be identified on all plats, maps, plans and specifications submitted for the project.

1.10 A.100 Fish/Wildlife Habitat Management and Mitigation Plan

A. A fish/wildlife habitat management and mitigation plan shall be prepared by a qualified professional who is knowledgeable of wildlife habitat within North Central Washington.

B. The fish/wildlife habitat management and mitigation plan shall demonstrate, when implemented, that there shall be no net loss of ecological function of habitat.

C. The fish/wildlife habitat management and mitigation plan shall identify how impacts from the proposed project shall be mitigated, as well as the necessary monitoring and contingency actions for the continued maintenance of the classified habitat conservation area and its associated buffer.

D. The fish/wildlife habitat management and mitigation plan shall contain a report containing, but not limited to, the following information:

1. Vicinity maps, regional 1:24,000 and local 1:4,800;
2. Location maps at a scale determined necessary and appropriate by the city;
3. A map or maps indicating the boundary of the habitat conservation areas; the width and length of all existing and proposed structures, utilities, roads, easements; wastewater and stormwater facilities; adjacent land uses, zoning districts and comprehensive plan designations;
4. A description of the proposed project including the nature, density and intensity of the proposed development and the associated grading, structures, roads, easements, wastewater facilities, stormwater facilities, utilities, etc., in sufficient detail to allow analysis of such land use change upon the habitat conservation area;
5. A detailed discussion of surface and subsurface hydrologic features both on and adjacent to the site where the city determines appropriate;
6. A description of the vegetation in the habitat conservation area, on the overall project site and adjacent to the site;
7. A detailed description of the proposed project's effect on the habitat conservation area, and a discussion of any federal, state or local management recommendations which have been developed for the species or habitats in the area;
8. A discussion of the following mitigation sequencing alternatives as they relate to the proposal:
   a. Avoiding the impact altogether by not taking a certain action or parts of an action;
   b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
   c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;
Regional Shoreline Master Plan - Bridgeport Critical Areas Regulations

d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and

f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

9. A plan by the applicant that explains how any adverse impacts created by the proposed development will be mitigated, including without limitation the following techniques:

a. Establishment of buffer zones,

b. Preservation of critically important plants and trees,

c. Limitation of access to the habitat conservation area,

d. Seasonal restriction of construction activities,

e. Establishment of a timetable for periodic review of the plan;

10. A detailed discussion of on-going management practices which will protect the habitat conservation area after the project site has been fully developed, including proposed monitoring, contingency, maintenance and surety programs.

1.10 A.110 Definitions

A. Except where specifically defined in this Section, all words used in this title shall carry their customary meanings. These definitions are used in addition to those found in other ordinances, laws and/or regulations of the City, including without limitation those found in the zoning code, the land division code, the environment code, etc. Words used in the present tense include the future; the plural includes the singular; the word “shall” is always mandatory; the word “may” denotes a use of discretion in making a decision; the words “used” or “occupied” shall be considered as though followed by the words “or intended, arranged or designed to be used or occupied”. The definition of any word or phrase not listed in the definitions that is in question when administering this title shall be defined from one of the flowing sources, which shall be utilized by finding the desired definition from source number one, but if it is not available there, then source number two may be used and so on. The sources are as follows:

1. Any City resolution, ordinance, code, regulation or formally adopted comprehensive plan, shoreline master program or other formally adopted land use plan;

2. Any statute or regulation of the state of Washington;

3. Legal definitions from Washington common law or a law dictionary;

4. The common dictionary.

1.10A.120 – Reasonable Use

Where project proponents would seek a “Reasonable Use” exception to their proposal, they shall seek exception process and relief through the RSMP Conditional Use or Variance Permit process.
Section 1.10 B
Wetlands

Sections:

I.10 B.010 Classification
I.10 B.020 Designation
I.10 B.030 Application Requirements
I.10 B.040 General Standards
I.10 B.050 Specific Standards

I.10 B.010 Classification

A. All wetlands shall be classified by the City to reflect the relative function, value and uniqueness of the wetland as determined through an approved wetland ranking evaluation submitted by the applicant for any development permit. The City may use the following information sources as guidance in identifying the presence of potential wetlands and the subsequent need for a wetland delineation study:

1. All sources identified in Section 1.10 A.020;
2. Hydric soils, soils with significant soil inclusions, and "wet spots" identified within the Douglas County Area soil survey;
3. Previous wetland ranking evaluation; and,
4. On-site inspection.

B. Wetlands shall be classified according to the following system:

1. Level 1: Critical Wetlands - These wetlands include those determined to be Category I or Category II wetlands according to the “Washington State Wetland Rating System of Eastern Washington” (Ecology Publication #04-06-15).
2. Level 2: Awareness Wetlands - These wetlands will include those determined to be Category III or Category IV wetlands according to the “Washington State Wetland Rating System for Eastern Washington” (Ecology Publication #04-06-15).

I.10 B.020 Designation.

All existing lands, shorelands and waters of the City classified according to the provisions contained in this Section, as determined by the City, are designated as wetlands.

I.10 B.030 Application Requirements

Development permit applications shall provide appropriate information on forms provided by the city, including without limitation the information described below. Additional reports or information to identify potential impacts and mitigation measures to wetlands may be required if deemed necessary.
Development. Projects processed by the City within a wetland or its buffer shall provide the following information, in addition to the information described in Section 1.10 B.030(A):

1. Wetland boundary survey and ranking evaluation as defined within this title;
2. Wetland management and mitigation plan as defined within this title;
3. A drainage and erosion control plan as defined within this title; and
4. A grading and excavation plan as defined within this title.

1.10 B.040 General Standards

The following minimum standards shall apply to all development activities occurring within designated wetlands and/or their buffers.

A. Level 1 Critical wetlands will be left undisturbed, unless the development proposal involves appropriate mitigation sequencing and enhancement measures as determined on a site-specific basis.

B. Level 2 Awareness wetlands will be afforded the maximum amount of protection possible through appropriate development techniques such as when an alteration or impact to a critical area is proposed, the biologist shall demonstrate that all reasonable efforts have been taken to mitigate impacts through mitigation sequencing, establishing critical area buffers, access limitations, enhancement of the wetland, etc. To ensure long-term success of a project containing a wetland, a comprehensive wetland mitigation plan will be submitted to the City for its approval. Such plans will provide for sufficient monitoring and contingencies to ensure natural wetland persistence.

C. Proposals for restoration, creation or enhancement of wetlands will be coordinated with appropriate resource agencies providing recommendations to promote adequate design.

D. Activities or uses that would strip the shoreline of vegetative cover, cause substantial erosion or sedimentation, or significantly, adversely affect aquatic life will be prohibited.

E. On-site replacement of wetlands will be provided whenever practical. Where on-site replacement is not feasible or practical due to characteristics of the existing location, replacement will occur within the same watershed and proximity. If necessary, wetlands artificially created voluntarily may be used.

F. A wetland buffer area of adequate width will be maintained between wetlands and adjacent new development to protect the functions and integrity of the wetland. The ultimate width of the established buffer will be based on Section 1.10 B.040(J) below and may be increased dependent on the function and sensitivity of the wetland, the characteristics of the existing buffer, the potential impacts associated with the adjacent and proposed land use, as well as other existing regulations which may control the proposed activity.

G. Wetland buffers will be retained in their natural conditions unless a portion of a wetland buffer is proposed to be utilized in a way that will not have an adverse impact on the wetland, or adequate mitigation cannot or will not be provided. The integrity of the wetland will be maintained as a function of the buffer.

H. Construction of structural shoreline stabilization and flood control works will be minimized.

I. Wetland alteration will not cause significant adverse impacts to wetland ecosystems or surrounding areas, unless the impacts are unavoidable and necessary to the feasibility of the project. In such cases the resultant impacts will demonstrate compliance with mitigation sequencing to be offset through the deliberate restoration, creation, or enhancement of wetlands or other mitigation acceptable to the City.

J. Appropriate buffer areas shall be maintained between all permitted uses and activities and the designated wetland.
1. All buffers shall be measured on a horizontal plane from the wetland edge, as established by the approved wetland boundary survey.

2. All buffer areas shall be temporarily fenced between the construction activity and the buffer with a highly visible and durable protective barrier during construction to prevent access and protect the designated wetland and associated buffer. This requirement may be waived by the city if an alternative to fencing which achieves the same objective is proposed and approved.

3. Except as otherwise allowed, buffers shall be retained in their natural condition. If degradation has previously occurred within the designated buffer area, the degraded areas shall be restored to a natural condition, as approved by the city. Any habitat created, restored or enhanced as compensation for approved wetland alterations shall have the standard buffer required for the category of the created, restored or enhanced wetland. Where buffer disturbance has occurred during construction, re-vegetation with native vegetation shall be required.

4. The width of the buffer may be increased by the city for a development project on a case-by-case basis when a larger buffer is necessary to protect the designated wetland function and value. The determination shall be based on site-specific and project-related conditions which include, without limitation:
   a. The designated wetland is used for feeding, nesting and resting by species proposed or listed by the federal or state government as endangered, threatened, sensitive, candidate, monitor or critical; or if it is outstanding potential habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees;
   b. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts;
   c. The proposed development adjacent to the designated wetland would be a high intensity land use.

5. Standard buffer widths may be modified by the city for a particular development proposal by averaging the required standard buffer widths for that development based on a report submitted by the applicant and prepared by a qualified professional approved by the city (e.g. wetland biologist), and shall only be allowed where the applicant demonstrates all of the following:
   a. Averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property;
   b. The designated wetland contains variations in sensitivity due to existing physical characteristics;
   c. The width averaging will not adversely impact the designated wetland's functional value;
   d. The total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging; and
   e. The buffer width shall not be reduced, at any location, by more than 25 percent of the required buffer in Section 1.10B.040(J)(6).

6. The minimum width of a wetland buffer, as measured from the wetland edge established in the approved wetland boundary survey, shall be as follows, except as may be averaged and/or increased as provided for in this Section:
### Regional Shoreline Master Plan - Bridgeport Critical Areas Regulations

<table>
<thead>
<tr>
<th>Wetland Classification</th>
<th>Wetland Category</th>
<th>Standard Buffer Width</th>
<th>Additional Buffer width if the wetland scores 20-28 habitat points</th>
<th>Additional buffer width if the wetland scores 29-36 habitat points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 Critical Wetland</td>
<td>Category I</td>
<td>100 feet</td>
<td>Add 50 feet</td>
<td>Add 100 feet</td>
</tr>
<tr>
<td></td>
<td>Category II</td>
<td>100 feet</td>
<td>Add 50 feet</td>
<td>Add 100 feet</td>
</tr>
<tr>
<td>Level 2 Awareness Wetland</td>
<td>Category III</td>
<td>80 feet</td>
<td>Add 70 feet</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Category IV</td>
<td>50 feet</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

7. Water dependant uses, as defined by this Program, may be located within a wetland or wetland buffer when the applicant or property owner can demonstrate compliance with Section 1.10 A.080 of Appendix H.
   a. Developments authorized within a wetland buffer shall comply with the following minimum standards:
      i. Designated wetlands and their associated buffers shall be delineated and disclosed on final plats, maps, documents, etc., as critical area tracts, non buildable lots, buffer areas or common areas. Ownership and control may be transferred to a homeowner's association or designated as an easement or covenant encumbering the property.
      ii. All lots within a major subdivision, short plat or binding site plan shall have the outer edge of all required buffers clearly marked on site with permanent buffer edge markers. Buffer markers may be either buffer signs or steel posts painted with a standard color and label, as approved by the Administrator. The markers shall be field verified by the surveyor or biologist of record prior to final plat approval. Each lot shall contain a minimum of three buffer area markers located at the landward edge of the buffer perimeter for each habitat type; one located at each side property line and one midway between side property lines. Covenants for the subdivision shall incorporate a requirement stating that buffer area markers shall not be removed, or relocated, except as may be approved by the Administrator.

### 1.10 B.050 Specific Standards

The following standards shall apply to the activity identified below, in addition to the general standards outlined in Section 1.10 B.040.

A. Docks. Construction of a dock, pier, moorage, float or launch facility may be authorized subject to the following standards:
   1. The dock/facility shall be in conformance with the Regional Shoreline Master Program;
   2. The dock/facility and landward access shall not significantly alter the existing wetland or buffer vegetation; and,
   3. For all land divisions, dock/facilities shall be designed, designated and constructed for joint and/or community use.

B. Road Repair and Construction. When no other practical alternative exists, public or private road repair, maintenance, expansion or construction may be authorized within the outer 25% of a wetland buffer, subject to the following minimum standards:
   1. The road shall serve multiple properties;
   2. No unmitigated impacts to the designated wetland or buffer area shall result from the repair, maintenance, expansion or construction of any public or private road;
   3. The road shall provide for the location of public utilities, pedestrian or bicycle easements, viewing points, etc.; and
4. Road repair and construction shall be the minimum necessary to provide safe traveling surfaces.

C. All developments processed by the City within a wetland buffer shall comply with the following minimum standards:
   1. Inundated and/or submerged lands shall not be used in calculating minimum lot area for proposed lots;
   2. Only fifty percent of the total wetlands on the property, other than inundated and/or submerged lands, shall be used in calculating minimum lot area for proposed lots. All wetland buffers may be included in the calculation of minimum lot area for proposed lots;
   3. All plats shall disclose the presence on each residential lot one building site, including access, that is suitable for development and which is not within the designated wetland or its associated buffer;
   4. All designated wetland areas and their proposed buffers shall be clearly identified on all final plats, maps, documents, etc. and shall be clearly marked in the field with appropriate signs and/or markers, as determined by the City;
   5. Designated wetlands and their associated wetland buffers shall be designated and disclosed on the final plats, maps, documents, etc., as open space tracts, non-buildable lots and buffer areas or common areas, with ownership and control transferred to a homeowner’s association. Associated wetland buffers may alternatively be designated and disclosed on the final plats, maps, documents, etc., as an easement or covenant encumbering the property.

D. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as picnic tables, benches, interpretive centers and signs, viewing platforms and campsites may be authorized within a designated wetland buffer, subject to the following minimum standards:
   1. Trail facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or any other previously disturbed areas;
   2. Trail facilities shall minimize the removal of trees, shrubs, snags and important forest and wildlife habitat;
   3. Viewing platforms, interpretive centers, campsites, picnic areas, benches and their associated access shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the designated wetland;
   4. Trail facilities that parallel the shoreline may be located in the outer 25 percent of the buffer area, and;
      a. Commercial and Public trails shall not exceed 10 feet in width
      b. Private trails shall not exceed 4 feet in width;
   5. Trails that provide direct shoreline access shall not exceed 4 feet in width and shall be kept to the minimum number necessary to serve the intended purpose; and
   6. All facilities shall be constructed with materials complimentary to the surrounding environment.

E. Utilities. When no other practical alternative exists, construction of utilities within a wetland buffer may be authorized, subject to the following minimum standards:
   1. Utility corridors shall be jointly used;
2. Corridor construction and maintenance shall protect the designated wetland buffer, and shall be aligned to avoid cutting trees greater than six inches in diameter at breast height when possible;

3. No pesticides, herbicides or other hazardous or toxic substances shall be used;

4. Corridors shall be re-vegetated to pre-construction densities with appropriate native vegetation immediately upon completion of construction, or as soon thereafter as possible given seasonal growing constraints. The utility purveyor shall provide an assurance device or surety in accordance with the Section that ensures such vegetation survives;

5. Any additional corridor access for maintenance shall be provided as much as possible at specific points rather than by parallel roads. If parallel roads are necessary they shall be no greater than fifteen feet in width, and shall be contiguous to the location of the utility corridor on the side opposite the wetland;

6. Construction of sewer lines within a designated wetland buffer which are necessary to meet state and/or local health code requirements shall not adversely impact the function and quality of the designated wetland buffer.

7. 

Section 1.10 C
Fish and Wildlife Habitat Conservation Areas

Sections:

1.10 C.010 Classification
1.10 C.020 Designation
1.10 C.030 Application Requirements
1.10 C.040 General Standards
1.10 C.050 Specific Standards

1.10 C.010 Classification

A. All fish and wildlife habitat conservation areas shall be classified by the City to reflect the relative function, value and uniqueness of the habitat area as established through an approved habitat ranking evaluation submitted by the applicant for any development permit. The City may use the following information sources as guidance in identifying the presence of potential fish and wildlife habitat conservation areas and the subsequent need for a habitat boundary survey:

1. All sources identified in Section 1.10 A.020;
2. The city shoreline master program;
3. Washington Department of Fish and Wildlife priority habitat and species maps;
4. Previous habitat boundary surveys; and
5. On-site inspection.

B. Fish and wildlife habitat conservation areas shall be classified according to the following system:

1. Level 1 Critical: Are habitat area which may be significantly disrupted by development in the immediate vicinity. Critical habitat may include winter ranges, migration routes, nesting sites, perches and wetlands, riparian, aquatic and upland habitat areas. The Columbia River is a Level 1 critical area.
2. Level 2 Awareness: These habitat areas are those surrounding or adjacent to designated Level 1 Critical areas that if disturbed, could impact the Level 1 area.

**I.10 C.020 Designation**

All existing areas of the City classified according to the provisions contained in this Section, as determined by the City, are designated as fish and wildlife habitat conservation areas.

**I.10 C.030 Application Requirements**

Development permit applications shall provide appropriate information on forms provided by the city, including without limitation the information described below. Additional reports or information to identify potential impacts and mitigation measures to fish and wildlife habitat conservation areas may be required if deemed necessary.

Development Projects processed by the City within a fish or wildlife habitat conservation area or its buffer shall provide the following information, in addition to the information described in Section I.10 A.100:

1. Habitat boundary survey and ranking evaluation as defined in this title;
2. Habitat management and mitigation plan as defined in this title;
3. A drainage and erosion control plan as defined in this title; and
4. A grading and excavation plan as defined in this title.

**I.10 C.040 General Standards**

The following minimum standards shall apply to all development activities occurring within designated habitat conservation areas and/or their associated buffers.

A. Critical habitat conservation areas will be left undisturbed, unless the development proposal involves appropriate mitigation and enhancement measures, as determined on a site specific basis.

B. Whenever possible, the maximum amount of vegetation will be maintained in its natural state and will be disturbed only as minimally necessary for the development.

C. Riparian vegetation will not be removed unless there are no other alternatives available. When it is necessary, only those areas of vegetation that are absolutely unavoidable may be cleared, and shall be re-vegetated with natural riparian vegetation as soon as possible and at an area ratio of 1:1 for the development buffer and area replacement ratio 2:1 for riparian vegetation.

D. Re-vegetation of disturbed areas which re-establishes desirable native plants adapted to the site that enhance applicable fish and wildlife populations will be, at a minimum, encouraged, as specified in the conditions for approval of the development. Said, re-vegetation will be maintained in good growing condition, as well as being kept free of noxious weeds.

E. When appropriate, fencing standards that protect wildlife, as well as providing for the operation and protection of a particular land use, may be part of the conditions placed on approval of a development application.

F. Access restrictions may be necessary which protect fish and wildlife habitat conservation areas, particularly during critical times of the year.

G. Particularly in instances where a development proposal involves more intense uses, all or part of the required open space (common and/or private) will be dedicated to fish and wildlife habitat conservation, based on the extent and importance of the habitat.
H. In certain instances it may be necessary to provide vegetation screenings and to provide controls on domestic animals to protect the function of critical habitat areas by reducing the potential for harassment from people and/or domesticated animals.

I. Appropriate buffer areas shall be maintained between all permitted uses and activities and designated habitat conservation areas.
   1. All buffers shall be measured on a horizontal plane from the habitat edge, as established by the approved habitat boundary survey. For buffers adjacent to aquatic habitat, distances shall be measured from the ordinary high water mark (OHWM), or from the top of the bank where the OHWM cannot be identified. The distance of the buffer shall be increased to include stream-side wetlands which provide overflow storage for storm waters, feed water back to the water body during low flows or provide shelter and food for fish. In braided channels, the OHWM or top of bank shall be defined so as to include the entire stream feature.

   2. All buffer areas shall be temporarily fenced between the construction activity and the buffer with a highly visible and durable protective barrier during construction to prevent access and protect the designated habitat conservation area and associated buffer. This requirement may be waived by the city if an alternative to fencing which achieves the same objective is proposed and approved.

   3. Except as otherwise allowed, buffers shall be retained in their natural condition. Any habitat created, restored or enhanced as compensation for approved habitat alterations shall have the standard buffer required for the category of the created, restored or enhanced habitat.

   4. The width of the buffer may be increased by the city for a development project on a case-by-case basis when a larger buffer is necessary to protect the designated habitat conservation area function and value. The determination shall be based on site-specific and project-related conditions which include without limitation:
      a. The designated habitat conservation area is used for feeding, nesting and resting by species proposed or listed by the federal or state government as endangered, threatened, sensitive, candidate, monitor or critical; or if it is an outstanding potential habitat for those species or has unusual nesting or resting sites such as heron rookeries or raptor nesting trees;
      b. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse habitat impacts;
      c. The proposed development adjacent to the designated habitat conservation area would be a high intensity land use.

   5. Standard buffer widths may be modified by the city for a development proposal by averaging buffer widths based on a report submitted by the applicant and prepared by a qualified professional approved by the city (e.g. wildlife biologist), and shall only be allowed where the applicant demonstrates all of the following:
      a. Averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property;
      b. The designated habitat conservation area contains variations in sensitivity due to existing physical characteristics;
      c. The width averaging will not adversely impact the designated habitat conservation area’s functional value;
d. The total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging; and
e. The buffer width shall not be reduced, at any location, by more than 25 percent of the required buffer described below, and in no case may the buffer be less than 75 feet in width.

J. Fish and Wildlife Conservation Areas. The width of a designated fish and wildlife habitat conservation area buffer shall be as follows:

<table>
<thead>
<tr>
<th>Environment Designation</th>
<th>Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Intensity</td>
<td>100</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>100</td>
</tr>
<tr>
<td>Shoreline Residential</td>
<td>100</td>
</tr>
<tr>
<td>Urban Conservancy</td>
<td>100</td>
</tr>
<tr>
<td>Natural</td>
<td>150</td>
</tr>
</tbody>
</table>

K. Predesignation in the Urban Growth Area:
   The following table applies to the UGA outside of the City Limits when an annexation of the City Limits may occur:

<table>
<thead>
<tr>
<th>Environment Designation</th>
<th>Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Intensity</td>
<td>100</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>100</td>
</tr>
<tr>
<td>Shoreline Residential</td>
<td>100</td>
</tr>
<tr>
<td>Urban Conservancy</td>
<td>100</td>
</tr>
<tr>
<td>Natural</td>
<td>150</td>
</tr>
</tbody>
</table>

L. View Corridors. The development or maintenance of view corridors can provide the general public and property owners of single family residences, opportunities for visual access to water bodies associated with shoreline lots. One view corridor may be permitted per lot, when consistent with the provisions of this Chapter. A mitigation and management plan as required by this chapter must be submitted for review and approval; either with a complete building permit application for a new single family residence or associated with an existing single family residence.

1. In addition to the submittal of a complete mitigation and management plan, an applicant must submit the following materials:
   a. A signed application form by the property owner of the shoreline proposed for vegetation alterations.
   b. A scaled graphic which demonstrates a side, top and bottom parameter for the view corridor with existing vegetation and proposed alterations. The view corridor shall be limited to 25% of the width of the lot, or 25’, whichever distance is less.
   c. A graphic and/or site photos for the entire shoreline frontage which demonstrates that the homesite and proposed or existing home does or will not when constructed have a view corridor of the water body, taking into account site topography and the location of shoreline vegetation on the parcel.
   d. Demonstration that the applicant does not have an existing or proposed shoreline access corridor or dock access corridor.

2. Applications for view corridors must also be consistent with the following standards:
   a. Native vegetation removal shall be prohibited.
b. Pruning of native vegetation shall not exceed 30% of a tree’s limbs, and shrubs shall not be pruned to a height less than 6’ No tree topping shall occur. Pruning of vegetation waterward of the ordinary high water mark is prohibited.

c. Non-native vegetation within a view corridor may be removed when the mitigation and management plan can demonstrate a net gain in site functions, and where impacts are mitigated at a ratio of 2:1.

d. Whenever possible, view corridors shall be located in areas dominated with non-native vegetation and invasive species.

e. Pruning shall be done in a manner that shall ensure the continued survival of vegetation.

f. The applicant’s biologist shall clearly establish that fragmentation of fish and wildlife habitat will not occur, and that there is not a net loss of site ecological functions.

g. View corridors are not permitted in the Natural Environment Designation.

h. A view corridor may be issued once for a property. No additional vegetation pruning for the view corridor is authorized except as may be permitted to maintain the approved view corridor from the regrowth of pruned limbs. Limitations and guidelines for this maintenance shall be established in the mitigation and management plan by the applicant’s biologist, to be reviewed and approved by the Administrator.

i. Sites which have had buffer widths reduced or modified by any prior action consistent with this Program are not eligible for the provisions of this section. Sites which utilize this provision are not eligible for any future buffer width reductions, under any provision of this Program, except as administered under Section 6.8 Variances.

M. Water dependant uses, as defined by this Program, may be located within a Fish & Wildlife habitat conservation area or buffer when the applicant or property owner can demonstrate compliance with Section 1.10 A.100 of Appendix H.

I. Developments authorized within a designated habitat conservation area or buffer shall comply with the following minimum standards:

a. Designated habitat conservation areas and their associated buffers shall be delineated and disclosed on final plats, maps, documents, etc., as critical area tracts, non buildable lots, buffer areas or common areas. Ownership and control may be transferred to a homeowner’s association or designated as an easement or covenant encumbering the property.

b. All lots within a major subdivision, short plat or binding site plan shall have the outer edge of all required buffers clearly marked on site with permanent buffer edge markers. Buffer markers may be either buffer signs or steel posts painted with a standard color and label, as approved by the Administrator. The markers shall be field verified by the surveyor or biologist of record prior to final plat approval. Each lot shall contain a minimum of three buffer area markers located at the landward edge of the buffer perimeter for each habitat type; one located at each side property line and one midway between side property lines. Covenants for the subdivision shall incorporate a requirement stating that buffer area markers shall not be removed, or relocated, except as a may be approved by the Administrator.

c. Residential developments with the potential for two or more dwelling units shall disclose on the face of the plat whether the development will be served by joint use or community dock facilities or a combination thereof. Access easements and dock locations shall be identified by a qualified professional biologist who will address the standards of Section 1.10 A.100(D)(8) of Appendix H. The identification of access easements and dock locations is not a substitute for permitting required in order to develop moorage facilities and in no way guarantees such an approval.
1.10 C.050 Specific Standards

The following standards shall apply to the activity identified below, in addition to the general standards outlined in Section 1.10 C.040.

A. Docks. Construction of a dock, pier, moorage, float or launch facility may be authorized, subject to the following standards:
   1. The dock/facility shall be in conformance with the Regional Shoreline Master Program;
   2. The dock/facility and landward access shall not significantly alter the existing habitat or buffer vegetation; and,
   3. For all land divisions, dock/facilities shall be designed, designated and constructed for joint use.

B. Road Repair and Construction. When no other practical alternative exists, public or private road or repair, maintenance, expansion or construction may be authorized within the outer 25% of a designated habitat conservation area, subject to the following minimum standards:
   1. The road shall serve multiple properties;
   2. No significant adverse impacts to the designated habitat conservation area shall result from the repair, maintenance, expansion or construction of any public or private road;
   3. The road shall provide for the location of public utilities, pedestrian or bicycle easements, viewing points, etc.; and

Road repair and construction is the minimum necessary to provide safe traveling surfaces.

C. All developments processed by the City within a designated habitat conservation area shall comply with the following minimum standards:
   1. Inundated and/or submerged lands shall not be used in calculating minimum lot area for proposed lots;
   2. A habitat management and mitigation plan shall be required for major and minor developments containing Level 1 Critical habitat conservation areas, and may be required for major developments containing Level 2 Awareness habitat conservation areas;
   3. All plats shall disclose the presence on each residential lot one building site, including access, that is suitable for development and which is not within the designated habitat conservation area or its associated buffer.
   4. All designated habitat conservation areas and their associated buffers shall be clearly identified on all final plats, maps, documents, etc.
   5. Designated habitat conservation areas and their associated buffers shall be designated and disclosed on the final plats, maps, documents, etc., as open space tracts, non-buildable lots, buffer areas or common areas, with ownership and control transferred to a homeowner’s association. Associated habitat conservation area buffers may alternatively be designated and disclosed on the final plats, maps, documents, etc., as an easement or covenant encumbering the property.

D. Stream Crossings. Expansion or construction of stream crossings may be authorized within a designated habitat conservation area, subject to the following minimum standards:
   1. Bridges are required for streams that support salmonids, unless culvert design and construction ensures proper passage opportunities;
   2. All crossings using culverts shall use superspan or oversized culverts;
3. Crossings shall not occur in salmonid spawning areas unless no other feasible crossing site exists;  
4. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary high water marks unless no other feasible alternative placement exists;  
5. Crossings shall not diminish flood carrying capacity; and  
6. Crossings shall serve multiple properties whenever possible.  

E. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as picnic tables, benches, interpretive centers and signs, viewing platforms and campsites may be authorized within a habitat conservation area, subject to the following minimum standards:  
1. Trail facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or any other previously disturbed areas;  
2. Trail facilities shall minimize the removal of trees, shrubs, snags and important habitat features;  
3. Viewing platforms, interpretive centers, campsites, picnic areas, benches and their associated access shall be designed and located to minimize disturbance of wildlife and/or critical characteristics of the designated habitat conservation area;  
4. Trail facilities that parallel the shoreline may be located in the outer 25 percent of the buffer area, and:  
   a. Commercial and Public trails shall not exceed 10 feet in width  
   b. Private trails shall not exceed 4 feet in width;  
5. Trails that provide direct shoreline access shall not exceed 4 feet in width and shall be kept to the minimum number necessary to serve the intended purpose; and  
6. All facilities shall be constructed with materials complimentary to the surrounding environment.  

F. Utilities. When no other practical alternative exists, construction of utilities within a designated habitat conservation area may be authorized, subject to the following minimum standards:  
1. Utility corridors shall be jointly used;  
2. Corridor construction and maintenance shall protect the designated habitat conservation area, and shall be aligned to avoid cutting trees greater than six inches in diameter at breast height when possible;  
3. No pesticides, herbicides or other hazardous or toxic substances shall be used;  
4. Corridors shall be re-vegetated to pre-construction densities with appropriate native vegetation immediately upon completion of construction, or as soon thereafter as possible given seasonal growing constraints. The utility purveyor shall provide an assurance device or surety in accordance with the Section which ensures that such vegetation survives;  
5. Any additional corridor access for maintenance shall be provided as much as possible at specific points rather than by parallel roads. If parallel roads are necessary they shall be no greater than fifteen feet in width, and shall be contiguous to the location of the utility corridor on the side opposite the designated habitat conservation area;  
Construction of sewer lines within a designated habitat conservation area that are necessary to meet state and/or local health code requirements shall not adversely impact the function and quality of the designated habitat conservation area.  

Chapter 1.10 D Aquifer Recharge Areas
Sections:
I.10 D.010 Permitted Uses and Activities
I.10 D.020 Classification
I.10 D.030 Designation
I.10 D.040 Application Requirements - Vulnerability Determination System – Procedures, Criteria
I.10 D.050 Determining Vulnerability Rating
I.10 D.060 General Standards
I.10 D.070 Specific Standards
I.10 D.010 Permitted Uses and Activities

Uses and activities allowed within designated aquifer recharge areas are those uses permitted by the zoning district, subject to the provisions of this chapter.

I.10 D.020 Classification
A. Aquifer recharge areas will be rated according to the vulnerability of the aquifer, with vulnerability being the combined effect of susceptibility to contamination and the contamination loading potential. The categories of vulnerability shall be High, Medium and Low, with high vulnerability being characterized by a combination of land uses that contribute to contamination that may degrade ground water, and hydrogeologic conditions that facilitate that degradation.

1. Hydrogeologic susceptibility will be characterized by looking at the following attributes:
   Depth to ground water;
   Aquifer properties such as hydraulic conductivity and gradients;
   Soil (texture, permeability, and contaminant attenuation properties);
   Characteristics of the vadose zone including permeability and attenuation properties; and
   Other relevant factors.

2. Contamination loading potential can be evaluated by considering the following:
   General land use;
   Waste disposal sites;
   Agriculture activities;
   Well logs and water quality test results;
   Density of septic systems in use in the area; and
   Other information about the potential for contamination.

B. Aquifer recharge areas shall be classified according to the following system:
   1. Level 1: Critical Aquifer Recharge Areas shall be those areas found to have a High vulnerability rating.
   2. Level 2: Awareness Aquifer Recharge Areas shall be those areas found to have a Medium vulnerability rating.

I.10 D.030 Designation
All existing areas of the City classified according to the provisions contained in this chapter, as determined by the city, are designated as aquifer recharge areas. Because there is insufficient
scientific data at this time to determine with any precision and/or certainty the location of areas having a critical recharging effect on aquifers used for potable water, specific designations have not been made. However, the best available science suggests that using a vulnerability determination system based on the above classification system will allow the City to designate critical aquifer recharge areas using a conservative approach, which provides a worst case scenario for contaminant movement in the subsurface. As areas are determined to be either a Level 1: Critical or Level 2: Awareness Aquifer Recharge Area, they will be included on a map or maps that are maintained by the City. Additionally, if any of the following areas are established within the City’s urban growth area, they shall be included on these maps:
A. Sole source aquifer recharge areas designated pursuant to the Federal Safe Drinking Water Act;
B. Areas established for special protection pursuant to the Washington State groundwater management program;
C. Areas designated for wellhead protection pursuant to the Federal Safe Drinking Water Act; and,
D. Aquifer recharge areas mapped and identified by a qualified ground water scientist.

1.10 D.040 Application Requirements - Vulnerability Determination System - Procedures, Criteria
A. Development permit applications shall provide appropriate information on forms provided by the city, including without limitation the information described below. Additional reports or information to identify potential impacts and mitigation measures to aquifer recharge areas may be required if deemed necessary.
B. The procedure for determining if a development proposal must complete a vulnerability rating shall be as follows:
   1. The applicant shall submit a certified statement with the application materials indicating which of the criteria identified in subsection B below apply to the development proposal, if any. The application will not be considered complete until this certified statement is submitted.
   2. If the applicant’s statement asserts that the criteria do not apply, as identified in item A.3. below, to the development proposal, the City will accept the statement and proceed with the development permit review. However, if the City has or obtains information prior to the permit or approval being finalized that clearly establishes the applicant’s statement is incorrect, the applicant will be advised in writing of the inconsistent information and must either (a) provide an amended statement adding the evaluation criteria as being applicable and determine the vulnerability rating of the development pursuant to 1.10 D.050; or (b) present sufficient countering information clearly establishing that the basis for the City’s concern is incorrect. If the applicant selects to proceed under (b), after receiving the applicant’s information, the City shall review the information and obtain whatever additional assistance may be required to resolve the issue. The final determination as to whether a determination of vulnerability is required shall be made by the City.
   3. If a development proposal meets criteria 1, 2, 3 or 4 below, or if the site or development proposal meets any two of the remaining criteria, the application shall determine the vulnerability rating for the development proposal according to 1.10 D.050.
4. If the development has a high or medium vulnerability rating, the development shall be subject to the general and specific standards contained within this chapter.

C. The applicant shall be required to determine the vulnerability rating for any development permit, not otherwise exempted from this Chapter, if the site or development meets criteria 1, 2, 3, or 4 or if it meets two or more of the remaining criteria below:

1. The development proposal is within a wellhead protection area designated under WAC 246-290 Public Water Supplies;
2. The development proposal is within an aquifer recharge area mapped and identified by a qualified groundwater scientist;
3. The site will be utilized for processing, storing, or handling hazardous substance (as now or hereafter defined in RCW 70.105D Hazardous Waste Cleanup – Model Toxics Control Act), in applications or quantities larger than is typical of household use;
4. The site will be utilized for hazardous waste treatment and storage as set forth in RCW 70.105 Hazardous Waste Management, as now or hereafter amended;
5. The site contains highly permeable soils as designated in the NRCS Soil Survey for the Douglas Area;
6. The development proposal is within a sole source aquifer recharge area designated pursuant to the Federal Safe Drinking Water Act;
7. The development proposal is within an area established for special protection pursuant to a groundwater management program, RCW chapters 90.44 Regulations of Public Ground Waters, 90.48 Water Pollution Control and 90.54 Water Resources Act of 1971, and WAC Chapters 173-100 Ground Water Management Areas and 173-200 Water Quality Standards for Ground Waters of the State of Washington;
8. The development proposal involves a major or short subdivision and includes present or future plans to construct three or more dwelling units where the dwelling units will not be connected to a public sewer system and any of the lots are less than 1 net acre in size;
9. The development proposal involves a commercial and/or industrial site that is not on a public sewer system and the main structure exceeds four thousand (4,000) square feet;
10. The development is within two hundred (200) feet of the ordinary high water mark of a perennial river, stream, lake or pond.

I.10 D.050 Determining Vulnerability Rating

A. General. The vulnerability matrix is used to determine the vulnerability of the development and to rate it as high, medium or low. This can be done by determining the “contaminant loading potential” of a proposed land use and the natural “susceptibility” of the site as outlined in this chapter and creating a numerical vulnerability value for a proposed land use. When a proposed use is determined to have a medium or high vulnerability rating, the protection measures described in this chapter shall be implemented that protect the potable water supply.

B. Determining Susceptibility. There are three basic components to determine a site’s susceptibility, as follows:

1. Permeability of the vadose zone. The vadose zone is composed of both the soil and the geologic materials under lying the soil. To adequately determine the overall ease
with which water will travel from land surface to the aquifer, it is necessary to
determine the overall permeability of both soil and geologic media. Soil permeability can
be determined through use of the NRCS Soil Survey for Douglas County. The values
shown on these pages are given in the inches per hour that water moves downward
through a saturated soil. A determination of the permeability of the geologic material
underlying the soil is more problematic.

a. Incrementally, the permeability of local soils (upper vadose zone) is grouped
into four ranges that are assigned a relative value to be used for determining
susceptibility on the matrix. Where conclusive information does not exist for
permeability of the soil, a relative value of 3 will be assigned.

### Soil Permeability Table Based on Soil Survey

<table>
<thead>
<tr>
<th>Condensed Description</th>
<th>Soil Survey Description</th>
<th>Permeability (in / hr)</th>
<th>Permeability (cm / sec)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Slow</td>
<td>Very Slow</td>
<td>&lt; 0.06</td>
<td>&lt; .00453</td>
<td>0</td>
</tr>
<tr>
<td>Slow</td>
<td>Slow</td>
<td>0.06 - .20</td>
<td>.00453 - .0141</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Moderately Slow</td>
<td>0.20 - 0.60</td>
<td>.0141 - .0423</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>Moderate</td>
<td>0.60 - 2.0</td>
<td>.0423 - .1411</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Moderately Rapid</td>
<td>2.0 - 6.0</td>
<td>.1411 - .4233</td>
<td>2</td>
</tr>
<tr>
<td>Rapid</td>
<td>Rapid</td>
<td>6.0 - 20</td>
<td>.4233 - 1.411</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Very Rapid</td>
<td>&gt; 20</td>
<td>&gt; 1.411</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Permeability of the lower vadose zone can be estimated using the Geologic
Matrix Table below by determining the material type and assigning the
appropriate permeability range for the material(s) overlying the uppermost
aquifer. In cases where heterogeneous material are encountered, the least
permeable layer with a thickness of not less than five (5) feet shall determine the
overall permeability to be applied to the entire vadose zone, excluding the soil
layer. Where conclusive information does not exist for permeability of the
geologic matrix, a relative value of 3 will be assigned.

### Geologic Matrix Table

<table>
<thead>
<tr>
<th>Condensed Description</th>
<th>Geologic Matrix</th>
<th>Permeability (cm / sec)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Slow</td>
<td>Unfractured Igneous or Metamorphic Bedrock, Shale</td>
<td>$10^{-13}$ - $10^{-9}$</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Marine clay, Clay, dense Sandstone, Hardpan</td>
<td>$10^{-9}$ - $10^{-7}$</td>
<td>0</td>
</tr>
<tr>
<td>Slow</td>
<td>Loess, Glacial Till, Fractured Igneous or Metamorphic Bedrock</td>
<td>$10^{-8}$ - $10^{-5}$</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Silt, Clayey Sands, Weathered Basalt</td>
<td>$10^{-7}$ - $10^{-3}$</td>
<td>2</td>
</tr>
<tr>
<td>Moderate</td>
<td>Silly Sands, Fine Sands, Permeable Basalt</td>
<td>$10^{-4}$ - $10^{-1}$</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Clean Sands, Karst Limestone</td>
<td>&gt;.1 - 1.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sand and Gravel</td>
<td>&gt;1.0 - 10</td>
<td>3</td>
</tr>
</tbody>
</table>
2. Depth to Groundwater. Depth to groundwater can be determined by utilizing local well log information or specific well information for the site. Depth to groundwater is also assigned a relative value used for determining susceptibility on the matrix. Where conclusive information does not exist for depth to groundwater, a relative value of 3 will be assigned.

Depth to Groundwater Table

<table>
<thead>
<tr>
<th>Condensed Description</th>
<th>Depth to Water (Feet)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>Confined Aquifer</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>&gt; 50</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>25 - 50</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>10 - 25</td>
<td>2</td>
</tr>
<tr>
<td>High</td>
<td>0 - 10</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Slope. Slope, or gradient, is related to the infiltration characteristics of an area. The steeper the slope, the less infiltration of surface waters occur. Slope is assigned a relative value used for determining susceptibility on the matrix. Where conclusive information does not exist for slope, a relative value of 3 will be assigned.

<table>
<thead>
<tr>
<th>Slope - As a Percent</th>
<th>Slope Relative Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;45%</td>
<td>0</td>
</tr>
<tr>
<td>&gt;30% - 45%</td>
<td>1</td>
</tr>
<tr>
<td>15% - 30%</td>
<td>2</td>
</tr>
<tr>
<td>&lt;15%</td>
<td>3</td>
</tr>
</tbody>
</table>

C. Determining the Susceptibility Rating. A susceptibility rating is determined by adding the relative values of permeability of the soils and geologic matrix of the vadose zone, depth to groundwater and slope. This is a baseline determination for susceptibility. The range of values are as follows:

1. High Susceptibility Rating = total range from 8 - 12
2. Medium Susceptibility Rating = total range from 4 – 7
3. Low Susceptibility Rating = total range from 0 - 3

D. Determining the Contaminant Loading Rating. Contaminant loading potential is dependent on the presence of critical materials on the site. A Critical Material is a substance present in sufficient quantity that its accidental or intentional release would result in the impairment of the aquifer water to be used as potable drinking water.

1. For the purpose of administration of this section, the City will maintain a Critical Materials Use Activity List, which is a list of commercial and industrial activities known to use critical materials, coupled with the names of critical materials normally associated
with the activity. The following situations will be considered as having a high contaminant loading rating, unless the project proponent provides assurances otherwise:

- Proposed activities fitting one of the general business descriptions provided or having one of the specified Standard Industrial Classification (SIC) codes identified on the City’s Critical Materials Use Activity List;
- Sites or uses that the City believes would be utilized for processing, storing or handling hazardous substance(s) (as now or hereafter defined in RCW 70.105D Hazardous Waste Cleanup-Model Toxics Control Act) in applications or quantities larger than is typical of household use;
- Sites that the City believes will be utilized for hazardous waste treatment and storage as set forth in RCW 70.105 Hazardous Waste Management, as now or hereafter amended, but may not be covered in the critical materials use activity list;
- Other contaminants and/or SIC Codes that are not currently found on the Critical Materials Use Activity List that are subsequently determined by the City to have a high contaminant loading rating.

Those uses or activities determined NOT to have a high contaminant loading rating are considered to have a low contaminant loading potential and rating.

2. The following process shall be used to determine whether or not critical materials are involved:

An initial screening will be performed by the City by comparing the proposed use and any other pertinent information provided by the proponent at his/her expense, with the Critical Materials Use Activity List. The City will exercise any discretion in judgment in the favor of Aquifer protection.

If the proposed use is determined to meet one of the criteria under section 1.10 D.050(D)(1) above, the City shall require the applicant to provide a list of materials, including quantities to be used, stored or transported in conjunction with the proposed activity. Additional information may be required by the City to be provided by the proponent at his or her expense.

After the review of the information supplied by the applicant, the City will either confirm the designation as a Critical Materials Use Activity or nullify the tentative designation.

If the designation as a Critical Materials Use Activity is confirmed, the applicant may respond by accepting the designation as a Critical Materials Use Activity or he/she may appeal the designation through the procedures governing appeals of administrative decisions, according to Title 19 BMC. Where an appeal is filed, the Washington Department of Ecology, the Washington Department of Health and the Douglas-Douglas Health District shall be notified of all appeal proceedings.

E. Vulnerability Matrix. A determination of a High, Medium, or Low Vulnerability rating is made by the City from the vulnerability matrix by identifying susceptibility and contaminant loading ratings, as identified above (Susceptibility = High [8-12], Medium [4-7] or Low [0-3]; Contaminant Loading = High or Low). After determining the susceptibility and contaminant loading ratings for the proposed use and site, the appropriate box on each axis of the vulnerability matrix below will be checked to determine the vulnerability rating. The
vulnerability of the site is then determined by the intersection of the susceptibility rating and the contaminant loading rating to be low, medium, or high.

**Vulnerability matrix**

<table>
<thead>
<tr>
<th>CONTAMINANT LOADING</th>
<th>LOW</th>
<th>HIGH</th>
<th>General Description (susceptibility)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 TO 3</td>
<td></td>
<td></td>
<td>Typically low permeability. Depth to groundwater is fairly deep and fairly significant slopes</td>
</tr>
<tr>
<td>4 TO 7</td>
<td></td>
<td></td>
<td>Higher permeability and shallower depth to groundwater. Less slope potential.</td>
</tr>
<tr>
<td>8 TO 12</td>
<td></td>
<td></td>
<td>Extremely permeable soils. Shallow depth to groundwater and fairly flat terrain.</td>
</tr>
</tbody>
</table>

**1.10 D.060 General Standards**
The following minimum standards shall apply to all development activities determined to have a high or medium vulnerability rating, as determined by this Chapter.
A. Development activities within an aquifer recharge area shall be designed, developed and operated in a manner that will not potentially degrade groundwater resources.
B. Alternative site designs, phased development and/or groundwater quality monitoring may be required to reduce contaminant loading where site conditions indicate that the proposed action will potentially degrade groundwater quality.
C. Open space may be required on development proposals overlying areas that are highly susceptible to contamination of groundwater resources.
D. When wells are required to be abandoned, the applicant shall ensure that they are abandoned according to the state Department of Ecology requirements.
E. Known contaminants shall be removed from stormwater runoff prior to their point of entry into surface or groundwater resources using available and reasonable best management practices;
F. Changes in occupancy and/or use of an existing site, and/or expansions of existing activities are subject to complete evaluation by the city under the provisions of this Chapter.

1.10 D.070 Specific Standards
The following standards shall apply to the activity identified below, in addition to the general standards outlined in Section 1.10 D.060.
A. Any agricultural activities shall incorporate best management practices concerning waste disposal, fertilizer use, pesticide use, and stream corridor management. If necessary, farmers shall seek technical assistance from the Foster Creek Conservation District, WSU Cooperative Extension Agent and local field agents.
B. Where otherwise permitted by applicable zoning regulations, landfills, junkyards, salvage yards and auto wrecking yards are prohibited within designated critical aquifer recharge areas. Landfills, junkyards, salvage yards and auto wrecking yards that are proposed to be located outside of designated critical aquifer recharge areas and that have a high or medium vulnerability rating must satisfactorily demonstrate that potential negative impacts to the groundwater would be overcome in such a manner as to prevent adverse impacts to groundwater.
C. Fertilizer, herbicide and pesticide management practices of schools, parks, golf courses and other non-residential facilities that maintain large landscaped areas shall be evaluated in relation to best management practices as recommended by the Cooperative Extension Service.
D. Commercial, industrial and/or mining uses shall comply with the following minimum provisions:
   1. For the purposes of this Section, all forms of mining activities shall be considered an industrial use.
   2. All commercial and industrial uses that are rated as having a medium or high vulnerability, shall submit a contingency plan that identifies the following:
      Types of hazardous wastes that would be used for the proposed land use.
      On site containment facilities designed to handle accidental releases of critical materials.
      Spill response and notification procedures.
   3. All activities designated as Critical Materials Use Activities shall only be approved so that:
      Facilities will be designed and built so that any spilled or leaked materials are contained on site; and
Facilities will be designed and built so that any spilled or leaked materials cannot infiltrate into the ground; and
No permanent disposal of any waste containing critical materials shall be allowed on site.

4. Commercial or industrial activities designated as Critical Materials Use Activities shall have specially designed and installed storm runoff drainage facilities in areas where spills might occur. Such facilities shall be designed and installed to:
   Prevent the co-mingling of storm runoff and critical materials spills; and
   Enhance spill cleanup procedures

5. Mining activities in areas determined to have a medium or high vulnerability shall comply with the following conditions:
   a. Six (6) foot fencing shall be provided and maintained in good condition at all times in the following locations:
      i. Exterior boundary of any portion of any site on which active operations exist; and
      ii. Exterior boundary of any portion of the site that has been mined and not yet rehabilitated.
   b. No excavation within 100 feet of a well or surface water used for potable drinking water;
   c. No excavation into an aquifer used for potable drinking water is allowed;
   d. The operators shall comply with all existing water quality monitoring regulations of WSDOE and the Douglas-Douglas Health District;
   e. A drainage channel shall be constructed around active gravel pit areas to keep surface runoff from outside the pit excavation from entering the pit areas;
   f. Fuel storage areas and service facilities shall incorporate provisions to prevent lubricants and petroleum products from contaminating either pit areas or drainage channels;
   g. No liquid, asphalt, cement, or water used in a mining operation shall be disposed of in the bottom of a pit;
   h. A protective eight (8) foot high berm or retaining wall shall be required adjacent to property lines where the edge of a pit is within one hundred (100) feet of a street or railroad right-of-way;
   i. The use of fertilizers, pesticides, herbicides, and critical materials shall not be allowed within (50) feet of an active pit;
   j. A sufficient amount of topsoil or suitable material shall be retained on site for re-vegetation/rehabilitation purposes;
   k. Reclamation plans for these sites shall include:
      i. A specification of the amount of materials to be left between the aquifer high-water mark (or elevation) and the final grade of the reclaimed site;
      ii. Physical barriers, as required in Subsection 7.6(F)(8) above, shall remain unless they are specifically permitted to be removed in a subsequent land use decision by the hearing body; and
      iii. Provisions shall be made for limitations of access to, and activities within, the rehabilitated site until the use of the land is changed.

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I. In rehabilitated gravel pits over an aquifer used for a potable water source, new uses requested for the property may be limited or specifically conditioned as determined by the appropriate Hearing Body; and
m. All mining activities shall be reclaimed per a reclamation plan approved by the Washington State Department of Natural Resources.

E. Utility facilities shall be reviewed and approved consistent with the requirements of Section 1.10 D.070(D), above.
F. Underground storage tanks and on-site sewage disposal systems are prohibited within designated critical aquifer recharge areas. Underground storage tanks and on-site sewage disposal systems that are proposed to be located outside of designated critical aquifer recharge areas and that have a high or medium vulnerability rating must satisfactorily demonstrate that potential negative impacts to the groundwater would be overcome in such a manner as to prevent adverse impacts to groundwater.
G. All residential land divisions within the City of Bridgeport Urban Growth Area shall be connected to the city's sanitary sewage collection and treatment facilities. Where an area subject to a land division process occurs within a designated aquifer recharge area, as describe by this chapter, a notation shall appear on the face of the final plat indicating the aquifer recharge area designation, and referencing the requirements of this Chapter.
H. Wood treatment facilities shall conform to the provisions of Section 1.10 D.070(D). Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces, both natural and man made, are prohibited.
I. As defined and regulated in WAC Chapter 173-24 Underground Injection Control Program, Class I, III and IV underground injection wells are prohibited. Class II injection wells are permitted under Chapter 173-24 WAC by the Washington State Department of Ecology in conjunction with the Washington State Department of Natural Resources. Class V injection wells, involving the injection of critical materials, may be prohibited by the Washington State Department of Ecology or a permit may be required by said agency. In addition, commercial or industrial uses proposing the injection of critical materials are subject to the provisions of this chapter.

Chapter 1.10 E Frequently Flooded Areas

1.10 E.010 Statutory authorization.
1.10 E.020 Findings of fact.
1.10 E.030 Statement of purpose.
1.10 E.040 Methods of reducing flood losses.
1.10 E.050 Definitions.
1.10 E.060 Lands to which this chapter applies.
1.10 E.070 Basis for establishing the areas of special flood hazard.
1.10 E.100 Interpretation.
1.10 E.110 Warning and disclaimer of liability.
1.10 E.120 Establishment of development permit.
1.10 E.130 Designation of the mayor.
1.10 E.140 Duties and responsibilities of the mayor.
1.10 E.160 Conditions for variances.
1.10 E.170 General standards.
1.10 E.180 Specific standards.
1.10 E.190 Floodways.
1.10 E.200 Encroachments.
1.10 E.210 Standards for shallow flooding areas (AO zones).
1.10 E.010 Statutory authorization.

The legislature of the state has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the city council ordains as set forth in this chapter.

1.10 E.020 Findings of fact.
A. The flood hazard areas identified by the FEMA maps and study adopted in this chapter are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.

1.10 E.030 Statement of purpose.
It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
A. To protect human life and health;
B. To minimize expenditure of public money and costly flood control projects;
C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
D. To minimize prolonged business interruptions;
E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

1.10 E.040 Methods of reducing flood losses.
In order to accomplish its purposes, this chapter includes methods and provisions for:
A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
D. Controlling filling, grading, and other development which may increase flood damage; and
E. Preventing or regulating the construction of flood barriers that will unnaturally divert floodwaters or may increase flood hazards in other areas.

1.10 E.050 Definitions.
Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.
A. "Appeal" means a request for a review of the city's interpretation of any provision of this chapter or a request for a variance.
B. "Area of shallow flooding" means designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
C. "Area of special flood hazard" means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.
D. "Critical facility" means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use, or store hazardous materials or hazardous waste.
E. "Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
F. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
   1. The overflow of inland or tidal waters; and/or
   2. The unusual and rapid accumulation of runoff of surface waters from any source.
G. "Flood Insurance Rate Map (FIRM)" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.
H. "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevations more than one foot.
I. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter found at 1.10 E.180(A)(2).
J. "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles.
placed on a site for greater than 40 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, or other similar vehicles.
K. "Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
L. "New construction" means a structure for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.
M. "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 40 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
N. "Structure" means a walled and roofed building including a gas or liquid storage tank that is principally above ground.
O. "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:
   1. Before the improvement or repair is started; or
   2. If the structure has been damaged and is being restored, before the damage occurred.
For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.
3. The term does not, however, include either:
   Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
   Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

P. “Variance" means the grant of relief from the requirements of this chapter that permits construction in a manner that would otherwise be prohibited by this chapter.
Q. "Water dependent" means a structure for commerce or industry that cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operation.

I.10 E.060 Lands to which this chapter applies.
This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city.

I.10 E.070 Basis for establishing the areas of special flood hazard.
The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study for the City of Bridgeport” dated, November 17, 1981, with accompanying Flood Insurance Maps is adopted by
Regional Shoreline Master Plan- Bridgeport Critical Areas Regulations

reference and declared to be a part of this chapter. The Flood Insurance Study is on file at City Hall, 1206 Columbia Avenue, Bridgeport, Washington.

1.10 E.100 Interpretation.
In the interpretation and application of this chapter, all provisions shall be:
A. Considered as minimum requirements;
B. Liberally construed in favor of the governing body; and
C. Deemed neither to limit nor repeal any other powers granted under state statutes. Potential impacts to wetlands, fish and wildlife habitat and other critical areas shall be addressed in accordance with the applicable sections of this chapter.

1.10 E.110 Warning and disclaimer of liability.
The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

1.10 E.120 Establishment of development permit.
A. Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in 1.10 E.120. The permit shall be for all structures including manufactured homes, as set forth in 1.10 E.050, and for all development including fill and other activities, also as set forth in 1.10 E.050.
B. Application for Development Permit. Application for a development permit shall be made on forms furnished by the city and may include but not be limited to: plans in duplicate drawn to scale showing the nature, locations, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:
   1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
   2. Elevation in relation to mean sea level to which any structure has been flood proofed;
   3. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in 1.10 E.40(B); and
   4. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

1.10 E.130 Designation of the mayor.
The mayor or his/her designee is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

1.10 E.140 Duties and responsibilities of the mayor.
Duties of the mayor shall include, but not be limited to:
A. Review all development permits to determine:
   1. That the permit requirements of this chapter have been satisfied;
   2. That all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required;
   3. If the proposed development is located in the floodway. If located in the floodway, assure that the provisions of 1.10 E.190 are met.

B. When base flood elevation data has not been provided in accordance with 1.10 E.070, the mayor shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer 1.10 E.40 and 1.10 E.190.

C. Obtain and maintain the following information:
   1. Where base flood elevation data is provided through the Flood Insurance Study or required as in subsection B of this section, obtain and record the actual (as built) elevation (in relation to mean sea level) of the lowest floor, including basement, of all new or substantially improved structures, and whether or not the structure contains a basement.
   2. For all new or substantially improved flood proofed structures:
      Verify and record the actual elevation (in relation to mean sea level), and
      Maintain the flood proofing certifications required in 1.10 E.120(B)(3).
   3. Maintain for public inspection all records pertaining to the provisions of this chapter.

D. Where there are proposed alteration(s) of watercourses, accomplish the following:
   1. Notify adjacent communities and the Washington State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
   2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

E. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). A person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in BMC Title 19 for administrative appeals. In passing upon such applications, the hearing officer shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
   1. The danger that materials may be swept onto other lands to the injury of others;
   2. The danger to life and property due to flooding or erosion damage;
   3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
   4. The importance of the services provided by the proposed facility to the community;
   5. The necessity to the facility of a waterfront location, where applicable;
   6. The availability of alternative locations for the proposed use which is not subject to flooding or erosion damage;
   7. The compatibility of the proposed use with existing and anticipated development;
   8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
   9. The safety of access to the property in times of flood for ordinary and emergency vehicles;

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10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

F. The mayor shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

1.10 E.160 Variances.
A. Variances, as interpreted in the National Flood Insurance Program, are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.
C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
D. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing 1.10 E.150(E)(1) through (11) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
E. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
F. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of flood proofing than watertight or dry-flood proofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection A of this section, and otherwise complies with 1.10 E.170(A) and (B).
G. Variances shall only be issued upon:
   1. A showing of good and sufficient cause;
   2. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
   3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in 1.10 E.150, or conflict with existing local laws or ordinances

H. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

1.10 E.170 General standards.
In all areas of special flood hazards, the following standards are required:

A. Anchoring.
   1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
   2. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

B. Construction Materials and Methods.
   1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
   2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;
   3. Electrical, heating ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

C. Utilities.
   1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
   2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
   3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Subdivision Proposals.
   1. All subdivision proposals shall be consistent with the need to minimize flood damage;
   2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
   3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;
   4. All subdivisions shall disclose the presence on each residential lot of one building site, including access, that is suitable of development and is not within the area of special flood hazard; and
   5. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or five acres (whichever is less).

I.10 E.180 Specific standards.
In all areas of special flood hazards where base flood elevation data has been provided as set forth in I.10 E.070 or I.10 E.140(B), the following provisions are required:

A. Residential Construction.
   1. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above base flood elevation.
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

   - A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade.
   - Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

B. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

   1. Be flood proofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
   2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
   3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in 1.10 E.140(C)(2);
   4. Nonresidential structures that are elevated, not flood proofed, must meet the same standards for space below the lowest floor as described in 1.10 E.180(A)(2);
   5. Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g., a building flood proofed to one foot above the base flood level will be rated as at the base flood level).

C. Manufactured Homes. All manufactured homes to be placed or substantially improved within Zones A1-30, AH, and AE on the community’s FIRM shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of 1.10 E.170(A)(2). This subsection applies to manufactured homes to be placed or substantially improved in an expansion to an existing manufactured home park or subdivision. This paragraph does not apply to manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision except where the repair, reconstruction, or improvement of the streets, utilities and pads equals or exceed 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced.

**1.10 E.190 Floodways.**

Located within areas of special flood hazard established in 1.10 E.070 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of
floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood damage.
B. Construction or reconstruction of residential structures is prohibited within designated floodways, except for (1) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (2) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure, either (a) before the repair, reconstruction, or repair is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places shall not be included in the 50 percent.
C. If subsection A of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.

1.10 E.200 Encroachments.
The cumulative effect of any proposed development, where combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one foot at any point.

1.10 E.210 Standards for shallow flooding areas (AO zones).
Shallow flooding areas appear on FIRM as AO Zones with depth designations. The base flood depths in these zones range from one to three feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:
A. New construction and substantial improvements of residential structures within AO Zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified).
B. New construction and substantial improvements of nonresidential structures within AO Zones shall either:
   1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified); or
   2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in 1.10 E.180(B)(3).
C. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
Chapter 1.10 F Geologically Hazardous Areas

Sections:
1.10 F.010 Permitted Uses and Activities
1.10 F.020 Classification
1.10 F.030 Designation
1.10 F.040 Application Requirements
1.10 F.050 General Standards
1.10 F.060 Specific Standards
1.10 F.010 Permitted Uses and Activities

Uses and activities allowed within designated geologically hazardous areas are those uses permitted by the zoning district, subject to the provisions of this chapter.

1.10 F.020 Classification

A. Geologically hazardous areas in the city consist of erosion hazard areas (wind and water) and steep slopes. Classification and rating of geologically hazardous areas will be based upon the risk to development. The categories of risk shall be 1) Known or suspected risk; 2) Risk Unknown; and 3) No risk, meaning data is not available to determine the presence or absence of a geological hazard. The classification system for geologically hazardous areas shall be as described below.

1. Level 1: Critical Hazard Area shall be those areas with a known or suspected risk.
2. Level 2: Awareness Hazard Areas shall be those areas that have an unknown risk.

B. The determination of the level of risk will be established through an approved geotechnical report submitted by the applicant for any development permit. The city may use on-site inspections and the information sources identified within this title as guidance in identifying the presence of potential geologically hazardous areas.

C. Any land containing soils, geology or slopes that meet any of the following criteria shall be classified as having a known or suspected risk of being geologically hazardous areas:

1. Soils classified in the Soil Survey of Douglas County as having a moderate or high hazard for wind and/or water erosion;
2. Soil complexes containing at least one soil type classified as a moderate to severe erosion hazard when occurring on slopes of fifteen percent or greater;
3. Any areas with slopes thirty percent and greater;
4. Areas of historic failures or potentially unstable slopes designated on the Natural Resource Conservation Service slide hazard area studies; and those areas mapped as slumps, earthflows, mudflows, lahars or landslides on maps published by the United States Geological Survey or Department of Natural Resources Division of Geology and Earth Resources;
5. Any area with a combination of:
   - Slopes fifteen percent or steeper, and
   - Impermeable soils (typically silt and clay) frequently interbedded with granular soils (predominantly sand and gravel), and
   - Springs or ground water seepage.
6. Any area which has shown geologically significant movement during the past ten thousand years or which is underlain by mass wastage debris from that period of time;
7. Any area potentially unstable as a result of rapid stream incision or stream bank erosion;
8. Areas located in a canyon or ravine, or on a bluff;
9. Any area located on an alluvial fan, presently or potentially subject to inundation by debris flows or deposition of stream-transported sediments.

1.10 F.030 Designation
All existing areas of the City classified according to the provisions contained in this chapter, as determined by the city, are designated as geologically hazardous areas.

1.10 C.040 Application Requirements
Development permit applications shall provide appropriate information on forms provided by the city, including without limitation the information described below. Additional reports or information to identify potential impacts and mitigation measures to geologically hazardous areas may be required if deemed necessary. Generally, within Level 1 Critical Hazard Areas, detailed studies and reports will be required to determine whether or not development will be allowed, and if so, what mitigation measures will be required. Within Level 2 Awareness Hazard Areas, detailed studies and reports may be necessary to determine the existence of a geologically hazardous area, and if so, whether or not development will be allowed and what mitigation measures might be necessary where development may occur.
A. A site plan which discloses the following:
   1. The location and boundaries of the geologically hazardous area;
   2. The location and dimensions of all existing and proposed buildings, roads and other improvements, and their physical relationship to the geologically hazardous area;
   3. The location and type of any proposed buffers, including the identification of any other protective measures; and
   4. Locations and results of any test holes, excavations, etc., used in evaluating the existence and extent of the geologic hazard.
B. A geotechnical report prepared as described within this title; and
C. A certification from the geotechnical engineer and/or geologist preparing the study and report stating all of the following:
   1. The risk of damage from the project, both on- and off-site is minimal;
   2. The project will not materially increase the risk of occurrence of the hazard; and
   3. The specific measures incorporated into the design and operational plan of the project to eliminate or reduce the risk of damage due to the hazard.

1.10 F.050 General Standards
The following minimum standards shall apply to all development activities occurring within designated geologically hazardous areas and their buffers.
A. All projects shall be evaluated to determine whether the project is proposed to be located in a geologically hazardous area, the project’s potential impact on the geologically hazardous area, and the potential impact of the geologic hazard on the proposed project.
B. Appropriate buffer areas shall be maintained between all permitted uses and activities and designated geologically hazardous areas.
   1. A minimum buffer of fifty feet shall be established from the top, toe and all edges of geological hazardous areas;
2. Existing native vegetation within the buffer area shall be maintained;
3. The buffer may be reduced to a minimum of thirty feet when an applicant demonstrates, to the satisfaction of the city, that the reduction will adequately protect the proposed development and the designated geologically hazardous area.
4. Normal nondestructive pruning and trimming of vegetation for maintenance purposes, or thinning of limbs of individual trees to provide for a view corridor is allowed within the buffer area.

C. Appropriate drainage and erosion control measures, as determined by the city, shall be implemented in designated geologically hazardous areas.
   1. All development shall submit for review and approval a drainage and erosion control plan pursuant to the provisions of this title, unless waived by the city.
   2. All disturbed areas shall be revegetated in accordance with an approved plan, and completed within six months.
   3. Surface drainage shall not be directed across the face of a bluff or into a ravine. If drainage must be discharged from the bluff into adjacent waters, it shall be collected above the face of the bluff and directed to the water by a sealed drain line, and provided with an energy dissipating device.

D. Appropriate grading and excavation measures, as determined by the city, shall be implemented in designated geologically hazardous areas.
   1. All development shall submit for review and approval a grading and excavation plan as specified in Chapter 1.10 A, unless waived by the city. There shall be minimum disturbance of trees and vegetation on steep slopes and in ravines to minimize erosion and instability.
   2. Excavation, grading and earthwork construction in designated geologically hazardous areas shall only be allowed from April 1st to October 15th, except for the following circumstances:
      Up to five thousand square feet may be cleared on any lot, subject to approval of a drainage and erosion control and grading plan as required above; and When a qualified geo-technical engineer determines that clearing and grading before April 1st or after October 15th will not negatively impact the geologically hazardous area.
   3. All disturbed areas shall be re-vegetated in accordance with an approved plan, and completed within six months.
   4. All clearing shall be marked in the field for inspection and approval prior to alteration of the site.
   5. The face of any cuts and/or fills on slopes will be prepared, maintained and re-vegetated to control against erosion.

E. Construction methods should be utilized which minimize risks to structures and which do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard.
F. Site planning shall minimize disruption of existing topography and natural vegetation, and shall incorporate opportunities for phased clearing.
G. Impervious surface coverage shall be minimized.
Regional Shoreline Master Plan- Bridgeport Critical Areas Regulations

H. Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval shall be marked in the field and approved by the City prior to undertaking the project.
I. A monitoring program shall be prepared for construction activities occurring in critical geologic hazard areas.
J. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.

1.10 F.060 Specific Standards
The following standards shall apply to the activity identified below, in addition to the general standards outlined in Section 1.10 F.050.

A. Road Repair and Construction. Construction of any new public or private road is prohibited in a designated geologically hazardous area. Any existing private or public road repair or maintenance may be authorized, subject to the following minimum standards:
   1. The repair and maintenance shall not create additional significant adverse impacts to the geologically hazardous area; and
   2. Road repair and maintenance is the minimum necessary to provide safe traveling surfaces.

B. Major Developments. All major developments processed by the City according to the provisions governing Type III, Type IVA or Type IVB permits authorized within a designated geologically hazardous area shall comply with the following minimum standards:
   1. All plats shall disclose the presence on each residential lot one building site, including sufficient building area, sewage system, setbacks, and access, that is suitable for development and which is not within the designated geologically hazardous area or its associated buffer;
   2. All geologically hazardous areas and their buffers shall be clearly identified on all plats, maps, documents, etc.;
   3. Designated geologically hazardous areas and their associated buffers shall be designated and disclosed on the final plats, maps, documents, etc., as open space tracts, nonbuildable lot and buffer areas, or as common areas, with ownership and control transferred to a homeowner’s association. Associated geologically hazardous area buffers may alternatively be designated and disclosed on the final plats, maps, documents, etc., as an easement or covenant encumbering the property; and
   4. Areas which pose an immediate, significant threat to public safety shall be appropriately fenced and identified, as determined by the city.

C. Surface Water Management. Stormwater retention and detention systems, including percolation systems utilizing buried pipe or french drain, are prohibited within designated geologically hazard areas and their buffers, unless a geotechnical report indicates such a system shall not affect slope stability and the systems are designed by an engineer. The engineer shall also certify that the systems were installed as designed.

D. Trails and Trail-Related Facilities. Construction of public and private trails and trail-related facilities, such as picnic tables, benches, interpretive centers and signs, viewing platforms and campsites may be authorized within a designated geologically hazardous area, subject to the following minimum standards:
   1. Trail facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or any other previously disturbed areas;
2. Trail facilities shall minimize the removal of trees, shrubs, snags and other important features;
3. Viewing platforms, interpretive centers, campsites, picnic areas, benches and their associated access shall be designed and located to minimize disturbance of the geologically hazardous area; and
4. All structures shall be constructed with materials complimentary to the surrounding environment.

E. Utilities. When no other practical alternative exists, construction of utilities within a designated geologically hazardous area may be authorized, subject to the following minimum standards:
   1. Utility corridor shall be jointly used;
   2. Corridors shall be re-vegetated to pre-construction densities with appropriate native vegetation immediately upon completion of construction, or as soon thereafter as possible given seasonal growing constraints. The utility purveyor shall provide an assurance device or surety in accordance with the BMC which ensures that such vegetation survives;
   3. Any additional corridor access for maintenance shall be provided as much as possible at specific points rather than by parallel roads. If parallel roads are necessary they shall be no greater than fifteen feet in width, and shall be contiguous to the location of the utility corridor on the side opposite the designated geologically hazardous area;
   4. Construction of sewer lines within a designated geologically hazardous area which are necessary to meet state and/or local health code requirements may be authorized, provided the severity of the designated geologically hazardous area is not increased.