ORDINANCE NO. 3781 Neperled by 3834

AN ORDINANCE OF THE CITY OF KIRKLAND, RELATING TO DRAINAGE BASINS AND SENSITIVE AREAS (WETLANDS, STREAMS, MINOR LAKES, AND FREQUENTLY FLOODED AREAS) AND TO LAND SURFACE MODIFICATION (CLEARING AND GRADING); ADOPTING REVISED INTERIM SENSITIVE AREAS REGULATIONS; REPLACING IN ITS ENTIRETY CHAPTER 90 OF THE KIRKLAND ZONING CODE (TITLE 23 OF THE KIRKLAND MUNICIPAL CODE); AMENDING SECTION 115.75.3.k OF THE KIRKLAND ZONING CODE; ADDING NEW PLATES 16A, 25 AND 26 TO CHAPTER 180 OF THE KIRKLAND ZONING CODE; AND REPEALING ORDINANCE NOS. 3658, 3684, 3706, 3742, AND 3755.

WHEREAS, in a regular public meeting on October 20, 1998, the City Council passed Ordinance No. 3658, which adopted interim regulations (Chapter 90 of the Zoning Code) that protect the particular functions and values of each drainage basin (sensitive areas); and

WHEREAS, on April 6, 1999, September 7, 1999, March 21, 2000, and September 19, 2000, the City Council extended the interim regulations by Ordinance Nos. 3684, 3706, 3742, and 3755 respectively; and

WHEREAS, the City Council has received from the Kirkland Planning Commission a recommendation to amend certain sections of the interim regulations, add three plates to the interim regulations, and amend Section 115.75.3.k. of the Zoning Code, all as set forth in that certain report and recommendation of the Planning Commission dated December 21, 1999, and bearing Kirkland Department of Planning and Community Development file No. IV-95-104; and

WHEREAS, prior to making the recommendation, the Planning Commission, following notice thereof as required by RCW 35A.63.100 and 35A.63.070, on October 14, 1999, held a public hearing on the amendment proposals and considered the comments received at the hearing; and

WHEREAS, pursuant to the State Environmental Policy Act, there has accompanied the legislative proposal and recommendation through the entire consideration process, a final determination of nonsignificance, including supporting environmental documents, issued by the responsible official pursuant to WAC 197-11-340 and WAC 197-11-390; and

WHEREAS, on February 20, 2001, following notice by publication, the City Council held a public hearing on the proposed amendments to the interim regulations; and

WHEREAS, the City Council has considered the environmental documents received from the responsible official, together with the report and recommendation of the Planning Commission and the Houghton Community Council on the proposed amendments to the interim regulations; and

WHEREAS, the City Council has concluded that the recommended amendments would improve the effectiveness of the interim regulations; and

WHEREAS, pursuant to RCW 35A.63.220 and 36.70A.390, the City Council is authorized to adopt interim zoning ordinances and official controls;

NOW, THEREFORE, the City Council of the City of Kirkland do ordain as follows:

Section 1. Based on public testimony and other evidence submitted at the public hearing before the City Council on February 20, 2001 and at the public hearing before the Kirkland Planning Commission on October 14, 1999, and based further on the Kirkland Planning Commission recommendation for amendments to the interim sensitive areas regulations, the City Council finds that adoption of the interim sensitive areas regulations of this ordinance is necessary for the reasons stated in the City staff memorandum included in the City Council agenda packet for the February 20, 2001 City Council meeting.

Section 2. To improve the interim sensitive areas regulations until permanent regulations have been completed Ordinance No. 3658, relating to drainage basins (sensitive areas) and Chapter 90 of the Kirkland Zoning Code (Title 23 of the Kirkland Municipal Code), are replaced in their entirety by Attachment A, which is a new interim Chapter 90 and which by this reference is incorporated herein.

<u>Section 3.</u> Section 115.75.3.k of the Kirkland Zoning Code (Title 23 of the Kirkland Municipal Code) is amended to read as set forth in Attachment B, which by this reference is incorporated herein.

Section 4. Plates 16A, 25, and 26, as set forth in Attachment C and by this reference incorporated herein, are added to Chapter 180 of the Kirkland Zoning Code (Title 23 of the Kirkland Municipal Code).

<u>Section 5.</u> Ordinance Nos. 3658, 3684, 3706, 3742, and 3755 are repealed.

<u>Section 6.</u> This ordinance shall be effective for six months, and may be renewed for one or more six-month periods if a subsequent public hearing is held and findings of fact are made prior to each renewal.

Section 7. Should any section, paragraph, sentence, clause, phrase or word of this ordinance or the Chapter 90 adopted by reference be declared invalid or unconstitutional by a court or agency of competent jurisdiction, such invalidity or unconstitutionality shall not affect any of the remaining sections, paragraphs, sentences, clauses, phrases, or words of this ordinance or such Chapter 90, all of which will remain in full force and effect.

This ordinance shall be in effect five days from and Section 8. after its passage by the Kirkland City Council and publication, pursuant to Section 1.088.017 Kirkland Municipal Code, in the summary form attached to the original of this ordinance, and by this reference approved by the City Council, as required by law.

PASSED by majority vote of the Kirkland City Council in regular, open meeting this 20th day of February, 2001.

SIGNED IN AUTHENTICATION thereof this 20th day of February 2001. MAYOR

Attest:

Approved as to Form:

City Attorney

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(Interim Ordinance No. 3781, Attachment A)

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90.05 User Guide

These regulations apply to activities, work, and conditions in or near any stream, wetland, frequently flooded area, or lake in the City. These regulations add to and in some cases supersede other City regulations. Anyone interested in conducting any development activity on or near a wetland, stream, lake, or frequently flooded areas; wishing to participate in the City's decision on a proposed development on or near any of these areas; or wishing to have a determination made as to the presence of one of these areas on their his or her property, should read these regulations.

90.10 Purpose

These regulations were prepared to comply with the Growth Management Act, RCW Chapter 36.70A. The purpose of these regulations is to protect the environment, human life, and property. This purpose will be achieved by preserving the important ecological functions of wetlands, streams, lakes, and frequently flooded areas. The designation and classification of these sensitive areas is intended to assure their preservation and protection from loss or degradation, and to restrict incompatible land uses.

Sensitive areas perform a variety of valuable biological, chemical, and physical functions that benefit the City and its residents. The functions of sensitive areas include, but are not limited to, the following.

1. <u>Wetlands.</u> Wetlands help maintain water quality; store and convey storm and flood water; recharge ground water; provide fish and wildlife habitat; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. The City's goal is to achieve no net loss of wetlands through retention of wetland functions, values, and acreage within each drainage basin. Wetlands are protected in part by buffers, which are upland areas adjacent to wetlands.

Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into wetlands.

The primary purpose of wetland regulations is to achieve a goal of no net loss of wetland function, value, and acreage within each drainage basin, which, where possible, includes enhancing and restoring wetlands.

2. <u>Streams</u>. Streams and their associated buffers provide important fish and wildlife habitat and travel corridors; help maintain water quality; store and convey storm and flood water; recharge groundwater; and serve as areas for recreation,

education, scientific study, and aesthetic appreciation. Streams are protected in part by buffers, which are adjacent upland areas that interact with streams.

Stream buffers - sometimes known as riparian buffers - serve to moderate runoff volume and flow rates; reduce sediment loads; remove waterborne contaminants such as excess nutrients, synthetic organic chemicals (e.g., pesticides, oils, and greases), and metals; provide shade for surface water temperature moderation; provide wildlife habitat; and deter harmful intrusion into streams.

The primary purpose of stream regulations is to avoid reducing stream and riparian corridor functions, and where possible, to enhance and restore streams and riparian areas.

3. Lakes provide important fish and wildlife habitat; store and convey storm and flood water; recharge ground water; store ground water discharge; and serve as areas for recreation, education, scientific study, and aesthetic appreciation. Many activities in and around lakes are regulated under the wetland regulations, because the shallow perimeter of most lakes (the littoral zone) often meets the definition of a wetland. Lake Washington is a Shoreline of the State, and is subject to the Shoreline Management Act. Activities on or in Lake Washington are regulated by the use zone regulation for the zones that include Lake Washington (see the Kirkland Zoning Code). Activities in wetlands contiguous to Lake Washington are subject to both the Shoreline Master Program and the wetland regulations. ; where these regulations differ, the more protective of wetlands shall apply.

The primary purpose of the lake regulations is to avoid impacts to lakes and contiguous riparian areas, and where possible, to enhance and restore lakes.

4. <u>Frequently Flooded Areas</u>. Frequently flooded areas help to store and convey storm and flood water; recharge ground water; provide important riparian habitat for fish and wildlife; and serve as areas for recreation, education, and scientific study. Development within these areas can be hazardous to those inhabiting such development, and to those living upstream and downstream. Flooding also can cause substantial damage to public and private property that results in significant costs to the public as well as to private individuals.

The primary purpose of frequently flooded areas regulations is to regulate development in the 100-year floodplain to avoid substantial risk and damage to public and private property and loss of life.

90.15 Applicability

- 1. <u>General</u>. These regulations apply to any property that contains or is within 100 feet-of-any of the following:
 - a. Streams;
 - b. Type 1 or 2 wetlands;
 - c. Type 3 wetlands greater than 1,000 square feet in a Primary Basin;
 - d. Type 3 wetlands greater than 2,500 square feet in a Secondary Basin;
 - e. Totem Lake and Forbes Lake;
 - f. Frequently flooded areas; and
 - g. Buffers required for the preceding six features.
- 2. <u>Conflicting Provisions with the Kirkland Zoning Code</u>. The provisions of these regulations supersede any conflicting provisions of the Kirkland Zoning Code. If more than one provision of these regulations applies to the subject property, then the regulation that provides the greatest protection to sSensitive aAreas shall apply. If these regulations and the Shoreline Master Program both apply to the subject property, then the regulation that provides the greatest protection to Sensitive Areas shall apply.
- 3. <u>Other Jurisdictions</u>. Nothing in these regulations eliminates or otherwise affects the responsibility of the applicant <u>or property owner</u> to comply with all other applicable local, state, and federal laws regulating development activities in sensitive areas, as herein defined.
- 4. <u>SEPA Compliance</u>. Nothing in these regulations or the decisions made pursuant to these regulations affects the authority of the City to review, condition, and deny projects under the State Environmental Policy Act, RCW Chapter 43.21C.

90.20 General Exceptions

The following activities or conditions shall be exempt from this Chapter:

- Activities involving artificially created wetlands or streams intentionally created from non-wetland sites, including but not limited to grass-lined swales, irrigation and drainage ditches, retention and/or detention facilities, farm ponds, and landscape features, *except* <u>activities involving</u> wetlands or streams that are created as mitigation for impacts to regulated sensitive areas, or that support state or federally listed threatened or endangered species.
- 2. Legally filled wetlands, or wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway.

- 3. Activities affecting Type 3 wetlands that are 1,000 square feet or less in any of the Primary Basins, or affecting Type 3 wetlands that are 2,500 square feet or less in any of the Secondary Basins.
- 4. All utility work in improved City rights-of-way; and all normal and routine maintenance, operation and reconstruction of existing roads, streets, and associated rights-of-way and structures; and all public and private connections-to existing public-utilities, and construction of sewer or water lines that connect to existing lines in a sensitive area or buffer where no feasible alternative location exists based on an analysis of technology and system efficiency; provided in each case, that the Planning Official determines that (1) such activities will not increase the impervious area or reduce flood storage capacity, and (2) the construction drawings specify that all affected sensitive areas and buffers will be expeditiously restored to their pre-project condition or better. For purposes of this Subsection only, "improved City rights-of-way" include those rights-of-way that have improvements only underground, as well as those with surface improvements.
- 5. Normal and routine maintenance or repair of <u>buildings or driveways structures</u>; provided, that such activities do not increase the previously approved<u>building</u> <u>structure</u> footprint within a sensitive area or its buffer. Increases in <u>building</u> <u>structure</u> footprint outside of such areas shall be allowed, even if all or a portion of the previously approved footprint is within such areas.
- 6. Site investigative work and studies necessary for preparing and processing land use applications, including, but not limited to hand dug holes for soils tests, water quality sampling, wildlife studies, and wetland and stream investigations; provided, that any disturbance of the sensitive area or its buffer shall be the minimum necessary to carry out the work or studies. Use of any mechanized equipment requires prior approval of the Planning Official. Areas disturbed by these activities shall be expeditiously stabilized and replanted, as approved by the Planning Official, to restore them to their previous condition.
- 7. Educational activities, scientific research, and passive outdoor recreational activities such as bird watching.
- 8. Emergency activities necessary to prevent an immediate threat to public health, safety, or welfare.

90.25 Sensitive Areas Maps and Other Resources

As part of the City's SEPA Ordinance, the City Council adopted, and may amend, a map folio entitled "Kirkland Sensitive Areas." Some of the maps in this folio depict wetlands, streams, and 100-year floodplains. The most recent amendment to this map folio is reflects a 1998 study of wetlands and streams throughout the City's drainage basins and

other sensitive areas discovered since 1992. The map folio, subsequent amendments, and other available resources (such as topographic maps, soils maps, and air photos) are intended only as guides. They depict the *approximate* location and extent of known wetlands and streams Sensitive Areas. Some sensitive areas depicted in these resources may no longer exist; further, sensitive areas not shown in these resources may occur. Property owners and project applicants are strongly advised to retain Qualified Professionals to conduct site-specific studies for the presence of sensitive areas.

90.30 Definitions

- 1. <u>Basin</u> A specific area of land drained by a particular watercourse and its tributaries.
- 2. <u>Buffer</u> The area immediately adjacent to wetlands and streams that protects these sensitive areas and provides essential habitat elements for fish and/or wildlife.
- 3. <u>Building Buffer Setback Line (BSBL)</u> A setback distance of 10 feet from a designated or modified wetland or stream buffer within which no buildings or other above-ground structures, with the exception of fencing or other certain minor improvements may be constructed, except as provided in Sections 90,45.2 and 90.90.2 of this Chapter. The <u>BSBL</u> Buffer Setback serves to protect the wetland or stream buffer during development activities, use, and routine maintenance occurring adjacent to these resources.
- 4. <u>Class A Streams</u>- Streams that are used by salmonids. Class A streams generally correlate with Type 3 streams as defined in the Washington State Hydraulic Code.
- 5. <u>Class B Streams</u> Perennial streams (during years of normal precipitation) that are not used by salmonids. Class B streams generally correlate with Type 4 streams as defined in the Washington State Hydraulic Code.
- 6. <u>Class C Streams</u> <u>Intermittent Seasonal</u> or ephemeral streams (during years of normal precipitation) not used by salmonids. Class C streams generally correlate with Type 5 streams as defined in the Washington State Hydraulic Code.
- 7. Critical Areas Critical Areas include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.
- 8. <u>Frequently Flooded Areas</u> All areas shown on the Kirkland Sensitive Areas maps as being within a 100-year floodplain, as well as all areas regulated by Chapter 21.56 of the Kirkland Municipal Code.

- 9. <u>Minor Improvements</u> Walkways, pedestrian bridges, benches, and similar features_as determined by the Planning Official, that present-minimal disturbance to the area affected, pursuant to Sections 90.45.5 and 90.90.5.
- Primary Basins The watersheds associated with the following five creeks: <u>as</u> shown in the Kirkland Sensitive Areas maps: (1) Juanita Creek, (2) Forbes Creek, (3) Cochran Springs Creek, (4) Yarrow Creek, and (5) Carillon Creek<u></u> as shown in the Kirkland Sensitive Areas maps.
- 11. <u>Qualified Professional</u> An individual with relevant education and training, as determined by the Planning Official, and with at least three years experience in biological fields such as botany, fisheries, wildlife, soils, ecology, and similar areas of specialization, and including a professional W wetland S scientist.
- <u>Salmonid</u> A member of the fish family salmonidae, which include C <u>chinook</u>, coho, chum, sockeye, and pink salmon; rainbow, steelhead, and cutthroat trout; brown trout; brook and <u>D</u> dolly <u>V</u> varden char, kokenee, and white fish.
- 13. <u>Secondary Basins</u> The Moss Bay Basin, Houghton Basin, and Kirkland Slope Basin, which are also depicted as the Urban Drainage Basins on the Kirkland Sensitive Areas maps.
- 14. <u>Sensitive Areas</u> Wetlands, streams, lakes, and frequently flooded areas.
- 15. <u>Significant Habitat Area</u> An area that provides food, protective cover, nesting, breeding, or movement for threatened, endangered, sensitive, monitor, or priority species of plants, fish, or wildlife. , or a species of local significance due to its rarity within the City. The terms threatened, endangered, sensitive, monitor, and priority pertain to lists, categories, and definitions of species promulgated by the Washington Department of Wildlife (Non-Game Data Systems Special Animal Species), as identified in WAC Sections 232-12-011 or 232-12-014, or in the Priority Habitat and Species (PHS) program of the Washington State Department of Wildlife, or in rules and regulations adopted from time to time by the U.S. Fish and Wildlife Service.
- 16. <u>Streams</u> Areas where surface waters produce a defined channel or bed that demonstrates clear evidence of the passage of water, including but not limited to bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. Streams do not include irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial water courses, unless they are used by salmonids or convey a naturally occurring stream that has been diverted into the artificial channel.

- 17. <u>Type 1 Wetlands</u> Wetlands that meet any of the following conditions:
 - a. Wetlands contiguous to Lake Washington;
 - b. Wetlands containing at least ¼ acre of organic soils, such as peat bogs or mucky soils;
 - c. Wetlands equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;
 - d. Wetlands that have significant habitat value to state or federally-listed threatened or endangered wildlife species; or
 - e. Wetlands that contain state or federally listed threatened or endangered plant species.
- 18. <u>Type 2 Wetlands</u> Wetlands that do not meet any of the criteria for Type 1 Wetlands, yet provide significant habitat function and value, and that merit at least 22 points as determined by using the City's Wetland Field Data Form, which is <u>Appendix A at the end Plate 26 of Chapter 180</u>.
- <u>Type 3 Wetlands</u> Wetlands that do not meet the criteria for either Type 1 or Type
 2 wetlands and that merit fewer than 22 points as determined by using the City's
 Wetland Field Data Form, which is Appendix A at the end of this Chapter_Plate 26
 of Chapter 180.
- 20. <u>Watershed</u> A region or area bounded on the periphery by a parting of water and draining to a particular watercourse or body of water.
- 21. <u>Wetlands</u> Those areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soils conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage ditches, grass-lined swales, canals, retention and/or detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands do include those artificial wetlands intentionally created from non-wetlands.

90.35 Wetland Determinations, Delineations, Regulations, Criteria, and Procedures

All determinations and delineations of wetlands shall be made using the criteria and procedures contained in the *Washington State Wetlands Identification and Delineation Manual* (Washington Department of Ecology, 1997). All determinations, delineations, and

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regulations of wetlands shall be based on the entire extent of the wetland, irrespective of property lines, ownership patterns, and the like.

90.40 Wetland Determinations

Either prior to or during review of a development application, the Planning Official shall determine whether a wetland or its buffer is present on the subject property using the following provisions:

- 1. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether any portion of the subject property or surrounding area (which shall be the area within 100 feet of the subject property) meets the definition of a wetland. If this initial site inspection does not indicate the presence of a wetland on the subject property or surrounding area, no additional wetland studies will be required. However, if the initial site inspection or information subsequently obtained indicates the presence of a wetland on the subject property or surrounding area, then the applicant shall follow the procedure in paragraph 2 below.
- 2. If the initial site inspection or information subsequently obtained indicates that a wetland may exist on or near the subject property or surrounding area, the applicant shall either (1) fund a study and report prepared by the City's wetland consultant, or (2) submit a report prepared by a Qualified Professional approved by the City, and fund a review of this report by the City's wetland consultant.
- 3. If a wetlands study and report are required, at a minimum the report shall include the following:
 - a. A summary of the methodology used to conduct the study;
 - b. A professional survey which is based on the KCAS or plat bearing system and tied to a known monument, depicting the wetland boundary on a map of the surrounding area which shows the wetland and its buffer;
 - c. A description of the wetland habitat(s) found throughout the entire wetland (not just on the subject property) using the U.S. Fish & Wildlife Service classification system (*Classification of Wetlands and Deepwater Habitats in the U.S.*, Cowardin et al., 1979);
 - d. A description of nesting, denning, and breeding areas found in the wetland or its surrounding area;
 - e. A description of the surrounding area, including any drainage systems entering and leaving the wetland, and a list of observed or documented plant and wildlife species;
 - f. A description of historical, hydrologic, vegetative, topographic, and soil modifications, if any;

- g. A proposed classification of the wetland as a Type 1, 2, or 3 wetland, including the rationale for the proposed classification; and
- h. A completed Wetland Field Data Form, which is Appendix A at the end of this Chapter. Plate 26 of Chapter 180.
- 4. Formal determination of whether a wetland exists on the subject property, as well as its boundaries, habitat classes, and rating, shall be made by the Planning Official after preparation and review of the report, if applicable, by the City's wetland consultant, review of the report prepared under paragraph 3 of this Section. A decision of the Planning Official may be appealed pursuant to Section 160 of this Chapter. The Planning Official's decision under this Section shall be used for review of any development activity proposed on the subject property for which an application is received within two years of the decision; provided, that the Planning Official may modify any decision whenever physical circumstances have markedly and demonstrably changed on the subject property or the surrounding area as a result of natural processes or human activity.

90.45 Wetland Buffers and Setbacks.

 No land surface modification shall occur and no improvement may be located in a wetland or its buffer, except as provided in this Section. Required, or standard, buffers for wetlands are as follows:_v

Wetland Type	Primary Basin	Secondary Basin
1	100 feet	75 feet
2	75 feet	50 feet
3	50 feet	25 feet

- 2. Building Buffer Setback (BSBL) Structures shall be set back at least 10 feet from the designated or modified wetland buffer. This BSBL The Planning Official may allow within this setback shall not be modified except through provisions for reasonable use. minor improvements which would clearly have no adverse effect during their construction, installation, use, or maintenance, on fish, wildlife, or their habitat or any vegetation in the buffer or adjacent wetland. The Planning Official's decision may be appealed in accordance with Section 160 of this Chapter.
- 3. Storm Water Outfalls Surface discharge of storm water through wetland buffers and Buffer Setbacks is required unless a piped system is approved pursuant to this Section. Storm water outfalls (piped systems) may be located within the Buffer Setback specified in Section 90.45.2 and within the buffers specified in Section 90.45.1 only when the Public Works and Planning Officials both determine, based on a report prepared by a Qualified Professional under contract to the City and paid for by the applicant, that surface discharge of storm water

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through the buffer would clearly pose a threat to slope stability, and if the storm water outfall will not:

- <u>a.</u> Adversely affect water quality;
- b. Adversely affect fish, wildlife, or their habitat;
- c. Adversely affect drainage or storm water detention capabilities:
- <u>d.</u> Lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and
- e. Be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas:

The decision of the Public Works and Planning Officials may be appealed in accordance with Section 160 of this Chapter.

If a pipe system is used, catch basins may be located within the Buffer Setback specified in Section 90.45.2, but must be installed as far as feasible from the buffer boundary (see Plate 25 of Chapter 180). Under this Subsection, pipe conveying storm water may be located within the buffer, but catch basins may not. Detention and water quality treatment devices shall not be located within the wetland buffers or Buffer Setbacks of this Section except as provided below.

- 4. Water Quality Facilities Water quality facilities, as determined by the Planning Official, may be located within the wetland buffers of Section 90.45.1. The Planning Official shall approve a proposal to install a water quality facility within the outer one-half of a wetland buffer if:
 - a. It will not adversely affect water quality;
 - b. It will not adversely affect fish, wildlife, or their habitat;
 - c. It will not adversely affect drainage or storm water detention capabilities;
 - <u>d.</u> It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;
 - e. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas;
 - f. The existing buffer is already degraded as determined by a Qualified <u>Professional:</u>
 - g. Its installation would be followed immediately by enhancement of an area equal in size and immediately adjacent to the affected portion of the buffer; and
 - h. Once installed, it would not require any further disturbance or intrusion into the buffer.

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The Planning Official shall approve a proposal by a public agency to install a water quality facility elsewhere in a wetland buffer if criteria i - 1 (below) are met in addition to a - h (above):

i. ____ The project includes enhancement of the entire buffer;

j. The project would provide an exceptional ecological benefit off-site;

<u>k.</u> The water quality facility, once installed, would not require any further disturbance or intrusion into the buffer; and

I. There is no practicable or feasible alternative proposal that results in less impact to the buffer.

The Planning Official's decision may be appealed in accordance with Section <u>160</u> of this Chapter.

- 5. <u>Minor Improvements</u> Minor improvements may be located within the sensitive area buffers of Section VII.B. specified in Section 90.45.1. These minor improvements shall be located within the outer one-half of the sensitive area buffer, except where approved stream crossings are made. The Planning Official shall approve a proposal to construct a minor improvement within an environmentally sensitive area buffer if:
 - a. It will not adversely affect water quality;
 - b. It will not destroy or damage a significant wildlife habitat area adversely affect fish, wildlife, or their habitat;
 - c. It will not adversely affect drainage or storm water detention capabilities;
 - d. It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and
 - e. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

The Planning Official may require the applicant to submit a report prepared by a Qualified Professional which describes how the proposal will or will not comply with the criteria for approving a minor improvement. The Planning Official's decision may be appealed in accordance with Section <u>90.160</u>.

90.50 Wetland Buffer Fence or Barrier

Prior to beginning development activities, the applicant shall install a six-foot high construction-phase chain link fence or equivalent fence, as approved by the Planning Official along the upland boundary of the entire wetland buffer with silt screen fabric installed per City standard, in a manner approved by the Planning Official. The construction-phase fence shall remain upright in the approved location for the duration of development activities.

Upon project completion, the applicant shall install between the upland boundary of all wetland buffers and the developed portion of the site, either (1) a permanent 3 to 4 foot tall split rail fence, or (2) permanent planting of equal barrier value, or (3) equivalent barrier, as approved by the Planning Official. Installation of the permanent fence or planted barrier must be done by hand where necessary to prevent machinery from entering the wetland or its buffer.

90.55 Wetland Modification

<u>Modification of Type 1 Wetlands – No land surface modification shall occur and no improvement shall be located in a Type 1 wetland, except as provided in this Section subsection</u>. Furthermore, all modifications of a Type 1 Wetland shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

An applicant may request a modification of the requirements of this subsection. The Hearing Examiner shall review a modification request, and when deemed appropriate, issue a consider the Modification Request Approval under a pursuant to Process IIA, described in Chapter 150 of the Kirkland Zoning Code. As part of the Modification Request, the applicant shall submit a report prepared by a Qualified Professional and fund a review of this report by the City's wetland consultant. In either event, t. The report shall contain all information specified in Section VII.A.3 <u>90.40.3</u> as well as an assessment of the habitat, water quality, storm water detention, ground water recharge, shoreline protection, and erosion protection functions of the wetland and its buffer. The report shall also assess the effects of the proposed modification on those functions. In addition to criteria of Process IIA, the Hearing Examiner shall approve an improvement or land surface modification in a wetland only if:

- a. It will not adversely affect water quality;
- b. It will not destroy, damage, or disrupt a significant habitat-area adversely affect fish, wildlife, or their habitat;
- c. It will not have an adverse effect on drainage and/or storm water detention capabilities;
- d. It will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;
- e. It will not be materially detrimental to any other property or the City as a whole;
- f. It will result in land surface modification of no more than 5% of the wetland on the subject property;
- g. Compensatory mitigation is provided in accordance with the table in Subsection 4 below;

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- h. Fill material does not contain organic or inorganic material that would be detrimental to water quality or fish and wildlife habitat;
- i. All exposed areas are stabilized with vegetation normally associated with native wetlands and/or buffers, as appropriate; and
- j. There is no practicable or feasible alternative development proposal that results in less impact to the Type 1 wetland and its buffer.
- Modification of Type 2 Wetlands No land surface modification shall occur and no improvement shall be located in a Type 2 wetland, except as provided in this Section subsection.

An applicant may request a modification of the requirements of this Section subsection. The Hearing Examiner shall consider the review a modification request, and when deemed-appropriate, issue a Modification Request Approval under pursuant to Process IIA, described in Chapter 150 of the Kirkland Zoning Code. The requirements for requesting such a modification are identical to those listed above for a Type 1 wetland with the following exceptions:

- a. In Primary Basins, the modification shall not affect more than 10% of the wetland on the subject property; and
- b. In Secondary Basins, the modification shall not affect more than 25% of the wetland on the subject property.
- <u>Modification of Type 3 Wetlands</u> No land surface modification shall occur and no improvement may be located in a Type 3 wetland, except as provided in this Section <u>subsection</u>.

An applicant may request a modification of the requirements of this Section subsection. The Planning Official shall consider the Modification Request in conjunction with approval of the applicable development permit. The requirements for requesting such a modification are identical to those listed above for a Type 1 wetland with the following exceptions:

- a. In Primary Basins, the modification shall not affect more than 50% of the wetland on the subject property; and
- b. In Secondary Basins, the modification may affect all of the wetland on the subject property.

Decisions on requests to modify Type 3 Wetlands may be appealed in accordance with Section <u>90.160</u>.

4. <u>Compensatory Mitigation</u> – All approved impacts to regulated wetlands require compensatory mitigation so that the goal of no net loss of wetland function, value, and acreage may be achieved. Mitigation shall be implemented through the

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creation of wetlands (from non-wetland areas) or through the restoration of wetlands (from uplands that were formerly wetlands). The following mitigation ratios (the ratio of the mitigated area to the impacted area) shall apply:

Wetland Type	Primary Basin	Secondary Basin
1	3:1	3:1
2	2:1	1.5:1
3	1.5:1	1:1

Compensatory mitigation as wetland enhancement (that is, the improvement of existing wetlands) shall also be allowed. In Primary Basins, no more than 1/3 of the mitigation may consist of enhancement; in Secondary Basins, no more than 1/2 of the mitigation may consist of enhancement.

On-site mitigation is presumed to be preferable to off-site mitigation. The decisionmaker may approve a plan to implement all or a portion of the required mitigation off-site, if the off-site mitigation is within the same drainage basin as the property that will be impacted by the project. The applicant shall demonstrate that the offsite mitigation will result in higher wetland functions, values, and/or acreage than on-site mitigation. Required compensatory mitigation ratios shall be the same for on-site or off-site mitigation, or a combination of both.

If the proposed on-site or off-site mitigation plan will result in the creation or expansion of a wetland or its buffer on any property other than the subject property, the plan shall not be approved until the applicant submits to the Planning Official a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Department of Elections and Records, consenting to the wetland and/or buffer creation or increase on such property.

Applicants proposing to alter wetlands or their buffers shall submit a sensitive area mitigation plan prepared by a Qualified Professional. The mitigation plan shall consist of a description of the existing functions and values of the sensitive areas wetlands and buffers affected by the proposed project, the nature and extent of impacts to those areas, and the mitigation measures to offset those impacts. The mitigation plan shall also contain a drawing that illustrates the compensatory mitigation elements. The plan and/or drawing shall list plant materials and other habitat features to be installed.

To ensure success of the mitigation plan, the applicant shall submit a monitoring and maintenance program prepared by a Qualified Professional. At a minimum, the monitoring and maintenance plan shall include the following:

1) The goals and objectives for the mitigation plan;

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- 2) Success criteria by which the mitigation will be assessed; and
- 3) Plans for a five-year monitoring and maintenance program;
- 4) A contingency plan in case of failure; and
- 5) Proof of a written contract with a Qualified Professional who will perform the monitoring program.

The monitoring program shall consist of at least two site visits per year by a Qualified Professional, with annual progress reports submitted to the Planning Official and all other agencies with jurisdiction.

The cost of <u>producing and implementing</u> the <u>mitigation</u> plan, <u>the monitoring and</u> <u>maintenance</u> program, reports, and drawing, <u>as well as the review of each</u> <u>component by the City's wetland consultant</u>, shall be borne by the applicant.

90.60 Wetland Buffer Modification

- Modification of Wetland Buffers when Wetland Is Also To Be Modified Wetland buffer impact is assumed to occur when wetland fill or modification is proposed. Any proposal for wetland fill/modification shall include provisions for establishing a new wetland buffer zone to be located around the compensatory mitigation sites and to be equal in width to its standard buffer <u>specified in Section 90.45.1</u> VII.B or a buffer reduced in accordance with this <u>Subsection Section</u> J-by no more than 1/3 of the standard buffer width in all cases (regardless of wetland type or basin type).
- Modification of Wetland Buffers When Wetland Is Not To Be Modified No land surface modification may occur and no improvement may be located in a wetland buffer, except as provided for in <u>this</u> Subsection J. Buffer widths may be decreased if an applicant receives a Modification Request Approval.
 - a. <u>Types of Buffer Modifications</u> Buffers may be reduced through one of two means, either (1) buffer averaging, or (2) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used.
 - Buffer averaging requires that the area of the buffer resulting from the buffer averaging is equal in size and quality to the buffer area calculated by the standards <u>specified in Section 90.45.1</u> VILB. Buffers may not be reduced at any point by more than 1/3 of the standards <u>specified in Section 90.45.1</u> VILB. Buffer averaging calculations shall only consider the subject property.

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- 2) Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features such as downed logs or snags, or other means) the reduced buffer will function at a higher level than the existing standard buffer. At a minimum, a buffer enhancement plan shall provide the following: 1) a map locating the specific area of enhancement, 2) a planting plan that uses native species, including groundcover, shrubs, and trees, and 3) provisions for monitoring and maintenance. Buffers may not be reduced at any point by more than 1/3 of the standards in Section 90.45.1 VII.B.
- b. <u>Review Process and Decisional Criteria</u> Modification requests for averaging or reduction/enhancement of Types 1 and 2 Wetland buffers shall be <u>considered</u> reviewed and decided upon by the Hearing Examiner <u>pursuant to under</u> Process IIA, described in Chapter 150 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Type 3 Wetland buffers shall be considered by the Planning Official. <u>Decisions on modification requests may be</u> appealed pursuant to the provisions of Section XVI of this Chapter.

<u>An improvement or land surface modification shall be approved in a</u> wetland buffer only if:

- It is consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998);
- It will not adversely affect water quality;
- 3) It will not adversely affect fish, wildlife, or their habitat;
- It will not have an adverse effect on drainage and/or storm water detention capabilities;
- 5) It will not lead to unstable earth conditions or create an erosion hazard;
- <u>6) It will not be materially detrimental to any other property or the City as a whole;</u>
- 7) Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife, or their habitat;
- 8) All exposed areas are stabilized with vegetation normally associated with native wetland buffers, as appropriate; and
- 9) There is no practicable or feasible alternative development proposal that results in less impact to the buffer.

As part of the Modification Request, the applicant shall submit a report prepared by a Qualified Professional and fund a review of this report by the City's wetland consultant. The report shall assess the habitat, water guality, storm water detention, ground water recharge, shoreline protection, and erosion protection functions of the buffer; assess the effects of the proposed modification on those functions; and address the nine criteria listed in this Subsection 2.b.

90.65 Wetland Restoration

<u>Planning Official approval is required prior to wetland restoration</u>. The Planning Official may permit or require the applicant <u>or property owner</u> to restore and maintain a wetland and/or its buffer by removing material detrimental to the area, such as debris, sediment, or vegetation. The Planning Official may also permit or require the applicant to restore a wetland or its buffer through the addition of native plants and other habitat features. Restoration may be required whenever a condition detrimental to water quality or habitat exists. <u>When wetland restoration is required by the City, the requirements of Section 90,55.4, Mitigation Plan Requirements, shall apply.</u>

90.70 Wetland Access

The City may develop access through a wetland and its buffer in conjunction with a public park.

90.75 Totem Lake and Forbes Lake

The majority, if not the entirety, of the perimeters of Totem Lake and Forbes Lake meet the definition of wetlands. All activities in the shallow (less than or equal to 6.6 feet) portions of these lakes as well as in their contiguous wetlands (located above the high waterline) are regulated pursuant to Sections 90.35 through 90.70 above. Activities in deep water portions (water depths greater than 6.6 feet) of these lakes, that is, waterward of the lakes' perimeter wetlands, shall be regulated as follows:

- 1. The Planning Official may permit or require the applicant <u>or property owner</u> to rehabilitate and maintain a lake by removing material detrimental to the lake, such a debris, sediment, or non-native vegetation. Rehabilitation may be required when a condition detrimental to water quality or habitat exists. Decisions made under this paragraph may be appealed in accordance with Section <u>90.160</u> of this Chapter.
- 2. Moorage structures are permitted in Totem Lake and Forbes Lake. The Planning Official shall consider requests to construct, replace, or repair existing structures concurrently with the Washington Department of Fish and Wildlife's review of a

Hydraulic Project Approval (HPA), or upon notification by that agency that an HPA is not required.

- 3. The Planning Official shall review applications for moorage structures using Process I, described in Chapter 145 of the Kirkland Zoning Code. The Planning Director shall authorize a moorage structure to be constructed only if (1) it is accessory to a dwelling unit or public park on the subject property, and (2) no significant habitat area will be destroyed.
- 4. A moorage structure shall extend no farther than is necessary to function properly, but in no event may extend more than 125 feet waterward of the high waterline.
- 5. A moorage structure shall not be treated with creosote or oil base or toxic substances.
- 6. Dock and pier decks and the top of other moorage structures shall not be more than two feet above the high waterline.
- 7. Bulkheads are prohibited unless (1) necessary to prevent significant erosion and
 (2) the use of vegetation or other "bioengineering" materials and techniques would not sufficiently stabilize the shoreline.

90.80 Activities In Or Near Streams

No land surface modification may occur and no improvements may be located in a stream or its buffer except as provided in this-Section Sections 90.90 through 90.120.

90.85 Stream Determination

The Planning Official shall determine whether a stream or stream buffer is present on the subject property using the following provisions. During or immediately following a site inspection, the Planning Official shall make an initial assessment as to whether a stream exists on any portion of the subject property or surrounding area (which shall be the area within approximately 100 feet of the subject property).

If the initial site inspection indicates the presence of a stream, the Planning Official shall determine, based on the definitions contained in this Chapter and after a review of all information available to the City, the classification of the stream.

If this initial site inspection does not indicate the presence of a stream on or near the subject property, no additional stream study will be required.

If an applicant disagrees with the Planning Official's determination that a stream exists on or near the subject property or the Planning Official's classification of a stream, the

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applicant shall submit a report prepared by a Qualified Professional approved by the Planning Official that independently evaluates the presence of a stream or the classification of the stream, based on the definitions contained in this Chapter.

The Planning Official shall make final determinations regarding the existence of a stream and the proper classification of that stream. This determination may be appealed pursuant to the provisions of Section <u>90.160</u> of this Chapter. The Planning Official's decision under this section shall be used for review of any development activity proposed on the subject property for which an application is received within two years of the decision; provided, that the Planning Official may modify any decision whenever physical circumstances have markedly and demonstrably changed on the subject property or the surrounding area as a result of natural processes or human activity.

90.90 Stream Buffers and Setbacks

 <u>Stream Buffers</u> - No land surface modification shall occur and no improvement may be located in a stream or its buffer, except as provided in this Section. Required, or standard, buffers for streams are as follows:_-

Stream Class	Primary Basins	Secondary Basins
A	75 feet	N/A
В	60 feet	50 feet
С	35 feet	25 feet

Stream buffers shall be measured from each side of the top of the slope of the channel of the stream except that where streams enter or exit pipes, the buffer shall be measured in all directions from the pipe opening (see Plates 16 and 16A of Chapter 180. Essential improvements to accommodate required vehicular, pedestrian, or utility access to the subject property may be located within those portions of stream buffers which are measured toward culverts from culvert openings.

2. Building Buffer Setback (BSBL). Structures shall be set back at least 10 feet from the designated or modified stream buffer. This BSBL The Planning Official may allow within this setback shall not be-modified except through-provisions for reasonable-use. minor improvements which would have no potential adverse effect during their construction, installation, use, or maintenance to fish, wildlife, or their habitat or to any vegetation in the buffer or adjacent stream. The Planning Official's decision may be appealed in accordance with Section 90.160.

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- 3. Storm Water Outfalls Surface discharge of storm water through stream buffers and Buffer Setbacks is required unless a piped system is approved pursuant to this Section. Storm water outfalls (piped systems) may be located within the Buffer Setback specified in Section 90.90.2 and within the buffers specified in Section 90.90.1 only when the Public Works and Planning Officials both determine, based on a report prepared by a Qualified Professional under contract to the City and paid for by the applicant, that surface discharge of storm water through the buffer would clearly pose a threat to slope stability; and if the storm water outfall will not:
 - a. Adversely affect water quality;
 - b. Adversely affect fish, wildlife, or their habitat;
 - c. Adversely affect drainage or storm water detention capabilities;
 - <u>d.</u> Lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;
 - e. Be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas;

The decision of the Planning and Public Works Officials may be appealed in accordance with Section 90.160.

If a pipe system is used, catch basins may be located within the Buffer Setback of Section 90.90.2, but must be installed as far as feasible from the buffer boundary (see Plate 25 of Chapter 180). Under this subsection, pipe conveying storm water may be located within the buffer, but catch basins may not. Detention and water quality treatment devices shall not be located within the stream buffers or Buffer Setbacks of this Section except as provided below.

- 4. Water Quality Facilities. Water quality facilities, as determined by the Planning Official, may be located within the stream buffers of Section 90.90.1. The Planning Official shall approve a proposal to install a water quality facility within the outer one-half of a stream buffer if:
 - a. It will not adversely affect water quality;
 - b. It will not adversely affect fish, wildlife, or their habitat;
 - c. It will not adversely affect drainage or storm water detention capabilities;
 - <u>d.</u> It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions;
 - e. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas;
 - f. The existing buffer is already degraded as determined by a Qualified Professional;

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- g. Its installation of the water quality facility would be followed immediately by enhancement of an area equal in size and immediately adjacent to the affected portion of the buffer; and
- h. Once installed, it would not require any further disturbance or intrusion into the buffer.

The Planning Official shall approve a proposal by a public agency to install a water guality facility elsewhere in a stream buffer if Criteria i - 1 (below) are met in addition to a - h (above):

The project includes enhancement of the entire buffer;

The project would provide an exceptional ecological benefit off-site;

- <u>k.</u> The water quality facility, once installed, would not require any further disturbance or intrusion into the buffer; and
- I. There is no practicable or feasible alternative proposal that results in less impact to the buffer.

The Planning Official's decision may be appealed in accordance with Section 90.160.

- 5. <u>Minor Improvements</u> Minor improvements may be located within the sensitive area buffers <u>specified in Section</u> 90.90.1. These minor improvements shall be located within the outer one-half of the sensitive area buffer, except where approved stream crossings are made. The Planning Official shall approve a proposal to construct a minor improvement within a sensitive area buffer if:
 - a. It will not adversely affect water quality;
 - b. It will not destroy or damage-a-significant wildlife-habitat-area-adversely affect fish, wildlife, or their habitat;
 - c. It will not adversely affect drainage or storm water detention capabilities;
 - d. It will not lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and
 - e. It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole, including the loss of significant open space or scenic vistas.

The Planning Official may require the applicant to submit a report prepared by a Qualified Professional which describes how the proposal will or will not comply with the criteria for approving a minor improvement. The Planning Official's decision may be appealed in accordance with Section <u>90.160 of this Chapter</u>.

90.95 Stream Buffer Fence or Barrier

Prior to beginning development activities, the applicant shall install a six-foot high construction-phase chain link fence or equivalent fence, as approved by the Planning Official, along the upland boundary of the entire stream buffer with silt screen fabric installed per City standard, in a manner approved by the Planning Official. The construction-phase fence shall remain upright in the approved location for the duration of development activities.

Upon project completion, the applicant shall install between the upland boundary of all stream buffers and the developed portion of the site, either (1) a permanent 3 to 4 foot tall split rail fence, or (2) permanent planting of equal barrier value, or (3) equivalent barrier, as approved by the Planning Official. Installation of the permanent fence or planted barrier must be done by hand where necessary to prevent machinery from entering the stream or its buffer.

90.100 Stream Buffer Modification

Buffer widths may be increased when it is determined that wider buffers are necessary to protect stream functions and values. For example, increased buffer widths may be required for buffers located on steep slopes or adjacent-to-existing or proposed high impact land uses.

- <u>Types of Buffer Modification</u> Buffers may be reduced through one of two means, either (1) buffer averaging, or (2) buffer reduction with enhancement. A combination of these two buffer reduction approaches shall not be used.
 - a. Buffer averaging requires that the area of the buffer resulting from the buffer averaging be equal in size and quality to the buffer area calculated by the standards <u>specified in Section</u> 90.90.1 VIII.C. Buffers may not be reduced at any point by more than 1/3 of the standards in this Section 90.90.1. Buffer averaging calculations shall only consider the subject property.
 - b. Buffers may be decreased through buffer enhancement. The applicant shall demonstrate that through enhancing the buffer (by removing invasive plants, planting native vegetation, installing habitat features such as downed logs or snags, or other means) the reduced buffer will function at a higher level than the standard existing buffer. A buffer enhancement plan shall at a minimum provide the following: 1) a map locating the specific area of enhancement, 2) a planting plan that uses native species, including groundcover, shrubs, and trees, and 3) provisions for monitoring and maintenance. Buffers may not be reduced at any point by

more than 1/3 of the standards in Section 90.90.1.

2. <u>Review Process and Decisional Criteria</u> – Modification requests for averaging or reduction/enhancement of Class A Stream buffers shall be reviewed and decided upon <u>be considered</u> by the Hearing Examiner <u>pursuant to under</u> Process IIA, described in Chapter 150 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Class B Stream buffers shall be reviewed and decided upon <u>considered</u> by the Planning Official <u>pursuant to under</u> Process I, described in Chapter 145 of the Kirkland Zoning Code. Modification requests for averaging or reduction/enhancement of Class C Stream buffers shall be reviewed and decided upon <u>considered</u> by the Planning Official. <u>Decisions on modification requests may be appealed pursuant to the provisions of Section 160 of this Chapter</u>.

An improvement or land surface modification shall be approved in a stream buffer only if:

- a. It is consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998);
- b. It will not adversely affect water quality;
- c. It will not adversely affect fish, wildlife, or their habitat;
- d. It will not have an adverse effect on drainage and/or storm water detention capabilities;
- e. It will not lead to unstable earth conditions or create an erosion hazard or contribute to scouring actions;
- f. It will not be materially detrimental to any other property or the City as a whole;
- g. Fill material does not contain organic or inorganic material that would be detrimental to water quality or to fish, wildlife, or their habitat;
- h. All exposed areas are stabilized with vegetation normally associated with native stream buffers, as appropriate; and
- i. There is no practicable or feasible alternative development proposal that results in less impact to the buffer.

As part of the Modification Request, the applicant shall submit a report prepared by a Qualified Professional and fund a review of this report by the City's wetland consultant. The report shall assess the habitat, water quality, storm water detention, ground water recharge, and erosion protection functions of the buffer; assess the effects of the proposed modification on those functions; and address the nine criteria listed in this subsection.

90.105 Stream Relocation or Modification

A proposal to relocate or modify a Class C stream shall be reviewed and decided upon <u>considered</u> by the Planning Official. The decision of the Planning Official may be appealed in accordance with Section <u>90,160</u> of this Chapter. A proposal to relocate or modify a Class A or B stream shall be considered by the Planning Official pursuant to <u>under</u> Process I. The Planning Official shall permit a stream to be relocated or modified only if water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream, will be significantly improved by the relocation or modification. Convenience to the applicant in order to facilitate general site design may not be considered.

A proposal to relocate or modify a Class A stream shall be approved only if the Washington Department of Fish and Wildlife issues a Hydraulic Project Approval for the project. Furthermore, all modifications shall be consistent with *Kirkland's Streams, Wetlands and Wildlife Study* (The Watershed Company, 1998) and the *Kirkland Sensitive Areas Regulatory Recommendations Report* (Adolfson Associates, Inc., 1998).

If the proposed stream activity will result in the creation or expansion of a sensitive area stream or its buffer on any property other than the subject property, the Planning Official shall not approve the plan until the applicant submits to the Planning Official a copy of a statement signed by the owners of all affected properties, in a form approved by the City Attorney and recorded in the King County Department of Elections and Records, consenting to the sensitive area and/or buffer creation or increase on such property.

Prior to the Planning Official's approval of a stream relocation or modification, the applicant shall submit a stream relocation/modification plan prepared by a Qualified Professional approved by the Planning Official. <u>The cost of producing and implementing the stream relocation/modification plan, and the cost of review of that plan by the City's stream consultant shall be borne by the applicant.</u> This plan shall contain or demonstrate the following.

- 1. A topographic survey showing existing and proposed topography and improvements;
- 2. The filling and revegetation of the existing stream channel;
- 3. A proposed phasing plan specifying time of year for all project phases;
- 4. The ability of the new stream channel to accommodate flow and velocity of 100year storm events; and
- 5. The design and implementation features techniques listed below, unless clearly and demonstrably inappropriate for the proposed relocation or modification:
 - a. The creation of natural meander patterns;

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- b. The formation of gentle and stable side slopes, no steeper than two feet horizontal to one-foot vertical, and the installation of both temporary and permanent erosion control features (the use of native vegetation on stream banks shall be emphasized);
- c. The creation of a narrow sub-channel (thalweg) against the south or west stream bank;
- d. The utilization of native materials;
- e. The installation of vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife;
- f. The creation of spawning areas, as appropriate;
- g. The re-establishment of fish population, as appropriate;
- h. The restoration of water flow characteristics compatible with fish habitat areas;
- i. Demonstration that the flow and velocity of the stream after relocation or modification shall not be increased or decreased at the points where the stream enters and leaves the subject property, unless the change has been approved by the Planning Official to improve fish and wildlife habitat or to improve storm water management; and
- j. A written description of how the proposed relocation or modification of the stream will significantly improve water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream.

Prior to diverting water into a new stream channel, a Qualified Professional approved by the Planning Official shall inspect the completed new channel and issue a written report to the Planning Official stating that the new stream channel complies with the requirements of this Section. The cost for this inspection and report shall be borne by the applicant.

90.110 Bulkheads in Streams

Bulkheads are not permitted along a stream except as provided in this Section. A proposal for a bulkhead shall be reviewed and decided upon by the Planning Official. Decisions made under this Subsection may be appealed in accordance with Section <u>90.160</u> of this Chapter. The Planning Official shall allow a bulkhead to be constructed only if:

- 1. It is not located within a wetland or between a wetland and a stream;
- 2. It is needed to prevent significant erosion;
- 3. The use of vegetation and/or other biological materials would not sufficiently stabilize the stream bank to prevent significant erosion;
- 4. The applicant submits a plan prepared by a Qualified Professional approved by the Planning Official that shows a bulkhead and implementation techniques that meet the following criteria:

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- a. There will be no adverse impact to water quality;
- b. There will be no adverse impact to fish, and wildlife, and their habitat;
- c. There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat;
- d. There will be no decrease in flood storage volumes;
- e. Neither the installation, existence, nor operation of the bulkhead will lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and
- f. Neither the installation, existence, nor operation of the bulkhead will be detrimental to any other property or the City as a whole.

The bulkhead shall be designed and constructed to minimize the transmittal of water current and energy to other properties. Changes in the horizontal or vertical configuration of the land shall be kept to a minimum. Fill material used in construction of a bulkhead shall be non-dissolving and non-decomposing. The applicant shall also stabilize all exposed soils by planting native riparian vegetation with high food and cover value for fish and wildlife.

90.115 Culverts in Streams

Culverts are not permitted in streams except as specified in this Section. The Planning Official shall review and decide upon an application to place a stream in a culvert under an access drive, driveway, or street. Decisions made under this Subsection may be appealed in accordance with Section <u>90.160</u> of this Chapter. The Planning Director will review and decide upon proposals to place streams in culverts, other than as specified above, using Process I, described in Chapter 145 of the Kirkland Zoning Code. A stream shall be allowed to be put in a culvert only if:

1---- No significant habitat area will be destroyed;

- 2.1. Placing the stream in a culvert is necessary to make reasonable use of the subject property (see Section-XII) to provide required vehicular, pedestrian, or utility access to the subject property. Convenience to the applicant in order to facilitate general site design shall not be considered; and
- 3.2. The applicant submits a plan prepared by a Qualified Professional approved by the Planning Official that shows the culvert and implementation techniques that meet the following criteria:
 - a. There will be no adverse impact to water quality;
 - b. There will be no adverse impact to fish, and wildlife, and their habitat;
 - c. There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat;
 - d. There will be no decrease in flood storage volumes;
 - e. Neither the installation, existence, nor operation of the culvert will lead to unstable earth conditions or create erosion hazards or contribute to scouring actions; and
 - f. Neither the installation, existence, nor operation of the culvert will be detrimental to any other property or to the City as a whole.

The culvert shall be designed and constructed to allow passage of fish inhabiting the stream or which may inhabit the stream in the future. The culvert shall be large enough to accommodate a 100-year storm event. The applicant shall at all times keep the culvert free of debris and sediment_so as to allow free passage of water and fish. The Planning Official shall require a security or perpetual culvert maintenance agreement under Section <u>90.145 of this Chapter</u> for continued maintenance of the culvert.

If a proposal for a culvert is denied, a bridge may be approved if the bridge complies with the above criteria.

If a proposed project requires approval through Process IIB or Process III, the City Council may require that any stream in a culvert on the subject property be opened, relocated, and restored, consistent with the provisions of this Subsection.

90.120 Stream Rehabilitation

<u>Planning Official approval is required prior to stream rehabilitation.</u> The Planning Official may permit or require the applicant <u>or property owner</u> to restore and maintain a stream and/or its buffer by removing material detrimental to the stream and its surrounding area such as debris, sediment, or vegetation. The Planning Official may also permit or require the applicant or property owner to restore a stream or its buffer through the addition of native plants and other habitat features. Restoration may be required at any time that a condition detrimental to water quality or habitat exists. When stream rehabilitation is required by the City, the requirements of Section 90.55.4, Mitigation Plan Requirements, shall apply.

90.125 Frequently Flooded Areas

No land surface modification may take place and no improvements may be located in a frequently flooded area except as specifically provided for in Chapter 21.56 of the Kirkland Municipal Code.

90.130 Site Requirements and Sensitive Areas Protection Techniques

In addition to any other requirements of this Chapter, the applicant shall locate all improvements on the subject property to minimize adverse impacts to sensitive areas. The applicant shall locate parking and vehicle circulation areas as far as possible from sensitive areas. In order to minimize adverse impacts to sensitive areas or to other areas not subject to development activity, the decision maker may require other construction techniques, conditions, and restrictions, including:

(Interim Ordinance No. 3781, Attachment A)

- 1. The decision-maker may limit development activity in or near sensitive areas to specific months and to a maximum number of continuous days or hours in order to minimize adverse impacts.
- 2. The decision-maker may require that equipment be operated from only one side of a stream in order to minimize bank disruption.
- 3. The applicant shall install a berm, curb, or other physical barrier during construction and following completion of the project when necessary to prevent direct runoff and erosion from any modified land surface into any sensitive area.

90.135 Maximum Development Potential

 <u>Dwelling Units</u>. – The theoretical maximum <u>potential</u> number of dwelling units for a site which contains a wetland, stream, minor lake, or their buffers shall be the Buildable Area in square feet divided by the minimum lot area per unit as specified by Kirkland Zoning Code Chapters 15 through 65, plus the area of the <u>required sensitive area</u> wetland, stream, minor lake, and buffer in square feet divided by the minimum lot area per unit as specified by Kirkland Zoning Code Chapters 15 through 65, multiplied by the Development Factor derived from Section XLC <u>90.135.2</u>:

MAXIMUM DWELLING UNIT POTENTIAL = (BUILDABLE AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT) + [(BUFFER AREA/THE PRESCRIBED MINIMUM LOT AREA PER UNIT) X (DEVELOPMENT FACTOR)]

For purposes of this subsection only, "Buildable Area" means the total area of the subject property minus sensitive areas and their buffers.

For multi-family development, if application of the Maximum Development Potential formula results in a fraction, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least 0.66. For single-family development, if application of the Maximum Development Potential formula results in a fraction, the number of permitted dwelling units (lots) shall not be rounded up, regardless of the fraction. This provision shall not be construed to preclude application of Section 22.28 of the Kirkland Municipal Code.

Lot size and/or density may be limited by or through other provisions of this Code or other applicable law, and the application of the provisions of this Chapter may result in the necessity for larger lot sizes or lower density due to inadequate buildable area.

(Interim Ordinance No. 3781, Attachment A)

 <u>Development Factor</u> - The development factor, consisting of a "percent credit", to be used in computing the <u>maximum potential</u> number of dwelling units per-square feet or the maximum allowable commercial floor area for a site which contains a sensitive area buffer is derived from the following table:

Percentage of Site in Wetland,	Stream	, Minor Lake, and Sensitive Area B	<u>uffer Co</u> ı	unted at
< 1	to	10%	30	<u>100</u> %
> 10	to	20%	27	<u>90</u> %
> 20	to	30%	<u>24</u>	<u>80</u> %
> 30	to	40%	21	<u>70</u> %
> 40	to	50%	18	<u>60</u> %
> 50	to	60%	15	<u>50</u> %
> 60	to	70%	12	<u>40</u> %
> 70	to	80%	_ 9	<u>30</u> %
> 80	to	90%	-6	<u>20</u> %
> 90	to	100%	С. С	<u>10%</u>

90.140 Reasonable Use

This Chapter is not intended, and shall not be construed or applied in a manner, to deny <u>all economically viable use of private property. Using Process IIB, described in reasonable</u> use of a lot, tract, or parcel. An owner of real property may apply for a reasonable use exception to this Chapter, which shall be considered under Process IIB of Chapter 152 of the Kirkland Zoning Code<u>, if an applicant demonstrates to the satisfaction of the decision</u> maker that. The application shall include the proposed use and activities for the property, and shall address the criteria described in this Section. The decision maker shall determine whether application of this Chapter will deny all economically viable use of the property in a residential area, one single family home may be permitted subject to appropriate conditions if the applicant also demonstrates all of the following to the satisfaction of the decision maker; reasonable use of the property, and whether the proposed use and activities are a reasonable use of the property. In making these determinations, the decision maker shall consider the following three criteria:

 <u>A. No use There is no permitted type of land use for the property with less</u> impact on the wetland-or stream <u>Sensitive Area</u> and the buffer is feasible and reasonable; and

- 2. B. There is no feasible and reasonable No on-site alternative to the proposed activities, proposal is feasible and reasonable, considering possible changes in site layout, reductions in density and similar factors; and
- 3. The proposed activities-proposal, as conditioned, will result in minimum feasible alteration of or impairment to the wetland's or stream's functional characteristics and its of the Sensitive Areas, and their existing contours, vegetation, fish and wildlife resources, and hydrological conditions; and D_x The proposed activities will not cause significant degradation of

<u>E.</u><u>All reasonable mitigation measures have been implemented or assured;</u> and

F.____The_proposed activities will_not_cause_or_result_in_damage_to_other properties: and

G.The inability to derive economically viable use is not the result of the applicant's actions, including such actions as segregating or dividing the property and creating the undevelopable condition, or taking actions in violation of any local, state, or federal law or regulation. The purchase price-paid for the property shall not be the measure of economically viable use.

The applicant shall either fund a report prepared by the City's wetland consultant, or submit a report prepared by a Qualified Professional, and fund a review of this report by the City's wetland/stream consultant, selected by the applicant, with the Qualified Professional's report reviewed by the City's wetland consultant at the applicant's cost and expense. The report shall describe how the proposal will or will not comply with the <u>above</u> three applicable decisional criteria.

In determining whether application of this chapter will deny reasonable use of the property, the decision maker shall consider the following:

- 1. The inability to derive reasonable use is the result of the applicant's actions, such as segregating or dividing property and creating the undevelopable condition, or taking actions in violation of any local, state, or federal law or regulation; and
- 2. The land use and environmental regulations which prevent reasonable use of the property were in effect at the time of purchase of the property by the applicant.

If the decision-maker determines that alteration of a wetland, stream, and/or buffer is necessary and unavoidable, the decision-maker shall set forth in writing its findings with respect to each of the items listed in this subsection.

For the purpose of this section only, "residential area" means all portions of the City located in a zone in which "detached dwelling units" or "detached, attached or stacked dwelling units" are uses that are permitted or are approved pursuant to this Code.

90.145 Bond or Performance Security

The Planning Official shall require a performance or maintenance bond, a performance or maintenance security, a perpetual culvert maintenance agreement, and/or a perpetual landscape maintenance agreement, as determined to be appropriate by the Planning Official, to ensure compliance with any aspect of this Chapter or any decision or determination made pursuant to this Chapter.

- 1. <u>Performance or Maintenance Bond or Security Requirement</u> The performance or maintenance security required by the Planning Official shall be provided in such forms and amounts as the Planning Official deems necessary to assure that all work or actions are satisfactorily completed or maintained in accordance with the approved plans, specifications, permit or approval requirements, and applicable regulations, and to assure that all work or actions not satisfactorily completed or maintained will be corrected to comply with approved plans, specifications, requirements, and regulations to restore environmental damage or degradation, protect fish and wildlife habitat and protect the health, safety, and general welfare of the public.
- 2. Form of Performance Security The performance security shall be a surety bond obtained from companies registered as surety in the state or certified as acceptable sureties on federal bonds. In lieu of a surety bond, the Planning Official may allow alternative performance security in the form of an assignment of funds or account, an escrow agreement, an irrevocable letter of credit, or other financial security device in an amount equal to that required for a surety bond. The surety bond or other performance security shall be conditioned on the work being completed or maintained in accordance with requirements, approvals, or permits; on the site being left or maintained in a safe condition; and on the site and adjacent or surrounding areas being restored in the event of damages or other environmental degradation from development or maintenance activities conducted pursuant to the permit or approval.
- 3. <u>Amount of Performance Security</u> The amount of the performance or maintenance security shall be 125 percent of the estimated cost, as approved by the Planning Official, of conformance to plans, specifications, and permit or approval requirements under this Chapter, including corrective work and compensation, enhancement, mitigation, maintenance, and restoration of sensitive areas. In addition, an administrative deposit shall be paid as required in Section 175.25 of the Kirkland Zoning Code. All bond or performance security

(Interim Ordinance No. 3781, Attachment A)

shall be submitted in their original form with original signatures of authorization.

- 4. <u>Administration of Performance Security</u> If during the term of the performance or maintenance security, the Planning Official determines that conditions exist which do not conform with plans, specifications, approval or permit requirements, the Planning Official may issue a stop work order prohibiting any additional work or maintenance until the condition is corrected. The Planning Official may revoke the performance or maintenance security, or a portion thereof, in order to correct conditions that are not_in_conformance or maintenance security may be released upon written notification by the Planning Official, following final site inspection or completion, as appropriate, or when the Planning Official is satisfied that the work or activity complies with permits or approved requirements.
- 5. <u>Exemptions for Public Agencies</u> State agencies and local government bodies, including school districts, shall not be required to secure the performance or maintenance of permit or approval conditions with a surety bond or other financial security device. These public agencies are required to comply with all requirements, terms, and conditions of the permit or approval, and the Planning Official may enforce compliance by withholding certificates of occupancy or occupancy approval, by administrative enforcement action, or by any other legal means.

90.150 Dedication

Consistent with law, the applicant shall dedicate development rights, air space, or grant a greenbelt protection or open space easement to the City to ensure the protection of protect sensitive areas and their buffers. Land survey information shall be provided by the applicant for this purpose in a format approved by the Planning Official,

90.155 Liability

Prior to issuance of a <u>Land Surface Modification permit or a</u> building permit, <u>whichever is</u> <u>issued first</u>, the applicant shall enter into an agreement with the City that runs with the property, in a form acceptable to the City Attorney, indemnifying the City from any claims, actions, liability and damages to sensitive areas arising out of development activity on the subject property. The applicant shall record this agreement with the King County Department of Elections and Records.

90.160 Appeals

All classifications, decisions, and determinations made pursuant to this Chapter may be appealed using, except as stated below, the applicable appeal provisions of Chapter 145 of the Kirkland Zoning Code. The applicant or any other aggrieved person shall file the

(Interim Ordinance No. 3781, Attachment A)

appeal-within-15 days of the date of the decision maker's written classification, determination, or decision. If a proposed development activity requires approval through Process IIA, IIB, or III (as described in Chapters 150, 152, and 155, respectively, of the Kirkland Zoning Code), any appeal of a classification, determination, or decision will be heard as part of that other process.

90.165 Setbacks and Buffers Required By Prior Approvals

If, subsequent to October 2, 1982, the City approved a <u>Variance, Planned Unit</u> <u>Development, Rezone, or zoning permit through Processes I, II, IIA, IIB, or III, as described</u> <u>in Zoning Code Chapters 120, 125, 130, 145, 150, 152, and 155, respectively, and/or a</u> <u>subdivision or short subdivision, or development permit</u> for the subject property with established setbacks or buffers on the subject property from a stream or wetland, those setbacks or buffers shall apply to <u>the original construction on the subject property</u>. any development on the subject property pursuant to that subdivision, short subdivision, or development permit, or any redevelopment or remodeling pursuant to that subdivision, short subdivision, or development permit. Any inconsistent environmentally sensitive area buffer requirements of this Chapter shall not apply, provided that a-All of the provisions of this Chapter which do not directly conflict with the previously imposed setback or buffer requirements shall fully apply to the subject property.

115.75 Land Surface Modif rtion

- 3. A land succe modification is permitted, only if it:
 - a. has been approved as part of a valid Develor. Substantial Development Permit; or

(Interim Ordinance No. 3781 Attachment B, Amending Zoning Code 115.75.3.k)

- b. is for cemetery graves; or
- is in a right-of-way authorized in writing by the Director of the Department of Public Works; or
- d. is for mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate or clay where a permit has been issued by the State of Washington, Department of Natural Resources; or
- e. is for exploratory excavations under the direction of a professional engineer licensed in the State of Washington, as long as the extent of the land surface modification does not exceed the minimum necessary to obtain the desired information; or
- f. is for normal maintenance and repair of the facilities of a common carrier by rail in interstate commerce within its existing right-of-way; or
- g. is for excavations for utility service connections to serve existing and/or new structures; or
- h. is for actions which must be undertaken immediately, or within a time too short to allow full compliance with the permit requirements of Paragraph 4, to avoid an imminent threat to public health or safety; to prevent an imminent danger to public or private property; or to prevent an imminent threat of serious environmental degradation. This determination will be made by the Planning Official; or
- is for the removal of overhanging vegetation and fire hazards as specified in Chapter 9.12, of the Kirkland Municipal Code and the removal of blackberry vines or dead, dangerous, or diseased trees when authorized by the Building Official; or
- j. is for placement of fill on land owned or controlled by the City; or
- complies with all of the following criteria:
 - The subject property contains a permanent building or an active use; and
 - 2) The Land Surface Modification will not change the points where the storm water or groundwater enters or exits the subject property; and will not change the quality, quantity, or velocity of storm water or groundwater; and
 - 3) The Land Surface Modification is not in a stream, lake, wetland, or required setback therefrom, is not on or within 25 feet of a regulated slope, and is not in an area with soft compressible soils; and
 - 4) In any one year period, not more than five healthy trees defined as significant natural vegetation are removed. If the subject property is larger than one acre, the limit is five trees within each acre. See also Chapter 95 of this Code for regulations requiring the retention of significant natural vegetation in some cases; and
- 5) The Land Surface Modification is not located on a site for which a Development Permit, subdivision, or Substantial Development Permit has been submitted or is under review but has not vet been approved; and

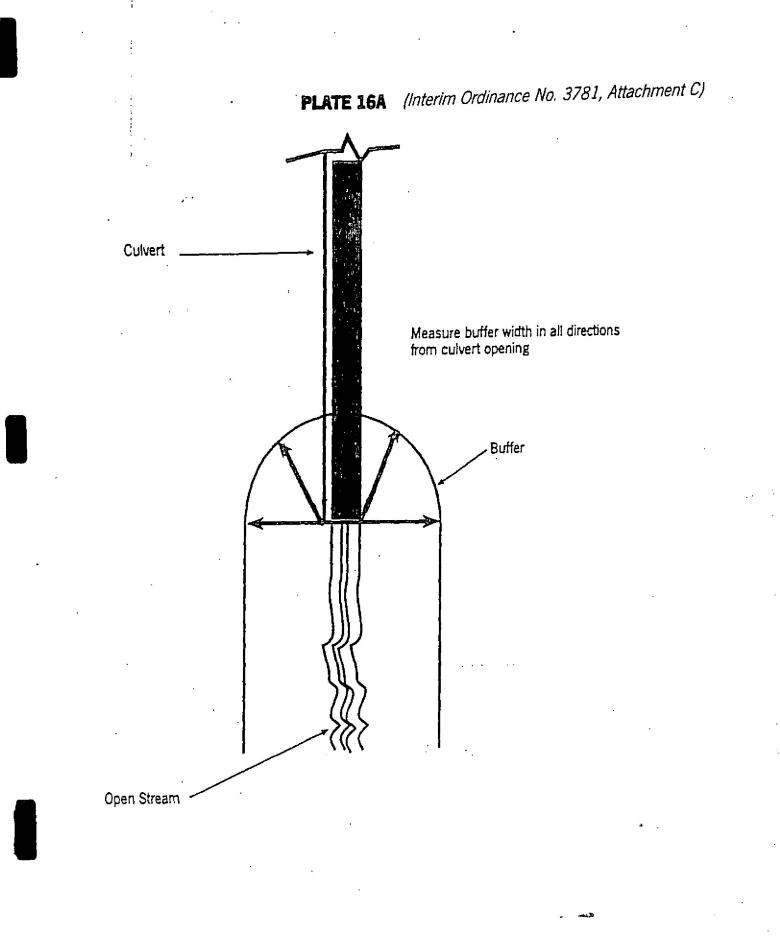
- In any one year period, not more than 500 cubic yards of fill material is deposited on, excavated and removed from or moved from place to place on the subject property and will not result in more than a two foot increase or one foot decrease in average slope. If the subject property is larger than one acre, the limit is five hundred cubic yards within each acre.
- If the Land Surface Modification is between 100 and 500 cubic yards, the City may require a soils report. If a soils report is required, it shall contain a description of any on or off site impacts of the proposed land surface modification on each of the following elements:
 - a) Slope stability if the site has an average slope 15% or greater.
 - b) Landslide hazard, sloughing or mud flows.
 - c) Seismic hazards (based on subclassifications within the Class III risk zone).
 - d) Erosion hazards.
 - e) Drainage
 - f) Springs or seeps or any other surface water.
 - g) Groundwater.
 - h) Flood hazard.
 - i) Existing vegetation.

The soils report also must contain recommended methods for mitigating identified impacts and a description of how these mitigating measures impact adjacent properties. The City may require implementation of recommendations in the soils report to mitigate identified impacts; or

- 4. The planning official may approve a land surface modification which does not comply with paragraph 3 above if the land surface modification:
 - Except as allowed by Chapter 90, does not alter or adversely affect streams, lakes, wetlands, or significant trees, either on the subject property or on any other property; and
 - b. Does not violate any expressed policy of the City; and
 - c. Either.

7) 21

- Is proposed to correct an erosion or drainage problem on an undeveloped site; or
- Is proposed to create new utility or access corridors; or



10' Buffer Setback Buffer Sensitive Area Catch Basin Pipe Stormwater -Outfall

PLATE 25

(Interim Ordinance No. 3781, Attachment C)

PLATE 26

(Interim Ordinance No. 3781, Attachment C)



WETLAND FIELD DATA FORM

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. - e.) THAT APPLY:

- a. The wetland is contiguous to Lake Washington;
- b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;
- C. The wetland is equal to or greater that 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;
- d. The wetland has significant habitat value to state or federally-listed threatened or endangered wildlife species; or
- e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain are associated with forested habitat.

1. Total wetland area

Estimate wetland area and score from choices	Acres		Point Value	POINTS
	>20.00	=	6	
	10-19.99	-	5	
	5-9.99	-	4	
	1-4.99	-	3	
	0.1-0.99	-	2	
	<0.1		1	

2. Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.

	# of Classes		Points
Open Water: if the area of open water is >1/3 acre or >10% of the total wetland area	1	=	1
Aquatic Beds: if the area of aquatic beds is >10% of the open water area or >1/2 acre	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	· 4	-	7
Forested: if area of forested class is >1/2 acre or >10% of the total wetland area.	5	=	10

PLATE 26

(Interim Ordinance No. 3781, Attachment C)

3. Plant species diversity.

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of Species		Point Value	Class	# of Species		Point Value
Aquatic Bed	1-2	E 2	1	Scrub-Shrub	1-2	=	1
	3	-	2		3-4	=	2
	>3		3		>4	-	3
Emergent	1-2	=	1	Forested	1-2	=	1
	3-4	=	2		3-4	=	2
	>4	=	3		>4	=	3

4. Structural Diversity

If the wetland has a forested class, add 1 point for each of the following atributes present:

Trees >50' tall	=	1
Trees 20' to 49' tall	=	1
shrubs	=	1
Herbaceous ground cover	=	1

5. Interspection between wetland classes

Decide from the diagrams below whether interspection between wetland classes is high, moderate, low or none

2		1.12
-	=	High
v		1 1 (5) 1

- 2 = Moderate
- 1 = Low

0

= None

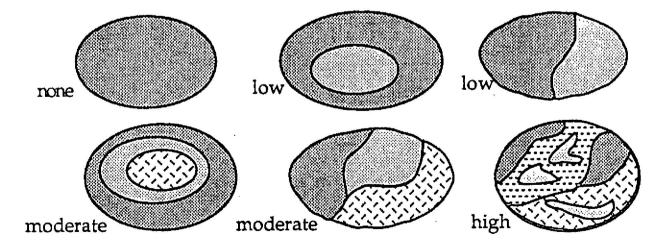


PLATE 26

(Interim Ordinance No. 3781, Attachment C)

6. Habitat features

Add points associated with each habitat feature listed:

Is there evidence of current use by beavers?	=	3
Is a heron rookery located within 300'?	=	2
Are raptor nest(s) located within 300'?	•	1
Are there at least 2 standing dead trees (snags) per acre?	=	1
Are there any other perches (wires, poles, or posts)?	=	1
Are there at least 3 downed logs per acre?	=	1

7. Connection to streams

Is the wetland connected at any time of the year via surface water? (score one answer only)

Is the wetland connected at any time of the year via surface water?		
To a perennial stream or a seasonal stream with fish		5
To a seasonal stream <i>without</i> fish	-	3
Is not connected to any stream	-	0

8. Buffers

<u>Step 1</u>: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer		Step 1	Width Factor	Step 2		
Roads, buildings or parking lots	<u> </u>	X 0 =		=	<u></u>		
Lawn, grazed pasture, vinyards or annual crops	%	X 1 =		<u></u> 3			
Ungrazed grassland or orchards	%	X 2 =		 #			
Open water or native grasslands	%	ХЗ=	. <u></u>	"	. <u> </u>		
Forest or shrub	%	X 4 =		=	_		
			Add buffer total				

<u>Step 2:</u> Multiply result(s) of step 1: By 1 if buffer width is 25-50' By 2 if buffer width is 50-100' By 3 if buffer width is >100' Enter results and add subscores

<u>Step 3</u>: Score points according to the following table: <u>Buffer Total</u> 900-1200 = 4 600-899 =3 300-599 =2 100-299 =1

9.	Connection to other habitat areas:		
	Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area?	=	5
	Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area?		3
	ls there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor?	-	1
	Is the wetland and buffer completely isolated by development and/or cultivated agricultural land?	=	0
10	Coordinat		

10. Scoring

Add the scores to get a total:

Question: Is the total greater than or equal to 22 points?

<u>Answer:</u> Yes = Type 2 No = Type 3

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ORDINANCE NO. <u>3781</u> PUBLICATION SUMMARY

AN INTERIM ORDINANCE OF THE CITY OF KIRKLAND, RELATING TO DRAINAGE BASINS AND SENSITIVE AREAS (WETLANDS, STREAMS, MINOR LAKES, AND FREQUENTLY FLOODED AREAS) AND TO LAND SURFACE MODIFICATION (CLEARING AND GRADING); ADOPTING REVISED INTERIM SENSITIVE AREAS REGULATIONS; REPLACING IN ITS ENTIRETY CHAPTER 90 OF THE KIRKLAND ZONING CODE (TITLE 23 OF THE KIRKLAND MUNICIPAL CODE); AMENDING SECTION 115.75.3.k OF THE KIRKLAND ZONING CODE; ADDING NEW PLATES 16A, 25 AND 26 TO CHAPTER 180 OF THE KIRKLAND ZONING CODE; AND REPEALING ORDINANCE NOS. 3658, 3684, 3706, 3742, AND 3755.

<u>Section 1</u>. Provides findings of fact for the ordinance.

Section 2. Replaces Ordinance 3658 and Chapter 90 in their entirety by Attachment A, which is a new interim Chapter 90.

<u>Section 3</u>. Adds to Section 115.75.3 of the Kirkland Zoning Code a requirement that an approved grading permit be obtained prior to commencing activities that require a grading permit.

Section 4. Adds Plates 16A, 25, and 26 to Chapter 180 of the Kirkland Zoning Code.

Section 5. Repeals Ordinance Nos. 3658, 3684, 3706, 3742, and 3755.

<u>Section 6</u>. Establishes the duration of the ordinance as six months.

<u>Section 7</u>. Provides a severability clause.

Section 8. Authorizes publication of the ordinance by summary, which summary is approved by the City Council pursuant to Section 1.088.017 Kirkland Municipal Code and establishes the effective date as five days after publication of summary.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its regular meeting on the <u>20th</u> day of <u>February</u>, 2001.

0-3781

I certify that the foregoing is a summary of Ordinance <u>3781</u> approved by the Kirkland City Council for summary publication.

MAYOR

Attest:

City Clerk