ORDINANCE NO. 3332

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO ZONING, PLANNING, AND LAND USE AND AMENDING ORDINANCE 2740 AS AMENDED, THE KIRKLAND ZONING ORDINANCE (FILE NO. IV-92-6) AND ITS SUMMARY ORDINANCE.

WHEREAS, the City Council has received from the Kirkland Planning Commission a recommendation to amend certain sections of the text of the Kirkland Zoning Code, Ordinance 2740 as amended, all as set forth in that certain report and recommendation of the Planning Commission dated July 16, 1992, and bearing Kirkland Department of Planning and Community Development File No. IV-92-6; and

WHEREAS, prior to making said recommendation, the Planning Commission, following notice thereof as required by RCW 35A.63.070, on April 23, May 14, June 11, and July 16, 1992, held public hearings on the amendment proposals and considered the comments received at said 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, in regular public meeting the City Council considered the environmental documents received from the responsible official, together with the report and recommendation of the Planning Commission.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Kirkland as follows:

Section 1. Zoning text amended: The following specified sections of the text of Ordinance 2740 as amended, the Kirkland Zoning Ordinance, be and they hereby are amended to read as follows:

As set forth in Attachment A which by this reference is incorporated herein.

Section 2. If any section, subsection, sentence, clause, phrase, part or portion of this ordinance, including those parts adopted by reference, is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. To the extent the subject matter of this ordinance, pursuant to Ordinance 2001, is subject to the

disapproval jurisdiction of the Houghton Community Council, this ordinance shall become effective within the Houghton Community Municipal Corporation only upon approval of the Houghton Community Council or the failure of said Community Council to disapprove this ordinance within 60 days of the date of the passage of this ordinance.

Section 4. Except as provided in Section 3, this ordinance shall be in full force and effect five days from and after its passage by the Kirkland City Council and publication, pursuant to Section 1.08.017 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 <u>6th</u> day of <u>October</u>, 19<u>92</u>.

SIGNED IN AUTHENTICATION thereof this 6th day of October 1992.

Mayor

Attest:

City Clerk

Approved as to Form:

ORD92-6.AUG/JM:om

CHAPTER 5 - DEFINITIONS

- 5.121 Class A Streams As defined in Chapter 90 of this Code.
- 5.122 Class B Streams As defined in Chapter 90 of this Code.
- 5.123 Class C Streams As defined in Chapter 90 of this Code.
- 5.282 <u>Environmentally Sensitive Areas Maps (ESA)</u> As defined in Chapter 90 of this Code.
- 5.283 Environmentally Sensitive Area Buffer As defined in Chapter 90 of this Code.
- 5.292 <u>Erosion Hazard Areas</u> As defined in Chapter 85 of this Code.
- 5.327 <u>Frequently Flooded Areas</u> As defined in Chapter 90 of this Code.
- 5.272 <u>Geologically Hazardous Areas</u> As defined in Chapter 85 of this Code.
- 5.467 <u>Landslide Hazard Areas</u> As defined in Chapter 85 of this Code.
- 5.493 Minor Improvements As defined in Chapter 90 of this Code.
- 5.945 <u>Major Stream</u> All-of the following: Forbes Creek, Juanita Creek, Cochran Creek, and Yarrow Creek.
- 5.530 Minor Lake Any-lake shown on the Environmentally Sensitive Areas Map, as adopted by the City Council and on file in the Planning Department, other than Lake Washington. As defined in Chapter 90 of this Code.
- 5.535 <u>Minor Stream</u> Any stream that does not meet the definition of major stream.
- 5.767 Regulated Slope An average slope of 15% or greater when measured between any two 5-foot-contour intervals. (See Plate 15).
- 5.768 Regulated Wetland A wetland that serves one or more of the following: serves significant biological functions; serves significant drainage and sedimentation functions; shields other areas from wave action, erosion or storm damage; serves as valuable storage area for storm and flood waters; is a prime natural recharge area; serves significant water purification functions. Although a site specific wetland may not meet the criteria descried above, it will be considered a regulated wetland if it is functionally related to another wetland that meets the criteria.

- 5.823 Salmonid As defined in Chapter 90 of this Code.
- 5.827 <u>Seismic Hazard Areas</u> As defined in Chapter 85 of this Code.
- 5.854 <u>Significant Habitat Area</u> As defined in Chapter 90 of this Code.
- 5.895 Streams A course or route, formed by nature, including those modified by man, and generally consisting of a channel with a bed, bank or sides throughout substantially all its length, along which surface waters naturally and normally flow in draining from higher to lower land. As defined in Chapter 90 of this Code.
- 5.932 Type I Wetlands As defined in Chapter 90 of this Code.
- 5.933 Type II Wetlands As defined in Chapter 90 of this Code.
- 5.985 Wetlands Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. As defined in Chapter 90 of this Code.

CHAPTER 85 SLOPES GEOLOGICALLY HAZARDOUS AREAS

- 85.05 User Guide
- 85.10 Applicability
- 85.12 Environmentally Sensitive Areas (ESA) Maps
- 85.13 Definitions
- 85.14 Erosion Hazard Areas
- 85.15 Required Information Landslide Hazard Areas and Seismic Hazard Areas
- 85.20 Required Review Process Landslide Hazard Areas and Seismic Hazard Areas
- 85.25 Specific Use and Development RequirementsPerformance Standards Landslide Areas and Seismic Hazard Areas
- 85.30 Appeals of Determination of Regulated Slopes
- 85.35 Bonds
- 85.40 Dedication
- 85.45 Documents to be Recorded
- 85.50 Request for Determination

85.05 User Guide

- 1. This Chapter establishes special regulations that apply to development on property containing average slopes 15% or greater (regulated slopes—see Plate 15); or areas with soft compressible soils. geologically hazardous areas. These regulations add to and, in some cases, supercede other regulations of this Code. Regulated slopes will be determined at the time a-permit application—is accepted for filing using topographic information submitted by an-applicant as part of other permit requirements and/or from topographic information shown on the City's maps. Unless more specific information is provided by an applicant, areas of soft compressible soils will be determined by using the City's Environmentally Sensitive Areas Map.
- 2. If you are interested in developing property that meets the criteria described in Section 10, Paragraph 1 of this Chapter contains a geologically hazardous area, or if you wish to participate in the City's decision on a proposed development on any of these areas, you should read this Chapter.
- 3. Conflict with Other Provisions of the Code The provisions of this Chapter supercede any conflicting provisions of this Code. The other provisions of this Code that do not conflict with the provisions of this Chapter apply to property that contains a regulated slope or areas with soft compressible soils.

85.10 Applicability

- 1. General This Chapter applies to any property that contains any of the following:
 - a. An average—slope—15% or greater, unless no development activity or revegetation is proposed on or within 25 feet of the slope; or erosion hazard area
 - b. Land-surface modification, improvements or utilities which are on or within 25 feet of an average slope 15% or greater; or A landslide hazard area.
 - c. Areas of soft compressible soils including peat and/or alluvium. A seismic hazard area.
- 2. Topographic Information Required Conflict with Other Provisions of this Code The City may require surveyed topographic information, prepared by a licensed surveyor, if it is necessary to determine whether or not a slope is 15% or greater. The provisions of this Chapter supercede any conflicting provisions of this Code. The other provisions of this Code that do not conflict with the provisions of this Chapter apply to property that contains a geologically hazardous area. If more than one provision of this Chapter applies to the subject property because of the presence on the subject property of more than one type of geologically hazardous area, then the regulations that provide the greatest protection from the hazardous area shall apply to the area governed by multiple regulations.
- 3. <u>SEPA Compliance</u> Nothing in this Chapter or the decisions made pursuant to this Chapter in any way effect the authority of the City to review, condition and deny projects under SEPA.

85.12 Environmentally Sensitive Areas (ESA) Maps

As part of the City's SEPA Ordinance, City Council adopts, and from time to time amends, a map folio entitled "Kirkland Sensitive Areas". This folio contains maps entitled "Seismic Hazards" and "Landslide and Erosion Hazards". These maps will be used as a guide only to determine the presence of seismic hazards, erosion hazards and landslide hazards, and the determination regarding whether these hazards exist on or near the subject property will be based on the actual characteristics of these areas and the definitions of this Code.

85.13 Definitions

The following definitions apply throughout this Code, unless, from the context, another meaning is clearly intended:

- 1. Environmentally Sensitive Areas Maps As defined in Chapter 90 of this Code.
- 2. Erosion Hazard Areas Those areas containing soils which, according to the USDA Soil Conservation Service King County Soil Survey dated 1973, may experience severe to very severe erosion hazard. This group of soils includes, but is not limited to the following when they occur on slopes of 15% or greater: Alderwood gravelly sand loam (AgD), Kitsap silt loam (KpD), Ragnar Indianola Association (RdE) and portions of the Everett gravelly sand loams (EvD) and Indianola Loamy fine sands (InD).
- 3. <u>Geologically Hazardous Areas</u> Landslide hazard areas, erosion hazard areas and seismic hazard areas.
- 4. Landslide Hazard Areas Both of the following:
 - a. High Landslide Hazard Areas Areas sloping 40% or greater, areas subject to previous landslide activities and areas sloping between 15% and 40% with zones of emergent ground water or underlain by or embedded with impermeable silts or clays.
 - b. Moderate Landslide Hazard Areas Areas sloping between 15% and 40% and underlain by relatively permeable soils consisting largely of sand and gravel or highly competent glacial till.
- 5. Seismic Hazard Areas Those areas subject to severe risk of earthquake damage as a result of seismically induced settlement or soil liquefaction, which conditions occur in areas underlain by cohesionless soils of low density usually in association with a shallow ground water table.

85.14 Erosion Hazard Areas

Regulations to control erosion are contained within Chapter 107 and other portions of this Code and in other Codes and ordinances of the City. Development activity within erosion hazard areas is regulated using these other provisions of this Code and other City codes and ordinances and may be

subject to increased scrutiny and conditioning because of the presence of an erosion hazard area.

85.15 Required Information - Landslide Hazard Areas and Seismic Hazard Areas

The City may require the applicant to submit a soils report prepared by a qualified professional and a tree retention plan for any development on a regulated slope; within 25 feet of a regulated slope; or within areas with soft compressible soils. The soils report shall contain the following information:

- 1. A description of how the proposed development will or will not impact each of the following on the subject property and adjoining properties:
 - a. slope stability with the proposed action
 - b. landslide hazard-or sloughing
 - 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 including size and type of significant trees
- 2. Recommended foundation design and proposed location of roadways and improvements.
- 3. Recommended methods for mitigating identified impacts and a description of how these mitigating measures may impact adjacent properties.
- 4. Any additional information determined to be relevant by the professional engineer.

The City may require the applicant to submit some or all of the following information, consistent with the nature and extent of the proposed development activity, for any proposed development activity in a landslide hazard area or seismic hazard area or on property which may contain one of these areas based on the environmentally sensitive areas maps or preliminary field investigation by the Planning Official:

- 1. A topographic survey of the subject property, or the portion of the subject property specified by the Planning Official, with contour intervals specified by the Planning Official. This mapping shall contain the following information:
 - a. Delineation of areas containing slopes 15% or greater.
 - b. The proximity of the subject property to streams.
 - c. The location of structured storm drainage systems on the subject property.
 - d. Existing vegetation, including size and type of significant trees.
- A geotechnical investigation, prepared by a qualified geotechnical engineer or engineering geologist, to determine if a landslide hazard area or seismic hazard area exists on the subject property.
- 3. A geotechnical report, prepared by a qualified geotechnical engineer or engineering geologist, showing and including the following information:
 - a. A description of how the proposed development will or will not effect slope stability, surface and subsurface drainage, erosion and seismic hazards on the subject and adjacent properties.
 - b. Evidence, if any, of holocene or recent landsliding, sloughing or soil creep.
 - c. The location of springs, seeps or any other surface expression of ground water, and the location of surface water or evidence of seasonal surface runoff or ground water.
 - d. Identification of existing fill areas.
 - e. Soil description in accordance with the Unified Soil Clarification Systems.
 - f. Depth to ground water and estimates of potential seasonal fluctuations.

- 4. Geotechnical recommendations, prepared by a qualified geotechnical engineer, for special engineering or other mitigation techniques appropriate to the hazard area along with an analysis of how these techniques will effect the subject and adjacent properties, including discussions and recommendations on the following:
 - a. The present stability of the subject property, the stability of the subject property during construction, the stability of the subject property after all development activities are completed and a discussion of the relative risks and slide potential relating to adjacent properties during each stage of development.
 - b. Location of buildings, roadways and other improvements.
 - c. Grading and earthwork, including compaction and fill material requirements, use of site soils as fill or back fill, imported fill or back fill requirements, height and inclination of both cut and fill slopes and erosion control and wet weather construction considerations and/or limitations.
 - d. Foundation and retaining wall design criteria, including bearing layer(s), allowable capacities, minimum width, minimum depth, estimated settlements (total and differential), lateral loads and other pertinent recommendations.
 - e. Surface and subsurface drainage requirements and drainage material requirements.
 - f. Assessment of seismic ground motion amplification and liquefaction potential.
 - g. Other measures recommended to reduce the risk of slope instability.
 - h. Any additional information believed to be relevant by the geotechnical engineer preparing the recommendations or requested by the Planning Official.

85.20 Required Review - Landslide Hazard Areas and Seismic Hazard Areas

- 1. General Except as specified in paragraph 2 of this Section The City will administratively review and decide upon any proposed development activity on a regulated slope or soft compressible soils within a landslide hazard area or seismic hazard area.
- Other approval required If the proposed development on the subject property requires approval through process I, IIA, IIB or III, described in Chapter 145, 150, 152 and 155 of this Code respectively, the proposed development activity within the landslide hazard area or seismic hazard area will be reviewed and decided upon as part of that other process.

85.25 <u>Specific Use and Development RequirementsPerformance</u> <u>Standards - Landslide Hazard Areas and Seismic Hazard Areas</u>

As part of any approval of development on a regulated slope or soft compressible soils, in a landslide hazard area or seismic hazard area, the City may require the following to protect property and persons:

- 1. Implementation of the geotechnical recommendations in the soils report to mitigate identified impacts., along with a written acknowledgement on the face of the plans signed by the architect, engineer and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.
- 2. Funding of a qualified Professional Geotechnical Engineer or Engineering Geologist, selected and retained by the City subject to a three-party contract, to review the soils geotechnical report and recommendations.
- 3. That—A a qualified geotechnical professional—engineer be present on site during all land surface modification and foundation installation activities, and submittal by a geotechnical engineer of a final report prior to occupancy, certifying substantial compliance with the geotechnical recommendations+ and geotechnical related permit requirements.
- 4. The retention of any and all trees, shrubs and ground cover+, and implementation of a revegetation plan including immediate planting of additional vegetation.

- 5. Planting of additional vegetation; Specifically engineered foundation and retaining wall designs.
- 6. The review of all access and circulation plans by the Department of Public Works.
- 7. Limitation or restriction of any development activity that may:-
 - a. significantly impact slope stability and or drainage patterns on the subject property or adjacent properties; or
 - b. cause serious erosion hazards, sedimentation problems or landslide hazards on the subject property or adjacent properties; or
 - c. cause a reduction in significant habitat area; or
 - d. destroy natural features that have recognized aesthetic, cultural or educational value to the community.; or
- e. c. cause property damage or injury to persons on or off the subject property.
- 8. Dedication of one or more natural greenbelt protective easement or tract.

85.30 Appeals of Determination of Regulated Slopes

- 1. Who Can Appeal The City will notify an applicant in writing when a determination is made that a regulated slope exits on their site. Any person who is aggrieved by a determination that a slope is a regulated slope or that the soils are soft and compressible may appeal that determination within 14 days of the date of the written determination.
- 2. How to Appeal The applicant must file a letter of appeal indicating how the determination affects his/her property and present any relevant arguments or information on the correctness of the determination. The applicant shall include the appeals fee as established by Ordinance.
- 3. Applicable Procedures All appeals of determinations of this Chapter will be reviewed and decided upon using Process IIA, described in Chapter 150 of this Code.

All classifications, decisions and determinations made under this Chapter are appealable using, except as stated below, the applicable appeal provisions of Chapter 145 of this Code:

- 1. The appeal may be filed by the applicant or any other aggrieved person within 15 days of the date of the City's written classification, determination or decision.
- 2. If a proposed development activity on the subject property requires approval through Processes IIA, IIB, or III, described in Chapters 150, 152 and 155 of this Code, respectively, any appeal of a classification, determination or decision under this Chapter will be heard as part of that other process.

85.35 <u>Bonds</u>

The City may require a bond under Chapter 175 of this Code and/or a perpetual landscape maintenance agreement to ensure compliance with any aspect of this Chapter or any decision or determination made under this Chapter.

85.40 Dedication

The City may require that the applicant dedicate development rights, air space, or an open space easement to the City to ensure the protection of that portion of a site demonstrated to exhibit any of the criteria listed in Section 10, paragraph 1 of this Chapter any landslide hazard area or seismic hazard area on the subject property.

85.45 Documents to be Recorded Liability -

1. Liability - Prior to issuance of any grading development permit, the applicant shall enter into an agreement with the City, which runs with the property, in a form acceptable to the City Attorney, indemnifying the City for any damage resulting from development activity on the subject property which is related to the physical condition of the property. The applicant shall record this agreement with the King County Department of Elections and Records.

85.50 Request for Determination

- 1. General The determination of whether a geologically hazardous area exists on the subject property and the boundaries of that geologically hazardous area will normally be made when the applicant applies for a development permit for the subject property. However, a property owner may, pursuant to the provisions of this Section, request a determination from the City regarding whether a geologically hazardous area exists on the subject property and the boundaries of that geologically hazardous area.
- 2. Application Information The applicant shall submit a letter of request along with a vicinity map and site plan indicating the location of the potential geologically hazardous area and other information, as appropriate.
- 3. Review A request for determination of whether a geologically hazardous area exists on the subject property, the location of the geologically hazardous area and the type of geologically hazardous area will be made using the definitions, procedures and criteria of this Chapter, as appropriate.
- 4. <u>Decision</u> Determinations regarding geologically hazardous areas pursuant to this Section will be made by the Planning Official.
- 5. <u>Appeals</u> Appeals from decisions made under this Section will be reviewed and decided upon pursuant to Section 30 of this Chapter.
- 6. Effect Any decision made under this Section will be used by the City in any development activity proposed on the subject property for which an application is received within two years of the final decision of the City under this Section; provided that the City may modify any decision made under this Section any time physical circumstances have markedly and demonstrably changed on the subject property or the surrounding areas as a result of natural processes or human activity.

CHAPTER 90 - STREAMS, MINOR LAKES AND WETLANDS DRAINAGE BASINS

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90.05 User Guide

This Chapter establishes special regulations that apply to development in or near any stream, or regulated wetland, frequently flooded area in the City and to any or lake, other than Lake Washington, in the City. These regulations add to and in some cases supersede other regulations of this Code. Regulations applicable to development on or near Lake Washington are included in the use zone regulation for the zones that include Lake Washington.

If you are interested in conducting any development activity on or near a stream, lake, other than Lake Washington, frequently flooded area or regulated wetland, or; if you wish to participate in the City's decision on a proposed development on or near any of these areas; or if you wish to have a determination made as to the presence of a stream,

this Chapter.

90.07 Purpose

The purpose of this Chapter is to protect the environment, human life, and property from harm. This is to be achieved by preserving the important ecological functions of streams, minor lakes, and wetlands, and frequently flooded areas. These functions include protection of water quality, groundwater recharge, shoreline stabilization, stream flow maintenance, wildlife and fisheries habitat, and natural flood control and storm water storage.

90.09 Lot Size and Density

Various provisions of this Chapter prohibit or limit land surface modification and improvements within certain areas. These various prohibitions and limitations do not effect minimum lot size or density requirements established by other provisions of this Code and other applicable law. However, 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 size or lower density due to inadequate buildable area.

90.10 Applicability

- General This Chapter applies to any property that contains or is within 100 feet of any of the following:
 - a. A major stream.
 - b. A minor stream Type I wetland.
 - c. A minor lake Type II wetland consisting of more than 2500 square feet.
 - d. A regulated wetland minor lake.
 - e. A frequently flooded area.
- 2. Conflict with Other Provisions of this Code The provisions of this Chapter supersede any conflicting provision of this Code. The other provisions of this Code that do not conflict with the provisions of this Chapter apply to property that contains a stream, a minor lake, a frequently flooded area, or a regulated

wetland. If more than one provision of this Chapter applies to the subject property because of the presence on the subject property of more than one type of sensitive area, then the regulation which provides the greatest protection to the sensitive area shall apply to the area governed by multiple regulations.

- 3. Other Jurisdictions Nothing in this Chapter eliminates the responsibility of the applicant to comply with all other applicable local, state and federal laws regulating development activity in or near a stream, lake, frequently flooded area, or regulated wetland as determined by the Planning Official. Appeals of this determination shall be made in accordance with Section 90.55 of this Chapter.
- 4. <u>SEPA Compliance</u> Nothing in this Chapter or the decisions made pursuant to this Chapter in any way effects the authority of the City to review, condition and deny projects under SEPA.

90.11 General Exceptions

In addition to the specific exception and modification provisions contained within the various Sections of this Chapter, the following improvements and/or activities are permitted within the areas regulated under the Chapter:

- The following public utility activities and improvements:
 - a. Normal and routine maintenance or repair of existing public utility improvements or rights-of-way.
 - b. Relocation of natural gas, cable communication, telephone and electrical lines, pipes, mains, facilities, equipment and appurtenances when required by the City.
 - c. Installation and replacement within existing improved City rights-of-way of natural gas, cable communication, telephone, and electrical lines, pipes, mains, facilities, equipment and appurtenances.
- 2. Government facilities and public utility activities and improvements which do not meet the criteria of Paragraph 1 of this Section but which meet the following criteria, as determined by the Planning Official:
 - a. The activity or facility is necessary to support the

public health, safety and welfare.

- b. No feasible alternative location exists based on an analysis of technology and system efficiency.
- c. The extent, location and nature of the facility or activity within the area regulated by this Chapter is kept to the minimum necessary.
- 3. Scientific, engineering and technical investigation and reconnaissance, including land surface modification, conducted to obtain information for compliance with this Chapter. All activities, including land surface modification, must be done in a manner which will result in the least intrusion into and disruption of the areas regulated under this Chapter while providing the needed information.

90.12 Environmentally Sensitive Areas (ESA) Maps

As part of the City's SEPA ordinance, City Council adopts, and from time to time amends, a map folio entitled "Rirkland Sensitive Areas". Maps in this folio depict wetlands, streams and 100-year floodplains. The regulations of this chapter applicable to minor lakes and frequently flooded areas apply to the areas marked on those maps as lakes and 100 year floodplains, respectively. The areas marked on those maps as streams and wetlands will be used as guides only to determine the presence of streams and wetlands on or near the subject property and the determination regarding whether streams or wetlands exist on or near the subject property will be based on field investigation using the definitions of those features contained in this Code.

90.13 Definitions

The following definitions apply throughout this Code, unless, from the context, another meaning is clearly intended:

- 1. <u>Class A Streams</u> Those streams any part of which are used by salmonids.
- Class B Streams Those streams any part of which have flow year-round during years of normal rain fall and are not used by salmonids.
- 3. <u>Class C Streams</u> Those streams that are intermittent or ephemeral during years of normal rainfall and are not

used by salmonids.

- 4. Environmentally Sensitive Area Buffer The area, the width of which is established in this Chapter, in which land surface modification and improvements are specifically regulated in order to protect the streams, minor lakes and wetlands regulated under this Chapter. The provisions of this Chapter contains various exceptions to the environmentally sensitive area buffer requirements.
- 5. Environmentally Sensitive Areas Maps The folio of maps entitled "Kirkland Sensitive Areas" as adopted from time to time by City Council as part of the City's SEPA ordinance.
- 6. <u>Frequently Flooded Areas</u> All areas shown on the environmentally 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.
- 7. Minor Improvements Walkways, pedestrian bridges, benches and similar features as determined by the Planning Official which present minimal disturbance to the area affected.
- 8. Minor Lake All areas marked as lakes, except Lake Washington, on the environmentally sensitive areas maps of the City.

- 9. <u>Salmonid</u> A member of the fish family salmonidae. In the Puget Sound area, these include Chinook, coho, chum, sockeye, and pink salmon; rainbow, steelhead and cutthroat trout; brown trout; brook and dolly varden char, kokenee and white fish.
- 10. Significant Habitat Area 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 pertains 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 §232-12-011 or WAC §232-12-014 or in the Priority Habitat and Species (PHS) program of the Washington State Department of Wildlife or by rules and regulations adopted from time to time by the U.S. Fish and Wildlife Service.
- 11. Streams Those areas where surface waters produce a defined channel or bed that demonstrates clear evidence of the passage of water and includes but is 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 used to convey a stream which had previously naturally occurred.
- 12. Type I Wetlands are those wetlands which meet one or more of the following criteria:
 - a. Wetlands that contain or show evidence of the presence of species listed by the federal government or the State of Washington as endangered or threatened, or that contain the presence of critical or outstanding habitat for those species.
 - b. Wetlands equal to or greater than ten acres in size and having three or more wetland classes, one of which is open water.
 - c. Wetlands that are determined to have significant habitat value based on the calculations on the wetland classification form provided by the Planning Official.

- 13. Type II Wetlands are those wetlands not meeting the definition of Type I wetlands.
- 14. Wetlands Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted Wetlands for life in saturated soils conditions. generally include swamps, marshes, bogs, and similar Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage swales, canals, ditches, grass lined facilities, wastewater treatment facilities, farm ponds, and landscape amenities. However, wetlands include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

90.15 <u>Development Activity and Improvements in or Near a Stream or Minor Lake</u>

- 1. <u>General</u> No land surface modification may take place and no improvements may be located in a stream or minor lake except as specifically provided in this Section.
- 2. Rehabilitation The Planning Official may permit or require the applicant to rehabilitate and maintain a stream or minor lake by removing material detrimental to the area such as debris, sediment or vegetation or by the adding of landscaping. Rehabilitation may be required at any time that a condition detrimental to water quality or habitat exists. This dDecisions made under this paragraph may be appealed in accordance with Section 90.5580 of this Chapter.

3. Watercourse Relocation

- a. General Relocation of a stream on the subject property is permitted subject to all of the conditions and restrictions of this Section. In addition, if a proposed development requires approval through Process IIB or III described in Chapter 152 and 155 of this code, the Planning Official may require that a culverted major stream on the subject property be opened and relocated subject to all of the conditions and restrictions of this section.
- b. Required Process A proposal to relocate any minor stream will be reviewed by the Planning Official.

The decision of the Planning Official may be appealed using Section 90.55. The City will review and decide upon an application to relocate a major stream using Process I, described in Chapter 145 of this Code.

- c. Criteria Relocation of a Stream The City-will allow a stream to be relocated only if water quality, habitat, and storm water retention capability of the watercourse will be significantly improved by the relocation. Convenience to the applicant in order to facilitate general site design may not be considered.
- d. Plan Required Prior to issuance of a building and/or Grading Permit the City may require the applicant to submit to the Planning Official a stream relocation plan prepared by a qualified professional approved by the City. This plan shall be reviewed and approved by the Planning Official prior to the issuance of any building and/or grading permits and shall show the following:
 - (1) The creation of a natural meander pattern.
 - (2) The formation of gentle side slopes, at least 2 feet horizontally, to one-foot vertically, including the installation of erosion control features for stream side slopes.
 - (3) The creation of a narrow, subchannel, where feasible, against the south or west bank.
 - (4) The utilization of natural materials, wherever possible.
 - (5) Vegetation normally—associated with streams, including—primarily—native—riparian vegetation.
 - (6) The creation of spawning and nesting areas, wherever appropriate.
 - (7) The re-establishment of the fish population, wherever appropriate.
 - (8) The restoration of water flow characteristics compatible with fish habitat areas, wherever appropriate.
 - (9) The filling and revegetation of the prior

channel.

- (10) A proposed Phasing Plan-specifying time of year-for all-project phases.
- e. Prior to diverting water into the new channel, a qualified professional approved by the City shall inspect the new channel following its completion and issue a written report to the Planning Official stating that the channel complies with the requirements of this Section.
- f. The amount of flow and velocity of the stream shall not be increased or decreased as the stream enters or leaves the subject property.
- g. <u>Land Surface Modification Permit A Land Surface</u>
 Modification Permit pursuant to Section 25.4 of
 this Chapter is not required for stream relocation.

4. 3. Bulkheads

- a. <u>General</u> Bulkheads are not permitted **in or** along streams and **minor** lakes except as specified below.
- b. Required Permit The Planning Official will review and decide upon an application for a bulkhead, using the criteria listed below.
- c. <u>Criteria</u> The City will allow a bulkhead to be constructed only if--
 - (1) It is needed to prevent significant erosion;
 and
 - (2) The use of vegetation will not sufficiently stabilize the shoreline or bank to prevent significant erosion.
- d. <u>Prohibited Location</u> A bulkhead may not be located within a regulated wetland or between a regulated wetland and a **minor** lake.
- e. <u>Design and Construction</u> The bulkhead must be designed to minimize the transmittal of wave energy or water current to other properties.
- f. Change in Configuration of the Land Change in the horizontal or vertical configuration of the land must be kept to a minimum.

5. Culverts

- a. <u>General</u> <u>Culverts are not permitted in streams</u> except as specified below.
- b. Required Permit The Planning Official will review and decide upon an application for a culvert under an access drive, driveway, or street. (Where a culvert enters into or crosses a public right-of-way, a permit-is required from the Department of Public Works.) The City will review and decide upon other-culvert applications using Process I, described in Chapter 145-of this Code.
- c. <u>Criteria</u> The City will allow a stream to be put in a culvert only if -
 - (1) No significant habitat area will be destroyed; and
 - (2) It is necessary for some reasonable use of the subject property. Convenience to the applicant in order to facilitate general site design will not be considered. The applicant can demonstrate, by submitting alternative site plans showing the stream in an open condition, that no other reasonable site design exists.
- d. <u>Design and Construction</u> The culvert must be designed and installed to allow passage of fish inhabiting or using the stream. The culvert must be large enough to accommodate a 100-year storm.
- e. Maintenance The applicant shall, at all times, keep the culvert free of debris and sediment so as to allow free passage of water and, if applicable, fish. The City shall require a bond under Chapter 175 of this Code to ensure maintenance of the culvert.

6. 4. Moorage Structure

- a. <u>General</u> Moorage structures are permitted in minor lakes subject to all of the conditions and restrictions of this section.
- b. <u>Required Permit</u> The City will review and decide upon an application for a moorage structure using Process I, described in Chapter 145 of this Code.

- c. <u>Criteria</u> The City will allow 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.

d. <u>Design and Construction</u>

- (1) A moorage structure may extend no farther than is necessary to function properly, but in no event may it extend more than 200 feet waterward of the high waterline.
- (2) A moorage structure may not be treated with creosote, oil base or toxic substances.
- (3) Dock and pier decks and the top of other moorage structures may not be more than 2 feet above the high water level.

90.2035 <u>Development in Regulated Wetlands and Environmentally</u> <u>Sensitive Area Buffers for Wetlands</u>

- 1. <u>General</u> No land surface modification may take place and no improvement may be located in a regulated wetland or within the following environmentally sensitive area buffers for a wetland, except as specifically provided in this Section::
 - a. 50 feet from the edge of a Type I wetland.
 - b. 25 feet from the edge of a Type II wetland.
- Public Park The City may develop access through a regulated wetland or environmentally sensitive area buffers for a wetland in conjunction with a public park.
- 3. Essential Public Facility or Utility The Planning Official may permit the placement of an essential public facility or utility in a regulated wetland. He/she must determine that the public improvement must traverse a regulated wetland because no feasible alternative location exists based on an analysis of technology and system efficiency. Also, the specific location and extent of the facility or utility must constitute the minimum necessary encroachment.
- 4. 3. Rehabilitation Restoration The Planning Official may

permit or require the applicant to rehabilitate restore and maintain a regulated wetland and/or environmentally sensitive area buffer for a wetland by removing material detrimental to the area such as debris, sediment, or adding landscaping. by the of vegetation or Rehabilitation Restoration may be required at any time that a condition detrimental to water quality or habitat exists. This-Decisions made under this paragraph may be appealed in accordance with Section 90.5580 of this Chapter.

5. 4. Modification --

- For Type I wetlands and environmentally sensitive area buffers for a Type I wetlands, The applicant may request a modification of the requirements of this section using either a variance described in 120 of this Code or a Planned Unit Chapter Development described in Chapter 125 of this Code. In addition, the City may approve a modification only if the applicant submits a report prepared by a to the application material required in those Chapters, the applicant shall either fund a report prepared by a the City's wetland consultant or submit a report prepared by a biologist, botanist, plant ecologist or similarly qualified professional approved by the City which and fund a review of this report by the City's wetland consultant. this report must contain an either event, water assessment of the habitat, quality storm purification enhancement, and water recharge, shoreline detention, ground protection and erosion protection functions of the wetland or environmentally sensitive area buffer for the wetland and the effect on those functions the proposed improvement or land surface modification. In addition to the criteria listed in Chapters 120 and 125 of this Code regarding Unit Developments, Variances and Planned respectively, the City may approve an improvement or land surface modification in a wetland or environmentally sensitive area buffers for wetland under this paragraph only if it finds that--
- a. 1) It will not unduly—adversely affect water quality; and
- b. 2) It will not destroy, nor unduly damage, or disrupt a significant habitat area; and

- e. 3) It will not have an undue—adverse effect on drainage and/or storm water retention detention capabilities; and
- d. 4) It will not lead to unstable earth conditions or create erosion hazards; and
- e. 5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole,; and
- f. 6) It will result in the land surface modification of no more than ten percent (10%) of a the regulated wetland on the subject property. This limitation may be exceeded if processed through Process III, described in Chapter 155 of this Code7.
- For Type II wetlands, any request to modify the provisions of this Section will be reviewed and decided upon by the Planning Official. The decision of the Planning Official may be appealed under Section 80 of this Chapter. To request a modification, the applicant must shall submit a report prepared by a biologist, botanist, plant ecologist or similarly qualified professional and fund a review of this report by the City's wetland consultant. This report must contain an assessment of the habitat, water quality purification and enhancement, storm water detention, ground water recharge, shoreline protection and erosion protection functions of the wetland or environmentally sensitive area buffer for the wetland and the effect on those functions of the proposed improvement or land surface The City may approve an improvement or modification. surface modification in а wetland environmentally sensitive area buffer for a wetland under this paragraph only if it finds that --
 - It will not adversely affect water quality;
 - 2) It will not destroy, nor damage, or disrupt a significant habitat area;
 - 3) It will not have an unduly adverse effect on drainage and/or storm water detention capabilities;
 - 4) It will not lead to unstable earth conditions or create erosion hazards; and
 - 5) It will not be materially detrimental to any

other property in the area of the subject property or to the City as a whole.

- 5. Type of Fill All material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality or the existing habitat.
- 7. 6. <u>Dredge Spoils</u> The applicant may deposit dredge spoils on the subject property only if part of an approved development on the subject property.
- 7. Exposed Area The applicant shall stabilize areas left exposed after land surface modification with vegetation normally associated with the stream, lake or regulated wetland.
- 8. Minor Improvements in Environmentally Sensitive Area Buffers
 - a. <u>General</u> Minor improvements may be located within the environmentally sensitive area buffers for Type I and Type II wetlands, but not within wetlands.
 - b. Required Review The Planning Official will review and decide upon a proposal to construct a minor improvement within the environmentally sensitive area buffer a wetland. Appeals from decisions under this paragraph may be made pursuant to Section 80 of this Chapter.
 - c. <u>Criteria</u> The City may allow a minor improvement to be located within the environmentally sensitive area buffer for a wetland only if it finds that--
 - 1) It will not adversely affect water quality;
 - 2) It will not destroy, nor damage a significant habitat area;
 - It will not adversely affect drainage and/or storm water detention capabilities;
 - 4) It will not lead to unstable earth conditions or create erosion hazards; and
 - 5) 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.

- 10. The City may require the applicant to fund a qualified professional, selected and retained by the City, to review the wetlands report.
- 11. If the initial site inspection by the Planning Official does not indicate the existence of a regulated wetland, no additional wetlands studies will be required.

9.90.30 Determination of a Regulated Wetland

The City will determine whether a wetland or the environmentally sensitive area buffer for a wetland is present on the subject property using the provisions of this Section.

- 1. Initial Assessment Following a site inspection, the Planning Official shall make an initial determination assessment as to whether or not any portions of a site may the subject property or surrounding area may meet the criteria for a regulated definition of a wetland. If this initial site inspection by the Planning Official does not indicate the presence of a wetland on or near the subject property, no additional wetland studies will be required, unless subsequent information comes to the attention of the Planning Official indicating the presence of a wetland on or near the subject property.
- b. 2. If the initial inspection indicates that a regulated wetland may exist on a site or near the subject property, the applicant shall be required to either fund a report prepared by the City's wetland consultant or submit a report prepared by a biologist, botanist, plant ecologist or similarly qualified professional approved by the City and fund a review of this report by the City's wetland consultant. In either event, this report must including include the following:
 - i. a. A n overview summary of the methodology used to conduct the study.
 - ii. b. A description map(s) of the wetland and surrounding area which, (including a map identifying shows the edge of the wetland and plant communities) based on and confirming the use of the "Federal Manual for

Identifying and Delineating Jurisdictional Wetlands (January 1989)"; the wetland's classification and plant communities (based on the U.S. Fish and Wildlife Service "Classification of Wetlands and Deepwater Habitats in the U.S."; and surrounding area and a detailed description of the method used to identify the wetland edge wildlife nesting, denning and breeding areas.

- iii. c. A description of the surrounding area, including the drainage system entering and leaving the wetland, a list of observed or documented plant and wildlife species, (using both scientific and common names,) and a description of their relative abundance and a description of the method of flagging the wetland edge.
- iv. d. A list of potential plant or animal species based on signs or other observations; description of historical, hydrologic, vegetation, topographic and soil modifications, if any.
- v. e. An assessment of the potential impacts of proposed development on the wetland including loss of flood storage potential, loss of habitat, changes in species diversity or quantity, impacts to water quality, increases in human intrusion and impacts on associated wetlands or downstream sensitive areas. A proposed classification of the wetland into either a Type I or Type II wetland and the explanation or rationale, including if applicable the completed wetland classification form provided by the Planning Official, for the proposed classification.
- e. The final determination of whether or not a wetland is a regulated wetland shall be made by the Planning Official after review of the report prepared in accordance with paragraph 9.a. above.
- 3. Formal Determination The formal determination of whether a wetland exists on the subject property, the type of wetland and the boundaries of that wetland shall be made by the Planning Official after review of the report prepared under paragraph 2 of this Section. This determination may be appealed pursuant to the provisions of Section 80 of this Chapter.
- 4. Marking of the Wetland Edge After final determination of the existence and boundaries of the wetland by the City pursuant to paragraph 3 of this Section or Section

80 of this Chapter, the City's wetland consultant shall mark the edge of the wetland pursuant to that final determination. The applicant shall then provide to the City a survey and legal description, prepared and stamped as a licensed surveyor, of the wetland as marked pursuant to this paragraph.

- 90 90.2520 <u>Minimum Setbacks From Major Streams, Environmentally</u>
 <u>Sensitive Area Buffers for Minor Lakes and Regulated</u>
 Wetlands
 - 1. General No land surface modification may take place and no improvement may be located in the following setbacks for streams, minor lakes and regulated wetlands, except as provided in this section. Within 50 feet of the ordinary high water line of a minor lake, except as provided in paragraphs 2 and 3 of this section. This 50' is the environmentally sensitive area buffer for a minor lake.
 - a. 50 feet from each side of the top-of the banks of a major stream (see Plate 16).
 - b. 50 feet from the ordinary high water line of a minor lake.
 - c. 50 feet from the edge of a regulated wetland as determined in the report required by Section 90.20.9b of this Chapter.
 - 2. <u>Culverted Streams</u> The setback requirements for streams in paragraph 1 of this Section do not apply to any stream that is in a culvert unless the stream will be taken out of the culvert as part of development of the subject property.
 - 3. Essential Public Facility or Utility The Planning Official may permit the placement of an essential public facility or utility-in-a-setback from a major stream, minor lake, or wetland. He/she must determine-that the public improvement must traverse the setback because no feasible alternative location exists based on an analysis of the technology and system efficiency. Also, the specific location and extent of the facility must constitute the minimum necessary encroachment to meet the requirements of the public facility or utility.
- 4. 3. Modification The applicant may request a modification of the requirements of this section using either a

variance described in Chapter 120 of this Code or a Planned Unit Development described in Chapter 125 of In addition, the City may approve a modification only if the applicant to the application material required in those chapters, the applicant must submits a report prepared by a qualified professional approved by the City which. This report must contain an assessment of the habitat, water quality purification and enhancement, storm water retention, ground water recharge, shoreline protection and erosion protection functions of the environmentally sensitive area buffer and the effect on those functions of the proposed improvement or land surface modification. In addition to the criteria listed in Chapters 120 and 125 of this Code regarding Variances and Planned Unit Developments, respectively, the City may approve an improvement or land surface modification in a environmentally sensitive area buffer under this provision only if it finds that --

- a. It will not adversely affect water quality; and
- b. It will not destroy, nor damage, or disrupt a significant habitat area; and
- c. It will not adversely effect drainage and/or storm water retention detention capabilities; and
- d. It will not lead to unstable earth conditions or create erosion hazards; 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, and.
- 5. 4. Type of Fill All material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality or the existing habitat.
- 6. 5. <u>Dredge Spoils</u> The applicant may deposit dredge spoils on the subject property only if part of an approved development on the subject property.
- 7. 6. Exposed Areas The applicant shall stabilize areas left exposed after land surface modification with vegetation normally associated with that stream, minor lake or regulated wetland.
- 8. 2. Minor Improvements

- a. General Minor improvements such as walkways, benches, and footbridges crossing streams may be located within the setback environmentally sensitive area buffers established in Section 25 paragraph 1 of this Chapter Section.
- b. Required Review The Planning Official will review and decide upon a proposal to construct a minor improvement within a required setback environmentally sensitive area buffer. Decisions made under this paragraph may be appealed in accordance with Section 80 of this Chapter.
- c. <u>Criteria</u> The City will allow a minor improvement to be located within the required setback environmentally sensitive area buffer only if it finds that:--
 - (1) It will not adversely affect water quality; and
 - (2) It will not destroy, nor damage a significant habitat area; and
 - (3) It will not adversely affect drainage and/or storm water retention detention capabilities;
 - (4) It will not lead to unstable earth conditions or create erosion hazards; and
 - (5) The minor improvement 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.
- d. Required Information In the event that any of the impacts described in paragraphs 1-5 of this section appear likely, the City may require the applicant to submit a report prepared by a qualified professional approved by the City. The report shall discuss the potential for the impact to occur. The Planning Official may require the applicant to submit a report prepared by a qualified professional approved by the City which describes how the proposal will or will not comply with applicable decisional criteria for approving a minor improvement.
- 90.25 Wetland Determinations, Delineations and Regulations,

Criteria and Procedures

All determinations and delineations of wetlands will be made using the criteria and procedures contained in the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands (January 1989)". All delineations, determinations and regulations of wetlands will be based on the entire extent of the wetland, unrelated to property lines or ownership patterns.

90.27 Minimum Setbacks From Minor Streams

- 1. <u>General</u> No land surface modification may take place and no improvement may be located in the following setbacks for minor streams, except as provided in this section.
 - a. 20 feet from each side of the top of the bank of all minor streams.
- 2. <u>Culverted Streams</u> The setback requirements for streams in paragraph 1 of this Section do not apply to any stream that is in a culvert unless the stream will be taken out of the culvert as part of development of the subject property.
- 3. Essential Public Facility or Utility The Planning Official may permit the placement of an essential public facility or utility in a setback from a stream. He/she must determine that the public improvement must traverse the setback because no feasible alternative location exists based on an analysis of technology and system efficiency. Also, the specific location and extent of the facility or utility must constitute the minimum necessary encroachment.
- 4. Modification A proposal to modify a stream setback will be reviewed by the Planning Official. The decision of the Planning Official may be appealed using Section 90.55. The Planning Official may approve a modification of a stream setback only if the applicant submits a report prepared by a qualified professional approved by the City which finds that:
 - a. It will not adversely affect water quality; and
 - b. It will not destroy, damage, or disrupt a significant habitat area, and
 - c. It will not adversely affect-drainage and/or storm

water retention capabilities, and

- d. It will not lead to unstable earth conditions or create erosion hazards, and
- e. The minor improvement 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 seenic vistas.

The City may ask the applicant to submit a report prepared by a qualified professional approved by the City if any of the impacts described in Paragraphs a through e of this section appear likely. The report shall discuss the potential for the impact to occur.

- 5. Type of Fill All material used in a landfill must be nondissolving and nondecomposing. The fill material must not contain organic or inorganic material that would be detrimental to the water quality of the existing habitat.
- 6. <u>Dredge Spoils</u> The applicant may deposit dredge spoils on the subject property only if part of an approved development on the subject property.
- 7. Exposed Areas The applicant shall-stabilize areas-left exposed after land surface modification with vegetation normally associated with that stream, lake or regulated wetland.

90.37 Stream Determination

The City will determine whether a stream or environmentally sensitive area buffer for a stream is present on the subject property using the provisions of this Section.

- 1. <u>Initial Determination</u> Following a site inspection, the Planning Official shall make an initial determination whether a stream exists on or near the subject property. If the initial site inspection by the Planning Official does not indicate the presence of a stream on or near the subject property, no additional investigation will be required, unless subsequent information comes to the attention of the Planning Official indicating the presence of a stream on or near the subject property.
- Initial Classification If the initial site inspection indicates that a stream may exist on or near the subject property, the Planning Official shall determine, based

on the definition in this Code, the classification of the stream after a review of all information available to the City. The Planning Official shall classify the stream as follows:

- a. The Planning Official shall classify the stream as a Class A stream if there is any indication that salmonids use the stream or if, based on the existing physical characteristics of the stream, it could be used by salmonids during years of typical rainfall and stream flow conditions; provided, however, that the Planning Official shall not classify the stream as a Class A stream if the available information clearly demonstrates that no portion of the stream could be used by salmonids during years of typical rainfall and stream flow conditions based on the existing physical characteristics of the stream.
- b. If paragraph 2.a of this Section does not apply, the Planning Official shall classify the stream as a Class B stream, unless the available information clearly demonstrates that no portion of the stream has year-round flow during years or normal rainfall.
- c. If paragraphs 2.a and 2.b of this Section do not apply, the Planning Official shall classify the stream as a Class C stream.
- 3. Further Evaluation If the applicant disagrees with the Planning Official's determination that a stream exists on or near the subject property or with the classification of that stream, the applicant may submit a report prepared by a qualified professional approved by the City which independently evaluates whether a stream exists on the subject property and the classification of that stream, based on the definitions of this Code.
- 4. Final Determination The final determination of whether a stream or environmentally sensitive area buffer for a stream exists on the subject property, the precise location of that stream and the proper classification of that stream shall be made by the Planning Official. This determination may be appealed pursuant to the provisions of Section 80 of this Chapter.
- 90.40 Development Activity and Improvements in or Near a Stream

- 1. <u>General</u> No land surface modification may take place and no improvements may be located in a stream except as specifically provided in this Section.
- 2. Rehabilitation The Planning Official may permit or require the applicant to rehabilitate and maintain a stream by removing material detrimental to the area such as debris, sedimentation or vegetation or by the addition of landscaping. Rehabilitation may be required at any time that a condition detrimental to water quality or habitat exists. Decisions made under this paragraph may be appealed in accordance with Section 80 of this Chapter.

3. Stream Relocation

- a. Relocation of a stream on the subject property is permitted subject to all of the conditions and restrictions of this Subsection.
- b. Required Process A proposal to relocate a Class C stream will be reviewed and decided upon by the Planning Official. The decision of the Planning Official may be appealed pursuant to Section 80 of this Chapter. A proposal to relocate a Class A or B stream will be reviewed and decided upon using Process I, described in Chapter 145 of this Code. A proposal to relocate a stream is not subject to the provisions of Subsection 45.4 of this Chapter.
- c. Criteria The City will permit a stream to be relocated only if water quality, 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. Convenience to the applicant in order to facilitate general site design may not be considered.
- d. Plan Required Prior to the Planning Official's approval of a stream relocation, the applicant must submit a stream relocation plan prepared by a qualified professional approved by the City. This plan, which will be reviewed and approved or rejected by the Planning Official, must contain or show the following:
 - 1) A topographic survey showing existing and proposed topography and improvements.
 - 2) The filling and revegetation of the prior

stream channel.

- A proposed phasing plan specifying time of the year for all project phases.
- 4) The ability of the new stream channel to accommodate flow and velocity of 100-year storm events.
- 5) The design and implementation features and techniques listed below, unless clearly and demonstrably inappropriate for the proposed relocation:
 - a) The creation of a natural meander pattern.
 - b) The formation of gentle side slopes, at least two feet horizontal to one foot vertical, and the installation of erosion control features for stream sideslopes.
 - c) The creation of a narrow subchannel against the south or west stream bank.
 - d) The utilization of natural materials.
 - e) The installation of vegetation normally associated with streams, including primarily native riparian vegetation with high food and cover value for fish and wildlife.
 - f) The creation of spawning and nesting areas.
 - q) The re-establishment of fish populations.
 - h) The restoration of water-flow characteristics compatible with fish habitat areas.
- Effect of Environmentally Sensitive Area Buffers on Other Properties - If the proposed stream relocation would result in a environmentally sensitive buffer, increased area or an environmentally sensitive area buffer, on any property other than the subject property, the City will not approve the plan under paragraph d of this Section and will not issue any development permit for the stream relocation until the applicant submits to the City a copy of a statement, in a

form approved by the City Attorney, recorded in the King County Department of Elections and Records signed by the owners of all effected properties consenting to the creation or increase of the environmentally sensitive area buffer requirements on the owner's property.

- f. Inspection of New Channel Prior to diverting water into a new stream channel, a qualified professional approved by the City 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 and the plan required by this Section.
- g. Increase or Decrease in Flow The amount of flow and velocity of the stream after relocation shall not be increased nor decreased at the points where the stream enters and leaves the subject property unless the change has been approved by the City to improve fish and wildlife habitat or improve storm water management.

4. Bulkheads

- a. <u>General</u> Bulkheads are not permitted along a stream except as specifically provided in this Subsection.
- b. Required Permit A proposal for a bulkhead will be reviewed and decided upon by the Planning Official. Decisions made under this paragraph may be appealed in accordance with Section 80 of this Chapter.
- c. <u>Criteria</u> The City will allow a bulkhead to be constructed only if--
 - 1) It is needed to prevent significant erosion;
 - 2) The use of vegetation will not sufficiently stabilize the stream bank to prevent significant erosion; and
 - 3) The applicant must submit a plan prepared by a qualified professional approved by the City which shows a bulkhead 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 on fish and wildlife habitat.
- c) There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat, nor decrease in flood storage volumes.
- d) Neither the installation, existence nor operation of the bulkhead will lead to unstable earth conditions or create erosion hazards.
- e) Neither the installation, existence, nor operation of the bulkhead will be detrimental to any other property in the area or to the City as a whole.
- e. <u>Prohibited Location</u> A bulkhead may not be located within a wetland or between a wetland and a stream.
- f. Design and Construction The bulkhead must be designed and constructed to minimize the transmittal of water current and energy to other properties.
- g. Changing Configuration of the Land Changes in the horizontal or vertical configuration of the land must be kept to a minimum.
- h. Type of Fill All material used in constructing a bulkhead must be nondissolving and nondecomposing. Fill material may not contain organic or inorganic material that would be detrimental to water quality or to existing habitats.
- i. <u>Dredge Spoils</u> The applicant may deposit dredge spoils on the subject property only as part of an approved development on the subject property.
- j. Exposed Areas The applicant shall stabilize all areas left exposed after land surface modification by planting native riparian vegetation with high food and cover value for fish and wildlife.

5. Culverts

a. <u>General</u> - Culverts are not permitted in streams except as specified in this Subsection.

- b. Required Process The Planning Official will review and decide upon an application for a culvert under an access drive, driveway or street. Decisions made pursuant to the proceeding sentence may be appealed in accordance with Section 80 of this Chapter. The City will review and decide upon proposals to place culverts, other than as specified above, using Process I, described in Chapter 145 of this Code.
- c. <u>Criteria</u> The City will allow a stream to be put in a culvert only if--
 - No significant fish or wildlife habitat will be destroyed;
 - 2) Placing the stream in a culvert is necessary in order to make some reasonable use of the subject property. Convenience to the applicant in order to facilitate general site design will not be considered; and
 - 3) The applicant submits a plan prepared by a qualified professional approved by the City which shows a culvert and implementation techniques that meet the following criteria:
 - a) There will be no significant adverse impact to water quality.
 - b) There will be no adverse impact on fish and wildlife habitat.
 - c) There will be no increase in the velocity of stream flow, unless approved by the Planning Official to improve fish habitat, nor decrease in flood storage volumes.
 - d) Neither the installation, existence nor operation of the culvert will lead to unstable earth conditions or create erosion hazards.
 - e) Neither the installation, existence nor operation of the culvert will be detrimental to any other property in the area or to the City as a whole.
- d. <u>Design and Construction</u> The culvert must be designed and constructed to allow passage to fish inhabiting or using the stream or which may inhabit

or use the stream in the future. The culvert must be large enough to accommodate a 100 year storm event.

- e. Maintenance The applicant shall, at all times, keep the culvert free of all debris and sediment so as to allow free passage of water and, if applicable, fish. The City shall require a bond under Chapter 175 of this Code for continued maintenance of the culvert.
- f. Alternative to Culvert If the City determines that a culvert may not be approved based on the criteria of paragraph 5.c of this Section, the City may approve a bridge crossing the stream if the bridge complies with said criteria.
- 6. Removing Streams from Culverts If a proposed development of the subject property requires approval through Process IIB or Process III, described in Chapters 152 and 155 of this Code, respectively, the City may require that any stream in a culvert on the subject property be opened, relocated and restored, consistent with the provisions of this Section.

90.45 Environmentally Sensitive Area Buffers for Streams

- 1. General No land surface modification may take place and no improvement may be located within the following environmentally sensitive area buffers for streams except as provided in this Section:
 - a. 50 feet from each side of the top of the banks of a Class A or Class B stream (see Plate 16).
 - b. 20 feet from each side of the top of the banks of a Class C stream (see Plate 16).
- 2. <u>Culverted Streams</u> The environmentally sensitive area buffer requirements of this Section do not apply to any stream that is in a culvert, unless the stream will be taken out of the culvert as part of development of the subject property in which case the environmentally sensitive area buffers do apply.

3. Minor Improvements

a. General - Minor improvements may be located within the environmentally sensitive area buffers established in paragraph 1 of this Section. These minor improvements must be located within the outer one-half of the environmentally sensitive area buffer, except where approved stream crossings are made.

- b. Required Review The Planning Official will review and decide upon a proposal to construct a minor improvement within a environmentally sensitive area buffer. Decisions made under this paragraph may be appealed in accordance with Section 80 of this Chapter.
- c. <u>Criteria</u> The City will allow a minor improvement to be located within the environmentally sensitive area buffer only if it finds that--
 - 1) It will not adversely effect water quality;
 - 2) It will not destroy nor damage a significant habitat area;
 - 3) It will not adversely effect drainage or storm water detention capabilities;
 - 4) It will not lead to unstable earth conditions or create erosion hazards; and
 - 5) 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.
- d. Required Information The Planning Official may require the applicant to submit a report prepared a qualified professional approved by the City which describes how the proposal will or will not comply with the criteria for approving a minor improvement.

4. Modification

- a. <u>General</u> The applicant may request a modification to the provisions of this Section.
- b. <u>Required Review</u> Requests for modifications from the provisions of this Section will be processed as follows:
 - .1) Environmentally sensitive area buffers for Class A streams, the applicant may request a

modification using either a variance, described in Chapter 120 of this Code or a Planned Unit Development, described in Chapter 125 of this Code.

- 2) Environmentally sensitive area buffers for Class B streams, the applicant may request a modification through Process I, described in Chapter 145 of this Code.
- 3) Environmentally sensitive area buffers for Class C streams, requests for modifications will be reviewed and decided upon by the Planning Official. Decisions made under this paragraph may be appealed in accordance with Section 80 of this Chapter.
- c. Criteria In addition to the criteria listed in Chapters 120, 125 and 145 of this Code as applicable, the City may approve a modification to a environmentally sensitive area buffer for a stream only if it finds that--
 - 1) It will not adversely effect water quality;
 - It will not destroy nor damage or disrupt a significant habitat area;
 - 3) It will not adversely effect drainage or storm water detention capabilities;
 - 4) It will not lead to unstable earth conditions or create erosion hazards; and
 - 5) It will not be materially detrimental to any other property in the area of the subject property or to the City as a whole.
- 5. Type of Fill All materials used for work in the environmentally sensitive area buffer for a stream must be nondissolving and nondecomposing. Fill material may not contain organic or inorganic material that would be detrimental to water quality or to existing habitats.
- 6. <u>Dredge Spoils</u> The applicant may deposit dredge spoils on the subject property only as part of an approved development on the subject property.
- 7. Exposed Areas The applicant shall stabilize all areas left exposed after land surface modification by planting native riparian vegetation with high food and cover

value for fish and wildlife.

90.50 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 in Chapter 21.56 of the Kirkland Municipal Code.

90.3055 Site Design Requirements for the Subject Property

- 1. <u>General</u> In addition to any other requirement of this Chapter, The applicant shall locate all improvements on the subject property to minimize adverse impacts on the streams, minor lakes, or regulated wetlands or and frequently flooded areas.
- 2. Physical Barrier 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 the any stream, minor lake or regulated wetland.
- 3. <u>Vehicle Circulation Areas</u> The applicant shall locate parking and vehicle circulation areas as far as possible from the stream, lake or regulated wetland.

90.3560 Additional Protection Techniques

 Timing of Development Activity - The City may limit development activity in or near a stream, minor lake or regulated wetland to specific months and to a maximum number of continuous days or hours in order to minimize adverse impacts on the area.

2. Construction Techniques

- a. The City may require that equipment be operated from only one side of a stream in order to minimize bank disruption.
- b. The City may require other construction techniques, conditions and restrictions in order to minimize adverse impacts on the stream, minor lake or regulated wetland and any related area not subject to development activity.

90.4065 Bonds

The City may require a bond under Chapter 175 of this Code and/or a perpetual landscape maintenance agreement to ensure compliance with any aspect of this Chapter or any decision or determination made under this Chapter.

90.4570 Dedication

The applicant shall dedicate development rights, air space, or an greenbelt protection or open space easement to the City to insure the protection of a the stream, minor lake or regulated wetland and required setback areas environmentally sensitive area buffer.

90.5075 Liability

Prior to issuance of a building permit, the applicant shall enter into an agreement with the City which runs with the property, in a form acceptable to the City Attorney, indemnifying the City for any damage resulting from development activity on the subject property which is related to the physical condition of the stream, minor lake or regulated wetland. The applicant shall record this agreement with the King County Bureau Department of Elections and Records.

90.5580 Appeals-of Stream, Lake or Wetland Determination or Decision

- 1. Who Can Appeal The City will notify an applicant in writing when a determination is made that a stream, lake or regulated wetland exists on their site. Any person who is aggrieved by a determination that a stream, lake or regulated wetland is located on or within 100 feet of the subject property or is aggrieved by the Planning Official's decision on stream rehabilitation, relocation, minor improvement within required setback, vegetation removal or landscaping within required setbacks may appeal that determination or decision within 14 days of the date of the written determination.
- 2. How to Appeal The applicant must file a letter of appeal indicating how the determination or decision effects his/her property and present any relevant argument or information on the correctness of the determination. The applicant shall include the appeals fee as established by ordinance.

3. Applicable procedures - All appeals of determinations of this Chapter will be reviewed and decided upon-using Process IIA. described in Chapter 150 of this Code.

All classifications, decisions and determinations made under this Chapter are appealable using, except as stated below, the applicable appeal provisions of Chapter 145 of this Code:

- The appeal may be filed by the applicant or any other aggrieved person within 15 days of the date of City's written classification, determination or decision.
- 2. If a proposed development activity on the subject property requires approval through Process IIA, IIB or III, described in Chapters 150, 152 and 155 respectively of this Code, any appeal of a classification, determination or decision will be heard as part of that other process.

90.85 Request for Determination

- 1. General The determination of whether a stream or wetland exists on the subject property, the classification or type of that stream or wetland and the location and boundaries of that stream or wetland will normally be made when the applicant applies for a development permit for the subject property. However, a property owner may, pursuant to the provisions of this section, request determinations from the City regarding these matters.
- 2. <u>Application Information</u> The applicant shall submit a letter of request along with a vicinity map and site plan indicating the location of the potential stream or wetland and other information, as appropriate.
- 3. Review A request for determination of whether a stream exists on the subject property, the precise location of the stream and the classification of stream will be made using the procedures and criteria of Section 37 of this Chapter, as applicable. A request for determination regarding whether a wetland exists on the subject property, the boundaries of that wetland and the type of wetland will be made using the procedures and criteria of Section 37 of this Chapter, as applicable.
- 4. <u>Decision</u> The determination regarding whether a stream or wetland exists on the subject property and the boundaries of that stream or wetland will be made by the

Planning Official.

- 5. <u>Appeals</u> Appeals from decisions made under this Section will be reviewed and decided upon pursuant to Section 80 of this Chapter.
- 6. Effect Any decision made under this Section will be used by the City in any development activity proposed on the subject property for which an application is received within two years of the final decision of the City under this Section; provided that the City may modify any decision made under this Section any time physical circumstances have markedly and demonstrably changed on the subject property or the surrounding areas as a result of natural processes or human activity.

90.90 Setbacks and Buffers Required by Prior Approvals

If, subsequent to October 2, 1982, the City approved a subdivision, short subdivision or development permit for the subject property which established setbacks or buffers on the subject property from a stream or wetland, those setbacks or buffers shall apply to 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 will not apply, provided that all of the provisions of this Chapter which do not directly conflict with said previously imposed setback or buffer requirements fully apply to the subject property.

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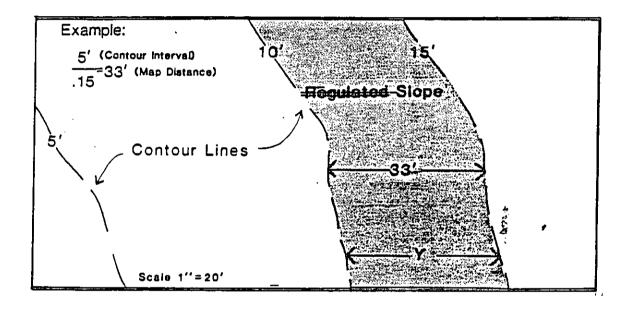
Measuring Regulated Slopes

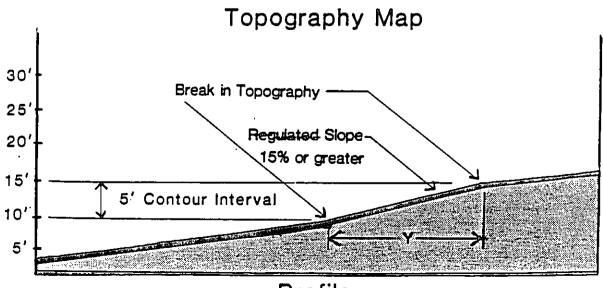
Formula: $\frac{5}{15} = Y$

5=Contour Interval (Feet)

.15-Minimum Grade (15%) for Regulated Slopes

Y=Maximum Map Distance Between Contour Lines for Pegulated Slopes (Feet)



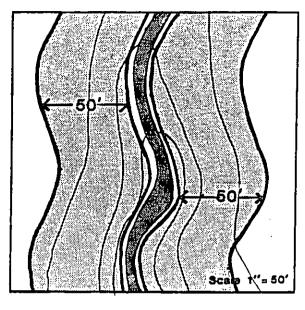


Profile

SEPTEMBER 1985 (0-2904)

Plate 16

Determining Stream Setbacks

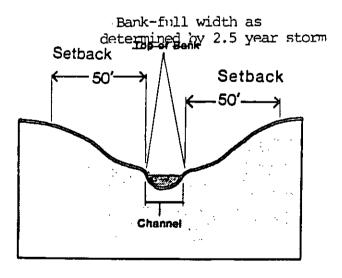


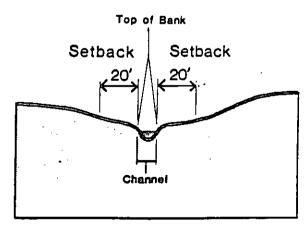
20' K 3 Scale 1'= 50'

Major Struam CLASS A AND B

Other Stream CLASS C

Plan View





Major Stream - Class A and B

-Other Stream Class C

Section

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO ZONING, PLANNING, AND LAND USE, AND AMENDING ORDINANCE 2740 AS AMENDED, AND THE KIRKLAND ZONING ORDINANCE (FILE NO. IV-92-6).

- <u>Section 1</u>. Zoning text amended: The following specified sections of the text of Ordinance 2740 as amended, be and they are hereby amended as follows:
 - 1) Chapter 5. Revise definitions consistent with the amendments found in Chapters 85 and 90.
 - 2) Chapter 85. Revise title of chapter to Geologically Hazardous Areas and include such provisions as landslide hazards, seismic hazards, and erosion hazards.
 - 3) Chapter 90. Revise title of chapter to Drainage Basins and amend provisions for streams, minor lakes, and wetlands.
 - 4) Chapter 180. Revise Plate 15 and Plate 16 consistent with Chapters 85 and 90, as amended.
 - Section 2. Provides a savings clause for the Ordinance.
- <u>Section 3.</u> Provides the disapproval jurisdiction of the Houghton Community Council.
- Section 4. Authorizes publication of the Ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code and establishes the effective date as five days after publication of summary, subject to Section 3.

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 City Council at its regular meeting on the <a href="https://example.com/regular-based-ba

I certify that the foregoing is a summary of Ordinance 3332 approved by the Kirkland City Council for summary publication.