July 29, 1997

Introduced by:

Pete von Reichbauer Christopher Vance

kn:ac-96-260sub 7/30/97 clerk Proposed No.:

96-260

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ORDINANCE NO. 12822

AN ORDINANCE relating to comprehensive planning and zoning; completing the zoning code conversion process from Title 21 to Title 21A by converting p-suffix development conditions relating to the natural environment into development regulations permit submittal requirements in the King County Code; amending Ordinance 1488, Sections 6 and 7, as amended, and K.C.C. 16.82.050 and 16.82.060; Ordinance 2281, Section 5, as amended, and K.C.C. 9.04.050; Ordinance 9614, Section 103, as amended, and K.C.C. 16.82.150; Ordinance 10870, Sections 29, 340, 364 and 475, all as amended, and K.C.C. 21A.04.080, 21A.12.030, 21A.14.040 and 21A.24.280.

#### PREAMBLE:

- 1. For purposes of effective land use planning and regulation, efficient and effective administration of development regulations, and compliance with the 1995 King County Comprehensive Plan, King County adopted a new zoning code in 1993 (Title 21A) and converted to the new zoning in February, 1995.
- 2. As a part of this conversion process, all site plan review (p-suffix) development conditions adopted under the previous zoning code (Title 21) were carried-forward pending further review pursuant to K.C.C. 21A.01.070 (F) and (G) and KCCP Policy I-406.
- 3. This ordinance is one of the products of that review process and represents the completion of the zoning conversion to Title 21A. As part of this conversion, all area-wide p-suffix conditions applicable to multiple properties are being repealed and replaced by general code provisions. The code conversion of area-wide p-suffix conditions relating to natural resources are addressed in this ordinance.
- 4. Some area-wide p-suffix development conditions are replaced by revisions to general code provisions in Title 16.82, the grading code, and Title 21A, the zoning code. The application of these development conditions are consistent with the coverage of the p-suffix conditions they replace.

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- 5. Some area-wide p-suffix development conditions are replaced by revisions to the surface water design manual that are proposed in a separate ordinance. Since there is no assurance of the timing of that ordinance, these development conditions are being temporarily carried forward as special requirements in the surface water design manual (detailed in Appendix B) until repealed upon Council adoption of the revisions to the surface water design manual. The special requirements are designated in parcel-specific maps in Appendix A consistent with the coverage of the p-suffix conditions they replace.
- 6. Where there are differences among p-suffix conditions in different areas or between p-suffix conditions and existing code language, the most recent policy direction was used as guidance to develop a single set of requirements to promote consistency and fairness in application.
- 7. Where there are identified programs already budgeted to address the areas of code amended as part of the p-suffix conversion, the development conditions are being applied as interim conditions consistent with the coverage of the p-suffix conditions they replace. Those budgeted programs will then provide more detailed analysis and develop countywide recommendations on these issues.
- 8. The general code provisions and surface water design manual special requirements offer a more consistent, efficient and flexible process than the psuffix conditions they replace. The improved process will help applicants address site-specific problems and improve the county's administration of the development regulations. These improvements will save both the applicant and the county time and resources while providing improved and more consistent implementation of the development conditions thus providing improved protection to our natural resources in a more cost-efficient manner.

#### BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Ordinance 2281, Section 5, as amended, and K.C.C. 9.04.050 are hereby amended to read as follows:

Drainage review - requirements. A. CORE REQUIREMENTS. Every permit or approval application with drainage review required by K.C.C. 9.04:030 must meet each of the following core requirements which are described in detail in the Surface Water Design Manual:

Core Requirement #1: Discharge at the natural location. The discharge from a project site must occur at the natural location and/or produce no significant adverse impact, as described in the Surface Water Design Manual.

Core Requirement #2: Off-site analysis. All projects must identify the upstream tributary drainage area and perform a downstream analysis. Levels of analysis required depend on the

problems identified or predicted. At a minimum, a level one analysis as described in the Surface Water Design Manual must be submitted with the initial permit application.

Core Requirement #3: Runoff control. All projects shall provide runoff controls to control the quantity and quality of runoff from the project by limiting the peak rates of runoff from design storm events to the pre-developed peak rates based on the project site's existing runoff conditions. The design volume, when detention facilities are required by the Surface Water Design Manual to meet the standard runoff control performance curve for the two- and ten-year, twenty-four hour duration design storm events, shall be increased by a thirty percent factor for safety. This factor of safety shall be reviewed as new research is completed to evaluate its effectiveness.

Project runoff resulting from more than five thousand square feet of impervious surface, and subject to vehicular use or storage of chemicals, shall be treated prior to discharge from the project site by biofiltration measures as specified in the Surface Water Design Manual.

Core Requirement #4: Conveyance system. All conveyance systems for projects must be analyzed, designed and constructed for existing tributary off-site flows and developed on-site flows from the project.

Core Requirement #5: Erosion/sedimentation control plan. All engineering plans for projects that involve modification or significant impact to existing drainage facilities and/or construction of new drainage facilities must include a plan to control erosion and sedimentation during construction and to permanently stabilize soil at the site.

Core Requirement #6: Maintenance and operation. Maintenance of all drainage facilities constructed or modified by a project is the responsibility of the property owner as described in the Surface Water Design Manual, except King County performs maintenance of drainage facilities constructed for formal plat subdivisions and some short plat subdivisions, two years after final plat recording following an inspection by the department.

Core Requirement #7: Financial guarantees and liability. All drainage facilities for projects (except downspout roof drain infiltration systems) must comply with the financial guarantee and liability requirements of Ordinance 12020.

B. SPECIAL REQUIREMENTS. In addition to the core requirements, engineering plans must also meet any of the following special requirements which apply to the project and which are described in detail in the Surface Water Design Manual:

Special Requirement #1: Critical drainage area. If a project lies within an area designated by public rule as a "critical drainage area," then the project drainage and engineering plans shall be prepared in accordance with the special critical drainage area requirements that have been formally adopted by public rule. Copies of all designated critical drainage area public rules (including critical drainage area maps) are available for reference from the division permit center;

Special Requirement #2: Compliance with an existing master drainage plan. If a project lies within an area covered by an approved master drainage plan as listed at the division permit center, then the project drainage and engineering plans shall be prepared in accordance with any special requirements of the master drainage plan. Copies of all master drainage plans are available for reference from the division permit center;

Special Requirement #3: Conditions requiring a master drainage plan. If a project:

- a. Is an urban planned development as described in an adopted community plan; or
- b. Is a subdivision that will eventually have more than one hundred single family lots and encompasses a contiguous drainage subbasin of more than two hundred acres; or
- c. Is a commercial building permit, commercial site development or formal subdivision that will eventually construct more than fifty acres of impervious surface; or
- d. Will clear an area of more than five hundred acres within a contiguous drainage subbasin; then a master drainage plan shall be prepared as specified in the Surface Water Design Manual. The master drainage plan process should proceed coincidentally with the

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State Environmental Policy Act (SEPA) process. Approval of the master drainage plan is required before permit approval.

Special Requirement #4: Adopted basin ((or community)) plans. If a project lies within an area included in an adopted basin ((or community)) plan, then the project drainage and engineering plans shall be prepared in conformance with the special requirements of the adopted basin ((or community)) plan. Copies of all adopted basin ((and community)) plans are available for reference from the division permit center;

Special Requirement #5: Shared Facility Drainage Plans. If a project lies within an area covered by an approved shared facility drainage plan, then the project drainage and engineering plans shall be prepared in accordance with any special requirements of the shared facility drainage plan. Copies of all adopted shared facility drainage plans are available for reference from the division permit center;

Special Requirement #6: Lake Management Plans. If a project lies within an area designated by public rule as a "lake management plan" then the project drainage and engineering plans shall be prepared in accordance with the special lake management plan requirements that have been formally adopted by public rule. Copies of all designated lake management plan public rules (including lake management plan area maps) are available for reference from the division permit center;

Special Requirement #7: Special water quality controls. If a project will construct more than one acre of impervious surface that will be subject to vehicular use or storage of chemicals and:

- a. Proposes to discharge runoff directly to a regional facility, receiving water body, lake, wetland, or closed depression to provide the runoff control consistent with Core Requirement #3; or
- b. The runoff from the project will discharge into a Type 1 or 2 stream, or Type 1 wetland within one mile from the project site; then a wetpond meeting the standards as specified in the Surface Water Design Manual shall be employed to treat a project's runoff

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prior to discharge from the project site. A wetvault or water quality swale may be used when a wetpond is not feasible.

Special Requirement #8: Coalescing plate oil/water separators. If a project will construct more than five acres of impervious surface that will be subject to petroleum storage or transfer, or high vehicular (more than twenty five hundred vehicle trips per day) or heavy equipment use, storage or maintenance, then a coalescing plate or equivalent oil/water separator shall be employed to treat a project's runoff prior to treatment by a wetpond. wetvault, or water quality swale, and/or discharge from the project site.

Special Requirement #9: Closed depressions. If a project will discharge to an existing closed depression either on or off the site that has greater than five thousand square feet of surface area at potential overflow, then the project's drainage and engineering plans must meet the requirements for closed depressions as specified in the Surface Water Design Manual;

Special Requirement #10: Use of lakes, wetlands or closed depressions for runoff control. If a project proposes to use a lake, wetland, or closed depression for runoff controls required by Core Requirement #3, then the project must meet the requirements of K.C.C. 21A.24 (Sensitive Areas) for such use, include special water quality controls, and observe the limits on any increases to the floodplain as specified in the Surface Water Design Manual;

Special Requirement #11: Delineation of one hundred year floodplain. If a project contains or abuts a stream, lake, wetland or closed depression, then the one hundred year floodplain boundaries (and floodway if available based on an approved floodplain study as specified in the Surface Water Design Manual) shall be delineated on the site improvement plans and profiles and on any final plat maps prepared for the project;

Special Requirement #12: Flood protection for Type 1 and 2 streams. If a project contains or abuts a Type 1 or 2 stream (as defined in the Surface Water Design Manual) that has an existing flood protection facility or involves construction of a new, or modification of existing flood protection facility, then the flood protection facility shall be analyzed and/or

designed as specified in the Surface Water Design Manual and in the Federal Emergency Management (FEMA) regulations (44 CFR).

Special Requirement #13: Geotechnical analysis and report. If a project includes construction of a pond for drainage control or an infiltration system (excluding a roof downspout system) above a steep slope (as defined in the Surface Water Design Manual) within two hundred feet from the top of the steep slope or on a slope with a gradient steeper than fifteen percent, or construction of earth fill/bank armor for flood protection facilities, then a geotechnical analysis and report shall be prepared and stamped by a geotechnical professional civil engineer that shall address at a minimum the analysis described in the Surface Water Design Manual;

Special Requirement #14: Soils analysis and report. If the soils underlying a project have not been mapped, or if the existing soils maps are in error or not of sufficient resolution to allow the proper engineering analysis of the proposed site to be performed, then a soils analysis and report shall be prepared and stamped by a professional civil engineer with expertise in soils to verify and/or map the underlying soils by addressing at a minimum the analysis described in the Surface Water Design Manual.

Special Requirement #15: Area-specific drainage conditions. If a proposed project is within one of the areas delineated on the area-specific drainage condition maps attached to this ordinance as Appendix A, the proposed project shall meet the applicable area-specific drainage conditions attached to this ordinance as Appendix B. Copies of these appendices shall be available for reference from the department of development and environmental services permit center. These area-specific drainage conditions shall expire upon the adoption of the Surface Water Design Manual 1996 update.

#### C. VARIANCES

1. A variance to the requirements contained in this section and/or other requirements in the Surface Water Design Manual may be proposed provided that the resulting development

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shall be subject to all of the remaining terms and conditions of this chapter and provided that granting the variance shall:

- a. Produce a compensating or comparable result in the public interest, and
- b. Meet this chapter's objectives of safety, function, appearance, environmental protection and maintainability based upon sound engineering judgment.
- 2. If meeting the provisions of 9.04.050 C.1.a. will deny reasonable use of a property, the applicant shall produce the best practicable alternative as determined by either the director of the department of natural resources or the director of the department of development and environmental services.
- 3. Variance requests which may be in conflict with the requirements of any other King County division will require review and concurrence with that division.
- 4. Variance requests shall be processed in accordance with procedures specified in the Surface Water Design Manual.
- 5. Proposed variances to the core and special requirements should be approved prior to final permit approval and may be accepted up to the time that the county approves the construction or until the facility is accepted for maintenance whichever is last.
- 6. The applicant may appeal variance decisions by following the appeal procedures as specified in the Surface Water Design Manual.
- 7. Variance requests for properties which are currently included in a special district overlay study and identified by map in Appendix A as Special Requirement 15-4, shall be processed as a Type II land use decision pursuant to Ordinance 12196, Sections 16 and 26.

  This notice and appeal process shall be in effect for these properties for a period of two years from the adoption date of this ordinance, or upon adoption of an amendment to K.C.C. 21A.38 establishing a special district overlay for this property, whichever first occurs.
- SECTION 2. Ordinance 1488, Section 6, as amended, and K.C.C. 16.82.050 are hereby amended to read as follows:

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Clearing and grading permit required - Exceptions. A. No person shall do any clearing or grading without first having obtained a clearing and grading permit from the director except for the following:

- 1. An on site excavation or fill for basements and footings of a building, retaining wall, parking lot, or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than five feet after the completion of such structure;
- 2. The depositing or covering of any garbage, rubbish or other material at any solid waste facility operated by King County;
- 3. Maintenance of existing driveways or private access roads within their existing road prisms, provided that the performance and restoration requirements of this chapter are met and best management practices are utilized to protect water quality.
  - 4. Any grading within a publicly owned road right-of-way;
- 5. Clearing or grading by a public agency for the following routine maintenance activities:
  - a. Roadside ditch cleaning provided the ditch does not contain salmonids;
  - b. Pavement maintenance;
  - c. Normal grading of gravel shoulders;
  - d. Maintenance of culverts;
- e. Maintenance of flood control or other approved surface water management facilities;
  - f. Routine clearing within road right-of-way.
- 6. Any clearing or grading for roads within a preliminary or finally approved residential plat which has been approved by the director and for which a financial guarantee has been posted,
- 7. Maintenance or reconstruction of the facilities of a common carrier by a rail in interstate commerce within its existing right-of-way; provided restoration is consistent with the

requirements of Section 16.82.110; provided that this exception does not apply if the clearing or grading is within a sensitive area as regulated in K.C.C. Chapter 21A.24.

- 8. Cemetery graves; provided that this exception does not apply except for routine maintenance if the clearing or grading is within a sensitive area as regulated in K.C.C. Chapter 21A.24;
- 9. Clearing or grading within a preliminarily or finally approved residential plat not involving any excavation exceeding five feet in vertical depth or any fill exceeding three feet in vertical depth, regardless of the amount of material to be removed; provided that this exception does not apply if the clearing or grading is within a sensitive area as regulated in K.C.C. Chapter 21A.24. This exception does not apply within an area placed into tracts or easements for a wildlife habitat corridor pursuant to K.C.C. 21A.14 unless the proposed activity is otherwise exempt under K.C.C. 21A.24;
- 10. Excavation less than five feet in vertical depth not involving more than one hundred cubic yards of earth or other material on a single site; provided that the exception does not apply if the clearing or grading is within a sensitive area as regulated in K.C.C. Chapter 21A.24. This exception does not apply within an area placed into tracts or easements for a wildlife habitat corridor pursuant to K.C.C. 21A.14 unless the proposed activity is otherwise exempt under K.C.C. 21A.24;
- 11. Fill less than three feet in vertical depth not involving more than one hundred cubic yards of earth or other material on a single site; provided that the exception does not apply if the clearing or grading is within a sensitive area as regulated in K.C.C. Chapter 21A.24. This exception does not apply within an area placed into tracts or easements for a wildlife habitat corridor pursuant to K.C.C. 21A.14 unless the proposed activity is otherwise exempt under K.C.C. 21A.24;
- 12. Minor stream restoration projects for fish habitat enhancement by a public agency, utility or tribe as set out in K.C.C. 21A.24.

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- 13. Clearing or grading for construction of livestock manure storage facilities or associated nonpoint source pollution facilities designed to the standards of and approved in a conservation plan by the King County conservation district, and constructed and maintained to those standards or livestock flood sanctuaries constructed and maintained to the standards approved by the Soil Conservation Service and conservation district and the best management practices approved by King County.
- 14. Clearing and grading, performed as Class I, II, III or IV Special forest practice in the F (Forestry) zone, that is conducted in accordance with RCW 76.09 and WAC 222.
- 15. Any clearing or grading which has been approved by the director as part of a Commercial Site Development permit and for which a financial guarantee has been posted.
- 16. ((The following activities are exempt from the clearing requirements of this chapter and no permit shall be required:))
- ((a-)) Clearing outside of sensitive areas and buffers as regulated in K.C.C. Chapter 21A.24 unless the development proposal site is within an area subject to clearing restrictions contained in: K.C.C. 16.82.150, ((a)) wildlife habitat corridors pursuant to K.C.C. 21A.14, ((a)) critical drainage areas established by administrative rule or ((in p suffix conditions in an adopted community plan or in clearing standards identified in 16.82.150)) property-specific development standards pursuant to K.C.C. 21A.38.
- ((b))17. Within sensitive areas, as regulated in K.C.C. Chapter 21A.24, the following activities are exempt from the clearing requirements of this chapter and no permit shall be required((-)):
- (((1)))a. Normal and routine maintenance of existing lawns and landscaping subject to the limitations on the use of pesticides in sensitive areas as set out in K.C.C. Chapter 21A.24.
- (((2)))b. Permitted agricultural uses; provided the clearing is consistent with the agricultural exemptions in sensitive areas as regulated in K.C.C. Chapter 21A.24.

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persons or property.							

- (((4)))d. Normal and routine horticultural activities associated with commercial orchards, nurseries, or Christmas tree farms in existence on the effective date of Ordinance 9614 (November 27, 1990) subject to the limitations on the use of pesticides in sensitive areas as set out in K.C.C. Chapter 21A.24. This does not include clearing or grading in order to develop or expand such activities.
- (((5)))e. Normal and routine maintenance of existing public parks and private and public golf courses. This does not include clearing or grading in order to develop or expand such activities in sensitive areas. For the purpose of this subsection, a park is defined as: any real property managed for public use which has been previously maintained as a park or has been developed as a park pursuant to a properly issued permit.
- (((6)))f. Removal of noxious weeds from steep slope hazard areas and the buffers of streams and wetlands subject to the limitations on the use of pesticides in sensitive areas as set out in K.C.C. Chapter 21A.24.
- (((7)))g. Pruning and limbing of vegetation for maintenance of above ground electrical and telecommunication facilities; provided that the clearing is consistent with the electric, natural gas, cable communication and telephone utility exemption in sensitive areas as regulated in K.C.C. Chapter 21A.24.
- (((8)))h. Class I, II, III and IV Special forest practices outside of areas zoned F provided they occur on parcels that meet all of the following criteria for long term forestry:
- $((\frac{a}{b}))(1)$  The parcel is enrolled under the current use taxation program as timber land pursuant to RCW 84.34 or as forest land pursuant to RCW 84.33;
- (((b)))(2) A long term management plan is approved for the parcel by the Washington Department of Natural Resources;
- (((e)))(3) The parcel is located within areas designated rural or agricultural by the King County Comprehensive Plan or applicable community plan;

(((d)))(4) The parcel is located outside of expansion areas for incorporated rural cities or rural towns and neighborhoods as designated in King County comprehensive plan or applicable community plans; and

(((e)))(5) The parcel equals or exceeds 5 acres in size.

((17))18. Clearing within seismic hazard area, except on slopes greater than 15((%)) percent and subject to clearing restrictions contained in: K.C.C. 16.82.150, wildlife habitat corridors pursuant to K.C.C. 21A.14, ((a)) critical drainage areas established by administrative rule or ((in p-suffix conditions in an adopted community plan,)) property-specific development standards pursuant to K.C.C. 21A.38; and provided the site contains no other sensitive area features; and

((18))19. Clearing within coal mine hazard area, subject to clearing restrictions contained in: K.C.C. 16.82.150, wildlife habitat corridors pursuant to K.C.C. 21A.14, ((a)) critical drainage areas established by administrative rule or ((in p suffix conditions in an adopted community plan,)) property-specific development standards pursuant to K.C.C. 21A.38; and provided the site contains no other sensitive area features.

B. TEMPORARY PERMITS. The director shall have the authority to issue temporary permits for excavations, processing, quarrying and mining, and removal of sand, gravel, rock and other natural deposits, together with the necessary buildings, apparatus or appurtenances incident thereto for specific jobs on application for highway, road, street, airport construction, flood control and other public works projects. In conjunction with such operations, allied uses such as, but not limited to, rock crushers, concrete-batching plants and asphalt-batching plants may be authorized by this temporary permit.

The department of development and environmental services shall consider the effect of the proposed operation on the county road system and any effect it may have on surface or groundwater drainage and flood control, and shall make such recommendations as are necessary to protect the public interest in this regard.

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The department of development and environmental services shall also consider the effect of the proposed operation on the current and future land use in the area affected by the proposed operation and shall condition permits as necessary to protect the public interest in this regard. Temporary permits are good for the life of the contract of the specific job but must be reviewed annually. Each temporary permit site shall be fully restored during the term of the temporary permit, unless the site is subsequently designated with a M zone classification.

SECTION 3. Ordinance 1488, Section 7, as amended, and K.C.C. 16.82.060 are hereby amended to read as follows:

Permit requirements. Except as exempted in Section 16.82.050, no person shall do any clearing or grading without first obtaining a clearing and grading permit from the director. A separate permit shall be required for each site and may cover both excavations and fills.

A. APPLICATION. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished for that purpose. The director shall prescribe the form by which application is made. No application shall be accepted unless it is completed consistent with the requirements of this chapter. Every application shall:

- 1. Identify and describe the work to be covered by the permit for which application is made;
- 2. Describe the land on which the proposed work is to be done, by lot, block, tract and house and street address, or similar description that will readily identify and definitely locate the proposed site;
- 3. Identify and describe those sensitive areas as defined in K.C.C. 21A.24 on or adjacent to the site;
  - 4. Indicate the estimated quantities of work involved;
- 5. Identify any clearing restrictions contained in K.C.C. 16.82.150, wildlife habitat corridors pursuant to K.C.C. 21A.14, ((a)) critical drainage areas established by administrative rule or ((in p-suffix conditions in an adopted community plan)) property-specific development standards pursuant to K.C.C. 21A.38;

- 6. Be accompanied by plans and specifications as required in subsections B. and C.;
- 7. Be signed by the property owner or his authorized agent who may be required to submit evidence to indicate such authority;
  - 8. Designate who the applicant is, on a form prescribed by the department; and
  - 9. Give such other information as may be required by the director.
- B. PLANS AND SPECIFICATIONS. When required by the director, each application for a grading permit shall be accompanied by six sets of plans and specifications and other supporting data as may be required. The plans and specifications shall be prepared and signed by a civil engineer or landscape architect registered to practice in the state of Washington when required by the director; provided, he may require additional studies prepared by a qualified soils specialist. If the plans and specifications are returned as a result of permit denial or any other reason, they shall be returned to the applicant.
- C. INFORMATION ON PLANS AND IN SPECIFICATIONS. Plans shall be drawn to an engineer's scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this chapter and all other relevant laws, rules, regulations and standards. The first sheet of each set of plans shall give the location of the work and the name and address of the owner and the person by whom they were prepared. The plans shall include the following minimum information:
  - 1. General vicinity of the proposed site;
- 2. Property limits and accurate contours of existing ground and details of terrain and area drainage;
- 3. Limiting dimensions, elevations or finished contours to be achieved by the grading, and proposed drainage channels and related construction;
- 4. Location of all <u>proposed</u> cleared areas((5)); <u>location of</u> any open space tracts or conservation easements if required pursuant to <u>K.C.C. 16.82.150</u>, K.C.C. 21A.14, critical drainage areas, or ((p-suffix-conditions,)) property-specific development standards pursuant to

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·25 26 K.C.C. 21A.38; and calculations of the total proposed area cleared on site as a percentage of the total site area;

- 5. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams, berms, settling ponds and other protective devices to be constructed with or as a part of the proposed work, together with the maps showing the drainage area and the estimated runoff of the area served by any drains;
- 6. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners which are within fifty feet of the property or which may be affected by the proposed grading operations;
  - 7. Landscape and rehabilitation plan as required by Section 16.82.110;
  - 8. Other information as may be required by the director, and
- 9. If the clearing or grading is proposed to take place in or adjacent to a sensitive area as regulated in K.C.C. 21A.24, provide information as required by that chapter.
- GRANTING OF PERMITS. 1. The director shall determine if the proposed grading will adversely affect the character of the site for present lawful uses or with the future development of the site and adjacent properties for building or other purposes as indicated by the comprehensive plan, the shoreline master program, and the zoning code.
- 2. After an application has been filed and reviewed, the director shall also ascertain whether such grading work complies with the other provisions of this chapter. If the application and plans so comply, or if they are corrected or amended so as to comply, the director may issue to the applicant a grading permit. A grading permit shall be valid for the number of days stated in the permit but in no case shall the period be more than two years; provided, that when operating conditions have been met, the permit may be renewed every two years, or less if a shorter approval and/or renewal period is specified by the director.
- 3. No grading permit shall be issued until approved by federal, state and local agencies having jurisdiction by laws or regulations.

- 4. Upon approval of the application and issuance of the grading permit, no work shall be done that is not provided for in the permit. The director is authorized to inspect the premises at any reasonable time to determine if the work is in accordance with the permit application and plans.
- 5. The permits from the director shall be required regardless of any permits issued by any other department of county government or any other governmental agency who may be interested in certain aspects of the proposed work. Where work for which a permit is required by this chapter is started or proceeded with prior to obtaining the permit, the violator shall be subject to such civil penalties as provided in Chapter 23.04. However, the payment of such civil penalties shall not relieve any persons from fully complying with the requirements of this chapter in the execution of the work nor from any other penalties prescribed thereon.

SECTION 4. Ordinance 9614, Section 103, as amended, and K.C.C. 16.82.150 are hereby amended to read as follows:

Clearing standards. A. For clearing and grading permits issued under this chapter, the current clearing standards contained in this section and in the following regulations ((or adopted policies)) shall apply:

- 1. The Sensitive Areas Code, K.C.C. 21A.24, and its adopted administrative rules;
- 2. ((P-suffix conditions within adopted community plans)) Property specific development standards pursuant to K.C.C. 21A.38;
  - 3. Critical drainage area designations identified by adopted administrative rule((-)); and
  - 4. Wildlife habitat corridors pursuant to  $\underline{K.C.C.}$  21A.14.
- B. ((Where conflicts exist between standards in subsection A, the most restrictive shall apply.))
- ((C.)) Within ((uncleared areas placed into tracts or conservation easements for wildlife habitat corridors pursuant to 21A.14)) sensitive areas designated pursuant to K.C.C. 21A.24, uses shall be limited to those specified in that chapter. Within any other areas subject to

clearing restrictions referenced or contained in this section, the following uses are allowed under a clearing permit:

- 1. Timber harvest in accordance with a timber harvest management plan and clearing permit approved by the department of development and environmental services or a successor agency. That department shall promulgate administrative rules specifying the contents of, and the submittal requirements and approval criteria for, timber harvest management plans in consultation with the department of natural resources prior to any permit approvals for timber harvest within these tracts or easements;
- 2. Passive recreation uses and related facilities, including pedestrian and bicycle trails, nature viewing areas, fishing and camping areas, and other similar uses that do not require permanent structures, provided that cleared areas and/or areas of compacted soils associated with these uses and facilities do not exceed eight percent of the area of the tract or easement. Within wildlife habitat corridors, trail widths shall be the minimum allowed under adopted trail standards and no other recreation uses shall be permitted in the 150 foot minimum width of the corridor;
- 3. Utilities and utility easements, including surface water facilities, provided that such uses are within or adjacent to existing road or utility easements whenever possible. ((E))Within wildlife habitat corridors, existing or multiple utility uses within established easements shall be allowed within the 150 foot minimum width of the corridor. Development of new utility corridors shall be allowed within wildlife habitat corridors only when multiple uses of existing easements are not feasible and the utility corridors are sited and ((use)) developed using county-approved best management practices to minimize disturbance ((to the corridor)); and
  - 4. Removal of dangerous and or damaged trees.
- ((D. For all new residential construction and residential subdivision in the RA (Rural Area) zoned areas in the Issaguah Creek Basin:

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1. Clearing shall be limited to a maximum of 35% of lot or plat area or the amount cleared prior to the effective date of this ordinance, whichever is greater, except under conditions specified in paragraphs D5 and D6 below.

2. For subdivisions and short subdivisions, portions of the plat that are not designated for clearing shall be retained in one or more open-space tracts, with all developable lots sited on the portions of the plat that may be cleared. For purposes of this subsection, the portion of the plat that may be cleared is identified as 35% of the plat area or the amount that was cleared prior to the effective date of this ordinance, whichever is greater. Sensitive areas designated under K.C.C. Title 21 shall be recorded separately from tracts mandated by this regulation, but may be counted towards meeting these requirements. Tract mandated by this regulation may be retained by the subdivider, conveyed to the residents of the subdivision, or conveyed to a third party. Open space tracts shall be shown on all property maps and shall be protected by covenants, approved by the County, that restrict their uses to the following:

a. Passive-recreation uses and related facilities, including pedestrian and bicycle trails, nature viewing areas, fishing and camping areas, and other similar uses that do not require permanent structures, provided that cleared areas and/or areas of compacted soils associated with these uses and facilities do not exceed eight percent of the area of the open space-tract;

b. Utilities and utility easements, including surface water facilities, provided that, whenever-possible, such uses are within or-adjacent to existing road or utility easements;

c. Timber harvest, provided that it is accomplished in accordance with a timber harvest management plan and clearing permit that have been approved by the Department of Development and Environmental Services. That Department shall prepare administrative rules regarding review and approval of timber harvest management plans in consultation with the Surface Water Management Division of the Department of Public Works before approving any permits for timber harvest after the effective date of this ordinance;

designated for clearing in the plat, uses shall be limited to those specified in K.C.C. 21 A.24. Aside from approved timber harvest activities and removal of dangerous and/or damaged trees, all trees within open space tracts at the time of subdivision application shall be retained.—All open space tracts established pursuant to this regulation shall be clearly marked with at least one sign per buildable lot adjoining the tract indicating that the tract is permanent, dedicated open space.

3. For individual lots, the clearing limits shall be applied at the time of building permit application unless the lot is within a subdivision that has been approved with other conditions to meet the standard established in paragraph D2. In cases where conditions are applied to subdivisions, individual lots shall be exempt from the clearing restrictions in paragraph D1. The uses and restrictions on the uncleared portions of individual lots shall be those specified in paragraph D2. Sensitive areas designated under K.C.C. Title 21A may be counted towards meeting requirements on individual lots. On lots greater than or equal to 20,000 square feet, the restrictions in paragraph D1 shall apply. On lots smaller than 20,000 square feet, up to 7,000 square feet may be cleared.

4. Clearing required for the construction of infrastructure to serve any lots 1.25 acres or smaller in size shall not be counted towards the 35% maximum-clearing standard established in paragraph D1.

5. Clearing shall be limited to a maximum of 60% of the lot or plat area if the permit applicant commits to constructing onsite retention/detention and water quality facilities to the standards of the King County Surface Water Design Manual and the Issaquah Creek Basin and Nonpoint Action Plan.

6. The subdivision or permitting of building on parcels that are cleared after the effective date of this ordinance shall be subject to conditions requiring the restoration of trees and understory vegetation on at least 65% of the plat or lot, or at least 40% if the applicant chooses the conditions of paragraph D5. A restoration plan shall be required of permit

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applicants, and shall be subject to the approval of the Department of Development and Environmental Services. That Department shall prepare administrative rules regarding the review and approval of restoration plans in consultation with the Surface Water Management Division of the Department of Public Works before approving subdivision or building permits for parcels cleared after the effective date of this ordinance. The administrative rules shall also specify when a restoration plan will be deemed sufficient to forgo the six (6) year moratorium on permitting authorized in K.C.C. 16.82.140.

- 7. Public uses, including schools, churches, fire stations, parks, libraries, hospitals and roads shall be exempt from the requirements of paragraphs D1 through D6.
- 8. In no cases shall the amount of clearing and site disturbance exceed that allowable in the regulations and conditions specified in paragraphs A1 and A2 of this section.))
- ((E))C. ((In)) For the RA (Rural Area) zoned areas in either the Bear Creek Basin,

  Issaquah Creek basin, the Soos Creek basin, the East Sammamish Community Planning Area

  or the Bear Creek Community Planning Area:
- 1. Clearing shall be limited to a maximum of 35((%)) percent of the lot or plat area or the amount legally cleared prior to the effective date of ((this ordinance)) any clearing regulations in effect at the time of the clearing, whichever is greater, except under conditions specified ((in paragraph E5)) below((-)):
- a. Clearing shall be limited to a maximum of 60 percent of the lot or plat area if the approved permit requires flow control and water quality facilities in accordance with standards set forth in the applicable adopted basin plan and the King County Surface Water Design Manual;
- b. In the Soos Creek basin, clearing shall be limited to a maximum of 80 percent of the lot or plat area, except in designated Regionally Significant Resource Areas where clearing shall be limited to a maximum of 65 percent of the lot or plat area. Buffers for all sensitive areas designated under K.C.C. Title 21A and sensitive areas except for submerged lands may

be counted towards meeting the requirement. Building permits for single-family residential building on individual lots shall be exempt from the clearing limit in the Soos Creek basin;

- c. Clearing required for the construction of access, utilities and septic systems to serve any lots 1.25 acres or smaller in size shall not be counted towards the 35 percent maximum clearing standard;
- d. On individual lots smaller than 20,000 square feet, up to 7,000 square feet may be cleared; and
- e. Clearing standards for Urban Planned Developments and Mineral zoned properties will be determined through their own designated review processes.
- 2. For subdivisions and short subdivisions, portions of the plat that are ((not designated for clearing)) required to remain uncleared shall be retained in one or more ((common)) open space tracts, with all the developable lots sited on the portions of the plat ((that may)) approved to be cleared. ((For purposes of this subsection, the portion of the plat that may be cleared is identified as 35% of the plat area or the amount that was cleared prior to the effective date of this ordinance, whichever is greater.)) Sensitive areas designated under K.C.C. Title 21A shall be recorded separately from tracts mandated by this regulation, but may be counted towards meeting these requirements. Tracts mandated by this regulation may be retained by the subdivider, conveyed to the residents of the subdivision, or conveyed to a third party. Open space tracts shall be shown on all property maps and shall be protected by covenants, approved by the county, that restrict their uses to those listed in K.C.C.

  16.82.150.B. ((e following:
- a. Passive recreation uses and related facilities, including pedestrian and bicycle trails; nature viewing areas, fishing and camping areas, and other similar uses that do not require permanent structures, provided that cleared areas and/or areas of compacted soils associated with these uses and facilities do not exceed eight percent of the area of the open space tract;

b. Utilities and utility easements, including surface water facilities, provided that, whenever possible, such uses are within or adjacent to existing road or utility easements;

- c. Timber harvest, provided that it is accomplished in accordance with a timber harvest management plan and clearing permit that have been approved by the Department of Development and Environmental Services. That Department shall prepare administrative rules regarding review and approval of timber harvest management plans in consultation with the Surface Water Management Division of the Department of Public Works before approving any permits for timber harvest after the effective date of this ordinance; and
- designated for clearing in the plat, uses shall be limited to those specified in K.C.C. 21 A.24. Aside from approved timber harvest activities and removal of dangerous and/or damaged trees, all trees within open space tracts at the time of subdivision application shall be retained.)) All open space tracts established pursuant to this regulation shall be clearly marked with at least one sign per buildable lot adjoining the tract indicating that the tract is permanent, dedicated open space.
- 3. For individual lots, the clearing limits shall be applied at the time of building permit application unless the lot is within a subdivision that has been approved with other conditions to meet the standard established in paragraph ((E))C2. In cases where conditions are applied to ((the)) subdivisions, individual lots shall be exempt from the clearing restrictions in paragraph ((E))C1. The uses and restrictions on the uncleared portions of individual lots shall be those specified in ((paragraph E2)) K.C.C. 16.82.150.B. Sensitive areas designated under K.C.C. Title 21A may be counted towards meeting requirements on individual lots. ((On lots greater than or equal to 20,000 square feet, the restrictions in paragraph E1 shall apply. On lots smaller than 20,000 square feet, up to 7,000 square feet may be cleared.))
- ((4. Clearing required for the construction of infrastructure to serve any lots 1.25 acres or smaller in size shall not be counted towards the 35% maximum clearing standard established in paragraph E1.))

((5. Clearing shall be limited to a maximum of 60% of the lot or plat area if the permi
applicant commits to constructing on-site retention/detention facilities in accordance with the
On-Site Detention Standards set forth in Recommendation BW-2 of the adopted Bear Creek
Basin Plan or superseding standards that may be contained in an update of the King County
Surface Water Design Manual.))

((6))4. The subdivision or permitting of building on parcels that are cleared ((after the effective date of this ordinance)) in violation of the regulations in effect at the time of the clearing shall be subject to conditions requiring the restoration of trees and understory vegetation on at least 65((%)) percent of the plat or lot, or, where applicable, on the percentage of the site that was to remain uncleared under ((at least 40% if the applicant ehooses the conditions of)) paragraph ((E5))C1. A restoration plan shall be required of permit applicants, and shall be subject to the approval of the ((D))department of ((D))development and ((E))environmental ((S))services. That ((D))department shall prepare administrative rules regarding the review and approval of restoration plans in consultation with the ((Surface Water Management Division of the D))department of ((Public Works)) natural resources before approving subdivision or building permits for parcels cleared ((after the effective date of this ordinance)) in violation of applicable clearing regulations. The administrative rules shall also specify when a restoration plan will be deemed sufficient to forgo the six (6) year moratorium on permitting authorized in K.C.C. 16.82.140.

((7. Clearing standards for Urban Planned Developments and Mineral zoned properties will be determined through their own designated review processes.))

- ((8))5. ((The requirements of paragraphs ((E))C1 through ((E6))C4 may be modified or waived by the director for proposed projects that meet the following conditions:
- a. The project shall consist of one or more of the following uses:
- 1. Government services listed in K.C.C. 21A.08.060,
  - 2. Educational services listed in K.C.C. 21A.08.050,

1	3. Parks as listed in K.C.C. 21A.08.040 when located adjacent to an existing or
2	proposed-school,
3	4. Libraries listed in K.C.C. 21A.08.040, and
4	5. Road projects;
5	b. The project site shall not be located in a designated Regionally Significant
6 7	Resource Area except for utility corridors that can demonstrate no feasible alternative;
8	use;))
9	In the Bear Creek basin and the Bear Creek Community Planning Area, the
10	requirements of paragraphs C1 through C4 shall be modified or waived by the director for
11	proposed projects that meet the following conditions:
12	a. The project shall consist of one or more of the following uses:
13	1. Government services listed in K.C.C. 21A.08.060,
14	2. Educational services listed in K.C.C. 21A.08.050,
15	3. Parks as listed in K.C.C. 21A.08.040 when located adjacent to an
16	existing or proposed school,
17	4. Libraries listed in K.C.C. 21A.08.040, and
18	5. Road projects;
19	b. The project site shall not be located in a designated Regionally
20	Significant Resource Area except for utility corridors that can demonstrate no feasible
21	alternative;
22	c. The project shall clear the minimum necessary to accommodate the proposed use
23	which includes all the allowed ballfields, playfields, other facilities, and spaces proposed by the
24	public agency to carry out its public function; and
25	d. The project shall meet the on-site ((detention)) flow control and water quality
26	standards set forth in the applicable adopted basin plan and the Surface Water Design Manual.
27 28	((provisions in paragraph E5; and)) ((e.)) The modification or waiver shall not exempt the project from any other code
29	provisions which may apply. The director's decision may be appealed to the zoning and

subdivision examiner pursuant to K.C.C. 20.24, provided that any such appeal must be consolidated with an appeal, if any, heard by the examiner on the merits of the proposed project.

- 6. In the Issaquah Creek basin, the Soos Creek basin and the East Sammamish Community Planning Area, the following standards shall apply:
- a. In the Regionally Significant Resource Areas, except for utility corridors that can demonstrate no feasible alternative, the requirements of paragraphs C1 through C4 shall apply; and
- b. In areas outside of the Regionally Significant Resources Areas, projects that consist of one or more of the uses identified in C5(a)(1) to (4) shall be exempt from the requirements of paragraphs C1 through C4.
- ((9))D. Construction projects can be a significant contributor of pollution to streams and wetlands. Therefore, from October 1 through March 31, in the Bear Creek Community

  Planning Area, the Northshore Community Planning Area, the East Sammamish Community

  Planning Area and the Soos Creek basin:
- ((a. the director may restrict or prohibit clearing, grading and construction during this period in Regionally Significant Resource Areas to protect sensitive habitat from damage caused by sedimentation))
- 1. Clearing and grading shall only be permitted if shown to the satisfaction of the director that silt-laden runoff exceeding standards in the King County Surface Water Design Manual will be prevented from leaving the construction site through a combination of the following:
- a. site conditions including vegetative coverage, slope, soil type and proximity to receiving waters;
  - b. limitations on activities and the extent of disturbed areas; and
  - c. proposed erosion and sedimentation control measures.
- ((b))2. The director shall set forth in writing the basis for approval or denial of clearing or grading during this period.

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3. Clearing and grading ((other than maintenance and repair of erosion and sediment
control facilities)) will be allowed only if there is installation and maintenance of an $((approved)$
temporary)) erosion and sedimentation control plan approved by the ((director)) department
which shall define any limits on clearing and grading or specific erosion and sediment control
measures required during this period. Alternate best management practices may be approved
or required on-site by the inspector.

- ((e))4. If, during the course of construction, silt-laden runoff exceeding standards in the King County Surface Water Design Manual leaves the construction site or if <u>clearing and grading limits or</u> erosion and sediment control measures shown in the approved plan are not maintained, a notice of violation shall be issued.
- ((d))5. If the erosion and sediment control problem defined in the violation is not adequately repaired within 24 hours of the notice of violation, then a notice and order may be issued by the inspector to install adequate erosion and sediment control measures to stop silt-laden runoff from leaving the site. The notice and order may also require the contractor to discontinue any further clearing or grading, except for erosion and sediment control maintenance and repair, until the following March 31.
- 6. The following activities are exempt from the seasonal clearing and grading requirements of this subsection:
- a. Routine maintenance and necessary repair of erosion and sediment control facilities;
- b. Routine maintenance of public facilities or existing utility structures as provided by K.C.C. 21A.24.050.B;
- c. Activities where there is 100 percent infiltration of surface water runoff within the site in approved and installed erosion and sedimentation control facilities;
- d. Typical landscaping activities of existing single family residences that do not require a permit;
  - e. Class I, II III and IV Special forest practices;

- f. Mineral extraction activities on sites with approved permits; and
- g. Public agency response to emergencies that threaten the public health, safety and welfare.

SECTION 5. Ordinance 11870, Section 29, as amended, and K.C.C. 21A.04.080 are each hereby amended to read as follows:

Residential zone. A. The purpose of the urban residential zone (R) is to implement Comprehensive Plan goals and policies for housing quality, diversity and affordability, and to efficiently use residential land, public services and energy. These purposes are accomplished by:

- 1. Providing, in the R-1 through R-8 zones, for a mix of predominantly single detached dwelling units and other development types, with a variety of densities and sizes in locations appropriate for urban densities;
- 2. Providing, in the R-12 through R-48 zones, for a mix of predominantly apartment and townhouse dwelling units and other development types, with a variety of densities and sizes in locations appropriate for urban densities;
- 3. Allowing only those accessory and complementary nonresidential uses that are compatible with residential communities; and
- 4. Establishing density designations to facilitate advanced area-wide planning for public facilities and services, and to protect environmentally sensitive sites from overdevelopment.
- B. Use of this zone is appropriate in urban areas, activity centers, or rural towns designated by the Comprehensive Plan or community plans as follows:
- 1. The R-1 zone on or adjacent to lands with area-wide environmental constraints where development is required to cluster away from sensitive areas, on lands designated urban separators or wildlife habitat network where development is required to cluster away from the axis of the corridor, or in well-established subdivisions of the same density, which are served at

the time of development by public or private facilities and services adequate to support planned densities;

- 2. The R-4 through R-8 zones on urban lands that are predominantly environmentally unconstrained and are served at the time of development, by adequate public sewers, water supply, roads and other needed public facilities and services; and
- 3. The R-12 through R-48 zones in urban areas, urban or community activity centers, urban neighborhood centers, or rural towns, that are served at the time of development by adequate public sewers, water supply, roads and other needed public facilities and services.

SECTION 6. Ordinance 11870, Section 340, as amended, and K.C.C. 21A.12.030 are each hereby amended to read as follows:

### A. Densities and dimensions - residential zones

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		RURAL				URBAN RESERVE	URBAN RESIDE	NTIAL						
STANDARDS		RA-2.5	RA-5	RA-10	RA-20	UR	R-1(17)	R-4	R-6	R-8	R-12	R-18	R-24	R-48
Base Density: Dwelling Unit/Acre (15)		0.2 du/ac	0.2 du/ac	0.1 du/ac	0.05 du/ac	0.2 du/ac	I du/ac	4 du/ac (6)	6 du/ac	8 du/ac	12 du/ac	18 du/ac	24 du/ac	48 du/ac
Maximum Density: Dwelling Unit/Acre (1)								6 du/ac	9 du/ac	12 du/ac	18 du/ac	27 du/ac	36 du/ac	72 du/ac
Minimum Density: (2)								85% (18)	85% (18)	85% (18)	80% (18)	75% (18)	70% (18)	65% (18)
Minimum Lot Width: (3)		135 ft	135 ft	135 ft	135 ft	35 ft (7)	35 ft (7)	30 ft	30 ft	30 ft	30 ft	30 ft	30 ft	30 ft
Minimum Street Setback (3)		30 ft (9)	30 ft (9)	30 ft (9)	30 ft (9)	30 ft (7)	20 ft (7)	10 ft (8)	10 ft (8)	10 ft (8)	10 ft (8)	10 ft (8)	10 FT (8)	10 FT (8)
Minimum Interior Setback (3) (16)		5 ft (9)	10 ft (9)	10 ft (9)	10 ft (9)	5 ft (7)	5 ft (7)	5 A	5 ft	5 ft	5 ft (10)	5 ft (10)	5 ft (10)	5 ft (10)
Base Height (4)		40 ft	40 ft	40 ft	40 ft	35 ft	35 ft	35 ft	35 ft 45 ft (14)	35 ft 45 ft (14)	60 ft	60 ft 80 ft (14)	60 ft 80 ft (14)	60 ft 80 ft (14)
Maximum Impervious Surface: Percentage (5)		25% (11) (19)	20% (11) (19)	15% (11) (19)	12.5% (11) (19)	30% (11)	30% (11)	55%	70%	75%	85%	85%	85%	90%

B. Development Conditions.

- 1. The maximum density may be achieved only through the application of residential density incentives or transfers of density credits pursuant to Chapters 21A.34 or 21A.36.

  Maximum density may only be exceeded pursuant to Section 21A.34.040 F. 1. f.
  - 2. Also see Section 21A.12.060.
- 3. These standards may be modified under the provisions for zero-lot-line and townhouse developments.
- 4. Height limits may be increased when portions of the structure which exceed the base height limit provide one additional foot of street and interior setback for each foot above the base height limit, provided that the maximum height may not exceed 75 feet. Netting or fencing and support structures for the netting or fencing used to contain golf balls in the operation of golf courses or golf driving ranges are exempt from the additional interior setback requirement provided that the maximum height shall not exceed 75 feet.
  - 5. Applies to each individual lot. Impervious surface area standards for:
    - a. regional uses shall be established at the time of permit review;
- b. nonresidential uses in residential zones shall comply with K.C.C. 21A.12.120 and .220;
- c. individual lots in the R-4 through R-6 zones which are less than 9,076 square feet in area shall be subject to the applicable provisions of the nearest comparable R-6 or R-8 zone;
- d. any lot may be increased beyond the total amount permitted in this chapter subject to approval of a conditional use permit.
  - 6. Mobile home parks shall be allowed a base density of six dwelling units per acre.
- 7. The standards of the R-4 zone shall apply if a lot is less than 15,000 square feet in area.
- 8. At least 20 linear feet of driveway shall be provided between any garage, carport, or other fenced parking area and the street property line. The linear distance shall be measured

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along the centerline of the driveway from the access point to such garage, carport or fenced area to the street property line.

- 9. a. Residences shall have a setback of at least 100 feet from any property line adjoining A, M or F zones or existing extractive operations.
- b. For lots between 1 acre and 2.5 acres in size, the setback requirements of the R-1 zone shall apply. For lots under 1 acre, the setback requirements of the R-4 zone shall apply.
- 10.a. For developments consisting of three or more single-detached dwellings located on a single parcel, the setback shall be 10 feet along any property line abutting R-1 through R-8, RA and UR zones.
- b. For townhouse and apartment development, the setback shall be 20 feet along any property line abutting R-1 through R-8, RA and UR zones.
- 11. Lots smaller than .5 acre in area shall comply with standards of the nearest comparable R-4 through R-8 zone. For lots that are .5 acre in area or larger, the maximum impervious surface area allowed shall be at least 10,000 square feet. On any lot over 1 acre in area, an additional 5 percent may be used for buildings related to agricultural or forestry practices.
  - 12. Reserved.
  - 13. Reserved.
  - 14. The base height to be used only for projects as follows:
- a. in R6 and R8 zones, a building with a footprint built on slopes exceeding a 15((%)) percent finished grade; and
- b. in R18, R24 and R48 zones using residential density incentives and transfer of density credits pursuant to this title.
  - 15. Density applies only to dwelling units and not to sleeping units.
- 16. Vehicle access points from garages, carports or fenced parking areas shall be set back from the property line upon which a joint use driveway is located to provide a straight

line length of at least 26 feet, as measured from the centerline of the garage, carport or fence parking area, from the access point to the opposite side of the joint use driveway.

- 17. All subdivisions and short subdivisions in the R-1 zone shall be required to be clustered away from sensitive areas or the axis of designated corridors such as urban separators or the wildlife habitat network to the extent possible and a permanent open space tract that includes at least 50 percent of the site shall be created. Open space tracts shall meet the provisions of 21A.14.040.
  - 18. See K.C.C. 21A.12.085.
- within the North Fork and Upper Issaquah Creek subbasins of the Issaquah Creek Basin (the North Fork and Upper Issaquah Creek subbasins are identified in the Issaquah Creek Basin and Nonpoint Action Plan) and the portion of the Grand Ridge subarea of the East Sammamish Community Planning Area which drains to Patterson Creek shall have a maximum impervious surface area of 8((%)) percent of the gross acreage of the plat. Distribution of the allowable impervious area among the platted lots ((will)) shall be recorded on the face of the plat. Impervious surface of roads need not be counted towards the allowable impervious area. In cases where both lot- and plat-specific impervious limits apply, the more restrictive shall be required.

SECTION 7. Ordinance 10870 Section 353, as amended, and K.C.C. 21A.12.160 are each amended to read as follows:

Setbacks - ((Adjoining half-street or designated arterial)) Required Modifications.

The following setback modifications are required:

A. In addition to providing the standard street setback, a lot adjoining a half-street or designated arterial shall provide an additional width of street setback sufficient to accommodate construction of the planned half-street or arterial-; and

B. Where the standard setback for a property is modified within an adopted subarea or neighborhood plan area zoning, the applicable setback shall be that specified therein.

SECTION 8. Ordinance 10870 Section 364, as amended, and K.C.C. 21A.14.040 are each amended to read as follows:

Lot segregations - Clustered development. When residential lot clustering is proposed, the following provisions shall be met:

A. Any open space resulting from lot clustering shall not be altered or disturbed except as specified on recorded documents creating the open space. Such open spaces may be retained under ownership by the subdivider, conveyed to residents of the development, or conveyed to a third party. When access to the open space is provided, the access shall be located in a separate tract;

### B. In the RA zone:

- 1. No more than eight lots of less than 2.5 acres shall be allowed in a cluster;
- 2. No more than eight lots of less than 2.5 acres shall be served by a single cul-de-sac street;
- 3. Clusters containing two or more lots of less than 2.5 acres, whether in the same or adjacent developments, shall be separated from similar clusters by at least 120 feet, and
- 4. The overall amount, and the individual degree of clustering shall be limited to a level that can be adequately served by rural facilities and services, including, but not limited to onsite sewage disposal systems and rural roadways, and
- C. In the R-1 zone, open space tracts created by clustering required by section 21A.12.030 shall be located and configured to create urban separators and greenbelts as required by the comprehensive plan, community plans, or local or subarea plans or open space functional plans, to connect and increase protective buffers for environmentally sensitive areas as defined in section 21A.06.1065, to connect and protect wildlife habitat corridors designated by the comprehensive plan, and to connect existing or planned public parks or trails. King

County may require open space tracts created under this subsection to be dedicated to an appropriate managing public agency or qualifying private entity such as a nature conservancy.

SECTION 9. Ordinance 10870, Section 475 and K.C.C. 21A.24.280 are each hereby amended to read as follows:

Landslide hazard areas: development standards and permitted alterations. A development proposal on a site containing a landslide hazard area shall meet the following requirements:

- A. A minimum buffer of 50 feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. For landslide hazard areas that are also steep slopes over 200 feet in height, the building setback shall be 50 feet from the buffer. The building setback may be reduced to a minimum of 15 feet from the buffer if, based on a special study, King County determines that the reduction will adequately protect the proposed development and the sensitive area. For single family residential building permits only, King County may waive the special study requirement and authorize building setback reductions, pursuant to K.C.C. 21A.24.075 or if King County determines that the reduction will adequately protect the proposed development and the sensitive area;
- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to King County shall be provided prior to any vegetation removal permitted by this subsection;
- C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to King County pursuant to an enhancement plan approved by King County. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by King County; and

D. Alterations to landslide hazard areas and buffers may be allowed only as follows:

1. A landslide hazard area located on a slope 40% or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in K.C.C. 21A.24.310;

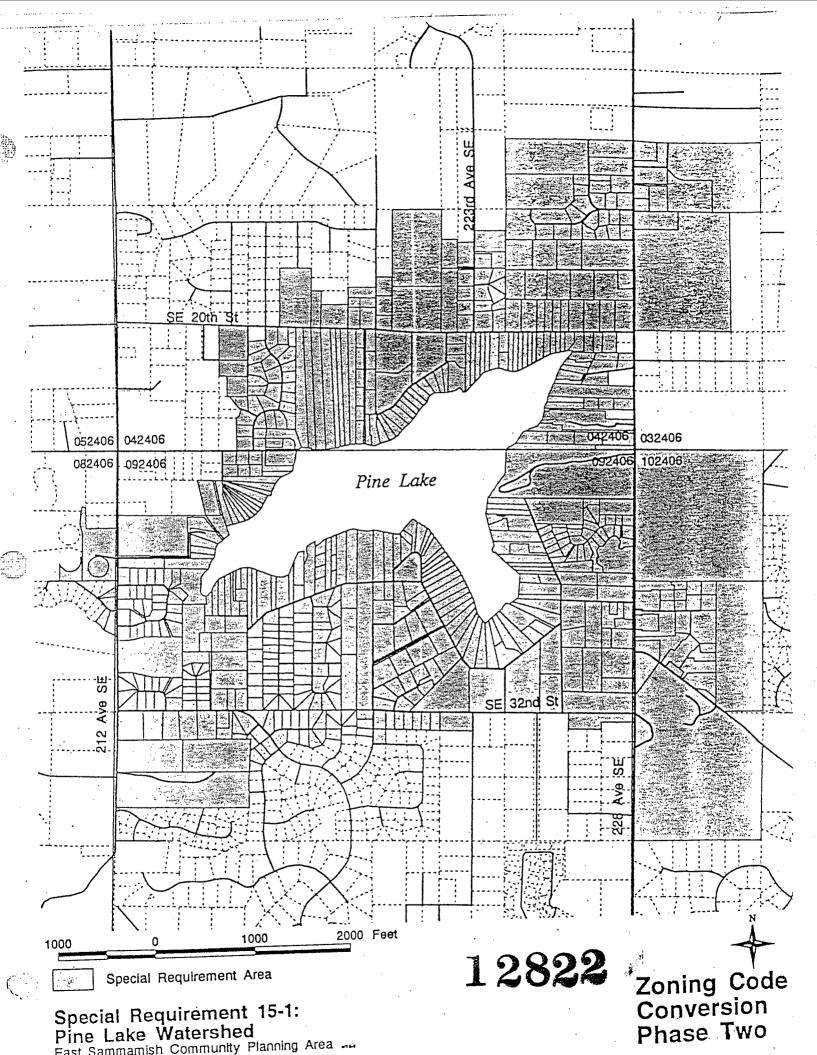
- 2. A landslide hazard area located on a slope less than 40% may be altered only if the alteration meets the following requirements:
- a. the development proposal will not decrease slope stability on contiguous properties; and
- b. mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from landslides; and
- 3. Neither buffers nor a sensitive area tract shall be required if the alteration meets the standards of subsection D.2.

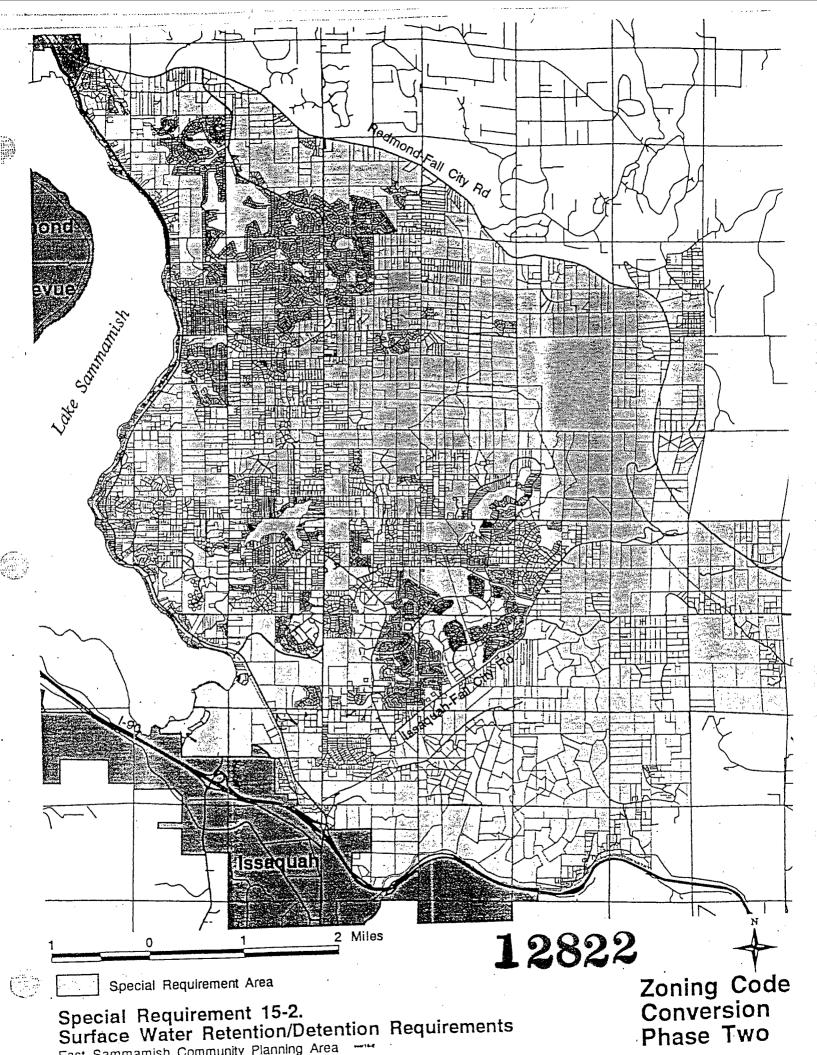
SECTION 10. The Metropolitan King County Council finds that pursuant to Ordinance 12196, the requirements for environmental analysis, protection and mitigation measures in King County Code Chapters 21A. 12, 21A.14 and 21A.24, as amended by this ordinance, provide adequate analysis of and mitigation for the specific adverse environmental impacts to which the requirements apply.

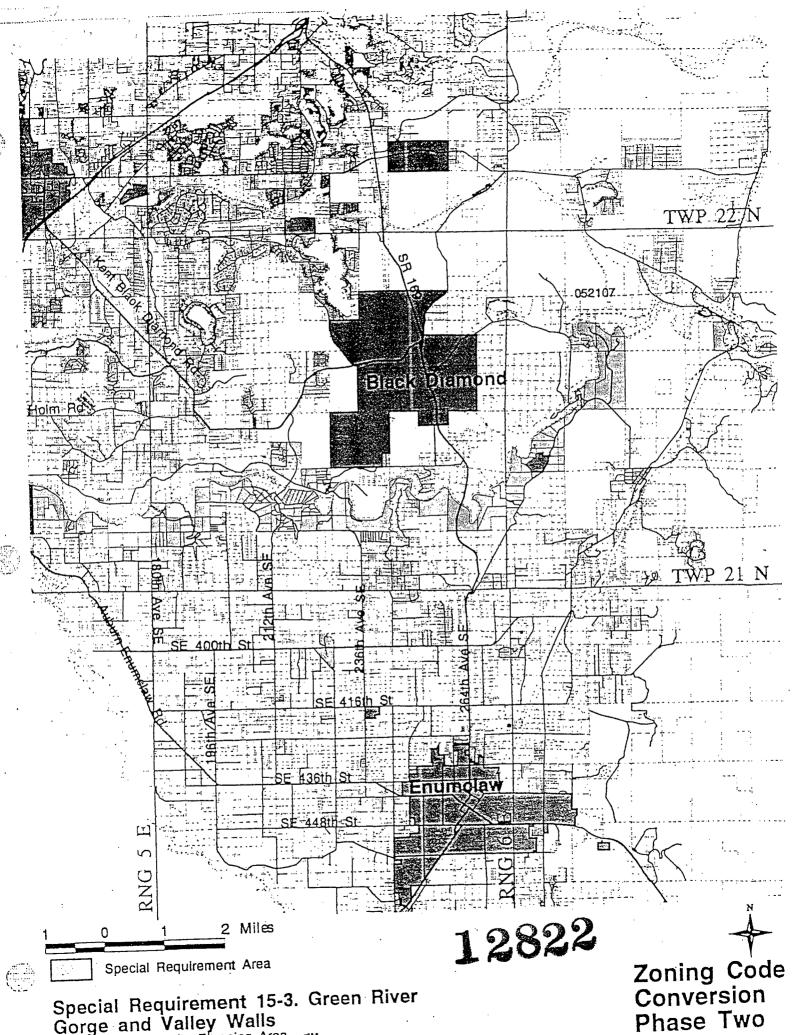
SECTION 11. The amendment or repeal of any P-suffix conditions or property-specific 1 2 development standards pursuant to the provisions of this ordinance may apply to a development application filed before the effective date of this ordinance if the director 3 determines that the development regulations to which the application is vested provide 4 5 equivalent development standards or conditions, or the applicant agrees to be bound by 6 existing development regulations. INTRODUCED AND READ for the first time this 7 eptember, 1996. 8 PASSED by a vote of // to  $\frac{3}{2}$  this  $\frac{3}{2}$  day of 9 10 KING COUNTY COUNCIL KING COUNTY, WASHINGTON 11 12 13 14 ATTEST: 15 16 Clerk of the Council 17 18 19 King County Executive 20 Attachments: Appendix A - Area-Specific Drainage Conditions Application Maps 21 Appendix B - Area-Specific Drainage Conditions

# Appendix A to Proposed Substitute Ordinance 96-260 AREA-SPECIFIC DRAINAGE CONDITIONS APPLICATIONS MAPS

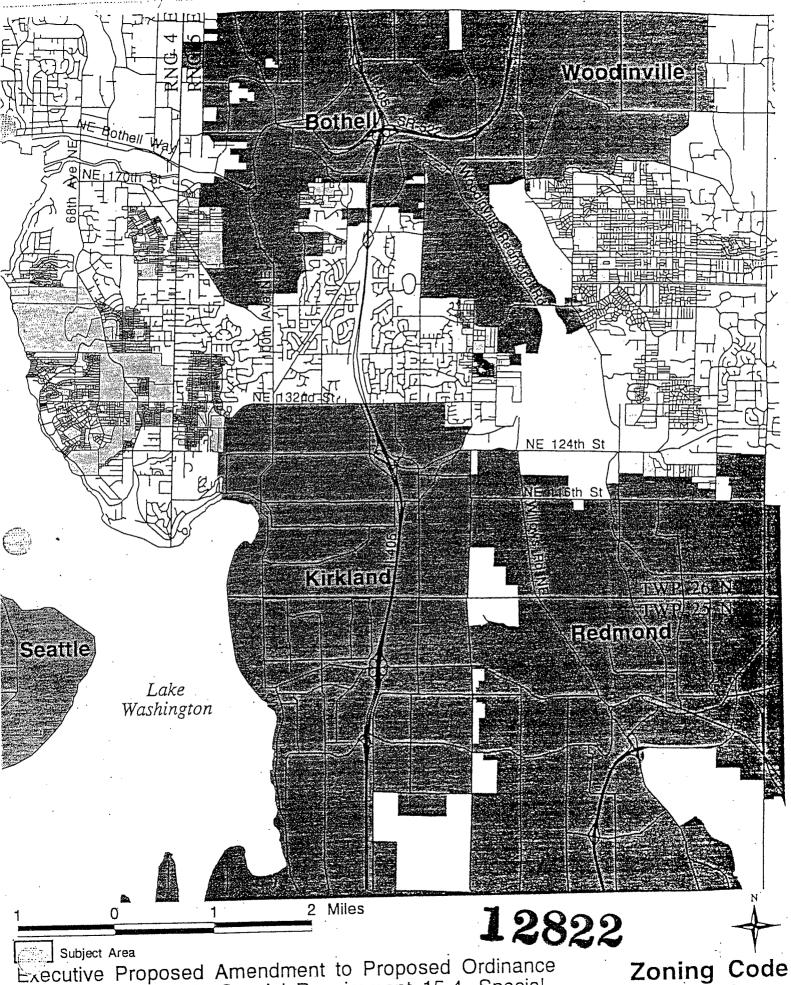
This appendix contains parcel-specific maps delineating the areas where the drainage conditions contained in Appendix B will apply. These areas are consistent with the p-suffix conditions set out in Appendix B.





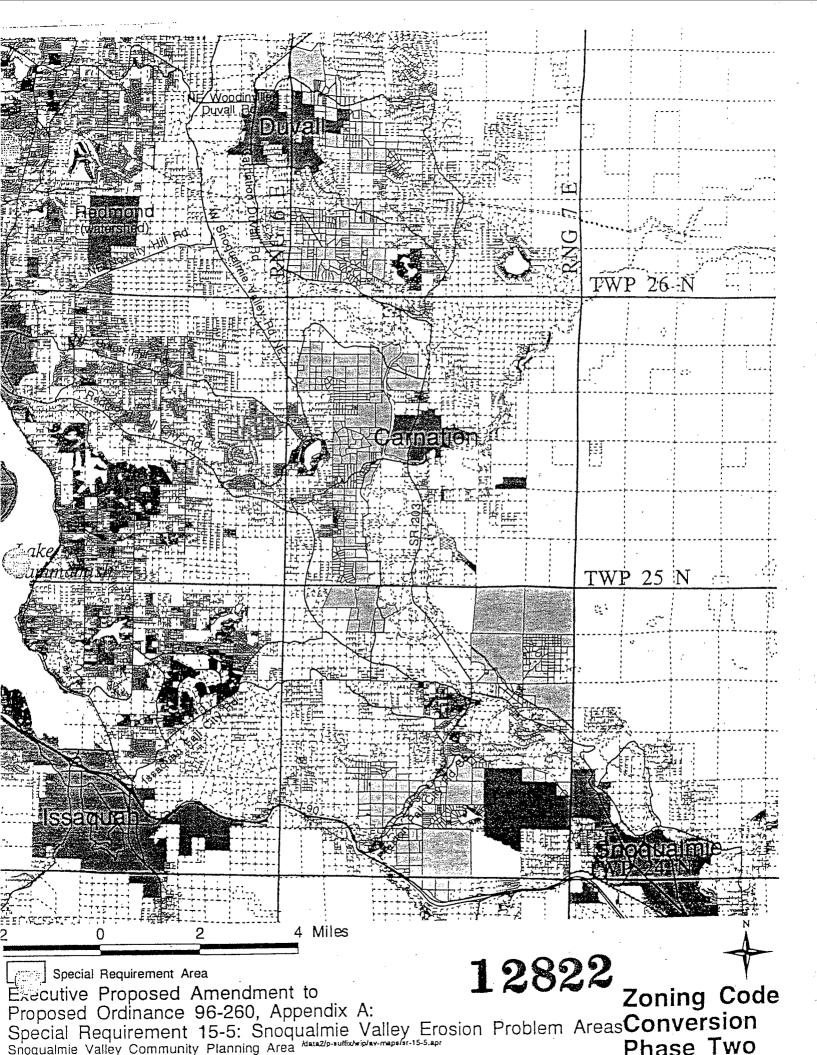


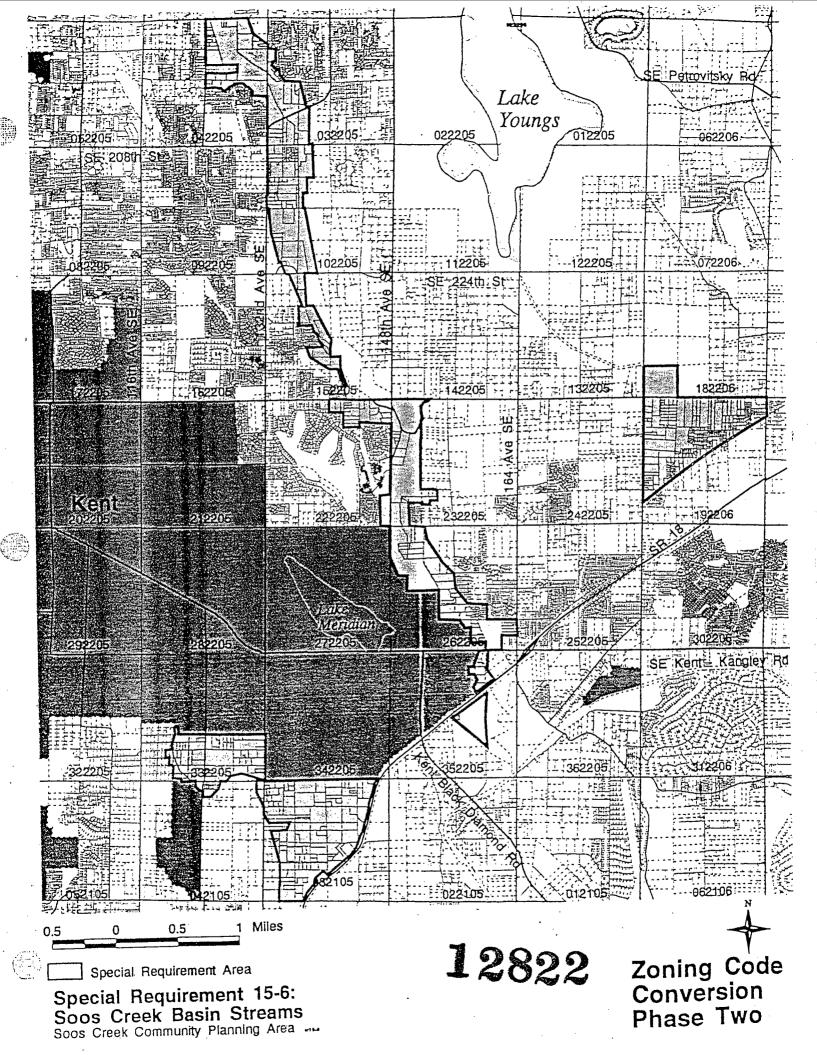
Special Requirement 15-3. Green River Gorge and Valley Walls
Enumclaw Community Planning Area

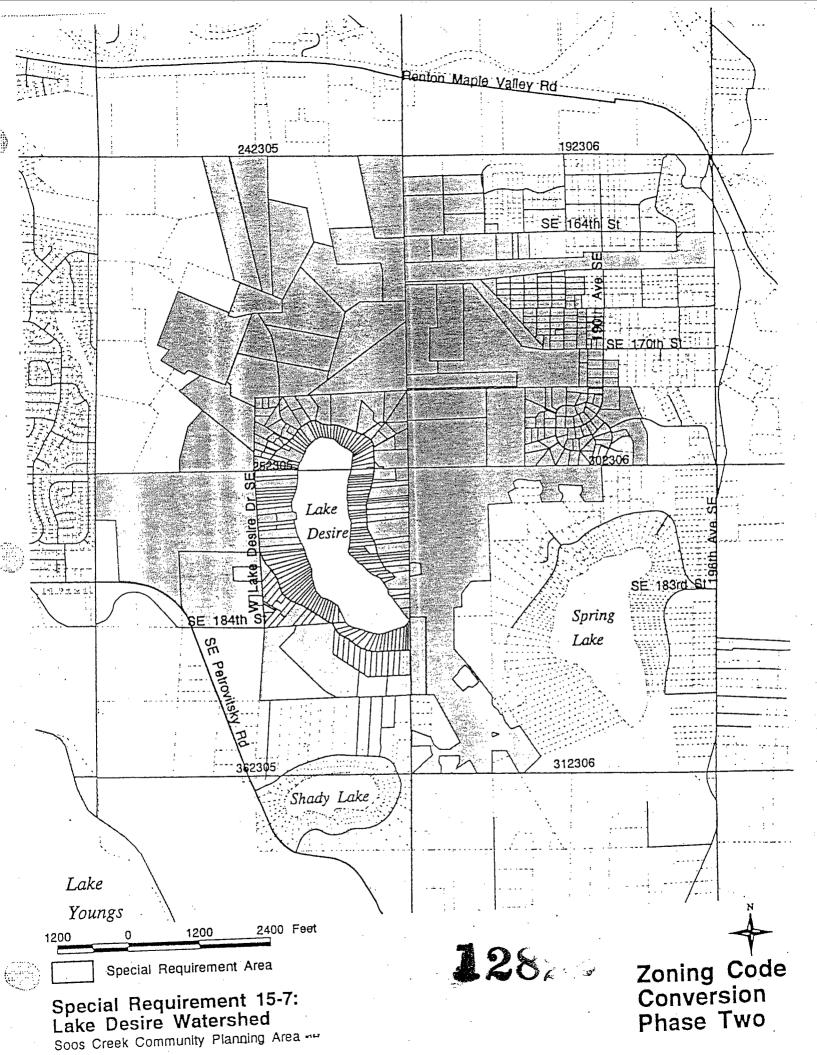


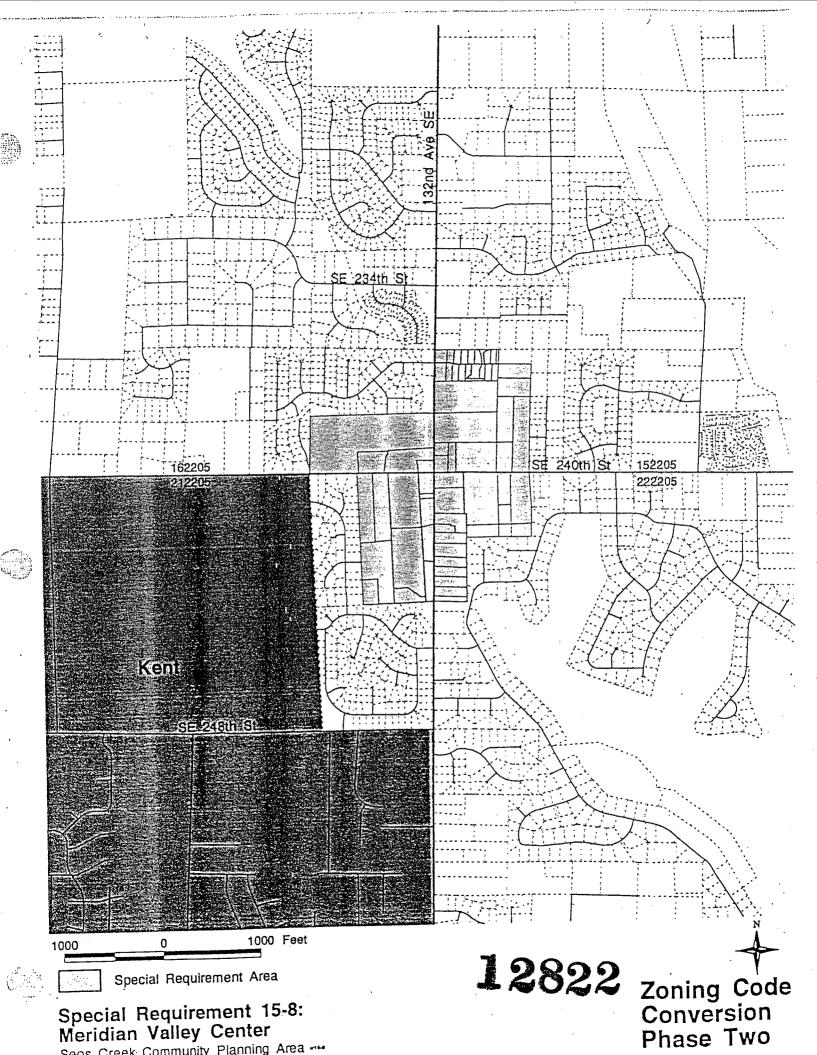
Executive Proposed Amendment to Proposed Ordinance 96-260, Appendix A: Special Requirement 15-4. Special Stormwater Retention/Detention Requirements

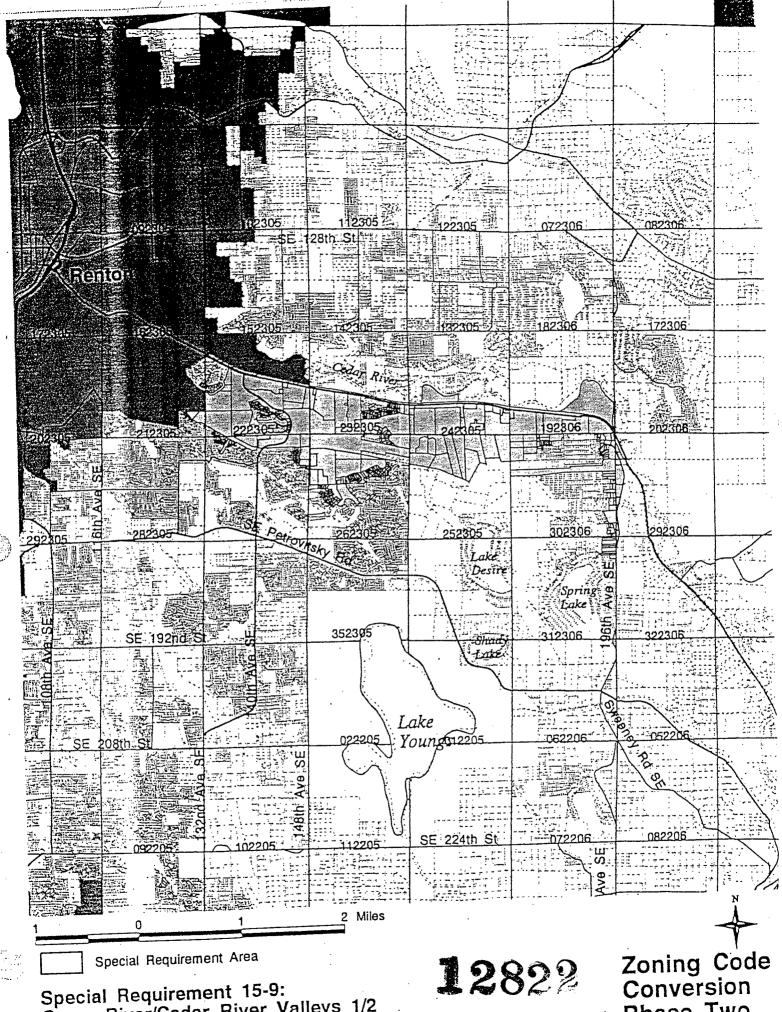
Zoning Code Conversion Phase Two





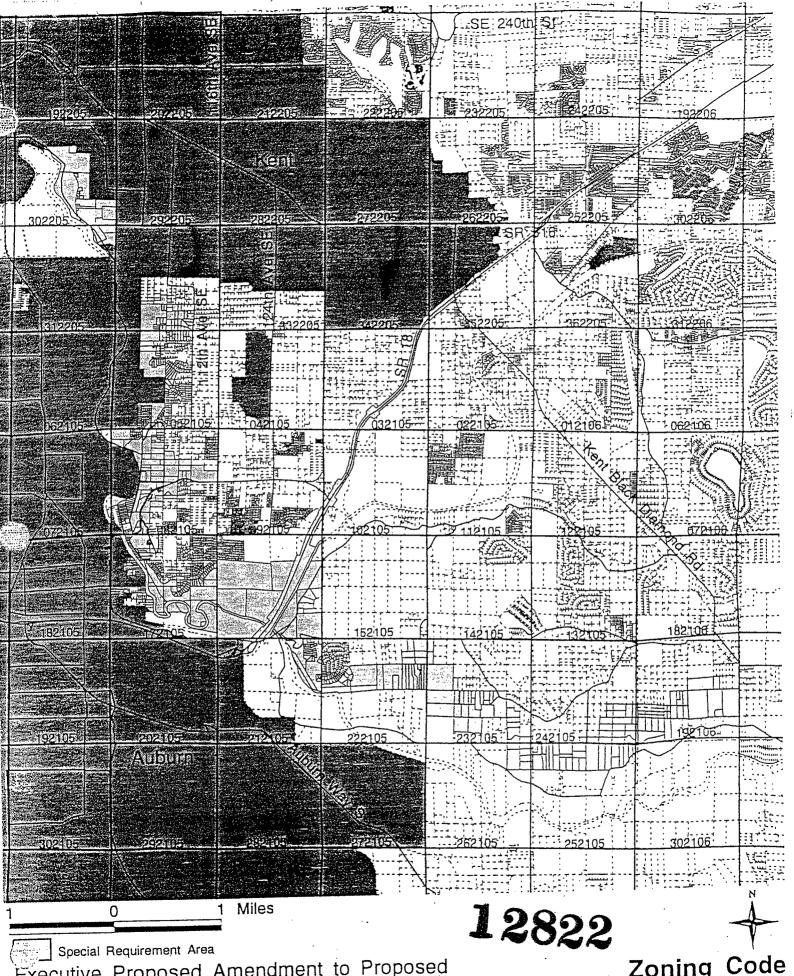






Green River/Cedar River Valleys 1/2 Soos Creek Community Planning Area

Conversion Phase Two



Executive Proposed Amendment to Proposed
Ordinance 96-260, Appendix A:
Special Requirement 15-9: Green River/Cedar River Valleys 2/2
Spot Creek Community Planning Area Maia/2/p-suffix/wip/av-maps/sr-15-4.apr

Zoning Code Conversion Phase Two

### Appendix B to Proposed Substitute Ordinance 96-260

#### AREA-SPECIFIC DRAINAGE CONDITIONS

This appendix lists the area-specific drainage conditions that are applied to those areas delineated in Appendix A. These drainage conditions are applied through Special Requirement 15 pursuant to 9.04.050. The language is consistent with repealed p-suffix conditions they replace except for the changes made to be consistent with more recent policy decisions. These differences are discussed in the ordinance summary for section 9.04.050.

1. PINE LAKE WATERSHED (East Sammamish Development Condition P-17: Amendment #58 and #59 to Ordinance 10847)

The following special requirement shall be applied to all properties within the Pine Lake Watershed (see Special Requirement 15.1 Map or the East Lake Sammamish Basin Development Conditions Map):

King County shall require all known, available and reasonable methods of prevention, control and treatment for phosphorus control for all new development in the Pine Lake basin.

Unless it can be demonstrated that a method or combination of methods is more effective to prevent, control and treat phosphorus, and is more feasible, the following shall be required in the Pine Lake basin, until the King County Surface Water Design Manual is revised to deal with phosphorus loading to small lakes, at which time the Design Manual requirements shall apply. If soils are suitable, King County shall require infiltration to and including 2/3 of the 2-year, 24-hour event, for all new development. If soils are not suitable for infiltration, then King County shall require a grass swale, wetpond or constructed wetland together with sand filtration for all new development.

2. EAST SAMMAMISH SURFACE WATER RETENTION/ DETENTION REQUIREMENTS (East Sammamish Development Condition P-19: Amendment #45 to Ordinance 10847)

The following special requirement shall be applied to all properties within the East Sammamish Community Planning Area (see Special Requirement 15.2 Map or the East Lake Sammamish Basin Development Conditions Map):

For development that requires a building permit, binding site plan, conditional use permit, unclassified use permit, zone reclassification or variance, formal or administrative subdivision, urban plan development, clearing permit, or grading permit, the following standards shall apply (see attached East Lake Sammamish Basin and East Sammamish Community Planning Area Development Conditions Maps):

- 1. For properties within the boundaries of Detention Standard 1, onsite retention/detention (R/D) facilities shall be designed to control the post-development 2 and 10-year flows to corresponding pre-development levels, with a safety factor of thirty percent added to the storage volume. Either of the following two design analysis techniques may be used according to design guidelines to be developed by the King County Surface Water Management Division.
  - a. A calibrated continuous flow hydrologic simulation model such as the Hydrologic Simulation Program Fortran (HSPF) model may be used.
  - b. The King County Surface Water Design Manual (King County, 1990) design method may be used if it is modified to use a seven-day rainfall distribution based on actual storms in the Puget Sound Lowlands instead of the Soil Conservation Service (SCS) Type 1a distribution. In addition, the time of concentration must be computed separately for pervious and impervious segments and then added to obtain the net time of concentration. Travel time and time of concentration computations for existing or pervious land segments shall be based on the sum of interflow, shallow concentrated flow, and open-channel flow.
- 2. To protect significant streams and wetlands in the East Lake Sammamish, Issaquah Creek, and Patterson Creek basins, onsite R/D facilities for properties within the boundaries of Detention Standard 2 shall be designed to reduce the post-development flow durations to their pre-developed levels for flows greater than fifty percent of the 2-year event and less than the 50-year event. A calibrated continuous flow simulation model, such as HSPF, shall be used for this design analysis. If a continuous model cannot be used, the method of the 1990 King County Surface Water Design Manual may be used with the 24-hour design event if the facilities are designed so that the post-development 2-year storm event is released at one-half of the pre-developed 2-year rate; the post development 10-year storm event is released at the pre-developed 2-year rate; and the post-development 100-year storm event is released at the pre-developed 10-year rate.
- 3. For properties within the Panhandle sub-basin, the Monohon sub-basin, and any other areas tributary to a steep valley along the west slope of the East Lake Sammamish Basin that does not (or did not in its predevelopment state) maintain a continuous surface water channel from the base of the west slope to the flat surface of the plateau, new development in these areas shall be held to the following standards:

- a. The drainage requirements listed below may be waived only for development proposals that meet any of the following criteria. These criteria substitute for the thresholds listed in section 1.1.1 of the Surface Water Design Manual:
  - (1) Proposals that construct less than 2,000 square feet of impervious surface area. The applicable impervious area should exclude the area of driveways for single family residential building permits and short plats.
  - (2) Proposals of any size that achieve 100 percent infiltration, evapotranspiration, and/or consumption of surface runoff from impervious and disturbed surfaces.
- b. Before discharging into a natural stream or waterbody, runoff shall receive water-quality treatment according to Core and Special Requirements in the King County Surface Water Design Manual, in order to meet the goals of the Lake Sammamish Water Quality Management Project which seek to maintain current phosphorus loading levels and to maintain groundwater recharge. Pretreatment of the Water-Quality Design Storm is required; it shall be achieved by infiltration or other methods of on-site retention, if feasible and if permitted by drainage regulations. If on-site retention is not possible, alternative requirements include biofiltration (Core Requirement #3) and wetponds for those projects meeting the threshold of Special Requirement #5 as specified in the Design Manual.
- c. The discharge of the pipeline shall be non-erosive, either into Lake Sammamish directly or to an open channel that is demonstrably stable from the point of discharge to the lakeshore. All outfalls shall comply with existing Shoreline and wetland regulations; they shall be designed and/or located to avoid disruption of shoreline spawning areas.
- d. Pipeline installation should be above ground wherever feasible and shall be above ground over all designated Erosion or Landslide Hazard Areas pursuant to K.C.C.
  21A.24. Pipeline routes down the west slope of the basin should avoid ravine valleys as much as possible.
- e. All runoff from newly constructed impervious surfaces must be retained on-site to the maximum extent feasible, consistent with underlying zoning and as allowed by the Surface Water Design Manual, as follows:
  - (1) Development proposals shall assess the feasibility of infiltration. Infiltration shall be required where feasible.

For subdivision and short subdivisions, a soils report as specified in section 4.5.2 of the Surface Water Design Manual and specifically addressing the feasibility of infiltration shall be included with preliminary plan submittal for subdivisions and short subdivisions or in the Technical Information Report submitted with initial application for binding site plans or other commercial permits. When, in the written opinion of the engineer preparing the report, the site is judged suitable for infiltration, infiltration shall be required.

For single family residential permits on existing lots, and with footprints greater than 2,000 square feet, a soils report as specified in Section 4.5.1, Design Criteria, shall be submitted with the permit application. Downspout infiltration shall be considered feasible if the requirements for minimum lot size and minimum pervious soil thickness specified in Section 4.5.1 can be met.

- (2) For soils where infiltration is not feasible, detention shall be provided to the level of the Stream Protection Standard.
- f. Runoff from all development proposals that involve the parcels identified in Attachment C of Ordinance No. 11111, except single-family building permits and those that achieve 100% on-site retention, must be conveyed down the western slope of the basin via continuous pipeline(s). Connection into one of these pipelines by subsequent development is required, if determined feasible by DDES. [The pipeline requirements have been removed from those parcels identified as "Pipeline Drainage Areas" south of Main Street, as a result of the findings of a study completed by the SWM Division examining the feasibility of cooperative construction of these pipelines. The parcels shall still comply with all other applicable drainage requirements for development in this area.]
- g. Development projects in the Ravine Protection Area that cannot achieve 100% on-site stormwater retention and are not required to construct a new pipeline or connect to an existing one should provide on-site stormwater detention to the level of the Stream-Protection Standard (BW-2) in the East Lake Sammamish Basin and Nonpoint Action Plan.
- h. Development projects that discharge to an existing conveyance system that is demonstrably stable from the point of discharge to Lake Sammamish need only provide retention/detention that consists of peak rate runoff control to prevent erosion problems and to prevent overtopping of the conveyance system during the 100-year, 24-hour design storm. A determination on this waiver from the stream protection detention requirements will be made based on the downstream analysis.

These p-suffix conditions shall be in effect until the effective date of incorporation of these standards into the King County Surface Water Design Manual.

Note: The portion of properties within the area covered by Special Requirement 15-2 that drains to Evans Creek shall apply Detention Standard 2 except where identified in the Bear Creek Basin Plan as only needed Detention Standard 1.

3. GREEN RIVER GORGE AND VALLEY WALLS (Enumclaw Development Condition P-3: Ordinance 9499)

The following special requirement shall be applied to all properties along the Green River Gorge and Valley Walls within the designated area (see Special Requirement 15.3 Map):

Lands overlooking the Green River Gorge and the Upper Green River Valley face a unique hazard due to the instability and height of the gorge and valley walls. Soil failures and slides along these walls, which are vertical or nearly vertical at many points, can result in major earth movements, as the loosened material seeks a stable "angle of repose," which probably will not be steeper than one-to-one (height to horizontal distance between slope top and toe). A one-to-one, or 100 percent slope in these circumstances may mean that extensive land on top of these walls may be unstable, since the walls are 200 to over 500 feet tall in many places. Therefore the review area for this hazard is set at 660 feet, which is the depth of a typical 10-acre parcel in the area.

All development within 660 feet of the top of the slopes of the Green River Valley and Green River Gorge shall meet the following requirements:

No discharge of water from any constructed drainage system shall be allowed onto valley or ravine side slopes, or into any swales which discharge onto these slopes. If storm water flow needs to be routed over these slopes, it shall be carried in a tightline system which can be installed with a minimum of slope disturbance and which is sufficiently durable to withstand slope movements, tree fall or other hazards. The tightline shall discharge to a non-erodable location at the toe of the slope.

4.	NORTHSHORE SPECIAL STORMWATER RETENTION/DETENTION REQUIREMENTS
	(Northshore Development Condition P-1: Ordinance)

The following special requirement shall be applied to all properties within the areas designated in the Northshore Community Planning Area (see Special Requirement 15.4 Map):

- 1. Stormwater release rate shall be at 70 percent of the predeveloped 2-year/24-hour release rate for design storm events up to and including the 100-year/24-hour design storm event.
- 2. A drainage control system, as approved by DDES, shall be installed prior to any unrelated land clearing, vegetation removal, site-grading, road construction or utility installation. Only those activities associated with pre-development exploration, such as surveying and performance of soil tests and limited clearing and grading associated with construction of drainage facilities, will be permitted prior to construction of the drainage control system.
- 3. In those situations where features of the drainage system or subsequent development make installation of the final drainage system impossible, a phased drainage control plan shall be developed. This phased plan shall provide the level of retention-detention set forth the applicable detention standard for the entire site at all times.
- 5. SNOQUALMIE VALLEY EROSION PROBLEM AREAS (Snoqualmie Valley Development Condition P-2: Ordinance 9118)

The following special requirement shall be applied to all properties within the areas designated in the Snoqualmie Valley Community Planning Area (see Special Requirement 15.5 Map):

The following conditions, in combination with low density zoning of the area, are intended to reduce or eliminate major surface water runoff impacts of development in tributary areas of the Snoqualmie Valley community planning area.

Due to the extreme sensitivity of property in the indicated drainage areas to water induced erosion, and the resulting potential for danger to the safety of persons and property in these areas, the following conditions shall apply to all development in the indicated areas unless the applicant can demonstrate that their project is so categorized in error, because either:

- 1. Site drainage does not in fact drain over steep slopes;
- 2. The downstream drainage pathway is not underlain with erodable granular sediment anywhere along its route; or
- 3. The site is underlain by permeable sediments that will infiltrate and dissipate runoff even after clearing and development.

If these exemptions are not met, drainage review for all development in this area shall be required whenever a proposed development requires a building permit, conditional use permit, unclassified use permit, variance, rezone, planned unit development, subdivision, short subdivision, right-of-way use permit, or grading permit. A list of exemptions, such as garden use of rights-of-way, will be developed to waive drainage review requirements for proposed uses that will not impact surface water runoff quantities or rates. Once a drainage plan is approved through the subdivision process, individual building permits on the same property will not require another drainage plan.

Unless otherwise exempted, the following conditions shall apply:

- 1. Stormwater detention shall contain up to the 100-year/24-hour storm. Release shall be at the pre-development 2-year rate up to the 10-year storm and match the pre-development 100-year rate up to the 100-year storm. The pre- and post-development performances for a storm with one-half the two-year rainfall must also be matched. These rate controls may be modified if discharge is via tightline to below the area of severe erosion potential.
- 2. Developed conditions will assume 100% removal of forest canopy, unless expressly prohibited by recorded easement or restriction; plus existing, proposed, and anticipated impervious surfaces.
- 3. Point discharge from detention systems will be only into drainage channels that convey surface water in the pre-development state. Dispersed discharge will be evaluated as a potential alternative.
- 4. Drainage entering the site from developed upstream areas must be detained and released under the same criteria as runoff generated onsite.
- 5. Installation of the critical drainage control features, as scheduled and delineated in the approved plan, shall be installed prior to any land clearing, vegetation removal, site grading, road construction or utility installation. Only those activities associated with predevelopment exploration, such as surveying and performance of soil tests and limited clearing and grading associated with construction of drainage facilities, will be permitted prior to completion of the drainage control system.
- 6. In those situations where features of the drainage system or subsequent development make installation of the final drainage system impossible, a phased plan will be developed which provides the required level of retention/detention to the entire site at all times.

6. SOOS CREEK BASIN STREAMS (Soos Creek Development Condition P-1.3: Ordinance 10197 as amended by Ordinance 10336)

The following special requirement shall be applied to all properties within the areas designated in the Soos Creek Community Planning Area (see Special Requirement 15.6 Map):

Streams and wetlands within the planning area help to protect water quality, control surface water runoff, and provide habitat to a substantial fisheries resource and extensive wildlife populations and provide agricultural and fish hatchery water supply and aesthetic enjoyment for people. The Sensitive Areas Ordinance provides protection to streams and wetlands by requiring buffers and by limiting the types of allowable alterations that can occur within these sensitive areas and their buffers. Unfortunately, the impacts of development and the cumulative effects of human activity in the face of land use changes in the basin can not be fully mitigated by the SAO. Additional efforts are needed to fully protect the streams and wetlands of the planning area.

In the Big Soos Sub-basin, onsite retention/detention (R/D) facilities shall be designed to reduce post-development levels for all flows greater than 50 percent of the 2-year event and less than the 50-year event.

A calibrated continuous flow simulation model, such as HSPF, is the preferred model to be used in designing these onsite R/D facilities. If a continuous model cannot be used, the 1990 King County Surface Water Design Manual method may be used with the 24-hour design event if the facilities are designed so that the post-development 2-year storm event is released at one-half of the pre-developed 2-year rate; the post-development 10-year storm event is released at the pre-developed 2-year rate; and the post-development 100-year storm event is released at the pre-developed 10-year rate.

These standards shall apply according to the procedures of the 1990 King County Surface Water Design Manual except that the threshold for drainage review shall be lowered to include proposals that will construct 300 square feet or more of new impervious surface where runoff is discharged onto soils other than the following Soil Conservation Service series soils: Arents ("An" only), Everett, Indianola, Klaus, Neilton, Pilchuck, Puyallup, or Ragnar. A soils report may be required to verify the soils series or to classify previous unmapped series.

NOTE: For onsite retention/detention requirements for the Soosette Sub-basin, please see the adopted Soos Creek Basin Plan.

7. LAKE DESIRE WATERSHED (Soos Creek Development Condition P16: Ordinance 10197 as amended by Ordinance 10336)

## 12822

The following special requirement shall be applied to all properties within the Lake Desire Watershed in the Soos Creek Community Planning Area (see Special Requirement 15.7 Map):

Properties in the Lake Desire Drainage Basin shall meet all water quality and quantity requirements as outlined by the King County Surface Water Management Division. These requirements must be in compliance with the State Growth Management Act. Special attention should be given to increased retention/detention requirements and clearing restrictions on undeveloped parcels and storm water treatments which will ensure that the quality of discharged waters shall be equal to or better then the current Lake Desire water quality.

Note: The Lake Desire Management Plan, April 1995, details best management practices intended to meet this requirement under Recommendation LD-4.

8. MERIDIAN VALLEY CENTER (Soos Creek Development Condition P21: Ordinance 10197 as amended by Ordinance 10336)

The following special requirement shall be applied to all properties within the Meridian Valley Neighborhood Business Center in the Soos Creek Community Planning Area (see Special Requirement 15.8 Map):

This condition applies to the Meridian Valley Neighborhood Center, which is defined as those areas contributing flow to Soos Creek tributary 0091A, north of SE 256th Street.

Prior to any development or project approval in the Meridian Valley Neighborhood Center requiring drainage review per King County Surface Water Design Manual, a drainage plan meeting enhanced detention requirements established by SWM shall be approved by DDES. Enhanced detention facilities shall be sized to at least maintain peak flows at or below existing peak flows for the 2, 10 and 100 year storm events, based on the King County SWM 7 day event. The enhanced requirements will minimize site-specific, or cumulative flooding and drainage problems for residences, businesses, and roads in the Meridian Valley Neighborhood Center. The requirements will be reevaluated when revisions to the 1990 Surface Water Design Manual are adopted. Prior to development of any commercial or residential projects in this center, King County Surface Water Management Division must determine that the SE 255th Street culvert improvement is installed as SWM intended. The County will construct projects in the following area: adjacent to the intersection of SE 240th Street and 132nd Avenue SE; along 132nd Avenue SE, near SE 246th Street; at SE 255th Street, west of 144th Avenue SE; and at SE 256th Street east of 144th Avenue SE. SWM shall design projects at these locations to reduce flooding in these areas for conditions up to the 100 year/24 hour event. These projects will be scheduled for completion in 1995.

Note: Original conditions amended by ordinance #10336.

9. GREEN RIVER/CEDAR RIVER VALLEYS (Soos Creek Development Condition P23: Ordinance 10197 as amended by Ordinance 10336)

The following special requirement shall be applied to all properties along the Green River and Cedar River Valley Walls within the designated area in the Soos Creek Community Planning Area (see Special Requirement 15.9 Map):

Lands overlooking the Green River Gorge Upper Green River Valley and Cedar River Valley, face a unique hazard due to the instability and height of the gorge and valley walls. Soil failures and slides along these walls, which are vertical or nearly vertical at many points, can result in major earth movements, as the loosened material seeks a stable "angle of repose", which probably will not be steeper than one-to-one (height to horizontal distance between slope top and toe). A one-to-one, or 100 percent, slope in these circumstances may mean that extensive land on top of these walls may be unstable, since the walls are 200 to over 500 feet tall in many places. Therefore the review area for this hazard is set at 660 feet, which is the depth of a typical 10-acre parcel in the area.

All development within 660 feet of the top of the slopes of the Green River Valley and Green River Gorge, the ridge line south and west of the Lea Hill Plateau including Olson Canyon and the Cedar River Valley walls including the ridge lines north and east of Lake Heights shall meet the following requirements. See map for the location of these areas.

No discharge of water from any constructed drainage system shall be allowed onto valley or ravine side slopes, or into any swales which discharge onto these slopes. Discharge shall be carried in a tightline system which can be installed with a minimum of slope disturbance and which is sufficiently durable to withstand slope movements, tree fall or other hazards. The tightline shall discharge to a non-erodable location at the tow of the slope.

#### 8. DEVELOPMENT CONDITION 23. EAST LAKE SAMMAMISH BASIN

The water quality treatment design standards of the King County Surface Water Design Manual are currently being updated. For purposes of applying these standards in the East Lake Sammamish drainage basin, developments should be required to meet the proposed lake protection water quality treatment requirements for phosphorus removal (50% removal). The exception to this is for developments that are within the Beaver Lake watershed where a water quality treatment goal for phosphorous removal of 80% applies (Ordinance 11522 and Public Rule *Beaver Lake Management Plan*, June 8, 1995).

The following p-suffix condition shall be applied to all properties within the East Lake Sammamish Watershed (see attached East Lake Sammamish Basin Development Conditions Map):

Prior to adoption of the *Design Manual*, new developments in the East Lake Sammamish basin that require drainage facilities under the current *Design Manual* should achieve phosphorus removal using one of the following options:

1. A wetpond or combined detention/wetpond with a permanent pool volume equal to 4.5 times the volume of runoff from the mean annual storm (VB/VR = 4.5).

The VB/VR ratio is the volume of the wetpond basin divided by the volume of the runoff from the mean annual storm. The mean annual storm is equal to 0.46 inches at SeaTac and 0.56 inches at Landsburg. Mean annual storm precipitation can be adjusted for intermediate locations using the 2-yr, 24-hour isopluvials as a guide. Runoff should be estimated using a runoff coefficient of 0.9 for impervious areas and 0.25 for pervious areas. Forested areas need not be included in the calculation for pond sizing (zero runoff is assumed). The SBUH model should not be used for estimating mean storm runoff values.

Pond volumes can be reduced for forest retention above 25 percent, according to the following schedule:

% forest	VB/VR ratio
25	4.25
30	4.0
40	3.5
50	3.25
60	3.0

- 2. Forest retention of 60 percent or greater in addition to one of the following facilities: biofiltration swale, filter strip, wetpond or combined detention/wetpond with a VB/VR of 3.0.
- 3. In addition to the above options, the use of two additional options involving sand filtration and infiltration are possible through a variance submitted to the SWM Division:
  - a. A biofiltration swale, filter strip, or wetpond with a VB/VR of 3.0 followed by a sand filter; or a single large sand filter.
  - b. Soil infiltration, if soils are suitable. Soils that are suitable for water quality treatment have relatively slow infiltration rates (less than or equal to 2.4 inches/hour), as well as

specific characteristics of organic content, cation exchange capacity, or grain size distribution.

Finally, if it can be demonstrated by the applicant that an alternative facility or combination of facilities is equally effective for phosphorus removal, then a variance request from this requirement can be submitted to the SWM Division for approval. Until the revisions are made to the Design Manual, guidance for the facility designs are available from the SWM Division.