Chapter 9.04 SURFACE WATER RUNOFF POLICY

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- **9.04.005 Scope.** Compliance with the standards in this chapter and the Surface Water Design Manual does not necessarily mitigate all probable and significant environmental impacts to aquatic biota. Fishery resources and other living components of aquatic systems are affected by a complex set of factors. While employing a specific flow control standard may prevent stream channel erosion or instability, other factors affecting fish and other biotic resources (such as increases in stream flow velocities) are not directly addressed by the Surface Water Design Manual. Thus, compliance with this manual should not be construed as mitigating all probable and significant stormwater impacts, and additional mitigation may be required to protect aquatic biota in streams and wetlands. (Ord. 13191 § 22, 1998).
- **9.04.010 Purposes.** The council finds this chapter is necessary in order to promote the public health, safety and welfare by providing for the comprehensive management of surface and storm waters and erosion control, especially that which preserves and utilizes the many values of the county's natural drainage system including open space, fish and wildlife habitat, recreation, education and urban separation. The council also finds that King County shall conduct programs to reduce flooding, erosion, and sedimentation; prevent and mitigate habitat loss; enhance groundwater recharge; and prevent water quality degradation through the implementation of comprehensive and thorough permit review, construction inspection, enforcement, and maintenance in order to promote the effectiveness of the requirements contained in this chapter. (Ord. 11615 § 2, 1994: Ord. 9163 § 1, 1989).
- **9.04.020 Definitions**. The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.
- A. "Adjustment" means a department-approved variation in the application of the requirements of K.C.C. 9.04.050 and the Surface Water Design Manual to a particular project in accordance with K.C.C. 9.04.050C. "Adjustment" replaces "variance," which was used in prior editions of the Surface Water Design Manual.
- B. "Applicant" means a property owner or a public agency or public or private utility that owns a right-of-way or other easement or has been adjudicated the right to such an easement under RCW 8.12.090, or any person or entity designated or named in writing by the property or easement owner to be the applicant, in an application for a development proposal, permit or approval.
- C. "Basin" means a geographic area that contains and drains to a stream or river named and noted on common maps, such as the Cedar river, Sammamish river, Green river, Snoqualmie river, Skykomish river or White river, [or a geographic area that drains to]* a nonflowing water body named and noted on common maps, such as Lake Washington or Puget Sound.
- D. "Basin plan" means a plan and all implementing regulations and procedures including, but not limited to, capital projects, public education activities and land use management adopted by ordinance for managing surface and storm water within the basin.
- E. "Closed depression" means an area greater than five thousand square feet at overflow elevation that is low-lying and that has no or such a limited surface water outlet that the area acts as a stormwater retention facility.
- F. "Construct or modify" means to install a new drainage pipe or ditch or make improvements to an existing drainage pipe or ditch, for purposes other than maintenance, that either serves to concentrate previously unconcentrated surface and storm water runoff or serves to increase, decrease or redirect the conveyance of surface and storm water runoff. "Construct or modify" does not include installation or maintenance of a driveway culvert installed as part of a single-family residential building permit.
- G."Conveyance system" means the drainage facilities and features, both natural and constructed, that collect, contain and provide for the flow of surface and storm water from the highest points on the land down to a receiving water. The natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes and wetlands. The constructed elements of the conveyance system include gutters, ditches, pipes, channels and most flow control and water quality treatment facilities.

- H. "Department" means the department of natural resources and parks or its successor.
- I. "Development" means any activity that requires a permit or approval, including, but not limited to, a building permit, grading permit, shoreline substantial development permit, conditional use permit, special use permit, zoning variance or reclassification, subdivision, short subdivision, urban planned development, binding site plan, site development permit or right-of-way use permit. "Development" does not include a Class I, II, III or IV-S forest practice conducted in accordance with chapter 76.09 RCW and Title 222 WAC or a class IV-G nonconversion forest practice, as defined in K.C.C. chapter 21A.06, conducted in accordance with chapter 76.09 RCW and Title 222 WAC and a county-approved forest management plan.
- J. "Director" means the director of the department of natural resources and parks, or any duly authorized representative of the director.
- K. "Drainage" means the collection, conveyance, containment or discharge, or any combination thereof, of surface and storm water runoff.
- L. "Drainage facility" means a constructed or engineered feature that collects, conveys, stores or treats surface and storm water runoff. "Drainage facility" includes, but is not limited to, a constructed or engineered stream, pipeline, channel, ditch, gutter, lake, wetland, closed depression, flow control or water quality treatmentfacility, erosion and sediment control facility and other structure and appurtenance that provides for drainage.
- M. "Drainage review" means an evaluation by King County staff of a proposed project's compliance with the drainage requirements in the Surface Water Design Manual. The types of drainage review include: Small project drainage review, targeted drainage review, full drainage review and large project drainage review.
- N. "Erosion and sediment control" means any temporary or permanent measures taken to reduce erosion, control siltation and sedimentation and ensure that sediment-laden water does not leave the site or enter into wetlands or aquatic areas.
- O. "Financial guarantee" means a form of financial security posted to do one or more of the following: ensure timely and proper completion of improvements; ensure compliance with the King County Code; or provide secured warranty of materials, workmanship of improvements and design. "Financial guarantees" include assignments of funds, cash deposit, surety bonds or other forms of financial security acceptable to the director of the department of development and environmental services. "Performance guarantee," "maintenance guarantee" and "defect guarantee" are considered sub categories of financial guarantee.
- P. "Flood hazard reduction plan" means a plan and all implementing programs, regulations and procedures including, but not limited to, capital projects, public education activities and enforcement programs for reduction of flood hazards and prepared in accordance with RCW 86.12.200.
- Q "Flow control best management practice" means a method or design for dispersing, infiltrating or otherwise reducing or preventing development-related increases in surface and storm water runoff at, or near, the sources of those increases. "Flow control best management practice" includes the methods and designs specified in the Surface Water Design Manual.
- R. "Flow control facility" means a drainage facility designed to mitigate the impacts of increased surface and storm water runoff generated by site development in accordance with the drainage requirements in this chapter. A "flow control facility" is designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration or infiltration into the ground or to hold runoff for a short period of time and then release it to the conveyance system.
- S. "Full drainage review" means the evaluation required by K.C.C. 9.04.030 for any proposed project, unless the project is subject to small project drainage review, targeted drainage review or large project drainage review, that:
 - 1. Would result in two thousand square feet or more of new impervious surface;
 - 2. Would result in thirty-five thousand square feet or more of new pervious surface: or
- 3. Is a redevelopment project on one or more parcels where the total of new and replaced impervious surface is five thousand square feet or more and when the valuation of proposed improvements exceeds fifty percent of the assessed value of the existing site improvements, including interior improvements and excluding required mitigation and frontage improvements.

- T. "High-use site" means a commercial, industrial or road intersection site that generates a higher than average number of vehicle turnovers or has other characteristics that generate the potential for chronic oil accumulation. "High use site" includes:
 - 1. A commercial or industrial site subject to:
- a. an expected daily traffic count greater than one hundred vehicles per one thousand square feet of gross building area;
- b. petroleum storage or transfer in excess of one thousand gallons per year, not including routine fuel oil storage or transfer; or
- c. use, storage or maintenance of a fleet of twenty-five or more diesel vehicles each weighing over ten tons; or
- 2. A road intersection with average daily traffic counts of twenty-five thousand vehicles or more on the main roadway and fifteen thousand or more vehicles on any intersecting roadway, excluding pedestrian or bicycle use improvement projects.
- U. "Hydraulically connected" means connected through surface flow or water features such as wetlands or lakes.
- V. "Impervious surface" means a hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions before development or that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roofs, walkways, patios, driveways, parking lots, storage areas, areas that are paved, graveled or made of packed or oiled earthen materials or other surfaces that similarly impede the natural infiltration of surface and storm water. An open uncovered flow control or water quality treatment facility is not an "impervious surface".
- W. "Improvement" means a permanent, human-made, physical change to land or real property including, but not limited to, buildings, streets, driveways, sidewalks, crosswalks, parking lots, water mains, sanitary and storm sewers, drainage facilities and landscaping.
- X. "Land disturbing activity" means an activity that results in a change in the existing soil cover, both vegetative and nonvegetative, or to the existing soil topography. "Land disturbing activity" includes, but is not limited to, demolition, construction, clearing, grading, filling, excavation and compaction. "Land disturbing activity" does not include tilling conducted as part of agricultural practices, landscape maintenance or gardening.
- Y. "Lake management plan" means a plan describing the lake management recommendations and requirements adopted by public rule for managing water quality within individual lake basins.
- Z. "Large project drainage review" means the evaluation required by K.C.C. 9.04.030 for any proposed project that:
- 1. Has an urban plan development land use designation in the King County Comprehensive Plan land use map;
- 2. Would, at full buildout of the project site, result in fifty acres or more of new impervious surface within a drainage subbasin or a number of subbasins hydraulically connected across subbasin boundaries; or
- 3. Has a project site of fifty acres or more within a critical aquifer recharge area, as defined in K.C.C. Title 21A.
- AA. "Licensed civil engineer" means a person registered with the State of Washington as a professional engineer in civil engineering.
- BB. "Maintenance" means those usual activities taken to prevent a decline, lapse or cessation in the use of currently serviceable structures, facilities, equipment or systems, if there is no expansion of the structure, facilities, equipment or system and there are no significant hydrologic impacts. "Maintenance" includes the repair or replacement of nonfunctional facilities or the replacement of existing structures with different types of structures, if the repair or replacement is required by one or more environmental permits or to meet current engineering standards and the functioning characteristics of the original facility or structure are not changed.

- CC. "Master drainage plan" means a comprehensive drainage control plan intended to prevent significant adverse impacts to the natural and constructed drainage system, both on- and off-site.
- DD. "Native vegetated surface" means a surface in which the soil conditions, ground cover and species of vegetation are like those of the original native condition for the site, as more specifically set forth in the Surface Water Design Manual.
- EE. "Natural discharge location" means the location where runoff leaves the project site under existing site conditions as defined in the Surface Water Design Manual.
- FF. "New impervious surface" means the creation of a hard or compacted surface such as roofs, pavement, gravel or dirt or the addition of a more compacted surface such as the paving of existing dirt or gravel.
- GG. "New pervious surface" means the conversion of a native vegetated surface or other native surface to a nonnative pervious surface, including, but not limited to, pasture land, grassland, cultivated land, lawn, landscaping or bare soil or any alteration of existing nonnative pervious surface that results in increased surface and storm water runoff as defined in the Surface Water Design Manual.
- HH. "Pollution-generating impervious surface" means an impervious surface considered to be a significant source of pollutants in surface and storm water runoff. "Pollution-generating impervious surface includes those surfaces subject to vehicular use or storage of erodible or leachable materials, wastes or chemicals and that receive direct rainfall or the run-on or blow-in of rainfall. A covered parking area would be included if runoff from uphill could regularly run through it or if rainfall could regularly blow in and wet the pavement surface. Metal roofs are also considered pollution-generating impervious surface unless they are treated to prevent leaching.
- II. "Pollution-generating pervious surface" means a nonimpervious surface considered to be a significant source of pollutants in surface and storm water runoff. "Pollution-generating pervious surfaces" include surfaces subject to the use of pesticides and fertilizers, to the use or storage of erodible or leachable materials, wastes or chemicals or to the loss of soil. "Pollution-generating pervious surface" includes, but is not limited to, the lawn and landscaped areas of a residential or commercial site, golf course, park sports field and county-standard grassed modular grid pavement.
- JJ. "Project" means any proposed action to alter or develop a site that may also require drainage review.
- KK. "Project site" means the portion of a site and any offsite areas subject to proposed project activities, alterations and improvements including those required by this chapter.
- LL. "Redevelopment project" means a project that proposes to add, replace or modify impervious surface for purposes other than a residential subdivision or maintenance on a site that:
- 1. Is already substantially developed in a manner that is consistent with its current zoning or with a legal nonconforming use; or
 - 2. Has an existing impervious surface coverage of thirty-five percent or more.
- MM. "Replaced impervious surface" means an existing impervious surface proposed to be removed and reestablished as impervious surface, excluding impervious surface removed for the sole purpose of installing utilities or performing maintenance. For purposes of this definition, "removed" includes the removal of buildings down to bare soil or the removal of Portland cement concrete slabs or pavement or asphaltic concrete pavement together with any asphalt-treated base.
- NN. "Runoff" means that portion of water originating from rainfall and other precipitation that flows over the surface or just below the surface from where it fell and is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands and shallow groundwater as well as on ground surfaces. For the purpose of this definition, groundwater means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.
- OO. "Salmon conservation plan" means a plan and all implementing regulations and procedures including, but not limited to, land use management adopted by ordinance, capital projects, public education activities and enforcement programs for conservation and recovery of salmon within a water resource inventory area designated by the state under WAC 173-500-040.

- PP. "Shared facility" means a drainage facility designed to meet one or more of the requirements of K.C.C. 9.04.050 for two or more separate projects contained within a basin. Shared facilities usually include shared financial commitments for those drainage facilities.
- QQ. "Site" means a single parcel, or two or more contiguous parcels that are under common ownership or documented legal control, used as a single parcel for a proposed project for purposes of applying for authority from King County to carry out a proposed project. For projects located primarily within dedicated rights-of-way, "site" includes the entire width of right-of-way subject to improvements proposed by the project.
- RR. "Small project drainage review" means the drainage review for a proposed single-family residential project or agricultural project that:
 - 1. Would result in:
- a. ten thousand square feet or less of total impervious surface added on or after January 8, 2001; or
- b. four percent or less of total impervious surface on a site as specified in the Surface Water Design Manual; and
- 2. Meets the small project drainage requirements specified in the Surface Water Design Manual, including flow control best management practices, erosion and sediment control measures and drainage plan submittal requirement; and
 - 3. Limits new pervious surface as specified in the Surface Water Design Manual.
- SS. "Stormwater compliance plan" means a plan or study and all regulations and procedures that have been adopted by the county to implement the plan or study, including, but not limited to, capital projects, public education activities and enforcement programs for managing stormwater quantity and quality discharged from the county's municipal separate storm sewer system in compliance with the National Pollutant Discharge Elimination System permit program under the Clean Water Act.
 - TT. "Subbasin" means a geographic area that:
 - 1. Drains to a stream or water body named and noted on common maps; and
 - 2. Is contained within the basin of the stream or water body.
- UU. "Surface and storm water" means water originating from rainfall and other precipitation that is found on ground surfaces and in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands as well as and shallow ground water.
- VV. "Surface Water Design Manual" means the manual, and supporting documentation referenced or incorporated in the manual, describing surface and storm water design and analysis requirements, procedures and guidance that has been formally adopted by rule under the procedures in K.C.C. chapter 2.98. The Surface Water Design Manual is available from the department of development and environmental services or the department of natural resources and parks, water and land resources division or their successor agencies.
- WW. "Targeted drainage review" means an abbreviated evaluation required by K.C.C. 9.04.030 for certain types of proposed projects that are not subject to full or large project drainage review. Targeted drainage review may be required for some projects in small project drainage review.
- XX. "Water quality treatment facility" means a drainage facility designed to reduce pollutants once they are already contained in surface and storm water runoff. A water quality treatment facility is the structural component of best management practices. When used singly or in combination, a water quality treatment facility reduces the potential for contamination of both surface and ground waters. (Ord. 15052 § 1, 2004: Ord. 14199 § 128, 2001: Ord. 13191 § 1, 1998: Ord. 12196 § 1, 1996: Ord. 12020 § 37, 1995: Ord. 11700 § 1, 1995: Ord. 11615 § 2, 1994: Ord. 9163 § 2, 1989).

9.04.030 Drainage review - when required - type.

- A. Drainage review is required when any proposed project is subject to a King County development permit or approval and:
 - 1. Would result in two thousand square feet or more of new impervious surface;
 - 2. Would involve seven thousand square feet or more of land disturbing activity;
- 3. Would construct or modify a drainage pipe or ditch that is twelve inches or more in size or depth or receives surface and storm water runoff from a drainage pipe or ditch that is twelve inches or more in size or depth;
 - 4. Contains or is adjacent to a flood hazard area as defined in K.C.C. chapter 21A.24;
 - 5. Is located within a critical drainage area;
- 6. Is a redevelopment project proposing one hundred thousand dollars or more of improvements to an existing high-use site; or
- 7. Is a redevelopment project on a site in which the total of new plus replaced impervious surface is five thousand square feet or more and whose valuation of proposed improvements, including interior improvements and excluding required mitigation and frontage improvements, exceeds fifty percent of the assessed value of the existing site improvements.
- B. The drainage review for any proposed project shall be scaled to the scope of the project's size, type of development and potential for impacts to the regional surface water system to facilitate preparation and review of project applications. If drainage review for a proposed project is required under subsection A. of this section, the department of development and environmental services shall determine which of the following drainage reviews apply as specified in the Surface Water Design Manual:
 - 1. Small project drainage review;
 - 2. Targeted drainage review;
 - 3. Full drainage review; or
- 4. Large project drainage review. (Ord. 15052 § 2, 2004: Ord. 13191 § 2, 1998: Ord. 11615 § 4, 1994: Ord. 11016 § 13, 1993: Ord. 9163 § 3, 1989).

9.04.050 Drainage review - requirements.

- A. A proposed project required to have drainage review 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. Projects subject only to small project drainage review that meet the small project drainage requirements specified in the Surface Water Design Manual, including flow control best management practices, erosion and sediment control measures and drainage plan submittal requirements are deemed to comply with the following core requirements:
- 1. Core requirement 1: Discharge at the natural location. All surface and storm water runoff from a project shall be discharged at the natural location so as not to be diverted onto, or away from, downstream properties. The manner in which runoff is discharged from the project site shall not create a significant adverse impact to downhill properties or drainage systems as specified in the discharge requirements of the Surface Water Design Manual;
- 2. Core requirement 2: Offsite analysis. The initial application submittal for proposed projects shall include an offsite analysis report that assesses potential offsite drainage impacts associated with development of the proposed site and proposes appropriate mitigations to those impacts. This initial submittal shall include, at minimum, a Level One downstream analysis as described in the Surface Water Design Manual. If impacts are identified, the proposed projects shall meet any applicable problem-specific requirements as specified in the Surface Water Design Manual;

- 3. Core Requirement 3: Flow control. Proposed projects that would result in two thousand square feet or more of new impervious surface or thirty-five thousand square feet or more of new pervious surface, or that are redevelopment projects that would reqult in a total of five thousand square feet or more of new and replaced impervious surface, shall provide flow control facilities or flow control BMPs, or both, to control surface and storm water runoff generated by new impervious surface, new pervious surface, replaced impervious surface and any existing impervious surface added on or after January 8, 2001, as specified in the Surface Water Design Manual. Flow control facilities shall meet the area-specific flow control facility requirements and the flow control facility implementation requirements applicable to the project site as specified in the Surface Water Design Manual. Flow control BMPs shall also be applied as specified in the Surface Water Design Manual. Projects subject to area-specific flow control facility requirements shall meet one of the flow control facility performance criteria listed in a. through c. of this subsection A.3., as directed by the Surface Water Design Manual:
- a. Level One shall match the predeveloped site's peak discharge rates for the twoyear and ten-year return periods;
- b. Level Two shall meet Level One criteria and also match the predeveloped site's discharge durations for the predeveloped peak discharge rates between the fifty percent of the two-year peak flow through the fifty-year peak flow; or
- c. Level Three shall meet Level Two criteria and also match the predeveloped site's peak discharge rate for the one hundred-year return period;
- 4. Core requirement 4: Conveyance system. All engineered conveyance system elements for proposed projects shall be analyzed, designed and constructed to provide the minimum level of protection against overtopping, flooding, erosion and structural failure as specified by the conveyance requirements for new and existing systems and conveyance implementation requirements described in the Surface Water Design Manual;
- 5. Core requirement 5: Erosion and sediment control. All proposed projects that will clear, grade or otherwise disturb the site shall provide erosion and sediment control that prevents, to the maximum extent practicable, the transport of sediment from the site to drainage facilities, water resources and adjacent properties. Erosion and sediment controls shall be applied in accordance with K.C.C. chapter 16.82 as specified by the temporary erosion and sediment control measures and performance criteria and implementation requirements in the King County Surface Water Design Manual;
- 6. Core requirement 6: Maintenance and operation. Maintenance of all drainage facilities in compliance with King County maintenance standards is the responsibility of the applicant or property owner as described in the Surface Water Design Manual, except those facilities for which King County assumes maintenance and operation as described in K.C.C. 9.04.115 and 9.04.120 and the Surface Water Design Manual;
- 7. Core requirement 7: Financial guarantees and liability. All drainage facilities constructed or modified for projects, except downspout infiltration and dispersion systems for single family residential lots, must comply with the liability requirements of K.C.C. 9.04.100 and the financial guarantee requirements of K.C.C. Title 27A;

- 8. Core requirement 8: Water quality. Proposed projects that would result in five thousand square feet or more of new pollution generating impervious surface or thirty-five thousand square feet or more of new pollution-generating pervious surface, or that are redevelopment projects that would result in a total of five thousand square feet or more of new and replaced pollution-generating impervious surface, shall provide water quality treatment facilities to treat polluted surface and storm water runoff generated by new or replaced pollution-generating impervious surface, new pollution-generating pervious surface and any existing pollutiongenerating impervious surface added on or after January 8, 2001, as specified in the Surface Water Design Manual. However, pervious surfaces are specifically excluded if there is a good faith agreement with the King Conservation District to implement a farm management plan for agricultural uses, and pervious areas for other uses are specifically excluded if King County department of development and environmental services approves a landscape management plan that controls pesticides and fertilizers leaving the site. Water quality treatment facilities shall meet the area-specific water quality treatment requirements and the water quality implementation requirements applicable to the project site as specified in the Surface Water Design Manual. The facilities specified by these requirements are designed to reduce pollutant loads according to the applicable annual average performance goals listed in a. through d. of this subsection A.8. for ninety-five percent of the annual average runoff volume:
 - a. for basic water quality: remove eighty percent of the total suspended solids;
 - b. for enhanced basic water quality: remove fifty percent of the total zinc;
 - c. for sensitive lake protection: remove fifty percent of the total phosphorus; and
- d. for sphagnum bog protection: remove fifty percent of the total phosphorus and forty percent of the total nitrate plus nitrite. The discharge shall maintain a pH of less than 6.5 and an alkalinity of less than ten milligrams per liter.
- B. A proposed project required by K.C.C. 9.04.030 to have drainage review shall meet any of the following special requirements which apply to the site and which are described in detail in the Surface Water Design Manual. The department of development and environmental services shall verify if a proposed project is subject to and must meet any of the following special requirements.
- 1. Special Requirement 1: Other adopted area-specific requirements. If a proposed project is in a designated critical drainage area, or is in an area included in an adopted master drainage plan, basin plan, salmon conservation plan, stormwater compliance plan, flood hazard reduction plan, lake management plan or shared facility plan, then the proposed project shall meet the applicable drainage requirements of the critical drainage area, master drainage plan, basin plan, salmon conservation plan, stormwater compliance plan, flood hazard reduction plan, lake management plan or shared facility plan;
- 2. Special Requirement 2: Floodplain/floodway delineation. If a proposed project contains or is adjacent to a stream, lake, wetland or closed depression, or if other King County regulations require study of flood hazards relating to the proposed project, the one hundred year floodplain boundaries and floodway shall be determined and delineated on the site improvement plans and profiles and any final maps prepared for the proposed project. The flood hazard study shall be prepared for as specified in the Surface Water Design Manual;
- 3. Special Requirement 3: Flood protection facilities. If a proposed project contains or is adjacent to a stream that has an existing flood protection facility, such as a levee, revetment or berm, or proposes to either construct a new or modify an existing flood protection facility, then the flood protection facilities shall be analyzed and designed as specified in the Surface Water Design Manual to conform with the Federal Emergency Management Agency regulations as found in 44 C.F.R;
- 4. Special Requirement 4: Source Control. If a proposed project requires a commercial building or commercial site development permit, then water quality source controls shall be applied to prevent rainfall and runoff from coming into contact with pollutants to the maximum extent practicable. Water quality source controls shall be applied in accordance with K.C.C. chapter 9.12, the King County stormwater pollution prevention manual and the Surface Water Design Manual. All structural source controls shall be identified on the site improvement plans and profiles or final maps prepared for the proposed project; and
- 5. Special Requirement 5: Oil control. If a proposed project is a high-use site or is a redevelopment project proposing one hundred thousand dollars or more of improvements to an existing high-use site, then oil control shall be applied to all runoff from the high-use portion of the site as specified in the Surface Water Design Manual.

- C.1. An adjustment to the requirements contained in this section or other requirements in the Surface Water Design Manual may be proposed. The resulting development shall be subject to all of the remaining terms and conditions of this chapter and the adjustment 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 complying with subsection C.1.a. of this section will deny all reasonable use of a property, the best practicable alternative shall be obtained as determined by the director of the department of development and environmental services according to the adjustment process defined in the Surface Water Design Manual.
- 3. Requests for adjustments that may conflict with the requirements of any other King County division shall require review and concurrence with that division.
- 4. A request for an adjustment is a Type 1 land use decision as provided for in K.C.C. 20.20.060 and shall be processed in accordance with the procedures specified in the Surface Water Design Manual.
- 5. The county may require monitoring of experimental designs and technology or untested applications proposed by the applicant in order to determine compliance with subsection C.1. of this section and the approved plans and conditions.
- 6. The applicant may appeal an adjustment decision by following the appeal procedures as specified in the Surface Water Design Manual.
- D. The drainage review requirements in this section and in the Surface Water Design Manual may be modified or waived under the procedures in K.C.C. 21A.55.060. (Ord. 15052 §3, 2004: Ord. 14662 § 2, 2003: Ord. 13191 § 4, 1998: Ord. 12822 § 1, 1997: Ord. 12020 § 38, 1995: Ord. 12001 § 1, 1995: Ord. 11615 § 5, 1994: Ord. 10570 § 1, 1992: Ord. 9163 § 5, 1989: Ord. 7817 § 2, 1986: Ord. 4938 § 5, 1980: Ord. 2812 § 3, 1976: Ord. 2281 § 5, 1975).
- 9.04.060 Critical drainage and/or erosion areas. Development in areas where the department has determined that the existing flooding, drainage and/or erosion conditions present an imminent likelihood of harm to the welfare and safety of the surrounding community shall meet special drainage requirements set by the director until such time as the community hazard is alleviated. Such conditions may include the limitation of the volume of discharge from the subject property to predevelopment levels, preservation of wetlands or other natural drainage features or other controls necessary to protect against community hazard. Where alternate facility designs or methods will produce a compensating or comparable result in the public interest and which will meet this section's objectives of safety, function, appearance, environmental protection and maintainability, based upon sound engineering judgment, an adjustment to the special drainage requirements promulgated under this section may be proposed, provided that the resulting development shall be subject to all of the remaining terms and conditions of this chapter. Where application of this section will deny all reasonable use of a property and a facility or design that produces a compensating or comparable result cannot be obtained, then a best practicable alternative may be obtained, to be determined by the director of the department of development and environmental services according to the adjustment process defined in the Surface Water Design Manual. (Ord. 13191 § 5, 1998: Ord. 12001 § 2, 1995: Ord. 10570 § 2, 1992: Ord. 9163 § 6, 1989: Ord. 7990 § 4, 1987: Ord. 7817 § 2, 1986: Ord. 4938 § 6, 1980: Ord. 2812 § 4, 1976).

9.04.070 Engineering plans for the purposes of drainage review.

- A.1. All engineering plans shall be submitted to the department of development and environmental services for review in accordance with the Surface Water Design Manual except those drainage plans developed by, or under the review of, the department of natural resources and parks for either surface and storm water capital improvement, repair, maintenance or restoration projects or other linear government agency projects, such as roadways, railways, pipelines, utility lines and trails.
- 2. If engineering plans are returned for any reason, they shall be returned to the applicant.
- 3. All master drainage plans, if required, shall be submitted to the department of development and environmental services for review in accordance with the specifications in the Surface Water Design Manual. The master drainage plan process should commence at the same time as the state Environmental Policy Act (SEPA) process.
- 4. Drainage plans not subject to review by the department of development and environmental services under subsection A.1. of this section shall be reviewed by the department of natural resources and parks in accordance with K.C.C. 9.04.050. Project applicability and compliance with K.C.C. 9.04.050 shall be documented in writing and available for review.
- B. The expiration time frames as specified in the Surface Water Design Manual shall apply to all permit and approval applications.
- C. All plans shall be processed in accordance with the review procedures specified in the Surface Water Design Manual.
- D. All submittal procedures, definitions and specifications for the required contents of engineering plans are presented in the Surface Water Design Manual. (Ord. 15052 §4, 2004: Ord. 14199 § 129, 2001: Ord. 13191 § 6, 1998: Ord. 12001 § 3, 1995: Ord. 11700 § 2, 1995: Ord. 9163 § 7, 1989: Ord. 7817 § 2, 1986: Ord. 2812 § 5, 1976: Ord. 2281 § 6, 1975).

9.04.090 Construction timing and final approval.

- A. No work related to permanent or temporary storm drainage control for a permitted development may proceed without the approval of the director of the department of development and environmental services.
- B. Erosion and sediment control measures associated with both the interim and permanent drainage systems shall be:
- 1. Constructed in accordance with the approved plan prior to any grading or land clearing other than that associated with an approved erosion and sediment control plan; and
- 2. Satisfactorily sequenced and maintained until all improvements, restoration, and landscaping associated with the permit and approvals for the project are completed and the potential for onsite erosion has passed.
- C. The applicant shall have constructed and have in operation those portions of the drainage facilities necessary to accommodate the control of surface and storm water runoff discharging from the site before the construction of any other improvements or buildings on the site, or to final recording of a plat or short plat, unless upon written request of the applicannt, the development engineer authorizes recording before construction of facilities in order to minimize impacts that may result from construction of facilities during inappropriate times of the year. (Ord. 15052 §5, 2004: Ord. 13694 § 83, 1999: Ord. 13191 § 7, 1998: Ord. 9163 § 8, 1989: Ord. 7990 § 5, 1987: Ord. 7817 § 2, 1986: Ord. 4938 § 7, 1980).
- **9.04.095** Vesting period for lots in final short plats. Unless the department finds that a change in conditions creates a serious threat to the public health or safety in the short subdivision, for a period of five years after recording, a lot within a short subdivision shall be governed by the provisions of this chapter in effect at the time a fully completed application for short subdivision approval was filed in accordance with K.C.C. chapter 20.20. (Ord. 15052 § 9, 2004).

- **9.04.100** Liability insurance required. The applicant required to construct the drainage facility pursuant to K.C.C. chapter 9.04 shall maintain a combined single limit per occurrence liability policy in the amount established annually by the King County risk management program, which shall name King County as an additional insured and protect King County from liability relating to the construction or maintenance of the facility until construction approval or acceptance for maintenance, whichever is last. Proof of this required liability policy shall be provided to the director of development and environmental services prior to commencing construction of any drainage facility. If this liability insurance is not kept in effect as required, King County may initiate enforcement action pursuant to K.C.C. Title 23. (Ord. 13191 § 8, 1998: Ord. 12020 § 39, 1995: Ord. 11700 § 3, 1995: Ord. 9163 § 9, 1989: Ord. 7990 § 6, 1987: Ord. 7817 § 2, 1986: Ord. 4938 § 8, 1980: Ord. 2812 § 6, 1976: Ord. 2281 § 7, 1975).
- **9.04.105** Financial guarantees authorized. The department of development and environmental services (or its successor organization) is authorized to require all applicants issued permits or approvals under the provisions of the title to post financial guarantees consistent with the provisions of Title 27A. (Ord. 12020 § 33, 1995).

9.04.115 Drainage facilities accepted by King County for maintenance.

- A. King County is responsible for the maintenance, including performance and operation, of drainage facilities which have formally been accepted for maintenance by the director.
- B. King County may assume maintenance of privately maintained drainage facilities only if the following conditions have been met:
- 1. All necessary easements or dedications entitling the county to properly maintain the drainage facility have been conveyed to the county;
- 2. The director has determined that the facility is in the dedicated public road right-of-way or that maintenance of the facility will contribute to protecting or improving the health, safety and welfare of the community based upon review of the existence of or potential for:
 - a. flooding.
 - b. downstream erosion,
 - c. property damage due to improper function of the facility,
 - d. safety hazard associated with the facility,
 - e. degradation of water quality or in-stream resources, or
 - f. degradation to the general welfare of the community; and
- 3. The director has declared in writing acceptance of maintenance responsibility by the county. Copies of this document will be kept on file in the department of natural resources and parks, water and land resources division.
- C. The director may terminate the department's assumption of maintenance responsibilities in writing after determining that continued maintenance will not significantly contribute to protecting or improving the health, safety and welfare of the community based upon review of the existence of or potential for:
 - 1. Flooding,
 - 2. Downstream erosion,
 - 3. Property damage due to improper function of the facility,
 - 4. Safety hazard associated with the facility,
 - 5. Degradation of water quality or in-stream resources, or
 - 6. Degradation to the general welfare of the community.

Copies of this document will be kept on file in the department of natural resources and parks, water and land resources division.

D. A drainage facility which does not meet the criteria of this section shall remain the responsibility of the applicant required to construct the facility and persons holding title to the property for which the facility was required. (Ord. 14199 § 130, 2001: Ord. 13191 § 10, 1998).

9.04.120 Drainage facilities not accepted by King County for maintenance.

- A. The person or persons holding title to the property and the applicant required to construct a drainage facility shall remain responsible for the facility's continual performance, operation and maintenance in accordance with the standards and requirements of the department and remain responsible for any liability as a result of these duties. This responsibility includes maintenance of a drainage facility which is:
 - 1. Under a maintenance guarantee or defect guarantee;
 - 2. A private road conveyance system;
- 3. Released from all required financial guarantees prior to July 7, 1980 (the effective date of Ordinance 4938):
 - 4. Located within and serving only one single family residential lot;
- 5. Located within and serving a multi-family or commercial site unless the facility is part of an approved shared facility plan;
- 6. Located within or associated with an administrative or formal subdivision which handles runoff from an area of which less than two-thirds is designated for detached or townhouse dwelling units located on individual lots unless the facility is part of an approved shared facility plan;
- 7. Previously terminated for assumption of maintenance responsibilities by the department in accordance with K.C.C. 9.04.110; or
 - 8. Not otherwise accepted by the county for maintenance.
- B. Prior to the issuance of any of the permits and/or for any multi-family or commercial project required to have a flow control or water quality treatment facility, the applicant shall record a declaration of covenant as specified in the Surface Water Design Manual. The restrictions set forth in such covenant shall include, but not be limited to, provisions for notice to the persons holding title to the property of a King County determination that maintenance and/or repairs are necessary to the facility and a reasonable time limit in which such work is to be completed.
- 1. In the event that the titleholders do not effect such maintenance and/or repairs, King County may perform such work upon due notice. The titleholders are required to reimburse King County for any such work. The restrictions set forth in such covenant shall be included in any instrument of conveyance of the subject property and shall be recorded with the King County records division.
- 2. The county may enforce the restrictions set forth in the declaration of covenant provided in the Surface Water Design Manual.
- C. Prior to the issuance of any of the permits and/or approvals for the project or the release of financial guarantees posted to guarantee satisfactory completion, the person or persons holding title to the subject property for which a drainage facility was required shall pay a fee established by the director of department of development and environmental services to reasonably compensate the county for costs relating to inspection of the facility to ensure that it has been constructed according to plan and applicable specifications and standards.
- D. The duties specified in this section with regard to payment of inspection fees and reimbursement of maintenance costs shall be enforced against the person or persons holding title to the property for which the drainage facility was required.
- E. Where not specifically defined in this section, the responsibility for performance, operation and maintenance of drainage facilities and conveyance systems, both natural and constructed, shall be determined on a case by case basis. (Ord. 13191 \S 11, 1998: Ord. 12020 \S 40, 1995: Ord. 9006 \S 1, 1989: Ord. 7990 \S 7, 1987: Ord. 7817 \S 2, 1986: Ord. 5824 \S 9, 1982: Ord. 4938 \S 10, 1980).
- **9.04.130 Hazards.** Whenever the director determines that any existing construction site, erosion and sedimentation problem and/or drainage facility poses a hazard to life and limb, endangers any property, and/or adversely affects the condition or capacity of other drainage facilities, the safety and operation of county right-of-way, utilities, and/or other property owned or maintained by the county, the applicant/person to whom the permit was issued pursuant to K.C.C. 9.04.030, the owner of the property within which the drainage facility is located, the applicant/person responsible for maintenance of the facility, and/or other person or agent in control of said property, upon receipt of notice in writing from the director shall within the period specified therein repair or otherwise address the cause of the hazardous situation in conformance with the requirements of this chapter.

Should the director have reasonable cause to believe that the situation is so adverse as to preclude written notice, the director may take the measures necessary to eliminate the hazardous situation; provided that the director shall first make a reasonable effort to locate the owner before acting. In such instances the applicant of whom a drainage plan was required pursuant to K.C.C. 9.04.030, the owner of the property and/or the person responsible for the maintenance of the facility shall be obligated for the payment of all costs incurred. If costs are incurred and a financial guarantee pursuant to this chapter or other county requirement has been posted, the director shall have the authority to collect against the financial guarantee to cover costs incurred. (Ord. 13191 § 13, 1998: Ord. 12020 § 41, 1995: Ord. 11700 § 5, 1995: Ord. 9163 § 11, 1989: Ord. 7817 § 2, 1986: Ord. 5824 § 11, 1982: Ord. 4938 § 11, 1980).

9.04.140 Administration.

A. Administration.

- 1. The director is authorized to promulgate and adopt administrative rules under the procedures specified in K.C.C. chapter 2.98, for the purpose of implementing and enforcing the provisions of this chapter. Adopted administrative rules are available to the public from the department of development and environmental services or the department of natural resources and parks, water and land resources division. This includes, but is not limited to, the Surface Water Design Manual.
- 2. The director of department of development and environmental services is authorized to develop procedures for applying adopted rules and regulations during the review of permit applications for the development of land. These procedures may also be contained in the Surface Water Design Manual.
- B. Inspections. The director is authorized to make such inspections and take such actions as may be required to enforce the provisions of this chapter.
- C. Right of entry. Whenever necessary to make an inspection to enforce any of the provisions of this chapter, monitor for proper function of drainage facilities or whenever the director has reasonable cause to believe that violations of this chapter are present or operating on a subject property or portion thereof, the director may enter such premises at all reasonable times to inspect the same or perform any duty imposed upon the director by this chapter; provided that, if such premises or portion thereof is occupied, the director shall first make a reasonable effort to locate the owner or other person having charge or control of the premises or portion thereof and demand entry.
- D. Access. Proper ingress and egress shall be provided to the director to inspect, monitor or perform any duty imposed upon the director by this chapter. The director shall notify the responsible party in writing of failure to comply with this access requirement. Failing to obtain a response within seven days from the receipt of notification the director may order the work required completed or otherwise address the cause of improper access. The obligation for the payment of all costs that may be incurred or expended by the county in causing such work to be done shall thereby be imposed on the person holding title to the subject property. (Ord. 14199 § 131, 2001: Ord. 13191 § 14, 1998: Ord. 9163 § 12, 1989: Ord. 7990 § 8, 1987: Ord. 7817 § 2, 1986: Ord. 5824 § 10, 1982: Ord. 4938 § 12, 1980).
- **9.04.180 Enforcement.** The director is authorized to enforce the provisions of this chapter, the ordinances and resolutions codified in it, and any rules and regulations promulgated thereunder pursuant to the enforcement and penalty provisions of K.C.C. Title 23. (Ord. 13191 § 17, 1998: Ord. 7990 § 9, 1987: Ord. 7817 § 2, 1986: Ord. 2909 § 3(part), 1976: Ord. 2281 (part), 1975).
- **9.04.192** Liberal construction. This chapter is exempted from the rule of strict construction and shall be liberally construed to give full effect to the objectives and purposes for which it was enacted. (Ord. 9163 § 17, 1989).
- **9.04.194** Implementation, review and revision. The department shall administer a training program for users of the Surface Water Design Manual. The department shall also conduct an on-going research program to evaluate the effectiveness of the requirements in meeting the purpose of this chapter. This research program will examine, but not be limited to, hydrologic and hydraulic analysis methods, stream geomorphologic analysis methods, water quality, best management practices and erosion and sediment control measures. (Ord. 13191 § 20, 1998: Ord. 9163 §§ 18-19, 1989).

- **9.04.196 Agency rules.** Any documents and/or manuals formally adopted by rule under the procedures specified in K.C.C. chapter 2.98 which implement the policies promulgated in this chapter are governed by the King County Code. Any inconsistencies identified will be controlled by the King County Code. (Ord. 13191 § 21, 1998).
- **9.04.197 Effective date.** The effective date of Ordinance 13191 is August 31, 1998. (Ord. 13191 § 19, 1998).
- **9.04.200 Severability.** If any provision of this chapter or its application to any person or property is held invalid, the remainder of the chapter or the application of the provision to other persons or property shall not be affected. (Ord. 9163 § 20, 1989: Ord. 7817 § 2, 1986: Ord. 2812 § 11, 1976: Ord. 2281 § 12, 1975).