

Department of Development and Environmental Services (DDES)

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Drainage Review

• FREQUENTLY ASKED QUESTIONS •

**Visit the DDES Web site at
www.kingcounty.gov/permits
for more information**

King County DDES has created customer information bulletins to inform the general public about the effect of codes and regulations on their projects. These bulletins are not intended to be complete statements of all laws and rules and should not be used as substitutes for them. If conflicts and questions arise, current codes and regulations are final authority. Because the codes and regulations may be revised or amended at any time, consult King County staff to be sure you understand all requirements before beginning work. It is the applicant's responsibility to ensure that the project meets all requirements of applicable codes and regulations.

DDES Customer
Information Bulletin #**29**

For alternate formats, call 206-296-6600.

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When do drainage review requirements apply to a proposed project?

This bulletin is intended to alert customers to the possibility that a proposed project may be subject to drainage review and to inform customers of the requirements that may apply. This bulletin does not attempt to set out all the standards that must be met or the actions on the part of applicants that will completely satisfy requirements for control of surface and storm water runoff.

If applicants think that a proposed project may require drainage review, please consult the current *King County Surface Water Design Manual* or a Civil Engineer to ensure that appropriate guidelines are followed.

Drainage review is required when any proposed project is subject to a King County development permit or approval AND:

1. Would result in 2,000 square feet or more of new impervious surface;
2. Would involve 7,000 square feet or more of land disturbing activity;
3. Would construct or modify a drainage pipe/ditch that is 12 inches or more in size/depth, or receives surface and storm water runoff from a drainage pipe/ditch that is 12 inches or more in depth/size;
4. Contains or is adjacent to a flood hazard area as defined by K.C.C. chapter 21A.24;
5. Is located within a critical drainage area;

6. Is a redevelopment project proposing \$100,000 or more of improvements to an existing high-use site; and/or
7. Is a redevelopment project on a site in which the total of new plus replaced impervious surface is 5,000 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.

Again, if a proposed project involves any of the scenarios described above, and requires one of the following permits, a drainage review will be required:

1. Administrative Subdivision (Short Plat);
2. Clearing;
3. Commercial Building;
4. Conditional Use;
5. Experimental Design Adjustment;
6. Formal Subdivision (Plat);
7. Franchise Utility Right-of-Way Use;
8. Grading;
9. Master Drainage Plan;
10. Pre-Application Adjustment;
11. Right-of-Way Use;
12. Shoreline Substantial Development;
13. Single Family Residential Building;
14. Special Use;
15. Surface Water Design Manual Adjustments;
16. Unclassified Use;
17. Urban Planned Development;
18. Zoning Reclassification; and/or
19. Zoning Variance.

There are different types of drainage reviews

For most projects adding 5,000 square feet or more of impervious surface, the full range of requirements must be evaluated for compliance through the drainage review process. For some types of projects, however, the scope of requirements applied is narrowed to allow more efficient, customized review. Each of the following four drainage review types tailors the review process and application of drainage requirements to a project's size, location, type of development, and anticipated impacts to the local and regional surface water system:

Small project drainage review – This is an alternative to full drainage review for small residential building, clearing, subdivision projects or small agricultural projects that results in 10,000 square feet or less of impervious surface added on or after January 8, 2001; or less than 4% of total impervious as defined by Section 1.1.2.1 of the *King County Surface Water Design Manual*.

Targeted drainage review – This is an abbreviated evaluation of small-site proposals and other small projects that have site-specific or project-specific drainage concerns for compliance with selected requirements.

Full drainage review – This is the evaluation of projects for compliance with the full range of requirements that do not qualify or choose not to comply with small-project and/or target drainage review.

Large project drainage review – This is applied to large development proposals that may also involve problems of special sensitivity or complexity.

What are the core requirements?

Every project requiring a drainage review must meet each of the following core requirements. These core requirements are described in detail in the current *King County Surface Water Design Manual*.

Core Requirement 1: Discharge at the natural location

The discharge from a project site must occur at a natural location and produce no significant adverse impact.

Core Requirement 2: Off-site analysis

All projects must identify and evaluate off-site drainage problems that may be created or aggravated by the proposed project and determine appropriate measures for preventing aggravation of those problems. This includes, at a minimum, a Level 1 Down Stream Analysis.

Core Requirement 3: Flow control

All proposed projects, including redevelopment projects, must provide onsite flow control facilities to mitigate the impacts of storm and surface water runoff generated by new impervious surface, new pervious surface, and replaced impervious surface targeted for flow mitigation as specified in Section and related Sub-Sections 1.2.3 of the *King County 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 applicant or property owner, as described in the *King County Surface Water Design Manual*, except for those facilities for which King County assumes maintenance and operation as described in KCC 9.04.115 and KCC 9.04.120.

Core Requirement 7: Financial guarantees and liability

All drainage facilities for projects (except for downspout roof drain infiltration systems) must comply with the bond and liability requirements of Chapter 9.04.100 of the King County Code (KCC).

Core Requirement 8: Water quality

All proposed projects, including redevelopment projects, must provide water quality (WQ) facilities to treat the runoff from those new and replaced pollution-generating impervious surfaces and new pollution-generating pervious surfaces targeted for treatment as specified in the Section and Sub-Sections 1.2.8 of the *King County Surface Water Design Manual*.

What are the special requirements?

In addition to the core requirements, special requirements may apply to a proposed project. Their descriptive titles are listed below; refer to the current *King County Surface Water Design Manual* for complete details.

1. Other Adopted Area-Specific Requirements
2. Floodplain/Floodway Delineation
3. Flood Protection Facilities
4. Source Control
5. Oil Control.

What other technical information reports and engineering plans exist?

If a targeted, full, or large-project drainage review is required, the core and special requirements must be addressed in a Technical Information Report (TIR), with appropriate engineering plans completed in accordance with the instructions given in the *King County Surface Water Design Manual*.

Are adjustments of the requirements possible?

Adjustments of the core and special requirements and/or other requirements in the *King County Surface Water Design Manual* may be proposed.

Requests for adjustments will be processed in accordance with the procedures specified in the *King County Surface Water Design Manual*. Proposed adjustments to the core and special requirements must be approved before permit approval and construction.

Where may customers purchase a King County Surface Water Design Manual?

A manual may be purchased from the King County DNR Water and Land Resources Division at 206-296-6519. For additional information, visit the Water and Land Resources Division Manual Web site at: <http://dnr.metrokc.gov/wlr/dss/manual.htm>.

Other bulletins and telephone numbers that may be helpful

Bulletin 1	Building and Development Permit Telephone Numbers
Bulletin 10	Residential Building On or Near Waterfront
Bulletin 17A	Zoning Code: Overview and Summary
Bulletin 18A	Zoning Code: Permitted Use Tables
Bulletin 21	Critical Areas Review
Bulletin 34A	Road Variances
Bulletin 34B	Surface Water Design Manual Variances or Adjustments
Bulletin 38	Flood Insurance and FEMA

These and other DDES bulletins are available via the department Web site at www.kingcounty.gov/permits.

206-296-6600	DDES Permit Center
206-296-6600	DDES zoning and land use information
206-296-6600	DDES drainage review information
206-296-6519	King County DNR Water & Land Resources Division



Be sure to visit our Web site at:
www.kingcounty.gov/permits

King County complies with the Americans with Disabilities Act (ADA). If you require an accommodation to attend a meeting (two weeks' notice) or require this information in Braille, audiocassette, or large print, please call 206-296-6600 or TTY 206-296-7217.