

**City of Kent
Surface Water Design Manual
(Chapter 5, Kent Construction Standards)**



May 2002

ACKNOWLEDGEMENTS

This Manual is based on the 1998 King County Surface Water Design Manual. Many individuals associated with King County were involved in preparation of that Manual. Acknowledgement of these individuals is included at the front of that Manual.

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PREFACE

HOW TO USE THIS DOCUMENT



**CITY OF KENT
Surface Water Design Manual
(Chapter 5 – Kent Construction Standards)**

PREFACE

HOW TO USE THIS DOCUMENT

This stormwater section is an addendum to the 1998 King County Surface Water Design Manual (KCSWDM) and applies to development proposals within the City of Kent. It includes all changes and deletions to the KCSWDM adopted by the City of Kent and is to be used for guidance in drainage review and design of stormwater facilities within the City.

Addendum Organization

The information presented in this addendum is organized as follows:

- **Preface—How to Use This Document:** This preface provides instructions for using the City of Kent's addendum to the KCSWDM. It also defines terms in the King County manual that are used differently for the City of Kent; City departments that are equivalent to county departments referred to in the KCSWDM; and designations from the King County manual that do not apply to proposals in the City of Kent.
- **Chapter 1—Drainage Review Requirements:** A completely revised Chapter 1 has been provided in this addendum. It is to be used instead of Chapter 1 in the 1998 KCSWDM for all proposals in the City of Kent. This chapter sets forth the thresholds and requirements for drainage review, describes the three types of drainage review, and summarizes the eight Core and five Special Requirements.
- **Chapter 2—Drainage Plan Submittal:** A completely revised Chapter 2 has been provided in this addendum. It is to be used instead of Chapter 2 in the 1998 KCSWDM for all proposals in the City of Kent. This chapter describes the required format and components of submittals for the three types of drainage review.
- **Chapter 3—Hydrologic Analysis and Design:** The City of Kent has made no changes to Chapter 3 of the 1998 KCSWDM. The King County version of Chapter 3 applies for proposals in the City of Kent.
- **Chapter 4—Conveyance System Analysis and Design:** The City of Kent has made several minor changes to Chapter 4 of the 1998 KCSWDM. This addendum to Chapter 4 provides replacement text for the sections that are changed. Apart from these changes, the King County version of Chapter 4 applies for proposals in the City of Kent.
- **Chapter 5—Flow Control Design:** The City of Kent has made minor changes to Chapter 5 of the 1998 KCSWDM. This addendum to Chapter 5 provides replacement text for the section that is changed. Apart from these changes, the King County version of Chapter 5 applies to proposals in the City of Kent.
- **Chapter 6—Water Quality Design:** The City of Kent has made a few minor changes to Chapter 6 of the 1998 KCSWDM. This addendum to Chapter 6 provides replacement text for the

section that is changed. Apart from this change, the King County version of Chapter 6 applies to proposals in the City of Kent.

- **Appendices** – Appendix A presents the City of Kent **Maintenance Requirements for Privately Maintained Drainage Facilities** (reprinted from Appendix D of the Kent Construction Standards), there is no Appendix B (King County includes Master Drainage Plan requirements here – does not apply in Kent), Appendices C and D are the Small Site Drainage Requirements and Erosion and Sediment Control Standards, respectively. These are included as separately bound documents included with the King County Manual.
- **References:** King County Reference Sections 1, 2, 3, 4b, 6A, and 7 do not apply to the City of Kent. The King County version of Reference sections 4A, 5, and 6B apply to proposals in the City of Kent. The City has modified and replaced several references within Section 8. This document includes the revised Sections 8-A through 8-J.

CITY EQUIVALENTS FOR COUNTY AGENCIES AND ORDINANCES

For proposals located within the City of Kent, all references in the KCSWDM to the following King County departments are to be replaced by reference to the Kent Public Works Department:

- DDES (Department of Development and Environmental Services)
- DNR (Department of Natural Resources)
- SWM (Surface Water Management)
- WLR (Water and Land Resources)

For proposals in the City of Kent, all references in the KCSWDM to the King County Sensitive Areas Ordinance (SAO) are to be replaced by reference to the Kent City Code, particularly Chapters 11, 14, and 15.

COUNTY DESIGNATIONS THAT DO NOT APPLY IN THE CITY

The following designations are used in the 1998 KCSWDM but are not currently used in the City of Kent; any reference in the KCSWDM to the existence of areas with these designations or thresholds or requirements for such areas is to be disregarded for development applications within the City of Kent:

- Coal Mine Hazard Area
- Critical Drainage Area
- Rural Residential Development
- Shared Facility

MANUAL UPDATES

With a publication of this complexity there may be errors that must be corrected and clarifications that are needed. There will also be new information and technological updates. The City of Kent Department of Public Works intends to publish corrections, updates and new technical information on our Departmental Home Page at <http://www.ci.kent.wa.us/PublicWorks/Stormwater>. The web site will not be used to make revisions in key policy areas – such as the thresholds and minimum requirements in Chapter 1. We

encourage you to visit this web site for periodically and incorporate updates and corrections into your copies of the manual. You can also visit this web site for updates and additional information about other Kent Public Works surface water activities.

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SURFACE WATER
DESIGN MANUAL**

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For all other sections, refer to the 1998 King County Surface Water Design Manual.

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King County Appendix B does not apply, See the 1998 King County Surface Water Design Manual for Appendices C and D

References

4A – Landscape Management Plan Guidelines

5 – Bibliography of Supporting Studies and Research

6B – Pond Geometry Equations

8-A – Technical Information Report (TIR) Worksheet

- 8-B – Offsite Analysis Drainage System Table
- 8-C – Flow Control and Water Quality Facility Summary Sheet and Sketch
- 8-D – Bond Quantities Worksheet – (contact the City of Kent Public Works Department)
- 8-E – Surface Water and Drainage Facilities Construction Bond
- 8-F – Declaration of Stormwater Facility Maintenance Covenant
- 8-G – Drainage Easements
- 8-H – Water Quality Memorandum
- 8-I – Adjustment Application Form and Process Guidelines
- 8-J – Plat Dedication Clause – Final Recording

Maps (included as hard copy fold-outs and PDF files on CD)

- Flow Control Applications Map
- Water Quality Applications Map
- Landslide Hazard / Landslide Hazard Drainage Areas Map
- Erosion Hazard Areas Map
- Soils / Wellhead Protection Area Map
- Wetland Map