

CITY OF CARNATION

4621 Tolt Avenue • P. O. Box 1238 • Carnation, WA 98014-1238 (425) 333-4192 phone • (425) 333-4336 fax • www.carnationwa.gov

APPLICATION FOR DRAINAGE PERMIT

SUBMITTAL REQUIREMENTS

Regulations that may apply to Drainage Permit application can be found in the following:

- Carnation Municipal Code (CMC) Chapter 15.64 Part II (15.64.160 15.64.300)
- Department of Ecology Stormwater Management Manual for Western Washington, 2012 Edition (2012 DOE Manual)
- Chapter 173-218 WAC Underground Injection Control Program

Drainage system must be designed by a professional engineer registered in the State of Washington.

For projects in which the total surface areas of new, replaced, or new plus replaced impervious surface is $\underline{1,000}$ square feet or more, or with total area of land disturbance of 5,000 square feet, or more, submit $\underline{5}$ sets of Stormwater Site Plans.

Develop Stormwater Site Plan in accordance with the requirements of the 2012 DOE Manual, Volume 1, Chapter 3. Stormwater Site Plan shall consist of a Permanent Stormwater Control Plan and a Construction Stormwater Pollution Prevention Plan (SWPPP).

Permanent Stormwater Control Plan

- __ Submit 5 bound sets of narrative and computer printout of stormwater modeling (WWHM3 or latest version).
- __ Submit 5 sets of drawings in engineering scale showing, as a minimum, the following items:
 - Stamp, signature, and date of professional engineer registered in the State of Washington.
 - Existing and proposed collection, distribution, water quality, retention and infiltrations facilities

Construction Stormwater Pollution Prevention Plan (SWPPP)

Develop SWPPP in accordance with 2012 DOE Manual, Volume 1, Chapter 2, Section 2.5.2

__ Submit 5 bound sets of narrative and drawings. Drawings shall be in engineering scale and shall be plotted at half-size or full size.

If SWPPP includes engineering calculations, then it shall include stamp, signature, and date of professional engineer registered in the State of Washington.

Clearly demonstrate, through TESC measures, BMPs, sequencing, plan notes (etc.), how drainage infiltration facilities will be protected from contamination (sediment, turbid water, etc.) during construction, until final site stabilization.

Stormwater Declaration of Covenant

__ If the storm drainage system scope of work includes an infiltration and/or water quality facility, submit a <u>draft</u> Declaration of Covenant, with required attachments, for City review.

<u>Underground Injection Control Program (UIC) Well</u>

__ If the storm drain system will include an infiltration trench or system that meets the Chapter 173-218 WAC reporting requirements for UIC wells, then submit a copy of the <u>draft</u> completed UIC Well Registration Form for review by the City. [UIC Well Registration Forms are available on the Department of Ecology website (<u>www.ecy.gov</u>)].



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TIPS FOR SUCCESS

The Storm Drainage Permit is issued for construction of roof drainage and stormwater drainage on private property (residential, commercial, industrial). If the scope of work will extend onto public rights-of-way, then a Right of Way Construction Permit must also be obtained. If the stormwater drainage facility to be constructed will be a public stormwater drainage facility, then submit an application for Public Utility Extension Permit (Stormwater Drainage) instead of this permit application.

Review CMC 15.64 Part II, Drainage, Erosion Control, Stormwater Management.

The City Engineer reviews and approves drainage permits and observes drainage installation. The City Engineer is a consultant to the City and is paid on a time and materials basis; therefore, <u>complete</u> submittals with required numbers of hard copies will reduce City consultant time and expense. Do not combine plan sets meant for different permits. Each type of permit should have it's own complete sets of plans and specs.

The City does not operate a public stormwater system; therefore, provisions are required to infiltrate stormwater on site in accordance with CMC 15.64.190.

Note: City standard for allowable runoff from site differs from 2012 DOE Manual – see CMC 15.64.165 for definitions of "pre-developed condition" and for "rate of stormwater discharge."

Provide sufficient geotechnical investigation and borings to determine reliable short-term infiltration rate and to establish seasonal high groundwater levels. Obtain soil borings as close as possible to the proposed location of the infiltration facility. Design depth of infiltration facility to reach sandy/gravelly soil layers, unless this is not possible.

Comply with methods described in 2012 DOE Manual, Volume III, Section 3.3 for determining <u>long term</u> infiltration rates for facility design.

Protect groundwater water quality per 2012 DOE Manual and WAC 173-200.

Identify and implement appropriate best management practices (BMPs) for erosion and sediment control and for water quality protection.

Per CMC 15.64.230, the City's surface area thresholds for requiring submission of Stormwater Site Plans is lower (smaller impervious areas and/or areas of disturbance) than required in the 2012 DOE Manual, therefore Stormwater Site Plans must be developed for as little 1,000 SF of new, replaced or new + replaced impervious area or 5,000 SF of land disturbance.

Inspection and maintenance procedures in the 2012 DOE Manual are generic; therefore, develop operation and maintenance procedures specifically <u>tailored</u> to proposed stormwater drainage and infiltration/water quality system configuration. These procedures will be recorded with the Declaration of Covenant, so be thorough but concise. The "King County Drainage Maintenance Standards for Commercial and Multifamily Drainage Facilities" (available on line) provides a better source.

Drawings for inclusion in the Declaration of Covenant must show plan view and details sufficient to accurately locate the buried components and to understand its configuration, operation, and maintenance.

Review WAC Chapter 173-218 for definitions of underground injection wells (UIC wells) that must be reported to the Washington State Department of Ecology (DOE), using the appropriate UIC well registration form, and provide a draft copy of the completed form to the City for review prior to submission to the DOE.