Basis of Design

The purpose of this section is to provide guidelines for the development of specifications for stormwater management and protection during construction.

Overview

Projects must minimize the pollution of stormwater. Storm drains at UW Seattle and UW Bothell drain directly into Portage Bay and Lake Washington. Storm drains at UW Tacoma drain directly to the Puyallup River, another salmon corridor. The biggest pollution concerns for construction projects are settleable solids (mainly sediment) and pH.

Local discharge permits for dewatering/contaminated stormwater

Discharge authorizations are required for discharge of stormwater to the sanitary sewer. The EH&S Environmental Programs Office (EPO) is the UW liaison for King County Industrial Waste Division and will coordinate authorization and permits on behalf of the project.

Construction stormwater protection

Below are general outlines of requirements in Seattle, Tacoma and Bothell for construction-phase stormwater protection. If your project disturbs more than one acre of land, you must also apply for coverage under the state Construction National Pollutant Discharge Elimination System (NPDES) permit. Again, EPO will coordinate permits on behalf of the project and provide guidance and advice in planning and during construction.

The Seattle campus is serviced by three storm drainage systems with three different owners: the City of Seattle, King County and University of Washington. The process for construction projects is the same for all three – submit appropriate plans to the City of Seattle Department of Planning and Development.

Some types of minor projects are exempt from this requirement, including maintenance, repair and installation of utilities and existing sanitary sewer or drainage systems; road maintenance and shoulder grading; drainage ditch maintenance and vegetation maintenance.

For all other projects that disturb land or involve new or replaced impervious surfaces of over 750 square feet, the City of Seattle requires a Small Project Construction Stormwater Control Plan. For projects that involve over 5,000 square feet of new or replaced impervious surfaces, the City of Seattle requires a Small Project Construction Stormwater Control Plan. Requirements for both types of projects are at http://www.seattle.gov/dpd/codes/dr/DR2009-16.pdf.

Requirements for the City of Tacoma are outlined in the Tacoma Surface Water Management Manual at http://www.cityoftacoma.org/Page.aspx?hid=951#manual. All projects must comply with the twelve required “Elements” of the Construction Stormwater Pollution Prevention Plan (SWPPP). Redevelopment construction projects that add or replace over 2000 square feet of impervious surface or disturb over 7000 square feet must also address additional requirements.

For the City of Bothell, Bothell’s Surface Water Design Manual outlines drainage review. It is at http://www.ci.bothell.wa.us/dept/PW/Forms/ConstructionStandards/SECTION4.pdf.

Post-construction stormwater protection

Depending on the size of the project, permanent stormwater detention and/or treatment may be required. See the websites above for more about these requirements.
EPO is generally not involved with post-construction stormwater protection because close guidance is provided by the city issuing the building permit. However, EPO can provide guidance and advice. For assistance, contact the EH&S Environmental Programs Office at 206.685.3759.