



## DRAINAGE REPORT GUIDELINES FOR CIVIL PLAN REVIEW

A drainage report is required for most projects requiring a grading permit. A drainage report shall be prepared, stamped & signed by a professional engineer currently licensed to practice in the State of Washington.

The goal of Civil Plan Review is to review for general conformance the applicable City of Marysville codes and ordinances, identify general constructability concerns, and also identify and avoid potential long-term operations/maintenance issues. However, conformance of the design with all applicable laws and regulations, and any errors/omissions which may be later discovered, are the full and complete responsibility of the licensed engineer whose stamp and signature appear on the report. The property owner and licensed design engineer shall be responsible for the acquisition of, and compliance with all applicable permits or authorizations.

### DRAINAGE REPORT PREPARATION GUIDELINES:

The following are general guidelines to assist in the preparation of a drainage report for Civil Plan Review. The engineer is afforded some flexibility in the arrangement of the report, but the items below are expected to be covered:

#### **General:**

- Provide a summary discussion of the proposed proposal along with a vicinity map.
- Provide an evaluation of which minimum requirements are applicable to the project and how each is addressed.

#### **Minimum Requirement #1 – Preparation of Stormwater Site Plans:**

- Provide basin maps for both the existing and proposed conditions **(REQUIRED)**
  - Outline all project basins (TDAs), upstream tributary basin, and discharge point(s)
- Identify any accompanying project plans and/or SWPPP reports.
- Indicate whether the following are required:
  - DOE Construction Stormwater Permit
  - Underground Injection Control (UIC) registration

#### **Minimum Requirement #2 – Construction Stormwater Pollution Prevention Plan:**

- Discuss all of the 13 required TESC elements and how they are addressed. The discussion should be consistent with the TESC plan.
- Provide sizing calculations for any engineered ESC facilities.
- This section of the drainage report can serve as the SWPPP for the project, or a separate stand-alone SWPPP may be provided.

#### **Minimum Requirement #3 – Source Control:**

- Identify whether source control is required. If so, discuss where it is required and how it is implemented.



#### **Minimum Requirement #4 – Preservation of Natural Drainage Systems & Outfalls**

- Identify the historic downstream flowpath from each TDA.
- Identify the proposed downstream flowpath from each TDA. If any areas are diverted from one basin to another, provide justification and identify how this requirement is met.

#### **Minimum Requirement #5 – On-site Stormwater Management**

- Identify whether the project proposes to meet the LID flow-control standard, or implement BMP's on List #1 or List #2.
- If the project elects to implement one of the BMP lists, provide a feasibility evaluation of each potential BMP in the order of preference listed in the manual for each type of surface. If a BMP is determined to be infeasible, provide the specific infeasibility criteria in the manual.

#### **Minimum Requirement #6 – Runoff Treatment**

- Provide a discussion that follows the runoff treatment design procedure outlined in the DOE Manual:
  - Step 1 - Provide discussion of downstream pollutants of concern. The DOE Water Quality Atlas can be a good resource for this information.  
(<https://apps.ecology.wa.gov/waterqualityatlas/wqa/map>)
  - Step 2 - Identify whether oil-control is required and discuss any proposed oil-control measures.
  - Step 3 - Discuss whether stormwater infiltration is feasible for treatment, and refer to the findings in the project's geotechnical report.
  - Step 4 – Phosphorus Control  
*[This step may be omitted. There are no phosphorus control areas within the City].*
  - Step 5 – Identify whether enhanced treatment is required.
  - Step 6 – Discuss all runoff treatment mechanisms proposed for the site. Provide design calculations as needed.
- Any proprietary treatment system must have GULD-approval from the Dept. of Ecology.
- Clearly depict and explain any flow-control trades that are utilized for the project.

#### **Minimum Requirement #7 – Flow Control**

- Discuss whether or not any flow control exemptions are applicable to the site.
- Discuss the soil and land-use conditions used for site modeling
- Clearly identify any bypass basins or treatment-trades utilized for the project.

#### **Minimum Requirement #8 – Wetland Protection**

- Provide a discussion of wetland protection strategies employed at the project site.
- Provide hydroperiod modeling, if needed.

#### **Minimum Requirement #9 – Operations & Maintenance**

- Provide the applicable operations/maintenance recommendations from the DOE Manual.
- Provide the applicable operations/maintenance/installation recommendations from the manufacturer for any proprietary flow-control or treatment features.