

### STORMWATER DRAINAGE REPORT

Community & Economic Development City of Arlington • 18204 59th Avenue NE • Arlington, WA 98223 • Phone (360) 403-3551

# The Department of Ecology (DOE) requires certain new and redevelopment projects to obtain an NPDES Permit.

See the attached matrix from Section 3 of the DOE Manual to see if your project needs a NPDES Permit. For additional information regarding NPDES Permit's refer to the DOE Manual.

The Storm Water Drainage Report Summary should include the following items.

- Cover with project name, engineer's stamp and signature;
- Table of Contents;
- Drainage Information Summary Form;
- Description of existing site conditions, soils, and existing drainage system;
- Description of developed site conditions;
- Erosion control risk assessment:
- Description of proposed erosion control BMP's;
- Upstream analysis;
- Downstream analysis;
- Geotechnical reports and other analyses (if applicable); and
- Basin map(s) must be included as part of the report with sub-basins and upstream and downstream basins.

Engineer's stamp, signature and date on drainage report;

The upstream analysis with narrative, basin map and other supporting information;

The downstream analysis with narrative, basin map and other supporting information, this analysis shall extend for at least a quarter of a mile downstream of the subject property. The analysis shall include photographs of the downstream drainage system (when possible) and an engineering and computational assessment of the capacity;

Critical areas mitigation measures for drainage impacts;

Design information and calculations for proposed quantity control measures (detention, retention or infiltration system), erosion control measures, water quality measures, and storm water conveyance;

All inputs shall be shown in a basin table with enough information to independently duplicate the analysis.

Outputs from computer calculations shall be clearly labeled and indexed with names and descriptors that reflect the basin names.

Operations and Maintenance (0 & M) Manual for the entire drainage system;

Design information, soil logs, describe method used to test the soils, calculations and report on proposed infiltration system(s), if applicable. If this information is in the soils report, please state, "See soils report";

Geotechnical information and discussion, summary of the tests, requirements for grading work and the testing schedule, geotechnical engineering or geologic reports if required, shall be stamped, signed and dated by licensed professional who is registered in the State of Washington. Do not duplicate if in the soils report;

Basin map(s) or plans for the site and offsite areas which show the location of basins and sub-basins which correspond to the analysis for the site, as well as the upstream and downstream areas;

Clearly delineate basins/sub-basins, include area for each, include location and area for each cover type, and indicate pollution or non-pollution generating;

Basin map(s) shall include contours or point elevations with enough detail to determine flow direction and slope.

For infiltration facilities; long term infiltration rate must be supported by a geotechnical report. Separation from high ground water must be addressed and mounding analysis as necessary.

#### **DRAINAGE INFORMATION SUMMARY**

Project Name:	
Project Total Area:	
Number of Lots (if applicable):	

## **Summary Table**

Drainage Basin Information	Individual Site Information			Total Site
	A	В	С	
Area of Impact				
Existing Condition Area (ac.)				
Pervious Area (ac.)				
Impervious Area (ac.)				
Proposed Condition Area (ac.)				
Pervious Area (ac.)				
Impervious Area (ac.)				
<ul><li>Non-pollution Generating (ac.)</li></ul>				
<ul><li>Pollution Generating (ac.)</li></ul>				
Pre-Developed Runoff Rates				
Q (cfs.) 2 year				
10 year				
100 year				
Post Development Runoff Rates				
Q (cfs.) 2 year				
10 year				
100 year				
Offsite Upstream Area				
Type of Storage Proposed				
Approx. Storage Volume (cu. ft.)				
Type of Treatment				
Low Impact Development				

#### Provide a written executive summary of the plan (2 pages maximum)

- Drainage plan description, outline the concept to comply with the City code
- Water quality measures being proposed
- Describe the drainage basins and sub-basins on-site and off-site, existing and proposed (refer to basin maps in the report)
- Describe or sketch of the drainage system proposed for the development
- Downstream analysis, summary of key issues and limitations
- Upstream analysis, summary of key issues to be addressed
- Totals should add up to area of impact
- Add columns/rows as needed