



Single-Family Stormwater Management Plan Submission Guidelines (2021)

The District of West Vancouver requires a stormwater management plan (SWMP) be prepared for any new single-family home or redevelopment of a single-family home.

Requirements

The Stormwater Management Plan must be prepared by a Professional Engineer (P.Eng.) specialising in stormwater management, who is registered with Engineers and Geoscientists BC.

- The SWMP must be stamped, signed and dated by the P.Eng.
- The P.Eng. must also provide:
 - Schedule B (Assurance of Professional Design and Commitment for Field Review) from the British Columbia Building Code latest edition.
 - Schedule C (Declaration of Insurance Coverage for Registered Professionals) from the Permits and Inspections Department, District of West Vancouver.
- The applicant is to provide two complete reports with all drawings prepared on suitably sized drawings sheets. Once the report is accepted by the District, the applicant is to provide an electronic copy of the report, including all drawings, in PDF format.

The SWMP (report as well as any drawings) must include the following information:

- Legal address of the lot where SWM is to be installed.
- Name and contact information (address, telephone and email address) for the designer.
- Revision information including:
 - Date of revision
 - Revision number
 - Purpose of revision
 - Revision clouds to identify changes from previous revision
- Drawings:
 - Prepared based on the topographical survey of the lot, prepared by a British Columbia Land Surveyor.
 - Minimum drawing scale 1:500 and minimum sheet size 11x17. Larger size drawing sheets are encouraged if needed to provide necessary detail.
 - Overall site plan showing property boundaries, lot dimensions, area, easements and right-of-ways, and utility service connections.
 - Pre-development site plan showing current land use, including permeable and impermeable surfaces, as well as any current stormwater management facilities. The area, in square meters, of each land use shall be identified on the drawings.
 - Post-development site plan showing proposed land use, including permeable and impermeable surfaces, proposed stormwater management facilities and offsets from buildings and/or property lines. The area, in square meters, of each land use shall be identified on the drawings.

- Profile drawings showing key features (including invert elevations) for the proposed stormwater management system, such as sumps, infiltration tanks, inspection chamber and tie-in to existing District storm system.
- Lot grading showing overland flow paths, swales, ditches, catch basins, lawn basins, trench drains and any other infrastructure to collect surface runoff.
- Description, drawing and sizing of the rainwater source controls to be used.
- Roof leader connections and foundation drainage shown separately.
- Detention system (if applicable):
 - Detention tank size, material and effective volume
 - Outflow rate control (orifice) including size, overflow and anti-clogging details
- Infiltration system (if applicable):
 - Infiltration tank size, material and effective volume
 - Infiltration testing report
 - Effective volume capture for infiltration to landscape areas
- Pumped system (if applicable)
 - Provide pump curve and specifications
 - System must have an audio and visual alarm system that sounds inside the home when pumps fail.
 - System must have backup power for the pumps (i.e., a generator) to provide power for pumps in the event of a power failure.

Once the stormwater management system is installed, the P.Eng will be required to provide:

- An As-built set of drawings.
- A Schedule C-B from the BC Building Code.
- An Operation and Maintenance Manual for the SWM system, including any pumps, generators and alarms if required.

If a pumped system is required to connect to the municipal storm system a Section 219 Covenant must be placed on the title to the lot, so that all current and future homeowners will be required to maintain the pump, generator and alarms in working order. The District will provide this document for signature by the homeowner(s) once an initial review of the SWMP has occurred and it is ascertained it is a requirement. All costs for the document preparation and Land Title Office registration will be borne by the homeowner(s).