
EROSION AND SEDIMENT CONTROL SMALL LOT DEVELOPMENT (LESS THAN 1,000M²)*

UNDERSTANDING THE ISSUE

Land development activities such as clearing land, grading slopes, excavating, and stockpiling of materials can lead to the erosion of soils and deposition of sediment in the City's storm sewer system or nearby watercourses. In urban environments, construction sites are the primary cause of exposed soils. Sediments that are washed off areas of exposed soil during rainy periods or are contained in water that is pumped from excavations enter the storm sewer system. Storm sewers are connected to the nearest body of water where contaminants can be toxic to aquatic life and the environment.

Sediments from construction sites may also plug catch basins and restrict flows in sewers creating local flooding conditions and increase the costs of maintaining the sewer system.

Other construction site pollutants that may enter the storm sewer system include concrete, stucco, paints, adhesives, solvents, cleaners and drywall mud/compound. For further information see Bulletin 2002-001-EV, Construction Site Wastes.

DOES THIS BULLETIN APPLY TO YOUR PROJECT?

*Sites which are less than 1,000m² and have an excavation depth of one storey or less must follow the Best Management Practices listed below. These sites are not required to submit an Erosion & Sediment Control plan to the City for review. Refer to Bulletin 2002-003-EV for Sites 1,000m² or more and/or with excavation depths which are greater than one storey.

BEST MANAGEMENT PRACTICES

Controlling erosion and preventing the release of sediments from construction sites can be an effective means of minimizing the discharge of sediments to the storm sewer system. To reduce sediment discharges from a construction site, the following erosion and sediment control measures should be practised:

Site Layout and Clearing Schedules

1. Time the clearing and excavation activities so that they occur no sooner than is necessary for subsequent construction activities.
2. Remove as little of the existing vegetation as possible. Vegetation holds the soil in place and reduces the velocity of runoff on site which reduces the erosive actions from runoff.
3. Store excavated soils away from storm drains or paved surfaces so that runoff will be filtered by existing vegetation or collected in the perimeter ditches.
4. Prevent traffic from tracking mud offsite by installing a site access pad (crushed gravel on the driveway or garage area) and restrict traffic to this area where practical. Trees must not be removed to provide the site access pad.

Erosion Control Measures

1. Cover temporary soil stockpiles with plastic or tarps.
2. Drape the excavation walls with plastic or tarps until the foundation has been poured.
3. Backfill the basement walls as soon as possible and rough grade the lot.
4. Remove excess soil from the site immediately after backfilling to eliminate sediment loss from surplus fill.
5. Re-vegetate or landscape the site as soon as practically possible.
6. Limit machine access and operations to the prepared access areas only.

Drainage and Sediment Control

1. Prevent runoff from entering the construction site and divert runoff away from cleared areas using berms or swales.
2. Use silt fences around stockpiles of soil and sloped areas.
3. Collect runoff and treat in a sediment trap or other approved treatment system prior to discharge.
4. Install inlet protection (i.e., sediment sacks) to protect storm sewers, within 30m downgradient of the Site.

The attached drawings illustrate typical lot development plans with erosion and sediment control features.

SOIL SPILLS AND TRACKING

Any soil that has been spilled or tracked onto the streets or public property must be cleaned up immediately using shovels and brooms or mechanical means (i.e., sweeper vehicle). **Do not** wash soils or sediments onto streets or into the storm sewer system. Any soil or dirt tracked onto City streets must be reported to the Streets Operation Branch at 311. If City crews are required to clean up a spill, the responsible party will be billed for the clean-up.

ENFORCEMENT

City Inspectors have right of entry to carry out random inspections to ensure compliance with applicable bylaws and bulletins. If compliance issues are identified, the City Inspector may require the Site to conduct environmental monitoring (refer to Bulletin 2002-003-EV).

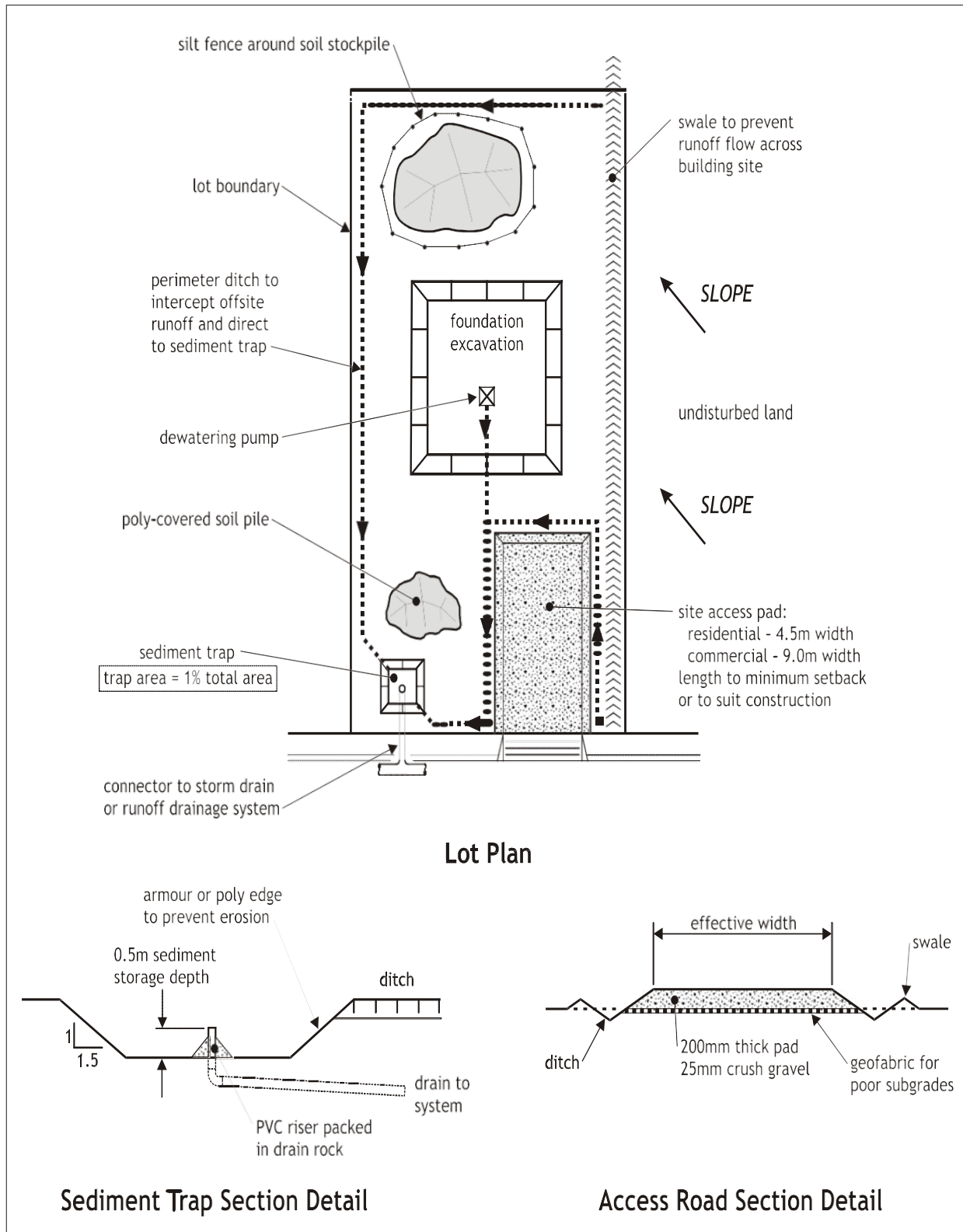
Section 3.2(1) of the Sewer and Watercourse Bylaw No.8093 states that "No person shall cause or permit contaminated water or wastewater to be discharged into a storm sewer". Violators are subject to fines of up to \$10,000 per offence.

For further information contact the Environmental Protection at 311, 604.873.7000 or at environmentalprotection@vancouver.ca.

(Original signed)

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SINGLE LOT DEVELOPMENT EROSION AND SEDIMENT CONTROL FEATURES



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