
BULLETIN 2000-001-BU/PL

APRIL 19, 2007

LOT DRAINAGE REQUIREMENTS FOR NEW HOMES

Constructing new homes in existing built-up areas has increasingly led to problems of water drainage from one lot to another especially when ground level is raised with respect to adjoining lots. This bulletin is provided to raise awareness of this issue and to identify a change in policy with respect to the content of plans submitted for building permit.

When applying for a building permit it is required that the site plan show:

1. any difference in existing/proposed elevation between your property and adjacent neighbouring properties, and
2. all lot surfacing materials (i.e., grass, concrete, gravel) including sidewalks, patios, parking areas, etc.

Grade Differences

Grade differences between adjacent lots create potential drainage problems from surface (or subsurface) water draining from paved areas and sidewalks or saturated ground to neighbouring properties. Plan submissions must include details of how the site drainage system will contain excess water on the property of origin and drain it by an approved method to a storm water drainage system on the same property.

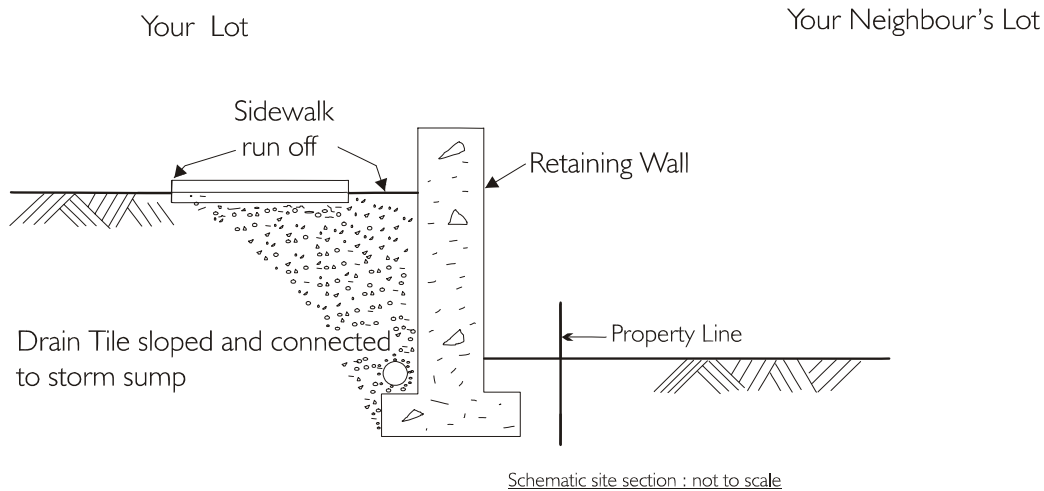
Preferred Solution:

- A retaining wall and drain tile system along the elevated areas will help retain storm water on the property and convey it to the storm water system.
- The retaining wall should be of concrete construction or landscaping blocks constructed in such a manner that seepage (through joints) will not occur. The top of the wall must be higher than your paved areas or sidewalks thereby preventing water from flowing over the wall.

NOTE: Railway ties, fencing material or wooden posts will not contain the water on your side.

The drain tile must run the entire length of the retaining wall at an elevation lower than the surface of the lower adjacent property and be conveyed to the storm water sump.

Please note, if the retaining wall exceeds 4' in height a building permit is required.



Grade Changes

Existing grade levels established on the design drawings accepted for building permit cannot be altered during construction unless prior approval is granted and the permit drawings are amended accordingly. This amendment process will involve a site visit by Plumbing Inspection Staff to confirm that the site drainage system is either not affected or is altered to accommodate the grade changes. Vancouver Building Bylaw and Zoning & Development Bylaw issues will also be reviewed.

Paved Areas

Rain water collected by non-porous surfacing such as paving or concrete on driveways, parking pads, sidewalks, patios, etc., must be redirected away from neighboring property lines, collected and piped to the storm sump.

Inspections

If the retaining wall, drain tile, and site drainage piping are installed at the time of construction no further permits will be required and inspection will be carried out during the normal construction stage.

Should a final inspection show a grade change other than what is shown on the accepted building plan, revised drawings will be required showing site drainage details and the appropriate fee for review of the revised drawings will be charged. *Also, a special inspection permit fee will be charged for the site visit by a District Plumbing Inspector to determine if the change of grade will create any drainage problems for adjoining properties. The special inspection permit fee will also cover a subsequent inspection that may be required to determine of any remedial work required to the drainage system has been carried out.*

Your forethought in addressing site drainage issues before commencing construction will help prevent drainage or flooding conditions for fellow neighbours during or after the construction of your new home.

Additional Information for the Home Designer

For one- and two-family dwelling developments that are “outright” under Zoning (i.e., where all relevant regulations of the Zoning & Development and Parking Bylaws are met and where no design discretion nor by-law relaxations are involved), no development permit will be required; however, any proposed alterations to grade must be identified and resolved on plan to the satisfaction of the City Building Inspector, including proper site drainage and surface treatment, prior to the issuance of a building permit.

For one- and two-family dwelling developments that are “conditional” under Zoning (i.e., where conditional approval is required by the Director of Planning relevant to design discretion or relaxations of the bylaw), any proposed alterations to grade will require Director of Planning approval, which may necessitate submission of a development application to determine site context and carry out neighbourhood notification. If approved by the Director of Planning under Zoning, the requirements for site drainage and surface treatment, as noted above, must be resolved to the satisfaction of the City Building Inspector prior to the issuance of a building permit.

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