



CITY OF RICHMOND

SUBDIVISION AND DEVELOPMENT BYLAW NO. 8751

BYLAW NO. 8751

EFFECTIVE DATE – July 11, 2011



SUBDIVISION AND DEVELOPMENT BYLAW NO. 8751

A bylaw to regulate and require the provision of works and services in connection with the subdivision and development of land and to establish standards for the construction and upgrading of dikes

Whereas the City may, under s. 938 of the *Local Government Act*, regulate and require the provision of works and services in respect of the subdivision of land, and require as a condition of the approval of a building permit or a subdivision that the owner of the land provide works and services on the land being developed or subdivided and on the adjacent highway, all in accordance with the works and services standards established in the bylaw; and

Whereas the City may, under s. 939 of the *Local Government Act*, require that the owner of land that is to be subdivided or developed provide excess or extended services as defined in that section; and

Whereas the City may, under s. 69 of the *Community Charter*, impose requirements on the owners of dikes or persons undertaking the construction of dikes; and

Whereas the Council of the City may, under s. 154 of the *Community Charter*, delegate its powers, duties and functions to an officer or employee of the City;

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. In this bylaw,

APPROVING OFFICER

means the person appointed to that position under the *Land Title Act*.

BUILDING INSPECTOR

means a person appointed as a building inspector as defined in Building Bylaw No. 7230.

DEVELOPER

means, as the context requires, the owner of land in respect of which a subdivision application or building permit application has been made.

**GENERAL MANAGER,
ENGINEERING AND
PUBLIC WORKS**

means the person appointed to that position by the Council or a person designated by the

General Manager to act in his or her absence.

SECURITY

means cash or a clean, unconditional, irrevocable and automatically renewing letter of credit drawn on a chartered bank or credit union having a branch in the City at which demand may be made on the letter of credit.

2. No person shall subdivide land in the City unless the works and services required by this bylaw have been provided by the **Developer** to the satisfaction of the **General Manager, Engineering and Public Works**, or the **Developer** has entered into an agreement with the City to construct and install the required works and services by a date specified in the agreement, and provided to the City **Security** in the amount determined by the **Approving Officer** in consultation with the **General Manager, Engineering and Public Works**, having regard to the cost of installing and paying for the works and services.
3. Section 2 does not apply:
 - (a) within the area indicated on Schedule A, in relation to any works and services other than water distribution systems and sewage collection systems;
 - (b) in relation to underground wiring, conduit and vaults, in the case of any subdivision resulting in the creation of fewer than 2 additional parcels in an area zoned for single-family residential use only where the electrical and telecommunication services abutting the parcel being subdivided and all immediately abutting parcels are above-ground; or
 - (c) in relation to works and services of any type, in cases where the **General Manager, Engineering and Public Works** determines that the need for the works or services is not directly attributable to the subdivision, or to buildings likely to be constructed in the subdivision.
4. No person shall construct a building or structure in the City for which a building permit is required unless the works and services required by this bylaw have been provided by the **Developer** to the satisfaction of the **General Manager, Engineering and Public Works**, or the **Developer** has entered into an agreement with the City to construct and install the required works and services by a date specified in the agreement, and provided to the City **Security** in the amount determined by the **Building Inspector** in consultation with the **General Manager, Engineering and Public Works**, having regard to the cost of installing and paying for the works and services.

5. Section 4 does not apply:

- (a) within the area indicated on Schedule A, in relation to any works and services other than water distribution systems and sewage collection systems;
- (b) outside the area indicated on Schedule B, in relation to a building permit authorizing the construction of a single family dwelling whether or not the dwelling contains a secondary suite or in relation to the construction of a two-family dwelling; or
- (c) in relation to works and services of any type, in cases where the **General Manager, Engineering and Public Works** determines that the need for the works or services is not directly attributable to the subdivision, to buildings likely to be constructed in the subdivision, or to the building for which a building permit application has been made.

6. The **General Manager, Engineering and Public Works** may

- (a) from time to time, prescribe the form of agreement to be used where the City is entering into an agreement pursuant to section 2 or section 4, provided that each such agreement shall require the **Developer** to:
 - i. maintain the works and services for a period specified in the agreement following completion or substantial completion of construction, and to repair and make good all defects and deficiencies appearing in the works and services during that period;
 - ii. provide to the City throughout the maintenance period performance **Security** in the amount determined by the **General Manager, Engineering and Public Works**;
 - iii. carry third party liability insurance in an amount and form acceptable to the **General Manager, Engineering and Public Works**, in respect of claims arising out of death, personal injury or damage arising from the construction of the works and services; and
 - iv. indemnify the City and save it harmless in respect of all costs and expenses it may incur as a result of faulty workmanship or defective material in the works and services in respect of which the City has provided notice to the **Developer** prior to the City's final acceptance of the works and services;
- (b) execute and deliver such agreements on behalf of the City, and

- (c) require that such agreements be drafted in a form that is registrable under s. 219 of the *Land Title Act* against title to the land being subdivided or built upon.

7. The works and services required by this bylaw are the following:

- (a) highways and lanes, boulevards including street trees and other landscaping, boulevard crossings, culverts, transit facilities, sidewalks, walkways, highway and walkway bridges, curbs and gutters, traffic signs and signals, street lighting and conduit and vaults for underground wiring;
- (b) water distribution systems connected to the City's water distribution system including, without limitation, pipelines, fire hydrant systems, valves and valve chambers, meters and meter chambers;
- (c) sewage collection systems connected to the City's sewage collection system including, without limitation, gravity mains, forcemains, lift stations, manholes and sewage holding facilities; and
- (d) drainage collection systems connected to the City's drainage collection system including, without limitation, enclosed storm sewers, catch basins, manholes, ditches, gates, stormwater retention and detention facilities, and environmental control facilities.

- 8. The works and services described in section 7 must, in all cases, be provided on that portion of any highway or lane immediately adjacent to the parcel that is the subject of the subdivision or building permit application, as the case may be, or in a utility statutory right of way, unless additional requirements are imposed under section 13.
- 9. The works and services required by sections 2 and 4 and under section 13 must be constructed and installed at the cost of the **Developer** to the standards set out in Schedules C through H, except to the extent that such standards may have been varied by development variance permit or board of variance order, and in accordance with such technical specifications as may be prescribed by the **General Manager, Engineering and Public Works** from time to time.
- 10. If works and services of the type described in section 7 are already in existence on or in the highway or lane adjacent to a parcel being subdivided or on which a building is proposed to be constructed or in a utility right of way, and the works and services do not comply with the standards specified in section 9, the **Developer** must alter the works and services so that they comply with the standards, and the provisions of sections 2 and 4 regarding agreements and **Security** apply to the alterations.

11. The **General Manager, Engineering and Public Works** may require a **Developer** to pay to the City, in lieu of constructing or altering works and services required by this bylaw, cash in the amount determined by the General Manager to be the cost of designing and constructing or altering the works and services as of the time of approval of the subdivision or issuance of the building permit including any land acquisition costs, if the General Manager determines on the basis of sound civil engineering practice or cost considerations that the works should be constructed or altered at a later time or concurrently with the construction or alteration of works and services serving adjacent or nearby parcels of land, and in such cases the City shall deposit the funds into a reserve fund established for the construction or alteration of the works and services.
12. The works and services required by this bylaw shall be provided in dedicated highways, unless the **General Manager, Engineering and Public Works** has approved the location of the works and services in a statutory right of way granted to the City, in which case the statutory right of way, including any required plan of right of way, must be prepared at the cost of the **Developer**, in terms satisfactory to the **General Manager, Engineering and Public Works** and the City Solicitor, and deposited concurrently with the deposit of the subdivision plan in the case of a subdivision application and prior to the issuance of the building permit in the case of a building permit application. Where an existing utility right of way is of insufficient width to accommodate the works and services, the **General Manager, Engineering and Public Works** may require the granting of additional right of way area to the City and this section applies to the preparation and deposit of a revised plan of statutory right of way.
13. The Council delegates to the **General Manager, Engineering and Public Works** the powers of the Council under the *Local Government Act* to:
 - (a) require a **Developer** to construct excess or extended services as defined in section 939 of the Act;
 - (b) determine whether the cost to the City to provide the excess or extended services would be excessive and, in that event, that the cost must be paid by the **Developer**;
 - (c) determine the benefit of the excess or extended service that may be attributed to each of the parcels of land that will be served by the services; and
 - (d) impose latecomer charges under section 939 of the Act including interest at the rate established by Excess or Extended Services and Latecomer Payment Interest Rate Establishment Bylaw No. 6936 or any successor bylaw.

14. For the purpose of section 13, the **General Manager, Engineering and Public Works** may execute and deliver on behalf of the City agreements with **Developers** regarding the collection and remittance of latecomer charges, which agreements may be combined with works and services agreements as referred to in sections 2 and 4.

15. Where a subdivision or building permit application in complete form was made prior to the adoption of this bylaw,

(a) in respect of the matters dealt with in section 11 of this bylaw, the subdivision may be approved or the building permit issued in accordance with the bylaws repealed by this bylaw, provided the subdivision is approved or the building permit is issued no later than 24 months after the adoption of this bylaw, and

(b) in respect of all other matters dealt with in this bylaw, the subdivision may be approved or the building permit issued in accordance with the bylaws repealed by this bylaw, provided the subdivision is approved or the building permit is issued no later than 12 months after the adoption of this bylaw,

unless the applicant has requested in writing that the application be considered and approved in accordance with this bylaw.

16. No person shall construct or repair or modify any dike or any embankment, wall, fill, piling, pump, gate, floodbox, pipe, sluice, culvert, canal, ditch, drain or any other thing that is constructed, assembled or installed to prevent the flooding of land, unless the works comply with Schedule H.

17. The following bylaws are repealed:

- (a) Subdivision Bylaw No. 6530;
- (b) Richmond Off-Site Works and Services Bylaw No. 5720.

18. This bylaw may be cited as “**Subdivision and Development Bylaw No. 8751**”.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

CITY OF RICHMOND
APPROVED for content by originating dept.
APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER

SCHEDULE A to BYLAW NO. 8751



**Boundaries of servicing exemption
in the Steveston Townsite**
*(Except water distribution and sanitary
sewerage collection systems)*

Original Date: 11/02/10

Revision Date:

Note: Dimensions are in METRES

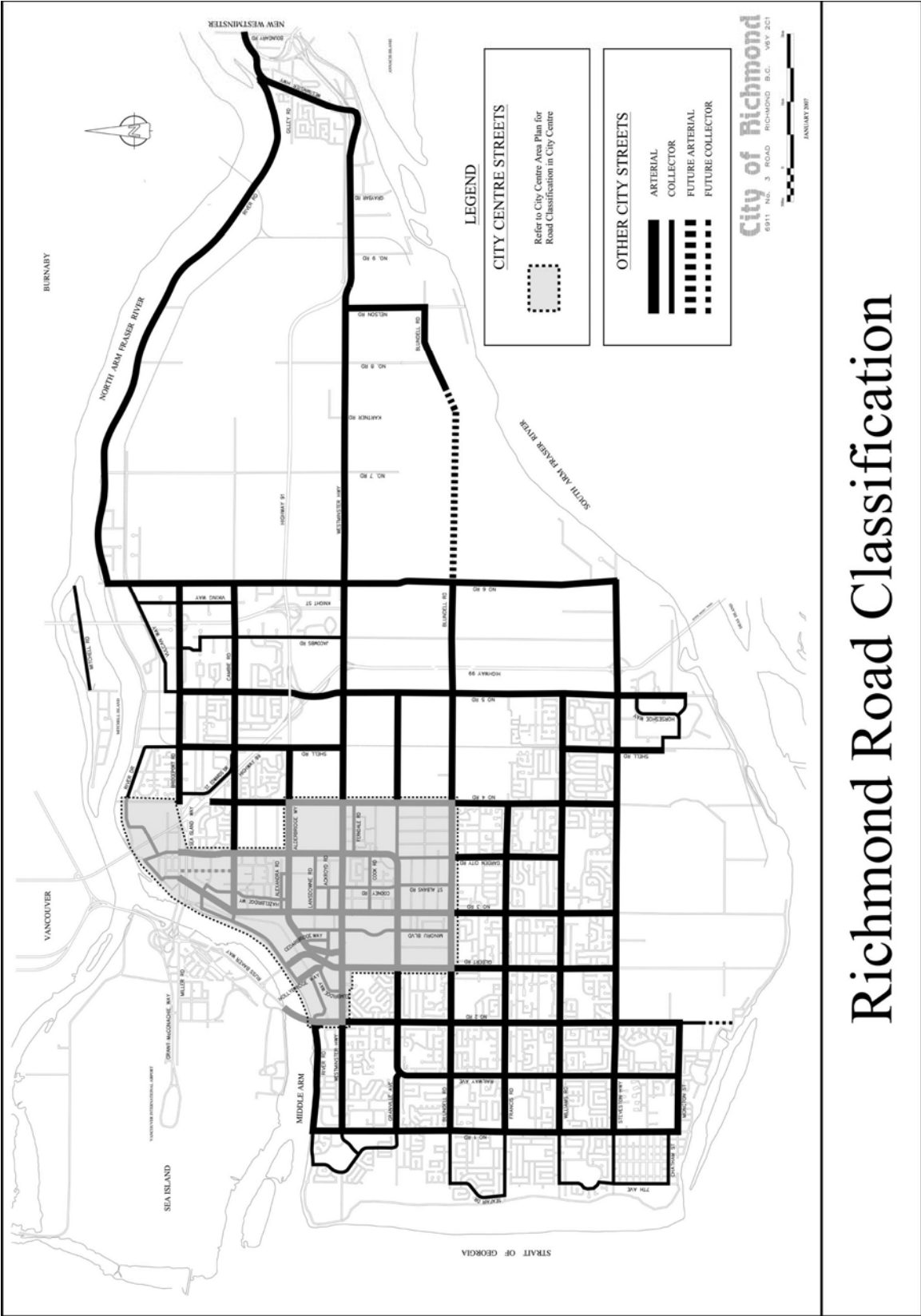
SCHEDULE B to BYLAW NO. 8751



SCHEDULE C to BYLAW NO. 8751
HIGHWAY STANDARDS -Road Cross Section Requirements

Road Classification	Road Dedication	Pavement Width	Sidewalks/ Edge Treatment	Curb/Gutter
1. Arterial (Undivided)	24.0 m (min) at mid-block + 1.8 m (per Bike lane) + 3.0 m (per parking bay) + 3.3 m (at intersection per left turn bay) + 1.2 m (divided arterial per centre median)	14.0 m (min) at mid-block + 1.8 m (per Bike lane) + 3.0 m (per parking bay) + 3.3 m (at intersection per left turn bay) + 1.2 m (divided arterial per centre median)	Both sides with lighting/planting strips. Sidewalk to be on the outside of the lighting/planting strips, away from pavement.	Barrier curb on both sides and raised median
2. Collector (Residential)	20.4 m	11.2 m	Both sides with boulevards	Barrier curb on both sides
3. Local/Collector (Industrial/Commercial)	21.2 m	12.0 m	Both sides with boulevards	Barrier curb on both sides
4. Local Residential (Multi Family/Townhouse)	20.4 m	11.2 m	Both sides with boulevards	Barrier curb on both sides
5. Local Residential (Single Family)	17.7 m	8.5 m	Both sides with boulevards	Barrier curb on both sides
6. Cul-de-sac Residential (Single Family)	17.7 m at throat and 17.7 m bulb radius	8.5 m at throat and 13m bulb radius	Both sides and around the radius. Blvds on both sides	Barrier curb on both sides around bulb
7. Cul-de-sac Residential (Multi Family/Townhouse)	20.4 m at throat and 19 m bulb radius	11.2 m at throat and 13m bulb radius	Both sides and around the radius. Blvds on both sides	Barrier curb on both sides around bulb
8. Cul-de-sac (Industrial/Commercial)	21.2 m at throat and 19 m bulb radius	12 m at throat and 15m bulb radius	Both sides and around the radius. Blvds on both sides	Barrier curb on both sides around bulb
9. Service Lane (City Centre)	9.0 m	7.5 m	One Side with lighting strip	Rollover curbs on both sides
10. Service Lane (Non-City Centre)	6.0 m	5.1 m		Rollover curbs on both sides
11. Emergency Fire/Access Lane	6.0 m (7.5m in City Centre)	As required	Fence on both sides	
12. Walkway	3.0 m	3.0 m	Fence on both sides	
13. Partial Road	12.65 m	6.0 m	Sidewalk and boulevard on one side	Barrier curb on one side
14. Other: As per OCP	as per OCP	as per OCP	as per OCP	as per OCP

Note: The amount of road dedication assumes a 1.5 m wide sidewalk (where applicable). Additional road dedications will be required in pedestrian-oriented area, where sidewalk widths of 2.0 m (minimum) are required.



Schedule C to Bylaw No 8751: Richmond Road Classification Map

SCHEDULE D to BYLAW NO. 8751

WATER DISTRIBUTION SYSTEM STANDARDS

Provide a water distribution system capable of providing the greater of:

- (a) An adequate water supply for fire fighting, concurrent with water flow sufficient to meet maximum day demand; or
- (b) Water flow sufficient to meet peak hour demand;

Every water distribution system must be designed to convey adequate supply for consumption and fire protection demands at a pressure appropriate for the intended use of the land.

Fire Flow Demand

The fire flows presented are minimum levels of protection. The Consultant must determine whether the fire flow required for the proposed development will exceed these minimum required flows. Approval of the General Manager of Engineering and Public Works is required when the required fire flow for the proposed development exceeds the minimums.

All fire flows are to be available to the furthest distance within the site from the service location and/or at the point of highest elevation.

The minimum required fire flows for different land uses is provided in Table D.1.

Table D.1 Fire Flows

Zone	Required Fire Flow (l/s)
Single & Two Family Homes	95
Townhouses	220
Condo/Apartment	220
Commercial	200
Industrial/Institutional	250

Where the proposed development is connected to the City's water distribution system that provides fire flows lower than listed in Table D.1, approval of the **General Manager, Engineering and Public Works** and Public Works is required for the following:

- the development will be required to either upgrade the water supply system sufficiently to provide the water flow; or
- the development will be required to reduce the fire protection requirements of the proposed development to match the level of protection afforded by the City's water distribution system.

SCHEDULE E to BYLAW NO. 8751

SEWAGE COLLECTION SYSTEM STANDARDS

The total design sewage flow shall be based on the greater of a) ultimate population densities and land use designations as outlined in the Official Community Plan for the entire catchment area, or b) for the planned development for the entire catchment area. Sanitary sewers shall be designed to convey the calculated peak sewage flows, including an allowance for inflow and infiltration.

Sanitary sewers shall be designed to the following:

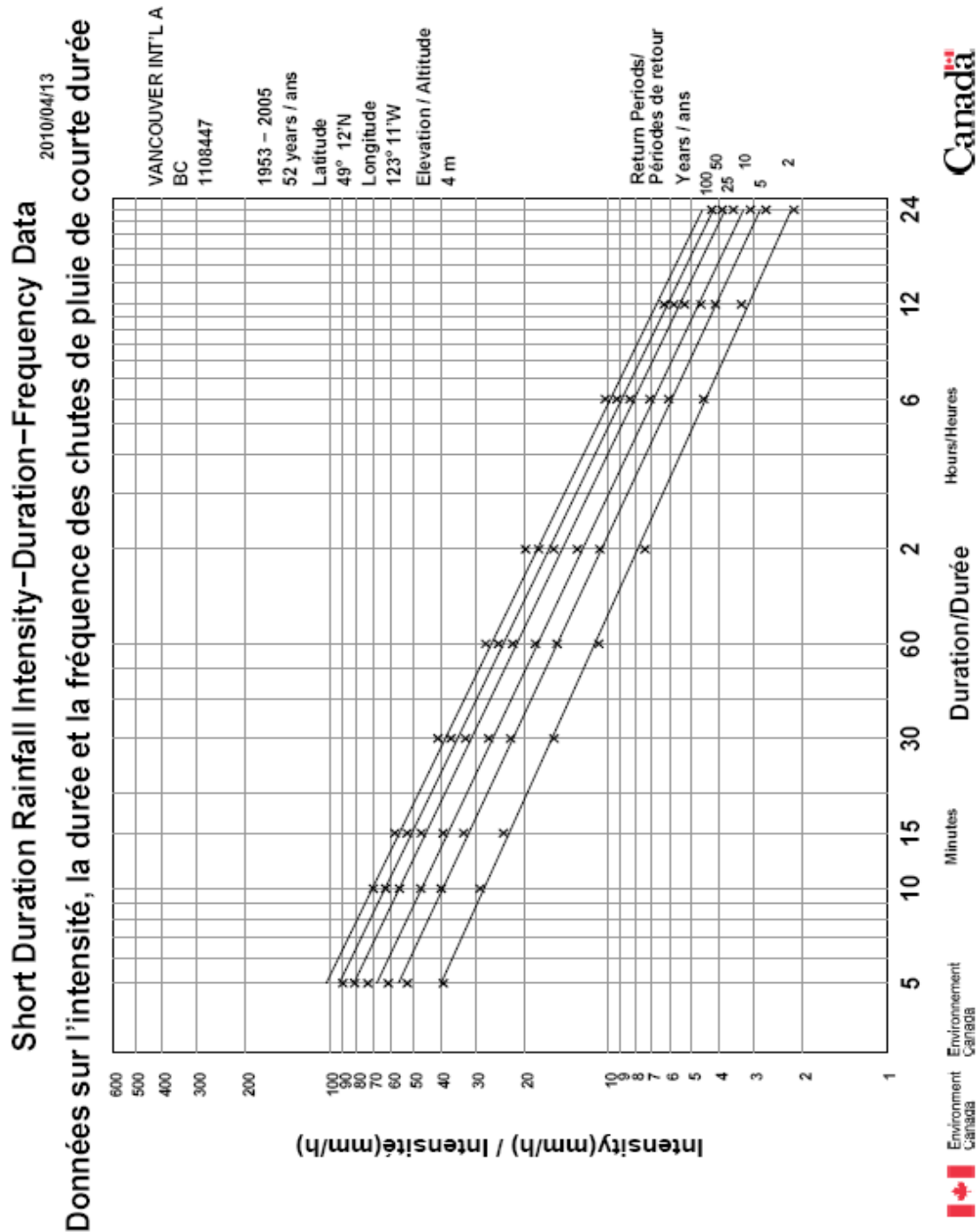
- minimum design velocity: 0.6m/s
- pipe capacity – new sewers: design peak wet weather flow rate not to exceed 50% of the full pipe capacity
- pipe capacity – existing sewers: design peak wet weather flow rate not to exceed 90% of the full pipe capacity

Forcemains shall be designed to the following:

- minimum design velocity: 0.9m/s

SCHEDULE F to BYLAW NO. 8751**DRAINAGE SYSTEM STANDARDS**

Provides a covered storm water collection system capable of handling run off for 10-year return period storm as determined by the Short Duration Rainfall Intensity – Duration - Frequency chart attached hereto.



SCHEDULE G to BYLAW NO. 8751

ROADWAY LIGHTING

The Illuminance Method shall be used to determine average maintained lux for various road and area classifications depending on the pavement type used and uniformity ration as specified in ANSI/IESNA RP-8-00 (Reaffirmed 2005).

To determine the required illumination levels, the designer shall confirm the road and area classification with the **General Manager, Engineering and Public Works**.

Some projects will require that lighting be provided for sidewalks, walkways and Laneways. In these instances, the illumination levels and uniformity ratios shall be determined by the **General Manager, Engineering and Public Works**.

SCHEDULE H to BYLAW NO. 8751

DIKING

Dikes shall be designed in accordance with the following:

- “Fraser River Hydraulic Model Update Final Report, March 2008”;
- “Dike Design and Construction Guide: Best Management Practices for British Columbia”, updated January 2011; and
- “Projected Sea Level Changes for British Columbia in the 21st Century”, December 2008