



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

“WATER UTILITY BYLAW, 1994, NO. 6417”

CONSOLIDATED FOR CONVENIENCE – DECEMBER 6, 2010

Amendment Bylaw, 1994, No. 6618	Schedules A & B
Amendment Bylaw, 1995, No. 6637	Schedules D, F, & H
Amendment Bylaw, 1995, No. 6747	Schedule B
Amendment Bylaw, 1996, No. 6846	Schedules A & B
Amendment Bylaw, 1997, No. 6972	Schedules A & B
Amendment Bylaw, 1998, No. 7088	Schedules A & B
Amendment Bylaw, 1999, No. 7177	Schedules A & B
Amendment Bylaw, 2000, No. 7278	Schedules A & B
Amendment Bylaw, 2001, No. 7356	Schedules A & B
Amendment Bylaw, 2002, No. 7453	Schedules A & B
Amendment Bylaw, 2003, No. 7546	Schedules A & B
Amendment Bylaw, 2004, No. 7646	Housekeeping & Schedule F
Amendment Bylaw, 2004, No. 7653	Schedules A & B
Amendment Bylaw, 2005, No. 7736	Schedules A & B
Amendment Bylaw, 2006, No. 7829	Schedules A & B
Amendment Bylaw, 2007, No. 7888	Housekeeping and Schedules A & B
Amendment Bylaw, 2008, No. 7969	Schedule A and B
Amendment Bylaw, 2009, No. 8033	Bylaw Notice Process
Amendment Bylaw, 2009, No. 8044	Schedule A & B
Amendment Bylaw, 2010, No. 8119	Schedule A & B

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 6417

A Bylaw to provide for the operation and management of a Water Utility

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

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PART 2 - TITLE

201 Short Title

1. This Bylaw may be cited for all purposes as "**Water Utility Bylaw, 1994, No. 6417.**"

PART 3 - INTERPRETATION

301 Definitions

- .1 "City" means The Corporation of the City of North Vancouver.
- .2 "Council" means the Council of the Corporation of the City of North Vancouver.
- .3 "dwelling unit" means one or more habitable rooms for the residential accommodation of only one family and contains or provides for only one cooking facility or set of cooking facilities.
- .4 "Engineer" means the person holding the office of City Engineer or his duly authorized representative.
- .5 "classroom" means a teaching area, laboratory, lecture theatre, gymnasium, or other indoor instructional area.
- .6 "electronic and paper media" means the local radio, TV stations or newspapers.
- .7 "fire line" means a pipe that is intended solely for the purpose of providing a standby supply of water for fire protection purposes.
- .8 "fixture" means any plumbing apparatus that uses or requires water from the waterworks system.
- .9 "low head loss" meter means a fire service type meter.
- .10 "metered service" means water service, the quantity thereof is determined by a meter or other measuring device.
- .11 "mixed use premises" means buildings having dwelling units and commercial uses.

- .12 "Owner" means the Owner as defined in the Land Title Act or an agent acting on his behalf, including any person occupying the property with the permission of the Owner.
- .13 "private service pipe" means the privately-owned underground pipe and fittings connecting a service pipe at or near the property line to a building.
- .14 "service pipe" means the City-owned pipe and fittings connecting a water main to a property, at or near the property line.
- .15 *This Definition was deleted November 1, 2004 by Bylaw No.7646.*
- .16 "Director of Finance" means the person holding the office of City Director of Finance or his duly authorized representative.
- .17 "to establish water service" means to enter into an arrangement for the supply of water through a completed service pipe.
- .18 "to sever water service" means to discontinue water service by cutting or removing a service pipe in part or in whole.
- .19 "to shut off" means to discontinue water service by closing a valve at or close to a property line.
- .20 "total floor area" means the area of floor or floors measured to the outside of a building including above and below ground structures.
- .21 "water connection reuse" means severing the existing connection for demolition and/or construction and installing a new water meter and a new shut off valve at property line.
- .22 "water service" means the supply of water by the City.
- .23 "Water Utility" means the waterworks system owned by the City.
- .24 "waterworks system" or "works" means the pipes, property, and all other facilities for the distribution of potable water.

PART 4 ORGANIZATION

401 Divisions

The authorities and responsibilities for the conduct, operation and maintenance of the Water Utility are in two divisions.

402 Financial

1. The financial division is under the direction and supervision of the Director of Finance who is responsible for:
 - (a) The management and control of all officers, servants or employees engaged in the financial affairs of the Water Utility including the billing of water rates and charges, and from time to time to prescribe the duties of each officer, servant or employee pursuant to the financial affairs of this Bylaw.
 - (b) The preparation, control and supervision of the financial books of the water utility.
 - (c) The rating of all buildings and premises, the collection of all water rates and other accounts or charges levied or imposed pursuant to the provisions of this Bylaw.

403 Engineering

- .1 The engineering division is under the direction and supervision of the Engineer, who is responsible for the works which distribute water within the City and to certain areas outside the City. The Engineer is responsible for the following:
 - (a) The works.
- .2 Management and control of all design, construction, operation and maintenance of all work in connection with the Water Utility, and full charge of the employees engaged in such work, including the laying of pipes and appurtenances and the installation, reading, and repair of meters and service pipes.
- .3 Management and control of all officers, servants or employees engaged in or connected with the works of the said Water Utility, and from time to time to prescribe the duties of any such servants or employees thereof pursuant to the engineering affairs of this Bylaw.

- .4 The presentation to Council of a report on the general condition of the works belonging to the Water Utility accompanied by such information and suggestions as he shall deem necessary.

PART 5 - ESTABLISHING & SEVERING WATER SERVICE

501 Application for Water Service

1. The responsibility for the cost of installing or replacing a water service is as follows:

TYPE OF INSTALLATION	RESPONSIBILITY FOR COST
(a) New Connection	Owner
(b) Existing Services: (i) Renewing to City Standard (ii) Upsizing Beyond City Standard	City Owner

Where "City Standard" is the pipe diameter deemed by the Engineer as appropriate for that land use, and the renewal is at the approval of the Engineer.

2. Before the laying of a private service pipe, the Owner of the premises to be served shall submit to the Engineer a written application for water service accompanied by the connection fee prescribed in Schedule "A" of the Bylaw and such other fees as may be applicable. The application shall state particulars of the location of the site, the type of structure erected or to be erected thereon, intended water use or uses, the required size, flow demand and location of the service pipe, and any other financial or engineering information requested by the Director of Finance and Engineer required to establish water service.
3. Property developments may choose to reuse an existing water connection of 20 years or less at the City Engineer's discretion, provided it is the correct size to meet flow requirements. The owner shall submit to the Engineer a written application for a water connection reuse accompanied by the fee specified in Schedule 'A'.
4. The installation of a private service pipe shall not proceed until the Engineer has approved the size and the location of the service pipe based on good engineering practice and compliance with applicable enactments, and upon payment to the City of the applicable connection fee for the required service pipe.

5. Only one domestic water service and one fire connection are allowed per property. The Engineer may approve additional connections upon being satisfied that there are no other practical means of providing adequate water supply and that public health will not be compromised.
6. The water service pipe shall not be turned on at the curb stop (property line) for occupancy use until the private plumbing system has been approved by the City plumbing Inspector on behalf of the Engineer or has been inspected for cross connections by the Engineer; this shall not prohibit the use of a water service for construction purposes for a limited time, provided the Engineer is satisfied that adequate provision is made to prevent backflow into the City water system.

502 Application to Sever Water Service

- .1 Water service to a property may be severed upon application in writing by the Owner and on payment of the Severance Fee as set out in Schedule "A" of the Bylaw, together with payment of any outstanding charges under this Bylaw to the date of application. Upon application to the Director of Finance, any prepaid rates will be pro-rated and the balance refunded.
- .2 An Owner wishing to demolish a building shall apply to sever the water service and shall not commence demolition until severance has been accomplished.
- .3 Where a service pipe remains shut off for a period of six (6) months and where no charges have been paid pursuant to this Bylaw, the service shall be deemed to be severed.

503 Location of Service Pipe

- .1 The location of a service pipe shall be determined by the Engineer, based on good engineering practice.

504 Type and Arrangement of Meters and Service Pipes

- .1 For any application for establishment of water service or for any subsequent relocation or modification of the service pipe and meter the Engineer may determine and specify the size of meter, piping and flow-detecting device, based on good engineering practice. If the Engineer determines that the sizes requested by an Owner are improper for the flows and use desired, the Owner must amend the application accordingly.
- .2 Refer to Schedule "C" of this Bylaw for the type and arrangement of meters.

505 Location of Meter

- .1 Refer to Schedule "C" of this Bylaw for the location of meters.

506 Enlargement of an Existing Service Pipe or Meter

- .1 The enlargement of a service pipe or meter may be permitted by the Engineer and may be proceeded with upon written application to the Engineer at cost for severance of water service and installation of new service pipe, as set out in Section 701 of this Bylaw.

507 Temporary Water Service during Construction

- .1 An Owner who requires temporary water service may obtain water by applying under Section 501 of this Bylaw.
- .2 Payment for water shall be in accordance with Schedule "B" of this Bylaw. The Engineer may deem that a meter is required.
- .3 Flat rates contained in Schedule "B" of this Bylaw shall be payable at the time the Building Permit is taken out for those buildings not having established metered water service.

508 Installation of Meters

- .1 The Engineer is authorized to install or to have installed, meters, if he so determines, in all commercial, mixed use, and industrial properties.
- .2 The Engineer is authorized to install or to have installed provision for meters in all residential properties and fire lines and may subsequently have a meter installed.
- .3 The Engineer may require the installation of or install a water meter despite the provisions of Sections 508.2 if he believes that the Owner's annual use of water is greater than 1.5 times the average for that type of building, in which case the Director of Finance shall levy the rates and charges as provided under this Bylaw.
- .4 The Engineer may permit the installation of or install a water meter, despite the provisions of Sections 508.2, if the Owner makes a written application for such.
- .5 Meters and provision for meters shall be installed in accordance with the policy set out in Schedule "C" of this Bylaw.
- .6 Water Meters are required on all new and replacement water service connections.

PART 6 - RESPONSIBILITY OF USERS

601 Use of Water

- .1 Except where it forms part of a manufactured product, no water shall be sold or conveyed beyond the property served without permission of the Engineer. No water shall be wilfully wasted, or, except with the approval of the Council, used for powering machinery or for any other use which the Engineer deems extraordinary. Water shall not be used for private fountains or ornamental ponds without recirculation.
- .2 Except for water cooled equipment units installed prior to February 1st, 1973, no water user shall be permitted to install water cooling equipment units which are designed to discharge water into a sewer, or to waste water, without recirculation, where such units draw or can, collectively, draw in excess of 45 litres per minute from the domestic water supply. Where units drawing an aggregate of 45 litres or less per minute are installed, there shall be an imposed annual flat rate charge as set out in Schedule "B" for each such unit; such charge is not to be prorated. This charge shall be in addition to any other flat rate or meter charge for water supply.
- .3 A person shall not use water from a fire line for any purpose other than fire fighting or required testing for fire protection purposes.

602 Repair of Leaks

- .1 Every Owner shall maintain the private service pipes, fittings, meter chambers, meter supports and fixtures in proper order and keep them free from leakage or wastage. Should leakage or wastage occur, the Engineer may give notice to the Owner to effect the necessary repairs or replacements within 96 hours or such lesser period as may be specified in the notice.
- .2 If the Owner fails to comply with such a notice within the time specified, the Engineer may either:
 - (a) Have the water service shut off until the repairs or replacements have been done, or
 - (b) In the case of unmetered service, have a meter installed, or
 - (c) Have the necessary work done, and any cost incurred may be recovered as a charge under this Bylaw.
 - (d) or any combination of the above.

603 Prevention of Contamination

- .1 No person shall connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container, or other appliance in a manner which, under any combination of circumstances may allow water waste, water, or any harmful liquid or substance to enter the City's system.
- .2 In addition to the requirements made by the City Plumbing Inspector for the installation of backflow prevention assemblies within the private plumbing system at the source of contamination, a backflow prevention assembly may be required by the Engineer on the water service pipe, should inspection on private property be restricted, or should, in the Engineer's opinion, the health hazard imposed on the water system warrant premise isolation. In any event, backflow prevention devices shall be installed for all uses serving docks, piers and underground sprinklers. Backflow prevention devices shall be installed in accordance with Schedule G of this bylaw. These devices must be annually maintained and kept in good working order. The owner must deliver proof of proper maintenance of the devices to the Engineer annually.
- .3 No person shall install a potable water piping system on private or City property using solder or other plumbing material which contains more than 0.2 percent lead in the case of solder or more than 8.0 percent lead in the case of pipes, fittings and other plumbing materials.
- .4 If a condition exists which is contrary to this section, the Engineer may give notice to the Owner to correct the fault within 96 hours or such lesser period as may be specified in the notice.
- .5 If the Owner fails to comply with such notice, the Engineer may either:
 - (a) Have the water service shut off until the fault has been corrected, or
 - (b) Have the fault corrected, or
 - (c) Take such other action either on or off the Owner's property as he deems appropriate to correct the fault or to reduce the possibility of contamination;

And any cost incurred by the City may be recovered from the Owner as a charge under this Bylaw.

604 Regulations Restricting the Use of Water

- .1 The Council may, by resolution, enact regulations restricting the use of water to a specific area, to any class of user, for any purpose of use or during any time of the day as a result of a drought or other reason.
- .2 The Engineer may, from time to time, impose restrictions on water use or change or revoke such restrictions, and in so doing, may make the restrictions applicable at specified times, on specified days, in specified areas, or for specified purposes.
- .3 The Regional Water Shortage Response Plan (as described in the separate Water Shortage Response Plan Bylaw, 2004, 7648) may be implemented by the Greater Vancouver Water District.”
- .4 Sufficient notice of the imposition of the regulations or restrictions contained within this bylaw shall be deemed to have been given by mention in the local electronic and/or paper media, or by delivery of a notification under this Section.) hereto and forming part of this Bylaw.
- .5 No person shall use water in contravention of these regulations or restrictions. Offenders may be subject to water shut off or prosecution.

605 Special Cases and Exemptions When Water Use Restrictions are Applicable

This section was deleted November 1, 2004 by Bylaw No. 7646.

606 Permits When Water Use Restrictions are Applicable

This section was deleted November 1, 2004 by Bylaw No. 7646.

607 Change in Use, Occupancy or Property Served

- .1 If any change occurs in the use, occupancy, site served, or other matter which may affect the fees or charges payable under this Bylaw or if any change in the other particulars given in the application for establishment of the service occurs, and should any such change entail an increase in the fees or charges; then such increase shall take effect from the actual date of change as determined or estimated by the Director of Finance.
- .2 Should any change entitle the Owner to a reduction in fee or charges or to a refund of fees or charges paid in advance, such reduction or refund shall take effect from the receipt of notice in writing, or from the actual date of change, whichever is later, but in neither case, beyond one year.

608 Removal and Relocation of Facilities

- .1 Owners or others desiring the removal or relocation of City owned water facilities including service pipe, meters, valves, chambers, hydrants or other fittings and appurtenances, shall bear all costs of such removal or relocation. The Engineer may refuse to permit the removal or relocation of facilities if fire protection or the operation or control of any portion of the City water system or other public or private facilities would be endangered.

609 Admission of City Employees

- .1 Employees of the City shall be admitted during reasonable hours to Owner's properties in order to inspect any private service pipe, fire line, water pipe, meter, appliance or fixture upon such premises. Such employees shall, on request, show proper identification.

- .2 The Engineer may, without liability to the Owner, inspect any part of any building, to expose piping, and to do any tests on water piping or fixtures belonging to the Owner that are required to determine compliance with this Bylaw.
- .3 It is an offence under this Bylaw to prevent inspections.

610 Interconnected Service Pipes

- .1 Where a site is supplied by two or more service pipes and the piping within the site is interconnected, the Owner shall install and maintain automatic backflow prevention valves of a type approved by the Engineer on all of the private service pipes or in such location or locations that will prevent backflow into the City's system or reversal of water meters. If the Owner fails to install the required devices within 30 days, then the City may either install them on the service pipes and charge the full cost to the Owner, or alternatively may discontinue service.

PART 7 - FEES AND CHARGES

701 Connection and Severance Fees

- .1 Applications for water service shall be accompanied by the connection fee prescribed in Schedule "A" of this Bylaw.
- .2 Applications for water service severance shall be accompanied by the severance fee prescribed in Schedule "B" of this Bylaw.

702 Application for Shut-off or Turn-on

- .1 All applications for either the shutting off or turning on of water service to any premises shall be made in writing by the Owner to Engineer. Applications to turn on will be accompanied by the fee set out in Schedule "A" of this Bylaw if water service has been shut off for more than 7 days.
- .2 Metered water charges shall continue to be payable for metered water services turned off for less than 60 days.
- .3 All rates and charges including penalties, if any, shall be paid on a pro rata basis to the date of shut-off or turn-on.

703 Testing of Meters

- .1 Flat rates and charges provided by Schedule "B" shall be due on the 1st day of January, in each and every year provided, however, a ten per cent discount on all such rates and charges shall be allowed if the rates and charges are paid on or before the close of business of the 29th of March, 1996. A penalty of five percent shall be added to all rates and charges remaining unpaid at the close of business on the 30th of April, 1996, and a further five percent penalty shall be added to all rates and charges remaining unpaid at the close of business on the 31st of July, 1996, and each and every year in which same are due.
- .2 If the meter is found to over-register or under-register by more than 2%, the test fee shall be returned, and the Director of Finance shall estimate the resultant over-charges or under-charges and settle with the Owner accordingly. No such settlement shall extend for a period beyond one year prior to the test, and any refund shall be made only to the person who overpaid.
- .3 If the inaccuracy of the meter does not exceed 2%, the test fee shall be retained by the City to partially offset the cost of the test, and there shall be no change to the charges.

704 Non-registering Meters

- .1 Meters, including strainers and remote reading heads, installed pursuant to this Bylaw, whether on a street or on private property, are the property of the City.
- .2 If a meter fails to register or to properly indicate the flow of water, or if for any reason the meter cannot be read, the Director of Finance shall render a bill based on the average previous consumption of the previous comparable six month period.

705 Adjustment for Leaks

- .1 If a meter shows excessively high consumption in comparison with previous readings, the Engineer may so notify the Owner and advise him to have all plumbing examined for leaks.

- .2 Where a leak is discovered, and where the Engineer is satisfied that, the Owner could not reasonably have been expected to be aware of such leak, the Director of Finance shall adjust the charge in accordance with the provisions of Section 704 of this Bylaw, provided, however, that no such adjustment shall be made unless such leak is repaired within 96 hours of the date of notification.

706 Date of Payment, Discounts and Penalties

- .1 Flat rates set out in Schedule "B" of this Bylaw shall be due on the last business day in February each year.
- .2 A ten percent (10%) discount on flat rates applies if all the rates which are due are paid in full before the end of February in the year in which the rates are due.
- .3 A penalty of five percent (5%) shall be added to all flat rates, which are not paid before the end of April of each year, and a further five percent (5%) penalty shall be added to all rates which are not paid before the end of July in each year.
- .4 Metered rates shall be billed every four months with minimum and maximum charges as per Schedule "B" of this Bylaw.

707 Commencement of Water Service

- .1 Water service to a new building without a meter shall commence for initial billing purposes from the date of the issuance of the Certificate of Occupancy by the Building Inspector.
- .2 Water service to a new building served by a meter will commence from the date the water is available through the meter.

708 Adjustment of Charges for a Partial Period

- .1 Where any meter, charge or fee is prescribed by the month, year, or other period, the amount payable for a partial period shall be calculated on proportionate basis as determined by the Director of Finance.

709 Rebate for Unoccupied Premises

- .1 Other than for a shut-off there shall be no rebate for unoccupied premises including dwelling units unless and until an application for severance has been received and accompanied by the severance fee specified in Schedule "A" of this Bylaw or until the premises, dwelling units or fixtures on which the charges are based are removed.
- .2 An application for rebate may be made in writing to the Director of Finance.

710 Levying Water Rates

- .1 The several fees, charges, and rates set forth in Schedules "A" and "B" of this Bylaw shall be charged, imposed and levied for water supplied or furnished or ready to be supplied or furnished, under the provisions of this Bylaw. All such rates, service charges, fees and all other penalties and charges payable under this Bylaw shall be payable by the Owner to the City and may be recovered by the City as provided by the Municipal Act, and shall form a charge on the lands or premises in respect to which water is supplied or furnished, or is ready to be supplied or furnished, as aforesaid, to the occupants thereof.

PART 8 - GENERAL

801 Pressure Supply and Quantity

- .1 The City does not warrant or guarantee pressure, nor a continuous supply of water, nor does it accept responsibility at any time for the maintenance of pressure on its lines nor for increases or decreases in pressure. The City reserves the right at any and all times, without notice, to change operating water pressures, to shut off water, or otherwise to interrupt water service for the purposes of making repairs, extensions, alterations or improvements, or for any other reason, and to increase or reduce pressure at any time. Neither the City, its officers, employees or agents shall incur any liability of any kind whatever by reason of the cessation in whole or in part of water pressure or water supply, or changes in operating pressures, or by reason of the water containing sediments, deposits, or other foreign matter.

- .2 Owners depending on a continuous and uninterrupted supply of water or having processes or equipment that require particularly clear or pure water shall provide such emergency storage, over-sized piping, pumps, tanks, filters, pressure regulators, check valves, additional service pipes, or other means for a continuous and adequate supply of water suitable to their requirements.

802 Tampering with the City's Facilities

- .1 No person shall tamper or interfere with the City's water works system, nor shall any person, except as authorized by the Engineer, connect to or operate any pipe, valve, meter, hydrant, or other part of the City's water system.

PART 9 - OFFENCES, PENALTIES AND ENFORCEMENT

Every person who violates a provision of this Bylaw, or consents, allows or permits an act or thing to be done in violation of a provision of this Bylaw, or who neglects to or refrains from doing anything required to be done by a provision of this Bylaw, is guilty of an offence and is liable to the penalties imposed under this Bylaw or any other applicable Bylaw of the City, and is guilty of a separate offence each day that a violation continues to exist.

Any person who contravenes any of the provisions of this Bylaw commits an offence punishable upon summary conviction and is liable to a fine of not more than \$10,000.00 or to imprisonment for not more than six months or to both. Each day that an offence continues shall constitute a separate offence.

Pursuant to Section 264 of the Community Charter, S.B.C. Chapter 26, any person designated as a Bylaw Enforcement Officer pursuant to the Bylaw Notice Enforcement Bylaw, 2005, No. 7675 or is named as the Enforcement Officer pursuant to the Ticket Information Utilization Bylaw, 1992, No. 6300 is hereby authorized and empowered to enforce the provisions of this Bylaw by Bylaw Notice or Municipal Ticket Information or as otherwise provided by this or any other Bylaw of the City of North Vancouver.

In addition any person continuing to offend, may have their water service turned off.

PART 10 REPEAL AND ENACTMENT

1001 Repeal

1. " Waterworks Bylaw, 1988, No. 5891" and amending Bylaws thereto are hereby repealed.

READ a first time by the Council on the 13th day of June, 1994.

READ a second time by the Council on the 13th day of June, 1994.

READ a third time and passed by the Council on the 13th day of June, 1994.

RECONSIDERED and finally adopted by the Council, signed by the Mayor and City Clerk and sealed with the Corporate Seal on the 27th day of June, 1994.

Signed by: "John E. Loucks", Mayor

Signed by: "Bruce A. Hawkshaw", City Clerk

Water Services

2011 CONNECTIONS AND SEVERANCE RATES

1. Water Service Connections

Size

Standard 19 mm	\$4500
>19mm	At Cost, with a minimum charge equal to the standard fee.

2. Water Service Severance

All service pipe sizes	\$800
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3. Water Connection Reuse \$2300

4. Turn on/off \$50

5. Flat fee for installation and removal of temporary meter \$400

A 50% rebate is available for standard 19mm water service replacements that are installed less than 2 years in advance of a City initiated programmed replacement of water services within the block.

SCHEDULE 'B'

2010 Water Use Rates

1 WATER RATES

.1 For Temporary Service during construction

Building Size (Total Floor Area)

46 sq. m to 460 sq. m	\$150.00
Over 460 sq. m but not exceeding 4,600 sq. m	\$300.00
Over 4,600 sq. m but not exceeding 23,000 sq. m	\$500.00
Over 23,000 sq. m	\$800.00

.2 Flat Rates (un-metered premises)

Single Family Dwelling.....	\$283	per year
Duplexes (per unit)	\$260	per year
Multiple Dwelling Units (including single unit dwellings with extra living units, apartments, condominiums, garden apartments and strata corporations) for each dwelling	\$187	per year
Lodging or Boarding Houses and Hotels (being premises which are not included in any other classification under this Bylaw, and which contain more than two rented rooms, or rooms available for rent).....	\$283	per year
Additional charge for each room in excess of two.....	\$27	per year
Stores, offices, other commercial premises not elsewhere designated; Churches and Public Halls per fixture	\$67	per year
Public and Private Hospitals and Nursing Homes per fixture	\$67	per year
Schools, per classroom	\$230	per year
Water Cooling Units.....	\$600	per year
Minimum charge for any service is	\$283	per year

2 METERED WATER RATES

For commercial and industrial properties, hospitals and schools served by water meters the following scale of charges shall apply:

.1 Billing Period

73.09 cents per cubic metre

A minimum bill for 30 cubic metres per month will be charged if a lesser quantity or no water is consumed.

.2 Metered Charges for Mixed Use Premises

Notwithstanding the minimum charge for any water user on metered rates, if the consumption is less than 30 cubic metres per month, the charge for Mixed Use Premises on metered rates shall be the flat rate for Multiple Dwelling Units provided in this Schedule times the number of dwelling units. Consumption of 30 cubic metres per unit, per month will be charged the metered rate.

3 MISCELLANEOUS CHARGES

.1 Testing a Meter as Provided in Section 703.

For meters 50 mm and smaller	\$115
For meters over 50 mm	\$225

SCHEDULE "C"

Water Meter Standards

1. GENERAL

- .1 In general, the City will supply all meters, chambers and automatic readers and associated wiring at the City's cost. The City will install the automatic readers at the City's cost. Installation of meters, chambers and associated work on private property will be done by the applicant at the applicant's cost. Installation of meters, chambers, and associated work on the City right-of-way will be done by the City at the City's cost.
- .2 If an Owner combines his potable and fire line in one line, resulting in the need for a meter of a large diameter than would otherwise be required, the Owner will pay for the total cost of supplying the meter.
- .3 The location of all meters must have the approval of the Engineer PRIOR TO INSTALLATION. Check with the Engineering department first to avoid delays or later expensive reconstruction.
- .4 Water meters are required in accordance with Section 508 of this Bylaw.
- .5 All meters shall be installed indoors. If the Engineer decides that the meter cannot be installed indoors, it shall be installed outside in a chamber on private property or, if not possible, then on City R.O.W.
- .6 All meters shall have automatic readers with remote read-outs. The applicant shall supply and install all raceways and install City supplied wiring required. Automatic readers shall be installed on the outside of the building, in a location acceptable to the City.
- .7 All meters shall have by-passes, sealed by the City and only operated by the City. The City will install a non-destructible tag requesting that if seal is broken to notify the City Yard at 987-7155 to avoid charge for unmetered water use.
- .8 All plumbing shall meet the requirements of the current Provincial Plumbing Code.
- .9 All piping shall be arranged so that the meter shall sit in a horizontal plane.

- .10 No pressure reducing valve shall be installed between the by-pass tees of the meter assembly. Any necessary reducing valve shall be located downstream from the meter and by-pass assembly.
- .11 Strainers shall be used on all meters greater than or equal to 75 mm and larger.
- .12 Refer to Standard #SAI-47 for diagrammatic layouts and standards SAI-48 and SAI-49 for detailed arrangements of pipe layouts and size of meter chambers.
- .13 Provision for a meter involves the applicant:
 - (a) Providing a spool piece inside building long enough to accommodate future meter.
 - (b) Pre-installing remote read-out wiring supplied by City.
 - (c) Ensuring that all hose bib and sprinkler takeoffs are down-stream of future meter.
 - (d) Ensuring that fire protection systems are isolated and taken off of meter on the City site.

2. INDOOR METERS

- .1 Reasonable access shall be provided during normal working hours for inspecting, repairing or changing the meter.
- .2 It is recommended that floor drains be provided for the testing, repairing or replacing of meters to handle any water spillage or leakage which could cause damage.
- .3 In order to prevent condensation on the surface of the meter or the effect of such condensation the applicant may insulate the meter if he so desires. However, the insulation shall be easily removable (not adhesive) and City, when repairing, servicing, or replacing the meter, will not guarantee the restoration of the insulation.
- .4 The meter shall normally be located as close to the point of entry as deemed possible by the City.
- .5 No drain valve or any other type of fixture through which water may be taken shall be located upstream of the meter.

3. OUTDOOR METERS

- .1 Meter boxes or chambers shall not be installed in any area where there is a possibility of vehicular traffic either moving or parked; either at the time of installation or in the foreseeable future. Meter boxes or chambers shall be easily and completely accessible at all times.
- .2 For details of chambers refer to standards #SAI-48 for meters 50 mm and less and SAI-49 for meters greater than 50 mm.
- .3 Chambers for meters greater than 50 mm must be drained to the City storm sewer system, using a pipe whose diameter is not less than 100 mm, not greater than 200 mm, depending on meter size.
- .4 Access covers for chambers with meters greater than 50 mm are required in accordance with SAI-49.

4. ANCHORAGE AND SUPPORT

- .1 Applicant shall provide adequate support for the meter. For meters of 50 mm or less the meter may be supported by adjacent piping.
- .2 For meters greater than 50 mm, support separate from the piping shall be provided.
- .3 The applicant is responsible for arranging piping so that the effects of hydraulic thrust are not transmitted to the meter assembly.

5. VALVES

- .1 For 50 mm and small meter settings, use approved valves having female iron pipe (F.I.P.) threaded connections.
- .2 For greater than 50 mm meter settings, use approved valves equipped with flanges to 860 Kpa drilling standard are to be installed. Note that threaded valves may be used but that the flanges will have to be provided for mounting the meter.

6. AUTOMATIC READER AND ELECTRICAL WIRING

- .1 An automatic reader is to be installed by the City on the outside face of the building - remember to get prior approval of its location from the Engineer to avoid the consequences of poor planning. Some of the requirements for good location of an automatic reader are:

- (a) Visible and accessible from the street.
 - (b) Located between 1200 mm and 1800 mm above ground level.
 - (c) A raceway (minimum size 20 mm) from the location of the meter to the location of the automatic reader supplied and installed by the applicant into which he shall install the special cable supplied by the City.
 - (d) Completely and easily accessible for changing, reading, testing or repair. The wires installed by the applicant shall be connected to the reader and the meter by the City.
- .2 The City shall provide 22 gauge, 3 conductor wire to the applicant for his installation. The applicant shall ensure that the proper length of wire, without joints, is requested.
- (a) The distance between the meter and the reader must be less than 150 metres.
 - (b) The control circuits shall be adequately protected against mechanical damage.
 - (c) All wiring shall conform to a Class 2 circuit and be in accordance with the City of North Vancouver Electrical Bylaw.
 - (d) The wire must be permanently and securely stapled to the beams, walls, stringers and similar portions of the building.
 - (e) At least 300 mm of wire shall be left loose at both ends - that is at the meter end and the automatic reader end - for connection purposes. At no time will the City do any of the work of laying or extending the control wiring.

SCHEDULE “D”

This Schedule was deleted November 1, 2004 by Bylaw No. 7646.

SCHEDULE “E”

This Schedule was deleted November 1, 2004 by Bylaw No. 7646.

SCHEDULE "F"

This Schedule was deleted November 2, 2009 by Bylaw No. 8033

SCHEDULE "G"

BACKFLOW PREVENTION DEVICES

1. Requirement for Backflow Prevention Assemblies

- .1 Over and above the requirements of the Plumbing Code, the Engineer shall require backflow prevention assemblies to protect the City's potable water supply in private systems which:
 - (a) Serve docks, or piers; or
 - (b) Are identified in the latest edition of AWWA M14 "Recommended Practice for Backflow Prevention and Cross-Connection Control" as systems requiring backflow prevention devices; or
 - (c) As determined by the Engineer, based on anticipated use of water on the premises.

2. Design of Backflow Prevention Assemblies

- .1 The type of Backflow Prevention Assembly required will be determined by the Owner's designer of the private water distribution system in accordance with the latest edition of AWWA M14 "Recommended Practice for Backflow Prevention and Cross Connection Control."
- .2 Only approved backflow prevention assemblies shall be used. Approved backflow-prevention assembly shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association titled:
 - (a) *AWWA C510-89 - Standard for Double Check Valve Backflow-Prevention Assembly, and
 - (b) *AWWA C511-89 - Standard for Reduced-Pressure Principle Backflow-Prevention Assembly,and have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research for the University of Southern California (USC FCCCHR) established by "Specification of Backflow-Prevention Assemblies" - Sec. 10 of the most current issue of the Manual of Cross-Connection Control.
- .3 The USC FCCCHR approves the entire assembly, which includes both the backflow prevention assembly and the accompanying isolating valves. All approved assemblies shall be supplied direct from the manufacturer with the approved isolating valves attached.

- .4 Any modification of an assembly, including pressure or atmospheric vacuum breakers, after it leaves the manufacturer's plant, such as the substitution of the make or model of isolating valves, voids the approval of the assembly. After installation, to retain approval of an assembly, any replacement of parts, materials, etc., for maintenance reasons, shall utilize only those parts and materials supplied by the manufacturer for the make and model of assembly specified.

3. Location and Layout of Backflow Prevention Assemblies

- .1 The location of backflow prevention assemblies will be as approved by the Engineer. Wherever possible, the backflow prevention assembly shall be located inside the building, and shall be upstream of meters and branch fire lines.
- .2 Clearances for backflow prevention assemblies located inside the building or in a hut shall be in accordance with City of North Vancouver Standard Detail #___ , and as defined in the table below shall apply.
- .3 Where a backflow prevention assembly is installed in a hut or pit, the minimum clearance dimensions shown on City of North Vancouver Standard Details #___ and as defined in the table below shall apply.

BACKFLOW PREVENTION ASSEMBLIES* TYPICAL CLEARANCES

Nominal Diameter of Device	A	B	C		D	E
			Bldg or Hut	Pit		
$\frac{3}{4}$ " – 1 1/2" 20mm – 40mm	0.53 m	0.3 m	0.3 m	0.6 m	0.3 m	1.0 m
2" – 3" 50mm – 75mm	0.66 m	0.3 m	0.3 m	0.6 m	0.3 m	1.0 m
4" – 6" 100mm – 150mm	0.81 m	0.3 m	0.3 m	0.75 m	0.3 m	1.0 m
8" – 10" 200 mm – 250 mm	0.81 m	0.3 m	0.3 m	0.75 m	0.3 m	1.0 m

*Check manufacturer's literature for recommended dimensions

4. Installation of Backflow Prevention Assemblies

- .1 All plumbing shall meet the requirements of the City Plumbing Bylaw and this Bylaw.
- .2 All backflow prevention assemblies shall be installed in a horizontal position.
- .3 The installation of an assembly may not be approved if, in the opinion of the Engineer, the assembly is located such that inspection, testing or maintenance may be encumbered.

5. Testing and Certification of Backflow Prevention Assemblies

- .1 The water service pipe shall not be turned on at the curb stop until the backflow prevention assembly installation has been tested and certified by an approved tester.
- .2 An approved backflow prevention assembly tester is one who is listed with the BC Waste and Water Cross Connection Tester Certification Program.
- .3 In July of each year, after the year of initial installation, or more frequently if required by the Engineer, the backflow prevention assembly shall be checked by an approved backflow prevention assembly tester and the tester's certificate shall be forwarded to the Engineer.
- .4 Failure to forward the certificate can result in penalties as specified in Section 9 of this Bylaw.

6. Cost of Backflow Prevention Assemblies

- .1 All costs related to the purchase, installation, maintenance and certification shall be borne by the Owner.

SCHEDULE “H”

This Schedule was deleted November 1, 2004 by Bylaw No. 7646.