



Regional District of
Kitimat-Stikine

Queensway Sanitary Sewage System Bylaw No. 407, 1999

ADOPTED May 15, 1999

This Regulation Bylaw is consolidated for convenience only.

*This Consolidated version includes amendments to August 22, 2018
up to and including Bylaw No. 620*

List of Amendments to the Queensway Sanitary Sewage System Bylaw No. 407, 1999		
Bylaw No.	Date of Adoption	Purpose of Amendment
620	October 19, 2012	delete Schedule "B" and replace with the new Schedule "B" attached as Appendix A

NOTE:

Where there is a discrepancy between this consolidated Version and the Amending Bylaw, then the original Bylaw No. 407 and the Amending Bylaws shall be deemed to be the true and correct version.

REGIONAL DISTRICT OF KITIMAT-STIKINE
Bylaw No. 407, 1999

**Bylaw respecting the Queensway Sanitary
Sewage System.**

WHEREAS the Regional District of Kitimat-Stikine has by bylaw established a service for the collection, conveyance, treatment and disposal of sewage;

AND WHEREAS pursuant to the Waste Management Act and the Municipal Act, the Regional District is authorized to adopt a bylaw respecting the direct or indirect discharge of waste into sewers and drains connected to a sewage facility operated by the Regional District;

1. NAME

This bylaw may be cited for all purposes as "Queensway Sewage Regulation Bylaw No. 407, 1999".

2. AREA

This bylaw applies to the areas as shown outlined on the plans attached as Figure 1 and Figure 2, Schedule "A", and forming part of this bylaw.

3. DEFINITIONS

In this bylaw,

- (a) "**ACCESSIBLE**" includes access which first requires removal or opening of an access panel, door or similar obstruction.
- (b) "**B.O.D.**" (denoting biochemical oxygen demand) means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20° Centigrade, expressed in milligrams per litre.
- (c) "**BUILDING SEWER SERVICE**" means a sewer and all attached appurtenances installed, owned and maintained by an owner connecting a service connection to the plumbing system of a building or structure on a parcel of land.

- (d) "**CAPABLE OF CONNECTION**" means that the parcel of land abuts a highway, Regional District right-of-way or easement, upon or in which there is a sanitary sewer with excess capacity and that the service connection will have adequate cover at the property line and drain towards the sewer, allowing the building or structure on the parcel of land to be connected to the service connection by either gravity building sewer, or a pump and force main.
- (e) "**CONCENTRATED SEWAGE**" means sewage having either a higher content of oil and grease, or a higher content of suspended solids, or a higher five day B.O.D., or any combination of these characteristics, as determined by tests using Standard Methods, than normal sewage.
- (f) "**EFFLUENT**" means a substance discharged into water and that:
- a) injures or is capable of injuring the health or safety of a person;
 - b) injures or is capable of injuring property or any life form;
 - c) interferes or is capable of interfering with visibility;
 - d) causes or is capable of causing material physical discomfort to a person; or
 - e) damages or is capable of damaging the environment.
- (g) "**GARBAGE**" includes but is not limited to, food wastes, market wastes, combustibles such as leather, plastics, wood and paper; non-combustibles such as crockery, glass, dirt and ashes from fireplaces and on-site incinerators.
- (h) "**GREASE**" includes fat, wax, oil or similar substance.
- (i) "**INTERCEPTOR**" means a receptacle installed to prevent oil, grease, sand or other materials from passing into a drainage system.
- (j) "**LIQUID WASTE**" means effluent that originates from any source and is discharged into a sanitary sewer.
- (k) "**NORMAL SEWAGE**" means sewage having a five-day B.O.D. of 250 parts per million or less and having a suspended solids content of 175 parts per million or less.
- (l) "**PARCEL OF LAND**" means any lot, block or other area in which land is held or into which it is subdivided, and includes a strata lot but does not include a highway.
- (m) "**PH**" means the logarithm (to the base 10) of the reciprocal of the hydrogen ion concentration in moles per litre and denotes alkalinity or acidity.

- (n) **"REGIONAL BOARD"** means the Board of the Regional District of Kitimat-Stikine.
- (o) **"REGIONAL DISTRICT"** means the Regional District of Kitimat-Stikine.
- (p) **"SANITARY SEWER"** means a sewer operated by the Regional District which carries permitted liquid waste and to which storm water is not intentionally admitted.
- (q) **"SEPTIC TANK"** means a watertight chamber with two compartments which are designed, constructed and installed for the collection of sewage and pumping out of sewage effluent.
- (r) **"SEPTIC TANK EFFLUENT"** means sewage passed through a septic tank which reduces B.O.D. levels to a minimum of 175 parts per million and suspended solids content to a minimum of 140 parts per million.
- (s) **"SERVICE AREA"** means the local service areas established by "Queensway Sewer System Local Service Establishment Bylaw No. 331, 1992" and "Thornhill Commercial Core Sewer System Extension Local Service Establishment Bylaw No. 360, 1994" and as shown outlined on the plans attached as Figure 1 and Figure 2, Schedule "A", and forming a part of this bylaw.
- (t) **"SERVICE CONNECTION"** means a pipe connecting a sanitary sewer main to a building sewer service at the property line of a parcel of land.
- (u) **"SEWAGE"** means water borne wastes containing any substance that is or is likely to be discharged directly or indirectly to a sewer or sewage facility.
- (v) **"SEWAGE FACILITY"** means works owned or otherwise under the control or jurisdiction of the Regional District that treats, stores, utilizes or discharges sewage.
- (w) **"STANDARD METHODS"** means the analytical and examination procedures set forth in the current edition of "Standard Methods for the Examination of Water and Waste Water" published jointly by the American Public Health Association, the American Waterworks Association and the Water Pollution Control Federation.
- (x) **"STORM WATER"** means water resulting from natural precipitation from the atmosphere.

- (y) **"SUSPENDED SOLIDS"** means solids that either float on the surface of, or are in suspension in water, sewage or other liquids and which are removable by laboratory filtering.
- (z) **"UTILITY INSPECTOR"** means a person appointed by the Regional District as inspector for the Regional District or any other person appointed by the Regional District to administer this bylaw.

4. SEWER SERVICE CONNECTION REQUIREMENTS

- (a) The owner of every parcel of land which is Capable of Connection shall, at the owner's expense, connect the parcel of land to the sanitary sewer in accordance with the provisions of the B.C. Plumbing Code and this bylaw within or before the sooner of:
 - i) 60 days from delivery of written notice requiring connection from the Regional District; or
 - ii) December 31, 1999, where the parcel of land is located within the service area outlined in the Queensway Sewer System Local Service Establishment Bylaw No. 331, 1992, and as shown outlined on the plan attached as Figure 1, Schedule "A".
- (b) Paragraph (a) does not apply to any parcel of land on which a building or structure designed or used to shelter any use or occupancy has not been constructed.
- (c) The owner of every parcel of land shall have designed and constructed a building sewer service to service the sewage requirements of the parcel of land and this system must meet or exceed the technical specifications as set out in Schedule "C" attached to this bylaw.
- (d) Every building sewer service shall include the installation of a septic tank to collect solids and grease and the tank must meet or exceed the technical specifications as set out in Schedule "C".
- (e) An owner shall be responsible for the acquisition, installation, operation and maintenance of the building sewer service, including the timely pumping out of the solids compartment of the septic tank, and shall, at the owner's expense, maintain all the elements of the building sewer service from the owner's building to the property line.

- (f) No person shall, except as permitted by this bylaw or the B.C. Plumbing Code or the Sewage Disposal Regulations of the *Health Act*, construct or maintain any privy, septic tank, cesspool, tile field, seepage bed or other facility intended or used for the disposal of sewage on any property in the area as set out in Figure 1, Schedule "A".
- (g) No person other than an employee or contractor of the Regional District may repair, alter, connect to, install, construct or maintain the sanitary sewer and service connections located on public property if they are crushed or broken, if there is a faulty installation, or if it is plugged, clogged or obstructed, unless authorized by the Utility Inspector.
- (h) In the event that any service connection is abandoned, the owner, at the owner's expense, shall effectively block up the connection at a suitable location within the owner's property or contact the Utility Inspector who may shut off the curb stop.
- (i) In the event of any owner failing to make the required connection in accordance with paragraph (a) the Regional District may notify the owner in writing that the connection shall be made within sixty (60) days of being notified. If the owner fails to make the required connection as notified, the Regional District may order the required connection be made by the Regional District or its contractors or agents at the owner's expense and the expenses incurred shall become due and payable by the owner. The amount of any invoice remaining unpaid at December 31 in any year shall be added to and form part of taxes in arrears on the subject property in accordance with Section 269 of the Municipal Act.

5. USE OF PUBLIC SEWERS

- (a) A person shall only discharge septic tank effluent to a sanitary sewer.
- (b) Except as provided in this bylaw, no person shall discharge or cause or permit to be discharged any of the following described waters or wastes to a sanitary sewer:
 - i) concentrated sewage or normal sewage which has not been pre-treated by removing solids and grease in a septic tank to achieve a 5 day B.O.D. of 175 parts per million or less and a suspended solids content of 140 parts per million or less;
 - ii) liquid or vapor having a temperature higher than 77° Centigrade;

- iii) water or waste containing grease of such character or quantity that unusual attention or expense is required to handle such materials by the sanitary sewer system or sewage facility;
 - iv) gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid solid or gas;
 - v) garbage;
 - vi) cinders, sand, mud, straw, shavings, metal, rags, feathers, tar or other solid or fibrous substance capable of causing obstruction to the flow of sewage system or other interference with the proper operation of the sewage system;
 - vii) waters or wastes having pH lower than 5.5 or above 9.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment, biological sewage treatment processes, or personnel of the sewage system;
 - viii) waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the sewage facility;
 - ix) waters or waste containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials within the sanitary sewer system or at the sewage facility;
 - x) water or waste containing a radioactive substance; and
 - xi) storm water, surface water, roof runoff, sub-surface drainage, cooling water or liquid waste.
- (c) Despite paragraph (b), the Utility Inspector may, upon review of an application, authorize discharge of concentrated sewage, normal sewage or a substance referred to in 5(b) xi) where exceptional conditions prevent compliance with paragraph (a) or (b).
- (d) The owner shall, at the owner's cost in addition to the required septic tank referred to in 4(d), install grease, oil and sand interceptors on private property for all restaurants, garages, gasoline service stations and vehicle and equipment washing establishments; and for other types of businesses discharging liquid waste containing grease, oil or any flammable waste, sand, grit and other harmful substances, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Regional District and shall be so located as to be readily and easily accessible for cleaning and inspection.

- (e) All grease, oil and sand interceptors installed by an owner shall be maintained by the owner at the owner's expense in good operating condition at all times.

6. POWER AND AUTHORITY OF REGIONAL DISTRICT

- (a) The Utility Inspector or a Bylaw Enforcement Officer may at any reasonable time enter upon any property or premises in order to ascertain whether the regulations of this bylaw are being observed.
- (b) Where the Board has authority to direct that a matter or thing be done by a person, the Board may also direct that if the person fails to take the required action, the matter or thing shall be done at the expense of the person in default in accordance with Section 269(1) of the Municipal Act. If action in default is taken, the Board may recover the expense from the person, together with costs and interest at the rate prescribed under Section 11(3) of the Taxation (Rural Area) Act, in the same manner as municipal taxes.

7. FEES AND CHARGES

- (a) The Regional District hereby imposes a sanitary sewer user fee, as set out in Schedule "B" to this bylaw, on all parcels of land connected with and discharging liquid waste into the sanitary sewer, to be paid twice a year on June 30 and December 31.
- (b) In the case of a parcel of land connected to a sanitary sewer, the user fee shall be paid prior to connection and will be pro rated to represent the number of months or part months remaining during the six month period in respect of which the fee is paid.
- (c) The Regional District hereby imposes a charge on all parcels of land which are:
 - i) connected to but not discharging liquid waste into the sanitary sewer; or
 - ii) capable of connection and occupied,to be paid twice a year on June 30 and December 31. The charge payable under this section will be equivalent to the amount that would be payable as a sewer user fee under paragraph (a) multiplied by 75 percent.
- (d) The fees and charges for basic sewer service provided by the Regional District shall be those fees and charges as set out in Schedule "B".

- (e) Any unpaid fees and charges due on or before December 31 of any year shall become part of the taxes in accordance with the Municipal Act.
- (f) Payments received by the Regional District will be applied to the oldest balance first.
- (g) Non-receipt of an invoice for a fee or charge imposed under this bylaw will not relieve the property owner of the obligation to pay the fee or charge.
- (h) Subject to paragraph (c), an owner of a parcel of land connected to and discharging liquid waste into a sanitary sewer shall pay the sanitary sewer user fee imposed under this bylaw until the owner has given notice in writing to the Regional District of his desire to discontinue use of the sanitary sewer and the sanitary sewer has been disconnected.
- (i) Any service applied for a portion of a month shall be charged as if it were supplied for a full month.
- (j) An owner or occupier of premises other than residential premises connected to a sanitary sewer shall keep records respecting the waste produced on the premises and discharged to a sanitary sewer and shall supply to the Regional District upon request a summary of the nature of the waste discharged from the property to the Regional District.
- (k) An owner of a parcel of land connected to a sanitary sewer shall provide to the Regional District written notice of any changes or modifications to the owner's premises that may affect the sanitary sewer user fee imposed under this bylaw and, despite paragraph (a), an owner connected to the sanitary sewer shall pay to the Regional District a sanitary sewer user fee commencing as of the date of the actual connection of the premises to a sanitary sewer.

8. CONNECTIONS AND CONNECTION FEES

- (a) No person shall connect or be allowed to connect or be allowed to remain connected to the sanitary sewer without:
 - i) the submission of an application to the Regional District for a sewer connection in accordance with the provisions of this bylaw;
 - ii) payment of the connection fee, where applicable, pursuant to Section 8(b) or (c); and,
 - iii) receiving a permit for the connection from the Utility Inspector.

- (b) No connection fees are payable for parcels of land:
 - i) within the Queensway Service Area as set out in Figure 1 of Schedule "A", at the date of adoption of this bylaw;
 - ii) within the Thornhill Commercial Core Service Area as set out in Figure 2 of Schedule "A", at the date of commissioning of the sewage system servicing this area;
- (c) The owner of a parcel created after the date described in Section 8(b) shall pay as a condition of connection:
 - i) a charge as calculated in accordance with Schedule "B"; and
 - ii) the actual cost of installing the service connection.
- (d) Application for service connection shall be made in writing on the form provided for that purpose as set out in Schedule "D", to this bylaw, giving the legal description or street address of the parcel of land to be served and all other information that may be required in order that the correct rates, rents or tolls can be applied.
- (e) The Regional District shall in each case determine the location and size of service connection to be used, having first given due consideration to any specific requests.

9. DISCONNECTION AND RECONNECTION FEES

- (a) Disconnection and reconnection fees shall be charged as set out in Schedule "B", to any person whose sewer service has been terminated and/or restored for any reason other than for reasons associated with normally required maintenance or operation.
- (b) Sewer services that have been terminated due to any breach of, or non-compliance with any provision of a Regional District Bylaw, or for failure to pay the fees and charges for sewer service, shall not be restored until the reconnection fee referred to in Section 9(a) of this bylaw, plus all outstanding rates, fees or charges have been paid.

10. PENALTIES

- (a) A person who contravenes a provision of this bylaw commits an offence and is liable, on summary conviction, to a penalty of not more than \$2,000.00 and the costs of prosecution.

11. GENERAL

- (a) If any section, subsection, sentence, clause or phrase in this bylaw is for any reason held to be invalid by a decision of any court of competent jurisdiction, a section, subsection, sentence, clause or phrase of the bylaw may be severed from the bylaw without affecting the validity of the remaining portions of the bylaw.

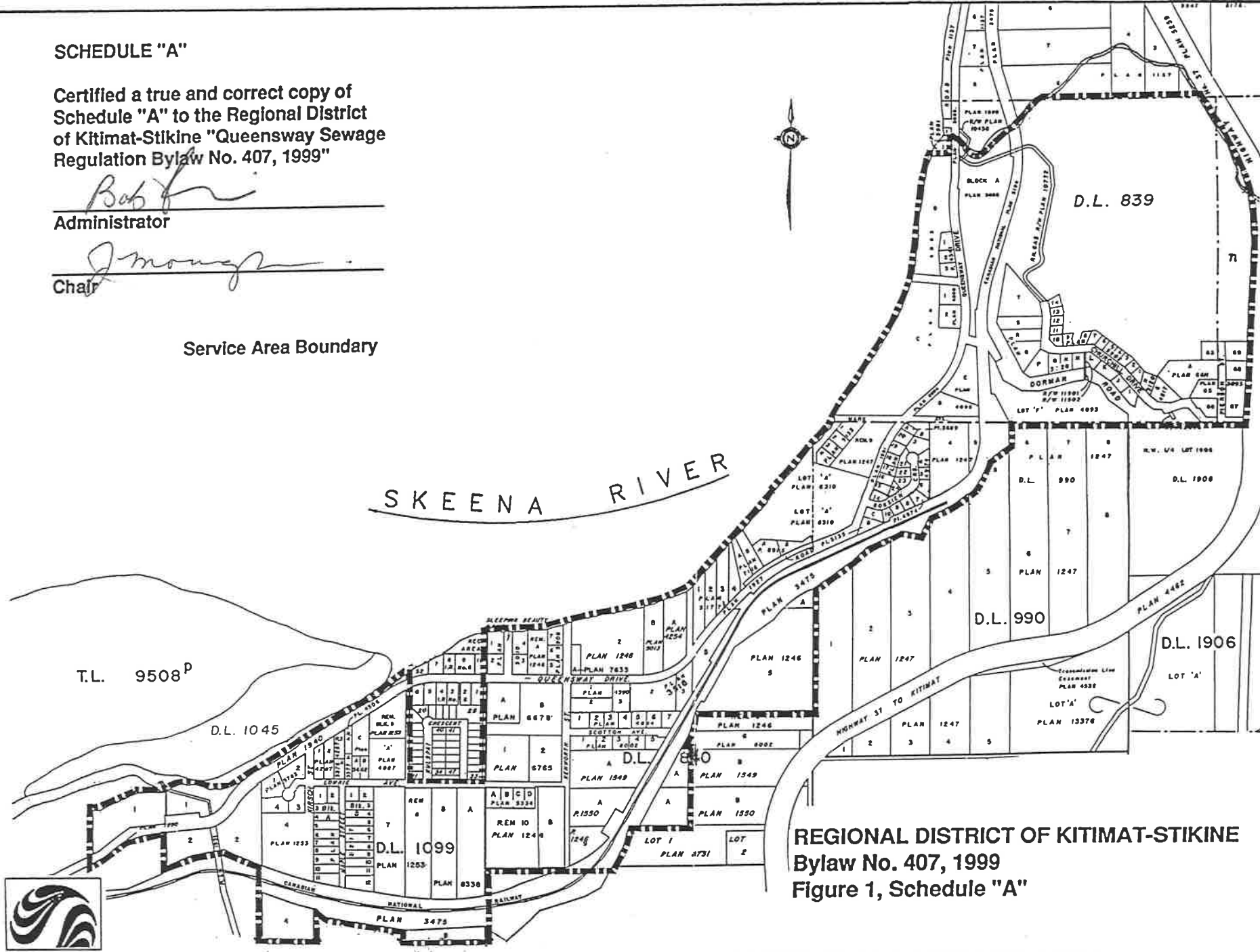
SCHEDULE "A"

Certified a true and correct copy of
Schedule "A" to the Regional District
of Kitimat-Stikine "Queensway Sewage
Regulation Bylaw No. 407, 1999"

Bob [Signature]
Administrator

[Signature]
Chair

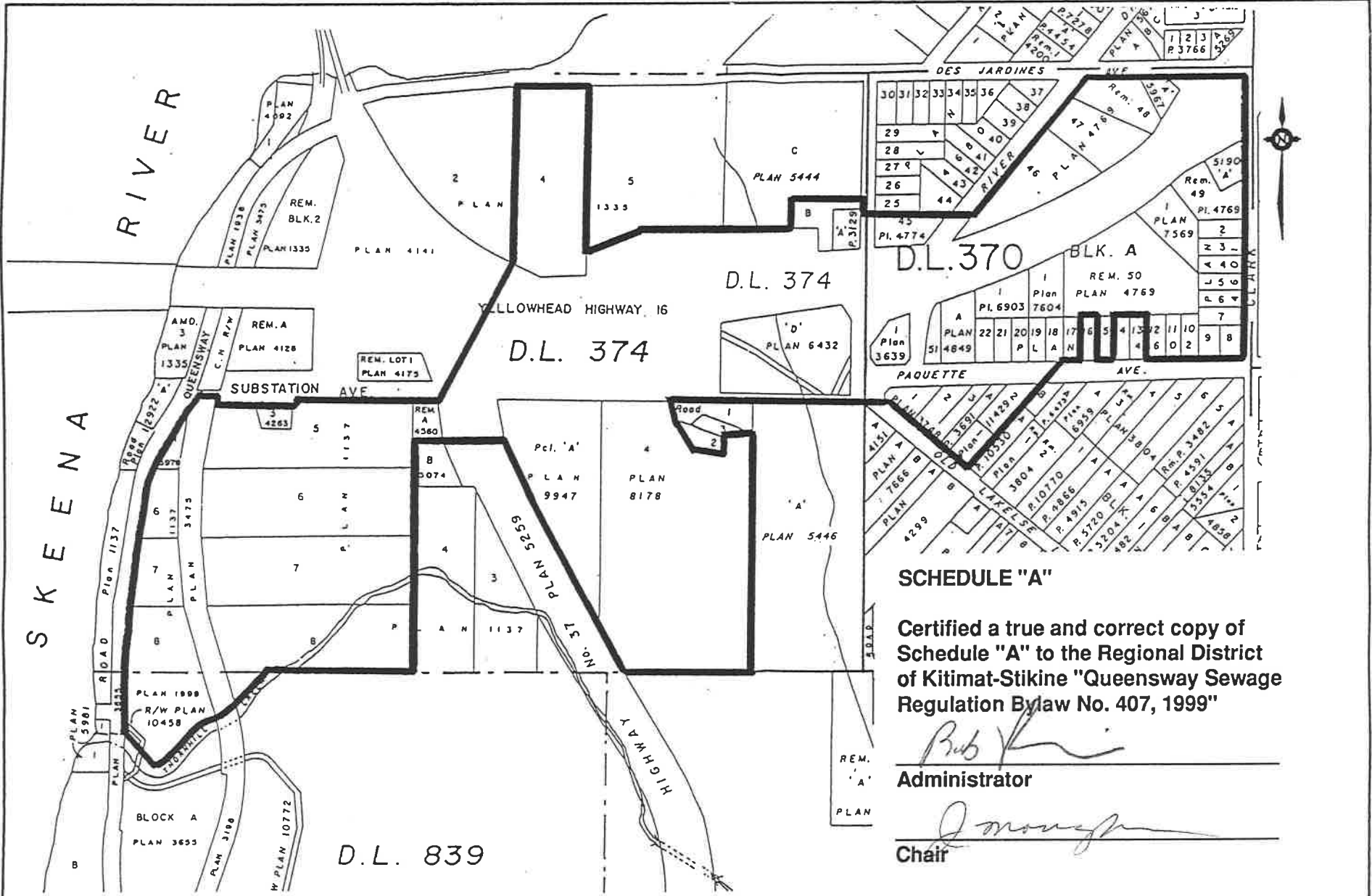
Service Area Boundary



REGIONAL DISTRICT OF KITIMAT-STIKINE
Bylaw No. 407, 1999
Figure 1, Schedule "A"



QUEENSWAY SERVICE AREA



SCHEDULE "A"

Certified a true and correct copy of
 Schedule "A" to the Regional District
 of Kitimat-Stikine "Queensway Sewage
 Regulation Bylaw No. 407, 1999"

Bob [Signature]
 Administrator

[Signature]
 Chair

REGIONAL DISTRICT OF KITIMAT-STIKINE
 Bylaw No. 407, 1999
 Figure 2, Schedule "A"

THORNHILL COMMERCIAL CORE SERVICE AREA



Service Area Boundary

Appendix A

SCHEDULE "B"

(Amended by Bylaw No. 620, 2012)

QUEENSWAY SEWAGE SYSTEM – FEES AND CHARGES

Figure 1

EQUIVALENT HOUSEHOLD BASIS – NON METERED						
		Fee Per Household Equivalent				
		Household Equivalent	Bi-Annual	Annually	Reconnect/ Disconnect Fees [Section 9(a)]	Connection Charge [Section 8(c)(i)]
1	For each single dwelling, manufactured home, trailer or apartment	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
2	Manufactured or Mobile Home Park	1 per dwelling unit	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
3	Multi-Family Housing	1 per dwelling unit	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
4	For each Store or Retail Business	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
5	Each double hose gas pump or Service Station	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
6	Café, Restaurant or Dining Room for every 10 seats or part thereof	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
7	Cabaret, Public House or Beer Parlour for every 5 seats or part thereof	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
8	Church	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
9	Hotels/Motels for every 3 standard rooms	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
10	Hotels/Motels for every 2 kitchenette rooms	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830
11	Laundromat for every washing machine unit	1	\$130.00	\$260.00	\$20 *(\$55 if after hours)	\$3,830

Despite Figure 1, parcels of land which obtain their water supply through a water meter will be charged on the metered water consumption unit basis by multiplying the percentage set out in the second column by the rate set out in the third column.

Figure 2

	Metered Unit Basis	FEE/m ³
For Multi-Family Residential Units	Fee applied to 70% of actual water usage	\$1.30
For Non-Residential Units	Fee applied to 80% of actual water usage	\$1.30

*After hours include: Monday-Friday, 4:00 p.m. to 8:00 a.m.; Weekends; Statutory Holidays

**Regional District of Kitimat-Stikine
Bylaw No. 407, 1999**

SCHEDULE "C"

TECHNICAL SPECIFICATIONS FOR WORKS ON PRIVATE PROPERTY

1. Septic Tanks

Septic tanks for use on private property for connection to the Sanitary Sewage System shall:

- (a) be CSA approvable;
- (b) must meet B.C. Ministry of Health requirements;
- (c) have the following minimum tank capacity:

Single Family Residential • minimum 2730 litres, plus a pumping chamber of a minimum of 680 litres

Duplex • minimum 2730 litres for each dwelling, plus a pumping chamber of a minimum of 680 litres

Multi-Family
(using a common lift station) • minimum volume of 1.5 times average daily flow
• based on average daily flows of 1355 litres per day per unit for single family dwellings
• based average daily flows of 1135 litres per day per dwelling unit for mobile homes and apartments

Commercial • minimum volume of 1.5 times average daily flow or 2730 litres, whichever is greater, plus a pumping chamber of a minimum of 680 litres
• based on average daily flows as follows:
 General Commercial - 7 litres per 1 m² floor area
 Hotels/motels - 320 litres/unit
 Restaurants - 90 litres per 1 m² dining area
 Pubs - 140 litres per 1 m² seating area
 Laundromat - 1365 litres/machine
 Service Stations - 570 litres/single hose pump
 - 1140 litres/double hose pump

- (d) be water tight;
- (e) be concrete tanks free of joints;
- (f) consist of two compartments with the first compartment being a minimum of 2730 litres liquid capacity.

Two or more septic tanks may be installed and used in series provided they meet or exceed the requirements of this Schedule.

- (g) be designed, constructed and installed to withstand the imposed loading to which it will be subjected from its depth of bury and any live loading, in accordance with good engineering practice;
- (h) be appropriate for installation in a high groundwater environment;
- (i) provide access for each compartment with minimum internal opening dimension of 60 cm for dual access and 75.0 cm for single access tanks and being provided with covers, including handles;
- (j) be located to provide a minimum fall in grade of 1% (2% is preferable) from the building drain;
- (k) be located not less than
 - i) 15 m from a source of domestic water;
 - ii) 1 m from a parcel boundary;
 - iii) 1 m from a building; and
 - iv) 3 m from a domestic water pipeline.

2. Pump Station

- (a) Specifications and layout of piping, valves and connections are to be as shown on Drawing 01, Typical Effluent Pump Station Arrangement, attached and forming part of this schedule.
- (b) Each pump station shall be furnished with pump discharge piping, valves, backflow valves, and fittings.
- (c) Discharge piping shall consist of 50 mm Schedule 80 PVC pipe, rising out of 50 mm NPT (National Pipe Thread) vertical discharge. Check valve to be mounted on 50 mm vertical pipe above pump discharge. Use 50 mm Schedule 80 PVC 90° bend to bring piping to horizontal. Isolation valve to be mounted in horizontal position. The 50 mm discharge piping is to be reduced to 38 mm prior to exiting tank wall. See Drawing 01, Typical Effluent Pump Station Arrangement.
- (d) Piping: Discharge piping used under this section shall be Schedule 80 PVC pipe.
- (e) Check valves: Ball check valve suitable for mounting in the vertical position. PVC body for use with Pump Type No. 1 performance, cast iron body for use with Pump Type No. 2 performance outlined in Section 3.
- (f) Isolation valves: Ball type with PVC body, teflon seats and mounted in the horizontal position.

3. Effluent Pumps

- (a) Effluent pumps shall meet the standards and specifications of the Hydromatic submersible effluent pumps (SPD 100 MH2 and SKHD150M2). Effluent pumps other than the Hydromatic pumps noted must be approved by the Regional District.
- (b) Refer to Figure 3, Pump Zone Plan, attached and forming part of this schedule to determine which areas require Pump Type No. 1 (SPD 100 MH2), and which areas require Pump Type No. 2 (SKHD150M2).

(c) Pump Specifications:

Each pump installed under this section shall meet the following specifications:

Size:	50 mm NPT Vertical Discharge
Construction:	Corrosion resistant cast iron.
Impeller:	2 vane, enclosed impeller capable of passing 2 cm solids.
Seals:	Mechanical type; carbon and ceramic construction; oil lubricated.
Hardware:	Corrosion resistant; all nuts, bolts and washers to be stainless steel.
Support:	Pumps shall include feet to support the unit while in or out of service so that the full weight of the unit rests squarely on a flat surface. Pumps shall include a lifting device for pump removal.

(d) Performance:

Each pump noted in Section 3b) shall meet or exceed the following performance specifications:

	<u>Pump Type No.1</u>	<u>Pump Type No. 2</u>
Minimum Head	1.0 m	7.0 m
Typical Operating Head	15.0 m	24.0 m
Maximum Head	20.0 m	28.0 m
Typical Operating Capacity	2.2 litres/second	2.2 litres/second

(e) Motor:

A motor for a pump to be installed under this section shall meet the following specifications:

- Oil filled motor, CSA approved.
- Hermetically sealed, submersible type.
- Overload protection (thermally protected), with pump mounted in its normal environment, must protect the motor against possibility of overheating due to overload or failure to start.
- Sufficient capacity to adequately and safely power the pump.
- Single phase, 220 volt
- Shaft material - 416 SST
- Power cable - shall include separate grounding conductor, STW-A, water resistant 600 V, 60E C, UL and CSA approved and suitable, depending on amp draw, for size.

4. Level Controls

- (a) Float switches shall be used in conjunction with the control circuit of a pump. Provide 2 internally weighted float switches, complete with 5 m leads, for automatic pump control of the sump liquid levels.

- 1 Float to activate pump
- 1 Float to deactivate pump

- (b) Provide support bracket with non-corrosive strain relief connectors from which to hang float switches.

SCHEDULE "C"

**Certified a true and correct copy of
Schedule "A" to the Regional District
of Kitimat-Stikine "Queensway Sewage
Regulation Bylaw No. 407, 1999"**

Rob Farn

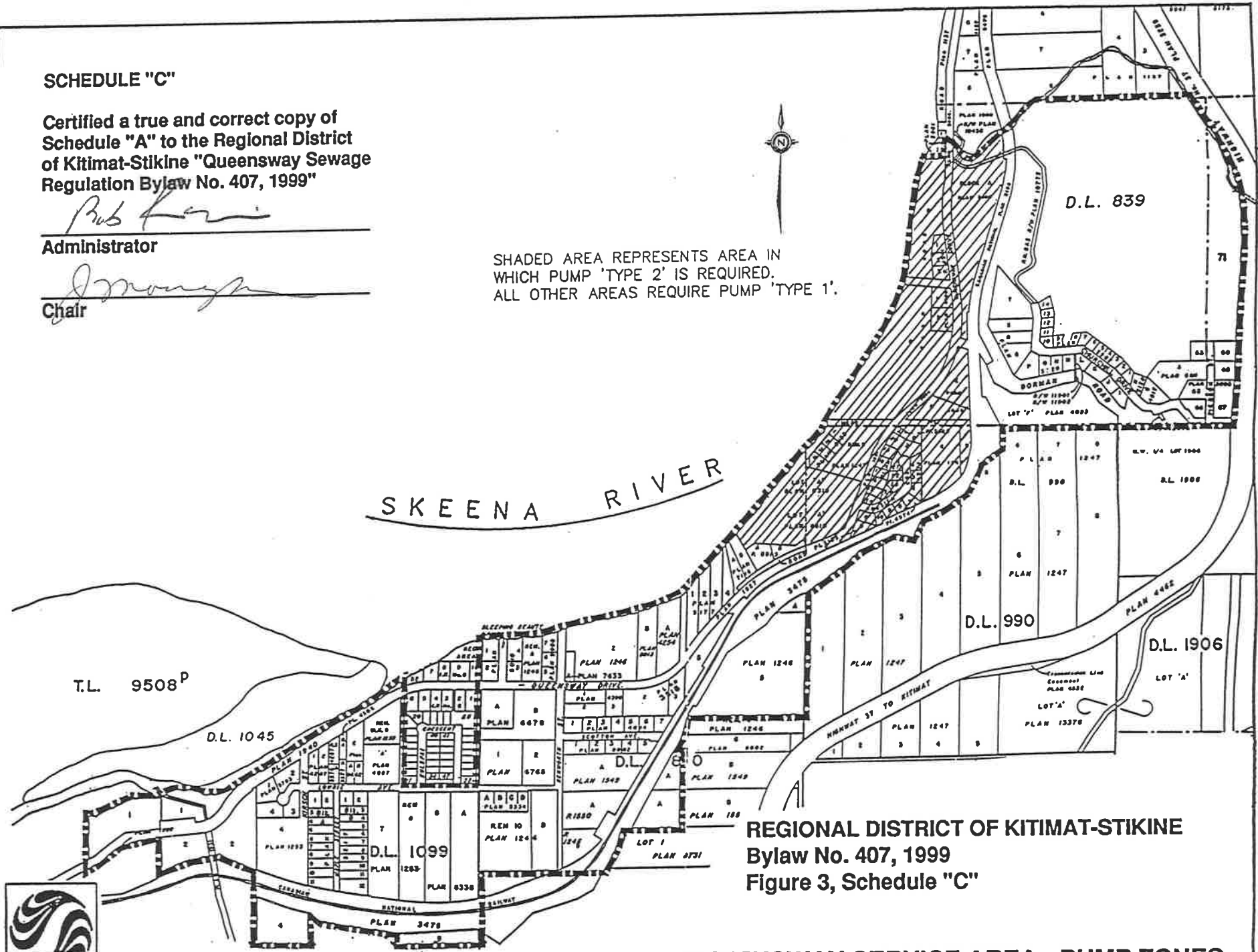
Administrator

J. Mouny

Chair



SHADED AREA REPRESENTS AREA IN WHICH PUMP 'TYPE 2' IS REQUIRED.
ALL OTHER AREAS REQUIRE PUMP 'TYPE 1'.



**REGIONAL DISTRICT OF KITIMAT-STIKINE
Bylaw No. 407, 1999
Figure 3, Schedule "C"**

QUEENSWAY SERVICE AREA - PUMP ZONES



**Regional District of Kitimat-Stikine
Bylaw No. 407, 1999**

SCHEDULE "D"

THORNHILL UTILITY

APPLICATION / WORK ORDER

WATER

SEWER

NAME: _____	REQUEST FOR:	AMOUNT
MAILING ADDRESS: _____	_____ TURN ON	_____
_____	_____ DISCONNECT	_____
LOCATION ADDRESS: _____	_____ INSPECTION	_____
TELEPHONE NUMBER: _____	_____ OTHER CHARGEABLE WORK	_____
REQUESTED DATE: _____		
APPLICATION DATE: _____		

*Winter connection installed during restrictive weather conditions shall be invoiced at cost or minimum standard service fee.

NEW SERVICE:	AMOUNT
_____ STANDARD SERVICE	_____
_____ OVERSIZE SERVICE	_____
_____ WINTER CONNECTION*	_____
_____ DEVELOPER INSTALLED	_____ n/c

CUSTOMER'S SIGNATURE: _____	REGULAR	_____
DATE ORDER COMPLETED: _____	UNITS	_____
MAINTENANCE/OPERATOR: _____	METERED	_____

In consideration for the granting of permission for connection to the above described land to the sanitary sewer, and/or water system, I acknowledge that use of the sanitary sewer, and/or water system, is subject to all bylaws, rules and regulations of the Regional District of Kitimat-Stikine in relation to the sanitary sewer, and/or water system.

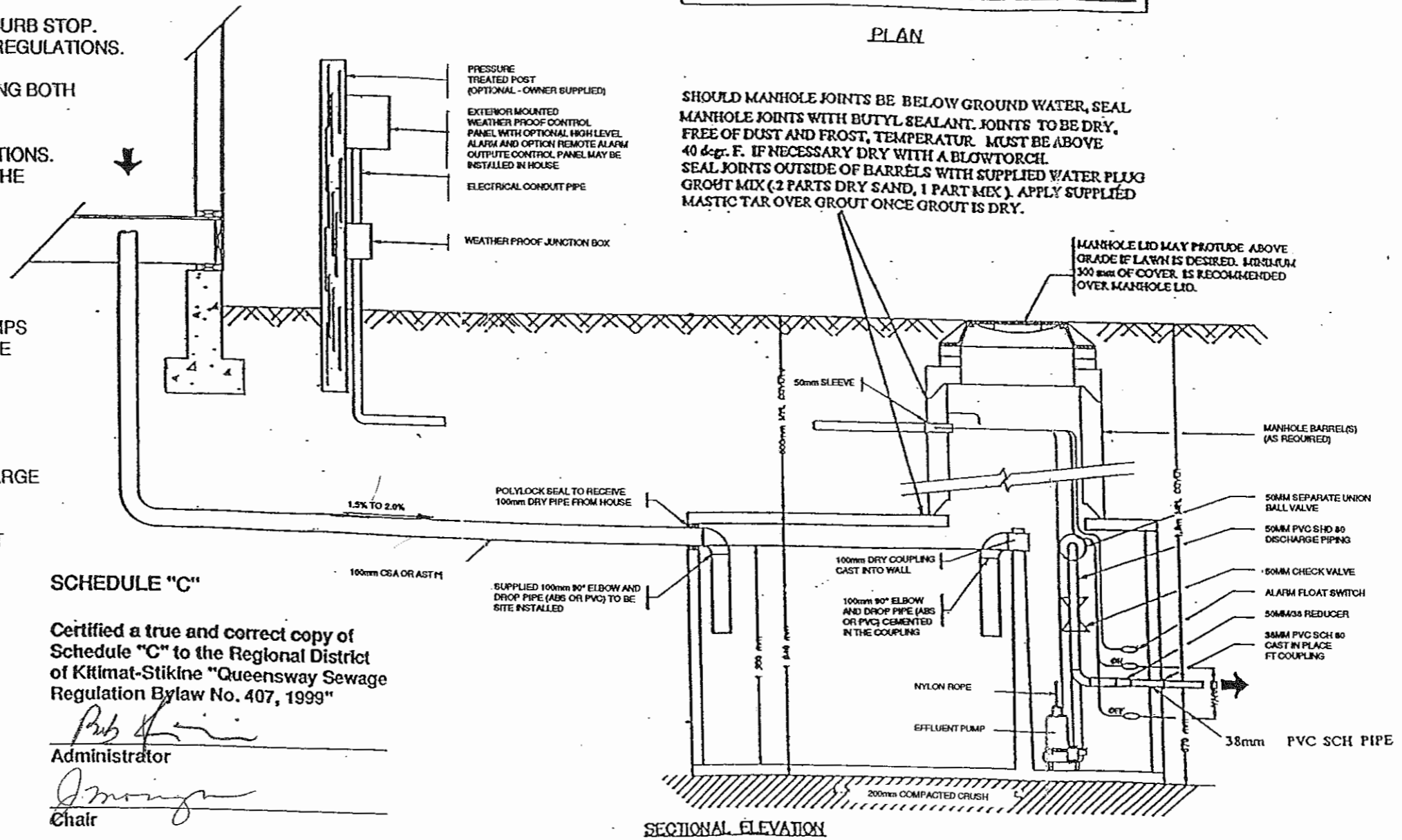
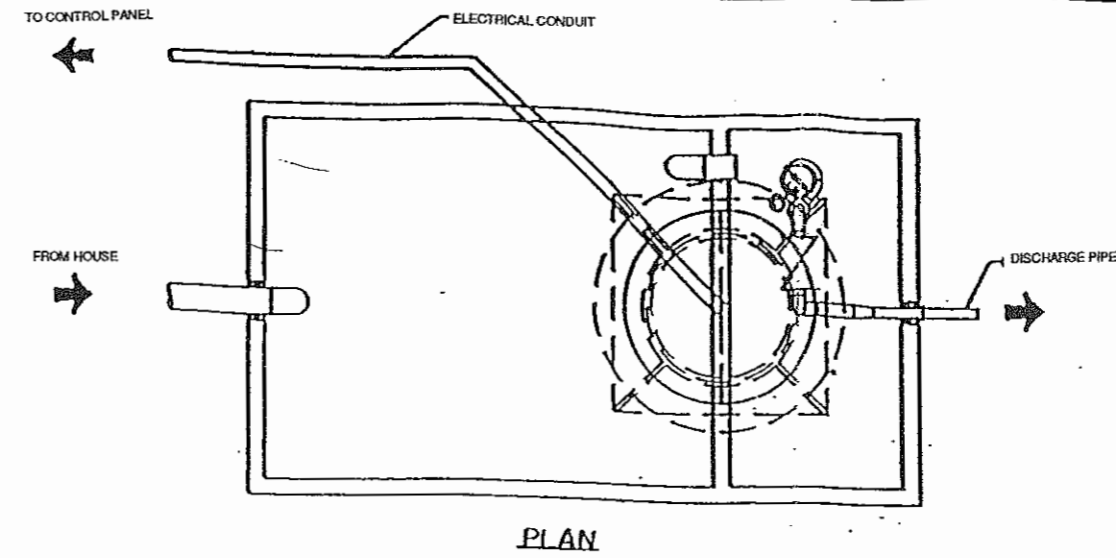
ACCOUNTING INFORMATION:

FOLIO NUMBER: _____	DATE PAID: _____
HOOK-UP AMOUNT: _____	
INVOICE NUMBER: _____	
DR AMOUNT: _____	
CR AMOUNT: _____	
DATE ENTERED: _____	

NOTES:

1. TANKS MUST BE A MINIMUM 1.0 METRE FROM BUILDINGS & PROPERTY LINES.
2. INSTALLATION OF TANK AND LINES MUST BE INSPECTED BY REGIONAL DISTRICT PRIOR TO BACKFILL.
3. PRIOR TO BACKFILLING, EFFLUENT LINE AND INTERIOR TANK PIPING FROM 50mm VALVE MUST BE PRESSURE TESTED BY REGIONAL DISTRICT. OWNER TO PROVIDE GARDEN HOSE AND WATER.
4. OWNER TO DO ALL CONNECTIONS, INCLUDING CURB STOP. ALL EXCAVATIONS SHALL COMPLY WITH W.B.C. REGULATIONS.
5. P.V.C. PIPE FITTINGS SHALL BE CONNECTED USING BOTH P.V.C. PRIMER & P.V.C. CEMENT.
6. MINIMUM 24 Hrs. NOTICE REQUIRED FOR INSPECTIONS. INSPECTIONS CAN BE ARRANGED BY PHONING THE REGIONAL DISTRICT. 615-6100
7. ELECTRICAL SERVICE & INSTALLATIONS IS THE RESPONSIBILITY OF THE OWNER AND SHOULD BE DISCUSSED WITH OWNER'S CONTRACTOR.
8. ON REGIONAL DISTRICT SUPPLIED 220 VOLT PUMPS
 - THE ELECTRICAL CONTRACTOR SHOULD BE AWARE THAT THE RED WIRE IS NOT USED.
 - THE MANUFACTURER HAS INDICATED INSTALLATION OF CORD END (PLUG) WILL VOID WARRANTY AND C.S.A. APPROVAL.
9. CHECK VALVE TO BE INSTALLED ON THE DISCHARGE LINE ABOVE THE PUMP.
10. CONNECTIONS EXCEPT FOR SEWAGE EFFLUENT DISCHARGE ARE PROHIBITED.

NOTE:
THIS DRAWING IS INTENDED AS A SCHEMATIC TO DEMONSTRATE THE INTENT OF HOW THE PUMP STATION SHOULD WORK. A DOUBLE ACCESS TANK IS OPTIONAL.



SHOULD MANHOLE JOINTS BE BELOW GROUND WATER, SEAL MANHOLE JOINTS WITH BUTYL SEALANT. JOINTS TO BE DRY, FREE OF DUST AND FROST, TEMPERATURE MUST BE ABOVE 40 deg. F. IF NECESSARY DRY WITH A BLOWTORCH. SEAL JOINTS OUTSIDE OF BARRELS WITH SUPPLIED WATER PLUG GROUT MIX (2 PARTS DRY SAND, 1 PART MEX.). APPLY SUPPLIED MASTIC TAR OVER GROUT ONCE GROUT IS DRY.

MANHOLE LID MAY PROTRUDE ABOVE GRADE IF LAWN IS DESIRED. MINIMUM 300mm OF COVER IS RECOMMENDED OVER MANHOLE LID.

SCHEDULE "C"

Certified a true and correct copy of Schedule "C" to the Regional District of Kitimat-Stikine "Queensway Sewage Regulation Bylaw No. 407, 1999"

[Signature]
Administrator
[Signature]
Chair

REGIONAL DISTRICT OF KITIMAT-STIKINE
Bylaw No. 407, 1999

Drawing 01, Schedule "C"

REV	DATE	DESCRIPTION	BY	APPROVED	DATE	ISSUE DATES
6		REVISIONS				
5		PLAN BY RECORDS				
4		APPROVAL FOR CONSTRUCTION				
3		FOR TENDER				
2		FOR APPROVAL				
1		PRELIMINARY				



SCALE	N.T.S.
DATE	04/07/94

R.D.K.S.
QUEENSWAY SEWER SYSTEM
TYPICAL EFFLUENT PUMP
STATION ARRANGEMENT