

THE CORPORATION OF THE DISTRICT OF BURNABY

BY-LAW NO. 5953

A BY-LAW to regulate subdivision of land.

The Council of The Corporation of the District of Burnaby
ENACTS as follows:

1. This By-Law may be cited as "BURNABY SUBDIVISION CONTROL BY-LAW 1971".
2. Every subdivision shall
 - (a) be suited to the configuration of the land being subdivided; and
 - (b) be suited to the use to which it is intended; and
 - (c) shall not make impracticable the future subdivision of the land within the proposed subdivision or any adjacent land.
3. Without limiting the generality of section 2, approval of any subdivision may be refused if it
 - (a) contains land which is subject to erosion; or
 - (b) contains land which is subject to flooding so as to render it unsuitable for the use to which it is intended.
4. The area, shape and dimensions of parcels of land created by subdivision plan shall conform to the requirements set out in the Zoning By-Law of the Municipality for the particular zone in which the said parcels are situated.
5. The subdivider shall
 - (a) clear, drain and surface highways within the subdivision to the standard prescribed in Schedule "A" of this by-law;
 - (b) provide a sufficient sewage collection system to service each parcel within the subdivision in accord-

ance with the standards set out in Schedule "B" of this by-law;

- (c) provide a sufficient waterworks system in accordance with the standards set out in Schedule "C" of this by-law to service each parcel within the subdivision with potable water and make provision for the connection of the said waterworks system with the municipal waterworks system;
- (d) where the nearest boundary of the land proposed to be subdivided is 2,000 feet or more in distance from an established trunk water main, shall provide for the installation of the water mains including trunk water mains from such established trunk water main in and to the proposed subdivision according to the standards prescribed in Schedule "C" of this by-law;
- (e) where the nearest boundary of the land proposed to be subdivided is 2,000 feet or more in distance from an established trunk sanitary sewer, shall provide for the installation of sanitary sewers including trunk sanitary sewers from such established trunk sanitary sewer in and to the proposed subdivision according to the standards prescribed in Schedule "B" of this by-law.

6. All works and services which the subdivider shall be required to construct and install pursuant to this by-law shall be constructed, installed and approved before the subdivision plan is approved. Notwithstanding this requirement, a subdivision plan may be approved before the said works and services are constructed, installed and approved provided that the subdivider has entered into a written agreement, satisfactory to the Approving Officer, with the Municipality to secure the construction and installation of the said works and services.

7. The cost of providing, constructing and installing all of the works and services required to be provided pursuant to this by-law shall be borne by the subdivider.

8. By-Law No. 3609 is hereby repealed.

Read a first time this 13th day of September, 1971.

Read a second time this 13th day of September, 1971.

Read a third time this 13th day of September, 1971.

Reconsidered and adopted this 20th day of September, 1971.



Robert M. Pitke
MAYOR
J. Shaw
CLERK

THE CORPORATION OF THE DISTRICT OF BURNABY

ENGINEERING DEPARTMENT

SCHEDULE "A"

SPECIFICATIONS FOR THE CONSTRUCTION
OF STREETS, LANES, SURFACE WORKS & STORM DRAINAGE

A. Streets, lanes and Surface Works

1. Scope

All streets, lanes and drainage works in subdivisions shall be to the standard and engineering requirements of the Municipal Engineer.

2. Lines, Grades and Measurements

All streets and lanes shall be constructed to the alignment, grade and cross-section approved by the Municipal Engineer.

The subdivider shall be held responsible for the preservation or replacement of all stakes, marks, monuments or other survey points that have once been set. All costs incurred in replacing the same shall be at the subdivider's expense.

3. Clearing and Grubbing

Clearing, grubbing and removal of stumps, boulders or other accumulated debris within the full right-of-way width of a street or lane must be carried out and extraneous material disposed of.

Provision of a suitable disposal site is the responsibility of the subdivider and must be acceptable to the Municipal Engineer.

4. Excavation of Topsoil Material

The organic topsoil shall be completely stripped for the predetermined width of the roadway or lane and in such additional areas as may be required by the Municipal Engineer. The topsoil may be required to be stored in an area designated by the Municipal Engineer for use in filling and constructing boulevard sections or may be required to be removed from the site.

5. Excavation of Subgrade

Excavation and fill shall conform to the lines and grades of the subgrade indicated on the approved design drawings and established in the field. The entire subgrade section shall be shaped and compacted and shall not vary more than one(1) inch from true elevation.

5. Excavation of Subgrade (cont'd)

The subgrade shall contain no roots, boulders, organic or other unsuitable material. All boulevards will be properly formed, graded and sloped as part of the subgrade preparation. If boulevard sloping should be impractical, retaining walls will be required to the extent and dimensions as specified by the Municipal Engineer.

6. Drainage and Culverts

The subdivider shall construct and maintain such drainage structures as may be needed to keep the street or lane in a workable condition during the construction period. All streets shall be drained by means of an underground storm sewer system with adequate inlets provided and house connections as detailed in Part "B". All lanes shall be drained by open ditches where a storm drain is not available and shall be constructed as part of the subgrade preparation. Wherever catch basins cannot be located, culverts of adequate size shall be installed at all intersections, crossings or as otherwise designated by the Engineer.

7. Base Construction

The required depth of base material will depend upon the type of subgrade soil and will be constructed to standards specified by the Municipal Engineer.

8. Curbing

All streets shall be finished with concrete curb and gutter. The curb and gutters may be the conventional hand formed type or extruded by machine. The work included as part of the curb and gutter construction shall consist of the preparation of the subgrade and placing of base materials, placing and removal of forms or tracks; the supply and placing of concrete of specified mix, placing of pre-moulded expansion material at required intervals; the finishing of the concrete; the curing and protection of the concrete; the supply and installation of drain tiles where required; and the cleaning up, including sloping and trimming as may be required, after the forms have been removed.

9. Surfacing

All streets and lanes shall be surfaced with asphaltic concrete to the approval of the Municipal Engineer.

B. Storm Drainage Works

Storm sewers shall be constructed on all Streets and Easements as required and the work shall include all clearing of rights-of-way excavation, backfilling, pipe-laying, gravel or concrete cradling, supply, delivery and installation of the storm sewer mains, including house connections, manholes and catch basins, as specified by the Municipal Engineer.

1. Storm Sewer Mains

Storm sewer pipe in sizes 8", 10", 12" shall be vitrified clay, asbestos cement, concrete or equivalent, and sizes 15" and greater shall be reinforced concrete or equivalent as specified by the Municipal Engineer.

2. Trench Protection

All trenches shall be protected by the installation of timber supports in accordance with regulations of the Workmen's Compensation Act. All timber shall be removed before final backfilling of the trench, but not before the pipe has been covered sufficiently for its protection.

3. Excavation and Cradling

Trenches shall be excavated to a depth of at least four inches below the bottom of the pipe and gravel cradling placed to a minimum depth of four (4) inches under the barrel of the pipe to cover the full width of the trench. Gravel used for cradling must be approved by the Municipal Engineer. If trench conditions are unsuitable for gravel cradling, the Municipal Engineer may order the placement of concrete cradling with at least four (4) sacks of Portland cement per cubic yard of concrete.

4. Backfilling

When pipes have been properly laid to grade and alignment on the bedding, the trench shall be backfilled by hand to a height of at least twelve (12) inches over the top of the pipe, using the best of the excavated or borrow pit material. This backfill shall be compacted in four (4) inch lifts. All remaining backfilling under roads shall be accomplished by compaction in twelve (12) inch lifts by vibratory compaction.

5. Manholes

Manholes shall be of the pre-cast forty-two (42) inch diameter type

5. Manholes (cont'd)

that three-eighths (3/8) inch diameter structural reinforcing steel rings shall be placed in the center of the wall at a maximum spacing of six (6) inches on center with a minimum of two (2) such rings being placed in any manhole section. Manholes shall be placed on a concrete base with a pre-cast top slab reinforced to carry H20 highway traffic loading and supplied with a cast iron frame and cover on a suitable brick ring collar.

6. House Connections

House connections shall be six (6) inch diameter to the same material and construction specifications as the storm sewer mains. House connections shall be plugged and marked at the end for depth and location by placing a wooden two-by-four (2x4) marker. Plugs shall be of a type that do not require their destruction for removal.

7. Catch Basins & Leads

Catch basins shall be required and located as specified by the Municipal Engineer. Catch basin leads shall be six (6) inch or eight (8) inch diameter or larger as directed by the Municipal Engineer and such leads shall be constructed to the same material and installation specifications as the storm sewer mains.

8. Concrete

Concrete used in pre-casting manholes or catch basins, manhole top slabs, bases and other concrete works except cradling shall be six (6) sacks of Portland Cement per cubic yard of mixed concrete and shall have a compression strength at age of twenty-eight (28) days of at least three thousand (3000) pounds per square inch. Concrete used for cradling shall be placed to a minimum thickness of three (3) inches under the pipe and such concrete shall contain at least four (4) sacks of Portland Cement per cubic yard of mixed concrete.

SCHEDULE "B"

SPECIFICATIONS FOR THE CONSTRUCTION
OF SANITARY SEWERS IN SUBDIVISIONS

The construction of sanitary sewers shall be required and the work shall include all clearing of rights-of-way, excavation, backfilling, pipe-laying, gravel or concrete cradling, supply, delivery and installation of the sanitary sewer system complete, including house connections and man-holes, as specified by the Municipal Engineer.

1. Sanitary Sewer Mains

Sanitary sewer pipe in sizes 8", 10", 12" shall be vitrified clay, asbestos cement, concrete or equivalent, and sizes 15" and greater shall be reinforced concrete or equivalent as specified by the Municipal Engineer.

2. Trench Protection

All trenches shall be protected by the installation of timber supports in accordance with the regulations of the Workmen's Compensation Act. All timber shall be removed before final backfilling of the trench, but not before the pipe has been covered sufficiently for its protection.

3. Excavation and Cradling

Trenches shall be excavated to a depth of at least four (4) inches below the bottom of the pipe and gravel cradling placed to a minimum depth of four (4) inches under the barrel of the pipe to cover the full width of the trench. Gravel used for cradling must be approved by the Municipal Engineer. If trench conditions are unsuitable for gravel cradling, the Municipal Engineer may order the placement of concrete cradling, which shall have at least four (4) sacks of Portland cement per cubic yard of concrete placed to a minimum thickness of at least three (3) inches under the pipe.

4. Backfilling

When pipes have been properly laid to grade and alignment on the bedding, the trench shall be backfilled by hand to a height of at least twelve (12) inches over the top of the pipe, using the best of the excavated or borrow pit material. This backfill shall be compacted in four (4) inch lifts. All remaining backfilling under roads shall be accomplished by compaction in twelve (12) inch lifts

5. Manholes

Manholes shall be of the pre-cast forty-two (42) inch diameter type cast with ladder rungs in accordance with A.S.T.M. C76-69, except that three-eighths (3/8) inch diameter structural reinforcing steel rings shall be placed in the center of the wall at a maximum spacing of six (6) inches on center with a minimum of two (2) such rings being placed in any manhole section. Manholes shall be placed on a concrete base with a pre-cast top slab reinforced to carry H20 highway traffic loading and supplied with a cast iron frame and cover on a suitable brick ring collar.

6. House Connections

House connections shall be four (4) inch diameter to the same material and construction specifications as the sanitary sewer main in (1). House connections shall be plugged at the property line and marked at the end for depth and location by placing a wooden two-by-four (2x4) marker. Plugs used in house connections shall be of the type that do not require their destruction for removal.

7. Concrete

Concrete used in pre-casting manholes or manhole top slabs, bases and other concrete works except cradling shall be six (6) sacks of Portland Cement per cubic yard of mixed concrete and shall have a compression strength at age of twenty-eight (28) days of at least three thousand (3000) pounds per square inch. Concrete used for cradling shall be placed to a minimum thickness of three (3) inches under the pipe and shall contain at least four (4) sacks of Portland cement per cubic yard of mixed concrete.

8. Infiltration Tests

Every effort shall be made to obtain water tight joints on sanitary sewers and the Engineer may, at his discretion, order that infiltration or exfiltration tests be carried out on any or all portions of the sewer or connections. Exfiltration tests may be carried out under heads, not to exceed twelve (12) feet and not less than four (4) feet, and observing the leakage. If leakage is observed on such tests or flow in the sewers at any time indicates an infiltration rate in excess of three hundred (300) imperial gallons per mile of sewer per inch of diameter per day, the section of sewer will be considered unacceptable and the cause of the leakage shall be located and remedied.

SCHEDULE "C"

SPECIFICATIONS FOR WATERMAIN
CONSTRUCTION IN SUBDIVISIONS

1. Scope of Work

Watermains will be constructed in subdivisions to the standards and engineering requirements of the Municipal Engineer.

Municipal forces only will operate valves in the existing water system; and where indicated on the plan, Municipal forces will make the connection in the existing system for the proposed works. This will be done at the expense of the contractor.

2. Location

The main and appurtenances will be located as shown on plans approved by the Municipal Engineer and no deviations will be permitted unless authorized by the Municipal Engineer.

3. Materials

All pipe shall be either asbestos cement, cast iron or ductile iron, conforming with A.W.W.A. Spec.'s and all fittings, valves, valve boxes and hydrants shall be of a class and type approved by the Municipal Engineer.

4. Excavation

A four foot minimum cover is required for all pipe.

Bedding of the pipe and backfilling of the excavation shall be done in a manner satisfactory to the Municipal Engineer.

5. Installation

The pipe, fittings and appurtenances shall be handled with care and installed in a manner complying with the manufacturer's recommendations and as directed by the Municipal Engineer.

6. Flushing

At dead-ends suitable provisions shall be made for flushing.

7. Testing

Upon completion of the work it shall be tested at 250 pounds per square inch for a minimum time of two hours. Subsequently, it shall be flushed, chlorinated, drained and refilled as specified by the Municipal Engineer