

ITEM 3
MANAGER'S REPORT NO. 37
COUNCIL MEETING May 20/75

Re: Underground Electrical Wiring Regulations

Following is a report from the Director of Planning on the inquiries that were raised by Council when Council discussed underground wiring regulations on April 21, 1975.

The Director of Planning advises that his department, in accordance with instructions from Council, is now preparing a report that involves a program for underground wiring that goes beyond the provisions of the current by-laws, i.e., a long range plan for placement of existing power lines underground. It is anticipated that this study will be completed in five or six months.

This is for the information of Council.

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MAY 9, 1975.

TO: MUNICIPAL MANAGER
FROM: DIRECTOR OF PLANNING

SUBJECT: UNDERGROUND ELECTRICAL WIRING REGULATIONS

At the Council meeting of April 21, the Planning Department was asked to prepare a report on the status of the Bylaw requirements in connection with underground wiring regulations and on a question of third-party liability as it relates to easements for underground cable installations.

Status:

Municipal regulations which require the placement underground of electrical service connections are contained in two Bylaws which generally deal with different applications.

The "Burnaby Electrical Connection Regulation Bylaw 1973" prohibits overhead electrical and telecommunications service lines and overhead electrical transformers serving buildings, structures, or things in the Municipality but exempts from this control (a) existing poles or overhead distribution lines of specified utility companies on dedicated roads or rights-of-way where these are part of a common distribution system, and (b) overhead electrical, telephone, and transformer facilities placed or maintained in conjunction with single- or two-family dwellings or accessory buildings in A, R, or RM districts.

The "Burnaby Subdivision Control Bylaw 1971" provides that where subdivision of land is involved, the subdivider must construct all wiring, transformers, and all appurtenances for power and telephone underground to serve all subdivided properties, in accordance with the design and specifications of the utility companies.

The manner in which these controls apply in the case of new development, service expansion, and land subdivision is outlined below.

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I. "BURNABY ELECTRICAL CONNECTION REGULATION BYLAW"

- Adopted August 23, 1973 as a replacement for the earlier provision contained in the Burnaby Building Bylaw 1969.
- Bylaw based on previous Council policies; clarified and stabilized in the form of a Bylaw that had been adopted as a policy commitment to make a start toward the eventual elimination of overhead wiring by ceasing to construct new overhead plant.
- The Bylaw requires that all new electrical and tele-communications services for new construction (including buildings, outdoor lighting, and freestanding signs, but excluding single and two family dwellings and accessory buildings in A, R or RM Districts) be installed wholly in underground conduits beneath the lot or lots and road or roads through which such service lines pass, and that all transformers or other appurtenances be placed and maintained wholly in underground vaults, ground kiosks, or transformer vaults within the structure served.
- Any electrical service increases associated with building additions or alterations, or in anticipation of such, which require electrical permit approval and replacement of existing overhead installations must be provided for underground to be in accordance with the Bylaw. However, changes in electrical service which are truly not associated with any present or potential development, building expansion or alterations do not require underground installation. Renewal of existing overhead plant for purely maintenance purposes is also permitted.
- The existing transformers on platform constructions may be replaced with higher KVA ratings provided no changes to the platform structure are necessary and provided no alterations or additions are being made to the building structures.
- Where underground connections are required, the underground wiring must extend to the building from the point in the distribution system at which the connection is to be made. If service of the type required by the development is not available immediately at the property and the service must be extended from some more distant point in the distribution system in order to serve that building, then the extension must be made in underground conduits as required by the Bylaw "beneath the lot or lots and road or roads through which such service lines pass". The location from which such service may be taken is determined by the utility company.
- Miscellaneous electrical installations which are customarily found on distribution poles such as street lights and service boxes, lease lights on B. C. Hydro Distribution poles, cablevision amplifiers in the same situation are of course permitted to be served by the overhead system; however services to free-standing elements such as traffic signals, telephone booths, and railway crossing signals are expected to be underground.

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- Temporary buildings installed under a permit from the Building Inspector for a limited period of time and temporary construction electric services are permitted overhead - on a temporary basis.
- The provisions of this Bylaw are administered on a day-to-day basis by the Chief Building Inspector through the Electrical Inspectors Division.
- The exception noted in the Bylaw relating to the distribution systems of the utility companies relates to "existing poles or overhead distribution lines" -- this control is administered by the Engineering Department.

II. BURNABY SUBDIVISION CONTROL BYLAW 1971

- Adopted September 20, 1971, this Bylaw regulates the subdivision of land in this Municipality and in so doing sets the standards for the provision of services.
- Prior to the adoption of this Bylaw, the Council had a policy that new subdivisions, whether residential or non-residential, be provided with underground power distribution services, and that no further overhead distribution services should be located on existing streets.
- The Bylaw provides that the subdivider shall construct all the public services required by the lots created by subdivision, including electrical power, and specifies that the wiring for power and telephone must be underground; all such services must be to the standards and specifications set out in the respective Appendices to the Bylaw.
- Where electrical service is not available at the boundaries of the lot or lots being created, and extensions of the electrical service system are thereby required, such extensions must be provided underground. Again, the utility company advises as to the location from which the service is to be extended.
- All subdivision applications processed since the adoption of the Bylaw have been required to adhere to these requirements.
- Arrangements for underground wiring are required to be made prior to subdivision approval by the Approving Officer; plans must be approved by the Municipal Engineer and installation must be arranged for by the developer in accordance with the design and specifications supplied by the Utility companies under the supervision of the Utility's inspectors.

III. LIABILITY WITH REFERENCE TO EASEMENTS

Where underground cable services are required to be placed under private properties as a part of a common distribution system or as part of a service connection to another property, it is necessary for an easement to be obtained to protect the installation and to define the rights under

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which it exists. Such conditions do not frequently arise, as the services are customarily located within public road allowances or rights-of-way to the boundaries of the property served. In those instances where this is not possible however, the utility company involved enters into an easement agreement with the property owner in the same sense as with any other service easement, and the question of liability does not differ in such an instance from any other easement situation. (The Solicitor advises that specific comments on third party liability can be made only on the basis of actual situations which provide evidence that can be evaluated - it is on this basis that liability can be attributed to either a property owner, the Municipality or another agency such as B. C. Hydro.)

SUMMARY:

The foregoing describes the regulations that apply to the new developments, to alterations to existing developments, and to new subdivision of land. These controls give effect to the principle that has been endorsed by Council of making a positive start in the direction of eventual elimination of overhead wiring, by avoiding any further placement of overhead plant in conjunction with new development.

This is for the information of Council.

Respectfully submitted,


A. L. Parr,
DIRECTOR OF PLANNING.

DGS:bp