

By-laws under the Rotorua Borough Act, 1922.

WHEREAS by section 8 of the Rotorua Borough Act, 1922, the control and ownership of electric light and power for supply of electric energy to the Borough of Rotorua is vested in the Department of Tourist and Health Resorts as incorporated by the Rotorua Town Act, 1907: And whereas in respect of the works the said Department has all the powers for the time being conferred by law on Borough Councils except the power to borrow money or to make and levy any special rate:

Now, therefore, the said Department, in pursuance of such powers and all other powers thereunto enabling it, doth hereby make the by-laws hereinafter set forth; and doth hereby revoke Part XIII of the Rotorua Town By-laws, 1909, as amended and published in the *New Zealand Gazette* of the 10th day of January, 1918, and doth substitute therefor the by-laws following; and doth hereby declare that such additional by-laws shall take effect and come into force on the 18th day of October, 1922.

BY-LAWS.

PART XIII.—SUPPLY OF ELECTRIC ENERGY.

PART I.—GENERAL.

"THE Department" means the Department of Tourist and Health Resorts.

"Departmental officer" means the officer for the time being in charge of the Department's electrical supply at Rotorua, or any officer authorized by him.

System of Supply.

1. Energy will be supplied by the single-phase and three-phase alternating-current system at a frequency of 50 cycles per second, and at a pressure of 115 volts single-phase and 200 volts three-phase.

Applications.

2. Applications for supply of electrical energy must be made on the official application form, obtainable at the Tourist Inquiry Office, or the substation.

3. This form, duly completed and signed by the consumer and the contractor, must be handed in to the substation, and written permission obtained from the Department before work is commenced. Applicants should first ascertain from the Department whether the supply is available; and, in event of any extension of the distributing main being necessary, whether such extension will be made by the Department free of charge.

4. The Department may require applicant to pay the whole or part cost of any lines, poles, fittings, &c., for any distance in excess of 60 ft. via route of wire from the property boundary to premises to be connected.

5. The consumer must provide the necessary insulators, mounted on the building, to carry the service lines.

6. Where considered necessary, pole-top fuses will be supplied by the Department.

7. At least fourteen days' notice should be given to the Department by the contractor of supply required; and, while every effort will be made to give the supply by the date quoted, the Department is not bound in any way to do so.

8. Upon acceptance of the application a departmental officer will inspect the premises by appointment, and indicate to the contractor the position of the meter-board and the point of entry for the service mains. The Department has the sole right to determine the point where the main shall enter the building and where the meter shall be situated.

Installations.

9. The wiring and fittings in the consumers' premises must be in accordance with the rules and regulations of the Council of the Fire Underwriters' Association of New Zealand, and to the entire satisfaction of a departmental officer, who shall be given free access to such premises during the progress of the said work, and shall, if he deem it necessary, have the right to require the contractor to open up any joint or to remove any casing, conduit, wires, or fittings, for the purposes of ascertaining if the work has been properly executed. The contractor must reinstate at his own expense any work such officer may have examined in the manner set forth.

10. When connections are taken from overhead lines, the mains between the entrance and the main-board must be run in steel screwed conduit, and project at least 2 ft. beyond the mouth of the entrance-tube. The minimum size of service cable shall be 7-029 (7/21½ S.W.G.).

11. The exposed portion of the conduit or piping carrying the mains to the main-board or the leads to outbuildings, outside lights, &c., must be galvanized. Outside fittings must be not less than ½ in. galvanized pipe or conduit, and if of a greater length than 2 ft. 6 in. must be suitably stayed.

12. All conduit systems must terminate at the outlet, points of switches, ceiling-roses, and other fittings in metal outlet-boxes. For surface work the present type of outlet-box must still be used, no wooden block being necessary. For concealed work a bell-mouthed or other outlet-box of approved pattern may be used. This must be of such a shape and size that the wires are adequately protected. The wooden block placed over it is to serve merely as a cover for the outlet. The outlet must be screwed to the conduit drop, so that the conduit is properly anchored, and so that no strain is placed on the wires.

13. Conduits must be first installed in a complete system, and the conductors afterwards drawn in. They must be electrically and mechanically continuous throughout, and connected to earth by not less than a 1-083 (1/14 S.W.G.) copper wire. The wiring at all outlets must be protected against abrasion. Where insulated bushings are used they must be of the internal type. External bushings must not be used.

14. Earth-clips shall be made of brass or copper of at least 22 gauge, and not less than ¾ in. wide, and shall make contact with at least three-quarters of the circumference of the pipe. In earthing motors the earth-wire must be placed under the bed-plate or slide-rail bolt, and not under the holding-down bolt of the motor. The main cutouts, main switch, and meters are to be placed as near to the point of entry of the mains as possible, and, provided such position is convenient, it is advisable that the distributing-board be placed in immediate proximity to the meter.

15. Distribution and meter boards shall be mounted on iron brackets and supported not less than 4 in. from the wall. They should preferably be placed in the hall of a building, and must not be placed in a bathroom or in a damp or exposed situation, or where liable to action of acid fumes. The board must be erected at such a height that the meter-dial will not be more than 7 ft. from the floor and in a well-lighted position. The meter-board shall be drilled ready for the erection of the meters, and leads shall be provided for connecting up the meter. The connections on main-board must be in the order of main cutout, main meter, main switch.

16. All distribution-boards must be provided with suitable cutouts which can be sealed. These will be fixed and sealed by the Department, and must not be opened or the fuses changed by other than a departmental officer. Space must be provided on such board for the Department's meters. The Department may make a charge for renewing any sealable fuse if the fuse has been blown by a fault in the consumer's installation.

17. Where an installation provides for both lighting and heating, two pairs of sealable cutouts must be provided, so that the lighting and heating circuits can be kept separate and distinct from each other.

18. In heating-circuits each point must be reckoned as not less than 1 kilowatt, and the conductors shall not be less than 3-036 (7/23 S.W.G.). One plug only will be allowed on each circuit.

19. Where lighting and heating or power plugs are used on the same installation they must be of different design, so that portable lamps cannot be used on the heating-circuit nor heating or power appliances on the lighting-circuit.

20. Porcelain covered switches are not allowed except by special permission of the Department. Ceiling-switches must be used in bathrooms, or in other damp places, if required by the departmental officer.

21. All aerial conductors to outbuildings or outside lights must be stranded, and not less than 3-036 (7/23 S.W.G.). They must be controlled by fuses on both poles, independent of interior wiring. If required, they must form an independent circuit.

22. If in any premises there are (a) any temporary wires or fittings, or (b) if any instructions relative to the installation deemed necessary by the departmental officer have not been complied with, or (c) if the whole of the work is not completed with all fittings fixed and fuses in place, the Department will not supply energy to such premises unless written consent to such supply has previously been obtained from the Department.

23. Casing will only be allowed after an inspection has been made and written permission given by the Department.

24. Portable leads must be armoured, preferably with a tough rubber compound, and the lamp-holder in portable lamps must be insulated from the guard and any other metal work.

25. No extensions or alterations of any installation shall be made without first notifying the Department of the intention so to do, and receiving written permission to carry out the work.

Temporary Work.

26. Temporary wiring will only be allowed by special permission of the Department. All such wiring must be done on porcelain knob insulators. These are to be fastened in such a manner as to make them secure, and are to carry nothing but the electric wires. All such wiring must be kept