Sept. 23.]

License authorizing the Christchurch Tramway Board to erect Electric Lines from the Trolly-wire at Summer to the Premises on Lot 91, D.P. 140, R.S. 15835.

# LIVERPOOL, Governor.

### ORDER IN COUNCIL.

At the Government House at Wellington, this twentieth day of September, 1915.

Present :

### HIS EXCELLENCY THE GOVERNOR IN COUNCIL

WHEREAS by section two of the Public Works Amend-ment Act, 1911, it is provided that no person shall lay, construct, put up, place, or use any electric line except under the authority of a license issued to him by the Governor in Council under that Act:

And whereas the Christchurch Tramway Board (hereinafter referred to as "the licensee") desires to erect electric lines from the trolly-wire near the tram-shed, Sumner, to connect with a three and a half horse-power motor, situated on the premises of James Howey, being Lot No. 91, D.P. 140, R.S. 15835, Block I, Summer Survey District (hereinafter referred to as "the said electric lines"), and it is expedient accordingly to issue a license in respect thereof under the said continue.

section : Now, therefore, in pursuance and in exercise of the powers conferred on him by the said section, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth, subject to the conditions set forth in the Schedule hereto, hereby authorize the said licensee to erect and maintain the said electric lines for the purpose of supplying electrical energy to the said motor, such electric lines and the position of the premises being indicated on the plan marked P.W.D. 38453, deposited in the office of the Minister of Public Works at Wellington, in the Wellington Provincial District.

## SCHEDULE.

#### Conditions.

- earth in such a manner as to ensure at all times an immediate and safe discharge to earth of electric energy
- energy. "Electric line" means any wire, wires, conductor, or other means used for conveying, transmitting, or distributing electricity for power, lighting, or heat-ing purposes; and includes any instrument, insulator, casing, tubing, pipe-covering, or post enclosing or supporting an electric line, or anything connected therewith.
- "Inspecting Engineer" means and includes any Inspecting Engineer appointed by the Minister to inspect the works to be constructed or maintained by virtue of electric-line licenses issued under the Public Works Act, 1908, and any or all of its amendments, or under any one or more of such amendments only, or any Act or Acts passed in amendment thereof or substitution therefor.

- Substitution therefor.
  "Minister " means Minister of Public Works.
  "Telegraph" includes telephone.
  "Telegraph line" has the same meaning as "electric line" in the Post and Telegraph Act, 1908, and also includes all telegraph, telephone, and electric signal-ling wires belonging to the Government Railways Department.

2. The conductors shall not be less than 7/18 S.W.G. hard-drawn copper wires firmly attached to porcelain in-sulators, and erected on supports placed not more than 150 ft. apart. The positive conductor shall be covered throughout, and the covering may consist of vulcanized indiarubber or of triple braiding thoroughly impregnated with weatherproof compound. The prestive conductor may be here

compound. The negative conductor may be bare. 3. The conductors shall be carried on substantial and durable supports, which shall be designed to have a factor of safety of four in the case of steel, iron, or ferro-concrete, and five in the case of wood, calculated upon the ultimate strength

fuse cut-out shall be placed in a suitable locked or sealed receptacle of fireproof construction fixed at a convenient height on the pole nearest the point where the positive con-ductor leaves the trolly-wire or feeder. At the distributingductor leaves the trolly-wire or feeder. At the distributing-point of a lighting circuit there shall be inserted in the positive conductor a single-pole switch, together with a fuse arranged to operate with an overload of 50 per cent. above the rated full load of such circuit. In a motor circuit there shall be provided, in the immediate vicinity of each motor connected thereto, a double-pole switch and fuse cut-out or circuit-breaker arranged to operate with an overload of 50 per cent. above the rated full load of the motor so controlled. Each motor shall be fitted with a no-volt release and a series resistance. resistance

6. The negative conductor shall, in a lighting circuit, be continuous throughout its length from the lamps to the tramway-rail, to which it shall be effectively bonded, and in a motor circuit from the switch terminal to the tramway-rail, to which it shall be effectively bonded.

rail, to which it shall be effectively bonded. 7. At telegraph-line crossings the conductors shall pass over or under, as may be decided by the Minister of Telegraphs. In every crossing-span the maximum tension in any conductor shall not exceed one-half the elastic limit of the conductor under the conditions of a minimum temperature of  $12^{\circ}$  F. and wind-pressure as specified in clause 3 occurring simultane-ously. Efficiently earthed guard-wires, to the satisfaction of the Minister of Telegraphs, shall be erected where such protection may be considered necessary by the Minister of Telegraphs, and earth-wires where led down poles shall be protected by a casing for a distance of 8 ft. from the ground. Guard-wires shall be carried on substantial supports at a protected by a casing for a distance of 8 ft. from the ground. Guard-wires shall be carried on substantial supports at a height of 2 ft. above the said electric lines if the telegraph lines pass over the said electric lines, or 2 ft. above the tele-graph lines if they pass under the said electric lines. In addition to the above precautions, telegraph lines shall be suitably insulated if deemed necessary guard-wires and special provisions required to comply with this clause, or deemed to be necessary as a protection to telegraph lines generally, shall be borne by the licensee when the telegraph lines are erected before the said electric lines. In cases where the said electric lines are erected before the telegraph lines, the licensee, on receipt of notice from the district Telegraph Engineer of the Post and Telegraph Department or his deputy, that it is proposed to run a telegraph line along the route, shall forth-with make the necessary changes required to comply with with make the necessary changes required to comply with this clause at any points at which the said electric lines already cross such routes, the cost of such changes being borne by the Post and Telegraph Department.

8. No work of any nature shall be erected or constructed upon, over, or under any part of the New Zealand Government Railways until the licensee has obtained the consent of the Minister of Railways thereto, as required by section 4 of the Government Railways Amendment Act, 1910 (No. 2).

9. The construction of the works hereby authorized shall be substantially commenced on or before the 1st day October, 1915, and shall be completed on or before the 1st day of December, 1915.

10. The licenses shall, prior to the completion of the said works, give to the Minister at least seven days' notice in writing of the estimated date of such completion.

11. The licensee shall not use the said electric lines, or permit the same to be used, until the Minister has given notice in writing to the licensee that he has received from the Inspecting Engineer a certificate that the work hereby autho-

Inspecting Engineer a certificate that the work hereby autho-rized has been satisfactorily carried out. 12. The said electric lines shall be duly and efficiently supervised and maintained by the licensee as regards both electrical and mechanical conditions, and shall not be per-mitted by the licensee to remain erected after they have

mitted by the licensee to remain erected after they have ceased to be used for the supply of electricity. 13. This license, and the benefits and obligations here-under, shall not be assigned by the licensee without the expressed consent in writing of the Minister first had and obtained; but such consent shall not be withheld if it is proved to the satisfaction of the Minister that the transferee is financially and otherwise able to carry out the obligations specified in this license.

14. The Minister may at any time order an inspection to be made of the said electric lines. If any defect is found to exist it must be remedied forthwith; and if, in the opinion of the officer or person inspecting, such default is serious the five in the case of wood, calculated upon the ultimate strength of the material, assuming the wind-pressure to be 20 lb. per square foot upon a plane surface, and 12 lb. per square foot upon a diametral plane upon a cylindrical surface. 4. The conductors shall not in any part thereof be at less height than 18 ft. from the surface of the ground. 5. A single-pole fuse cut-out shall be inserted in the positive conductor, and arranged to operate with an overload of 100 per cent. above the rated full load of the circuit. Such