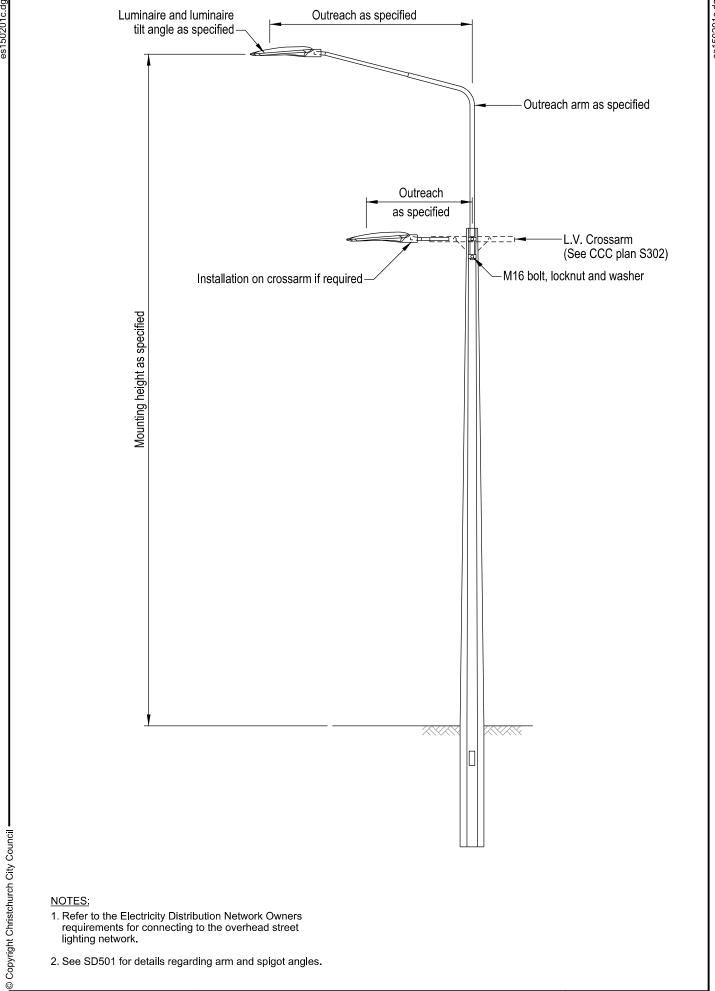


UNDERGROUND SUPPLY

SHEET OF



- 1. Refer to the Electricity Distribution Network Owners requirements for connecting to the overhead street lighting network.
- 2. See SD501 for details regarding arm and spigot angles.

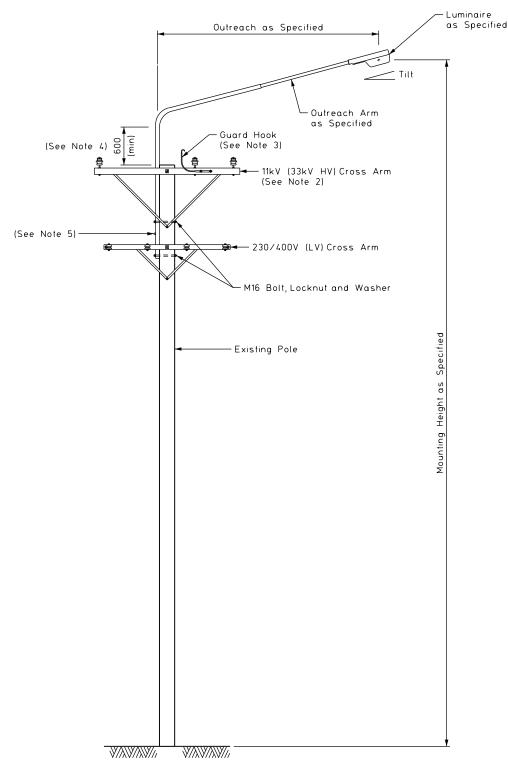


TYPICAL STREET LIGHT INSTALLATION L.V. DISTRIBUTION POLE

ISSUE DATE DEC 2019

SD502

SHEET OF



Notes

- Outreach arm to be mounted on front or back of pole depending on location of centre insulator.
- 2. Replace the existing 11kV cross arm with a 2.3m 33kV cross arm to allow for the clearances specified in note 4.
- Guard hook to be fitted to centre insulator at a suitable position so as to achieve a min clearance of 350mm between the guard hook and the outreach arm and a min clearance of 210mm between the guard hook and centre insulator.
- 4. The position of the outreach arm can be varied (up or down) to achieve a different mounting height for the luminaire providing the distance between the internal bend of the outreach arm and the top of the pole is not less than 600mm.
- 5. 25 x 25 x 4 flat earthing lug, with 80 hole, welded to outreach arm in approx. position shown. Earthing conductor to be (min.) 16mm² Cu PVC (Green insulation)



TYPICAL STREET LIGHT INSTALLATION FOR H.V/L.V DISTRIBUTION POLE - TYPE

ISSUE DATE DEC 2009

SD503

SHEET 1

Notes

 Replace the existing 11kV cross arm with a 3.0m x 0.1m x 0.1m cross arm to allow for the clearances specified in note 2. This arm to have the same drilling arrangement as the standard 2.0m cross arm.

- Guard hook to be fitted to outside insulator in a suitable position so as to achieve a min. clearance of 300mm between the guard hook and the outreach arm and a min. clearance of 210mm between the guard hook and outside insulator.
- 3. 25 x 25 x 4 flat earthing lug, with 80 hole, welded to outreach arm in approx. position shown. Earthing conductor to be (min.) 16mm² Cu PVC (Green insulation)



TYPICAL STREET LIGHT INSTALLATION FOR H.V/L.V DISTRIBUTION POLE - TYPE 2

SD504

SHEET -

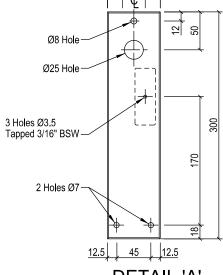
- Switchboard to be secured to inside of column, opposite door opening. Secure with suitable size nut and spacer behind panel. For concrete columns use Ø25 mounting hole. For steel columns use Ø8 mounting hole.
- Suitable "Main" label to be mounted adjacent to fuse. Label to include the installation date.
- 3. For installations where only one SLN cable is to be terminated, the phase conductor can be terminated directly into the fuse carrier, eliminating the need for a line tap connection and 6mm² phase conductor.
- 4. The Street Lighting Network (SLN) cable neutrals are to be secured onto the Neutral stud with their own nuts independantly of the other neutral connections. The TPS neutral and Earth-neutral link to be installed last so that any future removal of these will not result in the SLN cable neutrals being disconnected.
- Earth and Neutral studs to be M6 x 50 Brass Screws, nuts and washers.Refer to Note 4 for the specific requirements of the Neutral Stud connections.
- 6. Provide a 6mm² Cu PVC Green or Green/Yellow conductor from Earth Stud to be bonded to the door with a 6mm stud, washers, nut and locknut. N.B. All paint must be removed from the earthing connection area.
- 7. Ownership details are as follows:

Copyright Christchurch City Council

- Electricity Distribution Network Owner (EDNO)
- Street Lighting Network cables including line tap and 6mm² phase conductor to bottom of the Main Fuse.

CCC - Everything other than above.

- All Electricity Distribution Network Owner (EDNO) owned equipment (Street Lighting Network cables, line taps etc) shown are typical only.
 Refer to Electricity Distribution Network Owner (EDNO) standards and specifications.
- Anyone working on this equipment must be competent and approved by the relevant Electricity Distribution Network Owner (EDNO) to carry out the tasks they are performing.



DETAIL 'A'

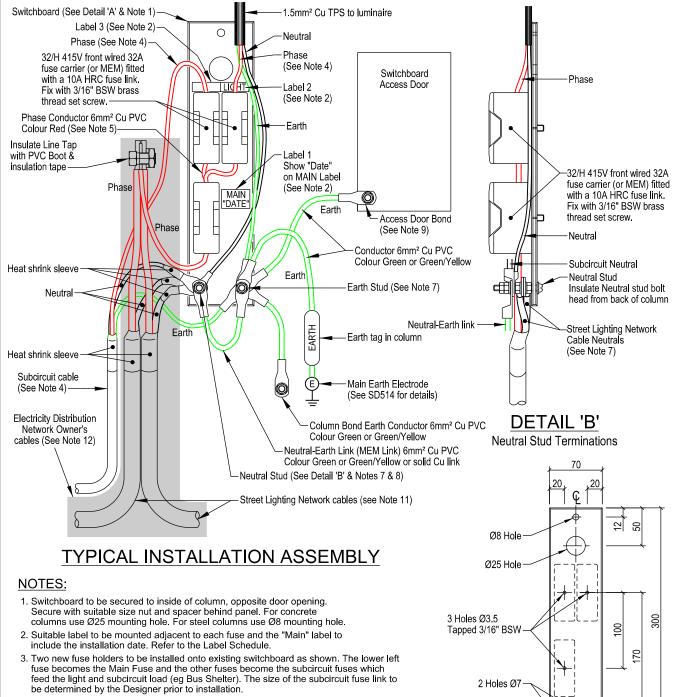
es151001c.dg

SWITCHBOARD MATERIAL: 6mm Formica P1, or similar electromechanical grade laminate

All dimensions in millimetres unless otherwise stated



STREET LIGHT SWITCHBOARD CONNECTION DETAILS SD510



- 4. The new subcircuit cable shall be a suitably sized twin + NS (or 3 core) cable. The phase conductor to be terminated into the top of it's subcircuit fuse. The neutral and earth conductors to be connected to the neutral and earth studs, as shown.
- 5. The existing phase conductor, from the line tap, is to be reterminated into the bottom of the (new) Main Fuse and two 6mm2 Cu PVC (red) conductors are to be connected from the other side of the Main Fuse into the bottom of each respective subcircuit fuse as shown. The existing phase conductor, feeding the light, is to be reterminated into the appropriate fuse holder as shown.
- 6. For installations where only one SLN cable is to be terminated, the phase conductor can be terminated directly into the fuse carrier, eliminating the need for a line tap connection and 6mm² phase conductor.
- 7. The Street Lighting Network (SLN) cable neutrals are to be secured onto the Neutral stud with their own nuts independently of the other neutral connections. The TPS neutral and Earth-neutral link to be installed last so that any future removal of these will not result in the SLN cable neutrals being disconnected.
- Earth and Neutral studs to be M6 x 50 Brass Screws, nuts and washers.
 Refer to Note 4 for the specific requirements of the Neutral Stud connections.
- Provide a 6mm² Cu PVC Green or Green/Yellow conductor from Earth Stud to be bonded to the door with a 6mm stud, washers, nut and locknut. N.B. All paint must be removed from the earthing connection area.
- 10. Ownership details are as follows:
 - Electricity Distribution Network Owner (EDNO)

 Street Lighting Network cables including line tap and 6mm² phase conductor to bottom of the Main Fuse.

 CCC Everything other than above.
- 11. All Electricity Distribution Network Owner (EDNO) owned equipment (Street Lighting Network cables, line taps etc) shown are typical only. Refer to Electricity Distribution Network Owner (EDNO) standards and specifications.
- 12. Anyone working on this equipment must be competent and approved by the relevant Electricity Distribution Network Owner (EDNO) to carry out the tasks they are performing.

DETAIL 'A'
SWITCHBOARD MATERIAL:
6mm Formica P1, or similar electromechanical grade laminate

es151101c.dg

LABEL SCHEDULE	
WORDING	
MAIN & DATE	
LIGHT(S)	
(TO SUIT FUNCTION)	

All dimensions in millimetres unless otherwise stated

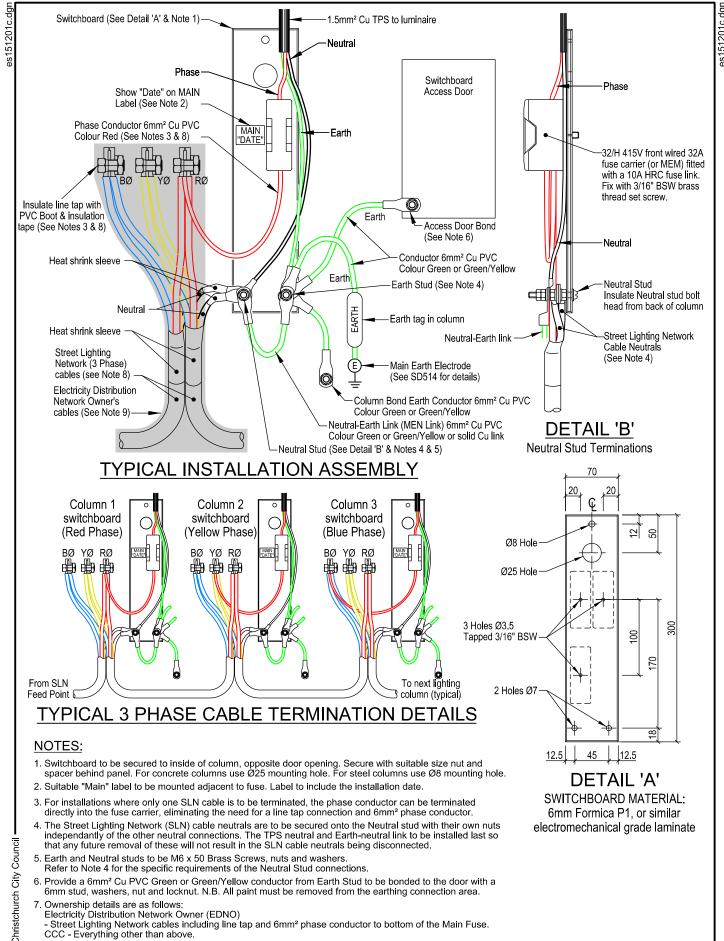
ISSUE DATE



STREET LIGHT SWITCHBOARD - SUBCIRCUIT CONNECTION DETAILS

SD511

DEC 2019



CCC - Everything other than above.8. All Electricity Distribution Network Owner (EDNO) owned equipment (Street Lighting Network cables, line taps etc) shown are typical only.

Refer to Electricity Distribution Network Owner (EDNO) standards and specifications.

9. Anyone working on this equipment must be competent and approved by the relevant Electricity Distribution Network Owner (EDNO) to carry out the tasks they are performing

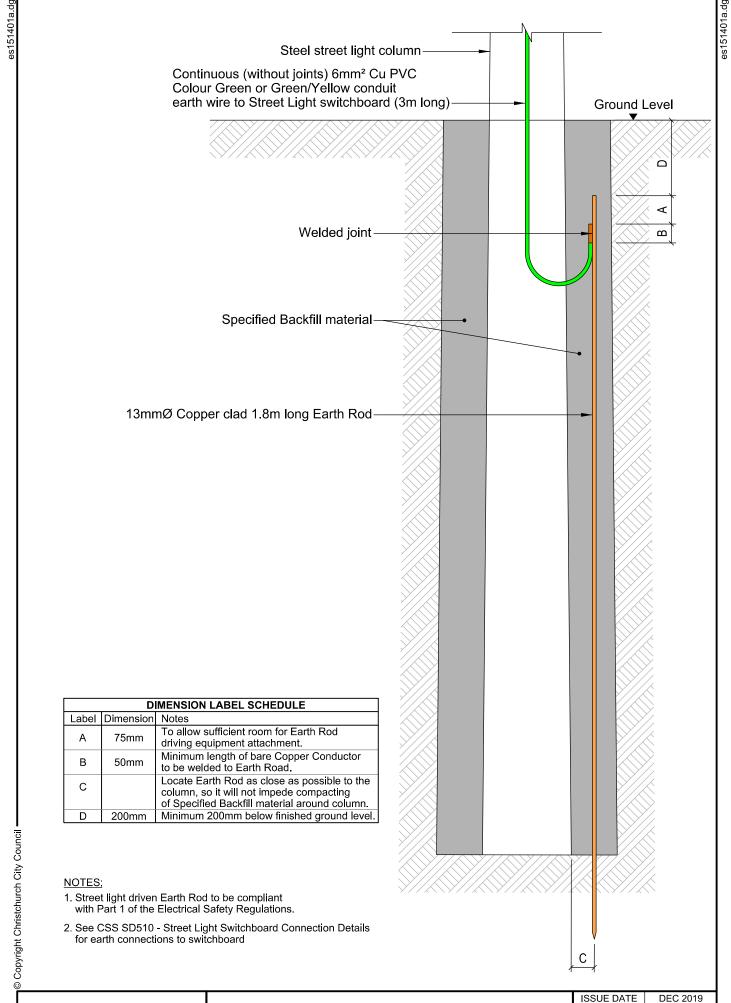
All dimensions in millimetres unless otherwise stated



STREET LIGHT SWITCHBOARD - 3 PHASE CONNECTION DETAILS

ISSUE DATE DEC 2019

SD512



Christchurch City Council

STREET LIGHT DRIVEN EARTH ROD _

SD514