



**CATEGORY 2 ADVERTISING DEVICE**

**THIRD PARTY PIT**  
Refer Note 8

**DEPARTMENT PIT**

**NOTES:**

1. The Category 2 advertising device is provided an Active, Neutral and Earth supply from the Department's bell. This is connected in the Department's bell joint in the same manner as underpass lighting. Refer Standard Drawing 1637.
2. The Department to confirm EFLI and voltage drop are satisfactory at the bell joint to allow for connection of the Category 2 advertising device.
3. Check existing bell joint for adequate space requirements. If space is limited, exchange existing bell joint with a new bell joint part number (534).
4. Combination Fuse Switch with 10A HRC fuse (type gG) to supply power to the Category 2 advertising device.
5. Neutral link and Earth link to fit 6mm<sup>2</sup> cables. No MEN link required at this point.
6. Combination fuse switch with 4A HRC fuse (type gG).
7. The installation of the Category 2 advertising device shall comply with AS/NZS 3000 including the requirement for an RCD and discrimination of protective devices.
8. Install a third party pit.
9. All bell joints are to be clearly labelled to confirm ownership.
10. Refer to TRUM Manual for Bell Joint Assembly Manual.
11. Earthing method.
  - (a) Generally the earth electrode for the bell joint is the footing of the associated road lighting pole. If this earth electrode is not present, install a copper clad earth electrode in a P3 pit adjustment to the Department pit.

- (b) Ensure there are no underground services in vicinity prior to installing earth electrode.
- (c) The earth electrode must be driven no less than 1300mm vertically into ground, leaving a minimum 150mm exposed length of electrode in the base of the pit.
- (d) In difficult soils, dig out the appropriate P3 pit size, auger a 75mm hole vertically to 1300mm, install the earth electrode in the centre of the hole, fill the auger hole with LSI RESLO compound or equal and install the pit over the earth electrode.
- (e) Connect the electrode to the MEN point inside the bell joint with a length of 6mm<sup>2</sup> copper earth conductor.
- (f) Attach a permanent label to the connection of the main earthing conductor to the earth electrode stating: "Warning: Main electrical earthing conductor DO NOT DISCONNECT".
- (g) Only one earth electrode connected to one main earth conductor permitted in one earth pit.

12. Dimensions are in millimetres unless shown otherwise.

- ASSOCIATED DEPARTMENTAL DOCUMENTS:**
- Standard Drawings
  - Specifications
  - Traffic and Road Use Management Manual (TRUM Manual) – Volume 5.3 Bell Joint Assembly

- REFERENCED DOCUMENTS:**
- Departmental Standard Drawings:
- 1149 Traffic Signals/Road Lighting/ITS – Installation of Underground Electrical and Communications Conduit
  - 1389 Road Lighting – Slip Base Pole Male/Female Connectors Installation Details
  - 1400 Road Lighting – Slip Base Pole Wiring Details
  - 1440 Traffic Signals/Road Lighting – Cable Jointing Pit Rectangular Concrete Surround
  - 1624 Road Lighting – Junction Box Single Phase Wiring Details
  - 1625 Road Lighting – Junction Box Three Phase Wiring Details
  - 1626 Road Lighting – Junction Box Active, Neutral and Earth Bolting Arrangements
  - 1637 Road Lighting – Underpass Lighting Wiring Details
  - 1699 Traffic Signals/Road Lighting/ITS – Parts List

- Departmental Specifications:
- MRTS91 Conduits and Pits
  - MRTS228 Provisions of Electrical Switchboards
  - MRTS256 Power Cables

Australian Standards:  
AS/NZS 3000 Electrical Installations (Wiring Rules)

**INSTALLATION OF CONDUITS AND PITS IS THE RESPONSIBILITY OF THE LICENSED ELECTRICAL CONTRACTOR**

Department of Transport and Main Roads				© The State of Queensland (Department of Transport and Main Roads) 2015 <a href="http://creativecommons.org/licenses/by/3.0/au">http://creativecommons.org/licenses/by/3.0/au</a>	
ROAD LIGHTING				A3	Standard Drawing No
CATEGORY 2 ADVERTISING DEVICES CONNECTED TO RATE 3 ROAD LIGHTING AS ALTERNATIVE POINT OF SUPPLY		Not to Scale	1638		Date 10/15
A	B	C	D		