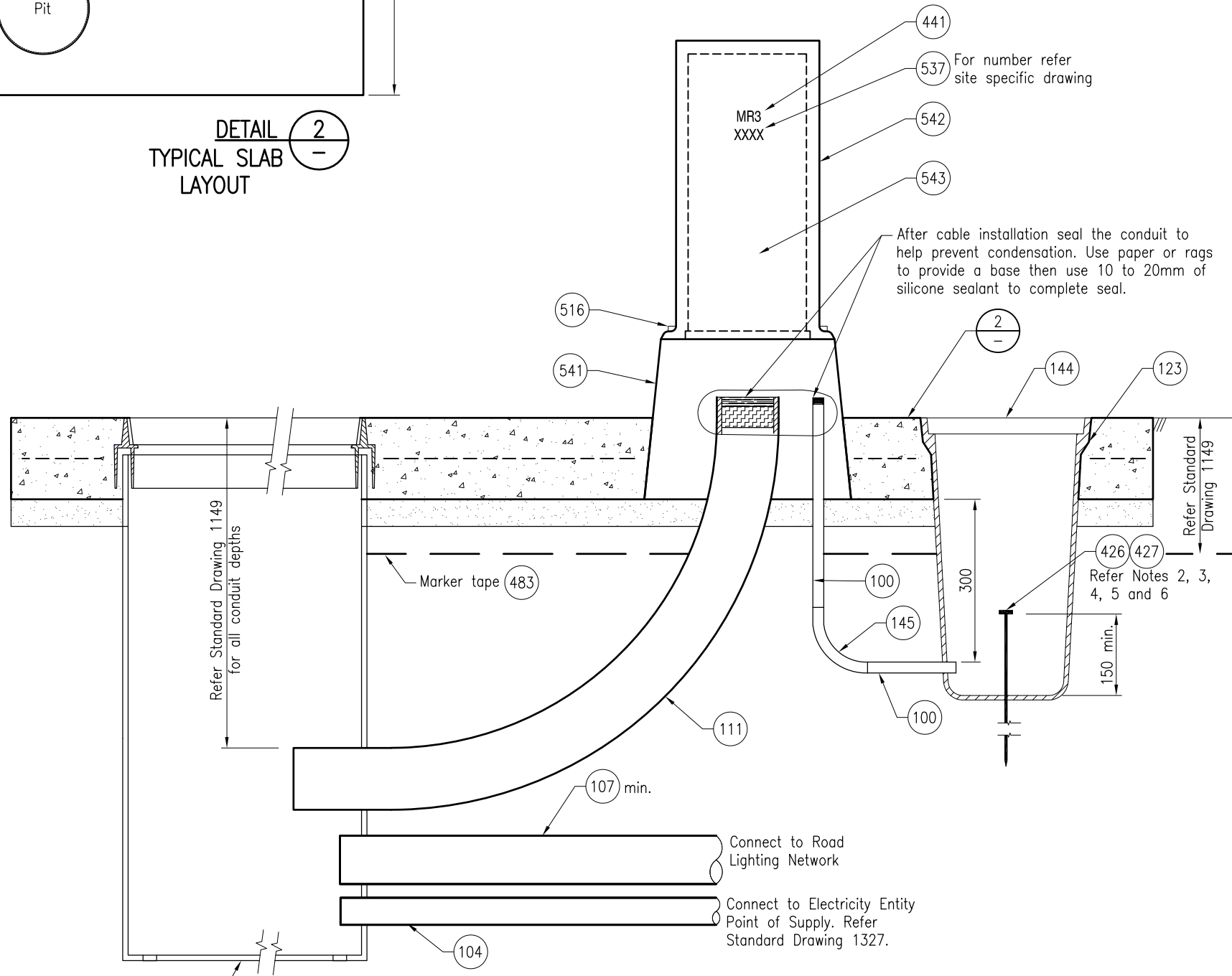


General arrangement only. Locate equipment to suit.

150 thick N25/20 concrete slab reinforced with 1 layer of SL62 mesh placed centrally.

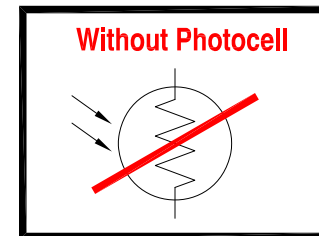
DETAIL 2
TYPICAL SLAB LAYOUT



EQUIPMENT DETAIL (ONLY)
REFER DETAIL 2 FOR TYPICAL LAYOUT

SCOPE OF THIS STANDARD DRAWING
Pillar switchboard should only be used where disconnect times cannot be met on metallic switchboard. (Refer TRUM Vol 4 Part 3 Electrical Design for Roadside Devices). TMR approval must be obtained before installation of Pillar switchboard.

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



NOTES:

- (a) Electrical switchboards shall wherever possible be located adjacent to the property boundary with the door facing the roadway.
- (b) Electrical switchboards shall wherever possible be located outside the clear zone (refer RPDM Chapter 8). Where site constraints require that electrical switchboards are situated within the clear zone then an assessment in accordance with the provisions of RPDM Chapter 8 must be carried out to determine whether protection (i.e. by safety barrier) is required.
- Attach a permanent label to the main earthing conductor at the connection to the earth electrode stating: "WARNING: MAIN ELECTRICAL EARTHING CONDUCTOR - DO NOT DISCONNECT"
- Ensure there are no underground services in vicinity prior to installing earth electrode.
- The earth electrode must be driven no less than 1300mm vertically into the ground, leaving a minimum 150mm exposed length of electrode in the base of the pit.
- In difficult soils, dig out the appropriate P3 pit size, auger a 75mm hole vertically to 1300mm, install the earth electrode in the center of the hole, fill the auger hole with LSI RESLO compound or equal and install the pit over the earth electrode.
- Only one earth electrode connected to one main earth conductor permitted in one earth pit.
- The URD pillar, photoelectric control switch and socket and electrical component details shall comply with MRTS228 and MRTS256.
- Photoelectric control switch and socket to face south.
- Seal between the photoelectric control switch socket and the pressure cap and between the pressure cap and the traffic signal post with silicone sealant.
- Enclose connectors, item (419), and cable tie, item (410), in junction box for installation in the field.
- Install cable (034) between photocell and switchboard.
- Attach a permanent label in the switchboard stating: "EARTH ELECTRODE IN ADJACENT EARTH PIT"
- Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:

- Standard Drawings Specifications
- Traffic and Road Use Management Manual (TRUM) - Volume 4 Part 3 Electrical Design for Roadside Devices

REFERENCED DOCUMENTS:

- Departmental Standard Drawings:
 - 1149 Traffic Signals/Road Lighting/ITS - Installation of Underground Electrical and Communications Conduit
 - 1327 Traffic Signals/Road Lighting - Mains Connections
 - 1424 Traffic Signals - Traffic Signal Post and Footing Installation Details
 - 1422 Traffic Signals - Ragbatt Sub-Assembly Fabrication Details
 - 1428 Traffic Signals - Traffic Signal Post Base Mounted
 - 1623 Road Lighting - Switchboard Typical Layout and Circuit Diagram MEN System
 - 1676 Road lighting - Switchboard Typical Pillar Layout
 - 1699 Traffic Signals/Road Lighting/ITS - Parts List

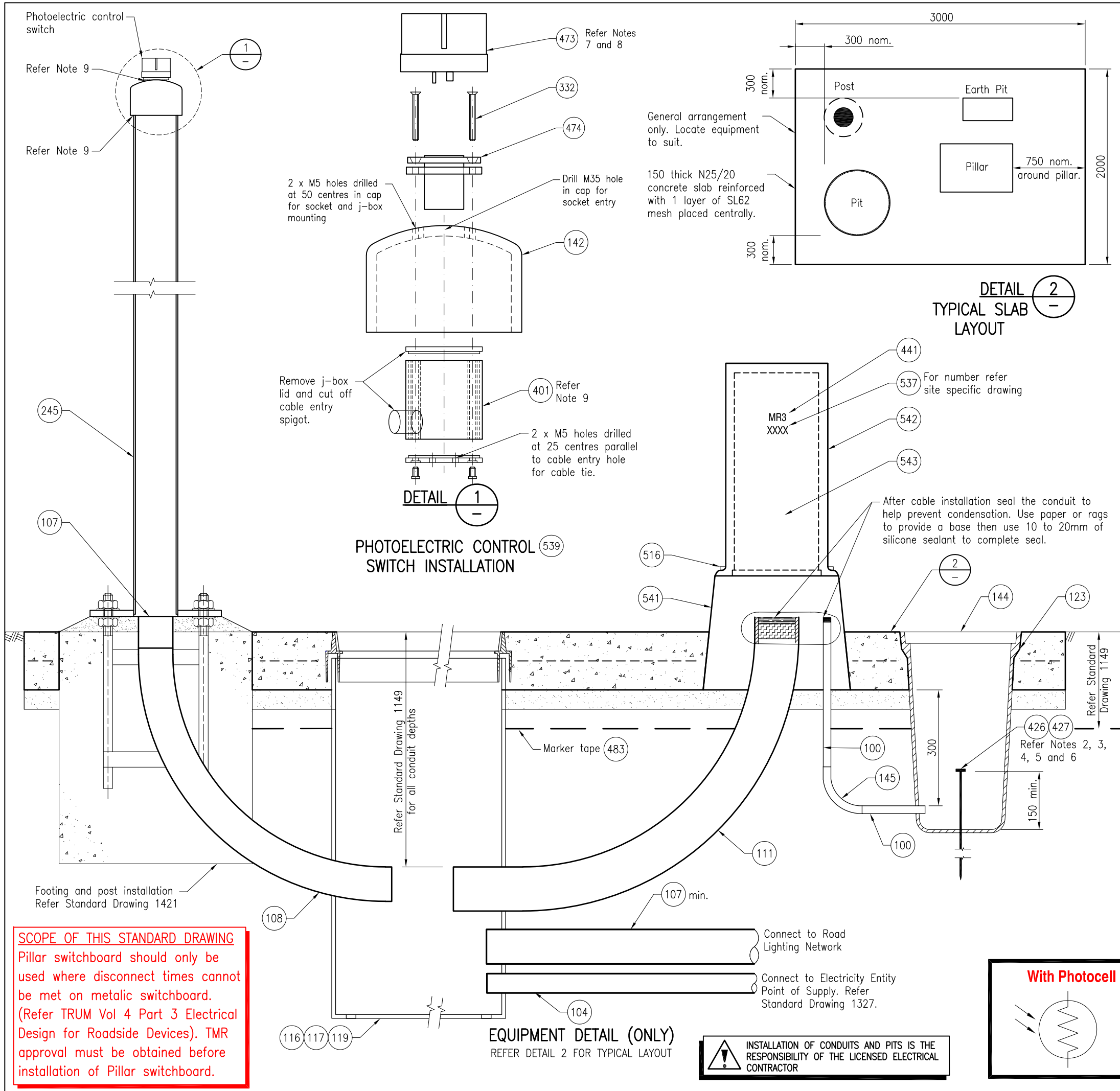
Departmental Specifications:

- MRTS91 Conduits and Pits
- MRTS92 Traffic Signal and Road Lighting Footings
- MRTS210 Provision of Mains Power
- MRTS228 Electrical Switchboards
- MRTS256 Power Cables

Australian Standards:

- AS/NZS 3000 Electrical Installations (Wiring Rules)

Department of Transport and Main Roads			
ROAD LIGHTING			
SWITCHBOARD PILLAR MOUNTED		A3	Standard Drawing No
SHEET 1 OF 2		Not to Scale	1430
			Date 3/2021



- NOTES:**
- (a) Electrical switchboards shall wherever possible be located adjacent to the property boundary with the door facing the roadway.
 - (b) Electrical switchboards shall wherever possible be located outside the clear zone (refer RPDM Chapter 8). Where site constraints require that electrical switchboards are situated within the clear zone then an assessment in accordance with the provisions of RPDM Chapter 8 must be carried out to determine whether protection (i.e. by safety barrier) is required.
 - Attach a permanent label to the main earthing conductor at the connection to the earth electrode stating: "WARNING: MAIN ELECTRICAL EARTHING CONDUCTOR - DO NOT DISCONNECT"
 - Ensure there are no underground services in vicinity prior to installing earth electrode.
 - The earth electrode must be driven no less than 1300mm vertically into the ground, leaving a minimum 150mm exposed length of electrode in the base of the pit.
 - In difficult soils, dig out the appropriate P3 pit size, auger a 75mm hole vertically to 1300mm, install the earth electrode in the center of the hole, fill the auger hole with LSI RESLO compound or equal and install the pit over the earth electrode.
 - Only one earth electrode connected to one main earth conductor permitted in one earth pit.
 - The URD pillar, photoelectric control switch and socket and electrical component details shall comply with MRTS228 and MRTS256.
 - Photoelectric control switch and socket to face south.
 - Seal between the photoelectric control switch socket and the pressure cap and between the pressure cap and the traffic signal post with silicone sealant.
 - Enclose connectors, item 419, and cable tie, item 410, in junction box for installation in the field.
 - Install cable 034 between photocell and switchboard.
 - Attach a permanent label in the switchboard stating: "EARTH ELECTRODE IN ADJACENT EARTH PIT"
 - Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:

- Standard Drawings Specifications
- Traffic and Road Use Management Manual (TRUM) - Volume 4 Part 3 Electrical Design for Roadside Devices

REFERENCED DOCUMENTS:

Departmental Standard Drawings:

- 1149 Traffic Signals/Road Lighting/ITS - Installation of Underground Electrical and Communications Conduit
- 1327 Traffic Signals/Road Lighting - Mains Connections
- 1421 Traffic Signals - Traffic Signals Post and Footing Installation Details
- 1422 Traffic Signals - Ragbolt Sub-Assembly Fabrication Details
- 1428 Traffic Signals - Traffic Signal Post Base Mounted
- 1623 Road Lighting - Switchboard Typical Layout and Circuit Diagram MEN System
- 1676 Road lighting - Switchboard Typical Pillar Layout
- 1699 Traffic Signals/Road Lighting/ITS - Parts List

Departmental Specifications:

- MRTS91 Conduits and Pits
- MRTS92 Traffic Signal and Road Lighting Footings
- MRTS210 Provision of Mains Power
- MRTS228 Electrical Switchboards
- MRTS256 Power Cables

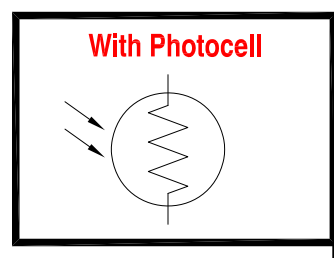
Australian Standards:

- AS/NZS 3000 Electrical Installations (Wiring Rules)

SCOPE OF THIS STANDARD DRAWING

Pillar switchboard should only be used where disconnect times cannot be met on metallic switchboard. (Refer TRUM Vol 4 Part 3 Electrical Design for Roadside Devices). TMR approval must be obtained before installation of Pillar switchboard.

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Department of Transport and Main Roads				ROAD LIGHTING	
ROAD LIGHTING				SWITCHBOARD PILLAR MOUNTED	
SHEET 2 OF 2		A3	Standard Drawing No	1430	
		Not to Scale	Date	3/2021	