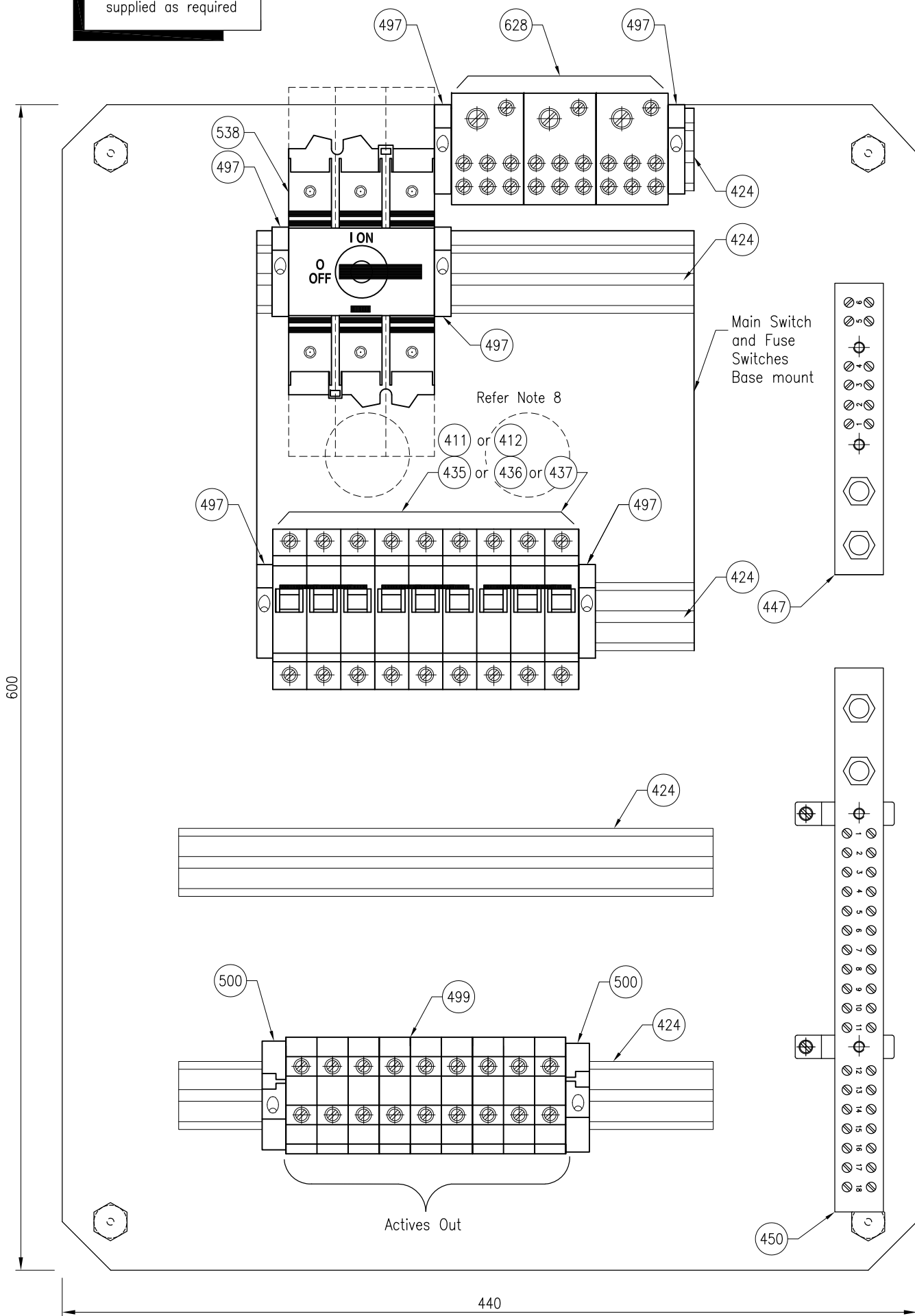
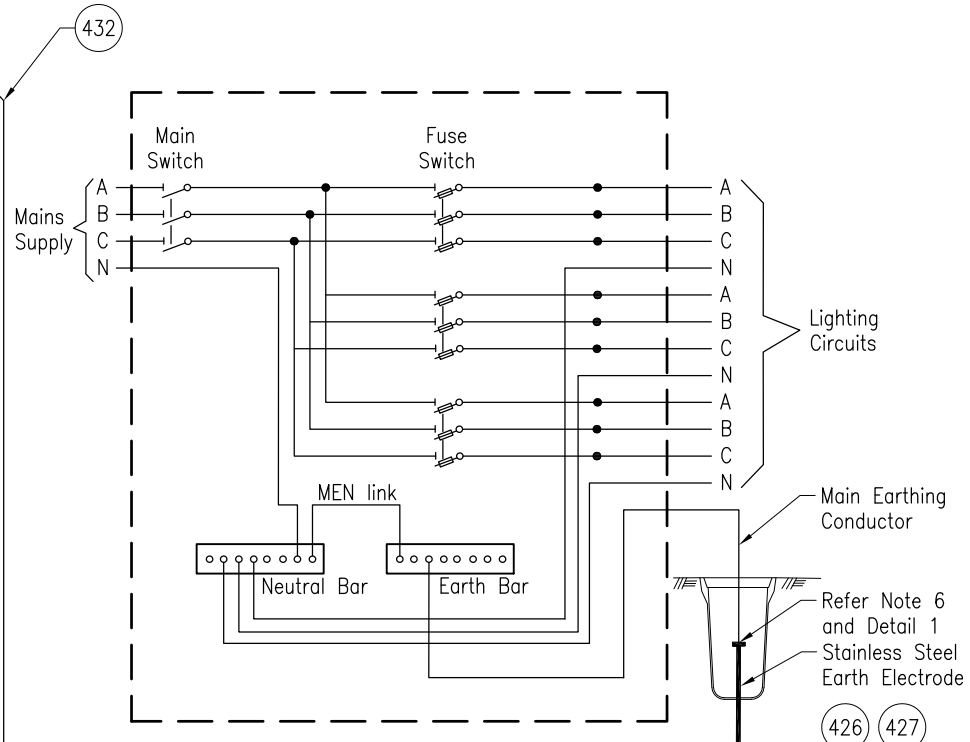


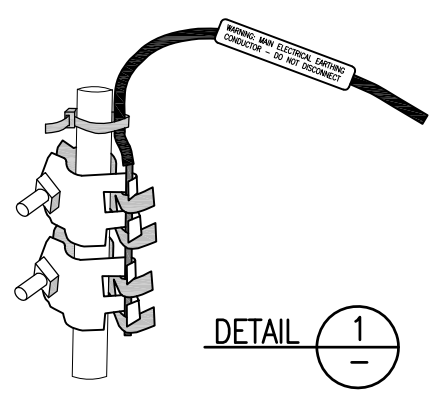
Mounting fasteners to be supplied as required



SWITCHBOARD LAYOUT FOR USE WITHOUT PHOTOELECTRIC CELL CONTROL



CIRCUIT DIAGRAM INSIDE SWITCHBOARD ENCLOSURE



EARTH STAKE, CABLE & CLAMP ASSEMBLY N.T.S

NOTES:

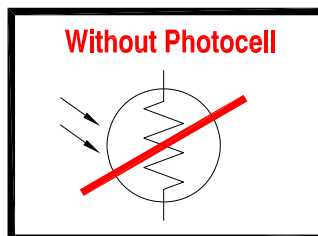
1. Label circuits and terminals appropriately.
2. Refer (558) for switchboard assembly.
3. Install panel into enclosure.
4. Permanently label item (538) as "Main Switch".
5. Fix permanent label to item (415) with "Night" up "Day" down.
6. (a) Ensure there are no underground services in the vicinity prior to installing earth electrode.  
(b) Earth pits shall be minimum of 3m apart.  
(c) The earth electrode must be driven no less than 1300mm vertically into the ground, leaving a minimum 150mm exposed length of the electrode in the base of the pit.  
(d) Earth rods are not to be cut under any circumstances. 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 or equivalent, then install the pit over the earth electrode.  
(e) Only one earth electrode connected to one main earth conductor permitted in one earth pit.  
(f) For existing no.7 pit and pits of greater depth, a 1.8m earth stake is to be used, where it is not viable to install a separate adjacent dedicated earth P3 pit with a new 1.5m earth stake.  
(g) 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".
7. Attach a permanent label in the switchboard stating: "EARTH ELECTRODE IN ADJACENT EARTH PIT"
8. 2 x 50mm dia holes for cables to connector blocks.
9. Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:  
Standard Drawings  
Specifications  
Electrical Design Manual for Roadside Devices Part 3, TRUM Vol 4.

REFERENCED DOCUMENTS:  
Departmental Standard Drawings:  
1627 Road Lighting – Switchboard Top Mounted  
1686 Road lighting – Switchboard Assembly Details  
1687 Road lighting – Metered Switchboard Assembly Details Single Phase  
1688 Road lighting – Metered Switchboard Assembly Details Three Phase  
1690 ITS – Switchboard Assembly Details CCTV  
1699 Traffic Signals/Road Lighting/ITS – Parts List indicated as (XXX)

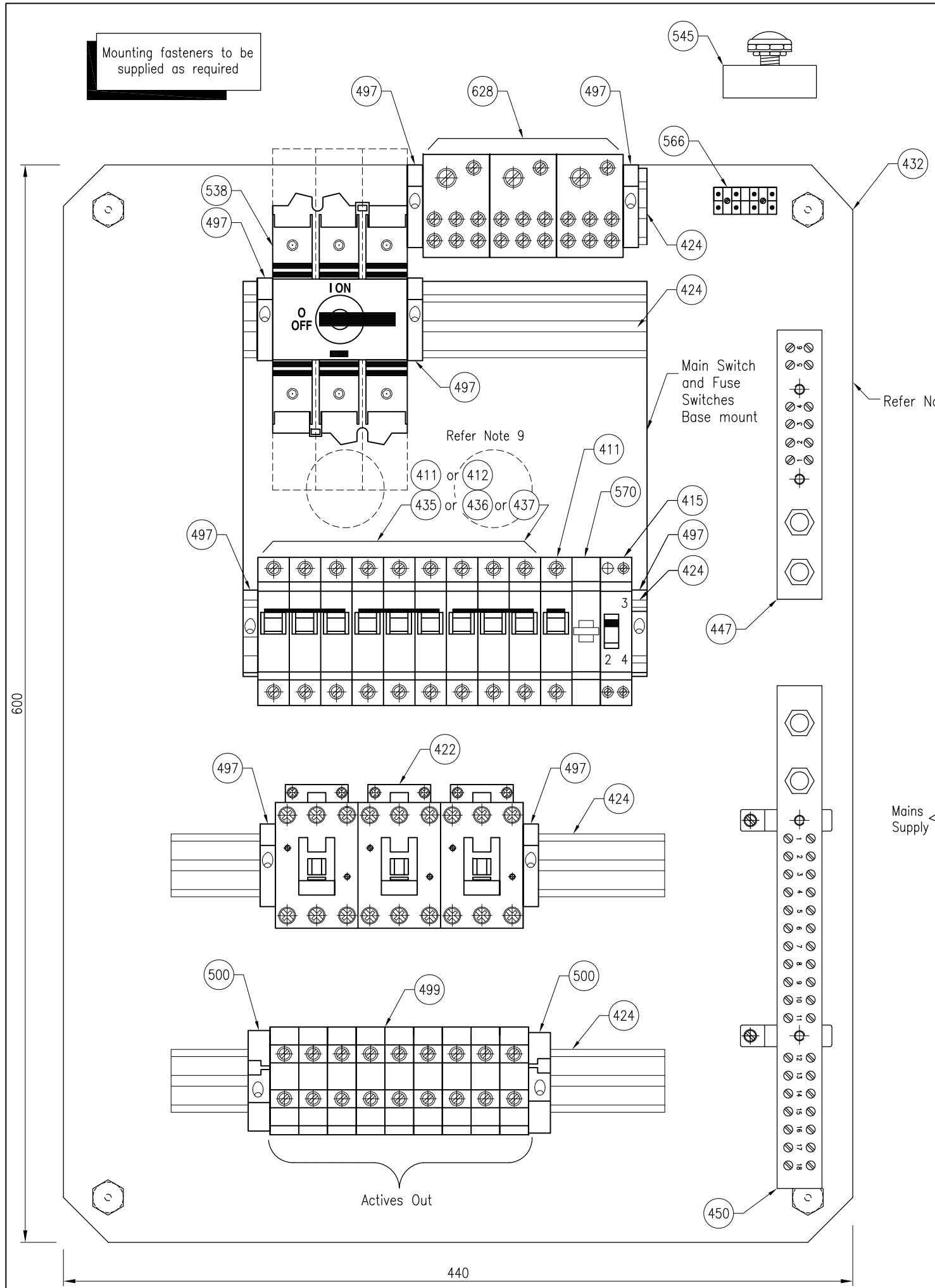
Departmental Standard Specifications:  
MRTS210 Provision of Mains Power  
MRTS228 Electrical Switchboards  
MRTS256 Power Cables

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



Department of Transport and Main Roads			
ROAD LIGHTING			
SWITCHBOARD TYPICAL LAYOUT AND CIRCUIT DIAGRAM MEN SYSTEM		A3	Standard Drawing No
SHEET 1 OF 2		Not to Scale	1623
			Date 3/2022

Mounting fasteners to be supplied as required



SWITCHBOARD LAYOUT FOR USE WITH PHOTOELECTRIC CELL CONTROL

**NOTES:**

1. (545) miniature photocell is installed in the top of the enclosure housing the (432) mounting plate. Refer Standard Drawing 1627.
2. Label circuits and terminals appropriately.
3. Refer (558) for switchboard assembly.
4. Install panel into enclosure.
5. Permanently label item (538) as "Main Switch".
6. Fix permanent label to item (415) with "Night" up "Day" down.
7. (a) Ensure there are no underground services in the vicinity prior to installing earth electrode.  
(b) Earth pits shall be minimum of 3m apart.  
(c) The earth electrode must be driven no less than 1300mm vertically into the ground, leaving a minimum 150mm exposed length of the electrode in the base of the pit.  
(d) Earth rods are not to be cut under any circumstances. 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 or equivalent, then install the pit over the earth electrode.

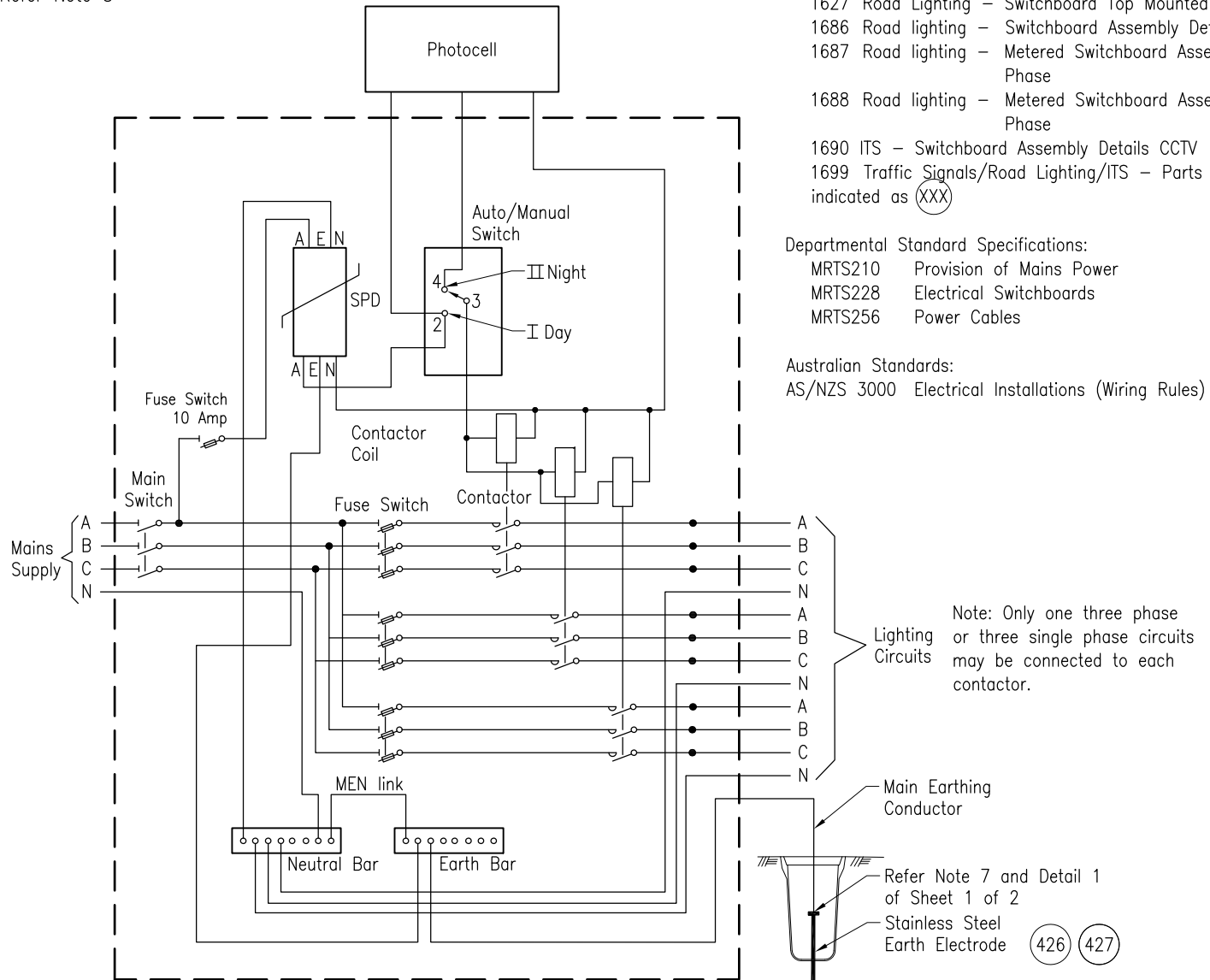
- (e) Only one earth electrode connected to one main earth conductor permitted in one earth pit.
  - (f) For existing no.7 pit and pits of greater depth, a 1.8m earth stake is to be used, where it is not viable to install a separate adjacent dedicated earth P3 pit with a new 1.5m earth stake.
  - (g) 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".
8. Attach a permanent label in the switchboard stating:  
"EARTH ELECTRODE IN ADJACENT EARTH PIT"
  9. 2 x 50mm dia holes for cables to connector blocks.
  10. Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:  
Standard Drawings  
Specifications  
Electrical Design Manual for Roadside Devices Part 3, TRUM Vol 4.

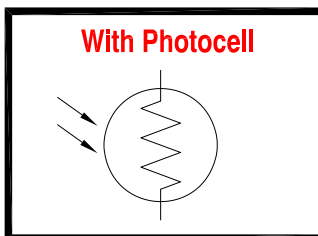
REFERENCED DOCUMENTS:  
Departmental Standard Drawings:  
1627 Road Lighting – Switchboard Top Mounted  
1686 Road lighting – Switchboard Assembly Details  
1687 Road lighting – Metered Switchboard Assembly Details Single Phase  
1688 Road lighting – Metered Switchboard Assembly Details Three Phase  
1690 ITS – Switchboard Assembly Details CCTV  
1699 Traffic Signals/Road Lighting/ITS – Parts List indicated as (XXX)

Departmental Standard Specifications:  
MRTS210 Provision of Mains Power  
MRTS228 Electrical Switchboards  
MRTS256 Power Cables

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



CIRCUIT DIAGRAM INSIDE SWITCHBOARD ENCLOSURE



Department of Transport and Main Roads			
ROAD LIGHTING			
SWITCHBOARD TYPICAL LAYOUT AND CIRCUIT DIAGRAM MEN SYSTEM SHEET 2 OF 2		A3	Standard Drawing No 1623
		Not to Scale	Date 3/2022