

SEQUENCE OF INSTALLATION:

- A. For footing details and installation of Mast Arm Post, refer Standard drawing 1403.
- B. Installation of Mast Arm Outreach.
1. Lightly oil the threads of the four M20 set screws and washers used for mounting the outreach.
 2. Position the outreach with a crane using the two lifting points provided and fit the four M20 set screws and washers. Fully torque to 200 Nm.
 3. If mast arm post has a luminaire spigot which is not initially being used for lighting purposes, the slotted hole in spigot pipe should be filled with silicone sealant and a cap fitted over the spigot. Also a steel cover plate is to be fitted to the luminaire junction box mounting plate. Refer Note 6.
 4. Use a suitable silicone sealant to waterproof the joint around the outreach arm.
- C. Procedure Where Space On Site Permits Preassembly.
1. Assemble the mast arm post and outreach complete on the ground.
 2. Attach adjustable chain slings to the lifting lugs on the end of the outreach and at the top of the post.
 3. Adjust the length of the slings to balance the load.
 4. Lift the mast arm assembly into position and secure on its footing.
- D. Setting Rake of Traffic Signal Mast Arm.
- After all lanterns are fitted, observe the installed mast arm from a distance. Adjust the rake of the column to give the best overall aesthetic appearance. If there is a problem achieving this, set the column vertical at approximately 2m from the ground.

This is important so that all bolts share the load during high wind loads both in compression and tension.

NOTES:

1. Refer project specific drawings for road lighting requirements, mast arm outreach length, and lantern assemblies.
2. Install draw ropes between road lighting luminaire and road lighting junction box and between road lighting junction box and pit.
3. Use (342) and (365) to fix outreach to post.
4. Use (341) and (356) to fix luminaire transition piece to luminaire spigot.
5. Use 5 x (355) and (351) to fix traffic signal junction box assembly to post.
6. Use 4 x (335) and (351) to fix road lighting junction box assembly to post. If road lighting luminaire is not fitted, fix 261 cover plate assembly instead of road lighting junction box assembly.
7. Use 2 x (304) and (324) and (325) to fix lantern straps to post, lantern fixing lugs and overhead lantern fixing discs.
8. Use 2 x (357) to fix pushbutton unit to post.
9. Use (304) to fix audio tactile driver unit to lantern fixing lug.
10. (553) used only with combination traffic signal mast arm and road lighting pole.
11. (773) is used with (764) and must be mounted on the same side of the post as the pedestrian pushbutton unit.
12. Lanterns to be mounted offset to post to maintain minimum clearance to kerb. (Shown protruding for illustration of mounting only).
13. Lantern to be installed in front of vertical support. (Shown offset for illustration of mounting only).
14. Refer Standard Drawing 1428 and Guide To Traffic Management Part 9: Traffic Operations for placement and orientation of pedestrian pushbuttons and bicycle pushbuttons.
15. Dimensions are in millimetres unless shown otherwise.

ASSOCIATED DEPARTMENTAL DOCUMENTS:

Standard Drawings
Specifications

REFERENCED DOCUMENTS:

Departmental Standard Drawings:

- 1403 Traffic Signals – Mast Arm Footing Details
- 1404 Traffic Signals – Mast Arm Anchor Cage Fabrication Details
- 1412 Road Lighting – Mast Arm Road Lighting Junction Box (Type B) Wiring Details
- 1414 Traffic Signals – Mast Arm Traffic Signal Junction Box (Type A) Wiring Details
- 1428 Traffic Signals – Traffic Signal Post Base Mounted
- 1635 Traffic Signals – Traffic Signal Upper Mounting Assembly and Split Shell Assembly
- 1670 Traffic Signals – Traffic Signal Wiring Connections
- 1699 Traffic Signals/Road Lighting/ITS – Parts List
- KRG1 Kerb Ramp – Guidelines for the Installation of Tactile Ground Surface Indicators on Ramped Kerb Crossings
- KRG2 Kerb Ramp – Application Examples for the Installation of Tactile Ground Surface Indicators on Ramped Kerb Crossings

Departmental Standard Specifications:

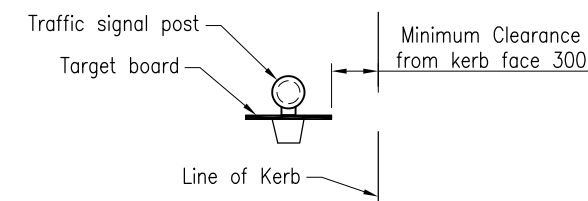
- MRTS93 Traffic Signals
- MRTS94 Road Lighting

Australian Standards:

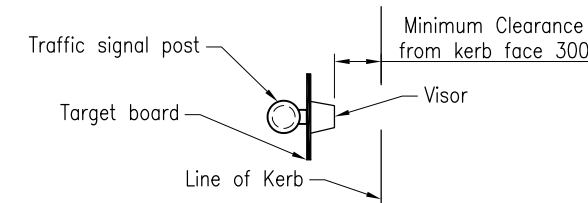
- AS/NZS 2144 Traffic Signal Lanterns
- AS 2339 Traffic Signal Posts and Attachments
- AS 2353 Pedestrian Pushbutton Assemblies
- AS 2979 Traffic Signals Mast Arm
- AS/NZS 3000 Wiring Rules

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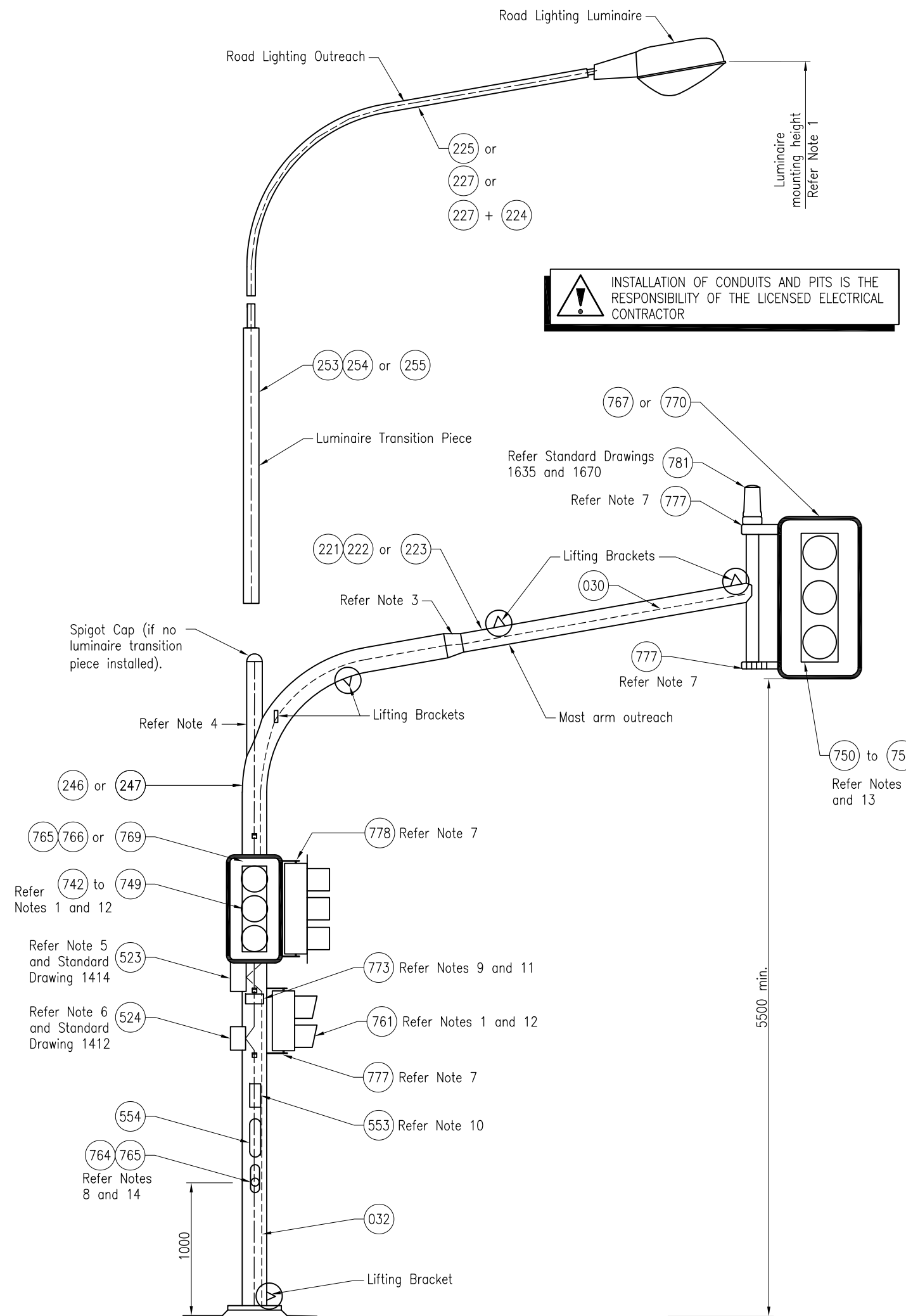
Guide To Traffic Management Part 9: Traffic Operations





CLEARANCE REQUIREMENT



CLEARANCE REQUIREMENT



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

Department of Transport and Main Roads		 	
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MAST ARM (U SERIES) INSTALLATION DETAILS		A3 Not to Scale	Standard Drawing No 1427 Date 1/19
B	C	D	E
F	G	H	