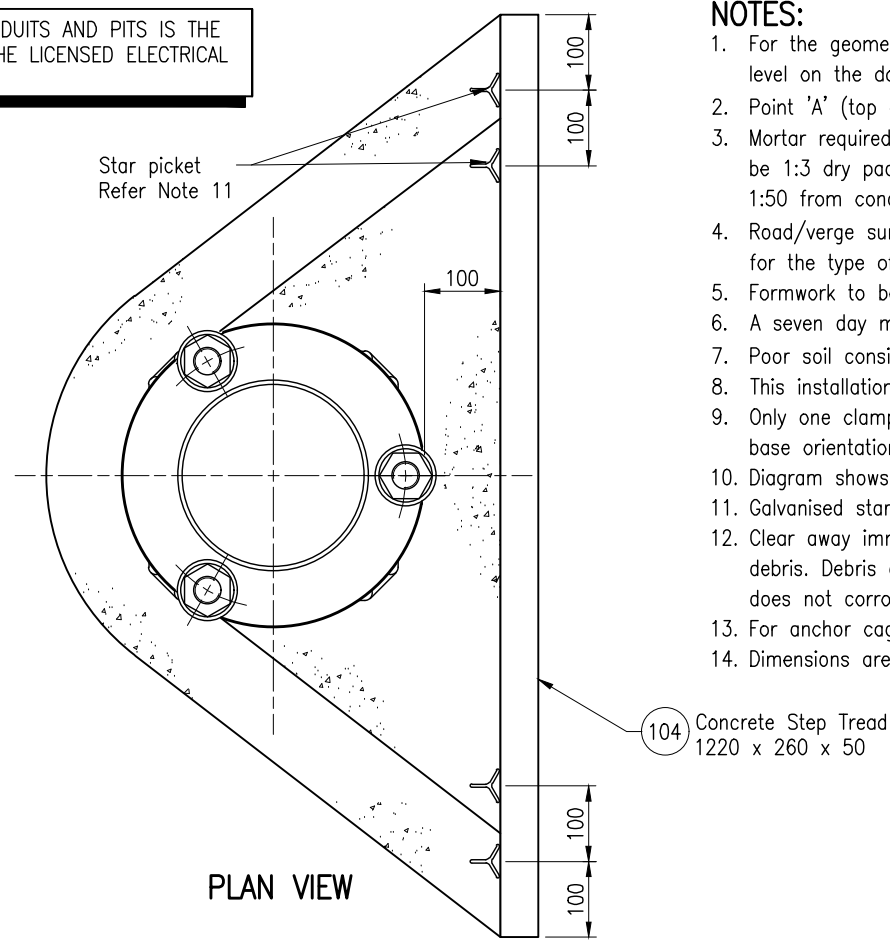


**SEQUENCE OF INSTALLATION:**

- ① Locate pole position relative to the roadway after check for services and determine crossfall.
- ② Dig/bore and excavate hole.
- ③ Determine finished surface level and suspend anchor bar cage in correct position relative to the finished surface level.
- ④ Threads to be protected and conduit plugged before pouring concrete.
- ⑤ Pour concrete footing to within 150 of top of anchor bar cage and allow to set.
- ⑥ Locate slip base mount. Ensure compressible fibre washers are placed under the slip base mount.
- ⑦ Level slip base mount, finger tighten M24 high strength fixing nut on each threaded bar. Create a 100 dia. void above electrical conduit by using a suitable length of 100 dia. conduit preferably.
- ⑧ Form mortar pad under slip base mount using one of the following methods.  
Mix and apply mortar in accordance with manufacturer's specifications. Mortar pad edges bevelled as shown.  
(a) Pack Parchem Conbextra HES mortar or approved equivalent in place.  
Mortar mix to be in plastic consistency, or  
(b) Pour Pachem Conbextra HES grout or approved equivalent in place. Grout mix to be in flowable consistency.
- ⑨ Wait until mortar has achieved final set in accordance with manufacturer's specifications before tensioning nuts.
- ⑩ Tension the M24 high strength fixing nuts on the slip base mount to 135 Nm minimum.
- ⑪ Install the light pole.
- ⑫ Tension the M36 high tensile clamping bolts to  $90 \pm 10$  Nm.
- ⑬ Install clamping bolt tethering system as per SD1755.

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



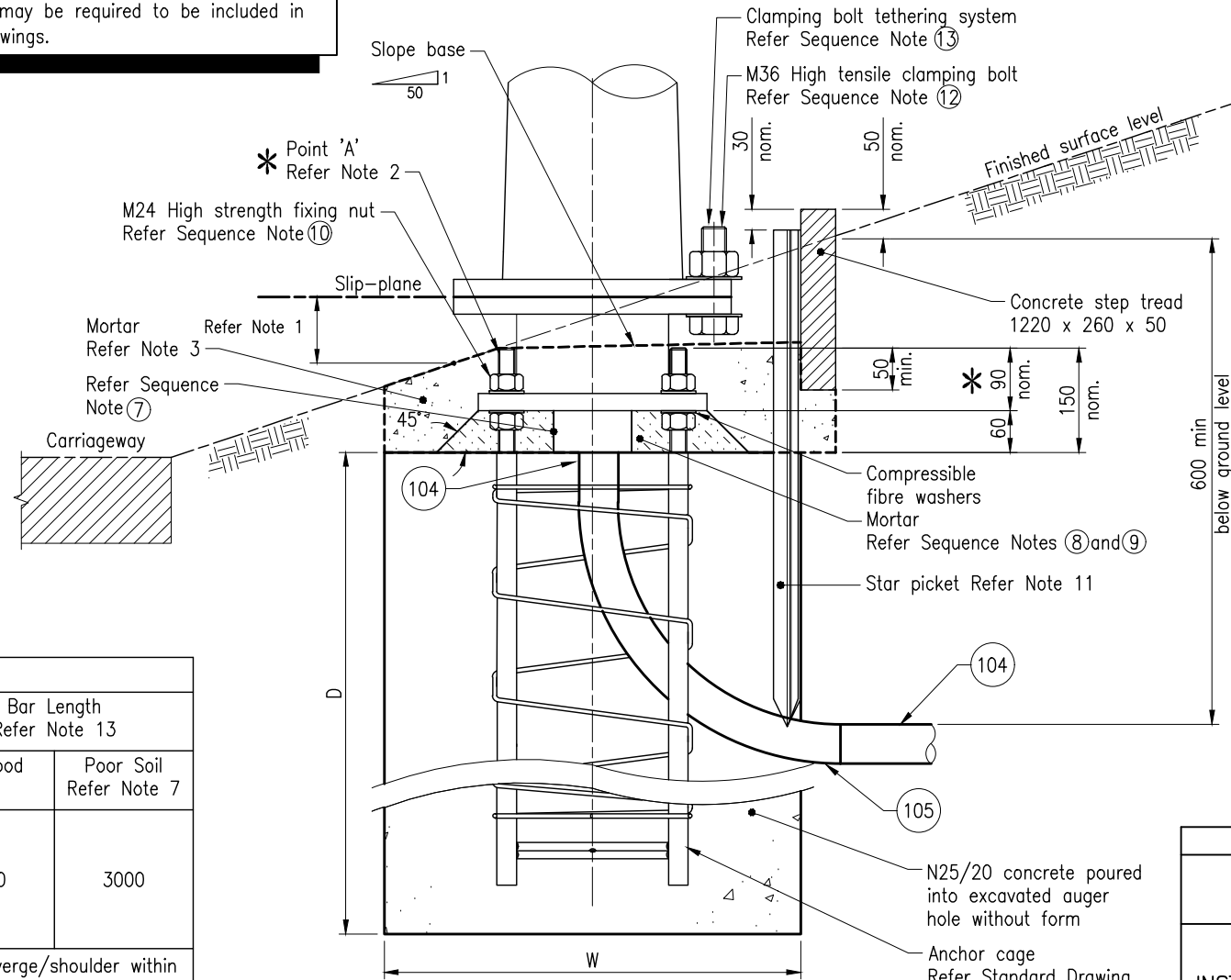
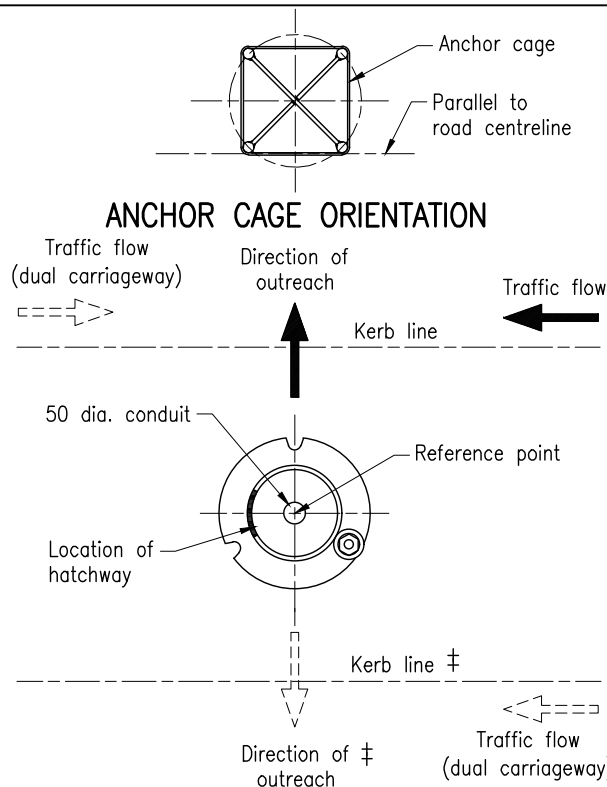
**NOTES:**

1. For the geometry shown, the resultant distance from the slip-plane to the projected finished surface level on the down hill side of the slip base mount will be 75 nominal.
2. Point 'A' (top of anchor bar) must always be level with the projected finished surface level ( $\pm 25$ ).
3. Mortar required to prevent ponding of water and dirt build up around the slip base mount. Mortar to be 1:3 dry pack and is to cover the top of the anchor cage bars. Slope the flat section of mortar 1:50 from concrete step tread ensuring the mortar does not cover the M36 clamping bolts
4. Road/verge surface of the errant vehicle approach to the pole must be uniform and be consistent for the type of crossfall installation.
5. Formwork to be provided for top 150mm of footings in collapsing soils.
6. A seven day minimum curing period must be allowed for concrete pole bases before fixing poles.
7. Poor soil consists of any of the following: Soft clay, loose sand and soft sand/clay mixes.
8. This installation has been designed to withstand wind conditions as defined in MRTS94.
9. Only one clamping bolt is shown for clarity. Positioning of the clamping bolts will depend on the slip base orientation.
10. Diagram shows dual carriageway however only one carriageway may be present.
11. Galvanised star picket, minimum size 900. Actual size to suit soil conditions.
12. Clear away immediate area around the slip base mount so that steel components are free of any debris. Debris collected in slip base recess to be removed on a regular basis to ensure steelwork does not corrode.
13. For anchor cages with lengths between 2000 and 3000, refer Standard Drawings 1328 and 1680.
14. Dimensions are in millimetres unless shown otherwise.

**WARNING**

In order for the slip base mechanism to operate correctly it is IMPERATIVE that the anchor cage is installed to the dimensions marked '\*' and the nuts are installed as per sequence notes ⑩ and ⑫. Failure to install the anchor cage and nuts strictly in accordance with this plan will make the Contractor liable for any resulting loss or damage to the Principal and to third parties.

The purpose of this drawing is to provide typical standard details. The fitness for purpose of this drawing for a specific project shall be determined and certified by an RPEQ Engineer. Additional project specific details may be required to be included in the scheme drawings.



- ASSOCIATED DEPARTMENTAL DOCUMENTS:**  
Standard Drawings Specifications
- REFERENCED DOCUMENTS:**  
Departmental Standard Drawings:  
1149 Traffic Signals/Road Lighting/ITS – Installation of Underground Electrical and Communications Conduit  
1328 Road Lighting/ITS/Camera Pole – Anchor Cage Fabrication Details  
1382 Road Lighting Pole– Slip Base Pole and Footing Installation Details for Crossfalls Greater Than 1:6 up to and Including 1:3  
1400 Road Lighting – Slip Base Pole Wiring Details  
1680 Traffic Signals/Road Lighting – Extension to Light Pole and Mast Arm Anchor Cages  
1699 Traffic Signals/Road Lighting/ITS – Parts List  
1755 Road Lighting – Slip Bolt Tethering System for TMR Rate 3 Slip Base poles
- Departmental Specifications:**  
MRTS70 Concrete  
MRTS72 Manufacture of Precast Concrete Elements  
MRTS91 Conduits and Pits  
MRTS92 Traffic Signal and Road Lighting Footings  
MRTS94 Road Lighting  
MRTS72 Manufacture of Precast Concrete Elements  
MRTS97 Mounting Structures for Roadside Equipment
- Departmental Technical Notes**  
TN64 Tensioning and Re-Tensioning of Slip Base Light Poles  
TN200 Slip Base Pole Clamping Bolt Tethering System Installation
- Australian Standards:**  
AS 1275 Metric Screw Threads for Fasteners

FOOTING DETAILS					
Pole Height (excludes outreach)	Minimum Depth of Footing (D)		Minimum Diameter of footing (W)	Bar Length Refer Note 13	
	Av. Good Soil	Poor Soil Refer Note 7		Av. Good Soil	Poor Soil Refer Note 7
7000	2400	2900	600	2500	3000
8500			600		
10000			600		
13000			700		

NOTE: These footing depths shall also apply for road lighting poles on a verge/shoulder within the following horizontal distances from the batter hinge point:

- 3.0m for poles with a 600mm dia. footing.
- 3.5m for poles with a 700mm dia. footing.

**INSTALLATION FOR CROSSFALLS GREATER THAN 1:6 AND UP TO AND INCLUDING 1:3**

Department of Transport and Main Roads			
<b>ROAD LIGHTING</b>			
SLIP BASE POLE AND FOOTING INSTALLATION DETAILS FOR CROSSFALLS GREATER THAN 1:6 UP TO AND INCLUDING 1:3 USING CONCRETE STEP TREAD		A3 Not to Scale H	Standard Drawing No <b>1429</b> Date 7/2022