Queensland Good jobs Better services Great lifestyle

Superseded

**Specification (Measurement)**

# Transport and Main Roads Specifications MRS226 Telecommunications Field Cabinets

**November 2023**

Queensland Government

Superseded

## Copyright

© The State of Queensland (Department of Transport and Main Roads) 2020.

### Licence



This work is licensed by the State of Queensland (Department of Transport and Main Roads) under a Creative Commons Attribution (CC BY) 4.0 International licence.

### CC BY licence summary statement

In essence, you are free to copy, communicate and adapt this work, as long as you attribute the work to the State of Queensland (Department of Transport and Main Roads). To view a copy of this licence, visit: https://creativecommons.org/licenses/by/4.0/

### Translating and interpreting assistance



The Queensland Government is committed to providing accessible services to Queenslanders from all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

### Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

### Feedback

Please send your feedback regarding this document to: tmr.techdocs@tmr.qld.gov.au

## Contents

**1 Introduction ..... 1**
**2 Measurement of work ..... 1**
2.1 Standard Work Items ..... 1
2.2 Work Operations ..... 2
2.3 Method of measurement of telecommunication field cabinet components ..... 6
2.4 Supply of materials ..... 6

Superseded

# 1 Introduction

This Specification applies to the supply and installation of field cabinets for housing roadside telecommunications field equipment as an integral part of the Department of Transport and Main Roads' wider requirement for telecommunications systems.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications, MRS50 Specific Quality System Requirements,* MRTS226 *Telecommunications Field Cabinets*, and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

# 2 Measurement of work

## *2.1 Standard Work Items*

In accordance with the provisions of Clause 2.1.3 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

***Table 2.1 - Standard Work Items***

| Standard Item No. | Description | Unit of Measurement |
|---|---|---|
| **Plinth Base** | | |
| 64001 | Supply of [*single* \| *double*] field cabinet plinth base | each |
| 64002 | Installation of [*single* \| *double*] field cabinet plinth base | each |
| 64003 | Supply and Installation of [*single* \| *double*] field cabinet plinth | each |
| **Field Cabinet Mounting Pole / Post** | | |
| 64021 | Supply of field cabinet mounting [*pole* \| *post*] | each |
| 64022 | Installation of field cabinet mounting [*pole* \| *post*] | each |
| 64023 | Supply and Installation of field cabinet mounting [*pole* \| *post*] | each |
| **Plinth and Pole Mounted Field Cabinets** | | |
| 64041 | Supply of [*single plinth* \| *double plinth* \| *pole-mount* \| *top-mount*] *[metered* \| *unmetered*] field cabinet, [*with* \| *without*] CyberLocks on [*number*] doors | each |
| 64042 | Installation of [*single plinth* \| *double plinth* \| *pole-mount* \| *top-mount*] [*metered* \| *unmetered*] field cabinet, [*with* \| *without*] CyberLocks on [*number*] doors | each |
| 64043 | Supply and Installation of [*single plinth* \| *double plinth* \| *pole-mount* \| *top-mount*] [*metered* \| *unmetered*] field cabinet, [*with* \| *without*] CyberLocks on [*number*] doors | each |
| **Cabinet Ancillary Equipment** | | |
| 64061 | Supply of field cabinet [*fan* \| *filter* \| *shelf*] | each |
| 64062 | Installation of field cabinet [*fan* \| *filter* \| *shelf*] | each |
| 64063 | Supply and Installation of field cabinet [*fan* \| *filter* \| *shelf*] | each |
| 64064 | Supply and Installation of [*number*] field cabinet CyberLocks | each |

Superseded

| Standard Item No. | Description | Unit of Measurement |
|---|---|---|
| **Removal of Existing Equipment** | | |
| 64091 | Removal of [*single plinth* \| *double plinth* \| *pole-mounted* \| *top-mounted*] field cabinet [*for salvage* \| *for disposal*] | each |
| 64092 | Removal of field cabinet plinth base | each |
| 64093 | Removal and return of [*number*] CyberLocks | each |

### *2.2 Work Operations*

**Item 64001 Supply of [*single* | *double*] field cabinet plinth base**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and

b) supply of field cabinet plinth in accordance with Standard Drawing 1679 *ITS – Telecommunications Field Cabinet Base Installation Details* and MRTS226 *Telecommunications Field Cabinets*.

**Item 64002 Installation of [*single* | *double*] field cabinet plinth base**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) localised excavation

c) provision of formwork for concrete pad surrounding plinth base

d) supply and installation of conduit from plinth base to electrical and communications pits, where necessary

e) sealing of gap between enclosure and plinth, where necessary

f) supply, placement and finishing of concrete pad surrounding plinth base, where necessary, and

g) supply and installation of all fixing bolts, nuts and washers as appropriate.

**Item 64003 Supply and Installation of [*single* | *double*] field cabinet plinth base**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply of field cabinet plinth in accordance with Standard Drawing 1679 *ITS – Telecommunications Field Cabinet Base Installation Details* and MRTS226 *Telecommunications Field Cabinets*.

c) localised excavation

d) provision of formwork for concrete pad surrounding plinth base

e) supply and installation of conduit from plinth base to electrical and communications pits, where necessary

f) supply and installation of plinth base

Superseded

g) sealing of gap between enclosure and plinth, where necessary

h) supply, placement and finishing of concrete pad surrounding plinth base, where necessary, and

i) supply and installation of all fixing bolts, nuts and washers as appropriate.

**Item 64021 Supply of field cabinet mounting [*pole* | *post*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply of [*fixed base* | *slip base* | *impact absorbent*] field cabinet mounting pole, or

c) supply of [*fixed base* | *slip base* | *impact absorbent*] field cabinet mounting post in accordance with Standard Drawing 1628 *Road lighting – Post – Top Mounted Switchboard*.

**Item 64022 Installation of field cabinet mounting [*pole* | *post*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) for slip base pole, installation of slip base mounts, shear washer, clamping bolts and nuts and cable clamping blocks

c) for impact absorbent and slip base poles, supply and installation of cable clamping blocks

d) supply, installation and termination of cabling from terminal panel to electrical and communication pits including supply and installation of pit junction box, if applicable

e) for post mounted cabinets, installations in accordance with Standard Drawing 1627 *Road lighting – Switchboard – Top Mounted*, and

f) testing of the installation.

**Item 64023 Supply and Installation of field cabinet mounting [*pole* | *post*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply of [*fixed base* | *slip base* | *impact absorbent*] field cabinet mounting pole

c) for slip base pole, installation of slip base mounts, shear washer, clamping bolts and nuts and cable clamping blocks

d) for impact absorbent and slip base poles, supply and installation of cable clamping blocks

e) supply, installation and termination of cabling from terminal panel to electrical and communication pits including supply and installation of pit junction box, if applicable

f) for post mounted cabinets, post shall be in accordance with Standard Drawing 1628 *Road lighting – Post – Top Mounted Switchboard* and installation in accordance with Standard Drawing 1627 *Road lighting – Switchboard – Top Mounted*, and

g) testing of the installation.

Superseded

**Item 64041 Supply of [*single plinth* | *double plinth* | *pole-mount* | *top-mount*] [*metered* | *unmetered*] field cabinet, [*with* | *without*] CyberLocks on [*number*] doors**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply of [*metered* | *unmetered*] plinth-mounted field cabinet complete with all necessary components including cabinet switchboard and internal wiring as per MRTS226 *Telecommunications Field Cabinets*., and/or

c) supply of [*metered* | *unmetered*] pole-mounted or post mounted field cabinet complete with all necessary components including cabinet switchboard and internal wiring as per MRTS201 *General Equipment Requirements*, and

d) supply of [*number*] CyberLocks [*if required*] as per MRTS226 *Telecommunications Field Cabinets.*

**Item 64042 Installation of [*single plinth* |*double plinth* | *pole-mount* | *top-mount*] [*metered* | *unmetered*] field cabinet, [*with* | *without*] CyberLocks on [*number*] doors**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) mounting of field cabinet on plinth or pole / post, as appropriate

c) installation of [*metered* | *unmetered*] field cabinet, as appropriate, complete with all necessary components including cabinet switchboard and internal wiring

d) installation of [*number*] CyberLocks [*if required*] as per MRTS226 *Telecommunications Field Cabinets*

e) earthing of installation including supply of earthing materials, and

f) electrical testing of field cabinet.

**Item 64043 Supply and Installation of [*single plinth* | *double plinth* | *pole-mount* | *top-mount*] [*metered* | *unmetered*] field cabinet, [*with* | *without*] CyberLocks on [*number*] doors**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply and installation of [*metered* | *unmetered*] field cabinet, as appropriate, complete with all necessary components including cabinet switchboard and internal wiring

c) supply and installation of [*number*] CyberLocks [*if required*] as per MRTS226 *Telecommunications Field Cabinets*

d) mounting of field cabinet on plinth or pole / post, as appropriate

e) earthing of installation including supply of earthing materials, and

f) electrical testing of field cabinet.

Superseded

**Item 64061 Supply of field cabinet [*fan* | *filter* | *shelf*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and

b) supply of field cabinet [*fan* | *filter* | *shelf*] complete with all necessary components.

**Item 64062 Installation of field cabinet [*fan* | *filter* | *shelf*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) installation of field cabinet [*fan* | *filter* | *shelf*] complete with all necessary components, and

c) testing of the operation of installed fans.

**Item 64063 Supply and Installation of field cabinet [*fan* | *filter* | *shelf*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) supply and installation of field cabinet [*fan* | *filter* | *shelf*] complete with all necessary components, and

c) testing of the operation of installed fans.

**Item 64064 Supply and Installation of [*number*] field cabinet CyberLocks**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) Supply and installation of [*number*] field cabinet CyberLocks as per MRTS226 *Telecommunications Field Cabinets*, and

c) testing of the operation of the CyberLocks.

**Item 64091 Removal of [*single plinth* | *double plinth* | *pole-mounted* | *post mounted*] field cabinet, [*for salvage* | *for disposal*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) de-energisation and disconnection of cabling to field cabinet

c) removal of cabinet and all internal cabling and associated components, as appropriate

d) for pole / post mounted field cabinets:

   i. removal of [*pole* | *post*]

   ii. dismantling of [*pole* | *post*] and components, where appropriate, and

   iii. transporting of [*pole* | *post*] and associated components to designated storage facility or another station for re-use.

e) for field cabinets to be salvaged:

   i. dismantling of equipment, where appropriate, and

Superseded

ii. transporting of field cabinets to designated storage facility or another station for re-use.

f) for field cabinets to be disposed:

i. disposal of field cabinets, and

ii. disposal of components.

**Item 64092 Removal of field cabinet plinth base**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) removal of plinth base and associated surrounding concrete pad, as required

c) removal of conduits from plinth to associated electrical and communications pits

d) disposal of materials, and

e) backfilling of hole.

**Item 64093 Removal and return of [*number*] CyberLocks**

Work Operations incorporated in the above item include:

f) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

g) removal of [*number*] CyberLocks as per MRTS226 *Telecommunications Field Cabinets*, and

h) return [*number*] CyberLocks to the department's Regional Office or a RoadTek depot.

### *2.3 Method of measurement of telecommunication field cabinet components*

This Specification provides Standard Work Items for:

a) supply only

b) installation only, and

c) supply and installation.

of telecommunication field cabinet components.

Any combination of Standard Work Items relating to these methods of measurement may be used in the Schedule of Rates; however, where a Standard Work Item for supply and installation of a particular component or group of components is included in the Schedule of Rates, no supply only nor installation only Standard Work Item shall also apply to that component or group of components, as applicable.

### *2.4 Supply of materials*

Any materials to be supplied by the Principal will be as stated in the Principal Supplied Material List, Form C7827. All other material shall be supplied by the Contractor.

The responsibility for transport to the Site of materials supplied by the Principal shall be as stated in the Principal Supplied Material List, Form C7827. Transport to the Site of all other materials shall be the responsibility of the Contractor.

Superseded

Superseded