

**Specification (Measurement)** 

Transport and Main Roads Specifications MRS257 Feeder Cable and Loop Cable for Vehicle Detector

October 2017





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# Contents

1 Introduction		tion	1	
2	Measure	ment of works	1	
2.1	Vehicle detectors			
		Standard Work Items Method of measurement		
2.2	2 Method of measurement of vehicle detection equipment		3	

SUPERSION

# 1 Introduction

This Specification applies to the supply and installation of feeder cable and loop cable for vehicle loop detector.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications*, MRTS01 *Introduction to Technical Specifications*, MRTS257 *Feeder Cable and Loop Cable for Vehicle Detector* and other Specifications as appropriate.

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

# 2 Measurement of works

#### 2.1 Vehicle detectors

### 2.1.1 Standard Work Items

In accordance with the provisions of Clause 2 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

Standard Item No.	Description	Unit of Measurement		
Vehicle detector loops				
67201	Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]	m		
67202	Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]	m		
67203	Supply of cable joint, [fused   unfused]	each		
67204	Installation, jointing and termination of loop detector cable, [cores]	m		
67205	Installation, jointing and termination of cable, [usage], [cores]	m		
67206	Supply of [rectangular   square] preformed loops [dimensions], [no. of turns   inductance range] in [concrete   asphalt] pavement	each		
67207	Supply and installation of [ <i>rectangular</i>   <i>square</i> ] preformed loops [ <i>dimensions</i> ], [ <i>no. of turns</i>   <i>inductance range</i> ] in [ <i>concrete</i>   <i>asphalt</i> ] pavement	each		
67208	Installation of [ <i>rectangular</i>   <i>square</i> ] preformed loops [ <i>dimensions</i> ], [ <i>no. of turns</i>   <i>inductance range</i> ] in [ <i>concrete</i>   <i>asphalt</i> ] pavement	each		
Removal of existing equipment				
67291	Removal of Vehicle Detector Loop	each		
67292	Removal of Vehicle Detector Feeder cable	m		

#### Table 2.1 – Standard Work Items

#### 2.1.2 Method of measurement

Item 67201 Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]

- Item 67202 Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]
- Item 67203 Supply of cable joint, [fused | unfused]

#### Item 67204 Installation, jointing and termination of loop detector cable, [cores]

### Item 67205 Installation, jointing and termination of cable, [usage], [cores]

Work Operations incorporated in the above items include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) installation of cables
- c) connection and termination of cables, and
- d) testing of installation.

# Item 67206 Supply of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) general equipment requirements stated in MRTS257.

# Item 67207 Supply and installation of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) general equipment requirements stated in MRTS257.

# Item 67208 Installation of [rectangular | square] preformed loops [dimensions], [no. of turns | inductance range] in [concrete | asphalt] pavement

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) general equipment requirements stated in MRTS257.

# Item 67291 Removal of Vehicle Detector loop

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) disconnection of electrical supply, including termination and "making safe" of supply cable
- c) disconnection of telecommunications connection
- d) removal of Internal cabinet equipment, supporting pole and associated cabinet enclosure
- e) transport of all components to Principal's storage facility or designated site storage area for re-use.

#### Item 67292 Removal of Vehicle Detector Feeder cable

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b) disconnection of electrical supply including termination and "making safe" of supply cable

- c) disconnection of telecommunications connection
- d) removal of internal cabinet equipment, supporting pole and associated cabinet enclosure
- e) transport of all components and disposal.

#### 2.2 Method of measurement of vehicle detection equipment

This specification provides Standard Work Items for:

- a) supply only of individual components
- b) installation only of individual components
- c) supply and installation of individual components, and
- d) supply and installation of complete vehicle detection site on a lump sum basis.

Any combination of Standard Work Items relating to these methods of measurement may be used in the Schedule of Rates. However:

- a) 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, and
- b) Where a Standard Work Item for supply and installation of a complete vehicle detection site on a lump sum basis is included in the Schedule of Rates, no supply only, installation only nor supply and installation Standard Work Item shall also apply to that work.



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