

**Specification (Measurement)**

**Transport and Main Roads Specifications  
MRS86 Widening, Strengthening and Rehabilitation of  
Bridges**

**July 2017**

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## 1 Introduction

This Specification applies to the operations required to be carried out in preparation for the widening, strengthening and rehabilitation of a bridge.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications* 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
<b>Preparation for Bridge Widening, Strengthening and Rehabilitation</b>		
73401	Removal of existing bridge rails and posts	lump sum
73402	Breaking back existing concrete	m <sup>3</sup>
73403	Removal of existing rubble masonry at abutments	lump sum
73404	Installation of steel reinforcing bars in existing concrete	each
73405	Installation of dowel bars	each
73406	Scabbling concrete faces	m <sup>2</sup>
73407	Temporary barrier guardrail	lump sum

### 2.2 Work Operations

#### Item 73401 Removal of existing bridge rails and posts

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 rails
- c) demolition and disposal of posts, and
- d) transport and storage of rails.

#### Item 73402 Breaking back existing concrete

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) demolition of existing concrete
- c) disposal of demolished concrete, and
- d) cutting of steel reinforcing and protecting cut ends, where applicable.

**Item 73403      Removal of existing rubble masonry at abutments**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) demolition of existing rubble masonry, and
- c) disposal of demolished materials.

**Item 73404      Installation of steel reinforcing bars in existing concrete**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) coring of holes in existing concrete
- c) supply of chemical fastener products, and
- d) installation of steel reinforcing bars.

**Item 73405      Installation of dowel bars**

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 dowel bars, and
- c) installation of dowel bars.

**Item 73406      Scabbling concrete faces**

Work Operations incorporated in the above item include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) scabbling of existing concrete
- c) cleaning of scabbled face, and
- d) supply, prepare and apply bonding agent, where applicable.

**Item 73407      Temporary barrier guardrail**

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 materials
- c) fabrication of steel components
- d) coring of holes for chemical fasteners
- e) installation of chemical fasteners
- f) erection of barrier
- g) dismantling on completion, and
- h) cutting off anchor bolts.

