

# Master Specification

## Part RD-LM-S3

### Supply of Guide Posts and Delineators

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**Government of South Australia**  
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## Document Management

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# RD-LM-S3 Supply of Guide Posts and Delineators

## 1 General

- a) This Master Specification Part specifies the requirements for the supply of flexible (buried or driven) guide posts and delineators, including:
  - i) the documentation requirements, as set out in section 2;
  - ii) the requirements for the approval of products, as set out in section 3;
  - iii) the guide post requirements, as set out in section 4;
  - iv) the manufacturer's warranty requirements, as set out in section 5;
  - v) the delineator requirements, as set out in section 6; and
  - vi) the test procedure requirements, as set out in section 7.
- b) Guide posts and delineators must comply with the Reference Documents, including:
  - i) AS 1742.2 Manual of uniform traffic control devices, Part 2: Traffic control devices for general use;
  - ii) AS 1906.2 Retroreflective materials and devices for road traffic control purposes, Part 2: Retroreflective devices (non-pavement application);
  - iii) AS 2312 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings;
  - iv) AS 2700 Colour standards for general purposes;
  - v) Department Approved Products List (available from: [https://dit.sa.gov.au/contractor\\_documents/masterspecifications](https://dit.sa.gov.au/contractor_documents/masterspecifications));
  - vi) Department Test Procedure TP966 Test Methods for the Evaluation of Guide Posts (available from: [https://dit.sa.gov.au/standards/test\\_procedures](https://dit.sa.gov.au/standards/test_procedures)); and
  - vii) Queensland Department of Transport and Main Roads Technical Specification MRTS14 Road Furniture (available from <https://www.tmr.qld.gov.au/>).

## 2 Documentation

### 2.1 Construction Documentation

In addition to the requirements of PC-CN3 "Construction Management", the Construction Documentation must include the information required in section 3a)ii).

### 2.2 Quality Management Records

In addition to the requirements of PC-QA1 "Quality Management Requirements" or PC-QA2 "Quality Management Requirements for Major Projects" (as applicable), the Quality Management Records must include:

- a) for approved guide posts, the information required by section 3a);
- b) for non-approved guide posts, the information required by section 3b);
- c) the results of all testing undertaken in accordance with section 7.

## 3 Approval of products

- a) Guide posts must:

- i) be an approved product in accordance with the Department Approved Products List or approved in accordance with the process set out in section 3b) and 3c); and
- ii) not be supplied until the following has been submitted as part of the Construction Documentation and the associated Hold Point in PC-CN3 "Construction Management" has been released:
  - A. details of the manufacturer and model of the guide post; and
  - B. the manufacturer's performance guarantee statement in accordance with the requirements of section 5.
- b) Where the Contractor proposes to use guide posts that are not an approved product in accordance with the Department Approved Products List, the following information must be supplied:
  - i) the details and dimensions of the guide posts;
  - ii) certification (dated no later than 3 years prior to the proposed date of installation) that the guide posts have been tested in accordance with the requirements of section 4.4 and conforms to all requirements of this Master Specification Part;
  - iii) results of vehicle impact testing;
  - iv) the manufacturer's performance guarantee statement in accordance with the requirements of section 5; and
  - v) the manufacturer's installation and disposal instructions.
- c) The information required by section 3b) must be submitted in accordance with the process set out in PC-CN3 "Construction Management". Supply of the relevant guide posts must not occur until the alternative product has been approved.

## 4 Guide posts

### 4.1 General

- a) Guide posts must be an approved product in accordance with the Department Approved Products List, except where a Hold Point has been released by the Principal in accordance with section 3c).
- b) For the efficiency of maintenance, the number of types of guide posts on the road network must be kept to a minimum.

### 4.2 Design and materials

- a) Guide posts must be:
  - i) manufactured from recycled or recyclable material that is resistant to heat, low temperature, mould growth and breakage due to vehicle impact;
  - ii) designed to resist bending, twisting and displacement due to wind;
  - iii) resistant to vertical removal by persons other than authorised personnel using approved removal tools; and
  - iv) designed and manufactured such that there is no risk of injury to installers during the installation process or once in service.
- b) Guide posts must not be semi-flexible.

### 4.3 Dimensions and shape

- a) Guide posts must meet the following dimensional requirements:
  - i) a minimum projected width of 100 mm;

- ii) a minimum thickness of 4 mm, unless it can be demonstrated that a smaller thickness will not adversely affect the free-standing performance of the post; and
  - iii) a minimum overall length of 1,350 mm.
- b) The tops of guide posts must be flat and, depending on the method of installation recommended by the manufacturer, the bottom may be either rectangular or pointed over a length of approximately 80 mm.
  - c) The shape of each guide post must be such that delineators can be permanently and securely attached to the guide post.

#### 4.4 Testing requirements

- a) Guide posts must be tested in accordance with the requirements of section 7.
- b) Records of the vehicle impact testing must be provided as part of the Quality Management Records.

#### 4.5 Finish and colour

The surface of guide posts must:

- a) have a smooth gloss or semi-gloss finish over the entire length;
- b) be free of roughness, sharp edges, discolouration and other objectionable marks or Defects which may affect appearance, serviceability and attachment of delineators;
- c) be able to be easily cleaned; and
- d) for the exposed portion of the guide post, be of a colour whiter than Y35 (off white) of AS 2700 Colour standards for general purposes.

#### 4.6 Steel post coatings

Steel posts forming part of guide posts must be coated with a system which:

- a) will protect from corrosion and provide impact and abrasion resistance sufficient to withstand normal storage, handling and installation without damage;
- b) meets the requirements of and are recommended in AS 2312 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings, for Category D exposure and 5-10 years to first maintenance (or better); and
- c) is covered by a manufacturer's warranty provided in accordance with section 5 which warrants that the coating will be free from corrosion, blistering, cracking, checking, flaking, peeling or any other Defect for a period of at least 3 years.

#### 4.7 Markings

- a) Guide posts must be marked with the month and the year of manufacture.
- b) A horizontal depth line, or other instructions necessary to correctly install the post at a height of 1,000 mm above ground, must be marked on one of the faces of the guide post.

### 5 Manufacturer's warranty

The Contractor must provide a manufacturer's performance guarantee statement for the guide posts as part of the Quality Management Records, which must include:

- a) a manufacturer's warranty in accordance with PC-CN3 "Construction Management", which provides for full replacement of the guide post should any Defect relating to manufacture become apparent within 3 years of manufacture; and
- b) full details of the guarantee and the service life expectancy.

## 6 Delineators

- a) Guide posts must be fitted with a delineator, which must:
- i) comply with the requirements of AS 1742.2 Manual of uniform traffic control devices, Part 2: Traffic control devices for general use;
  - ii) be either:
    - A. retroreflector - discrete device type; or
    - B. retroreflector - sheeting type,
 as defined in AS 1906.2 Retroreflective materials and devices for road traffic control purposes, Part 2: Retroreflective devices (non-pavement application);
  - iii) be placed centrally between the edges of guide posts, with the top of the delineator 50 mm below the top edge; and
  - iv) be attached to guide posts following completion of final protective coatings by a vandal-proof and weatherproof means so they can be replaced if necessary without damaging the post.
- b) Where reflective sheeting is used for delineators, it must:
- i) have a minimum area of 100 cm<sup>2</sup> and minimum width of 50 mm when measured on a flat surface; and
  - ii) be installed such that the sheeting manufacturer's preferred orientation for optimum performance is complied with.

## 7 Test procedures

The Contractor must carry out testing in accordance with the requirements of this Master Specification Part, including the test procedures listed in Table RD-LM-S3 7-1. Results of the testing must be provided as part of the Quality Management Records.

**Table RD-LM-S3 7-1 Test procedures**

Test	Test procedure
Evaluation of guide posts	Department Test Procedure TP966 Test Methods for the Evaluation of Guide Posts
Vehicle impact testing	Queensland Department of Transport and Main Roads Technical Specification MRTS14 Road Furniture