

## **53.21 PAINTED PAVEMENT MARKINGS**

### **53.21.1 GENERAL**

The Work consists of supplying paint and glass beads and painting markings on pavement surfaces.

### **53.21.2 MATERIALS**

#### **53.21.2.1 Paint and Glass Beads**

The Contractor shall supply the paint and glass bead materials from the Alberta Transportation Recognised Products list. The use of other products will be subject to the approval of the Engineer. The Contractor shall be responsible for ensuring that the quality of the paint and beads supplied meets the requirements specified.

No paint formulation shall be diluted or mixed with a different formulation or with any other material without the specific approval of the Engineer.

The Contractor shall take all necessary steps to prevent contamination of the materials. Paint shall be protected from freezing.

When requested by the Engineer, the Contractor shall provide the following information:

- Names and mailing addresses of the suppliers and manufacturers.
- Paint formulation to be supplied.
- Written confirmation from the manufacturer that the materials to be supplied meet all specified requirements.

### **53.21.3 PROCEDURE**

#### **53.21.3.1 Pavement Marking Dimensions**

Painting shall be performed using a template or other method that will achieve the dimensions shown in the applicable TEB drawings, without over spray.

Markings shall conform with drawings TEB 2.26, TEB 2.29, TEB 2.30, TEB 2.31, TEB 2.32, TEB 2.33, TEB 2.34, TEB 2.35 and TEB 2.37 and the attached Figures TCS-C-4.08, TCS-C-4.09, TCS-C-4.10 and TCS-C-4.11. The dimensions shown are in millimetres unless otherwise indicated.

### **53.21.3.2 Pavement Surface and Atmospheric Conditions**

In addition to the general restrictions specified in Specification 51.2, General (For Maintenance Work), painting shall not be performed during the following conditions:

- ! When the temperature is below 0°C.
- ! When wind conditions cause over spray.
- ! During periods of rainfall.

Areas to be painted shall be clean and dry during the application of paint.

Areas to be painted shall be inspected by the Contractor to ensure they are clean, free of sand and debris, and suitable for painting. The Contractor shall clean the pavement surface when required.

### **53.21.3.3 Paint and Bead Application**

All painted messages shall be uniform in thickness with no splatter, excessive overspray or other defects. To produce a uniform appearance of colour and reflectivity, paint and glass beads must be uniformly applied such that the beads do not contact the pavement surface. Typically, this can be achieved using an application rate of about 0.4 l/m<sup>2</sup> for the paint and 600 g of glass beads per litre of paint.

Traffic shall be kept off painted messages until the paint has dried and will not track under traffic.

The Contractor shall be responsible for the proper clean up of waste or spilled material, and the proper disposition of containers and waste.

### **53.21.4 TIME TO COMPLETE**

In urgent situations, the Contractor shall complete the Work within 7 calendar days of the issuance of the Work Order. In all other cases, the Contractor shall complete the Work within 60 calendar days of the issuance of the Work Order.

#### **53.21.4.1 ACCEPTANCE CRITERIA**

Evaluation of the Work will be based on a visual inspection by the Engineer. To be acceptable, markings shall be correctly applied regarding application rates, location, colour, size, alignment (within 2° measured from the painted centreline), shall not have "tracked" under traffic, and shall have a uniform appearance for colour and reflectivity.

Markings applied at incorrect locations, shall be completely removed at the Contractor's expense. The method used to remove an incorrect marking shall be subject to the approval of the Engineer.

**53.21.5 MEASUREMENT AND PAYMENT**

Measurement will be in square metres (to the nearest tenth of a square metre) of the painted area for each marking.

Payment will be made at the unit price bid per square metre for "Painting Pavement Markings". This payment will be full compensation for inspecting the areas to be painted, cleaning the pavement surface when required, supplying templates if necessary, supplying and applying the paint and glass beads, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

In urgent situations where the Contractor is required to complete the Work within 7 calendar days of the issuance of the Work Order, an additional payment per Work Order will be made at the unit price bid per occurrence for "Painting Pavement Markings - Premium". This payment will be full compensation for complying with the accelerated scheduling required to complete the Work.

**53.21.6 WARRANTY**

The warranty period for this Work shall be 60 days with the exception of Stop Bars which will be 30 days.







