

## **BC MINISTRY OF TRANSPORTATION**

### **Electrical Maintenance Specification E-320 (Version 6 – May/05)**

#### **HIGHMAST LIGHTING MAINTENANCE**

##### **1. OBJECTIVE**

- To ensure that Highmast Lighting is operational and will function in accordance with its design and Ministry standards.

##### **2. GENERAL PERFORMANCE SPECIFICATIONS**

###### **2.1 Routine Maintenance Services**

- All services for the Electrical Maintenance Specifications are routine.

###### **2.2 Additional Services**

- Not applicable to this Electrical Maintenance Specification.

##### **3. DETAILED PERFORMANCE SPECIFICATIONS**

###### **3.1 Routine Maintenance Services**

The Contractor must:

- a) repair or replace Highmast Lighting and their components;
- b) perform preventative maintenance;
- c) replace all high pressure sodium lamps;
- d) service and inspect raise/lower systems;
- e) notify the PHCC of any malfunctioning Highmast Lighting causing a major traffic disruption and inform the PHCC when repaired;
- f) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;

- g) mark the replacement lamps with the actual date of replacement; and
- h) document all activities related to electrical maintenance of Highmast Lighting including but not limited to field inspections, patrols, testing, complaints received / responses made, and all changes made to the equipment and operations.

### **3.1.1 Performance Time Frames**

The following establishes the maximum time, from the time the deficiency was detected or reported to the Contractor, within which the Contractor must Respond to deficiencies:

- a) repair any Highmast Lighting that constitutes a safety hazard to the Highway User within 1 hour from the time the deficiency was detected by or reported to the Contractor;
- b) repair or replace Highmast Lighting and their components that create traffic disruptions within 1 hour from the time the deficiency was detected by, or reported to the Contractor;
- c) repair or replace Highmast Lighting and/or their components that do not create a safety hazard, do not cause traffic disruptions, or are structurally sound but have identified deficiencies within three months;
- d) repair or replace Highmast Lighting and/or their components if more than  $\frac{1}{2}$  of the luminaires are not operating on one pole or at a single interchange within 1 hour from the time the deficiency was detected by or reported to the Contractor;
- e) repair or replace Highmast Lighting and/or their components if  $\frac{1}{2}$  or less of the luminaires are not operating on one pole or at a single interchange within 7 days from the time the deficiency was detected by or reported to the Contractor;
- f) repair all other deficiencies within a maximum time frame of 3 months or as soon as possible thereafter if inclement weather prevents such activities;

- g) perform preventative maintenance as required;
- h) replace all Highmast Lighting lamps every 48 months;
- i) service and inspect raise/lower systems every 12 months;
- j) notify the PHCC of any malfunctioning Highmast Lighting causing a traffic disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and inform the PHCC when repaired;
- k) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;
- l) mark the replacement lamps with the date at the time of replacement; and
- m) document all activities related to electrical maintenance of Highmast Lighting including but not limited to field inspections, patrols, testing, complaints received / responses made, and all changes made to the equipment and operations immediately.

### **3.2 Additional Services**

- Not applicable to this Electrical Maintenance Specification.

### **3.3 Materials**

- Refer to the Introduction.