

## BC MINISTRY OF TRANSPORTATION

### Electrical Maintenance Specification E-230 (Version 6 – May/05)

#### AVIATION, NAVIGATIONAL AND PIER LIGHTING MAINTENANCE

##### 1. OBJECTIVE

- To ensure that Aviation Lighting, Navigational Lighting and Pier Lighting is operational and function in accordance with their design and Ministry standards.

##### 2. GENERAL PERFORMANCE SPECIFICATIONS

###### 2.1 Routine Maintenance Services

- All services for this Electrical Maintenance Specification 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 Aviation, Navigational and Pier Lighting and their components;
- b) perform preventative maintenance;
- c) replace all lamps;
- d) replace all high pressure sodium and mercury vapour lamps;
- e) notify the PHCC of any malfunctioning Aviation, Navigational and Pier Lighting causing a 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) ensure that replacement lamps are marked with the actual date of replacement; and
- h) document all activities related to electrical maintenance of Aviation Lighting, Navigational Lighting and Pier 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 or replace Aviation, Navigational and Pier Lighting and their components that constitute or have the potential to constitute a safety hazard to the Highway, Airway or Navigable Waterway User within 1 hour;
- b) repair or replace Aviation, Navigational and Pier Lighting and their components that create traffic or waterway disruptions within 1 hour;
- c) repair or replace Aviation, Navigational and Pier Lighting and their components that do not operate as designed, but are not a safety hazard, on the next regularly scheduled work day;
- d) repair or replace Aviation, Navigational and Pier Lighting and/or their components that operate as designed, do not create a safety hazard, do not cause traffic disruptions, and are structurally sound but have identified deficiencies within 3 months;

The Contractor must:

- a) perform preventative maintenance as required;
- b) replace all non-LED lamps every 12 months; replace LED lamps as required
- c) replace mercury vapour lamps every 24 months;
- d) replace all high pressure sodium lamps every 48 months;

- e) notify the PHCC of any malfunctioning Aviation, Navigational and Pier Lighting causing a major traffic disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and inform the PHCC when repaired;
- f) remove or cover graffiti in accordance with the Performance Time Frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*;
- g) mark the replacement lamps with the date at the time of replacement; and
- h) document all activities related to electrical maintenance of Aviation Lighting, Navigational Lighting and Pier Lighting immediately.

### **3.2 Additional Services**

- Not applicable to this Electrical Maintenance Specification.

### **3.3 Materials**

- Refer to the Introduction.