

BC MINISTRY OF TRANSPORTATION

Electrical Maintenance Specification E-310 (Version 6 – May/05)

STREET, ROADWAY, AREA AND SIGN LIGHTING MAINTENANCE

1. OBJECTIVE

- To ensure that Street, Roadway, Area and Sign Lighting is operational and functions in accordance with their design and Ministry standards.

2. GENERAL PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

- All services in 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 Street, Roadway, Area and Sign Lighting and their components;
- b) perform preventative maintenance;
- c) replace all lamps;
- d) notify the PHCC of any malfunctioning Street, Roadway, Area and Sign Lighting causing a traffic disruption and inform the PHCC when repaired;
- e) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;

- f) mark the replacement lamps with the date of replacement; and
- g) document all activities related to electrical maintenance of Street, Roadway, Area and Sign 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 Street, Roadway, Area and Sign 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 Street, Roadway, Area and Sign 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) except as noted in 3.1.1 d) and e) below, repair or replace Street, Roadway, Area and Sign Lighting and/or their components that do not create a safety hazard, do not cause traffic disruptions, but have identified deficiencies within three months;
- d) ensure that the defects listed in **Note A** below are repaired within 1 hour from the time the deficiency was detected by or reported to the Contractor:

Note A:

- 1/2 or more of the luminaries not operating at a signalized intersection, marked Pedestrian Crossing;
- Any luminaire directly over a marked Pedestrian Crossing;
- 2/3rds or more of luminaries not operating at an un-signalized intersection, interchange, or

roadway between interchanges or intersections; or

- Three adjacent luminaires not operating.
- e) ensure defects listed in **Note B** below are repaired within 7 days from the time the deficiency was detected by or reported to the Contractor:

Note B:

- Less than 1/2 of the luminaries not operating at a signalized intersection, signed Pedestrian Crossing, or in areas of continuous lighting;
 - Less than 2/3rds of the luminaries not operating at an un-signalized intersection, interchange, or roadway between interchanges or intersections;
 - Two adjacent luminaries not operating; and
 - Warning Sign luminaires not operating.
- 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) replace all Street, Roadway, Area and Sign Lighting lamps every 48 months with 25% being replaced each year;
- h) notify the PHCC of any malfunctioning Street, Roadway, Area and Sign 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;
- i) remove or cover graffiti in accordance with the *Highway Maintenance Specification – Litter collection and Graffiti Removal*;
- j) mark the replacement lamps with the date at the time of replacement; and.

- k) document all activities related to electrical maintenance of Street, Roadway, Area and Sign Lighting including but not limited to field inspections, patrols, testing, complaints received / responses made, and all changes made to the equipment and operations.

3.2 Additional Services

- Not applicable to this Electrical Maintenance Specification.

3.3 Materials

- Refer to the Introduction.