

ELECTRICAL MAINTENANCE SPECIFICATION E-160

TEMPORARY ONE WAY BRIDGE SIGNAL MAINTENANCE

1. OBJECTIVE

To ensure temporary one way bridge signals are operational and function as designed and in accordance with Ministry standards.

2. DETAILED PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

The Contractor must:

- a) repair or replace temporary one way bridge signals and their components that constitute or have the potential to constitute an immediate Safety Hazard to the highway user or cause a Traffic Disruption, and Respond within 1 hour;
- b) repair or replace temporary one way bridge signals and their components that do not operate as per their original design but are not immediate Safety Hazards, and Respond on the next Work Day;
- c) repair or replace temporary one way bridge signals and/or their components that operate as per the original design, do not create a Safety Hazard, and are structurally sound but have identified deficiencies, and Respond within 30 days;
- d) perform Preventative Maintenance as required;
- e) replace all non-LED lamps of signal heads once every 12 months;
- f) replace LED signal head light sources as required;
- g) test all conflict monitors once every 12 months;
- h) notify the RTMC of any malfunctioning temporary one way bridge signal causing a Traffic Disruption within 5 minutes from the time the malfunction was detected by or reported to the Contractor and inform the RTMC when repaired;
- i) remove or cover graffiti in accordance with the performance time frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*;

- j) store and maintain the Ministry supplied temporary one way bridge signal controller assembly including but not limited to providing, maintaining and servicing UPS batteries to enable the unit to be deployed within 7 days;
- k) implement temporary one way bridge signal timing plans as per section 600 of the *Traffic Controller Design Manual* as follows:
 - (i) new temporary one way bridge signals or modifications to existing signals – to meet the project schedule;
 - (ii) observed operational field problems – Respond within 12 hours of receiving the timing plan;
 - (iii) scheduled roadway maintenance or construction activities by others – to meet the scheduled maintenance activities (one week notification); and
 - (iv) coordination plan updates – Respond within 3 weeks of receiving the new temporary one way bridge signal timing plans;
- l) collect controller volume and measure of effectiveness (MOE) logs as requested by the Ministry following the guidelines outlined in section 600 of the *Traffic Controller Design Manual*; and
- m) document all activities related to electrical maintenance of temporary one way bridge signals including but not limited to field inspections, Patrols, testing, complaints received / responses made, and all changes made to the controller equipment and operations, as per section 600 of the *Traffic Controller Design Manual* in a timely manner to the Province's satisfaction.

2.3 Materials

Refer to Article 3 of the Introduction to the Specifications. For new traffic signal controller installations, the Ministry will supply a complete unit as per the design requirements.