

ELECTRICAL MAINTENANCE SPECIFICATION E-140

ACTUATED RAILWAY WARNING SIGN MAINTENANCE

1. OBJECTIVE

To ensure that actuated railway warning signs are operational and function in accordance with their design and Ministry standards.

2. DETAILED PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

The Contractor must:

- a) repair or replace actuated railway warning signs 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 actuated railway warning signs 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 actuated railway warning signs and/or their components that operate as per the original design intent, 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 signal head lamps once every 12 months;
- f) replace LED light sources as required;
- g) replace all HID lamps every 48 months;
- h) contact the railway authority and arrange to jointly test the operation of any railway preemption or railway advance warning sign system including but not limited to signal timing sequences in the field every 12 months;
- i) notify the RTMC of any malfunctioning actuated railway warning sign 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;
- j) immediately advise the railway authority and the Ministry Representative if any warning sign is not operational;

- k) remove or cover graffiti in accordance with the performance time frames listed in the *Highway Maintenance Specification – Litter Collection and Graffiti Removal*; and
- l) document all activities related to electrical maintenance of actuated railway warning signs including but not limited to field inspections, Patrols, testing, complaints received / responses made, and all changes made to the equipment and operations in a timely manner to the Province's satisfaction.

2.2 Materials

Refer to Article 3 of the Introduction to the Specifications.