

BOSTON TRANSPORTATION DEPARTMENT
Specification for Solar-powered Flashing LED Pedestrian Crossing Sign

December 5, 2018

General:

The Solar-powered Flashing LED Pedestrian Crossing sign shall be a complete unit consisting of a solar panel, battery, and 24" x 24" Pedestrian Crossing sign (BTD W-6) with eight embedded yellow LEDs around the edge of the sign background. The signs shall have a black border and legend on a fluorescent yellow-green background. All signs shall be in compliance with MUTCD requirements for retroreflectivity and illumination. Mounting hardware shall be provided for rapid installation of the unit on new or existing square or round sign posts, street lights and/or wooden utility poles. The minimum height, measured vertically from the bottom of the sign to the sidewalk, shall be 7 feet. A lateral offset of at least 1 foot measured from the edge of sign to the face of curb shall be provided. **Please refer to BTD Standard Detail A52 latest revision.**

All LEDs shall flash simultaneously at a rate of more than 50 and less than 60 times per minute. The LEDs should be set to flash 24 hours a day unless otherwise specified by BTD.

The unit shall be designed to operate from a 20 watt solar powered source with a 12 volt battery backup. Solar panel shall be mounted to allow 360 degree rotation and shall be installed with a South facing orientation. Initial angle from vertical shall be set to 45 degrees. Battery shall be sized to allow at least 30 days of operation without sun. A spare battery pack and compatible battery charger shall be supplied for each unit unless otherwise specified by the Boston Transportation Department.

Wiring diagrams and manuals shall be supplied for all equipment installed as part of the System. Documentation shall include instructions for set up and troubleshooting of all components in the unit.

The unit shall be equipped with a photocell and shall adjust brightness of LEDs based on ambient light conditions.

Circuitry shall be enclosed in a weatherproof casing.

The unit shall be designed to operate over a temperature range from -30 degrees F to + 165 degrees F.

The unit shall be fully compliant with the MUTCD and shall be on the MassDOT approved equipment list at the time of bid or purchase.

Warranty:

The Solar Powered Flashing LED sign unit shall include a full warranty by its supplier for two (2) years from the date of installation.