Florida Department of Transportation

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GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT, P.E.
SECRETARY

February 3, 2020

Khoa Nguyen
Director, Office of Technical Services
Federal Highway Administration
3500 Financial Plaza, Suite 400
Tallahassee, Florida 32312

Re: State Specifications Office
Section: **654**
Proposed Specification: **6540201 Midblock Crosswalk Enhancement Assemblies.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Derek Vollmer from the Traffic Engineering and Operations Office to clarify passive detection allowed for actuation.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to daniel.strickland@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Daniel Strickland, P.E.
State Specifications Engineer

DS/ra
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

MIDBLOCK CROSSWALK ENHANCEMENT ASSEMBLIES
(REV 11-12-20)

SUBARTICLE 654-2.1 is deleted and the following substituted:

654-2.1 In-Roadway Light Assemblies: In-roadway light assemblies must meet the physical and operational requirements of the latest edition of the MUTCD, Chapter 4N.

~~In-roadway light assemblies shall be normally dark, initiate operation only upon pedestrian actuation via a pedestrian pushbutton,~~ In-roadway light assemblies can include a passive detector in addition to a pedestrian pushbutton. In-roadway light assemblies must be normally dark and initiate operation upon pedestrian actuation via a pedestrian pushbutton or a passive detector. The In-roadway light assembly will~~and~~ cease operation at a predetermined time after the pedestrian actuation. ~~or, with passive detection, after~~ If a passive detector is used, the In-roadway light assembly may cease operation after the pedestrian clears the crosswalk. The duration of the predetermined period shall be programmable and capable of matching the pedestrian clearance time for pedestrian signals as determined by MUTCD procedures. The timer that controls flashing must automatically reset each time a pedestrian call is received.

In-roadway light assemblies must have a minimum luminance of 101 candelas and a minimum viewing angle of 20 degrees.

SUBARTICLE 654-2.2.2 is deleted and the following substituted:

654-2.2.2 Beacon Flashing Requirements: The light intensity of the yellow indications shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 for Class 1 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005. Ensure RRFB assemblies are capable of automatically dimming to reduce brightness of the LEDs at nighttime.

The flash rate of each individual yellow indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second. When activated, the two yellow indications in each RRFB shall have a flash rate of 75 flash cycles per minute using the following sequence: left side beacon on for 50 milliseconds (msec), both beacons off for 50 msec, right side beacon on for 50 msec, both beacons off for 50 msec, left side beacon on for 50 msec, both beacons off for 50 msec, right side beacon on for 50 msec, both beacons off for 50 msec, both beacons on for 50 msec, both beacons off for 50 msec, both beacons on for 50 msec, both beacons off for 250 msec. No other flash patterns shall be selectable via hardware or software.

SUBARTICLE 654-2.2.3 is deleted and the following substituted:

654-2.2.3 RRFB Operation: RRFB can include a passive detector in addition to a ~~shall be normally dark, initiate operation only upon~~ pedestrian pushbutton. RRFBs must be normally dark and initiate operation only upon pedestrian actuation via a pedestrian pushbutton, or a passive detector. The RRFB will~~and~~ cease operation at a predetermined time after the pedestrian actuation. ~~or, with passive detection, after~~ If the passive detector is used, the RRFB

may cease operation after the pedestrian clears the crosswalk. The duration of the predetermined period shall be programmable and capable of matching the pedestrian clearance time for pedestrian signals as determined by MUTCD procedures. The timer that controls flashing must automatically reset each time a pedestrian call is received.

All RRFBs associated with a single crosswalk (including those with an overhead or advance crossing sign, if used) shall simultaneously commence operation of their alternating rapid flashing indications and shall cease operation simultaneously.

RRFBs must include an instruction sign (FTP-68C-21)~~with the legend PUSH BUTTON TO TURN ON WARNING LIGHTS~~ mounted adjacent to or integral with each pedestrian pushbutton.

A confirmation light directed at and visible to pedestrians in the crosswalk must be installed integral to the RRFB to give confirmation that the RRFB is in operation.

ARTICLE 654-6 is deleted and the following substituted:

654-6 Basis of Payment.

Price and Payment will be full compensation for all work specified in this Section.

Payment will be made under:

Item No. 654- 1	Midblock Crosswalk - In-Roadway Light Assembly - per assembly.
Item No. 654- 2	Midblock Crosswalk - Rectangular Rapid Flashing Beacon Assembly - per assembly.
Item No. 654- 3	Midblock Crosswalk - Pedestrian Hybrid Beacon Assembly - per assembly.

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