Florida Department of Transportation

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SECRETARY

ENGINEERING AND OPERATIONS MEMORANDUM 19-02

DATE: December 5, 2019

TO: FDOT Senior Leadership

FROM: Will N. Watts Jr., P.E., Chief Engineer

COPIES: Courtney Drummond, Tom Byron, Stacy Miller, L.K. Nandam, Greg Evans, Phillip Gainer, Gerry O'Reilly, Jared Perdue, Jim Wolfe, David Gwynn, Nicola Liquori, Directors of Production, Directors of Operations, Lora Hollingsworth, Tim Lattner, Scott Foltz, Trey Tillander, Dan Hurtado, Rudy Powell, Timothy Ruelke, Jason Watts, Irene Cabral, Stefanie Maxwell, Torey Alston, and Beth Frady

SUBJECT: Rail Crossing Dynamic Envelope Implementation

The Florida Department of Transportation identifies safety as a top priority, with a vision of zero fatalities. On December 5, 2019, FDOT announced a commitment to implement engineering countermeasures on all existing department owned rail corridor crossings and rail crossings on department roadways.

Immediately, the agency will begin implementing "dynamic envelopes" at every existing railroad crossing on FDOT roadways together with all state-owned rail corridor crossings within the state. Total inventory is expected to be more than 4,000 locations.

Installation of the "dynamic envelope" for the entire inventory shall be completed before March 2022.

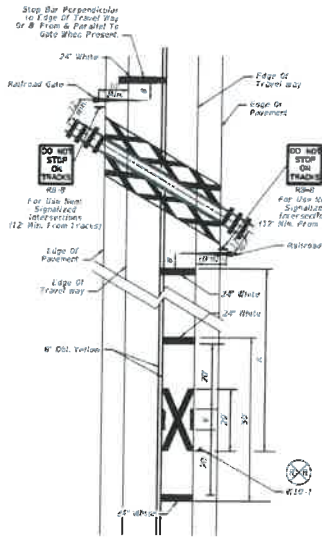
Towards this goal, each district will:

- Complete an inventory of all railroad crossings on the state highway system within the district
- Complete an inventory of FDOT owned rail corridors crossings within the district
- Use the details below as technical guidance for installations
- Develop an execution plan to complete installation of all "dynamic envelopes" prior to the deadline of March 2022

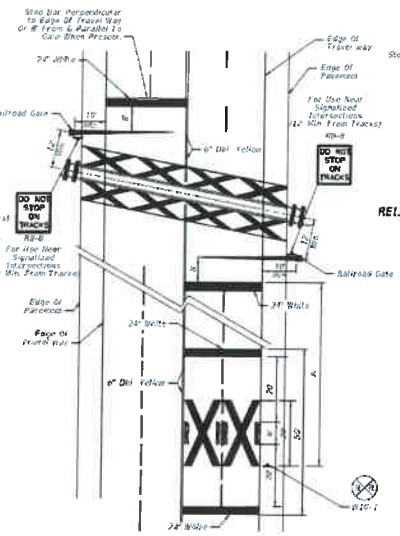
NOTES:

1. Place an additional W10-1 sign where intersections occur between the R/R pavement message and the tracks.
2. Place FTP-61-06 or FTP-62-06 (sign 109) in advance of crossing for urban conditions and 360' in advance of crossing for rural conditions. See Index 209-102 for sign details.

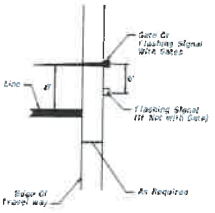
Design Speed (mph)	Distance "A" (Ft)
40	400
45	450
50	500
55	550
60	600
65	650
70	700



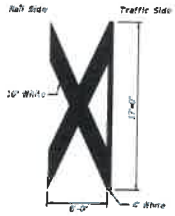
RAILROAD CROSSING AT TWO-LANE ROADWAY



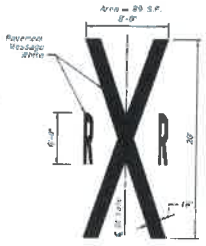
RAILROAD CROSSING AT MULTILANE ROADWAY



RELATIVE LOCATION OF CROSSING TRAFFIC CONTROL DEVICES



RAILROAD DYNAMIC ENVELOPE (RDE) PAVEMENT MARKING DETAIL



RAILROAD CROSSING PAVEMENT MESSAGE