



Florida Department of Transportation

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ROADWAY DESIGN BULLETIN 15-08
TRAFFIC OPERATION BULLETIN 03-15
(FHWA Approved: April 14, 2015)

DATE: April 15, 2015

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Consultant Project Management Engineers, District Construction Engineers, District Maintenance Engineers, District Geotechnical Engineers, District Structures Design Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers

FROM:  Michael Shepard, P.E., State Roadway Design Engineer
 Mark Wilson, P.E., Director, Office of Traffic Engineering & Operations

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SUBJECT: **Signing and Pavement Marking Standards at Ramp Intersections**

This bulletin introduces new minimum signing and pavement marking standards for interstate exit ramp intersections throughout the state of Florida to complement the Manual of Uniform Traffic Control Devices (MUTCD), 2009 Edition.

REQUIREMENTS

1. The new standard for signing and pavement marking at exit ramp intersections is illustrated in **Figures 7.8.1** "Diamond Interchange Exit Ramp" and **7.8.2** "Partial Cloverleaf/Trumpet Interchange Exit Ramp" and described as follows:
 - A. Include MUTCD "optional" signs
 - Second DO NOT ENTER sign
 - Second WRONG WAY sign
 - ONE WAY signs
 - B. Include NO RIGHT TURN and NO LEFT TURN signs

- C. Use 3.5 ft. by 2.5 ft. WRONG WAY signs mounted at 4-foot height with retroreflective strip on sign supports (MUTCD, Figure 2A-1[E])
- D. Include 2-4 dotted guide line striping for left turns between ramps entrances/exits and cross-streets
- E. Include retroreflective paint (yellow) on ramp median nose where applicable
- F. Include a straight arrow and route interstate shield pavement marking in left-turn lanes extending from the far-side ramp intersection through the near-side ramp intersection to prevent premature left turns
- G. Include a straight arrow and ONLY pavement message in outside lane approaching the ramp exit

COMMENTARY

The FDOT Traffic Engineering and Operations Office conducted a study for wrong-way crashes occurring on interstate freeways and expressways throughout the state of Florida. Over the past years (2009-2013), 280 wrong-way crashes have occurred on Florida's freeways and expressways resulting in more than 400 injuries and 75 deaths. This bulletin requires the use of systemic signing and pavement marking countermeasures to deter wrong-way occurrences.

This bulletin complements design requirements established by the Traffic Engineering Manual (TEM), February 2015 Edition, Section 4.2.4 "Route Shields for Wrong Way Treatment". All signing and pavement markings included in this bulleting have corresponding pay item numbers on the Basis of Estimates Manual, 2015 Edition.

BACKGROUND

Prior to this bulletin the minimum MUTCD signing and pavement marking requirements for exit ramp intersections were accepted as the FDOT Standard. The study conducted has identified the need to provide additional direction to motorists and greater level of warning to errant drivers. The installation of these wrong-way driving countermeasures will provide a safer roadway.

IMPLEMENTATION

The requirements of this bulletin are effective immediately on all design-bid-build projects for which the design development is less than 90% complete (Phase III Submittal). These requirements should be employed on projects beyond 90% complete where implementation will not adversely impact the production schedule.

The requirements of this bulletin are effective immediately on all design-build projects for which the final RFP has not been released. Implementation of this bulletin for Design-build projects for which the final RFP has been released is at the discretion of the District.

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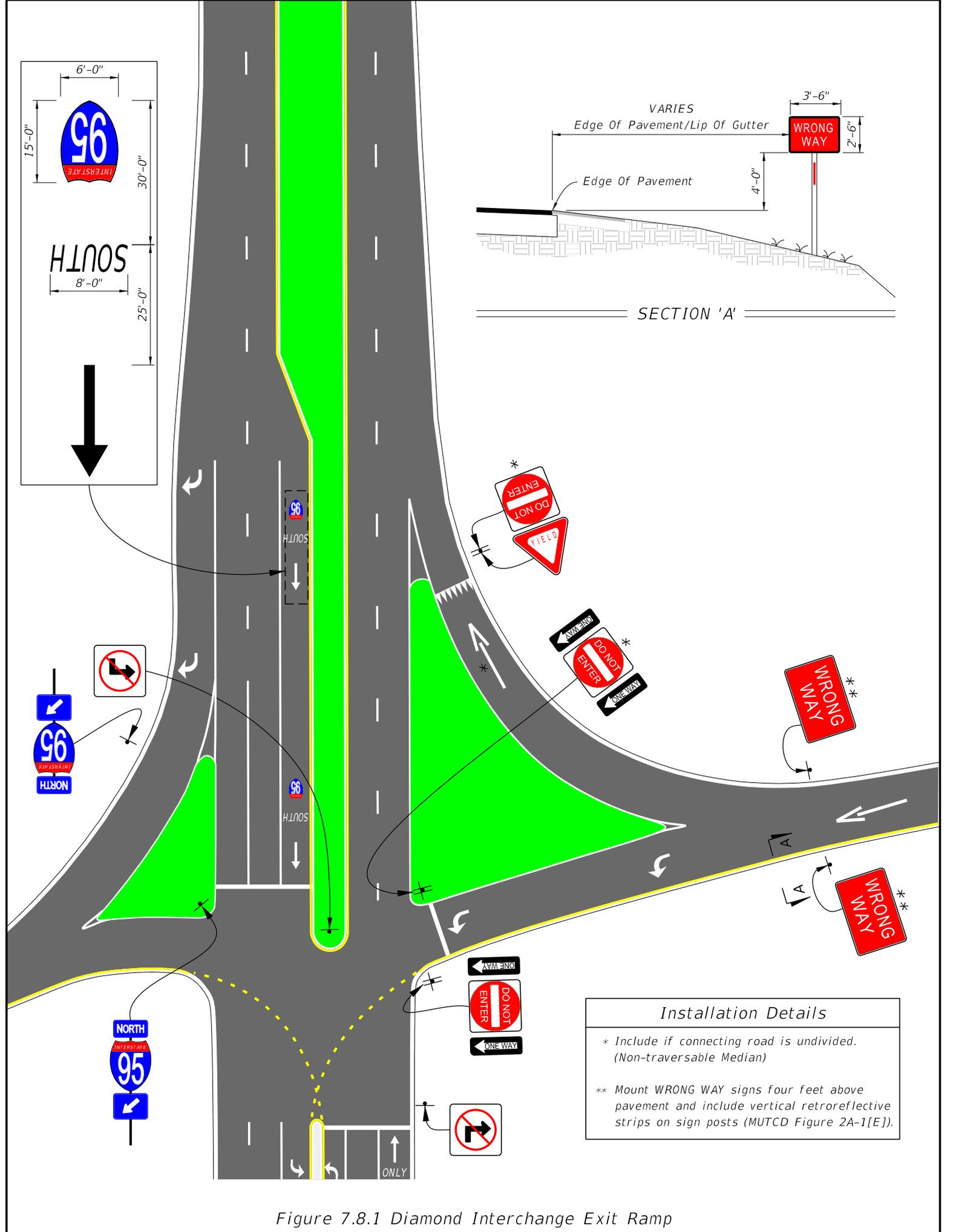
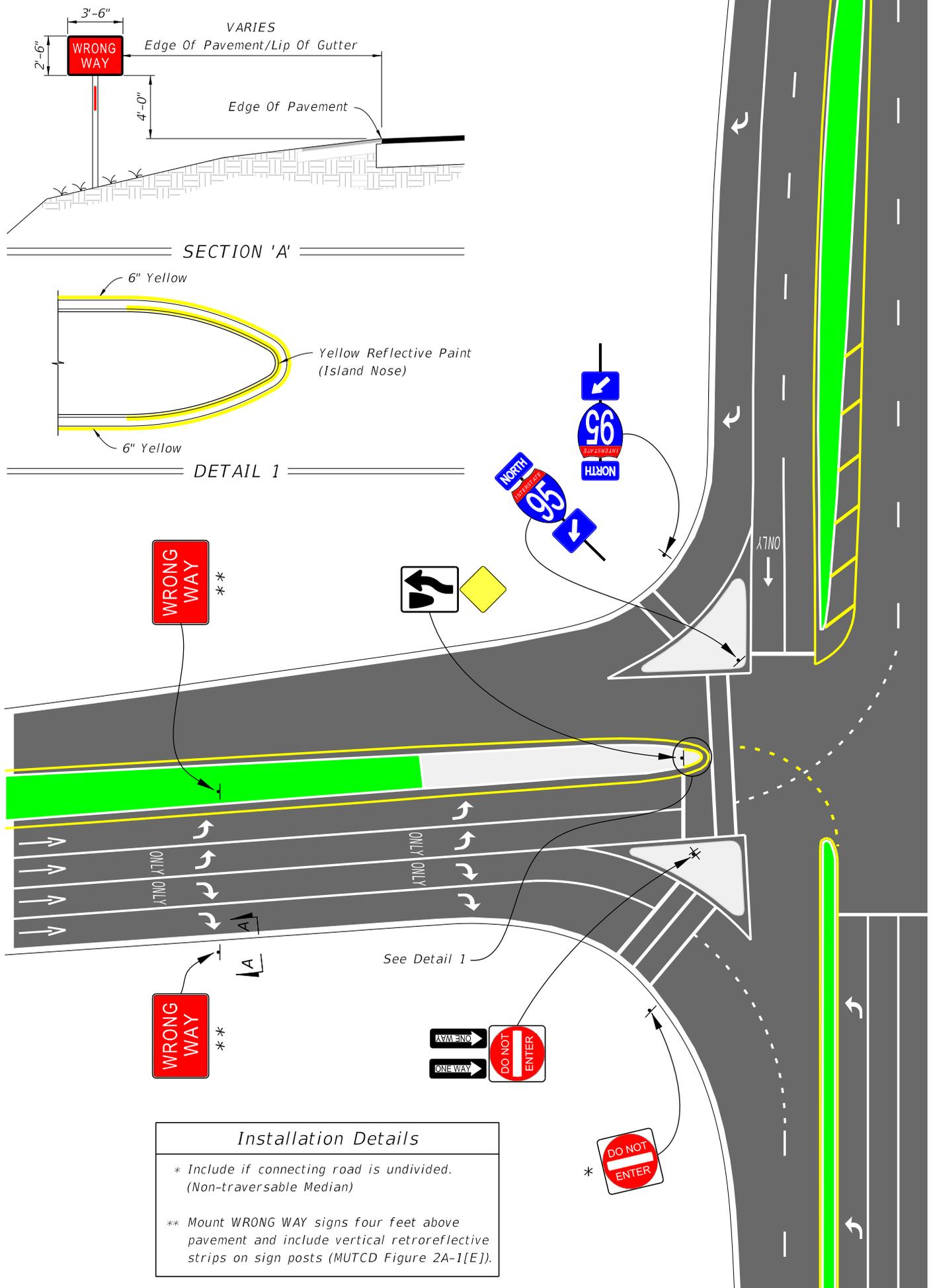
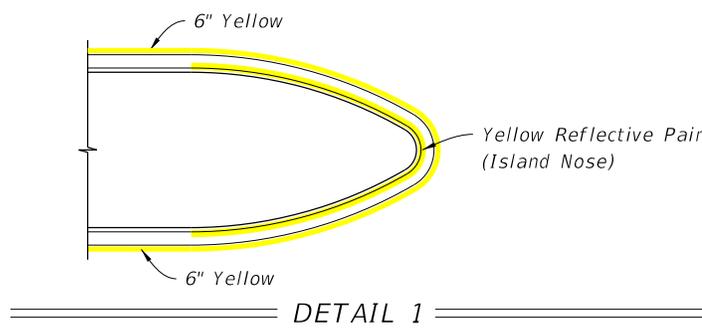
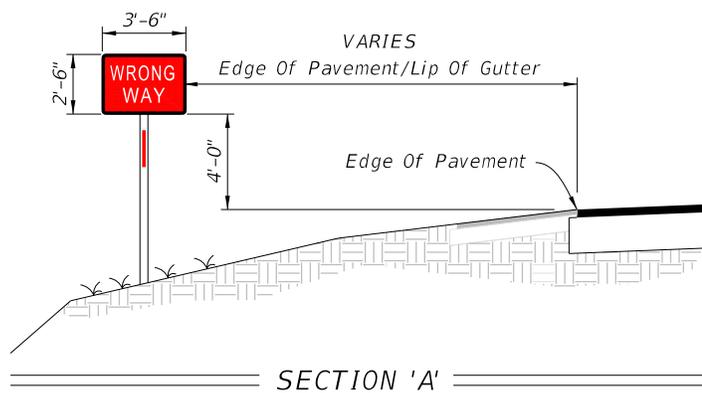


Figure 7.8.1 Diamond Interchange Exit Ramp



Installation Details

- * Include if connecting road is undivided. (Non-traversable Median)
- ** Mount WRONG WAY signs four feet above pavement and include vertical retroreflective strips on sign posts (MUTCD Figure 2A-1[E]).

Figure 7.8.2 Partial Cloverleaf/Trumpet Interchange Exit Ramp