

Florida Department of Transportation

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ANANTH PRASAD, P.E.
SECRETARY

June 15, 2011

Mr. Mark Kehrli
Director of Office of Transportation Operations
Federal Highway Administration
1200 New Jersey Avenue, S.E., HOTO-1
Washington, DC 20590

By Email to: MUTCDofficialrequest@dot.gov

RE: FHWA Request for Experiment: Use of Blue Striped Channelizing Drums along Business Entrances with a Work Zone.

Dear Mr. Kehrli:

In accordance with Section 1A.10 in the Manual on Uniform Traffic Control Devices (MUTCD), the Florida Department of Transportation (FDOT) requests approval to conduct an experiment to improve safety by using blue striped channelizing drums along business entrances in work zones.

1. The Problem

On some urban widening projects, business entrances are not easily distinguishable from the rest of the drums and traffic control devices, making it difficult for the traveling public to identify where to turn into the respective business driveways located within a work zone.

2. Proposed Change

We propose to change the orange and white reflective bands to blue reflective bands for the channelizing drums that are within the radius limits for driveways located within a work zone. The remaining drums used to channelize traffic on the mainline roadway would remain the traditional orange and white.

3. Illustrations

See attached picture of the proposed channelizing drum with the blue reflective stripes (Figure 1) and 2010 FDOT Design Standard Index No. 600 (Figure 2) showing the placement of the blue channelizing devices at business entrances within work zones.

4. Supporting Data

The idea was developed after listening to the concerns of motorists and business owners on recent urban widening projects. This use of this type of device has not been tried before to our knowledge. Therefore there is no data on its performance. The proposed device is the use of the standard drums with the orange and white reflective band changed to blue in order to match the business signs. This process will provide a visual indicator so the traveling public can more easily recognize driveway entrance locations for businesses within a work zone.

5. Legally Binding Statement

Attached is a legally binding statement certifying that the concept of the traffic control device is not protected by either a patent or copyright.

6. Proposed Time Period and Location of the Experiment.

We propose to conduct this experimentation on a minimum of three urban widening projects that use multiple Maintenance of Traffic phasing within our District 5 area. The specific site locations cannot be determined at this time, however, after receiving approval to proceed, we will notify FHWA when project sites have been selected and added as an experiment location. The experiment period is estimated to be between three to five years, dependent on the overall length of each urban widening project selected as an experiment site.

7. Evaluation Plan

The experiment will be in conducted in two phases. Phase One will use the regular channelizing drums with orange and white reflective bands. Phase Two will use the channelizing drums with the blue reflective bands.

It is our plan to survey both the drivers and local business owners during each phase to determine the effectiveness in the use of the blue drums on identifying the location of business entrances within a work zone.

8. Restoration

Drums are temporary traffic control devices and will be removed after construction.

9. Reporting

FDOT will provide semiannual progress reports for the duration of the experimentation and to provide a copy of the final results to the Office of Transportation Operations (HOTO) within three months of the conclusion of the experiment.

Project Administration

FDOT District Five Construction Office will be responsible for all project administration. The Project Manager will be:

Jonathan M. Duazo
District Construction Consultant Manager
District Five Construction, MS 3-506
719 South Woodland Boulevard
DeLand FL 32720-6834
(386) 943-5347
jonathan.duazo@dot.state.fl.us

We look forward to receiving FHWA approval to conduct this experiment. If you need further information or have any questions prior to approval, please contact Mrs. Gail Holley, of my staff at gail.holley@dot.state.fl.us.

Sincerely,



Mark C. Wilson, P.E.
State Traffic Operations Engineer

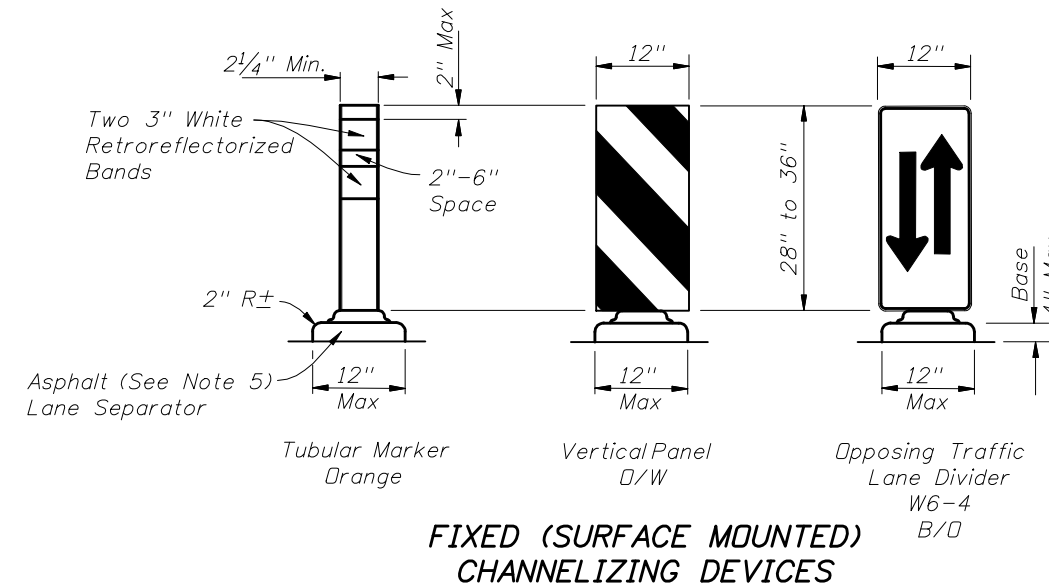
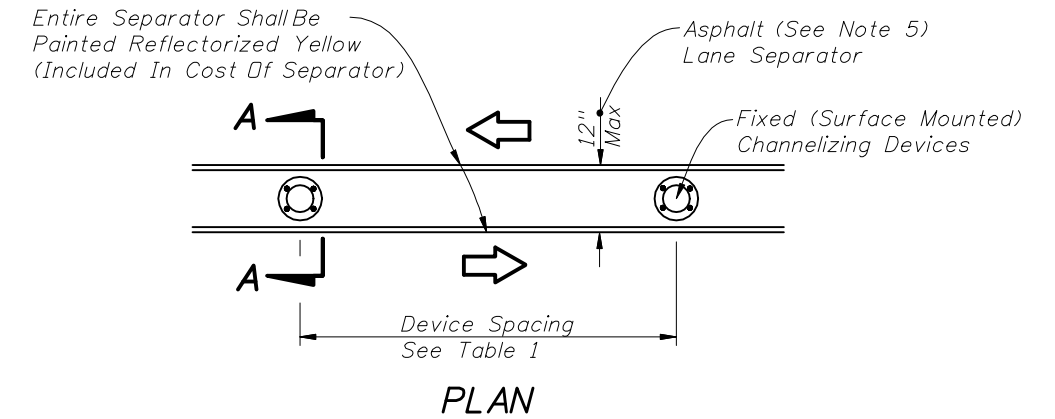
cc: FHWA Florida Division Office

Frank J. O'Dea, P.E. - District Construction Engineer
David A. Sadler, P.E. - Director, Office of Construction
Rick Morrow, P.E. - District 5 Traffic Operations Engineer
Jonathan Duazo - Project Manager

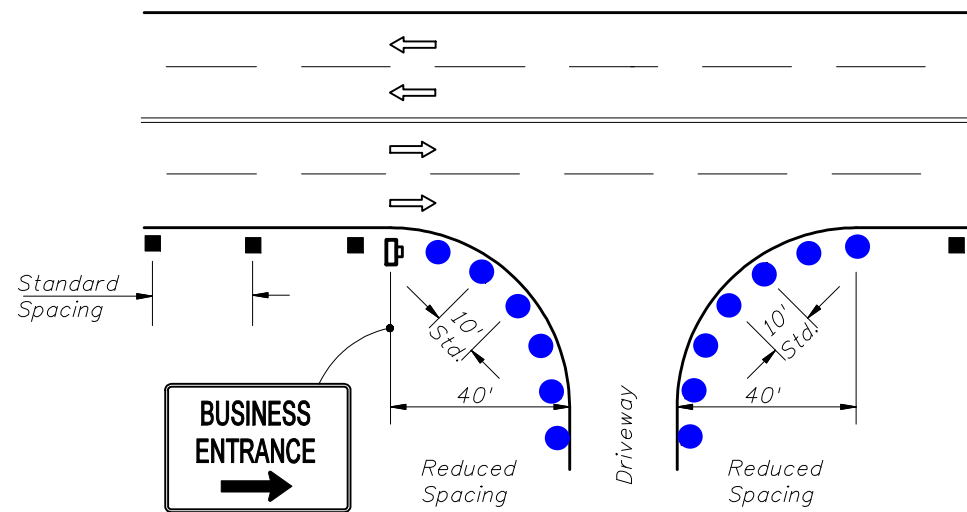
Figure 1. Proposed Channelizing Drum with Blue Reflective Stripes



Table 1 Device Spacing				
Speed (mph)	Max. Distance Between Devices (ft.)			
	Tubular Markers		Vertical Panels or Opposing Traffic Lane Divider	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100



SECTION AA



1. Sign height shall be 7' minimum. Sign offset from edge of travelway should be between 6' and 10' and relatively consistent through the project phase.
2. Signs should show specific business names. Logos may be provided by business owners. BUSINESS ENTRANCE sign in accordance with Index 17355 may be used when approved by the Engineer.
3. Place one business sign for each driveway entrance affected. When several businesses share a common driveway entrance, place one sign per common driveway entrance.
4. Channelizing devices should be placed at a reduced spacing on each side of the driveway entrance as to not to interfere with providing sight distances for the driveway user.

PLACEMENT OF BUSINESS ENTRANCE SIGNS AND CHANNELIZING DEVICES AT BUSINESS ENTRANCE

1. Temporary lane separators shall be supplemented with any of the following approved fixed (surface mounted) channelizing devices: tubular markers, vertical panels, or opposing traffic lane divider panels. Opposing traffic lane divider panels (W6-4) shall only be used as center lane dividers to separate opposing vehicular traffic on a two-lane, two-way operation.
2. Reflectorized materials shall have a smooth sealed outer surface which will display the same approximate color day and night.
3. 12" openings for drainage will be constructed in the separator island every 25' in areas with grades of 1% or less or every 50' in areas with grades over 1% as directed by the Engineer.
4. Tubular Markers, Vertical Panels and Opposing Traffic Lane Divider panels shall not be intermixed within the limits where the temporary lane separator is used.
5. The Contractor has the option of using temporary lane separator systems (including channelizing devices) from the qualified products list in lieu of the temporary asphalt separator and channelizing devices detailed on this sheet.
6. Temporary lane separator shall be paid for under the contract unit price for Maintenance of Traffic, LS, and will include all materials and work necessary to construct, relocate, maintain, and remove the temporary lane separator. Any damage to existing pavement caused by the removal of temporary lane separator shall be satisfactorily repaired and the cost of such repairs are to be included in the cost of Maintenance of Traffic, LS.

TEMPORARY LANE SEPARATOR

FIGURE 2

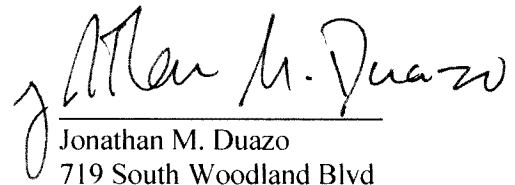
AFFIDAVIT

STATE OF FLORIDA)

COUNTY OF VOLUSIA)

I, **Jonathan M. Duazo**, hereby state that the following statements are true and correct based upon my personal knowledge.

1. To the best of my knowledge, I certify that the concept of using MUTCD Channelizing Drum with four blue reflective stripes as a traffic control device is not protected by a patent or copyright.

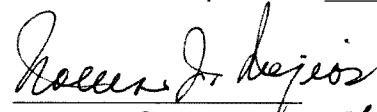

Jonathan M. Duazo
719 South Woodland Blvd
DeLand, FL 32724
District Five, State of Florida
Department of Transportation

State of Florida

County of Volusia

The foregoing instrument was acknowledged before me this 5 day of May, 2011, by Jonathan M. Duazo, who is personally known to me or who has produced DRIVERS LICENSE as identification.

My Commission Expires: 7/27/13


Name: NORMA I. MEJIAS
Title: EXECUTIVE ASSISTANT

