Florida Department of Transportation

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ESTIMATES BULLETIN 07-02
ROADWAY DESIGN BULLETIN 07-07

DATE: August 27, 2007

TO: District Estimates Coordinators, District Design Engineers

FROM: Phillip "Greg" Davis, P.E., State Estimates Engineer
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COPIES TO: Lora Hollingsworth, Ananth Prasad, Brian Blanchard, Duane Brautigam

SUBJECT: Object Markers and Delineators

ISSUE BACKGROUND: Past use of object markers and delineators has been inconsistent. According to the Manual on Uniform Traffic Control Devices- MUTCD, object markers are used to mark obstructions within or adjacent to the roadway. Delineators are used along the side of the roadway to indicate the alignment of the roadway. The specifications (Sections 705, 972, 993 and 994), standards (Interim Index 17346), and pay items (shown below) have been updated to clarify the correct use of each item, in accordance with the MUTCD (Chapters 3C and 3D).

IMPLEMENTATION: Effective with the January 2008 letting, ensure that the plans, specifications, and pay items are updated to reflect the correct use of each item.

The following pay items will be valid through December 31, 2007:

705- 1-	Delineator, Single Unit, EA
705- 2-	Delineator, Double Unit, EA
705- 3-	Delineator, Triple Unit, EA
705- 10-AB	Object Marker, EA
705- 71-	Delineator, Tubular Flexible, EA

The following new pay items will be effective January 1, 2008:

705-10- A Object Marker, EA
A= Type
1 (Type 1)
2 (Type 2)

3 (Type 3)
4 (End of Road)

705- 11- A Delineator, EA
A= Type
1 (Flexible Tubular)
2 (non-Flexible)
3 (Flexible High Visibility Median)
4 (Flexible High Performance)

Each of the types of Object Markers is shown in Part 3 of the MUTCD. Both Object Markers and Delineators are described in the Specifications, Sections 705, 972, 993, and 994. A new section on Delineators and Object Markers is being added to the Plans Preparation Manual. The following is a copy of the new section:

7.2.9 Delineators and Object Markers.

The MUTCD defines the differences between delineators and object markers. Object markers are used to mark obstructions within or adjacent to the roadway. The MUTCD describes four object markers and how they are to be used. Type 1 or Type 3 object markers are used to mark obstructions within the roadway and Type 2 and Type 3 object markers are used to mark obstructions adjacent to the roadway. Type 4 object markers, end-of-roadway markers, are used to alert users of the end of the road.

Delineators are considered guidance devices rather than warning devices. The MUTCD shows the use of delineators along the edge of freeways and expressways and on the side of interchange ramps. Design Standard Index 17345 details the use of this type of delineator. This delineator may be a flexible or a non-flexible type delineator. District maintenance units generally have a preference on which should be specified.

The Department also uses delineators to mark median opening for both rural and urban openings. In general, flexible delineators are used on urban median openings and non-flexible are used on rural median openings. A high visibility median delineators should be use on traffic separators in the following locations:

- At multilane intersections where additional visibility is required for the marking of the traffic separator,
- Where the separator is obstructed due to crest vertical curves,
- At intersections where the alignment thru the intersection is not straight, and
- Where traditional flexible delineators are constantly being replaced.

High visibility median delineators can be specified for urban median separators.

High performance delineators should be used in all applications where the delineator is being used to maintain lane positions, restrict vehicle movements or any other area where the delineator is subject to being frequently hit.

The particular type of object marker or delineator should be identified in the plans by the use of the pay item.

If you have any questions regarding the use of the above items, please contact Chester Henson in the State Roadway Design Office at 850-414-4117.