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## GENERAL NOTES

1. The energy absorbing system represented on this standard is a proprietary design by Barrier Systems, Inc. and marketed under the trade name TAU-II. Any infringement on the rights of the designer shall be the sole responsibility of the user.

2. This standard is produced by the Florida Department of Transportation solely for use by the Department and its assignees.

3. The TAU-II is a redirective non-gating crash cushion produced in two models, each model designed to shield narrow hazards. The TAU-II TL-3 (8 bay model) may be used on Florida highways with speeds of 60 mph or less. The TAU-II TL-2 (4 bay model) is limited to use on Florida highways with speeds of 45 mph or less.

4. Until the Florida Department of Transportation develops drawings for inclusion in this design standard, the TAU-II system requires shop drawings for each site of installation, signed and sealed by a professional engineer registered in the state of Florida.

5. The TAU-II is supplied in a single width of 35" (36" nominal).

6. Only the TAU-II Type A cartridge shall be used in Bay No. 1 (the nose bay); only TAU-II Type B cartridges shall be used in all bays back of Bay No. 1.

7. Cement concrete foundations shall be constructed with compressive strength concrete and reinforcing steel specified by the manufacturer.

8. The TAU-II 'Compact Backstop' is the primary backup to be used on Florida Department of Transportation projects. Use of concrete backups will be permitted, but will require call out in the plans for site specific construction; concrete backup connections must meet manufacturer's specifications, installation guidelines and transition hardware requirements.

9. The TAU-II shall be constructed parallel to the approach travel lane and on cross slopes 1:10 or flatter.

10. All metallic components shall meet the galvanizing requirements for guardrail, Index No. 400.

11. A yellow Type I Object Marker shall be centered 3' in front of the nose of the TAU-II. Mounting hardware shall be in conformance with Index Nos. 11860 and 11865. The cost of the Object Marker shall be included in the cost of the TAU-II system.

12. Quantity for payment is based on each independent location as called for in the plans or as directed by the Engineer. The cost for manufacturer's transition hardware, foundations and subgrade preparation will be included in the cost for the TAU-II system.

    Permanent systems will be paid for under the contract unit price for Impact Attenuator Vehicular (TAU-II), EA; temporary units will be paid for under the contract unit price for Vehicular Impact Attenuator (Temporary) (TAU-II), LO, or when the TAU-II system is used as an option in accordance with Index No. 415, it will be paid for under the contract unit price for Vehicular Impact Attenuator (Temporary) (Redirective), LO.

## DESIGN NOTES AND GUIDELINES

1. The beginning length-of-need shall be at the point of intersection between the face of the cushion and the transverse centerline of the diaphragm back of cartridge No. 1.

2. The TAU-II System is designed to cushion automobile end-on hits and to redirect automobiles from side hits. The TAU-II is designed to shield fixed hazards or the ends of other temporary and permanent barrier systems. The number of bays to be used in a specific unit will be determined by the design speed, except where the Engineer determines that another speed is more applicable.

3. The TAU-II is a restorable system that is particularly suited to shielding hazards subject to high speed traffic, high volume traffic, and/or traffic with a history of frequent errant vehicle departures from the roadway or the potential exists for such departures. The TAU-II is particularly suited to shielding hazards where the approach space is limited; and, is particularly suited to conditions where the terminal must be located close to the traffic lane.

4. Currently the Department does not recognize other proprietary items as being equally suitable alternatives to the TAU-II, and until such alternatives are available, the TAU-II need not be bid against other proprietary items. However, for temporary use where the TAU-II and other approved redirective crash cushions meet or exceed the minimum requirements for a specific location, the approved crash cushions will be considered optional systems and paid for as described in General Note 12 above.

THE APPROVED ORIGINAL OF THIS STANDARD IS ON FILE IN THE ROADWAY DESIGN OFFICE.

# TAU-II CRASH CUSHION

Date: 03-18-02

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

TAU-II

INTERIM STANDARD

THIS STANDARD IS A SUPPLEMENT TO THE DESIGN STANDARDS, BOOKLET DATED JANUARY 2002.

APPROVED BY Thomas R. Bane
Roadway Design Engineer

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