SUPPLEMENTAL GENERAL NOTES FOR THE TRITON BARRIER

1. The system presented in this standard drawing (labeled) under the label TRANSPORT BARRIER is a proprietary design by Energy Absorption Systems, Inc. and is marketed under the trademark TRITON BARRIER.

2. This label provides the general graphic and information necessary to identify proprietary parts of the TRANSPORT BARRIER, and its implementation as a whole system for Department standards and guidelines.

3. The TRANSPORT BARRIER system can be installed as a freestanding system or in combination with other Department temporary and permanent barrier systems, exclusive of other proprietary water-filled barrier systems.

4. Connections between the TRANSPORT BARRIER and other barrier systems shall be in accordance with the TRANSPORT BARRIER TRANSITION HARDWARE ASSEMBLY. Variation from these connections shall be as directed in the plans or as prescribed by the manufacturer.

5. The TRANSPORT BARRIER addition or extension is not to be used as a permanent fixed guardrail, guardrail, or freight component.

6. Section shall be installed in alternating white and yellow work zone safety orange color.

7. The TRANSPORT BARRIER system shall be sold for the contract unit price as barrier (Temporary Water Filled) L,F, at the time specified in the plans and with the manufacturers' specified drawdown, procedure, and specifications. The cost for transitional hardware depicted in this drawing is included in the contract unit price for the barrier. TRANSPORT modules configured as part of the system's protection and treatment shall be included in the firm measures; other components and terminals, crash cushions or other attachments required for use of the TRANSPORT barrier will not be included in the contract unit price for the barrier.

SUPPLEMENTAL DESIGN NOTES AND GUIDELINES FOR THE TRITON BARRIER

1. The length/taper system can be used for work zone speeds of 65 mph or less. Transition hardware can be used in areas where speeds are limited to 45 mph or less.

2. Currently, the Department does not recognize other proprietary items as being equally suitable alternatives to the TRANSPORT BARRIER, and unless otherwise are specified, the TRANSPORT BARRIER need not be bid against other proprietary items.

GENERAL NOTES

1. This standard drawing (labeled) presents proprietary temporary water-filled barrier design and is produced by the Florida Department of Transportation along with the Department and its suppliers.

2. Any graphic presented in this drawing can be used as a temporary barrier in traffic control work zones and other Department-permitted traffic control zones but cannot be considered as a permanent barrier.

3. All systems shall be assembled and installed in accordance with the manufacturer's detailed drawings, procedure, and specifications; however, installation will be limited to the applications shown on this drawing, except when otherwise directed in the plans or approved by shop drawings or approved by the Engineer.

4. Water-filled barrier systems are to be used only as a temporary barrier. A longitudinal gage may include supplemental work zone barriers within its approved location only where the approach longitudinal gage is in the Traffic Control Zone around the work area compliance.

5. One type proprietary water-filled barrier system is not to be used in conjunction with another type proprietary water-filled barrier system; except when specifically called for and detailed in the plans.

6. All water-filled barrier system applications shall be in accordance with manufacturer and Department approved crash-tested connections, i.e., no individual sections or interconnection sections of adjacent length are to stand alone, except when specifically called for and detailed in the plans, or for specific application of interconnection sections around the work area compliance.

7. Water-filled barrier systems are not to be used on surfaces with cross slopes exceeding 0.05 (farther than 1 in 20), including the surfaces within the design deflection area behind the barrier.

8. Water-filled barrier systems are not to be used on grades steeper than 2%, nor placed over water, irregularities that cause deflection exceeding 1.0D between connected sections.

9. Water-filled barrier systems are not permitted on bridges or approach abutments; however, they can be placed over box culverts, including slabs of bridge length, where design deflection area is appropriate. The systems should be used on concrete pavements only when the Engineer determines that the dynamic loading of pavement abutments will not cause the system to come out of alignment.

10. Temporary water-filled barriers are to be sold for the contract unit price for barrier (Temporary Water Filled), L,F, at the time specified in the plans and with the manufacturer's specified drawdown, procedure, and specifications. The cost for transitional hardware depicted in this drawing is included in the contract unit price for the barrier. TRANSPORT modules configured as part of the system's protection and treatment shall be included in the firm measures; other components and terminals, crash cushions or other attachments required for use of the TRANSPORT barrier will not be included in the contract unit price for the barrier.

DESIGN NOTES

1. The TRANSPORT and GUARDIAN water-filled barriers are manufactured by the Federal Highway Administration to be innovative temporary barriers, and may be used as such with compliance with the guidance of innovative barrier required in the Director's decision on Federal Aid Projects.
DETERMINING THE IMPACT ANGLE CURVE TO APPLY
Except where the plane and/or the use of a certain impact angle curve, or where a certain impact angle is anticipated by the specific condition, the impact angle curve to be used in determining impact severity will be selected on the following basis:

Barrier Location
Parallel to or tangent roadway
Parallel to and on the inside of roadway curve
Standard lane shift or drop (e.g. 6' & 8')
Parallel to and on the outside of roadway curve
Approach flood and ejection on inside of roadway curve
Approach flood and ejection on approach tangent roadway
Approach flood and ejection on outside of roadway curve

Graph Curve
5°
5°
5°
5° (10°) [20°]
4°
10°
10° (15°) [25°]

Notes:
1. Max. Curvature (Wt. Radius), Low Speed Facilities
2. Wt. Curve (Wt. Radius), High Speed Facilities

INSET A

IMPACT SEVERITY DETERMINATION FOR VEHICLES
4,400 lb IMPACTING SINGLE ROW TRITON SYSTEM

IMPACT SEVERITY AND LATERAL DEFLECTION DISTANCES

TRITON BARRIER SYSTEM LENGTHS AND DEFLECTIONS

SYSTEM LENGTHS FOR UNIDIRECTIONAL OR BIDIRECTIONAL TRAFFIC

NOTES: Curved for Regional 'A' and 'B' apply to vehicles a 4400 lbs.
--- Critical impact severity level is reached by higher impact angles not encountered in worst zones.

CUSTOMER APPLICATION:
TRITON BARRIER
INSTALLATION DEFLECTION CURVES
TRANSITION - W-BEAM TO TRITON BARRIER

TRANSITION NOTES:
1. Transitions shown on this sheet are limited to speeds of 45 mph or less.
2. Transition hardware can be placed on either end of TRITON section.
3. Transition hardware can be located on left or right side of roadway, right side shown.
4. TRITON Barricade end sections must be filled with water when using transition hardware assemblies.
5. Install transition hardware in accordance with the manufacturer's recommendations and specifications.

TRITON BARRIER TRANSITION HARDWARE ASSEMBLIES
SUPPLEMENTAL GENERAL NOTES FOR THE GUARDIAN BARRIER

1. The barrier units presented on this standard drawing (1) and the label GUARDIAN are proprietary designs by Safety Barrier Systems and are marketed under the trade name GUARDIAN Safety Barrier.

2. This index provides general information and specific conditions necessary to simply identify the water filled polyethylene segmented barrier module and the basic frame and basic connections, but does not identify the interior of the module or frame connections into a whole system. Any use of the GUARDIAN must be in accordance with the details on the plans, or by shop drawing approval or by the Engineer in accordance with the plans.

3. The GUARDIAN modules are specified for use in highways with all design grades and in any case when the GUARDIAN Highway Kit is incorporated throughout the system in use.

4. The GUARDIAN modules can be used only in a stand alone system, i.e., not connected to other types of barrier systems.

5. The GUARDIAN can be used only as a longitudinal barrier on the State maintained highway system. Any longitudinal system must be a minimum of eleven (11) longitudinally connected modules in reference to the length of lane. In no case shall the length of lane be less than 33 modules.

6. The GUARDIAN system must be placed on a crown above not exceeding 1:10, and located to provide a deflection distance between the system and barrier in accordance with the data below.

<table>
<thead>
<tr>
<th>GUARDIAN BARRIER WITH 350 HIGHWAY KIT</th>
<th>ESTIMATED BARRIERS DEFLECTION (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Speed (mph)</td>
<td>Vehicle Impact Angle (Degrees)</td>
</tr>
<tr>
<td>25°</td>
<td>5°</td>
</tr>
<tr>
<td>45°</td>
<td>2½°</td>
</tr>
<tr>
<td>55°</td>
<td>2½°</td>
</tr>
<tr>
<td>60°</td>
<td>2½°</td>
</tr>
</tbody>
</table>

7. The GUARDIAN barrier system shall be sold for under the contract unit price for Barrier (Temporary) (Water Filled) 11, and shall be full compensation for furnishing and installing GUARDIAN barrier in accordance with this Index, with the plans and with the manufacturer's detailed drawings, specifications and instructions. Any installation and terminals, crash damage or other undesirable required for use of the GUARDIAN barrier will not be included in the contract unit price for the barrier.

SUPPLEMENTAL DESIGN NOTES FOR THE GUARDIAN BARRIER

1. All files of publication of this standard non crash test data was available to provide a crashworthy and terminal design using the barrier module only the requirement for eleven (11) interconnected modules proceeding and following the length of lane, based on available crash test data.

2. System included in any maintenance of traffic plan will require detailed location and placement information.

3. Currently the Department does not recognize the other proprietary trees as being equally suitable alternatives to the GUARDIAN barrier, and until such alternatives are available, the GUARDIAN barrier need not be bid against other proprietary trees.

GUARDIAN BARRIER WITH 350 HIGHWAY KIT
GENERAL NOTES FOR THE YODOCK BARRIER

1. The longitudinal traffic barrier system presented on this standard drawing (Index) and the label YODOCK are proprietary designs by THE YODOCK WALL COMPANY and are marketed under the trade name YODOCK BARRIER.

2. This Index provides general information and information necessary to identify the water filled polyethylene elongated barrier module (Energy Disipation Cell) and the module frame andcludes connections, but does not identify the location of any modules in the barrier. Any use of the YODOCK Barrier must be in accordance with the details on the plans, or by verbal agreement or by the Engineer in absence of plan detail.

3. The Model 5000 barrier systems is approved for use on highways with all design aspects. The Model 6000 is limited to use on highways with a design speed of 45 mph and less.

4. The YODOCK longitudinal traffic barrier systems can be used only in a fixed, stone system, i.e., not connected to other type of barrier systems.

5. The YODOCK longitudinal traffic barrier system must be a minimum of 180° longitudinally connected modules in accordance with the length of needs. In no case can the longitudinal run of barrier be less than 25 modules.

6. The approach end of the YODock system must either extend to the outer limit of the clear zone, be aligned by a crash cushion or, where behind, but not connected to another barrier or aligning feature.

DESIGN NOTES FOR THE YODOCK BARRIER

1. Systems included in any maintenance of traffic plan will require detailed location and placement information.

2. Currently the Department does not recognize other proprietary designs as being equally suitable alternatives to the YODOCK barrier, and until such alternatives are available, the YODOCK barrier need not be used against other proprietary designs.