

PARAPET DELINEATOR

(B) MEDIAN BARRIER DELINEATORS SHALL BE HIGH IMPACT, UV-STABILIZED, ENGINEERED THERMOPLASTIC OR POLYCARBONATE SUBSTRATE. SEE TDOT APPROVED QUALIFIED PRODUCT LISTS FOR ACCEPTABLE PRODUCTS.

PROJECT NO.	YEAR	SHEET NO.	
	2006		
REVIEWS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-1-10	JHW	REVISED DIMENSIONS & NOTE

GENERAL NOTES:
 DESIGN: AASHTO SPECIFICATIONS CURRENT EDITION WITH ADDENDA.
 SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (CURRENT EDITION).
 CONCRETE: TO BE CLASS 'A' f'c = 3,000 psi.
 REINFORCING STEEL: TO BE ASTM A615 GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED. THE SUFFIX 'E', FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SECTION 907 OF THE STANDARD SPECIFICATIONS.

(A) NOTE: CONTRACTOR MAY POUR THE MEDIAN BARRIER WITHOUT FELT PAPER JOINT PROVIDED HE FORMS A 1/2 INCH DEEP V-GROOVE ALONG BOTH FACES AND TOP OF MEDIAN BARRIER DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING.

MEDIAN BARRIER DELINEATOR REFLECTIVE SHEETING SHALL MEET ASTM D4956, TYPE V SPECIFICATIONS. THE REFLECTIVE SHEETING SHALL BE A MINIMUM OF 4"x3" AND HAVE MINIMUM COVERAGE AREA OF 12 SQUARE INCHES. THE COLOR OF THE DELINEATORS SHALL CONFORM TO THE REQUIREMENTS OUTLINED IN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. MEDIAN BARRIER DELINEATORS WILL NOT BE REQUIRED IN AREAS WHERE ROADWAY IS LIGHTED.

THE COST OF FURNISHING AND INSTALLING MEDIAN BARRIER DELINEATORS, INCLUDING ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION, SHALL BE INCLUDED IN BID PRICE FOR CONCRETE MEDIAN BARRIER.

PARAPET DELINEATORS SHALL BE MOUNTED DIRECTLY TO THE CONCRETE OF THE MEDIAN WITH A ONE COMPONENT ADHESIVE AS RECOMMENDED BY THE MANUFACTURER. MASKING SHALL BE APPLIED TO THE VERTICAL PROJECTION TO PREVENT TEXTURE COATING FROM ENCRACING ON DELINEATOR SURFACE.

(D) ANCHOR BOLTS AND ASSOCIATED NUTS, WASHERS AND PLATES FOR THE BARRIER TO SLAB ATTACHMENT SHALL BE GALVANIZED. ANCHOR BOLT ASSEMBLIES SHALL BE ASTM F1554 GRADE 36 OR A307 THREADED ROD WITH TACK WELDED NUTS (0.906 INCH MIN. DIA. WITH ROLLED THREADS), DRILLED ANCHORAGE HOLES SHALL BE INSTALLED WITH ROTARY TYPE EQUIPMENT; PERCUSSION DRILLING DISALLOWED. SPALLS IN THE BOTTOM OF THE SLAB EXCEEDING 1/2 INCH FROM THE EDGE OF THE HOLE SHALL BE PATCHED.

FABRICATION NOTES:

- OPEN JOINTS OR FILLED JOINTS WILL BE ALLOWED IN MEDIAN ONLY WHEN SHOWN ON PROJECT DRAWINGS. JOINTS SHALL CONFORM TO THE JOINT DETAILS ON THIS SHEET OR AS OTHERWISE SHOWN ON PROJECT DRAWINGS AND SHALL BE PLACED TO ALIGN WITH ALL JOINTS IN THE BRIDGE DECK AND PARAPET OR RAILS.
- MEDIAN BARRIER CONCRETE SHALL NOT BE CAST PRIOR TO REMOVAL OF ALL SUPERSTRUCTURE RELATED FALSEWORK.
- ALIGNMENT AND PROFILE OF MEDIAN BARRIER SHALL CONFORM TO ROADWAY PROFILE AND GEOMETRY.
- IF THE BARRIER IS SLIP-FORMED, ROUNDED EDGES WITH A 3/4 INCH RADIUS MAY BE USED INSTEAD OF THE 1/4 INCH CHAMFER AS SHOWN.
- A 1/2 INCH DEEP V-GROOVE ALONG BOTH FACES AND TOP OF MEDIAN BARRIER SHALL BE FORMED DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING @ 10'-0" CENTER-TO-CENTER.
- THE VERTICAL DIMENSION SHALL BE THE MINIMUM DIMENSION TAKEN AT THE TRAFFIC FACE WITH BARRIER PLUMB, WHEN DECK CROSS SLOPE CAUSES THE TWO FACES TO BE OF DIFFERENT HEIGHTS.

REINFORCING NOTES:

- BAR DIMENSIONS ARE OUT TO OUT. FIRST DIGIT INDICATES SIZE.
 - LONGITUDINAL BARS SHALL BE FULL LENGTH OF MEDIAN BARRIER EXCEPT THAT NO BAR WILL PASS THROUGH OPEN JOINTS.
 - VERTICAL DIMENSIONS ARE BASED ON NO OVERLAY ON THE BRIDGE AND SHALL BE INCREASED AS REQUIRED WHEN ASPHALT OVERLAY IS PLACED AT THE TIME OF BARRIER CONSTRUCTION.
- ☆ BARS M470E IN SLAB TO BE INCLUDED IN EPOXY COATED REINFORCING QUANTITIES AND BILL OF STEEL FOR SUPERSTRUCTURE.
 ☆ BARS M470E IN APPROACH TO BE INCLUDED IN EPOXY COATED REINFORCING QUANTITIES AND BILL OF STEEL FOR PAVEMENT AT BRIDGE ENDS.
 NOTE: BARS M470E ARE NOT INCLUDED IN PER FOOT QUANTITIES SHOWN THIS SHEET.

ESTIMATED QUANTITIES - PER FOOT

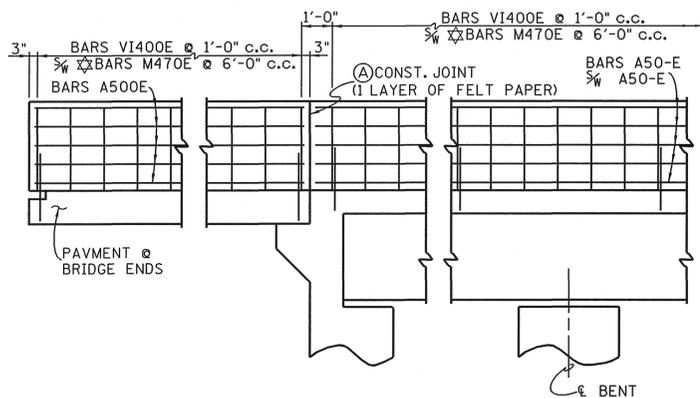
ITEM	CLASS 'A' CONCRETE (BRIDGES) C.Y.	EPOXY COATED REINFORCING STEEL LB.	TEXTURE COATED FINISH (NEW STRUCTURE) S.Y.
32" MEDIAN	0.116	13	0.677
51" MEDIAN	0.232	18	1.035

THIS RAIL HAS BEEN EVALUATED AND ACCEPTED TO BE OF EQUAL STRENGTH TO OTHER SAFTY-SHAPED RAILINGS WITH LIKE GEOMETRY, WHICH HAVE BEEN CRASH TESTED TO MEET NCHRP REPORT 350 TL4.

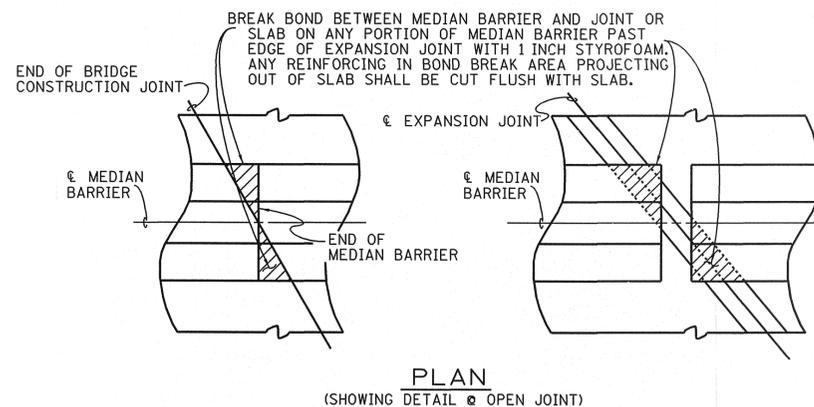
MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 STANDARD
 SINGLE SLOPE
 CONCRETE
 MEDIAN BARRIER
 2006

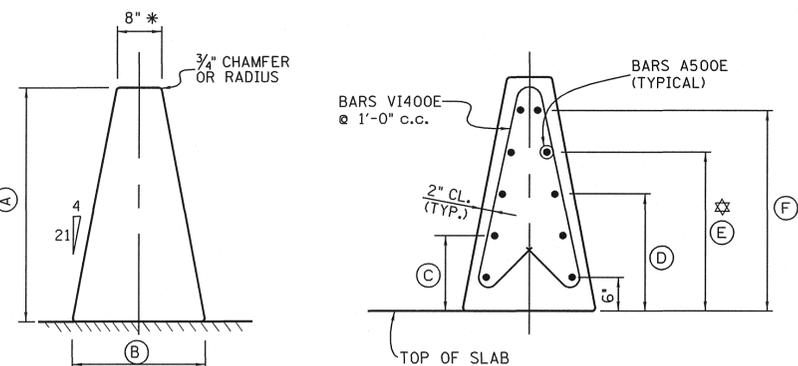
CORRECT *Edward P. Wasserman*
 ENGINEER OF STRUCTURES



ELEVATION SHOWING REINFORCING STEEL



PLAN (SHOWING DETAIL @ OPEN JOINT)



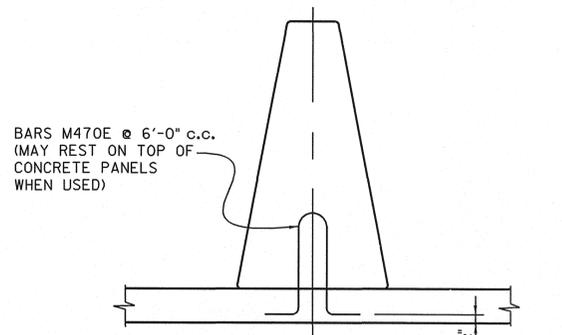
(A) TYPICAL SECTION (GEOMETRICS)

(B) TYPICAL SECTION (CONVENTIONAL REINFORCING)

* REGARDLESS OF THE CONSTRUCTED BARRIER HEIGHT, AND ACCOUNTING FOR ANY PROFILE ADJUSTMENTS, THE TOP WIDTH REMAINS THE CONSTANT.

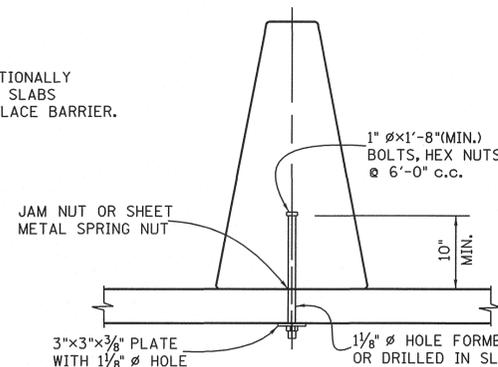
☆ (OMIT (E) FOR 32" BARRIER.)

BARRIER HEIGHT (IN.)	DIMENSIONS (IN.)							
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
32	32	20 3/16	12	19	--	26	14	26
51	51	27 7/16	15	24	3 1/2	45	22	45



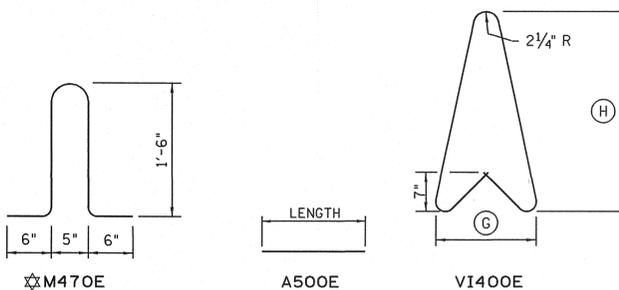
CAST-IN-PLACE ON NEW SLABS

BOLTS OR M BARS OPTIONALLY MAY BE USED ON NEW SLABS TO ANCHOR CAST-IN-PLACE BARRIER.



CAST-IN-PLACE ON NEW OR EXISTING SLABS

(NOTE: UTILIZE ON NEW SLABS ONLY WHEN REQUIRED BY PHASE CONSTRUCTION)



REINFORCING DETAILS

DESIGNED BY _____ DATE _____
 DRAWN BY *K.L. FRANKENFIELD* DATE *7-06*
 SUPERVISED BY _____ DATE _____
 CHECKED BY _____ DATE _____