

SECTION A-A

**DESIGNER NOTE**  
 (REMOVE PRIOR TO PLOTTING FINAL PLAN);  
 VERIFY LENGTH OF BARRIER ON APPROACH PANEL  
 WITH ROADWAY DESIGNER. REFER TO MEMO TO DESIGNERS (2016-01)  
 FOR ADDITIONAL REQUIREMENTS REGARDING BARRIER PLACEMENT.

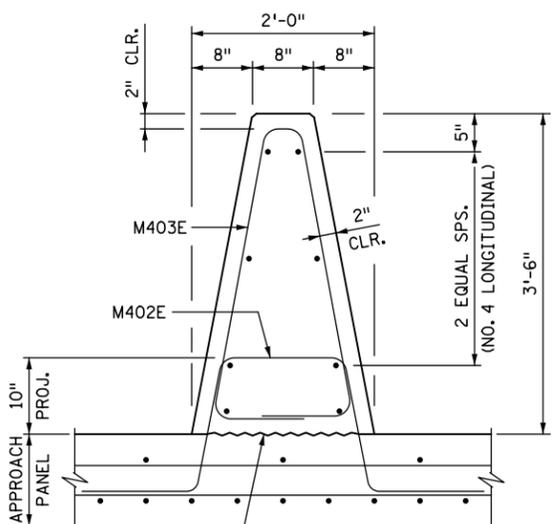
EXPANSION JOINT ③  
 EXPANSION DEVICE NOT SHOWN

CONTROL JOINT

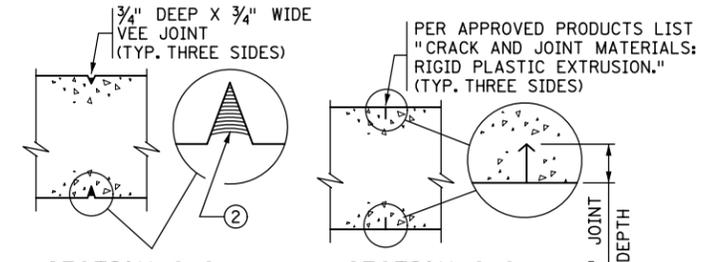
INSIDE ELEVATION OF BARRIER

BARRIER MEETS NCHRP 350 TL-4 REQUIREMENTS  
 ON BRIDGE DECK AND TL-3 ON APPROACH PANEL.

BILL OF REINFORCEMENT FOR BARRIER				
BAR	NO.	LENGTH	SHAPE	LOCATION
M401E		6'-9"		BARRIER DOWEL
M402E		6'-10"		BARRIER DOWEL
M403E		8'-11"		BARRIER VERTICAL
M404E		6'-5"		BARRIER VERTICAL
M4_E				BARRIER LONGITUDINAL
M4_E				BARRIER LONGITUDINAL
M4_E				BARRIER LONGITUDINAL

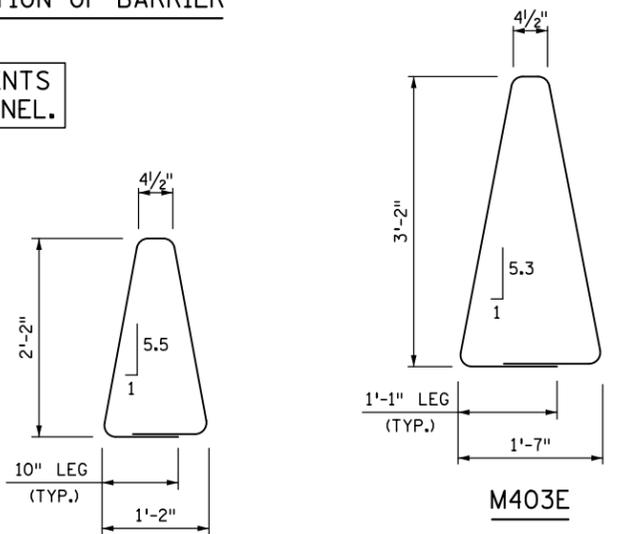


SECTION B-B  
 CONCRETE APPROACH PANEL



SECTION C-C  
 CAST-IN-PLACE CONSTRUCTION    SLIPFORM CONSTRUCTION  
 CONTROL JOINT DETAILS

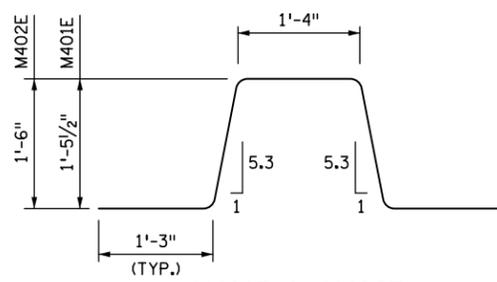
FOR SLIPFORM CONSTRUCTION: IMMEDIATELY AFTER CONCRETE IS PLACED AND WHILE IT IS STILL WET, CREATE A ONE INCH STRAIGHT GROOVE USING A TROWEL. INSERT RIGID PLASTIC EXTRUSION INTO GROOVE TO A DEPTH 1/8" BELOW THE SURFACE; FINISH OVER GROOVE COMPLETELY HIDING THE EXTRUSION.



M404E

M403E

INCREASE M401E VERTICAL LEGS IF DECK SLAB THICKNESS IS GREATER THAN 9"



M401E & M402E

GENERAL NOTES

- MEASURE PAYMENT LENGTH BETWEEN THE OUTSIDE ENDS OF THE BARRIER FROM THE E8 JOINT.
- CONCRETE BARRIER = 700 LBS./FT. (0.173 CU. YDS/FT.)
- FINISH ALL EDGES OF BARRIER WITH 1/2" CHAMFER EXCEPT WHERE OTHERWISE NOTED.
- SPACE CONTROL JOINTS AT 10 FT. MAXIMUM. REFER TO SUPERSTRUCTURE SHEET FOR SPECIFIC SPACING INFORMATION.
- BARRIER QUANTITIES ARE LISTED IN SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE.
- ① PLACE BAR ON TOP OF BOTTOM REINFORCEMENT MAT IN DECK.
- ② JOINT SEALANT PER MNDOT APPROVED/QUALIFIED PRODUCTS LIST - CRACK AND JOINT MATERIALS - SILICONE JOINT SEALERS.
- ③ REFER TO "WATERPROOF EXPANSION DEVICE" STANDARD PLANS FOR COVER PLATE DETAILS.

REVISION: MAY 10, 2017  
 APPROVED: AUGUST 24, 2016  
 Kevin Weston  
 STATE BRIDGE ENGINEER

CERTIFIED BY \_\_\_\_\_  
 LICENSED PROFESSIONAL ENGINEER    DATE \_\_\_\_\_  
 NAME: \_\_\_\_\_    LIC. NO. \_\_\_\_\_

TITLE: **SOLID MEDIAN BARRIER 42"**  
**(TYPE S, TL-4)**  
 PARAPET ABUTMENT  
 (WITHOUT CONCRETE WEARING COURSE)

DES: \_\_\_\_\_    DR: \_\_\_\_\_  
 CHK: \_\_\_\_\_    CHK: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_  
 SHEET NO. OF SHEETS    BRIDGE NO. \_\_\_\_\_

FIG. 5-397.148(C)