

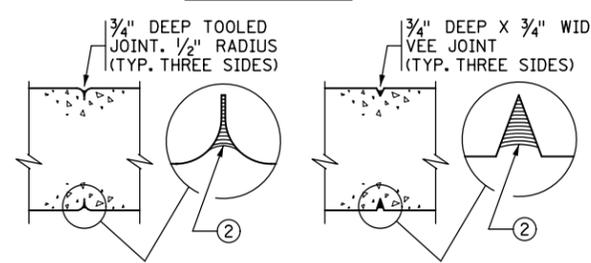
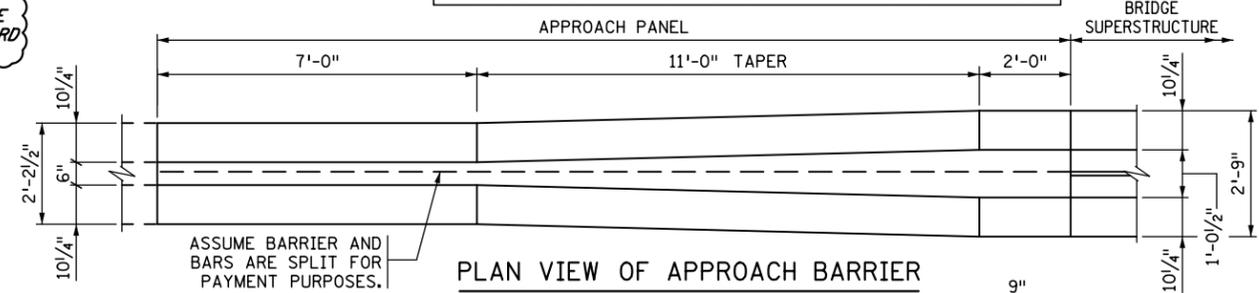
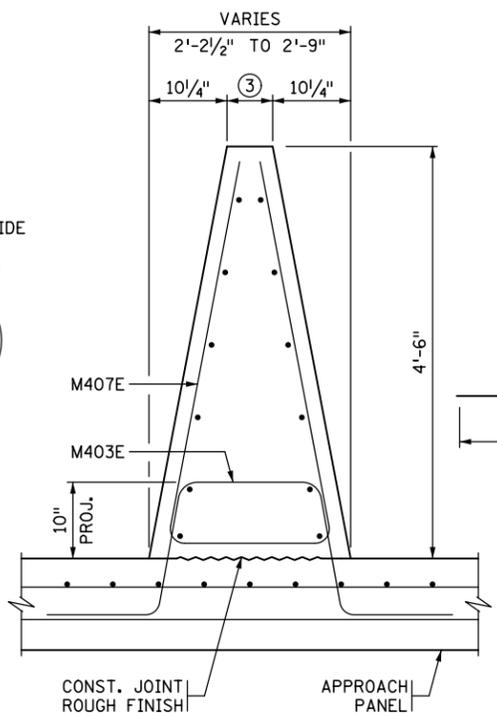
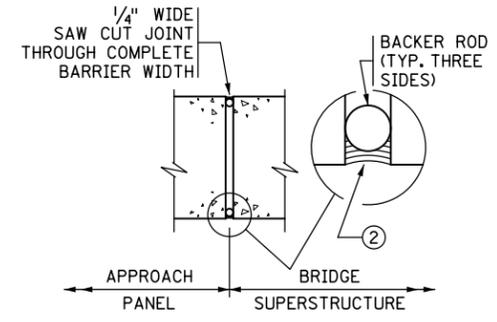
**JOINT AT ABUTMENT**  
(INTEGRAL OR SEMI-INTEGRAL ABUTMENT)  
**CONTROL JOINT**  
**INSIDE ELEVATION OF BARRIER**

**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.

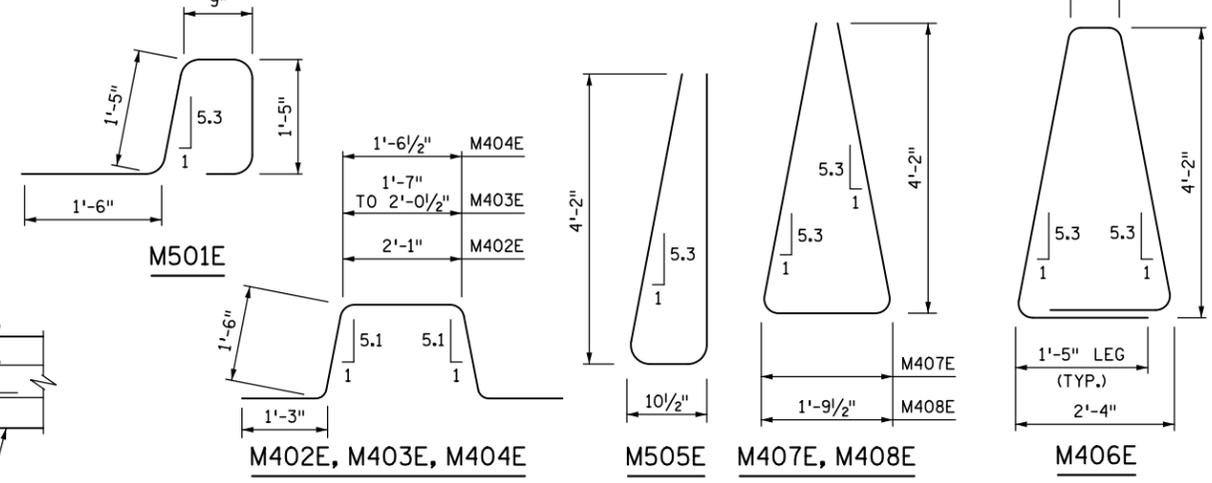
**DESIGNER NOTE**  
(REMOVE PRIOR TO PLOTTING FINAL PLAN)  
AVOID LAYOUTS WITH HORIZONTAL GAP BETWEEN SPLIT MEDIAN BARRIERS OF 2" TO 6", AS BARRIERS CANNOT BE SLIPFORMED. IF GAP EXCEEDS 6" CONSIDER USING STANDARD FIGURE 5-397-142 OR 143 IN LIEU OF THIS STANDARD.

BARRIER ON EACH SIDE 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
M501E		5'-7"		BARRIER DOWEL
M402E		7'-8"		BARRIER DOWEL
M403E	SER. OF 10	7'-2" TO 7'-7"		BARRIER DOWEL
M404E		7'-1"		BARRIER DOWEL
M505E		9'-2"		BARRIER VERTICAL
M406E		11'-11"		BARRIER VERTICAL
M407E	SER. OF 10	10'-2" TO 10'-7"		BARRIER VERTICAL
M408E		10'-1"		BARRIER VERTICAL
M4_E				BARRIER LONGIT.
M4_E				BARRIER LONGIT.
M4_E				BARRIER LONGIT.
M4_E				BARRIER LONGIT.



**CONTROL JOINT DETAILS**  
WHEN USING SLIP FORM METHOD TO PLACE THE CONCRETE, CUT JOINT 3 INCHES DEEP USING MARGIN TROWEL OR SIMILAR MEANS IMMEDIATELY AFTER CONCRETE PLACEMENT (TYP. THREE SIDES).



**GENERAL NOTES**  
MEASURE PAYMENT LENGTH BETWEEN THE OUTSIDE ENDS OF THE BARRIER FROM THE E8 JOINT. MEASURED LENGTH IS FOR ONE SIDE OF THE SPLIT MEDIAN BARRIER.  
CONCRETE BARRIER = 612 LBS./FT. (0.151 CU. YDS./FT.) PER SIDE.  
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 VARIES FROM 6" TO 1'-0 1/2".

REVISION:  
APPROVED: AUGUST 24, 2016  
*Kevin Weston*  
STATE BRIDGE ENGINEER

**SECTION B-B**  
CONCRETE APPROACH ROADWAY

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

TITLE: **SPLIT MEDIAN BARRIER 54"**  
(TYPE S, TL-4)  
INTEGRAL OR SEMI-INTEGRAL ABUTMENT  
(WITHOUT CONCRETE WEARING COURSE)

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

FIG. 5-397.146(A)