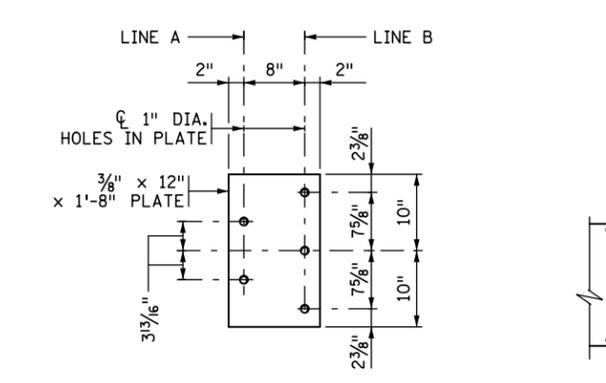
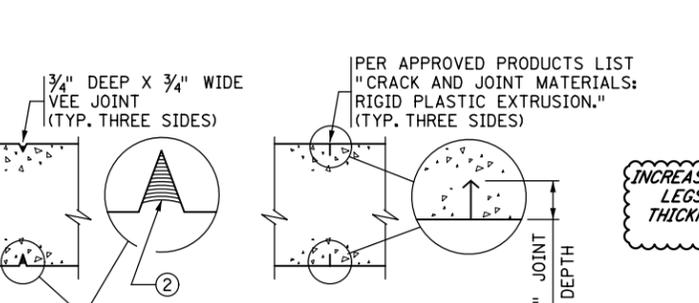
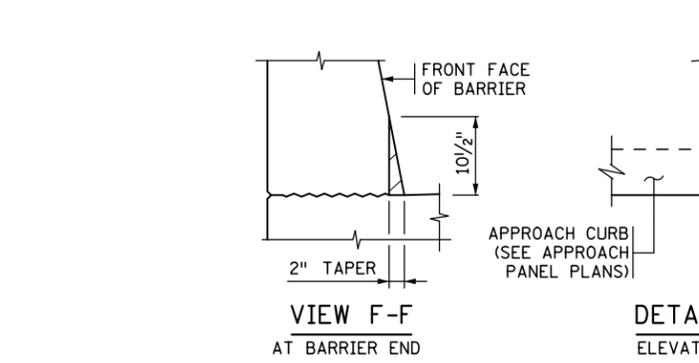


DESIGNER NOTE
 (REMOVE PRIOR TO PLOTTING FINAL PLAN)
 MINIMUM BARRIER LENGTH ON APPROACH PANEL IS 10'-8" WITH MINIMUM OF 22 R502E AND R503E DOWELS WITH ACCOMPANYING APPROPRIATE BARRIER VERTICAL BARS, 12" MAX. SPACING. VERIFY APPROACH BARRIER LENGTH, NEED FOR A GUARDRAIL CONNECTION, AND VERTICAL TAPER WITH ROADWAY DESIGNER. REFER TO MEMO TO DESIGNERS (2016-01) FOR ADDITIONAL REQUIREMENTS REGARDING BARRIER PLACEMENT.

SECTION A-A
 (REINFORCEMENT NOT SHOWN)
 TRIM GUARDRAIL BOLTS SUCH THAT NO MORE THAN 1/2" PROTRUDES FROM BACK FACE OF BARRIER.
 ☆ DIMENSIONS INCLUDE 3/8" PLATE



GUARDRAIL CONNECTION DETAIL
 GALVANIZE AFTER FABRICATION PER SPEC. 3394
 ESTIMATED WEIGHT = 35 LBS.

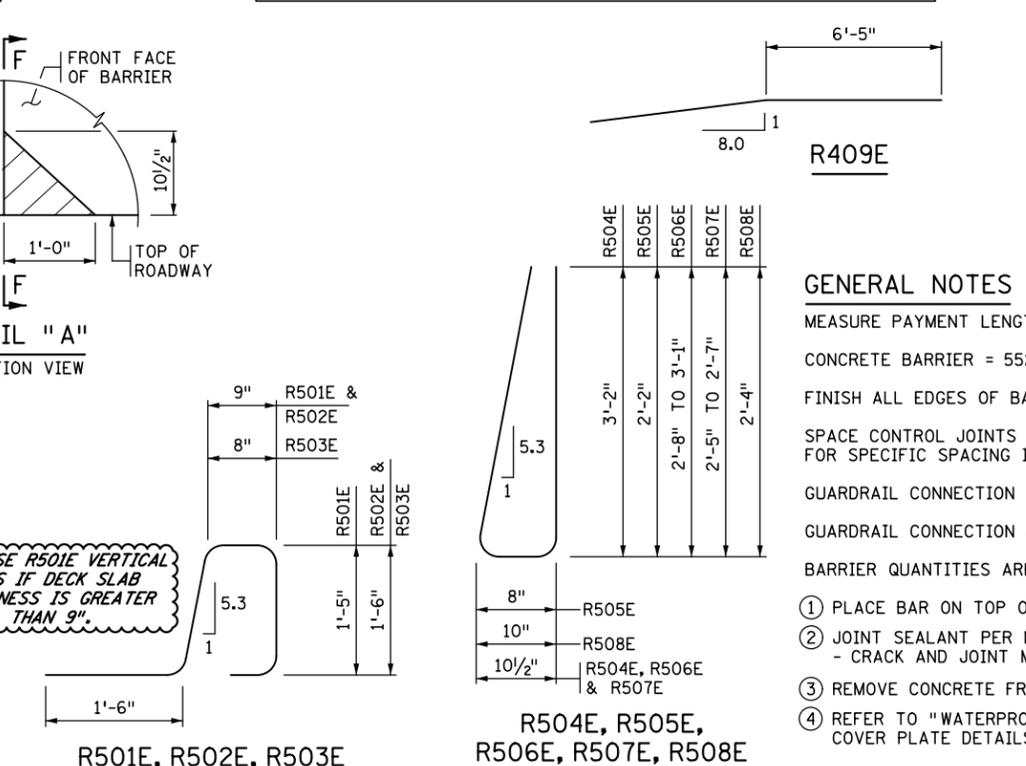


CONTROL JOINT DETAILS
 FOR SLIPFORM CONSTRUCTION: IMMEDIATELY AFTER CONCRETE IS PLACED AND WHILE IT IS STILL WET, CREATE A ONE INCH STRAIGHT GROOVE USING A TROWEL. INSERT RIGID PLASTIC EXTRUSION INTO GROOVE TO A DEPTH 1/8" BELOW THE SURFACE; FINISH OVER GROOVE COMPLETELY HIDING THE EXTRUSION.

EXPANSION JOINT ④
 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
R501E		5'-7"		BARRIER DOWEL
R502E		5'-9"		BARRIER DOWEL
R503E		5'-8"		BARRIER DOWEL
R504E		7'-2"		BARRIER VERTICAL
R505E		5'-0"		BARRIER VERTICAL
R506E	-- SER. OF 4	6'-3" TO 7'-1"		BARRIER VERTICAL
R507E	-- SER. OF 4	5'-9" TO 6'-1"		BARRIER VERTICAL
R508E		5'-6"		BARRIER VERTICAL
R409E		11'-7"		BARRIER LONGIT.
R4_E				BARRIER LONGIT.
R4_E				BARRIER LONGIT.
R4_E				BARRIER LONGIT.
R4_E				BARRIER LONGIT.

GENERAL NOTES

MEASURE PAYMENT LENGTH BETWEEN THE OUTSIDE ENDS OF THE BARRIER.

CONCRETE BARRIER = 552 LBS./FT. (0.136 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.

GUARDRAIL CONNECTION TO BE STRUCTURAL STEEL, SPEC. 3306.

GUARDRAIL CONNECTION AND NAME PLATE TO BE CONSIDERED INCIDENTAL TO BARRIER.

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 MDOT APPROVED/QUALIFIED PRODUCTS LIST - CRACK AND JOINT MATERIALS - SILICONE JOINT SEALERS.

③ REMOVE CONCRETE FROM PIPE ENDS AFTER SLIPFORMING OR FORM REMOVAL.

④ 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: **CONCRETE BARRIER 42" (TYPE S, TL-4)**
 PARAPET ABUTMENT WITH GUARDRAIL CONNECTION (WITHOUT CONCRETE WEARING COURSE)

DES: _____ DR: _____
 CHK: _____ CHK: _____

APPROVED: _____
 BRIDGE NO. _____

SHEET NO. OF SHEETS

FIG. 5-397.141(A)