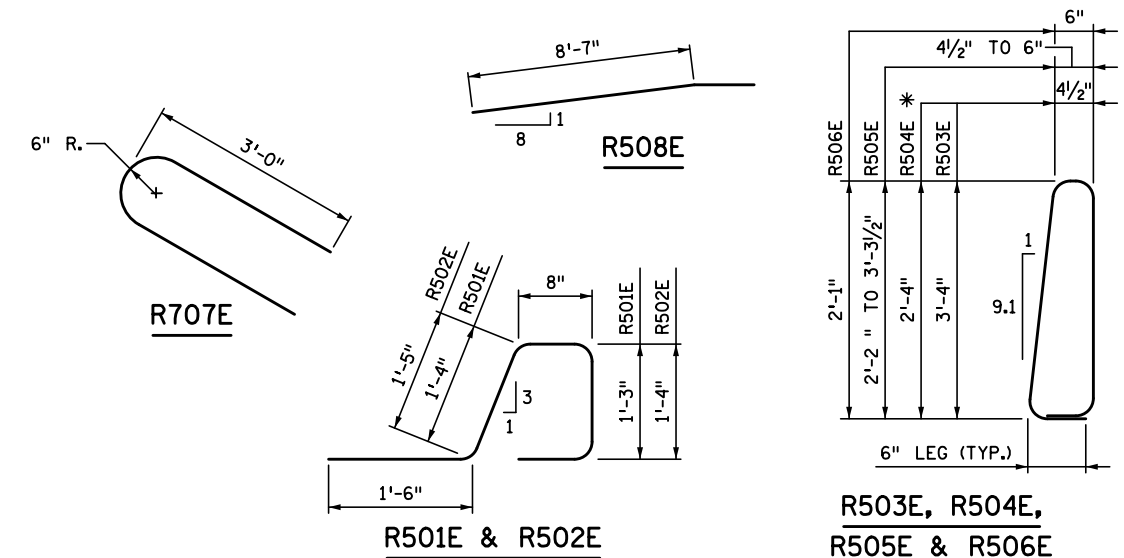


DESIGNER NOTES
(REMOVE PRIOR TO PLOTTING FINAL PLAN)
CHECK WITH ROAD DESIGNERS FOR SIGHT DISTANCE REQUIREMENTS.
VERIFY BAR R501E HAS 10" MIN. PROJECTION WHEN CROSS SLOPE VARIES FROM NORMAL 0.02 FT/FT.
MODIFY AS NECESSARY IF BARRIER IS MOUNTED ON WINGWALL. ELIMINATE R502E, MODIFY SECTION A-A ON STANDARD FIGURE 5-397. VERIFY 10'-8" BARRIER LENGTH BEYOND BRIDGE JOINT.
VERIFY THAT BRIDGE DECK REINFORCING IS ADEQUATE FOR USE WITH A TL-5 BARRIER.

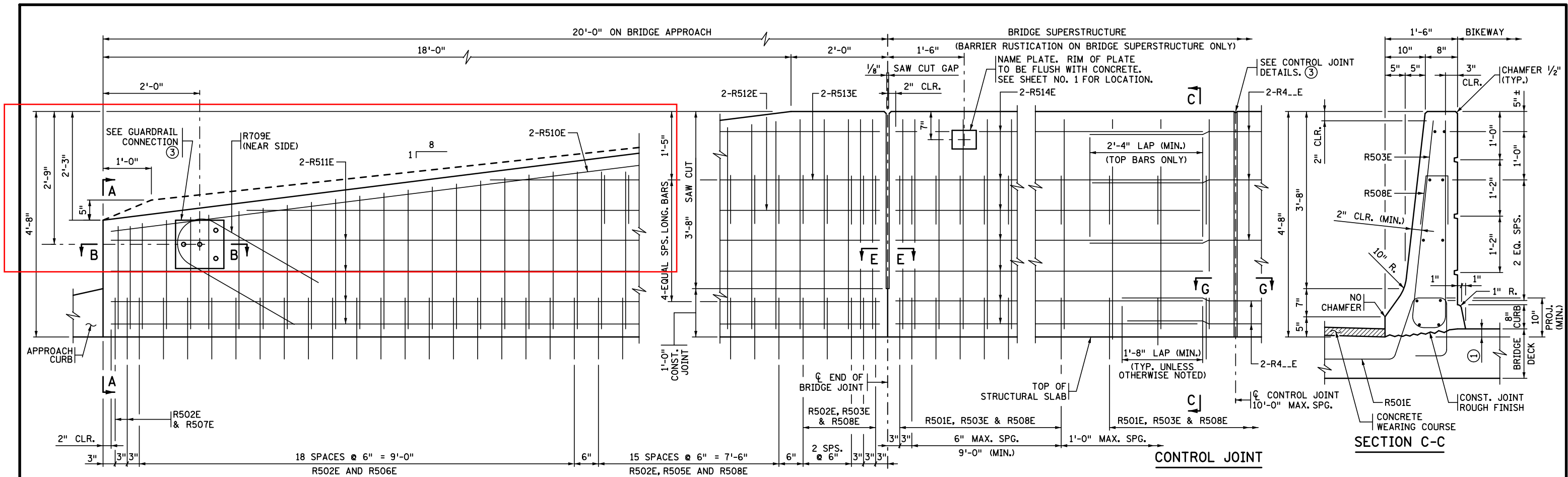
BARRIER ON BRIDGE SUPERSTRUCTURE MEETS TEST LEVEL 5 REQUIREMENTS OF NCHRP REPORT 350
BARRIER ON BRIDGE APPROACH OR WINGWALL MEETS TEST LEVEL 4 REQUIREMENTS OF NCHRP REPORT 350



BILL OF REINFORCEMENT FOR BARRIER				
BAR	NO.	LENGTH	SHAPE	LOCATION
R501E		5'-3"		BARRIER DOWEL
R502E		5'-5"		BARRIER DOWEL
R503E		8'-1"		BARRIER VERTICAL
R504E		6'-1"		BARRIER VERTICAL
R505E	SER. OF 19	5'-10" TO 8'-1"		BARRIER VERTICAL
R506E		5'-8"		BARRIER VERTICAL
R707E		6'-6"		BARRIER VERTICAL
R508E		10'-4"		BARRIER LONGIT.
R509E		10'-4"		BARRIER LONGIT.
R510E		7'-3"		BARRIER LONGIT.
R511E		12'-6"		BARRIER LONGIT.
R4..E				BARRIER LONGIT.
R4..E				BARRIER LONGIT.

* R504E WHEN PARAPET ABUTMENT IS USED. (SEE DETAIL "A")

GENERAL NOTES
LENGTH OF "TYPE F (TL-5) BARRIER CONCRETE (3Y46 OR 3Y46A)" FOR PAYMENT SHALL BE MEASURED BETWEEN THE OUTSIDE FACES OF THE CONCRETE BARRIER.
CONCRETE BARRIER = 607 LBS./FT. (0.150 CU. YDS./FT.) EACH 10'-0" TAPERED END OF BARRIER IS 7250 LBS. AND 1.8 CU. YDS.
FINISH ALL EDGES OF BARRIER WITH 1/2" CHAMFER, EXCEPT WHERE OTHERWISE NOTED.
MAXIMUM SPACING OF CONTROL JOINTS ON SUPERSTRUCTURE, APPROACH AND WINGWALL SHALL BE 10 FT.
GUARDRAIL CONNECTION TO BE STRUCTURAL STEEL, SPEC. 3306.
GUARDRAIL CONNECTION AND NAME PLATE TO BE CONSIDERED INCIDENTAL TO "TYPE F (TL-5) BARRIER CONCRETE (3Y46 OR 3Y46A)".
BARRIER QUANTITIES ARE LISTED IN SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE.
SEE MARK SPAFFORD

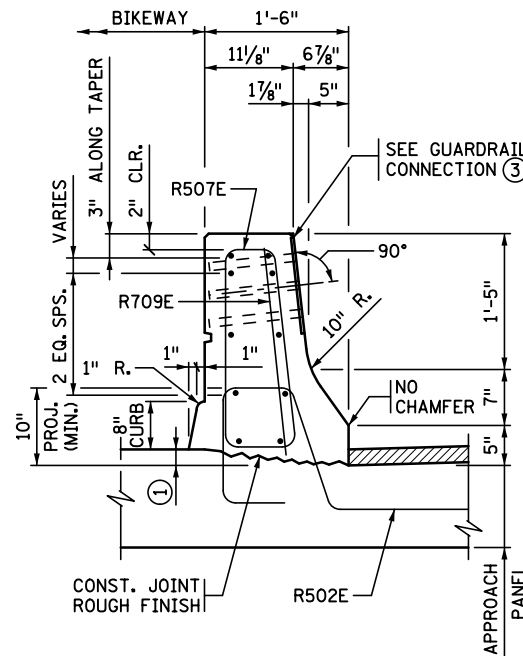


JOINT AT ABUTMENT
(INTEGRAL OR SEMI-INTEGRAL ABUTMENT) SEE DETAIL "A" FOR PARAPET ABUTMENT ③

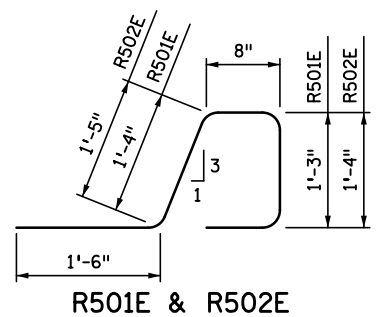
INSIDE ELEVATION OF BARRIER

CONCRETE WEARING COURSE NOT SHOWN (20'-0" BARRIER ON APPROACH SHOWN)

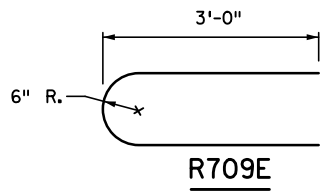
**BARRIER ON BRIDGE SUPERSTRUCTURE MEETS TEST LEVEL 5 REQUIREMENTS OF NCHRP REPORT 350
BARRIER ON BRIDGE APPROACH OR WINGWALL MEETS TEST LEVEL 4 REQUIREMENTS OF NCHRP REPORT 350**



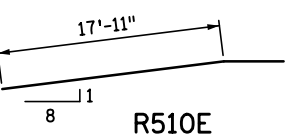
SECTION A-A



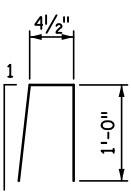
R501E & R502E



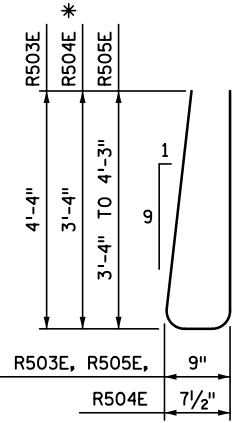
R709E



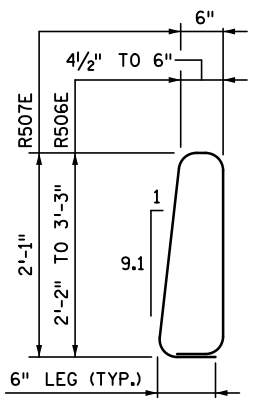
R510E



R508E



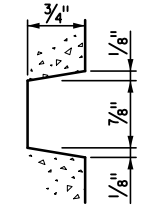
R503E, R504E & R505E



R506E, R507E

BILL OF REINFORCEMENT FOR BARRIER				
BAR	NO.	LENGTH	SHAPE	LOCATION
R501E		5'-3"		BARRIER DOWEL
R502E		5'-5"		BARRIER DOWEL
R503E		9'-5"		BARRIER VERTICAL
R504E		7'-3"		BARRIER VERTICAL
R505E	SER. OF 16	7'-5" TO 9'-3"		BARRIER VERTICAL
R506E	SER. OF 19	5'-10" TO 7'-11"		BARRIER VERTICAL
R507E		5'-8"		BARRIER VERTICAL
R508E		2'-6"		BARRIER TIE
R709E		6'-6"		BARRIER VERTICAL
R510E		19'-8"		BARRIER LONGIT.
R511E		19'-8"		BARRIER LONGIT.
R512E		16'-8"		BARRIER LONGIT.
R513E		11'-7"		BARRIER LONGIT.
R514E		12'-6"		BARRIER LONGIT.
R4__E				BARRIER LONGIT.
R4__E				BARRIER LONGIT.

* R504E WHEN PARAPET ABUTMENT IS USED. (SEE DETAIL "A") ③



BARRIER RUSTICATION

DESIGNER NOTES
(REMOVE PRIOR TO PLOTTING FINAL PLAN); CHECK WITH ROAD DESIGNERS FOR SIGHT DISTANCE REQUIREMENTS.

COORDINATE BARRIER ON APPROACH PANEL WITH ROAD DESIGNERS.

VERIFY BAR R501E HAS 10" MIN. PROJECTION WHEN CROSS SLOPE VARIES FROM NORMAL 0.02 FT/FT.

VERIFY THAT BRIDGE DECK REINFORCING IS ADEQUATE FOR USE WITH A TL-5 BARRIER.

GENERAL NOTES

- LENGTH OF "TYPE F (TL-5) WITH BIKEWAY BARRIER CONCRETE (3Y46 OR 3Y46A)" FOR PAYMENT SHALL BE MEASURED BETWEEN THE OUTSIDE FACES OF THE CONCRETE BARRIER.
- CONCRETE BARRIER = 679 LBS./FT. (0.168 CU. YDS./FT.) EACH 18'-0" TAPERED END OF BARRIER IS 9805 LBS. AND 2.8 CU. YDS.
- FINISH ALL EDGES OF BARRIER WITH 1/2" CHAMFER, EXCEPT WHERE OTHERWISE NOTED.
- MAXIMUM SPACING OF CONTROL JOINTS ON SUPERSTRUCTURE, APPROACH AND WINGWALL SHALL BE 10 FT.
- GUARDRAIL CONNECTION TO BE STRUCTURAL STEEL, SPEC. 3306.
- GUARDRAIL CONNECTION AND NAME PLATE TO BE CONSIDERED INCIDENTAL TO "TYPE F (TL-5) WITH BIKEWAY BARRIER CONCRETE (3Y46 OR 3Y46A)".
- BARRIER QUANTITIES ARE LISTED IN SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE.
- ① DIMENSIONS TO BE DETERMINED BASED ON THE BRIDGE DECK SLOPE.
② SEE SPECIAL PROVISIONS FOR JOINT SEALING REQUIREMENTS.
③ FOR DETAILS "A", SECTIONS B-B, E-E AND G-G SEE STANDARD FIGURE 5-397.---- "CONCRETE BARRIER DETAILS".

SEE MARK SPAFFORD

REVISED:
APPROVED: JUNE 2013
NOT APPROVED
STATE BRIDGE ENGINEER

REFERENCE DATE:
07-09-2013

CERTIFIED BY _____
LICENSED PROFESSIONAL ENGINEER DATE _____
NAME: _____ LIC. NO. _____

TITLE: **CONCRETE BARRIER (TYPE F, TL-5)**
WITH BIKEWAY AND INTEGRAL END POST
(WITH CONC. WEARING COURSE)

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

FIG. 5-397.129
APPROVED: _____
BRIDGE NO. _____
SHEET NO. _____ OF _____ SHEETS

