

STATE	FEDERAL AID	STATE	SHEET
VA.	PROJECT	ROUTE	NO.

Notes:

All reinforcing bars shall be Corrosion Resistant Reinforcing Steel, Class ...

All bevels for concrete on this sheet shall be 3/4". Rounded edges with 1" radius may be used in lieu of bevels along top of terminal wall and railing.

All concrete shall be Class A4.

Each terminal wall shall be cast as one piece.

Barrier delineator size, color, and spacing to be in accordance with the Specifications. Cost of delineator to be included in the price bid for railing. Reflective surface of barrier delineator, in all instances, to be facing oncoming traffic.

The Contractor shall determine all dimensions and details necessary for installation.

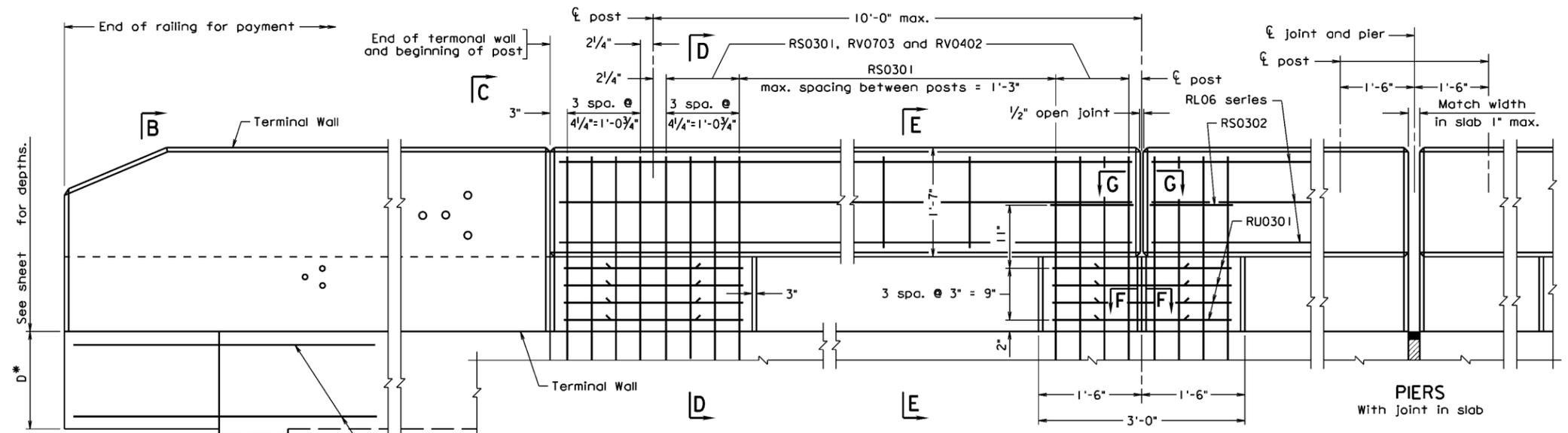
Terminal walls are detailed to take guard rail attachment GR-FOA-1.

Holes, where shown, shall be formed with sleeves of 1/2" diameter nominal pipe.

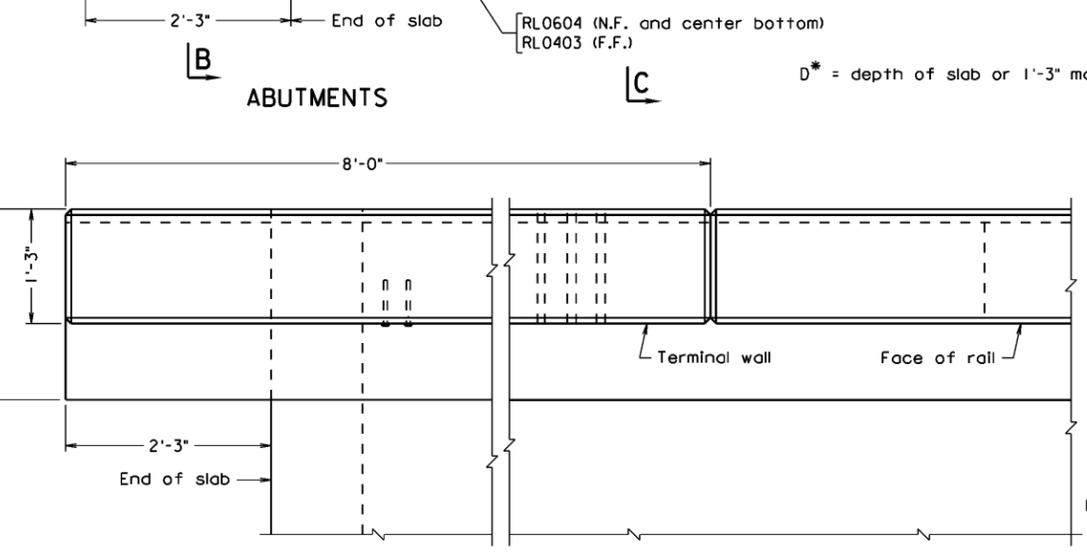
Bolts, where shown, shall be 5/8" dia. expansion anchor bolts, 6" long to be drilled and installed when rub rail is attached.

Bid item for railing shall include concrete noted in plans and reinforcing steel indicated in Reinforcing Steel Schedule.

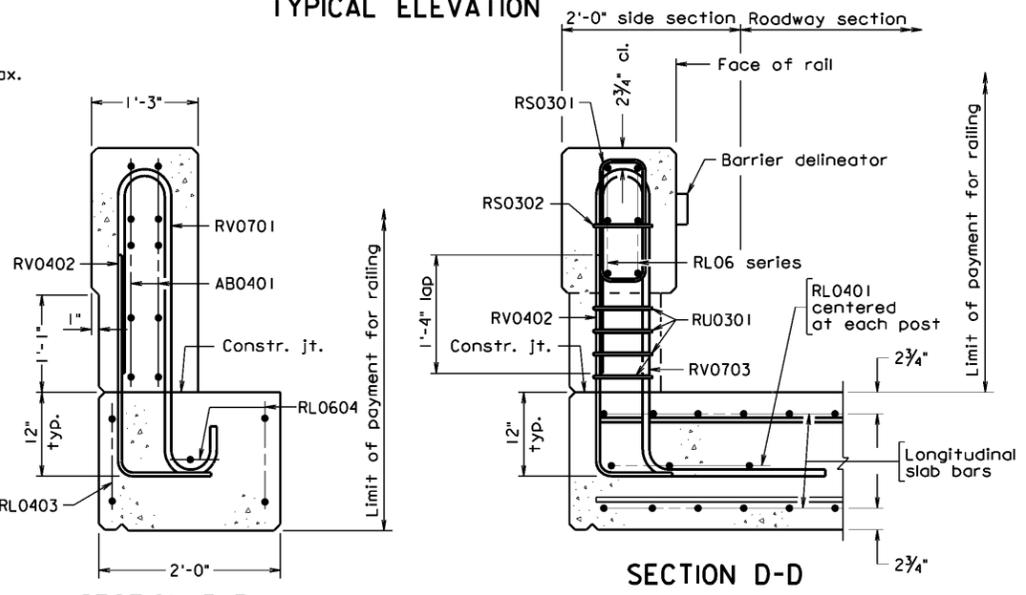
For Sections C-C, E-E, F-F and G-G, see CS-CR2.



TYPICAL ELEVATION



PLAN - TERMINAL WALL
(0° skew shown)



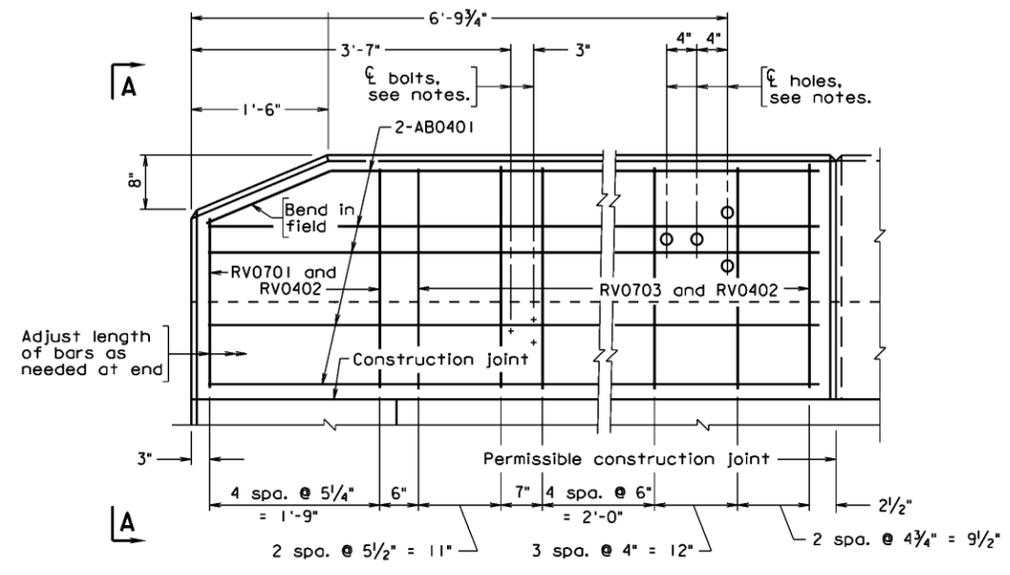
SECTION B-B

SECTION D-D

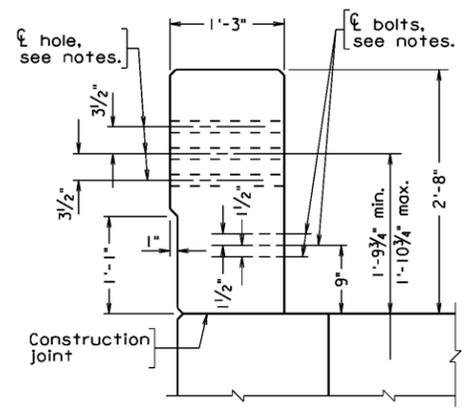
REINFORCING STEEL SCHEDULE					
RV0701	RS0301 and RS0302	RU0301			
RV0703	RV0402				
Mark	No.	Size	Pin ø	Length	Location
AB0401	.	#4	—	7'-9"	Terminal wall
RL0401	.	#4	—	6'-6"	Slab at posts
RL06	.	#6	—	.	Rail
RL0403	.	#4	—	4'-0"	Slab and Terminal Wall
RL0604	.	#6	—	4'-0"	Slab and Terminal Wall
RS0301	.	#3	2 1/4"	3'-11"	Rail
RS0302	.	#3	2 1/4"	4'-1"	Posts
RU0301	.	#3	2 1/4"	4'-4"	Posts
RV0701	.	#7	5 1/4"	6'-10"	Terminal Wall
RV0402	.	#4	3"	3'-3"	Terminal Wall
RV0703	.	#7	5 1/4"	10'-3"	Posts and Terminal Wall

Mark	No.	Size	Pin ø	Length	Location
AB0401	.	#4	—	7'-9"	Terminal wall
RL0401	.	#4	—	6'-6"	Slab at posts
RL06	.	#6	—	.	Rail
RL0403	.	#4	—	4'-0"	Slab and Terminal Wall
RL0604	.	#6	—	4'-0"	Slab and Terminal Wall
RS0301	.	#3	2 1/4"	3'-11"	Rail
RS0302	.	#3	2 1/4"	4'-1"	Posts
RU0301	.	#3	2 1/4"	4'-4"	Posts
RV0701	.	#7	5 1/4"	6'-10"	Terminal Wall
RV0402	.	#4	3"	3'-3"	Terminal Wall
RV0703	.	#7	5 1/4"	10'-3"	Posts and Terminal Wall

Gross concrete quantities above roadway slab:
Railing: C.Y. = Lin. Ft. x 0.085



ELEVATION - TERMINAL WALL



VIEW A-A

Not to scale © 2013, Commonwealth of Virginia

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION STRUCTURE AND BRIDGE DIVISION					
CAST-IN-PLACE CONCRETE RAILING (32" KANSAS CORRAL)					
No.	Description	Date	Designed:	Date	Plan No.
			Drawn:		Sheet No.
			Checked:		CS-CR1

CS-CR1.dgn

01-25-2013

CS-CR1

Sealed and Signed by:
Julius F.J. Volgyi Jr.
Lic. No. 010487
On the date of
January 25, 2013

A copy of the original sealed and signed standard drawing is on file in the Central Office.

VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER

CAST-IN-PLACE CONCRETE SLAB SPANS

CAST-IN-PLACE CONCRETE RAILING 32" KANSAS CORRAL WITHOUT CURB

NOTES TO DESIGNER:

The Kansas Corral Railing with a railing height of 2'-8" has been crash tested for TL-4 (TL = test level). The original rail has been modified as follows: rail width increased from 12" to 15" and the width of the post increased from 10" to 12". Dimensions were changed to allow for additional reinforcement cover.

Use standard only for structures with low traffic volume that require increased hydraulic opening and/or visibility and when approach roadway has no curb. Standard is not intended to be used with sidewalk curb(s). Standard may not be used for concrete slab spans having a slab thickness less than 15". This standard is to be used in conjunction with CS-CR2.

It is the Contractor's responsibility to determine the number of reinforcing bars required as well as any other details required for installation. Therefore, the remainder of the Reinforcing Steel Schedule, including number of bars required, is to be left blank by the designer.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

PROJECT/TITLE BLOCKS:

Project block and title block shall be completed in accordance with Manual of the Structure and Bridge Division, Volume V – Part 2, Chapter 4.

NOTES:

Complete first note by adding the Class I, II or III of corrosion resistant reinforcing steel required. For additional information on corrosion resistant reinforcing steels (CRR), see Structure and Bridge Division Memorandum (current IIM-S&B-81).