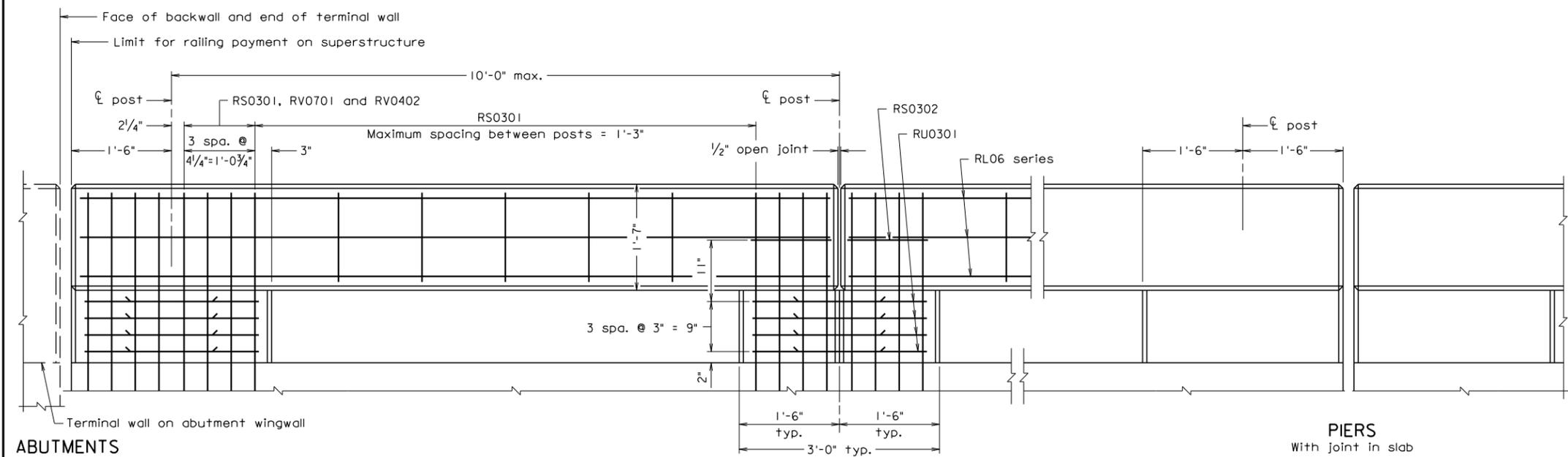


STATE	ROUTE	FEDERAL AID PROJECT	STATE ROUTE	PROJECT	SHEET NO.
VA.					



Notes:

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

RL0401 bars are not required for deck slabs and RU0502 bars are not required for slab spans.

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 details necessary for installation.

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 railing.

All concrete shall be Class A4.

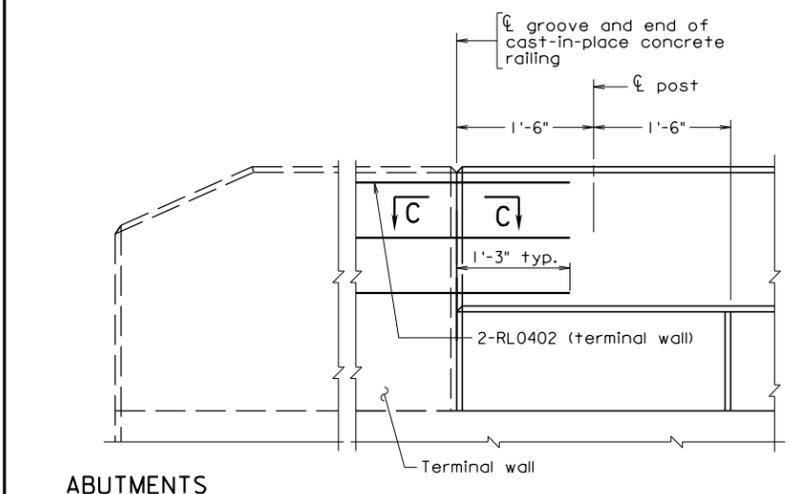
Bid item for railing shall include concrete noted in plans and reinforcing steel indicated in Reinforcing Steel Schedule.

Plan dimensions shown on this sheet and terminal wall sheet are measured in the respective horizontal and vertical planes. The reinforcing steel shown has been detailed based on standard 1/4" per foot cross slope. The Contractor shall adjust the reinforcing steel as required for other cross slopes.

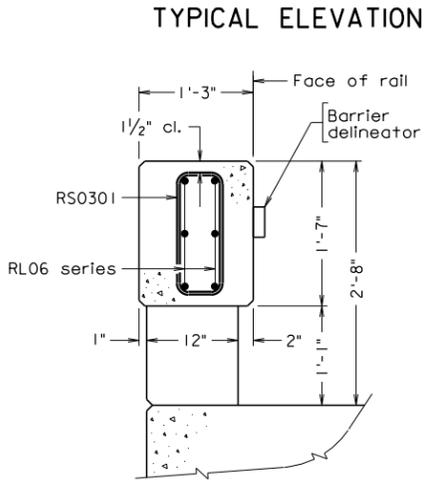
For details and reinforcing steel schedule of terminal wall, see sheet --.

ABUTMENTS

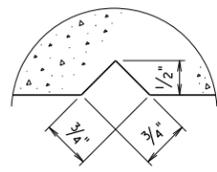
PIERS
With joint in slab



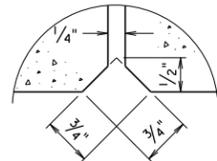
PART ELEVATION
Terminal Wall on Superstructure



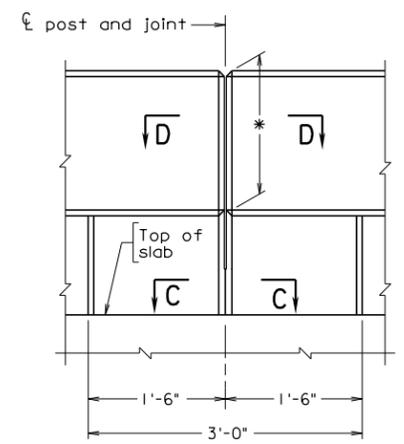
TYPICAL SECTION BETWEEN POSTS
Reinforcing steel on deck not shown



SECTION C-C
both sides of post
Not to scale
Groove detail for rail or joint



SECTION D-D
Not to scale
Deflection joint detail for both sides of rail and post



PIERS
Slab continuous over pier
* Open deflection joint 1'-7\"/>

REINFORCING STEEL SCHEDULE

RS0301 and RS0302	RV0701	RV0402			
Mark	No.	Size	Pin ϕ	Length	Location
RS0301		#3	2 1/4"	3'-11"	Rail
RS0302		#3	2 1/4"	4'-1"	Posts
RU0301		#3	2 1/4"	4'-4"	Posts
RU0502		#5			Slab at posts (Deck Slabs)
RV0701		#7	5 1/4"		Posts
RV0402		#4	3"		Posts
RL0401		#4		6'-6"	Slab at posts (Slab Spans)
RL06		#6			Rail

Dimensions in bending diagram are out-to-out of bars, except as shown.

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

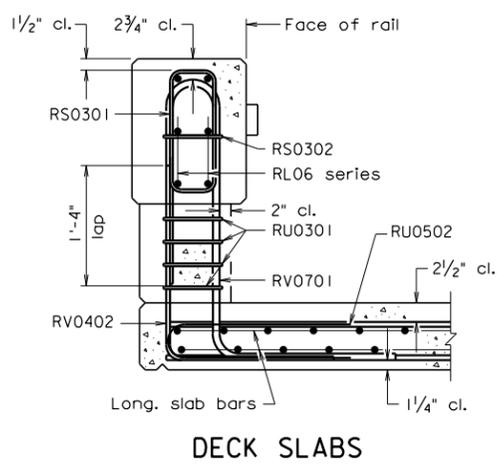
12-14-2012

BCR-4

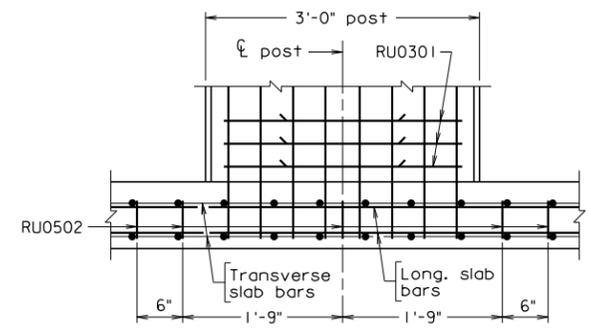
Sealed and Signed by:
Julius F.J. Volgyi Jr.
Lic. No. 010487
On the date of
December 14, 2012

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

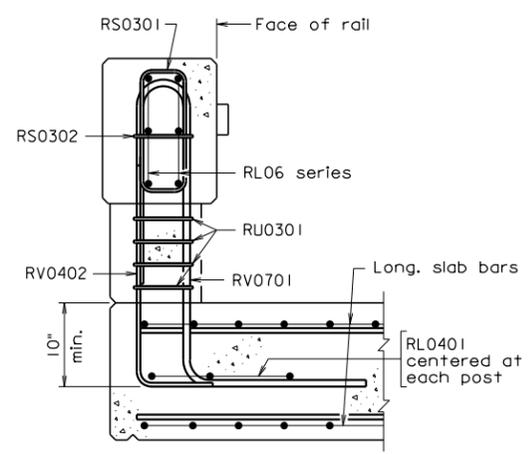
VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER



DECK SLABS



ELEVATION SHOWING RU0502 PLACEMENT DECK SLABS



SLAB SPANS

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION					
STRUCTURE AND BRIDGE DIVISION					
CAST-IN-PLACE CONCRETE RAILING 32" KANSAS CORRAL W/O CURB					
No.	Description	Date	Designed: S&B..DIV	Date	Plan No.
			Drawn: S&B..DIV		Sheet No.
			Checked: S&B..DIV		BCR-4

**CAST-IN-PLACE CONCRETE RAILING
KANSAS CORRAL**

2'-8" HEIGHT WITHOUT CURB

NOTES TO DESIGNER:

The Kansas Corral with a railing height of 2'-8" and without curb section 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. This rail is for use as a traffic barrier and shall not be used for sidewalk applications.

Use standard only for structures 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 be used for deck slab on stringers and concrete slab spans having a minimum slab thickness of 15".

Select the appropriate terminal wall standard (BCR-6 to BCR-9) to be included in the plans when using this standard.

It is the Contractor's responsibility to determine the number of reinforcing bars required as well as any details or dimensions. Therefore, these items are left blank in the Reinforcing Steel Schedule.

If bituminous overlay is placed, dimensions and rebars must be adjusted as noted below.

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

TYPICAL SECTION BETWEEN POSTS:

For projects with bituminous overlay, modify vertical dimensions 1'-1" and 2'-8" (railing height) so that these dimension will be established from top of overlay surface.

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 steel (CRR), see Structure and Bridge Division Memorandum (current IIM-S&B-81).

Complete sheet no. for terminal wall.

REINFORCING STEEL SCHEDULE:

Add dimension for rebars RV0701, RV0402, and RU0502.

For projects with bituminous overlay, modify rebar lengths to allow for dimension changes.