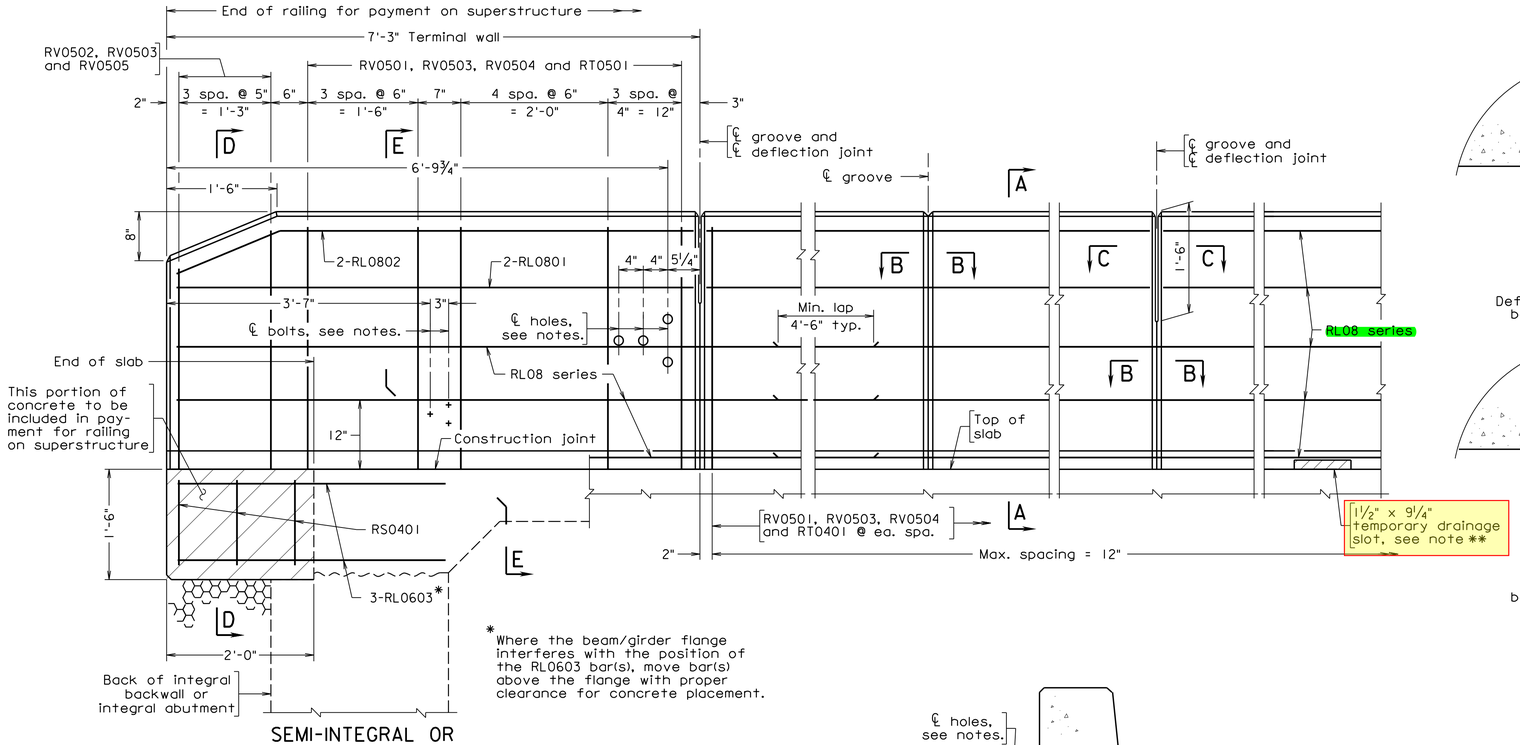
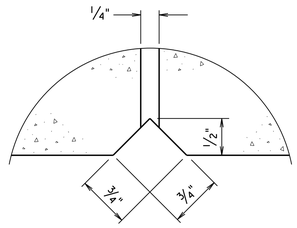
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		77	0077-098-828, B653, B654	39

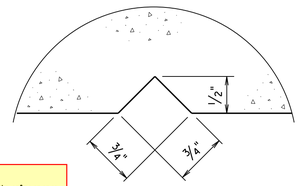


* Where the beam/girder flange interferes with the position of the RL0603 bar(s), move bar(s) above the flange with proper clearance for concrete placement.

SEMI-INTEGRAL OR FULL INTEGRAL ABUTMENT



SECTION C-C
Full scale
Deflection joint detail for both sides of parapet



SECTION B-B
Full scale
Groove detail for both sides of parapet

Notes:

Plan dimensions shown are measured in the respective horizontal and vertical planes.

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

All concrete shall be Low Shrinkage Class A4 Modified.

All bevels for concrete shall be ¾".

The reinforcing steel shown has been detailed based on a standard ¼" per foot cross slope and for an 8½" slab depth. The Contractor shall adjust the reinforcing steel as required for other cross slopes and slab depths.

All reinforcing steel shall be Corrosion Resistant Reinforcing Steel, Class III.

Use groove and deflection joint over pier.

Spacing of grooves is to be approximately 8'-0". If lighting standard is used (see bridge conduit system), groove shall be located approximately 4'-0" from centerline of light standard. Spacing of deflection joints shall not exceed three groove spaces.

Barrier delineator size, color and spacing shall be in accordance with the Specifications.

Each terminal wall shall be cast as one piece.

Terminal walls are detailed to take guardrail attachment GR-FOA-2.

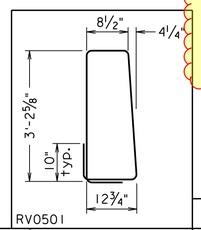
Holes, where shown, shall be formed with sleeves of 1½" diameter nominal pipe.

Bolts for guardrail attachment, where shown, shall be ⅝" diameter expansion anchor bolts, 6" long and shall be drilled and installed when rub rail is attached.

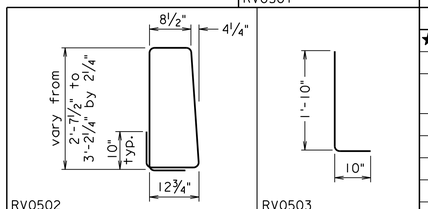
phrasing on spacing is ambiguou s

** Temporary drainage slots shall be provided along the right parapet of the SBL bridge only (B653). Slots will be provided at a 5'-0" maximum spacing along the parapet evenly spaced between RV series bars. Slots will not be provided in terminal walls. In Phase IV, slots will be completely closed using non-shrink grout.

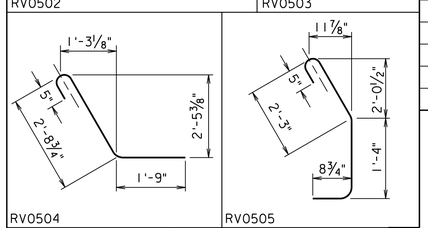
temporary slot. no closer than 5ft C-C



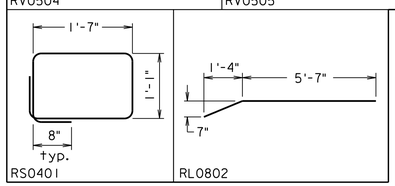
RV0501



RV0502 RV0503



RV0504 RV0505



RS0401 RL0802

REINFORCING STEEL SCHEDULE

Mark	No.	Size	Pin ø	Length	Location
★RT0401		#4	—	3'-0"	Slab
RV0501		#5	3¾"	9'-3"	Parapet and teminal wall
RV0502		#5	3¾"	from 8'-1 to 9'-2"	Terminal wall (4 per terminal wall)
RV0503		#5	3¾"	2'-6½"	Parapet
RV0504		#5	3¾"	5'-0"	Parapet
RV0505		#5	—	4'-9"	Terminal wall and wingwall
RS0401		#4	3"	6'-2"	Terminal wall end support
RL0801		#8	—	6'-11"	Terminal wall and U-back wing
RL0802		#8	6"	7'-0¼"	Terminal wall
RL0603		#6	—	3'-6"	Terminal wall end support
RL08		#8	—		Parapet

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

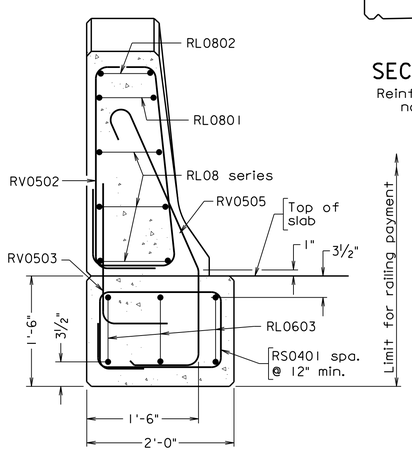
Cost of all bars listed in schedule to be included in price bid for parapet.

Gross concrete quantities (C.Y.) = Lin. Ft. x 0.158
All concrete above roadway slab.

★ Used only when deck transverse reinforcement is parallel to skew of bridge.

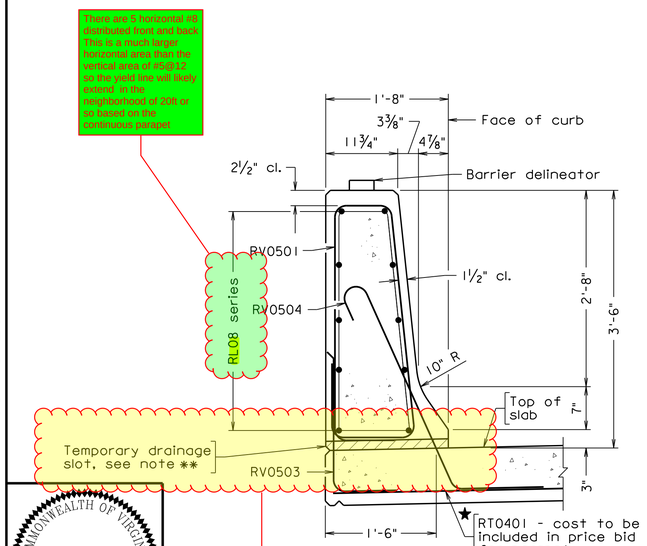
SECTION E-E
Reinforcing steel not shown.

ELEVATION



SECTION D-D
For dimensions and details not shown, see Section A-A.

There are 5 horizontal #8 distributed front and back. This is a much larger horizontal area than the vertical area of #5@12 so the yield line will likely extend to the neighborhood of 20ft or so based on the continuous parapet



SECTION A-A

temporary drainage slot

05-18-2016

BPB-4C MOD.

COMMONWEALTH OF VIRGINIA
T. MICHAEL HARRIS
Lic. No. 023868
PROFESSIONAL ENGINEER

Thomas M Harris
2019.12.18 17:38:57 -05'00'

MOFFATT & NICHOL
RICHMOND, VA
STRUCTURAL ENGINEER

Scale: 1" = 1'-0" unless otherwise shown.

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No.	Description	Date
	Revisions	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

42" CAST-IN-PLACE CONCRETE PARAPET (F-SHAPE)

Designed: S&B Div	Date	Plan No.	Sheet No.
Drawn: S&B Div	Dec. 2019	301-77	39 of 69
Checked: S&B Div			