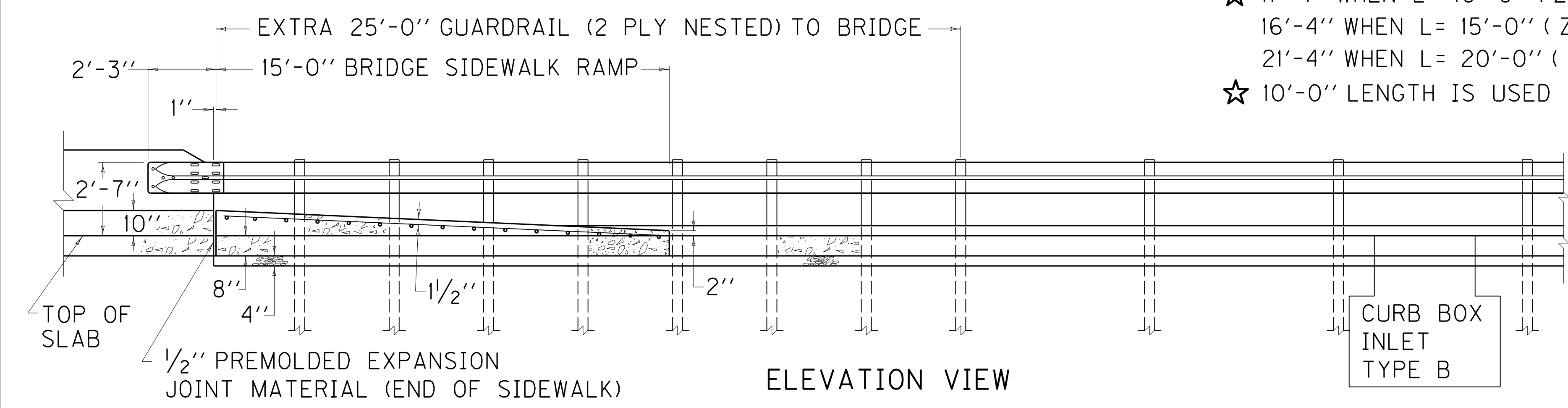
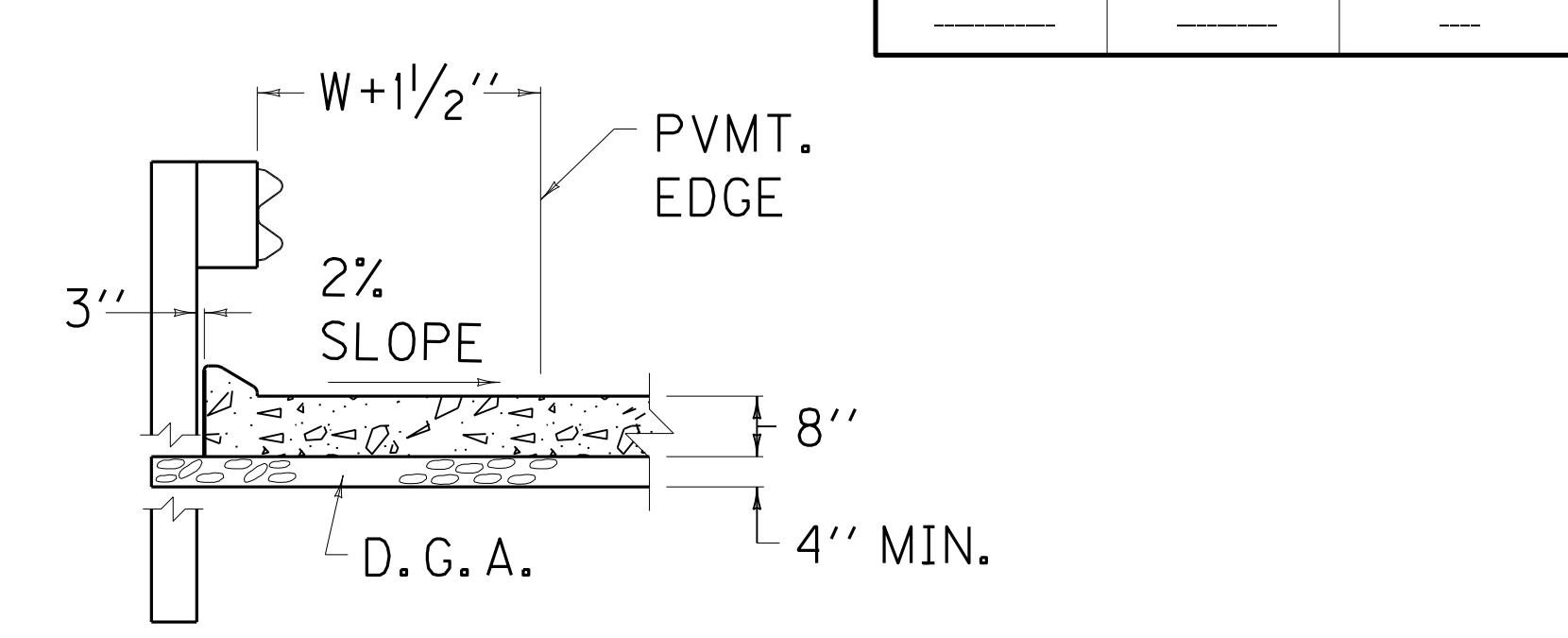


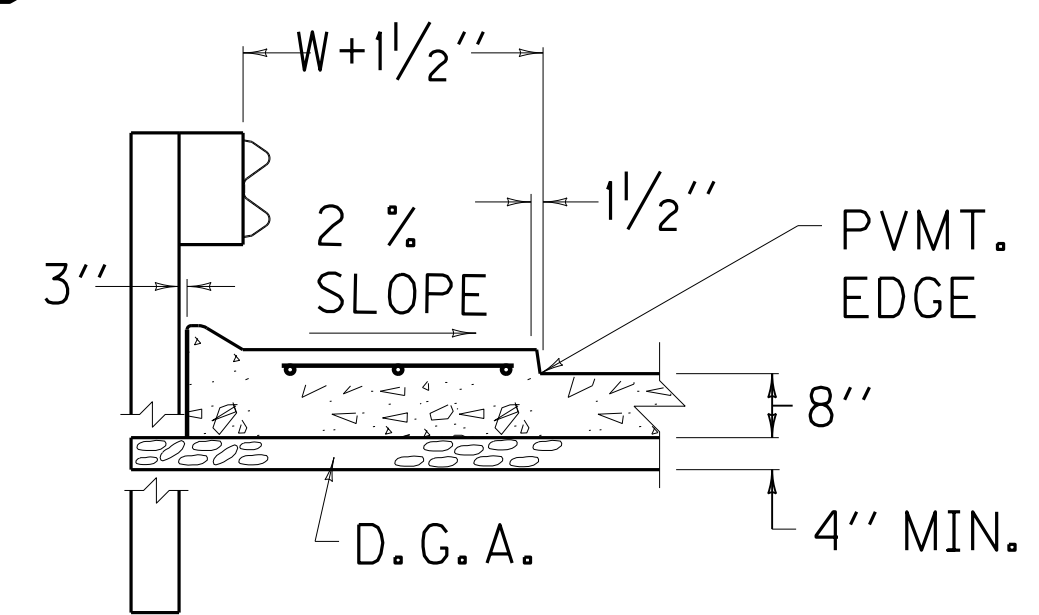
PLAN VIEW



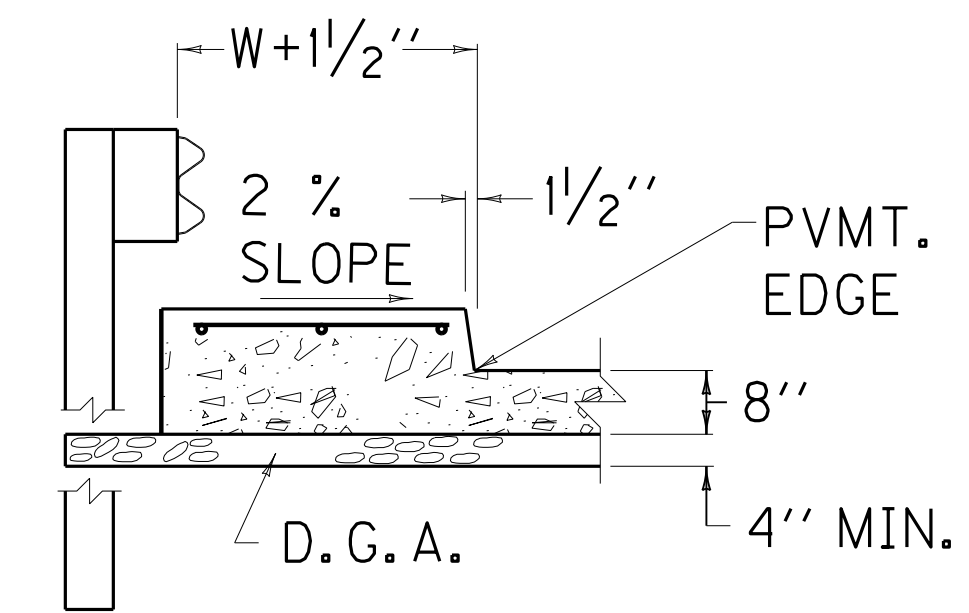
ELEVATION VIEW



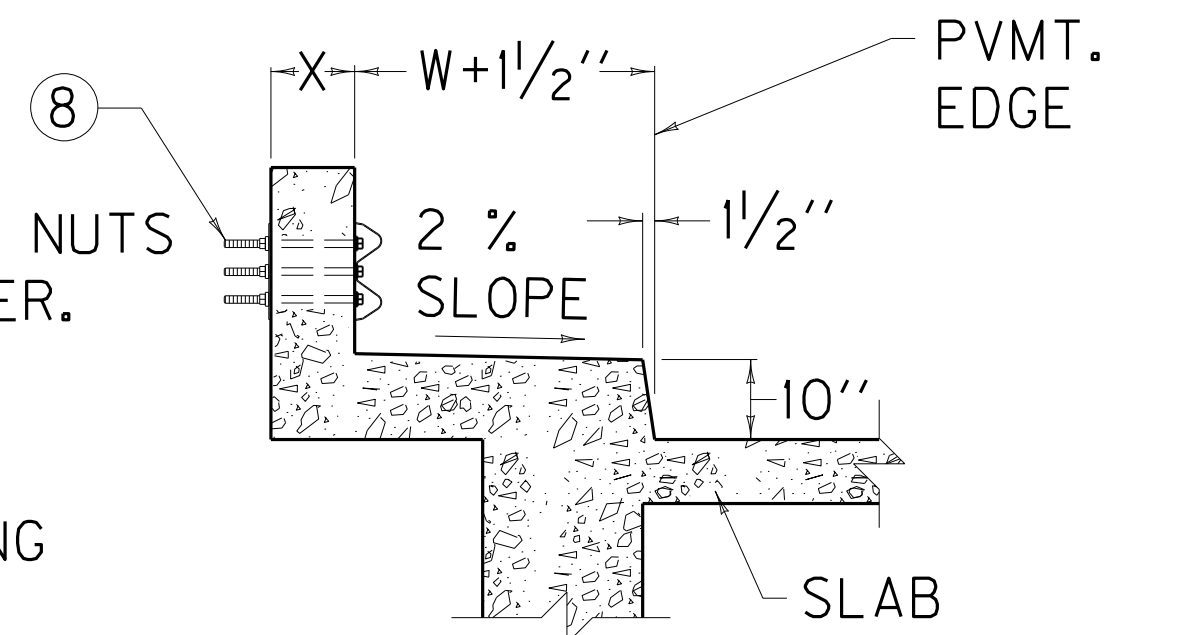
SECTION D-D



SECTION C-C



SECTION B-B



SECTION A-A (THRU BRIDGE)

- ~ NOTES ~
4. GUARDRAIL CONNECTOR TO BRIDGE END TYPE "D" SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, AND SHALL INCLUDE TERMINAL SECTION NO. 2, EXTRA GUARDRAIL POST AND OFFSET BLOCKS, EXTRA GUARDRAIL, BRIDGE SIDEWALK RAMP (INCLUDING CLASS "A" CONCRETE, STEEL REINF. AND STRUCTURE EXCAVATION) ALL COMPLETELY INSTALLED.
 5. THIS DRAWING DEPICTS GUARDRAIL CONNECTED TO A POST AT THE END OF THE BRIDGE. WHEN A BRIDGE WING EXTENDS BEYOND THE END OF THE BRIDGE, THE GUARDRAIL SHALL BE MOVED BACK AND CONNECTED IN A CORRESPONDING MANNER.
 6. THE GUARDRAIL CONNECTOR TO BRIDGE END TYPE "D" SHALL BE APPLIED ON EACH END OF THE BRIDGE, WHERE A SIDEWALK EITHER EXISTS OR IS PROPOSED, ON THE STRUCTURE AND NOT ON THE ROADWAY. THIS IS ONLY APPLICABLE TO RURAL STRUCTURES THAT HAVE TWO DIRECTIONAL TRAFFIC WITH SIDEWALK.
 7. SEE STANDARD DRAWING NO. RBR-SERIES (CURRENT EDITION) FOR ALL OTHER APPLICABLE MATERIAL AND CONSTRUCTION REQUIREMENTS.

BID ITEMS AND UNIT TO BID	
GUARDRAIL CONNECTOR TO BRIDGE END TY D	EACH
ISLAND INTEGRAL CURB (AS REQUIRED)	LF
DGA BASE (AS REQUIRED)	TON
CONCRETE-CLASS A (AS REQUIRED)	CUYD
CURB BOX INLET TYPE B (AS REQUIRED)	EACH

- ② APPROX. QUANTITY PER LIN. FT. Z DIMENSION.
- ③ 6'-4" WHEN L = 5'-0" (Z = 20'-4")
 ☆ 11'-4" WHEN L = 10'-0" (Z = 15'-4")
 16'-4" WHEN L = 15'-0" (Z = 10'-4")
 21'-4" WHEN L = 20'-0" (Z = 5'-4")
 ☆ 10'-0" LENGTH IS USED MOST FREQUENTLY.

- ⑧ CONNECT GUARDRAIL TO BRIDGE END WITH :
- 4-7/8" (LTH. = "Z" PLUS 3") HEX HEAD BOLTS OR 4-7/8" (LENGTH = "Z" PLUS 4") STEEL THREADED RODS WITH 4 NUTS FOR THE BOLTS AND 8 NUTS FOR THE RODS AND WITH 8 FLAT WASHERS FOR EITHER. FORM 1" HOLES FOR THE 7/8" BOLTS WITH PLASTIC PIPE IN PROPOSED BRIDGE ENDS. DRILL 1" HOLES FOR THE 7/8" BOLTS THROUGH EXISTING BRIDGE ENDS. BOTH THE 7/8" BOLTS AND STEEL THREADED RODS SHALL HAVE A MINIMUM OF 50,000 LBS. TENSILE STRENGTH AT THEIR NARROWEST POINT. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.

APPROXIMATE QUANTITIES

"W"	SIDEWALK RAMP	GUTTER PAVING	STEEL REINFORCEMENT	ISLAND INTERGAL CURB
	CUBIC YARDS	CLASS "A" CONC.	LBS.	LINEAR FEET
2'-6"	1.9	② 0.1	51	19'-6"
3'-0"	2.3		56	
3'-6"	2.7		61	
4'-0"	3.1		66	

USE WITH CUR. STD. DWG. RDB-280

KENTUCKY DEPARTMENT OF HIGHWAYS

GUARDRAIL CONNECTOR TO BRIDGE END TYPE "D"

SUBMITTED *William S. Selick* 11-17-17
 DIRECTOR DIVISION OF DESIGN DATE