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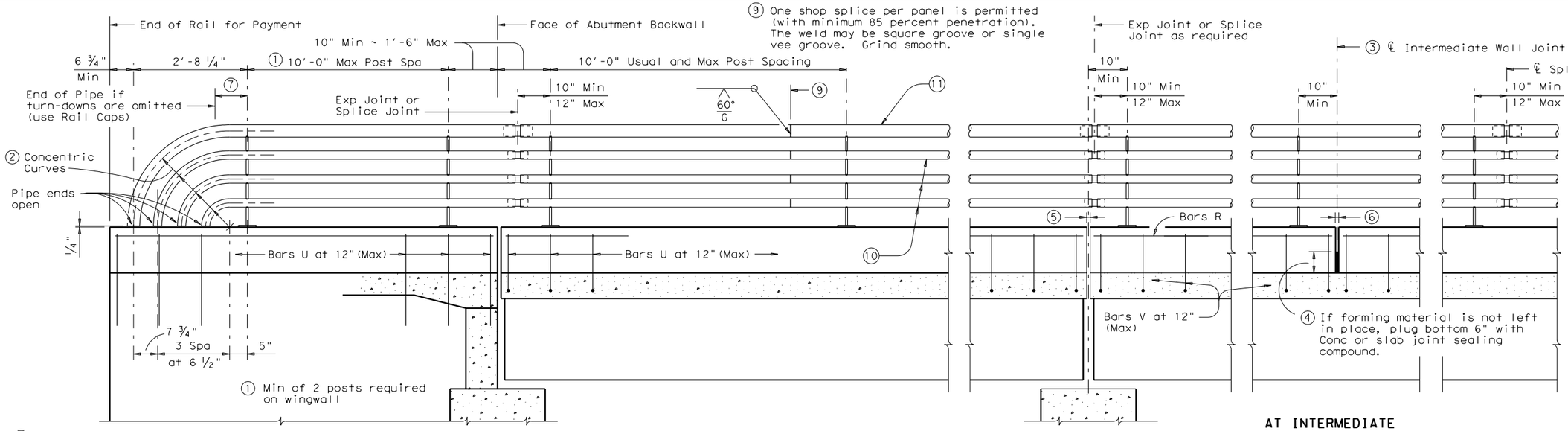
ACC:

LEVELS DISPLAYED

1



AT ABUTMENT BENTS

AT SLAB EXP JTS

AT INTERMEDIATE WALL JOINTS

AT SPLICE JOINTS

ROADWAY ELEVATION OF RAIL

② Portion of railing with turn-downs to be used or omitted as indicated on Bridge Layout.

⑦ 10" Min ~ 1'-6" Max if turn-downs are omitted.

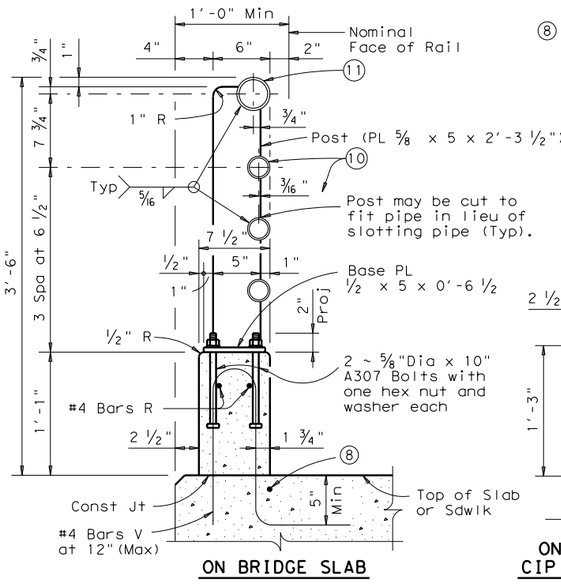
⑧ Top longitudinal slab bar may be adjusted laterally 3" ± to tie rail reinforcing.

③ Provide intermediate wall joints over all slab construction joints, over interior supports on continuous units, and at equal intervals in between as necessary to maintain a 33' maximum maximum length of unbroken wall.

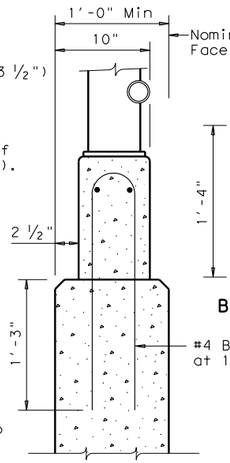
④ Material used in forming joint may be left in place if it is compressible and light in color such as the following materials: polystyrene, molded cork granules, sponge rubber sheet, etc.

⑤ Same as Slab opening

⑥ ¼" Min ~ ¾" Max

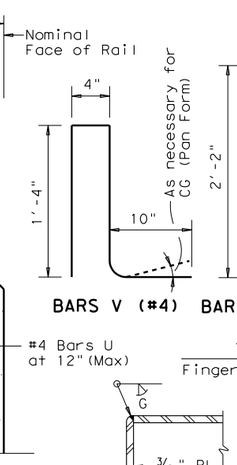


ON BRIDGE SLAB

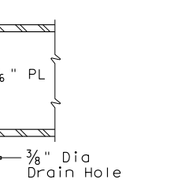


ON ABUT WING OR CIP RETAINING WALL

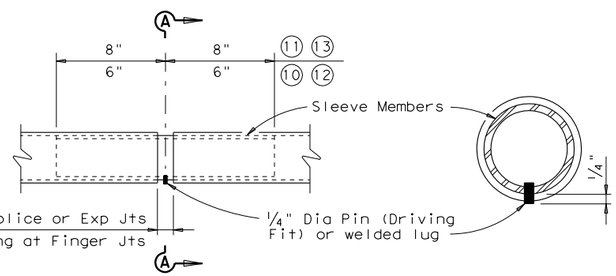
SECTIONS THRU RAIL



BARS V (#4) BARS U (#4)



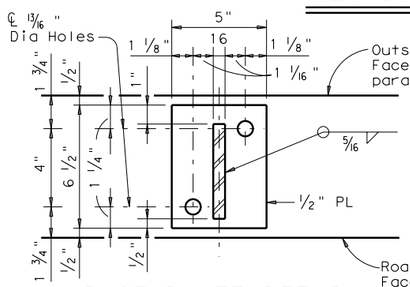
RAIL CAP DETAIL



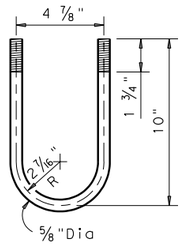
AT SPLICE OR EXP JTS

SECTION A-A

PIPE SPLICE DETAIL



BASE PLATE DETAIL



OPTIONAL U BOLT

⑩ 2" Std Pipe (2.375" O.D., 0.154" wall thickness)

⑪ 3" Std Pipe (3.500" O.D., 0.216" wall thickness)

⑫ 1 ½" Std Pipe (1.900" O.D., 0.145" wall thickness)

⑬ 2 ½" Std Pipe (2.875" O.D., 0.203" wall thickness)

GENERAL NOTES:

Designed according to current AASHTO Standard Specifications for Highway Bridges.

Pipe for pipe rail shall conform to ASTM A53 Grade B or A501. Posts and Plates shall be ASTM A36.

Anchor bolts, nuts and washers to be included in unit price bid for railing.

Panel lengths of railing shall be attached to a minimum of three posts except on abutment wingwalls.

All steel components to be galvanized unless otherwise shown on plans.

Anchor bolts shall be ⅝" Dia ASTM A307 Grade A bolts (or A36 threaded rods with one tack welded hex nut each) with one hex nut and one 1 ¾" O.D. hardened steel washer at each bolt. Threaded rods may be 0.557" minimum diameter with rolled threads. Nuts shall conform to A563 requirements. The untapped blanks shall be galvanized prior to cutting the threads. Threads for bolts and nuts shall have Class 2A and 2B fit tolerances in accordance with ANSI B1.1.

Face of rail, posts and parapet shall be vertical transversely unless otherwise approved by the Engineer. Rail posts shall be perpendicular to top of adjacent concrete parapet grade. Grout may be used under base plates if necessary.

Shop drawings to be submitted to the Bridge Engineer for approval will be required only for rails on horizontal curves in which case the rail members shall be fabricated to the required radius for radii of 600' or less. For rails not requiring shop drawings, erection drawings showing panel lengths, splice locations, rail post spacing and anchor bolt setting shall be submitted to the Area Engineer for approval.

Shop drawings may be submitted as 11"x17" prints provided they are clearly legible.

Exposed edges of pipe rail and pipe rail posts shall be rounded or chamfered to approximately 1/16" by grinding.

All concrete shall be Class "C".

Epoxy coat Bars V and U if slab bars are epoxy coated.

All reinforcing shall be Grade 60.

Average weight of railing: 102 plf ~ Conc (with no Overlay)
23 plf ~ Steel

Texas Department of Transportation
Bridge Division

PEDESTRIAN RAIL

TYPE PR2

FILE: rlstde35.dgn	DN: JJP	CK: TxDOT	DW: DRG/JTR	CK: DWM		
©TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT				SHEET
REVISIONS						
	COUNTY		CONTROL	SECT	JOB	HIGHWAY