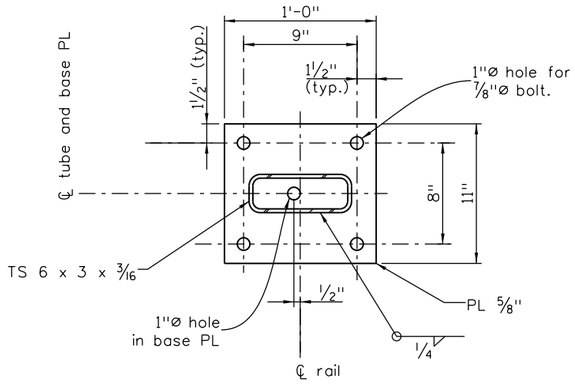
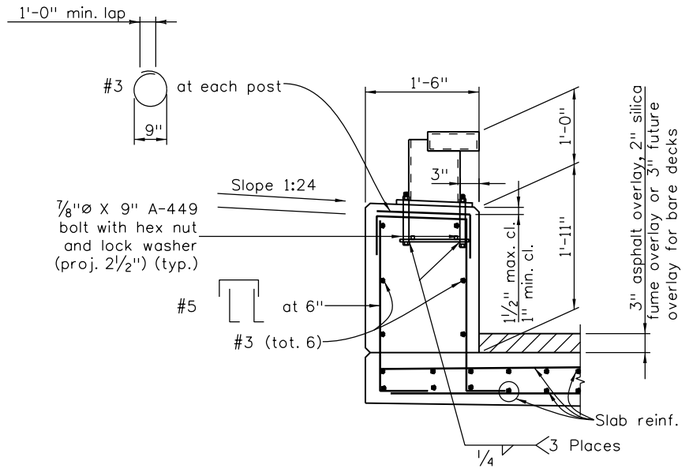
B-606-8A

Designer:

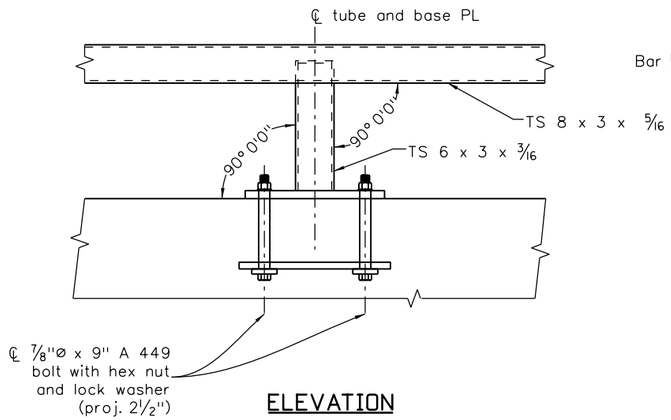
Design variance required for use.



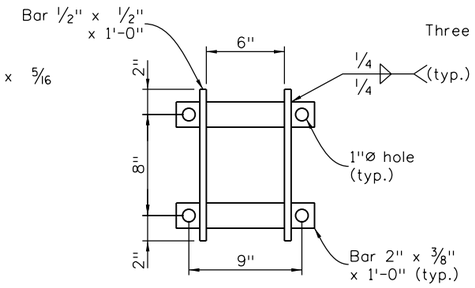
BASE PLATE DETAIL



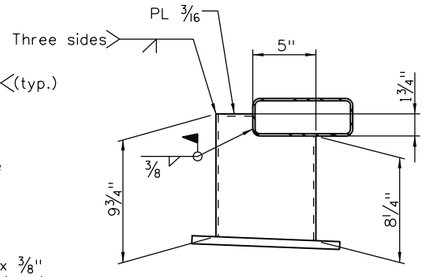
PARAPET DETAIL



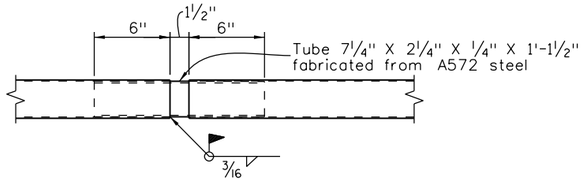
ELEVATION



ANCHOR DETAIL

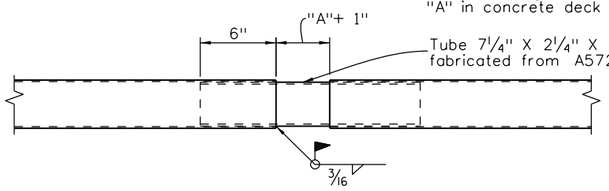


SIDE VIEW



RAIL SPLICE

"A"=1 inch for prestressed concrete pavement joints, and see Bridge Expansion Device Details for joint gap "A" in concrete deck at bridges.



RAIL EXPANSION JOINT

NOTES:

All tubes shall be fabricated from ASTM A 500 Grade B.
Base plates shall be fabricated from ASTM A 36 steel.

The above material shall be painted after fabrication in accordance with Section 509 of the Standard Specifications. The color shall be XXX, equivalent to federal standard 595b color no. XXX. All anchor bolts, nuts, and washers shall be galvanized in accordance with Section 509. Concrete, reinforcing steel, and structural steel elements shall conform to the requirements of Sections 601, 602, and 509, respectively.

Post anchor, encased in concrete, shall be ASTM A 36 or AASHTO M 169 steel and need not be galvanized.

The tubes shall be shop bent or fabricated to fit horizontal curve when radius is less than 2,400 feet.

Tubes shall be continuous over not less than three posts. No welded butt splices will be allowed in the tube sections.

The centerline of the posts shall be a 2'-6" minimum and 7'-4" maximum from the centerline of the tube expansion splice, measured along the centerline of posts.

All bolts that have lock washers shall be tightened to snug only.

Posts shall be perpendicular to the longitudinal roadway grade. One or more 10'-0" post spacings may be reduced (7'-10" min.) in order to maintain dimensions from the end of the wings and expansion joints.

Payment will be made under Item 606, Bridge Rail Type 8 for all post anchors, base plates, anchor bolts, nuts, washers, tubes tube expansion devices, end plates, curb concrete (Class D), curb reinforcing steel. Welding shall be in accordance with ANSI/ AASHTO/ AWS D1.1.
Prior to fabrication of this item, three sets of working drawings which comply with the requirements of Section 105, shall be submitted to the Department for information only. One set shall be sent to the Colorado Department of Transportation, Staff Materials Inspection Unit, 4340 E. Louisiana Avenue, Denver, Colorado 80222. Two sets shall be sent to the Engineer.

Structural Steel:

AASHTO M-183 (ASTM A-36)	f_y = 36,000 psi
Cold formed ASTM A-500 Grade B	f_y = 46,000 psi
AASHTO M 223 (ASTM A-572) Grade 50	f_y = 50,000 psi

For additional details see next rail sheets.

FOR INFORMATION ONLY

Description	Unit	Per Lin. Ft.
Structural Steel	Lb	100
Concrete Class D (Bridge)	CY	0.1
Reinforcing Steel (Epoxy Coated)	Lb	37.5

Revision Dates (Preliminary Stage Only)	1/92	3/99	11/99	5/00	5/01	4/02	3/07	10/13
Quantities INITIAL								
Quantities By								
Quantities DATE								
Detail INITIAL								
Detailed By								
Detail DATE								
Design INITIAL								
Designed By								
Design DATE								

Quantities			
INITIAL	XXX	XXX	
Quantities By			
DATE	MM/YY	MM/YY	

Detail			
INITIAL	XXX	XXX	
Detailed By			
DATE	MM/YY	MM/YY	

Design			
INITIAL	XXX	XXX	
Designed By			
DATE	MM/YY	MM/YY	

Checked By			
Checked By			
Checked By			

Print Date: $DATE$
File Name: Sheet_B-606-8A.dgn
Horiz. Scale: NTS Vert. Scale: As Noted
Staff Bridge Branch - Unit 022X Unit Leader Initials

Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation
DEPARTMENT OF TRANSPORTATION
4201 East Arkansas Avenue
Room 107
Denver, CO 80222
Phone: 303-757-9309 FAX: 303-757-9197
Staff Bridge Branch Initials

As Constructed
No Revisions:
Revised:
Void:

BRIDGE RAIL TYPE 8

Designer:	XXXXXXXX	Structure Numbers	X-XX-XX
Detailer:	XXXXXXXX		X-XX-XX
Sheet Subset:	BRIDGE	Subset Sheets:	BXX of XXX

Project No./Code
Project Number
Code
Sheet Number

$PLOT_INFO$