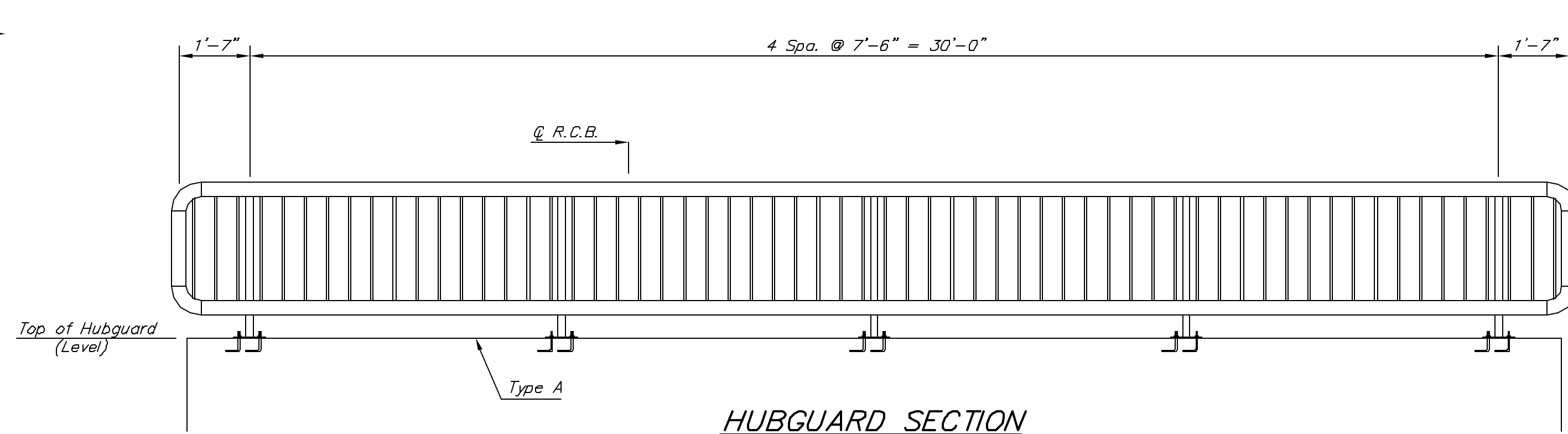
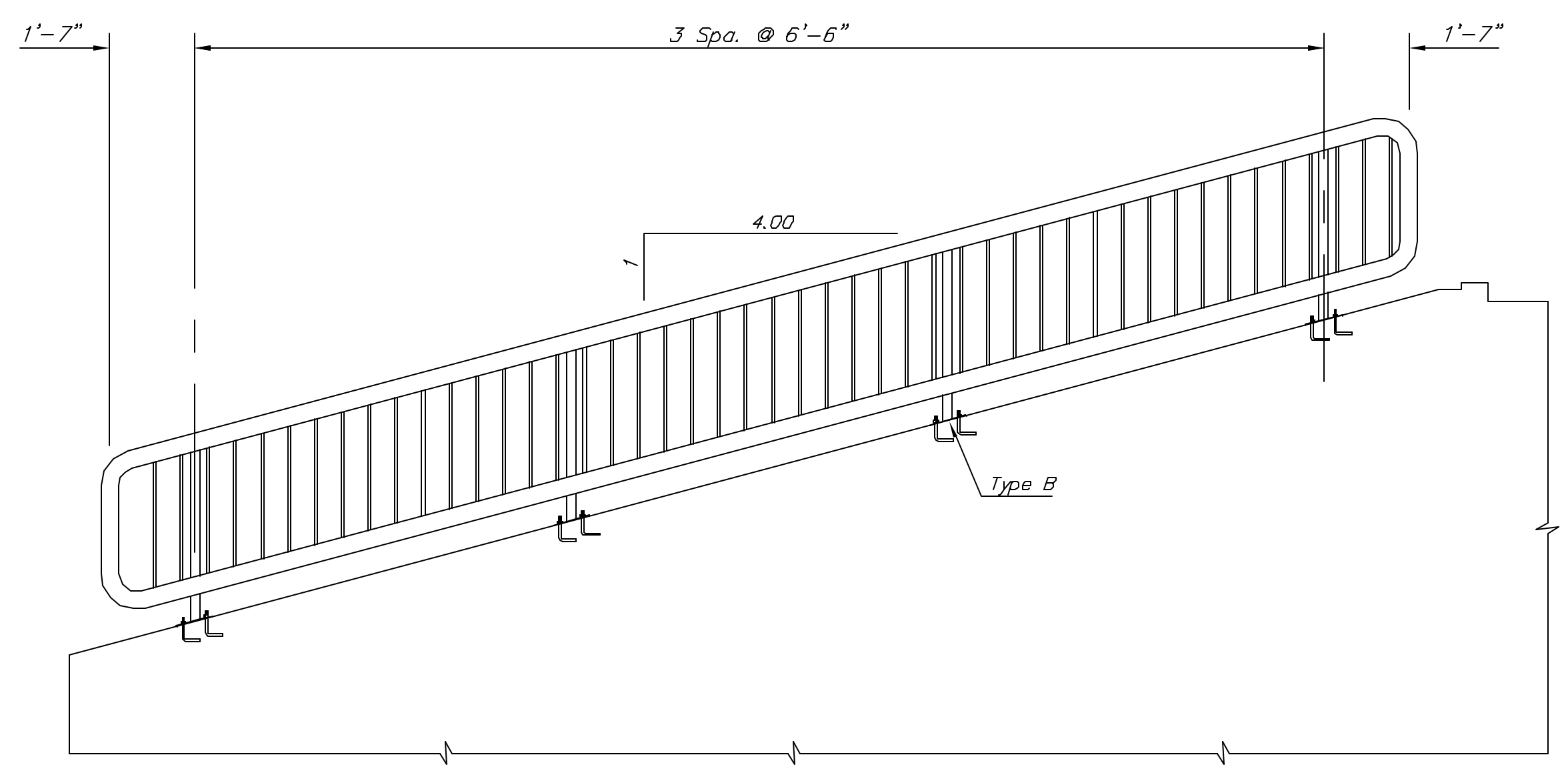


HANDRAIL ELEVATION



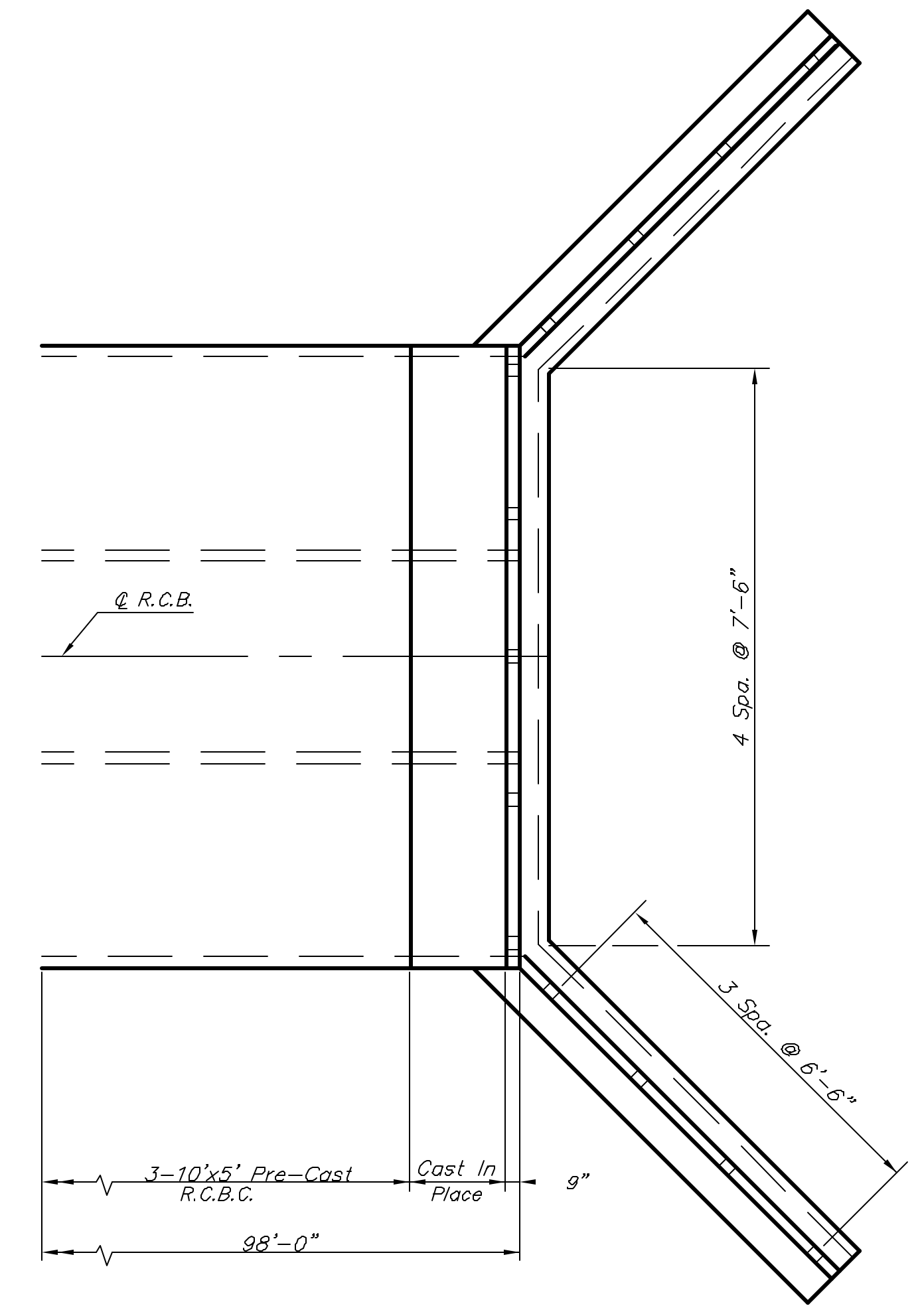
HUBGUARD SECTION

(1 Required)



HANDRAIL ELEVATION

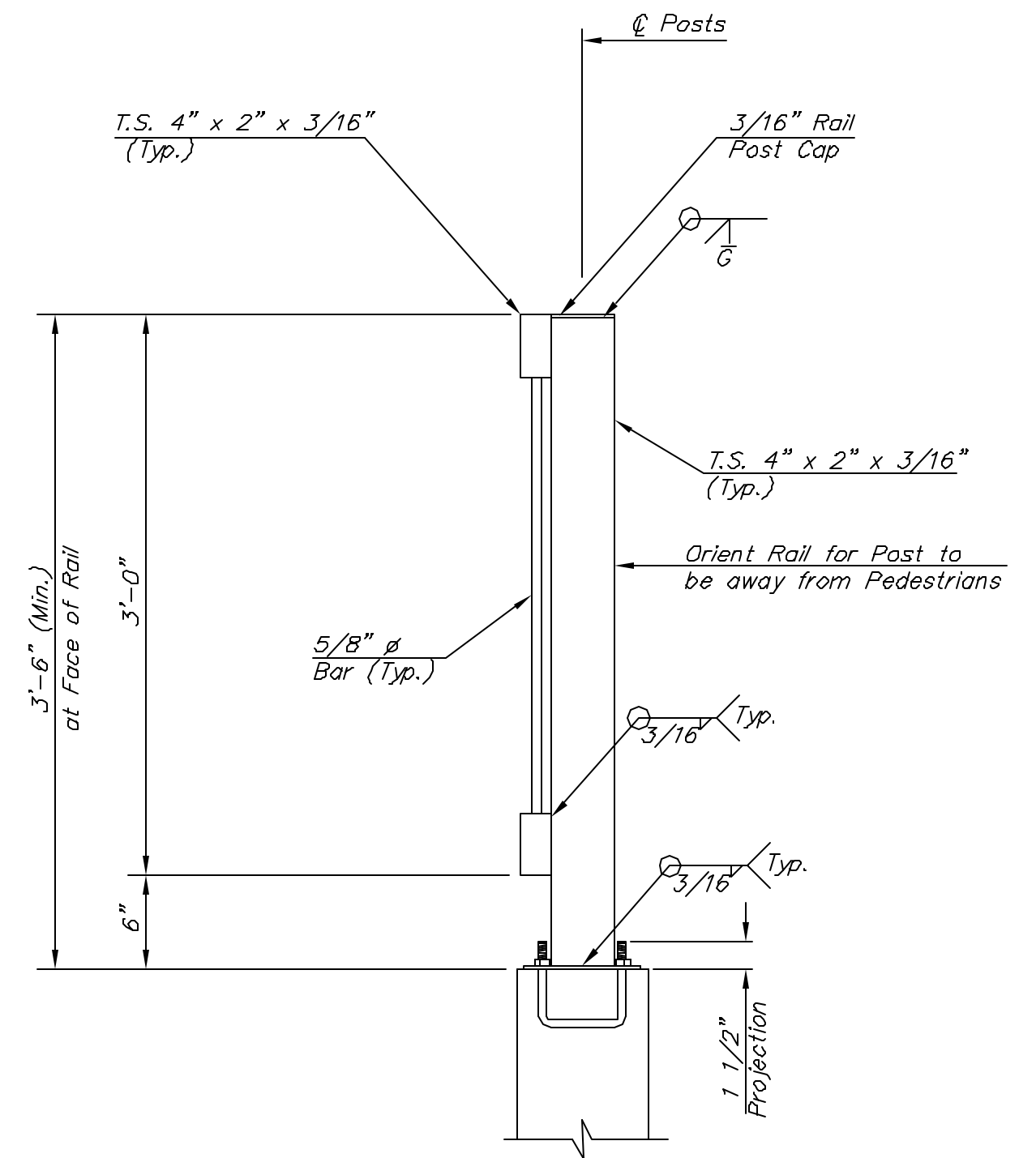
(2 Required)



RAIL LOCATION PLAN

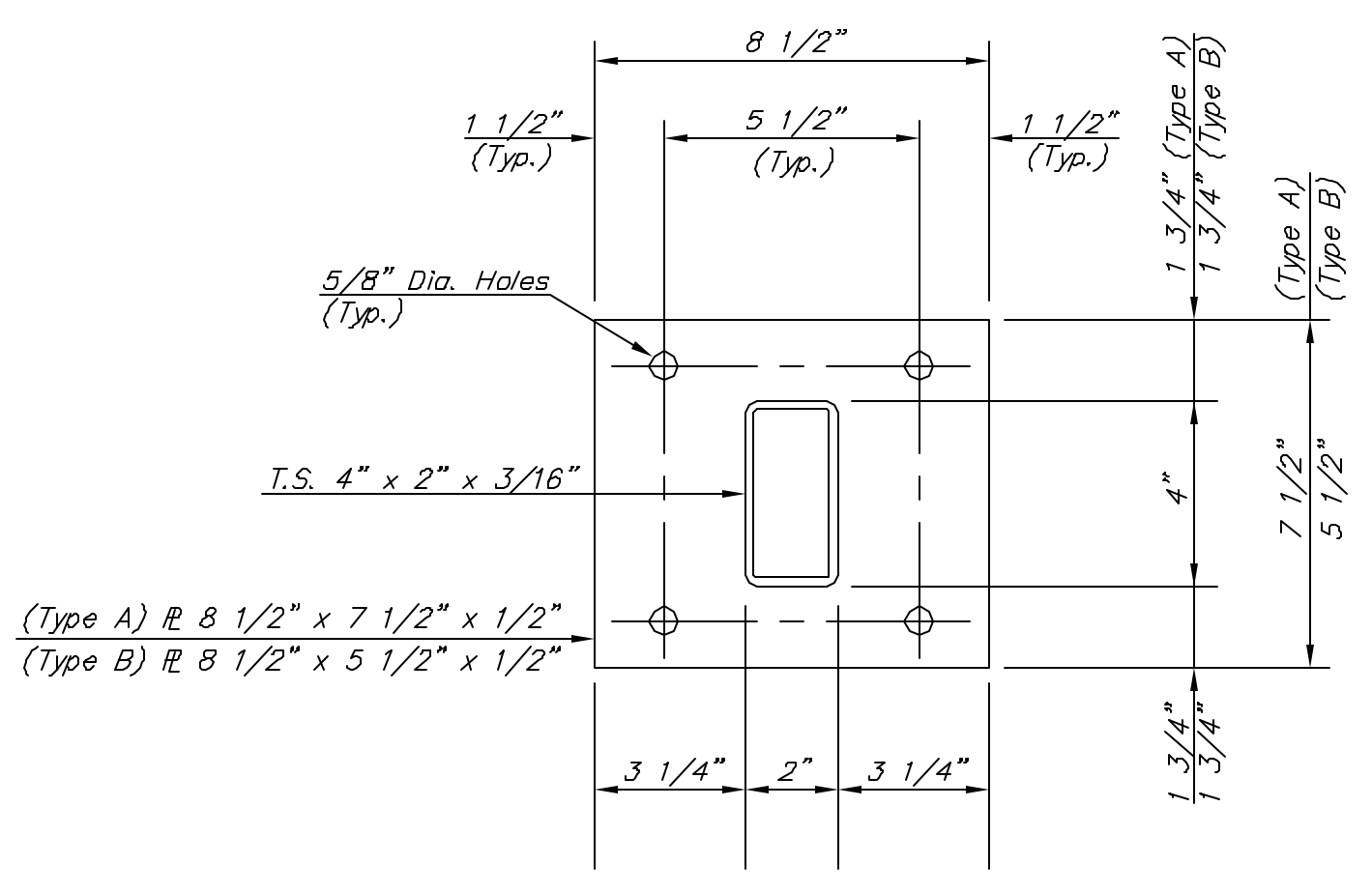
BASIS OF PAYMENT

The Bid Item "L.F. Handrail" shall include all labor, materials, anchor bolts, fabrication, installation, and ect. necessary to place the handrails as shown along the box culvert. (Both Sides)



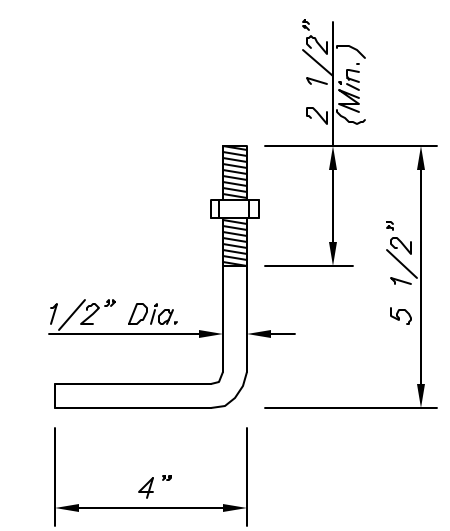
SECTION A-A

Note:
Rail Post on Hubguard shown,
Rail Posts on Wingwalls not shown
but similar controlling criteria.



BASE PLATE

5 Required (Type A)
8 Required (Type B)



Galvanized (ATSM A153)
(May Substitute expandable anchor bolts when approved by the Engineer)

ANCHOR BOLT

Orient to provide min. 2" edge clearance to either hubguard face or adjacent bolts)

GENERAL NOTES

The horizontal members of the rail and posts shall be hollow structural tubing. All structural steel and tubing shall comply to A.S.T.M. Designation A36 or A500 Grade B respectively.

Rail shall be fabricated in lengths as shown.

Posts and bars shall be set vertical and shimmed if required.

The paint system shall be provided by Carboline: 350 Hanley Industrial Ct., St. Louis, MO. The application will be in accordance with the manufacturers recommendations. The paint procedure is as follows:

1. Abrasive blast to commercial finish SSPC-SP6 to obtain a surface profile of 1-1/2 mils.
2. Apply 2 coats of Carboline GP 818 Primer (2 to 4 mils per coat).
3. Apply one topcoat of Subsil 30 HS (2 to 3 Mils) (Color Carboline -+336). An approved substitution of the total paint system will be allowed with the approval of the Engineer.

Material and construction shall conform to the Structural Welding Code A.W.S. D1.1-00.

Shop details must be submitted and approved by the Engineer.

The Handrail Shall be Painted Maroon & a Test Piece Shall Be Supplied To the Engineer Prior To Cons. For Its Approval.

CRYSTAL CREEK ADDITION HANDRAIL DETAIL CITY OF WICHITA, KANSAS			
BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING 316-282-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER 472-83818			SHEET 32
DESIGN SCL	DRAWN SCL	APPROVED NBW	DATE 12/03
			SCALE NOTED
			57

Handrail.dwg 03-07-03