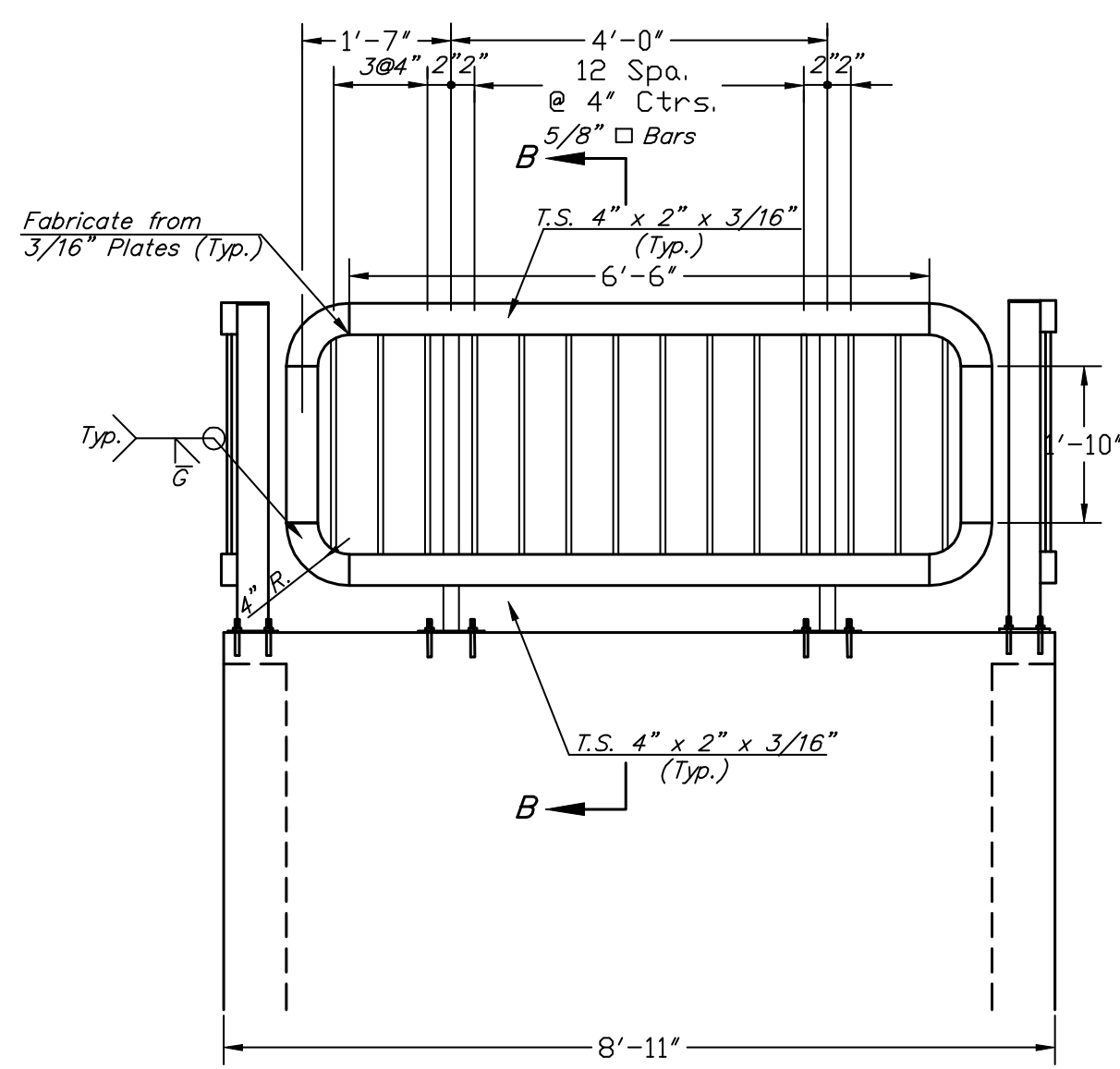
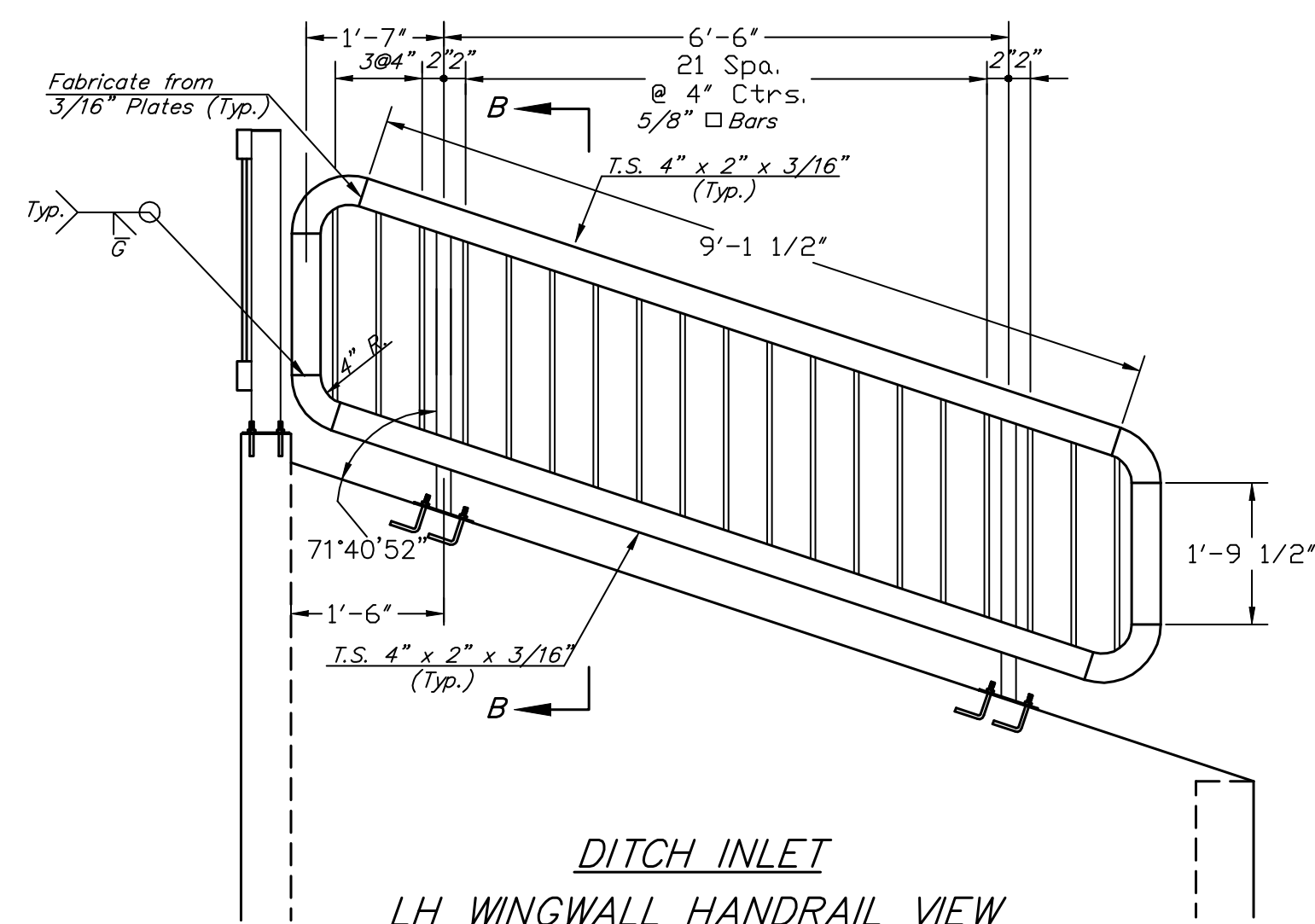


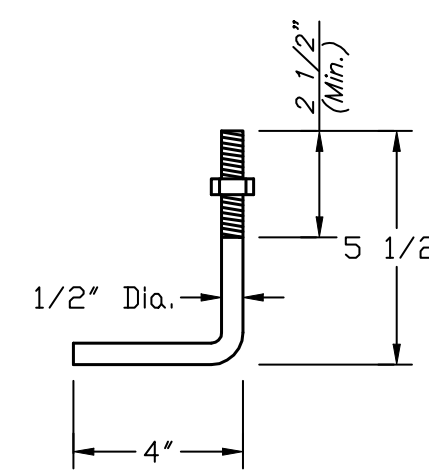
| FHWA REGION NO. | STATE  | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|-----------------|--------|-------------|-------------|-----------|--------------|
| 7               | KANSAS | 87N-0348-01 | 2007        | 49        | 135          |



**DITCH INLET  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'

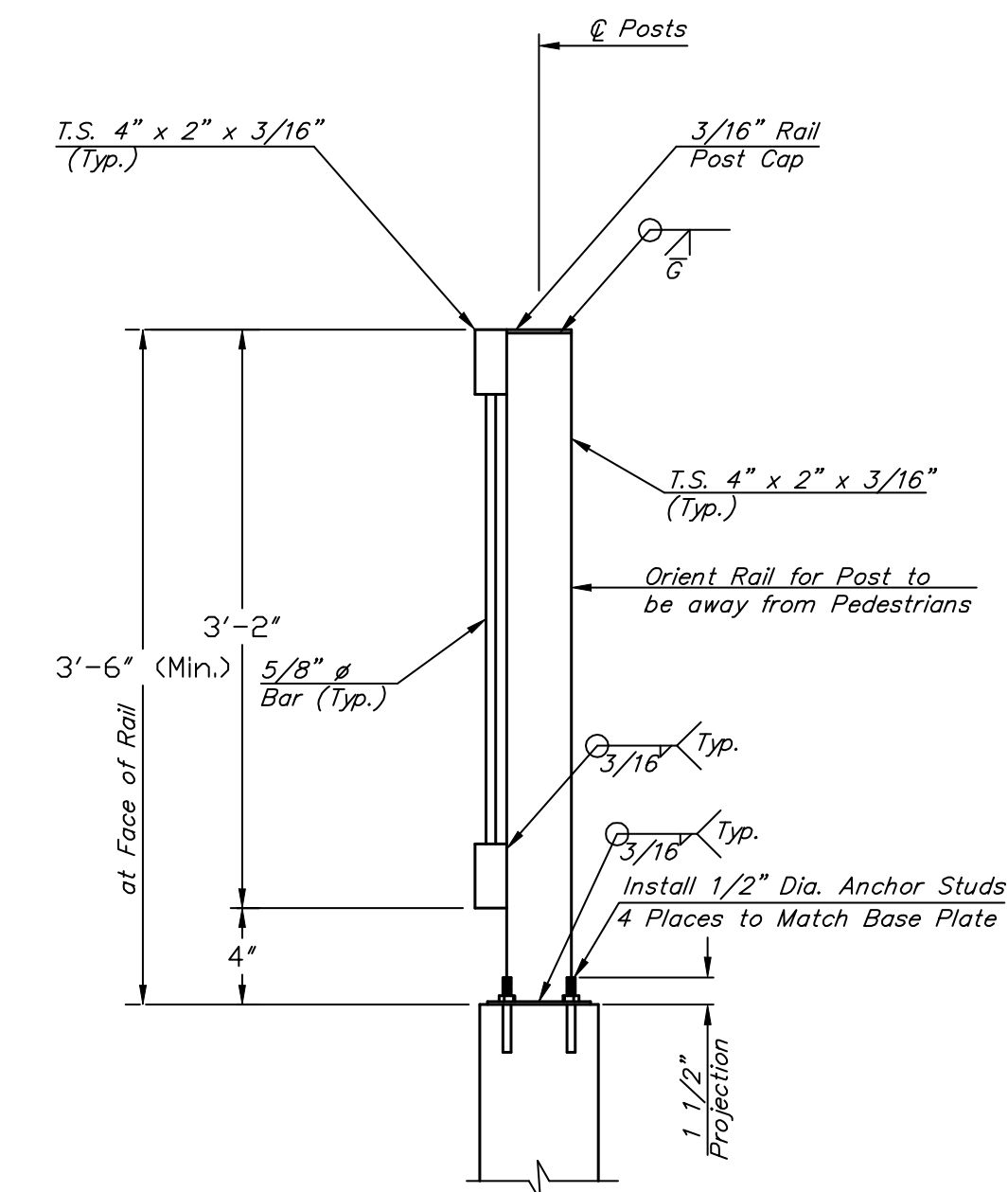


**DITCH INLET  
LH WINGWALL HANDRAIL VIEW  
(shown)  
RH WINGWALL HANDRAIL VIEW  
(opp)**  
Scale 1/2" = 1'

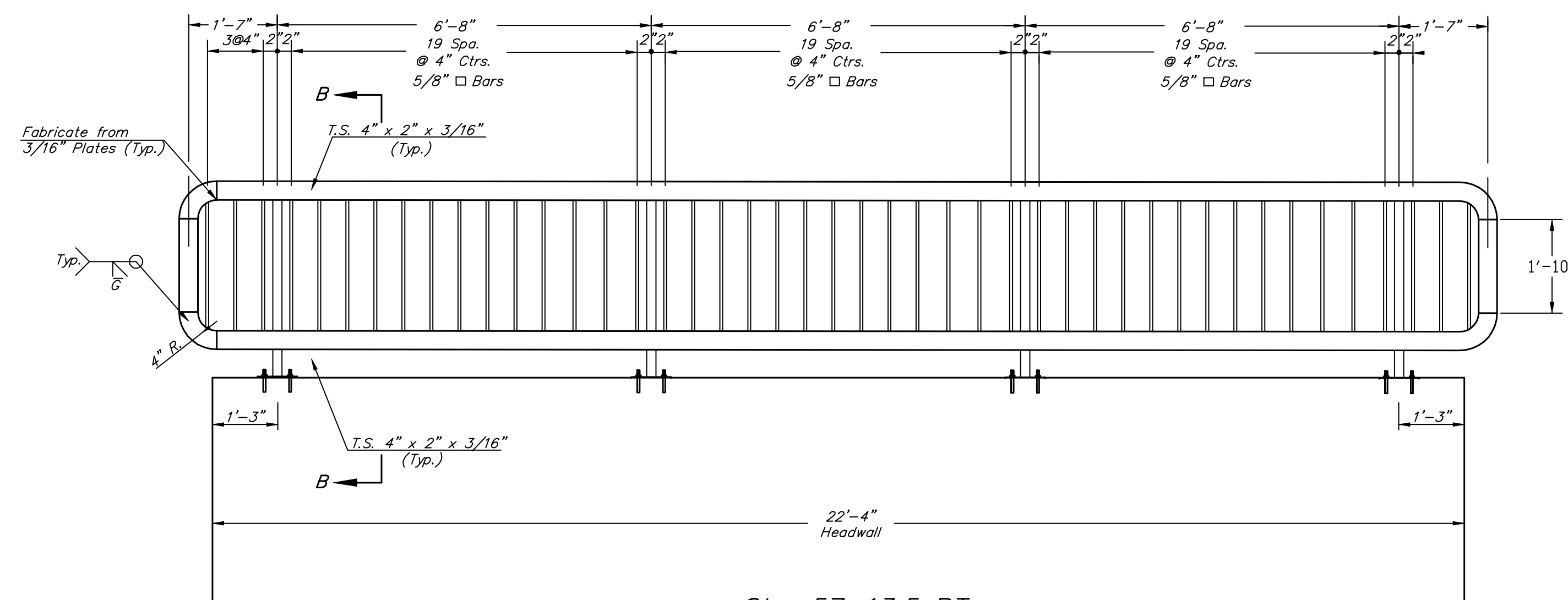


Galvanized (ATSM A153)  
(May Substitute expandable anchor bolts when approved by the Engineer)

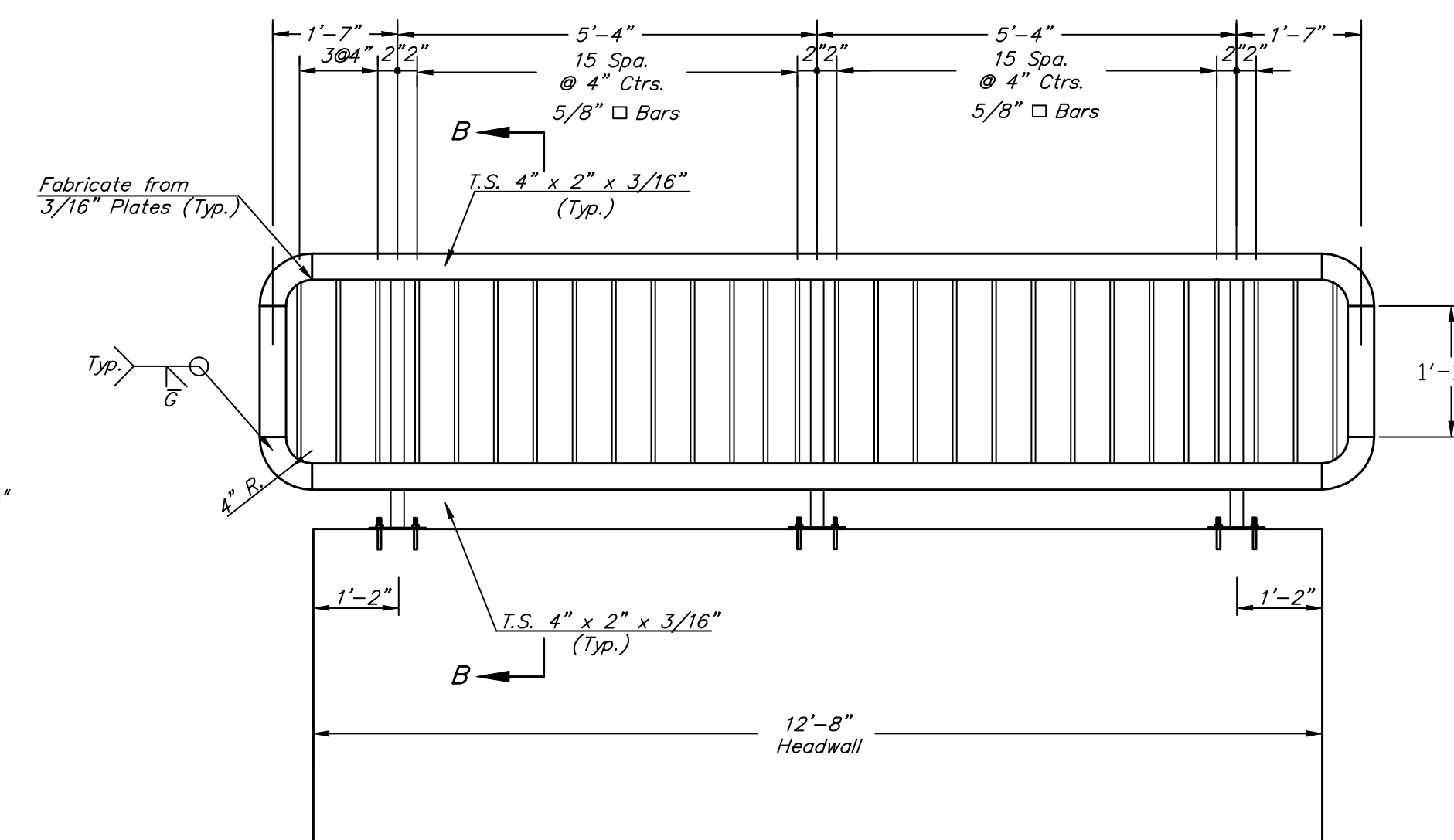
**ANCHOR BOLT**  
Scale 2 1/2" = 1'  
Orient to provide min. 2" edge clearance to either wall face or adjacent bolts



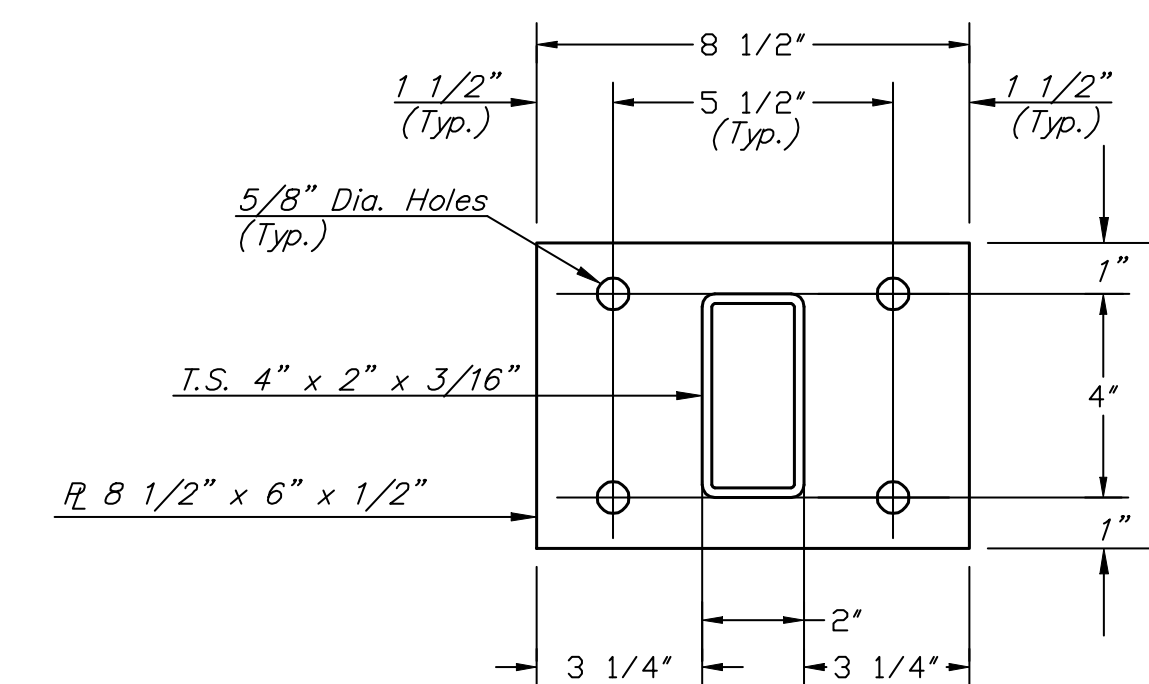
**SECTION B-B**  
Scale 1" = 1'



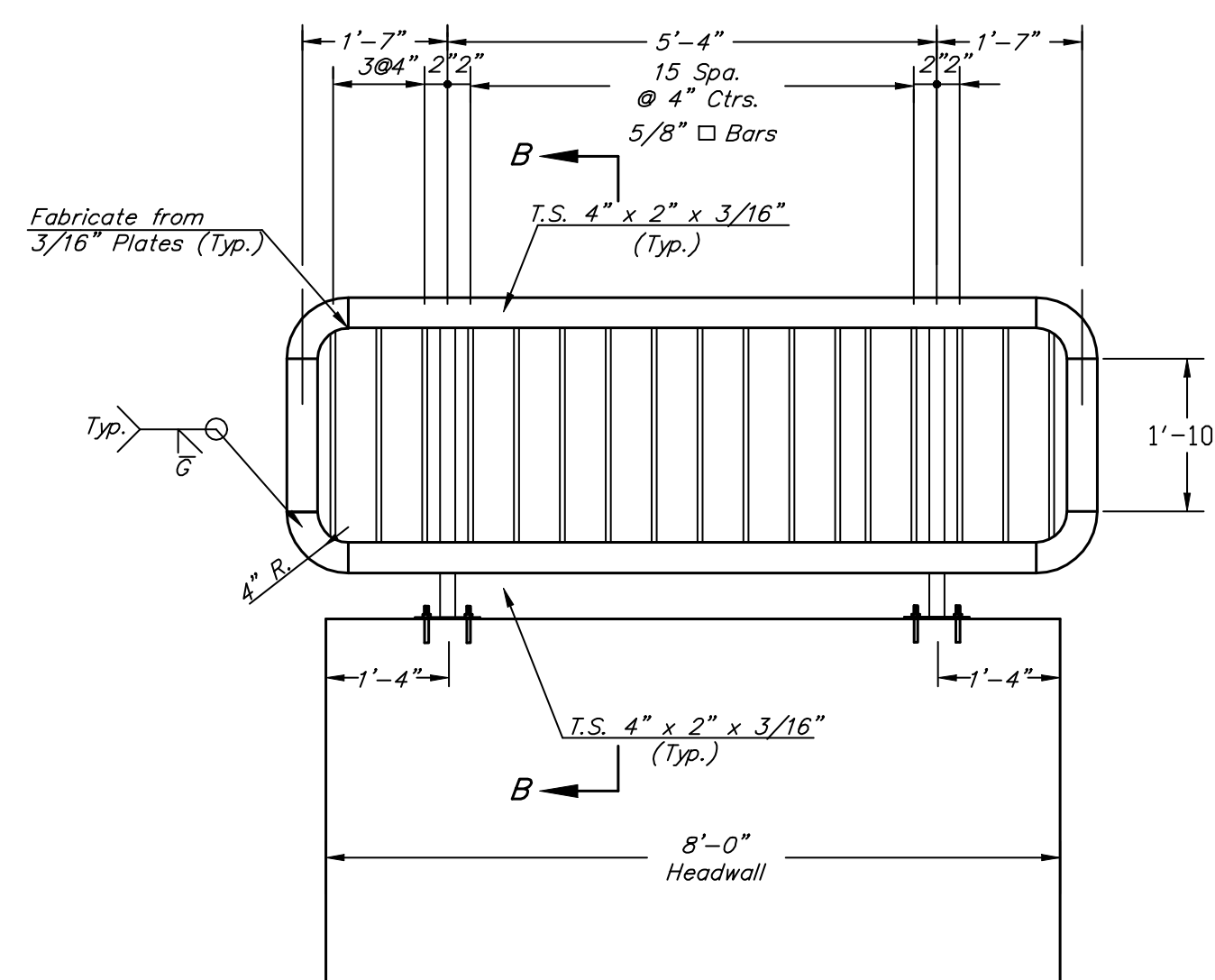
**Sta. 57+13.5 RT  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'



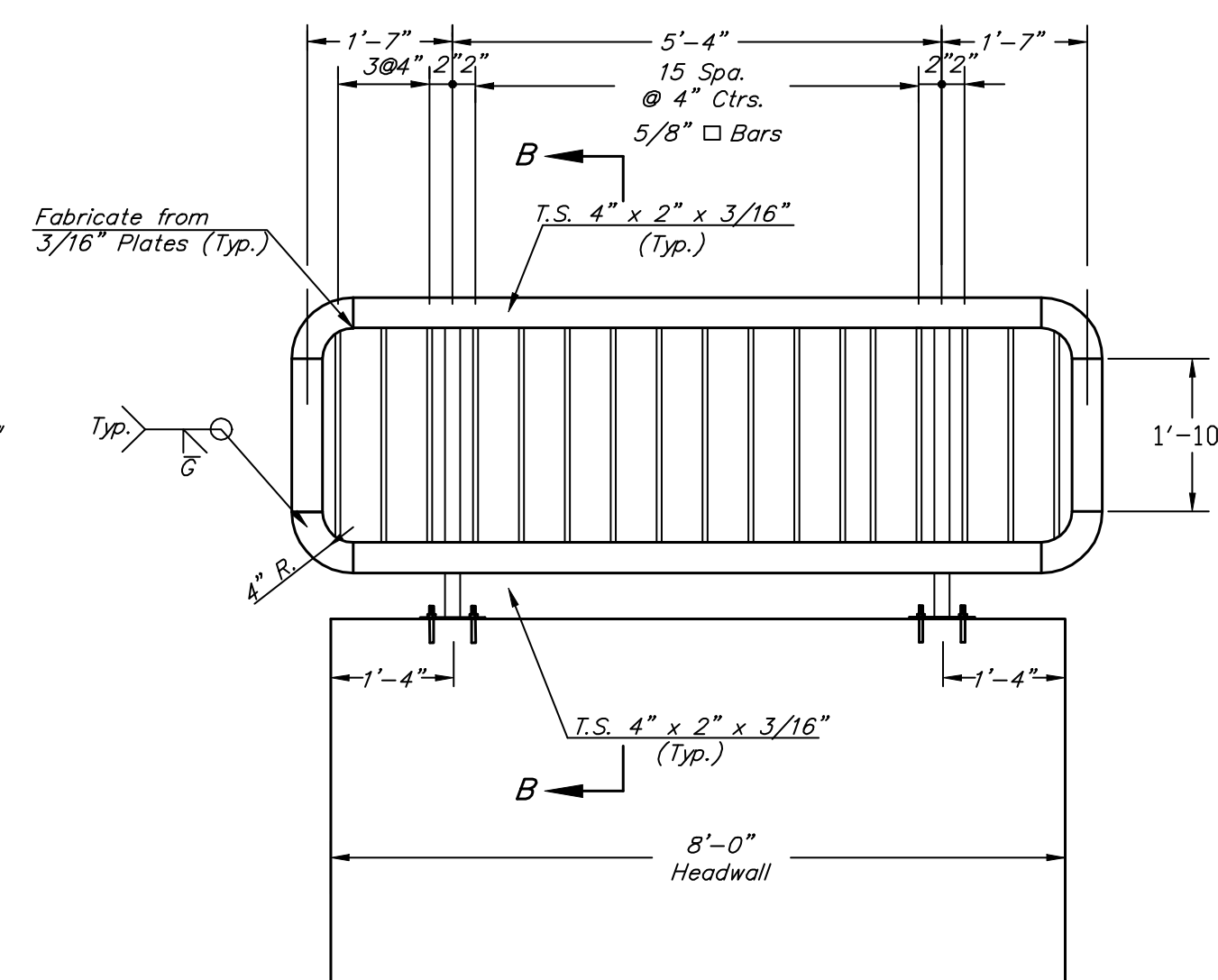
**Sta. 49+51 LT  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'



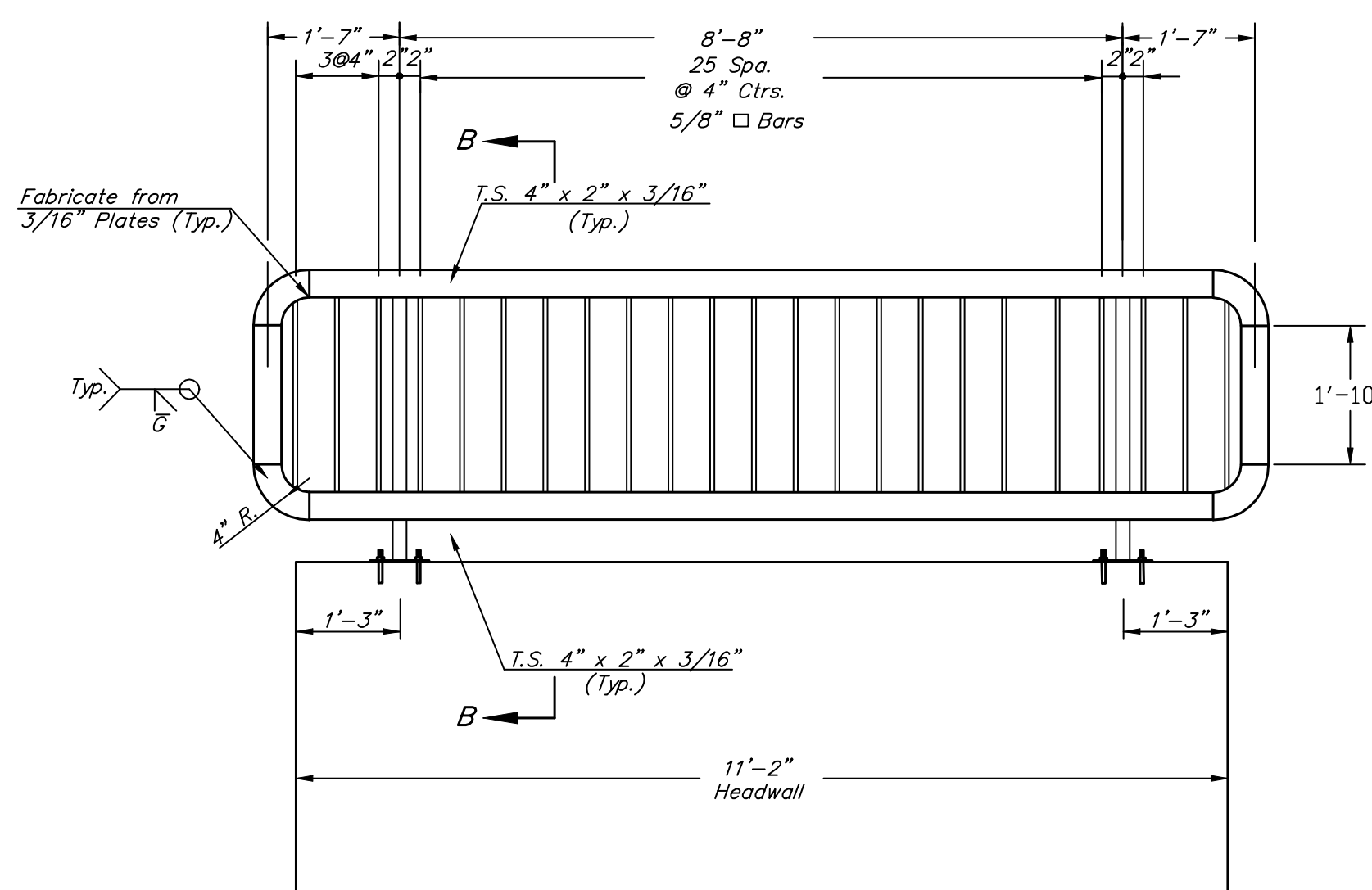
**BASE PLATE**  
Scale 3" = 1'



**Sta. 62+59.99 LT  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'



**Sta. 62+62.33 RT  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'



**Sta. 57+18.5 LT  
HEADWALL HANDRAIL VIEW**  
Scale 1/2" = 1'

**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 handrail shall be painted shop and field with an inorganic zinc-vinyl paint system complying with the Standard Specifications for State Road and Bridge Construction, 1990 Edition Kansas Department of Transportation.

All Handrail Components shall be painted BLACK (c900-Carboline)

Material and construction shall conform to the Structural Welding Code A.W.S. D1.1-88.

Shop details must be submitted and approved by the Engineer.

Drawing File: F:\ENG\29TH MAIZE\119TH\DETAILS  
Project No. 0403-EB28 CAPITAL IMPROVEMENT PROJECT  
Design: KK  
Drawn: AZIERE  
Approved: JFB  
Scale: NOTED

**HANDRAIL DETAILS**

29TH STREET PAVING PROJECT MAIZE TO 119TH STREET

**Baughman Company, P.A.**  
315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149  
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

MARCH, 2007  
SHEET  
49  
OF  
135