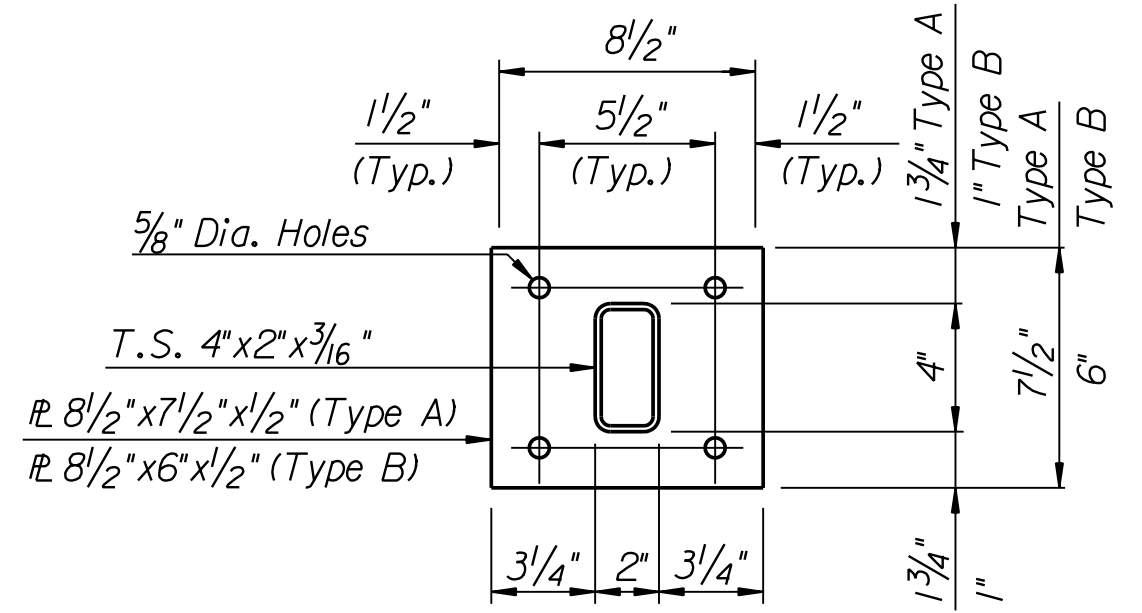
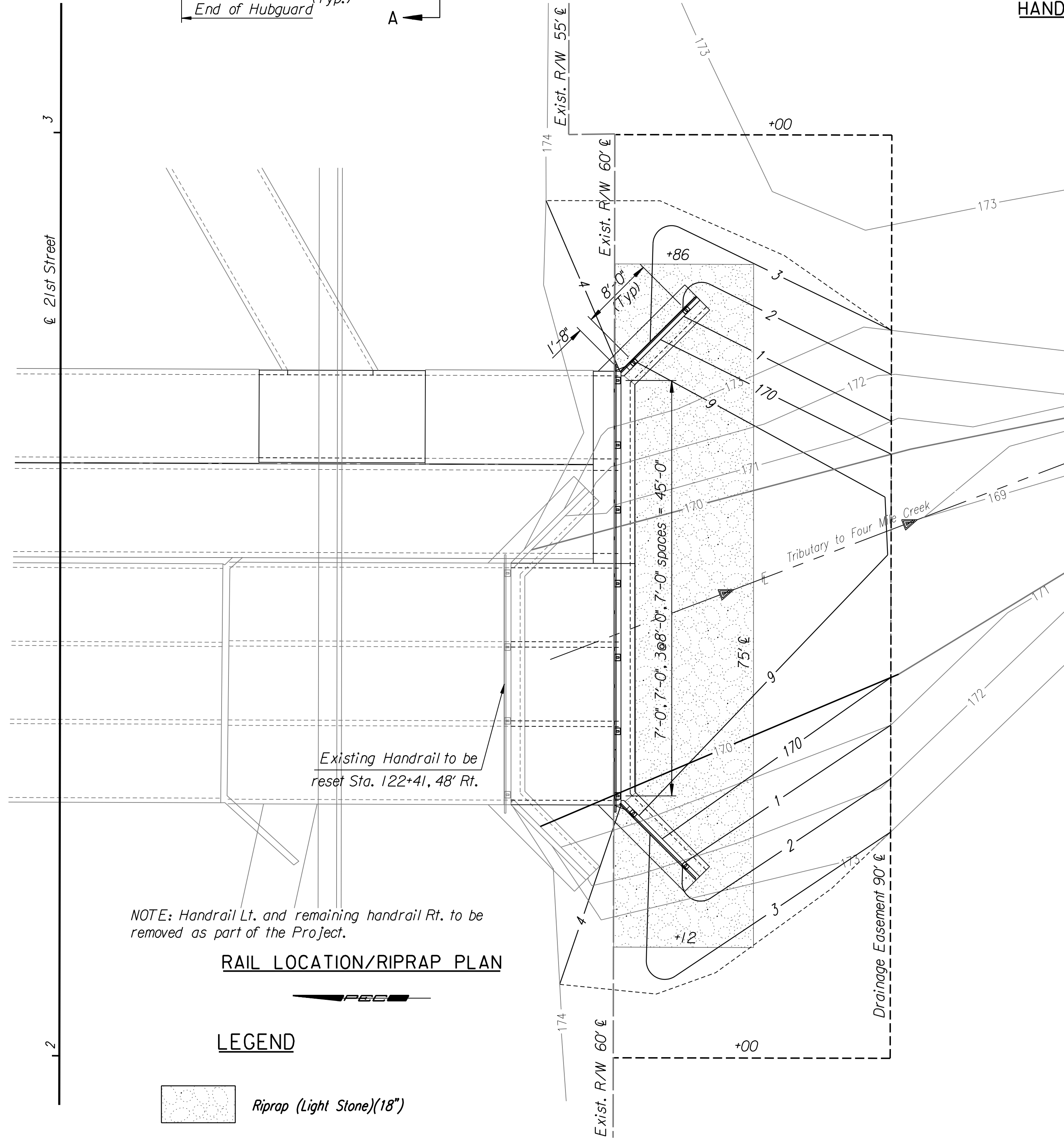


**HANDRAIL ELEVATION**  
(Looking south)



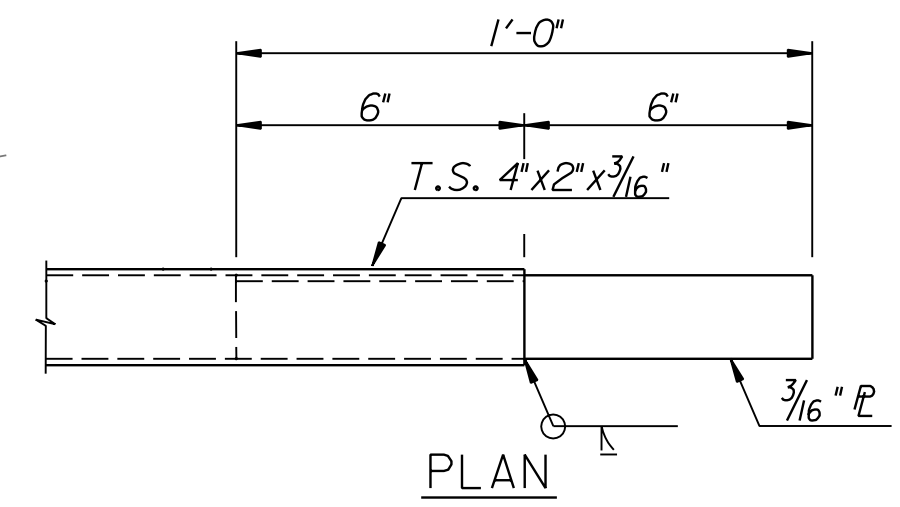
**BASE PLATE DETAIL**  
3 Required (Type A)  
4 Required (Type B)



**RAIL LOCATION/RIPRAP PLAN**

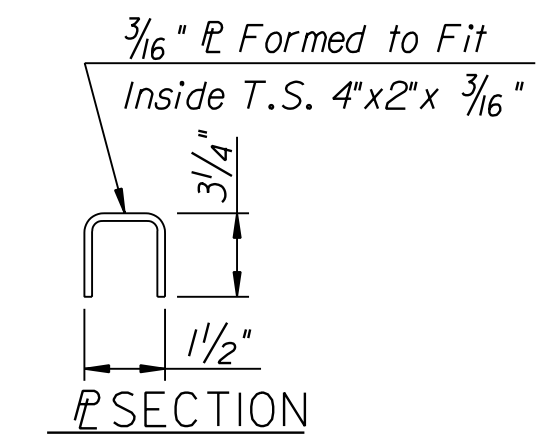
**LEGEND**

Riprap (Light Stone)(18")



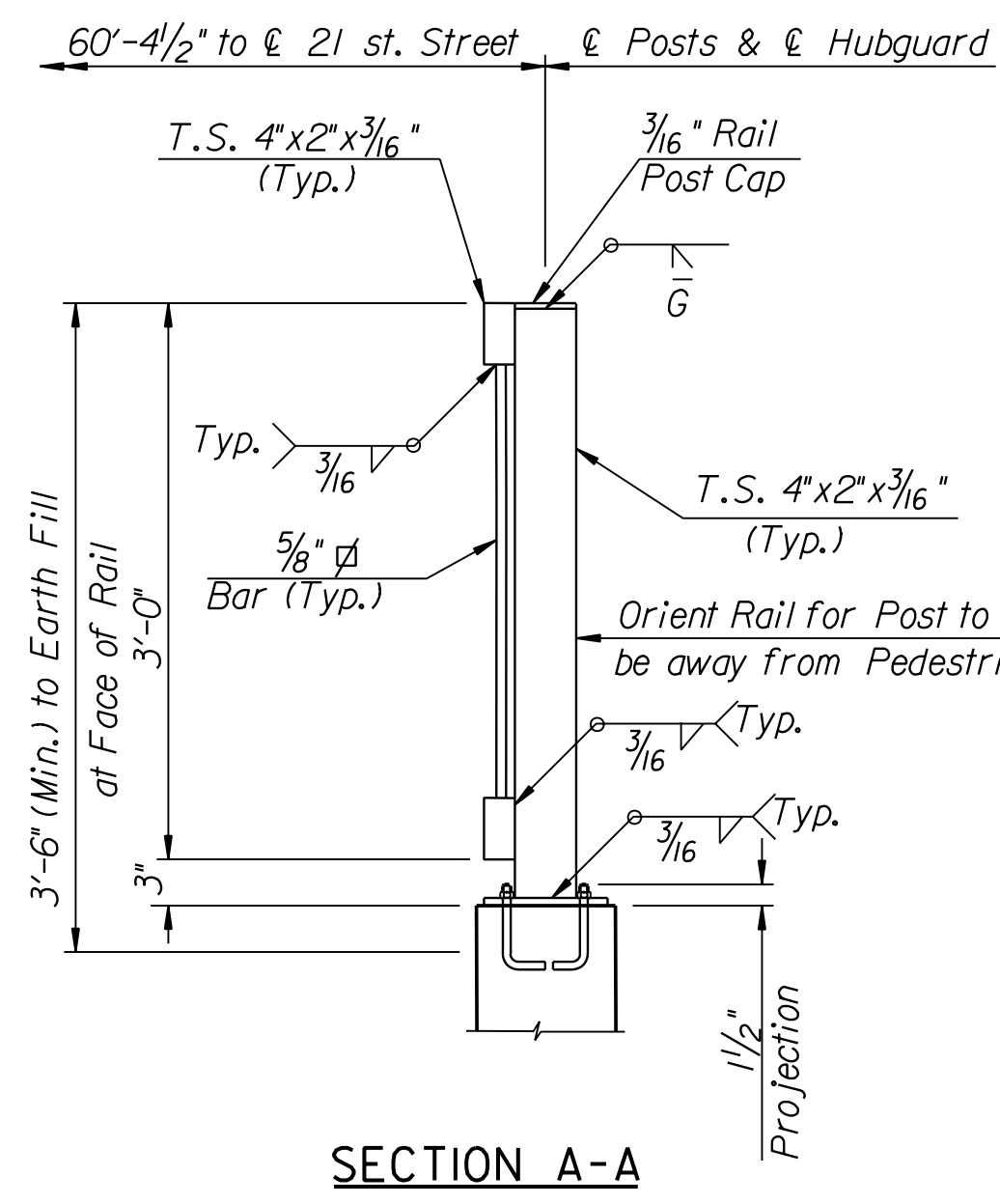
**SLIDING JOINT DETAIL**

NOTE: Sliding joints, when required, on interior panels shall be centered 2'-0" from posts.  
(4 Required Max.) (Reuse sliding joints if applicable)



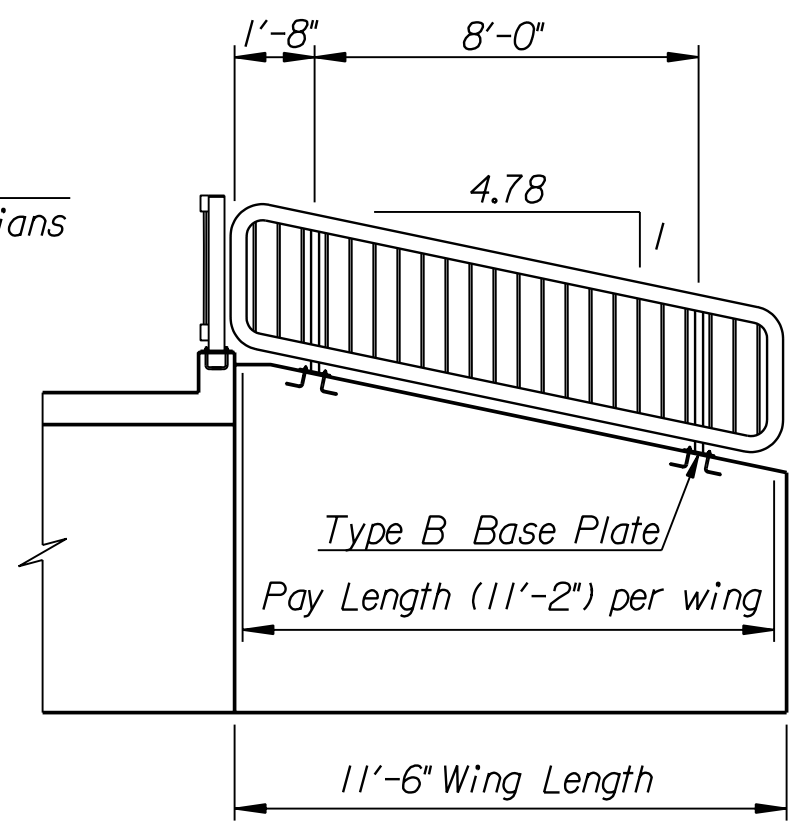
**ANCHOR BOLT**

Galvanized (ASTM A153)  
(Orient to provide min. 1/2" edge clearance to either hubguard face/wingwall face or adjacent bolts)  
(44 Required) (May substitute expandable anchors when approved by the Engineer.)



**SECTION A-A**

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



**TYPICAL WING**

(2 Required)  
See Handrail Elevation for Typical Details

**GENERAL NOTES**

- THE HORIZONTAL MEMBERS OF THE RAIL AND POSTS SHALL BE HOLLOW STRUCTURAL TUBING. ALL STRUCTURAL STEEL TUBING SHALL COMPLY TO A.S.T.M. DESIGNATION A36 OR A500 GR. B RESPECTIVELY.
- RAIL SHALL BE FABRICATED IN LENGTHS AS SHOWN FROM JOINT TO JOINT AND JOINT TO END.
- POSTS AND BARS SHALL BE SET VERTICAL AND SHIMMED IF REQUIRED.
- EXISTING HANDRAIL, AS DEPICTED IN PLAN VIEW, FROM JOINT TO JOINT WILL BE REMOVED, SANDBLASTED, PAINTED AND RESET AS SHOWN. THIS WORK WILL BE SUBSIDIARY TO THE BID ITEM "HANDRAIL/STRUCTURAL STEEL".
- PRIOR TO PAINTING ABRASIVE BLAST TO COMMERCIAL FINISH SSPC-SP6 TO OBTAIN A SURFACE PROFILE OF 1 1/2 MILS. THE SHOP AND FIELD COATS APPLIED TO STRUCTURAL STEEL SHALL CONFORM TO AN INORGANIC ZINC PRIMER WITH A WATER-BORNE ACRYLIC FINISH COAT. (THE FINISH COAT SHALL MATCH CARBOLINE #0516).
- MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE STRUCTURAL WELDING CODE A.W.S. D1.1-01.
- SHOP DETAILS MUST BE SUBMITTED AND APPROVED BY THE ENGINEER.
- SLOPE OF HANDRAIL SHALL MATCH THE SLOPE OF THE WINGWALL.
- EXISTING HANDRAIL SHALL BE REMOVED AS PER SPECIFICATIONS.
- NEW HANDRAIL MAY BE SUBSTITUTED FOR THE RESET HANDRAIL WITH NO ADDITIONAL PAYMENT.
- ALL WORK ASSOCIATED WITH FURNISHING, REHABILITATING AND INSTALLING HANDRAIL SHALL BE PAID FOR AS "HANDRAIL/STRUCTURAL STEEL".

HANDRAIL (STRUCTURAL STEEL) 40.5 L.F.

Revisions		By	Date
No.			
CITY OF WICHITA, KANSAS JAMES L. ARMOUR, P.E.-ACTING CITY ENGINEER Str. No. 614-33-4506 PEDESTRIAN RAIL AND RIPRAP SWD #225 Proj. No. 468-83775 SEDGWICK CO.			
<b>Professional Engineering Consultants, P.A.</b> 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	R.A.S.	Checked by	M.S.N.
Drawn by	R.A.S.	Date	Mar. 2004
		Job No.	04106