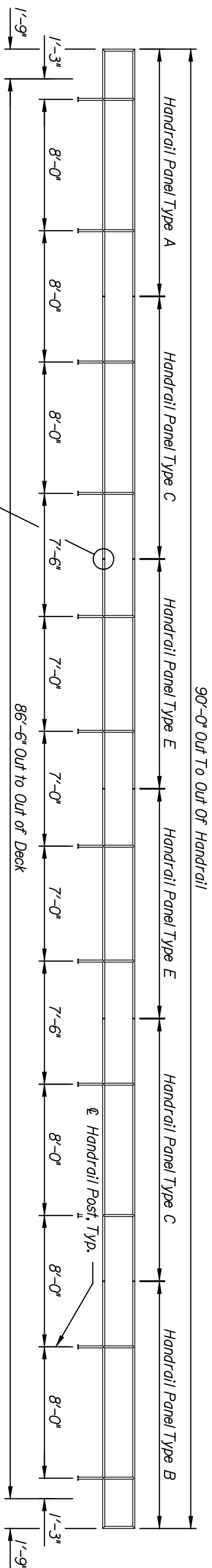
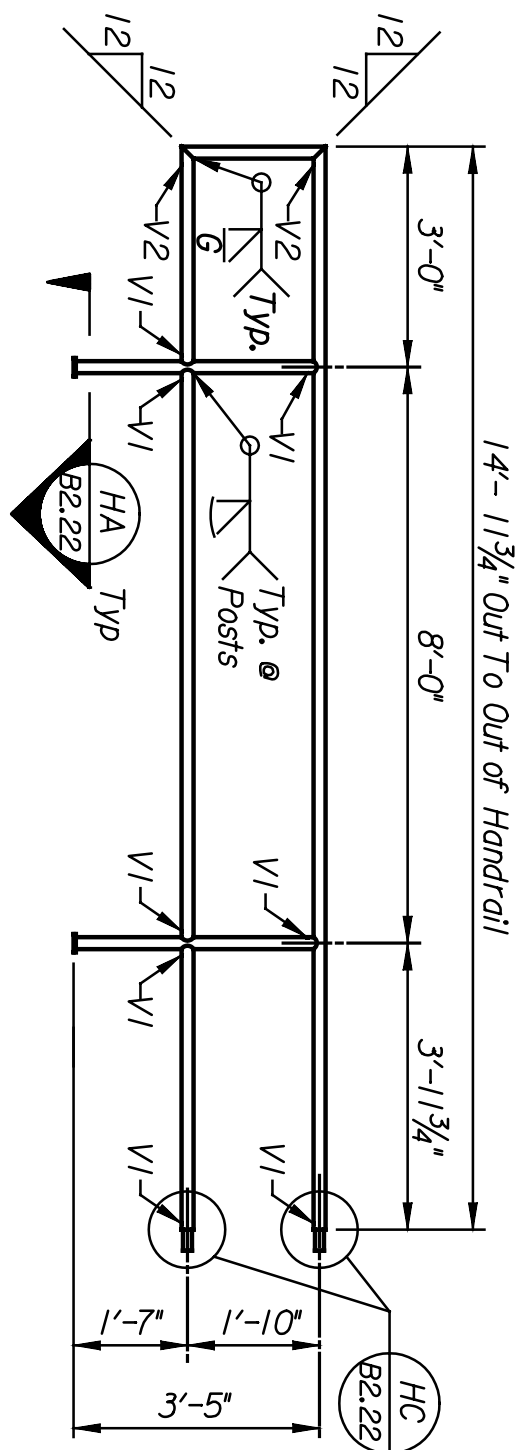


DATE	BY

Plotted on: 04-JAN-2005 13:02 \*time\$  
 dJamison Plot Queue: #queue\$  
 Plot Scale: #scale\$ Pen Table: #pentables  
 Design Filename: k:\b29049\BridgesDec2004\Base Bld\13thStreet\drawings\t20.dgn.

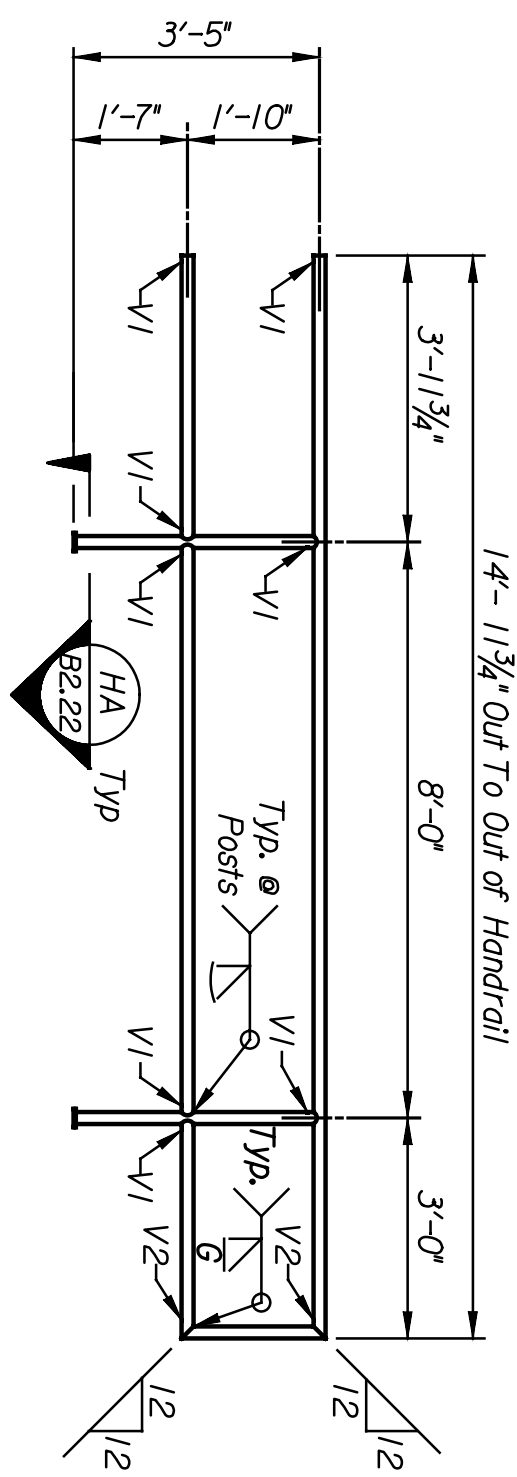


**HANDRAIL ELEVATION (TYPE 2)**  
 Scale:  $\frac{3}{8}'' = 1'-0''$



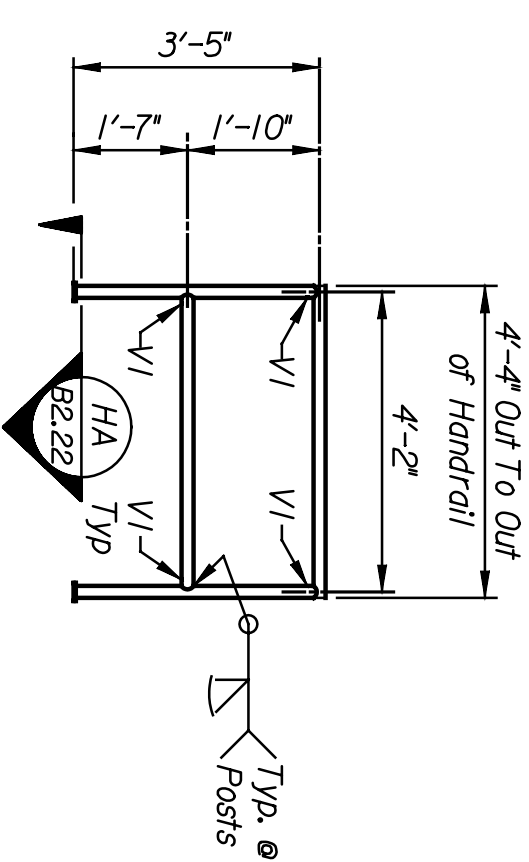
**HANDRAIL PANEL TYPE A**

No. Required = 1  
 Weight = 105 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$



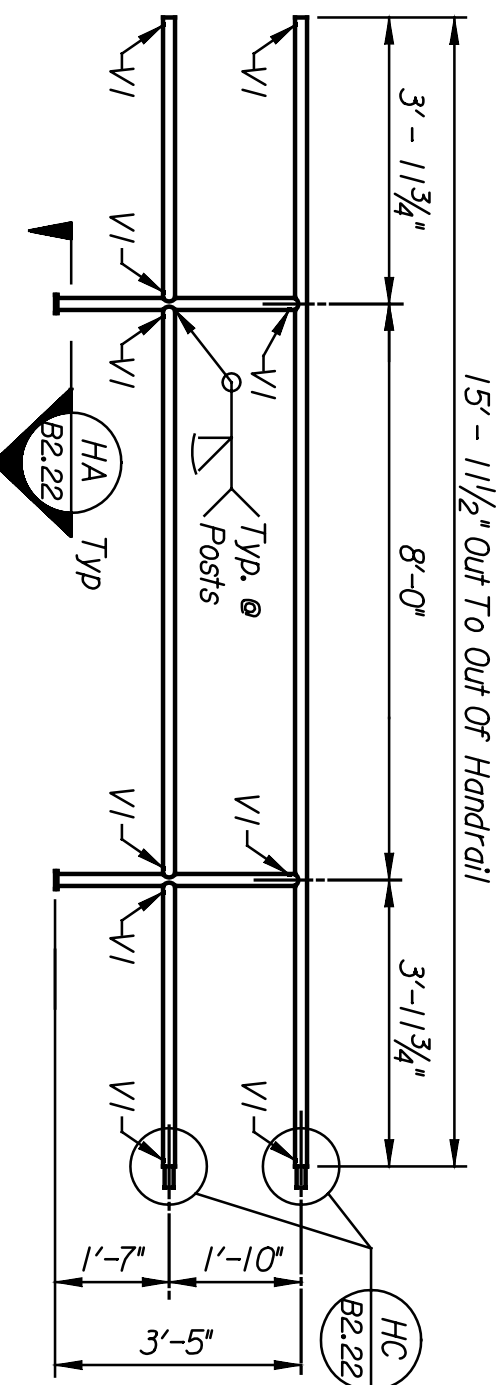
**HANDRAIL PANEL TYPE B**

No. Required = 1  
 Weight = 105 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$



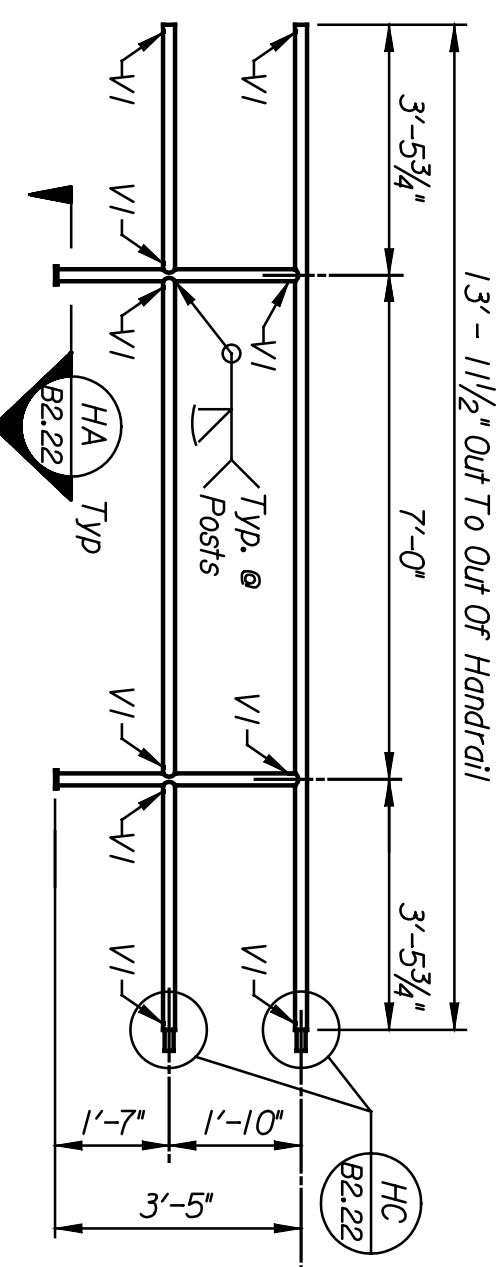
**HANDRAIL PANEL (TYPE 2A)**

No. Required = 4  
 Weight = 41 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$



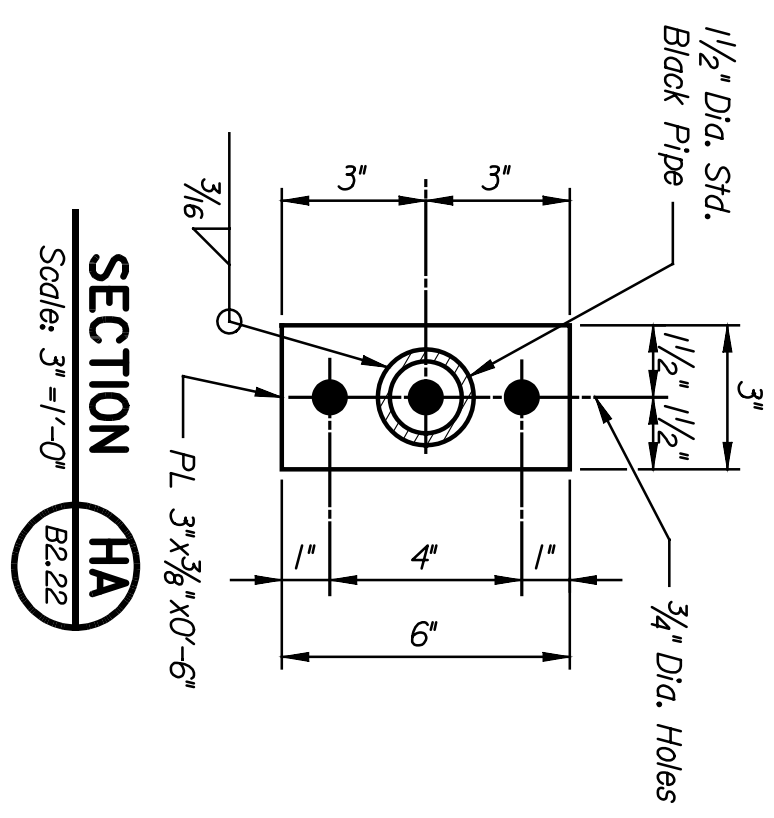
**HANDRAIL PANEL TYPE C**

No. Required = 2  
 Weight = 106 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$

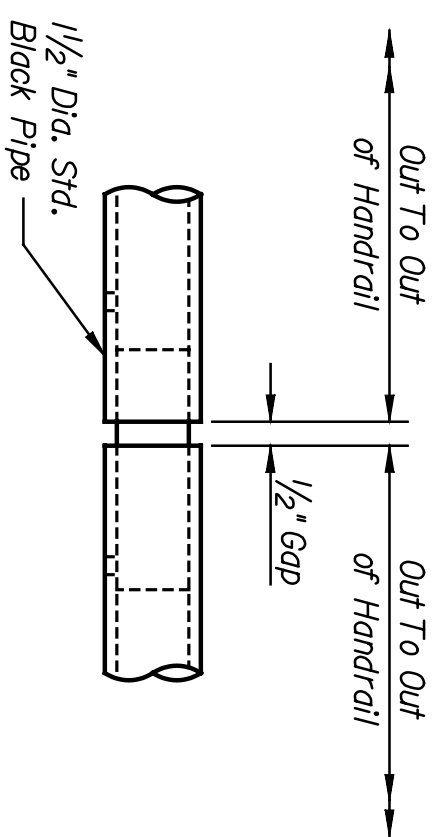


**HANDRAIL PANEL TYPE E**

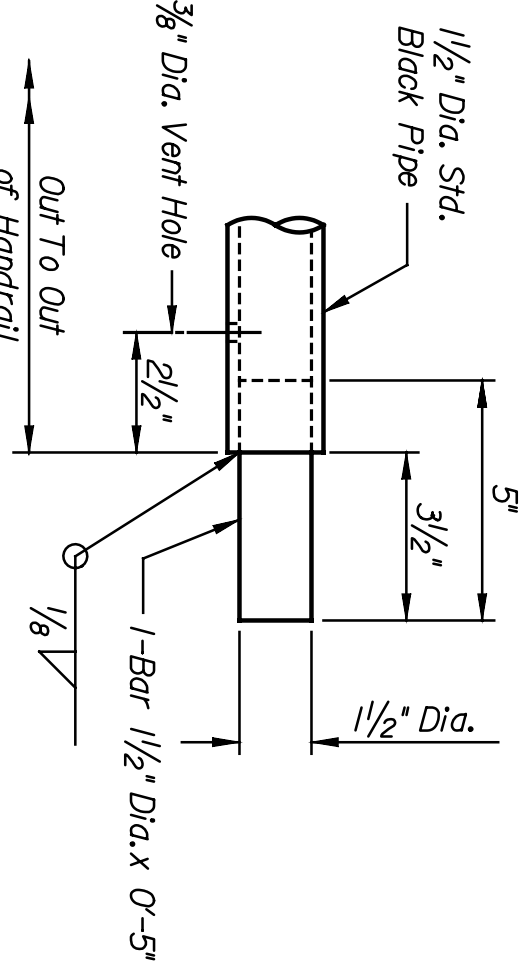
No. Required = 2  
 Weight = 96 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$



**SECTION HA**  
 Scale:  $3'' = 1'-0''$



**SECTION HB**  
 Scale:  $3'' = 1'-0''$



**SECTION HC**  
 Scale:  $3'' = 1'-0''$

This sheet designed by:



ARCHITECTS ENGINEERS PLANNERS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84071	2005	B2.22	

**NOTES:**

- Welding shall conform to the AREMA Manual for Railway Engineering and the Bridge Welding Code, AWS D1.5M/D1.5.
- All weld metal shall be equivalent to the base metal in strength, corrosion resistance and painted appearance.
- All pipe welds shall be made with the MIG process.
- All steel pipes shall be uncoated and conform to ASTM A53.
- All structural steel shall conform to ASTM A36 or A709, Gr. 50.
- Concrete anchors for Handrails Type 2A shall be approved by the Engineer.
- Handrails, hardware and appurtenances shall be galvanized in accordance with ASTM A123 or A153 after fabrication.
- After galvanizing, all elements shall be free of fins, abrasions, rough or sharp edges and other surface defects.

SHEET NO. OF		SCALE AS NOTED		APP'D.	
DESIGNED BY	FRID	DETAILED BY	QUANTITIES	DRAWN	TRACED
DESIGN GR.		DATE	BY	APPR'D.	
<b>CITY OF WICHITA</b> <b>WICHITA CENTRAL CORRIDOR</b> <b>13TH STREET</b> <b>BRIDGE HANDRAIL (TYPE 2, 2A)</b>					
LOCATION:	LINE SEGMENT		MICHITA, KS		
PROJECT:	BRIDGE		2008		