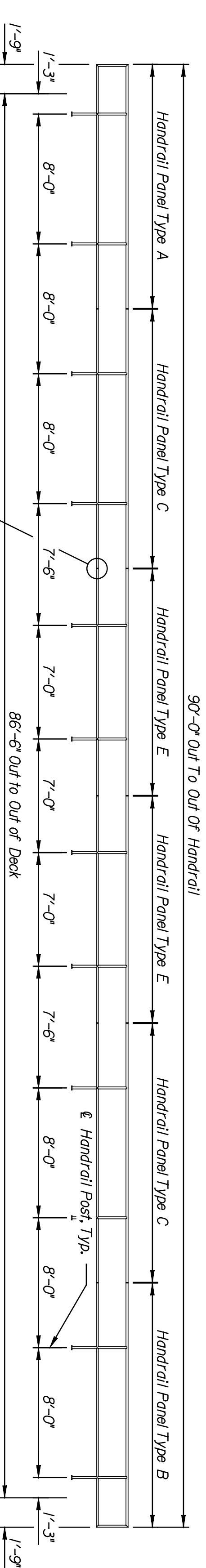
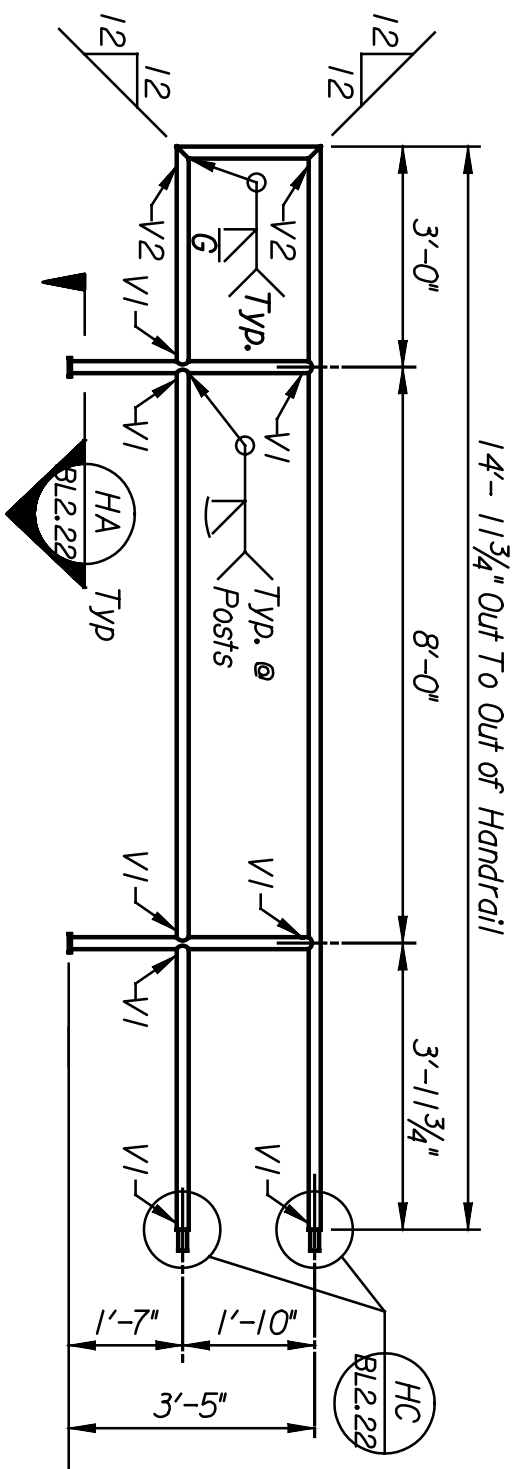


DATE	BY

Plotted on: 04-JAN-2005 11:42  
 scindrell Plot Queue: #queue#  
 Plot Scale: #scale# Pen Table: #pentables  
 Design Filename: k:\b29049\BridgesDec2004\Ballard Lighting Alternate\13thStreet\drawings\t20.dgn.

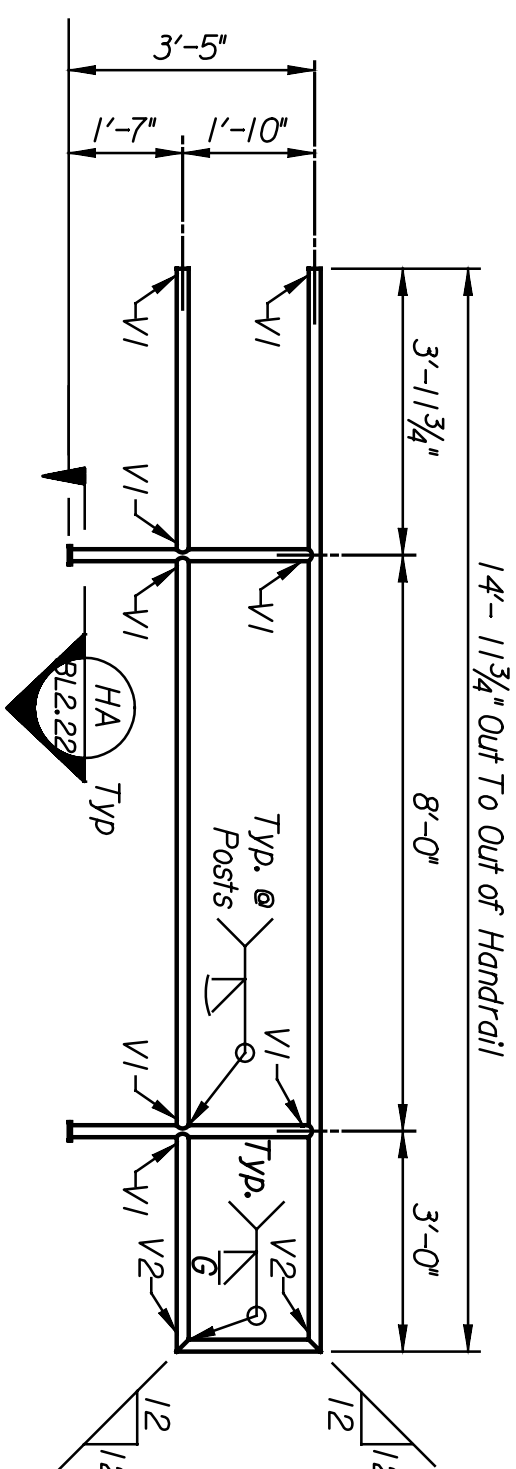


**HANDRAIL ELEVATION (TYPE 2)**  
 Scale:  $\frac{3}{16}'' = 1'-0''$



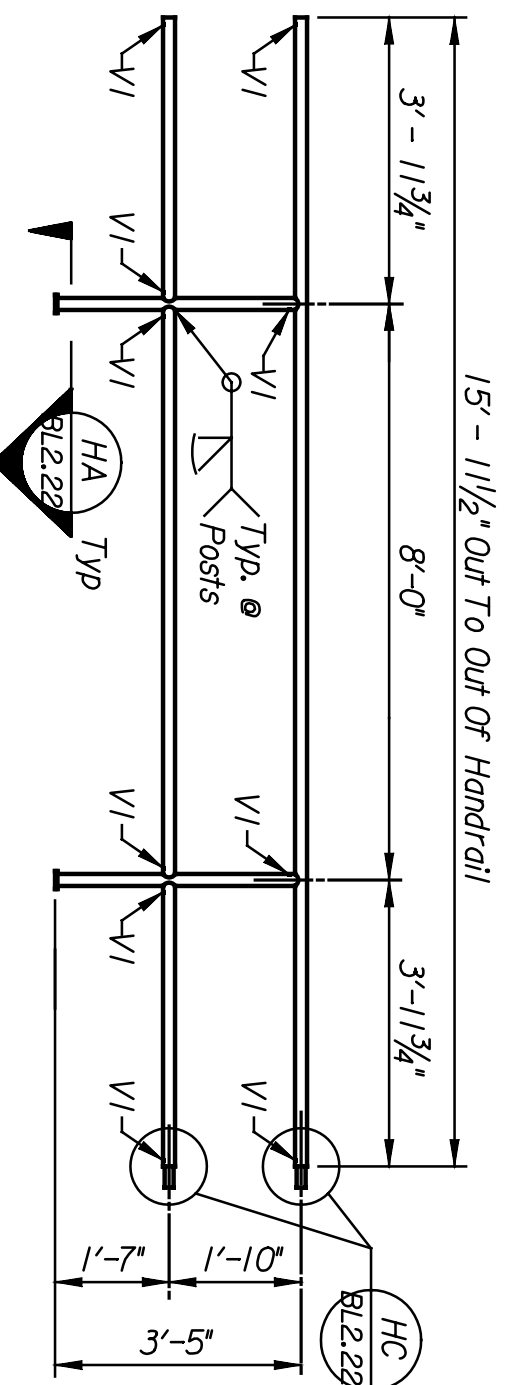
**HANDRAIL PANEL TYPE A**

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



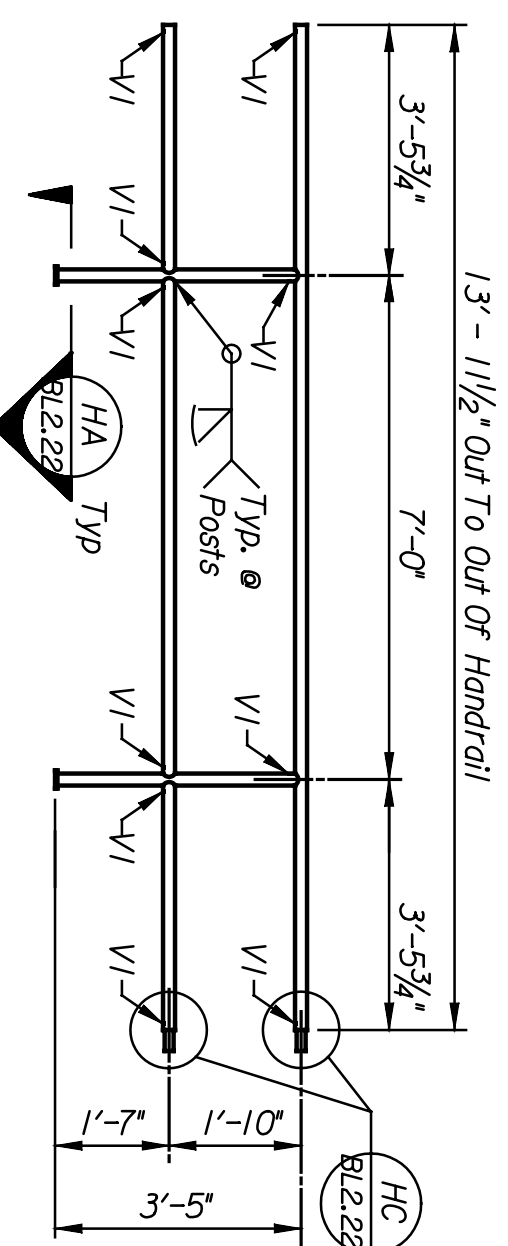
**HANDRAIL PANEL TYPE B**

No. Required = 1  
 Weight = 105 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$   
 V1 = 3/8" Dia. Drilled Vent Hole 1" From Joint unless noted otherwise.  
 V2 = 1/2" Dia. Drilled Vent Hole 1" From Vent.



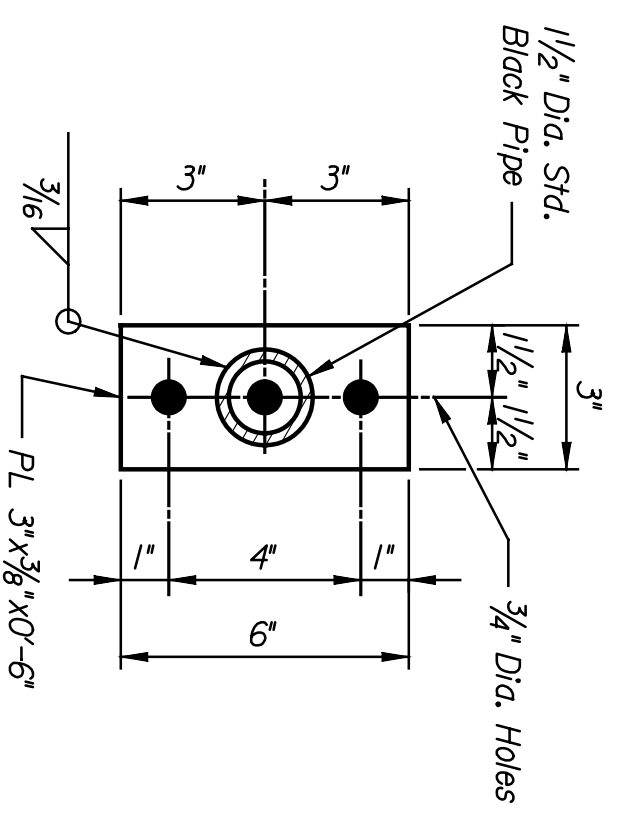
**HANDRAIL PANEL TYPE C**

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

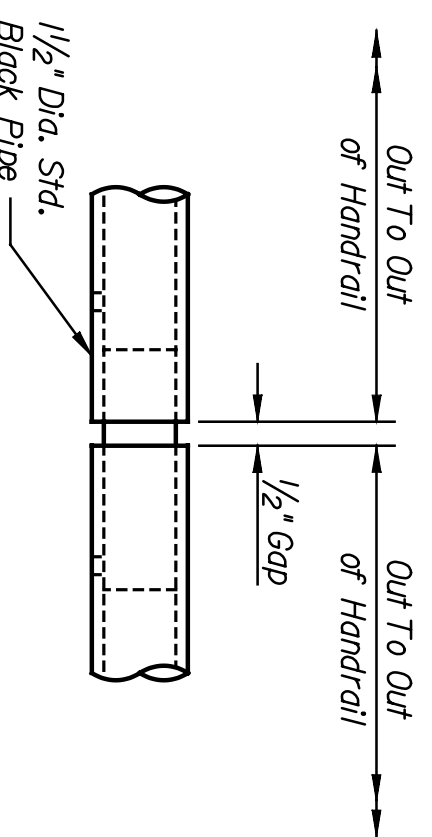


**HANDRAIL PANEL TYPE E**

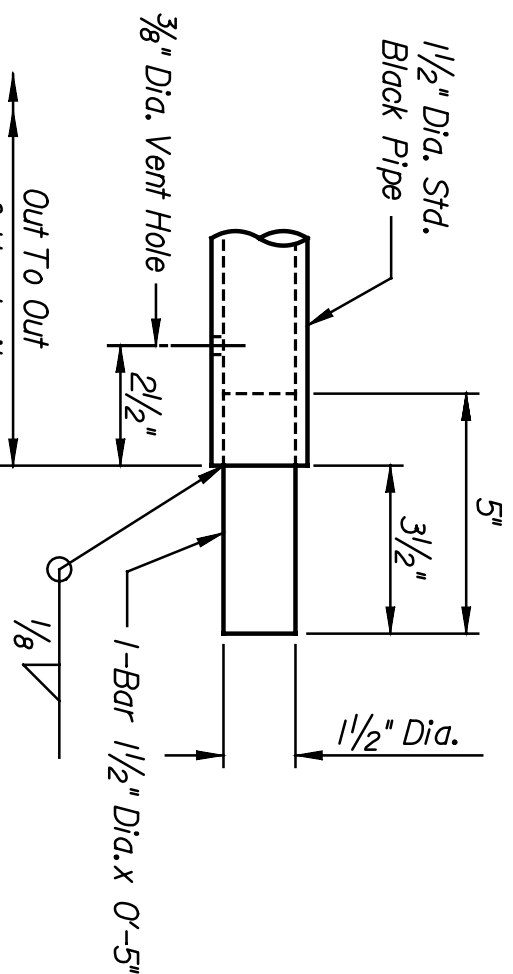
No. Required = 2  
 Weight = 96 Lbs. Each  
 Handrail Panels are to be fabricated using  
 1/2" Dia. std. Black Pipe.  
 (Galvanize after fabrication)  
 Scale:  $\frac{3}{8}'' = 1'-0''$



**SECTION HA**  
 Scale:  $3'' = 1'-0''$   
 BL222



**SECTION HB**  
 Scale:  $3'' = 1'-0''$   
 BL222



**SECTION HC**  
 Scale:  $3'' = 1'-0''$   
 BL222

This sheet designed by:



ARCHITECTS ENGINEERS PLANNERS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84071	2005	BL222	

**NOTES:**

Welding shall conform to the APEMA 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.  
 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.

LOCATION: RWSF BR. 201A	WICHITA, KS	LINE SEGMENT 7400
SHEET NO. OF	SCALE AS NOTED	APPD.
DESIGNED: FKO	DETAILED: DUJ	QUANTITIES: DJL
DESIGN: GK	DETAILED: GK	QUANTITIES: DMH
	EDT	TRAFFIC: GK
		DMH
<b>CITY OF WICHITA</b> <b>WICHITA CENTRAL CORRIDOR</b> ALTERNATE 5 <b>13TH STREET</b> <b>BRIDGE HANDRAIL (TYPE 2)</b>		
REVISIONS NO. DATE BY APPD.		
3		
2		
1		