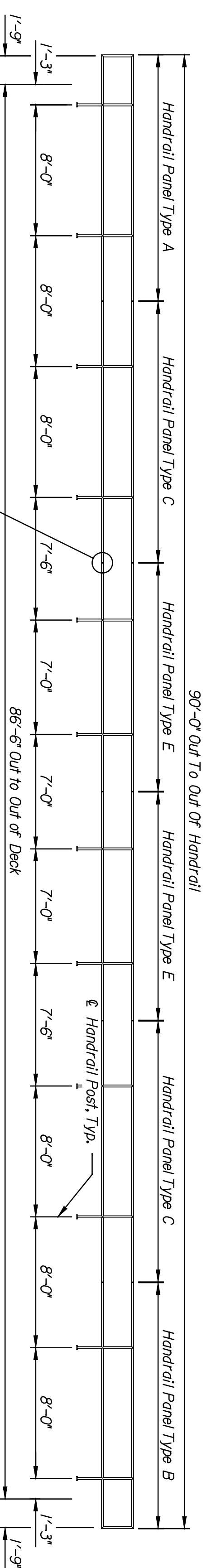
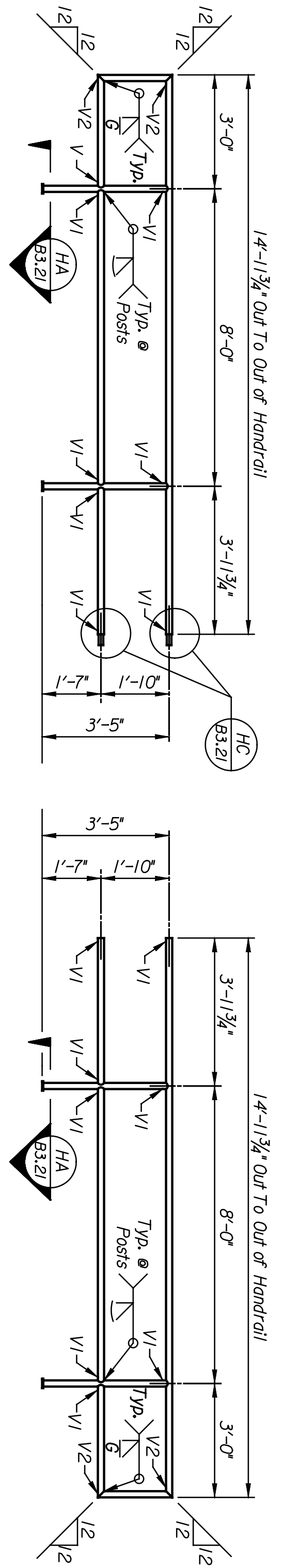


| | |
|------|----|
| DATE | BY |
| | |

Plotted on: 04-JAN-2005 13:09 *time\$
 dJamison Plot Queue: #queue\$
 Plot Scale: #scale\$ Pen Table: #pentables
 Design Filename: k:\b29049\BridgesDec2004\Base Bld\Murdock\drawings\m20.dgn

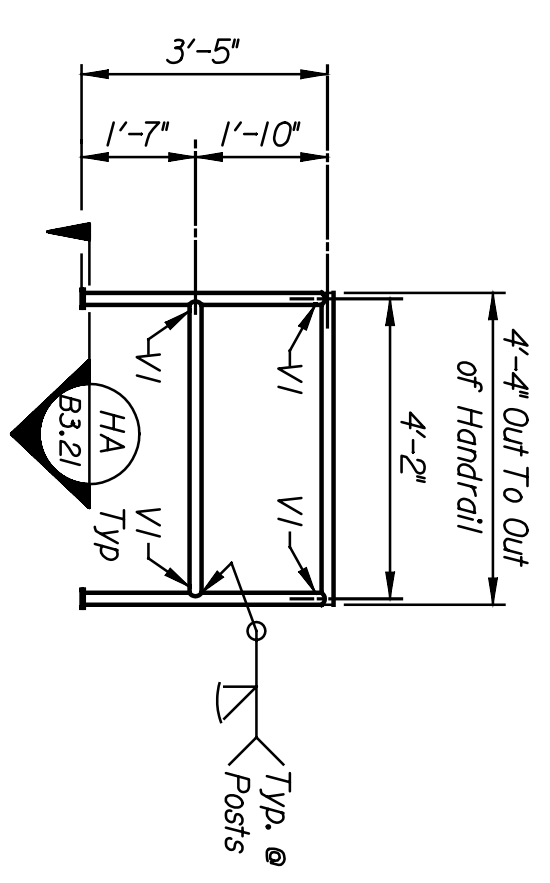


HANDRAIL ELEVATION (TYPE 2)
 Scale: $\frac{3}{8}'' = 1'-0''$

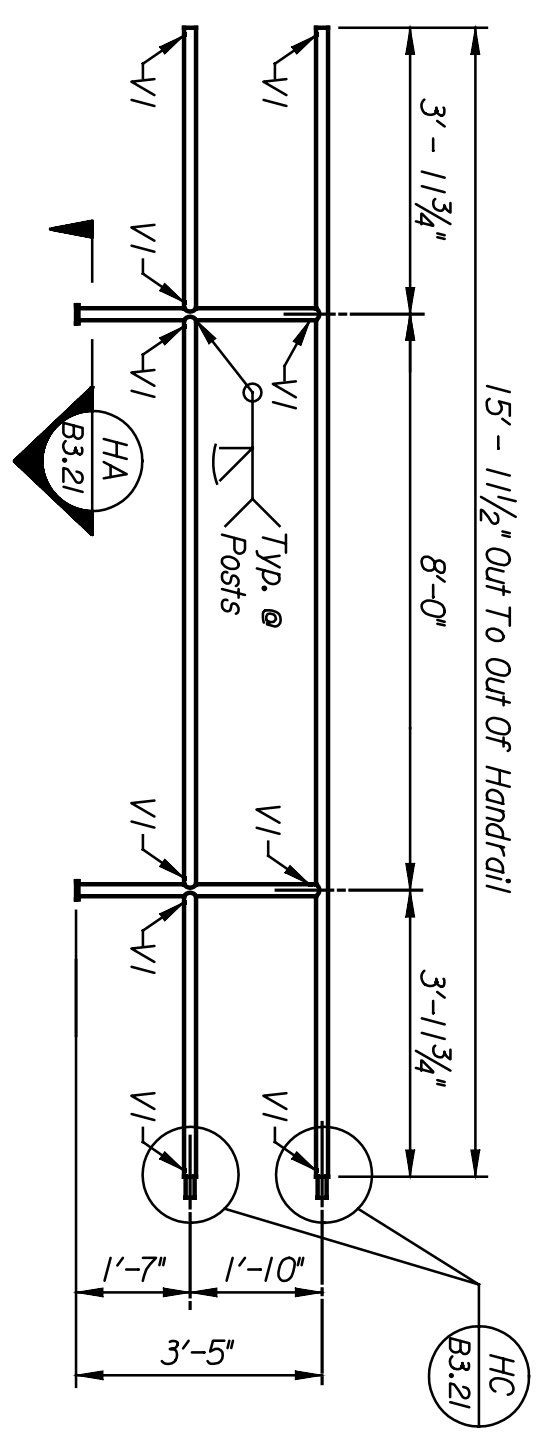


HANDRAIL PANEL TYPE A
 No. Required = 1
 Weight = 105 Lbs. Each
 Handrail Panels are to be fabricated using
 1/2" Dia. std. Black Pipe.
 (Galvanize after fabrication)
 Scale: $\frac{3}{8}'' = 1'-0''$

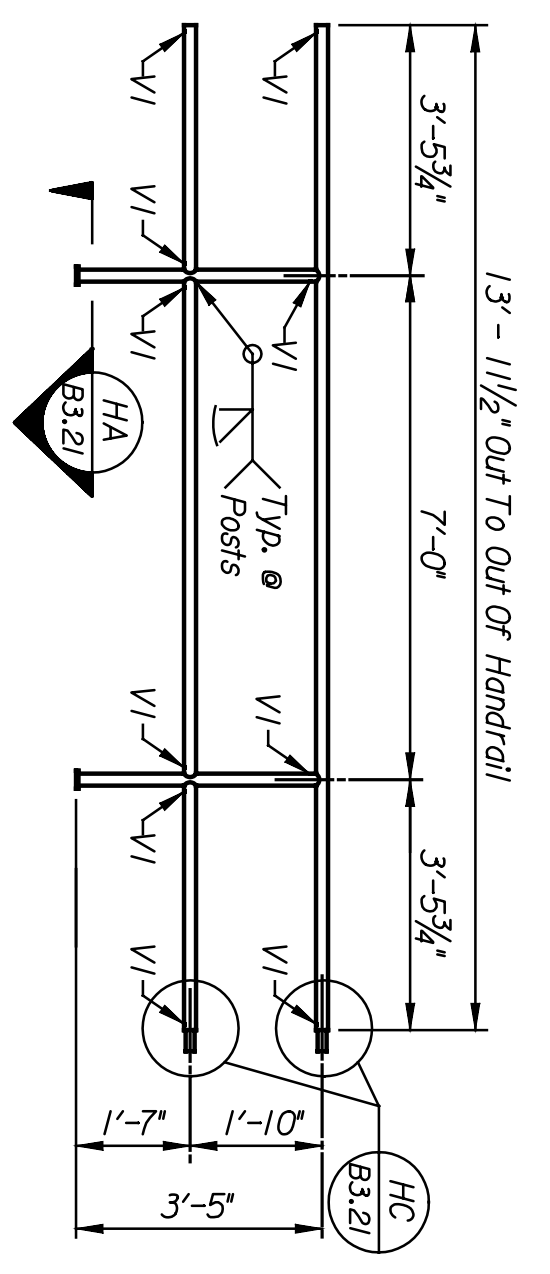
HANDRAIL PANEL TYPE B
 No. Required = 1
 Weight = 105 Lbs. Each
 Handrail Panels are to be fabricated using
 1/2" Dia. std. Black Pipe.
 (Galvanize after fabrication)
 Scale: $\frac{3}{8}'' = 1'-0''$



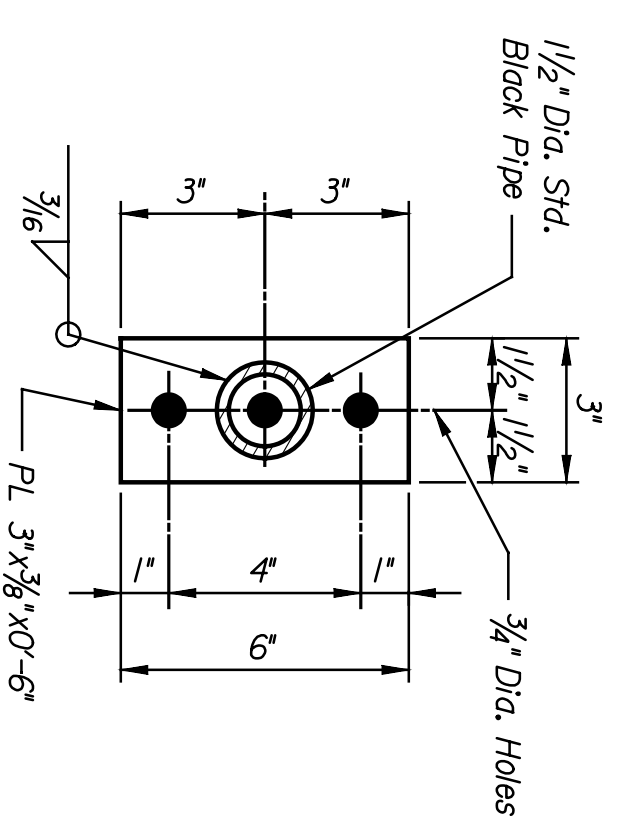
HANDRAIL PANEL (TYPE 2A)
 No. Required = 4
 Weight = 41 Lbs. Each
 Handrail Panels are to be fabricated using
 1/2" Dia. std. Black Pipe.
 (Galvanize after fabrication)
 Scale: $\frac{3}{8}'' = 1'-0''$



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: $\frac{3}{8}'' = 1'-0''$

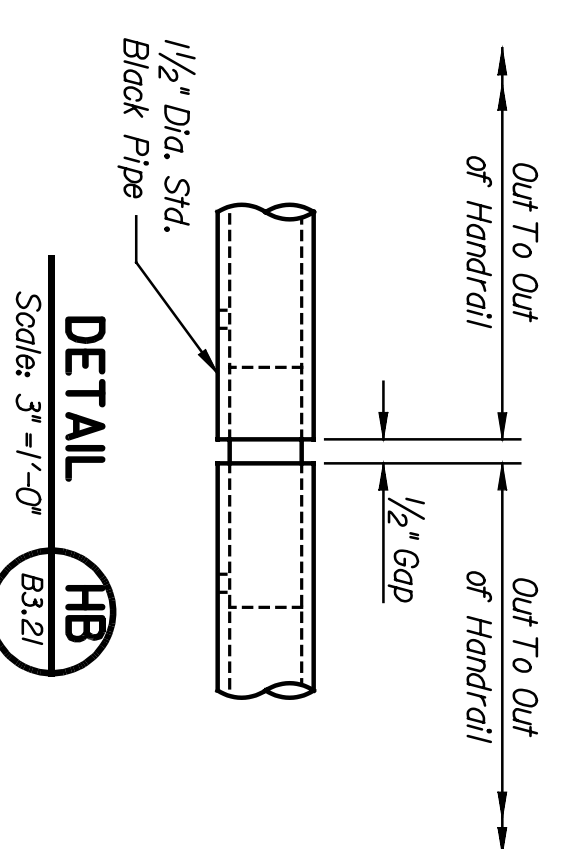


SECTION HA
 Scale: 3" = 1'-0"

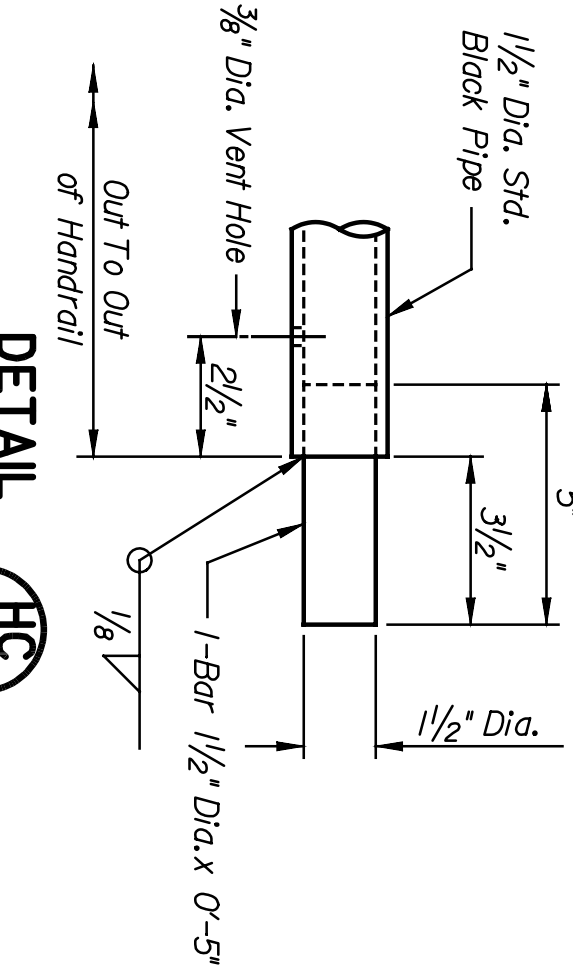
This sheet designed by:



ARCHITECTS ENGINEERS PLANNERS



DETAIL HB
 Scale: 3" = 1'-0"



DETAIL HC
 Scale: 3" = 1'-0"

| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|-------------|------|-----------|--------------|
| KANSAS | 472-84071 | 2005 | B3.21 | |

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 Handrail 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.

| | | |
|---------------------------|-----------------|-----------------|
| LOCATION: RMSF BR. 215 | SCALE: AS NOTED | APPD. |
| WICHTLA, KS | DESIGNED: GAB | QUANTITIES: DJL |
| | DETAILS: SALS | TRACED: DJL |
| | DATE: _____ | CHECKED: DJM |
| | NO. _____ | DATE: _____ |
| | BY: _____ | DATE: _____ |
| | APPROVED: _____ | DATE: _____ |

CITY OF WICHITA
WICHITA CENTRAL CORRIDOR
MURDOCK
BRIDGE HANDRAIL (TYPE 2, 2A)

LINE SEGMENT 7400