



CLOSURE FRAME ASSEMBLY

SCALE: $\frac{3}{4}$ " = 1'-0"

GENERAL NOTES:

- THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE SIZE OF THE MINE OPENING AND THE CORRESPONDING LAYOUTS OF THE BAT COMPATIBLE CLOSURE AND ARCH RISER PIPE. THE DRAWING SHALL BE USED AS A GUIDE FOR FIELD LAYOUT. DETERMINE THE ACTUAL LAYOUT AND DIMENSIONS OF THE CLOSURE IN THE FIELD PRIOR TO FABRICATION.
- 2. USING A COMPRESSED AIR LANCE OR EQUIVALENT, REMOVE DIRT AND LOOSE ROCK FROM ALL SURFACES AGAINST WHICH POLYURETHANE FOAM (PUF) WILL BE PLACED. PLACE PUF AGAINST CLEAN, DRY SURFACES.
- 3. STEEL PLATES, SHAPES AND BARS SHALL BE WEATHERING STEEL. WELD ALL JOINTS. CONSTRUCT THE CLOSURE FRAME ASSEMBLY TO ELIMINATE SURFACES ON WHICH MOISTURE OR DEBRIS CAN BE TRAPPED. PLIES OF MATERIAL SHALL BE TIGHT TO PREVENT THE INCURSION OF MOISTURE. ALL TUBULAR MEMBERS SHALL BE HERMETICALLY SEALED TO PREVENT THE INCURSION OF MOISTURE. EXCEPT AS OTHERWISE NOTED, ROUND OR CHAMFER ALL EXPOSED SHARP CORNERS AND
- 4. MINIMIZE THE AMOUNT OF ROCK, TIMBER AND OTHER DEBRIS THAT FALLS INTO THE MINE OPENING DURING CONSTRUCTION.
- 5. THOROUGHLY COMPACT ALL FILL UNDERNEATH THE PRECAST CONCRETE MASONRY UNITS AND CONCRETE COLLAR. PLACE SCORIA AND DRAINAGE AGGREGATE IN NOT MORE THAN SIX-INCH LAYERS AND COMPACT BY SLICING WITH A SHOVEL OR VIBRATING.
- 6. FILL THE ANNULAR SPACE BETWEEN THE CLOSURE FRAME AND CSP RISER WITH NON-SHRINK GROUT. SLOPE TOP OF GROUT TO DRAIN INTO CSP.
- 7. SLOPE THE FINISH GRADE TO DRAIN STORM WATER AWAY FROM THE COLLAR.

ABANDONED MINE LAND PROGRAM MINING AND MINERALS DIVISION ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

SCALE: AS SHOWN DATE: JAN. 28, 2010

COLUMBIA LODE

DRAWN BY: JAK REVISED:

HORIZONTAL BAT GATE AT FEATURE 049-070S SHAFT

LAKE VALLEY MINE SAFEGUARD PROJECT - PH. IV FIGURE 22