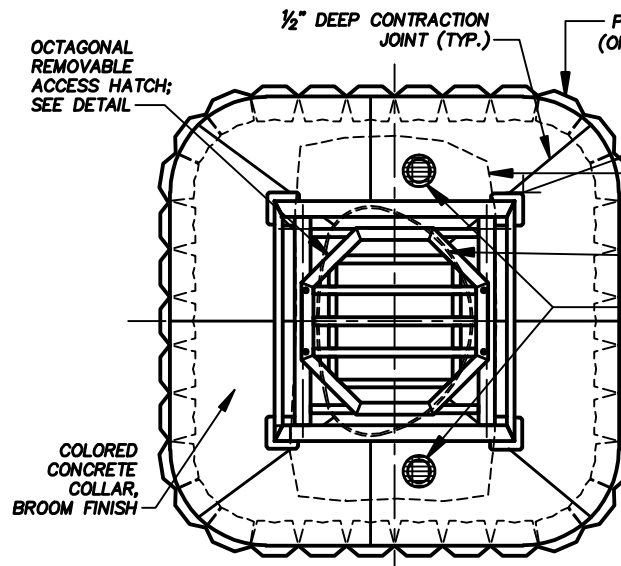
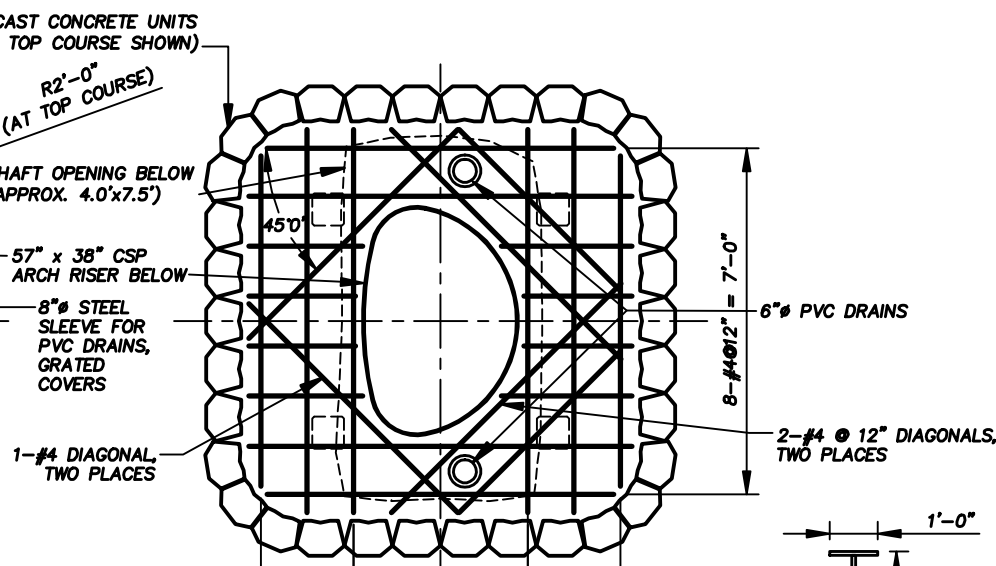


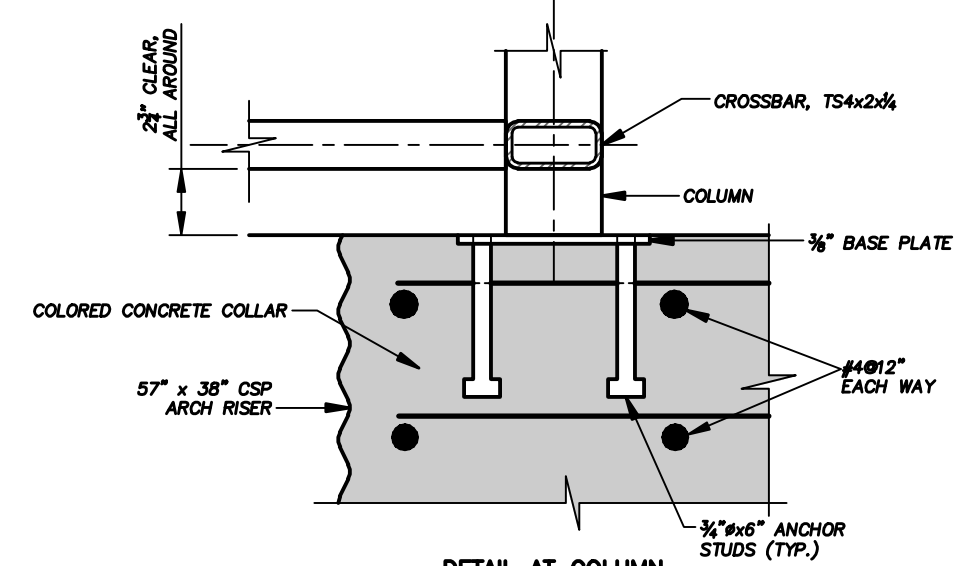
CAUTION - THIS PROJECT REQUIRES CONSTRUCTION WORK IN, AROUND, AND OVER HAZARDOUS AND UNPROTECTED MINE SHAFTS, STOPS, ADITS, AND OTHER OPENINGS WHICH MAY BE OPEN TO THE SURFACE OR HIDDEN FROM VIEW BY TRASH, DEBRIS, OR THIN AND UNSTABLE LAYERS OF SURFACE MATERIALS OR ROCK. THE CONSTRUCTOR SHALL BE RESPONSIBLE FOR THOROUGHLY INVESTIGATING THE SITE CONDITIONS AND SCHEDULING HIS EQUIPMENT, PERSONNEL, AND SAFETY PROCEDURES TO PREVENT ACCIDENTS AND INJURIES.



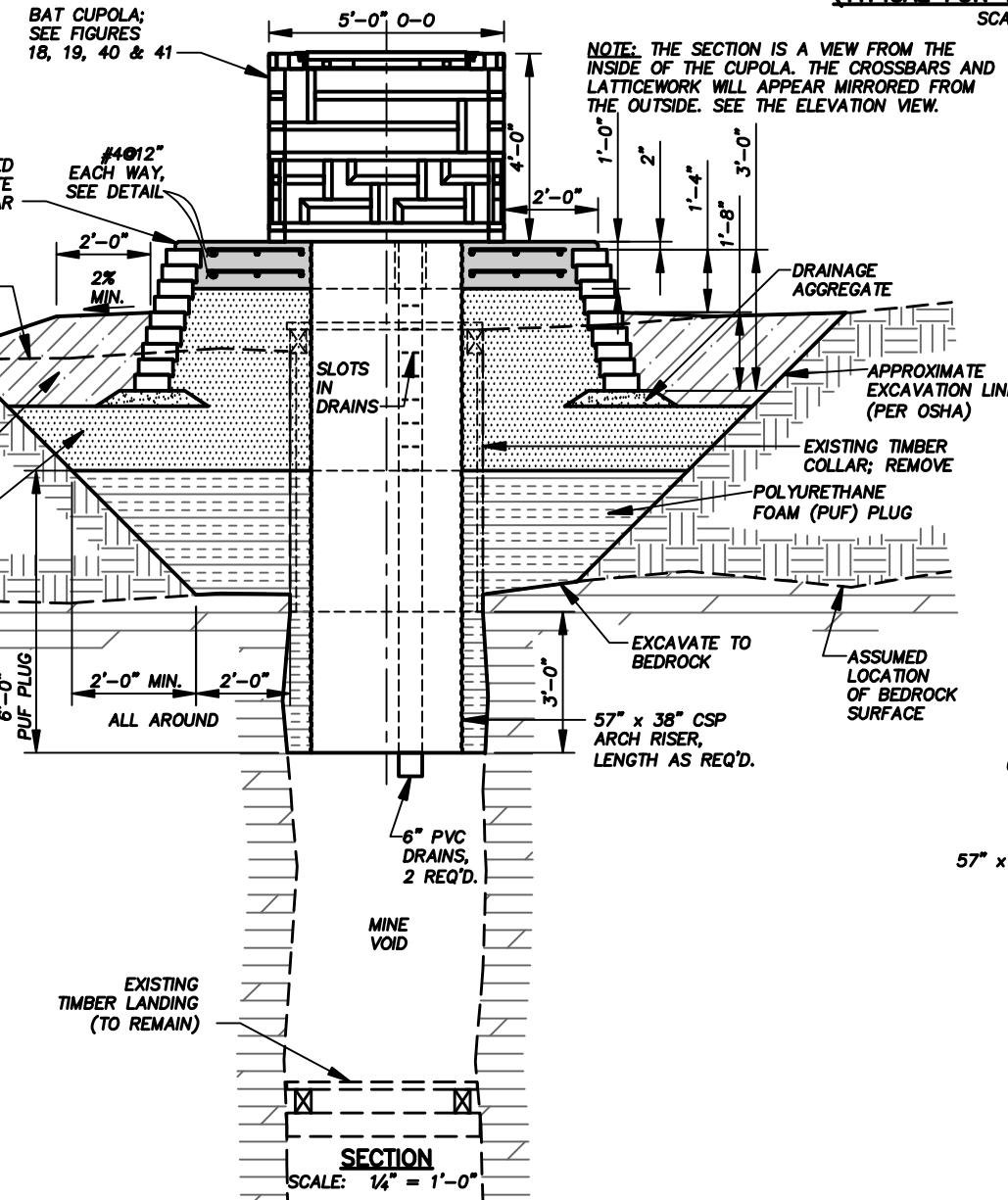
PLAN - BAT CUPOLA TOP
SCALE: 1/4" = 1'-0"



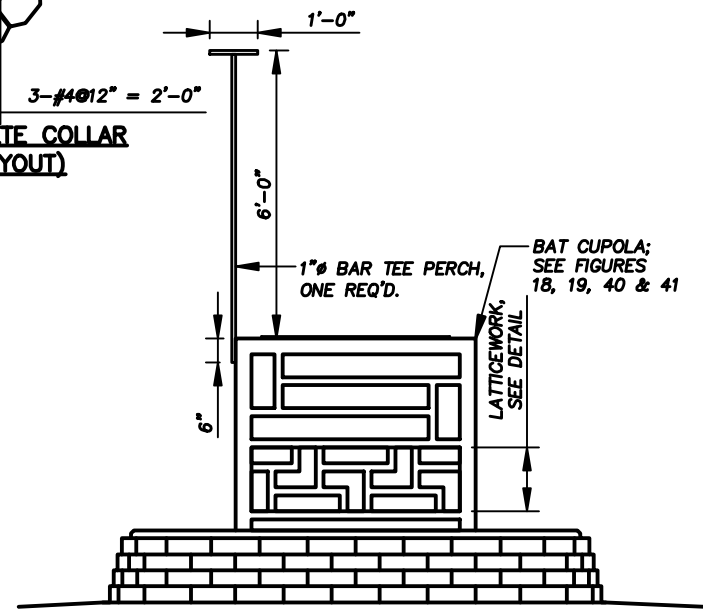
PLAN - REINFORCING STEEL AT CONCRETE COLLAR (TYPICAL FOR TOP AND BOTTOM LAYOUT)
SCALE: 1/4" = 1'-0"



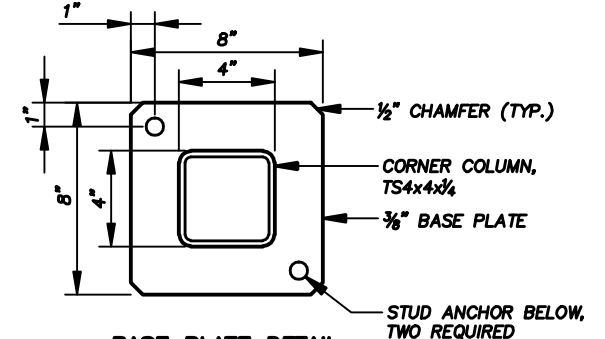
DETAIL AT COLUMN
SCALE: 1/2" = 1'-0"



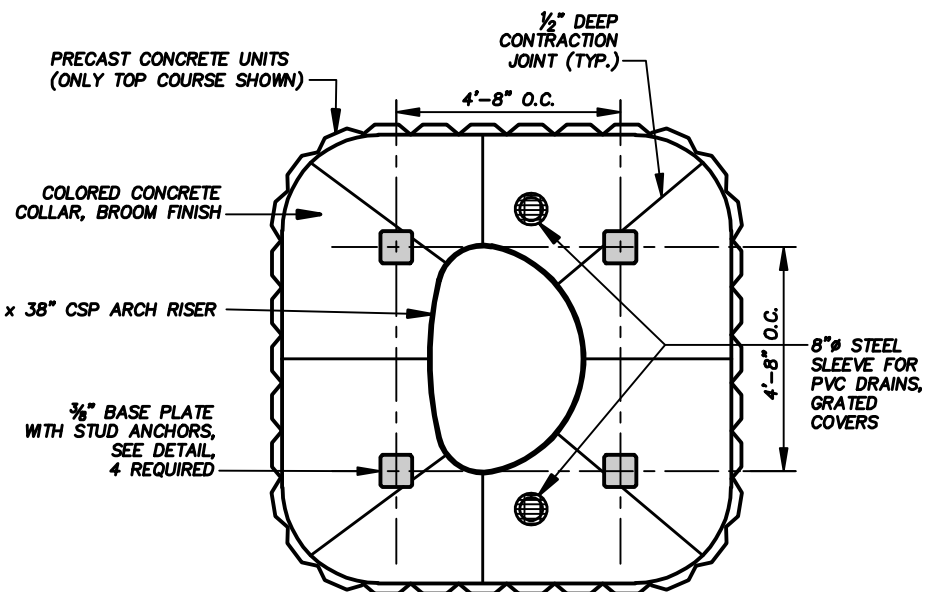
SECTION
SCALE: 1/4" = 1'-0"



CUPOLA ELEVATION NORTH & SOUTH SIDES
SCALE: 1/4" = 1'-0"



BASE PLATE DETAIL
SCALE: 1/2" = 1'-0"



PLAN - CONCRETE COLLAR DETAILS
SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
1. THIS DRAWING SHOWS THE GENERAL SHAPE AND APPROXIMATE SIZE OF THE MINE OPENING AND THE CORRESPONDING LAYOUT OF THE BAT CUPOLA. 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 ROCK SURFACES AGAINST WHICH POLYURETHANE FOAM (PUF) WILL BE PLACED. PLACE PUF AGAINST CLEAN, DRY SURFACES.
 3. THE INDICATED BEDROCK LOCATIONS ARE APPROXIMATE. THE BEDROCK SURFACE IS EXPECTED TO BE ROUGH, IRREGULAR AND VARIABLE IN DEPTH.
 4. MINIMIZE THE AMOUNT OF ROCK, TIMBER AND OTHER DEBRIS THAT FALL INTO THE MINE OPENING DURING CONSTRUCTION.
 5. REMOVE EXISTING TIMBER COLLAR AND TIMBER LADDER (NOT SHOWN) TO AT LEAST 10 FEET BELOW SURFACE.
 6. INSTALL PRECAST CONCRETE UNITS AS SPECIFIED, INCLUDING APPLICATION OF SPECIFIED CONSTRUCTION ADHESIVE AT THE TOP TWO COURSES.
 7. SLOPE THE FINISH GRADE TO DRAIN STORM WATER AWAY FROM THE CONCRETE FOOTING AS INDICATED.
 8. N.B. THERE IS EXTENSIVE TIMBER WORK IN THE MINE WORKINGS BELOW THIS SHAFT OPENING. THE TIMBER IS EXTREMELY DRY AND EASY TO SET ON FIRE. EXTREME PRECAUTION SHALL BE TAKEN TO PREVENT ANY SPARKS FROM WELDING OR OTHER ACTIVITIES FROM FALLING INTO THE SHAFT.

ABANDONED MINE LAND PROGRAM MINING AND MINERALS DIVISION		
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT		
SCALE: AS SHOWN	NORTH CAROLINA LODE	DRAWN BY: JAK/JRS
DATE: FEB. 8, 2007		REVISED:
BAT CUPOLA AT FEATURE 046-115S SHAFT		
LAKE VALLEY MINE SAFEGUARD PROJECT - PHASE II		DRAWING NUMBER: FIGURE 25

046-115S SHAFT CUPOLA.DWG PLOT SCALE 1 = 48