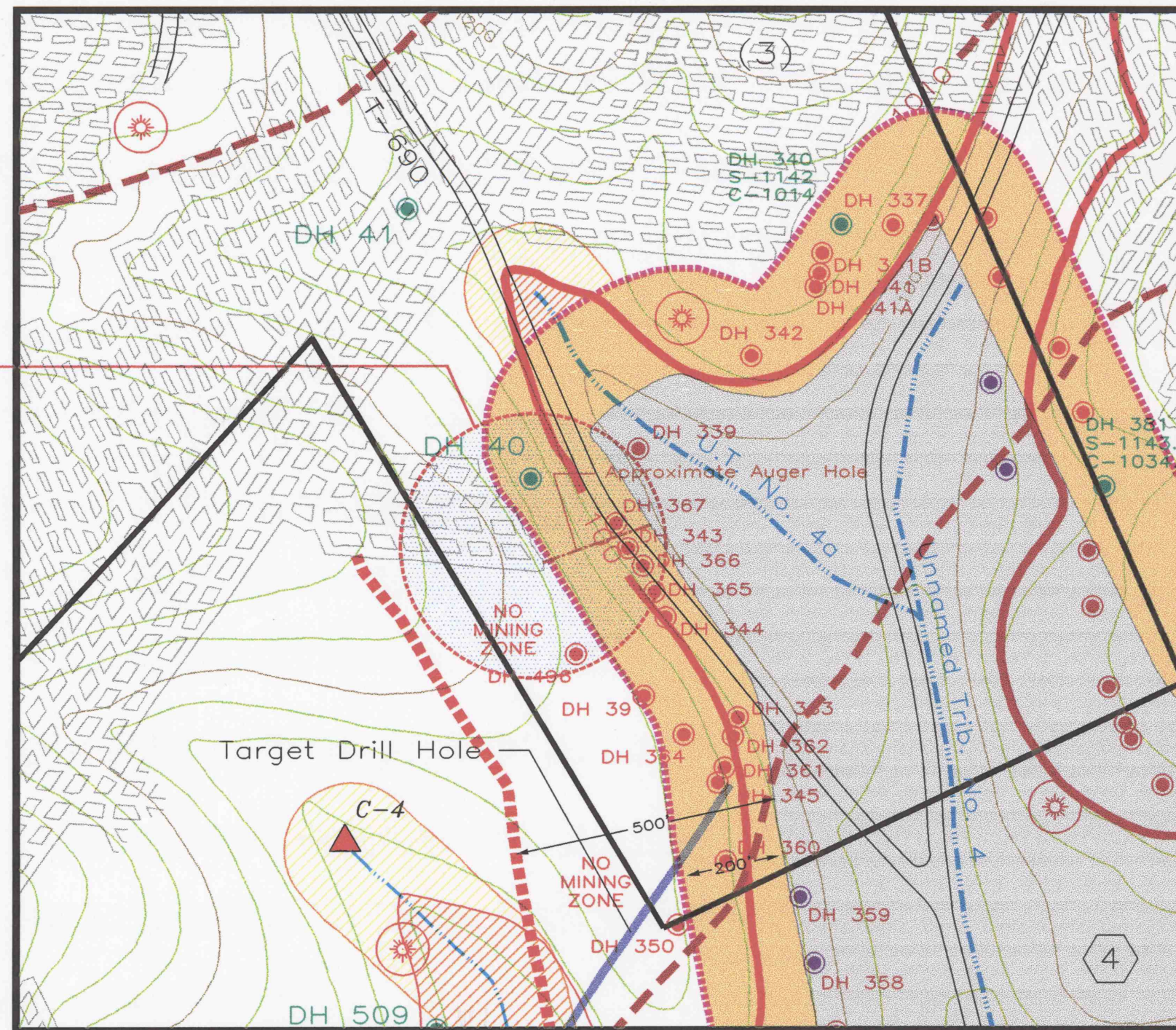
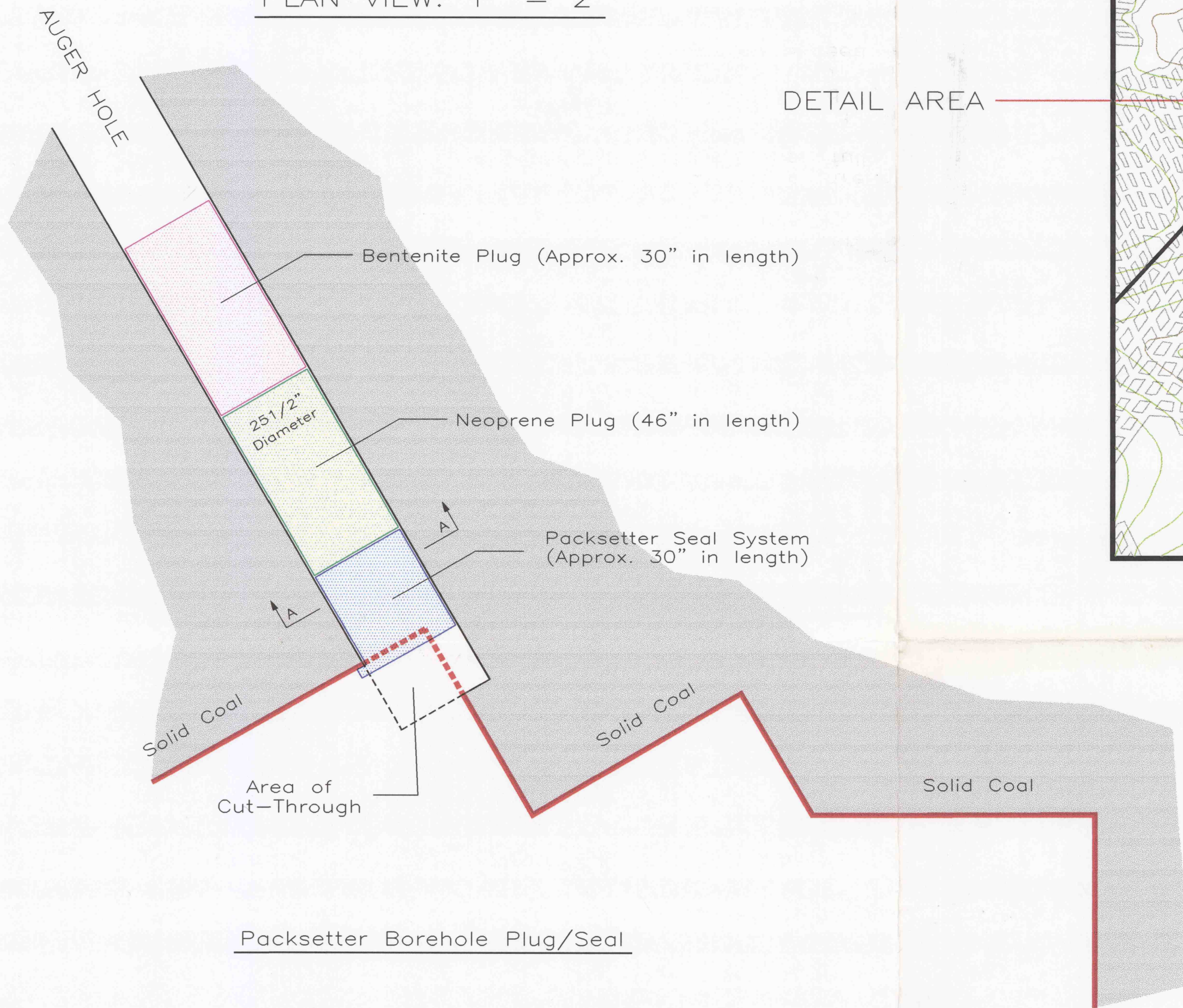


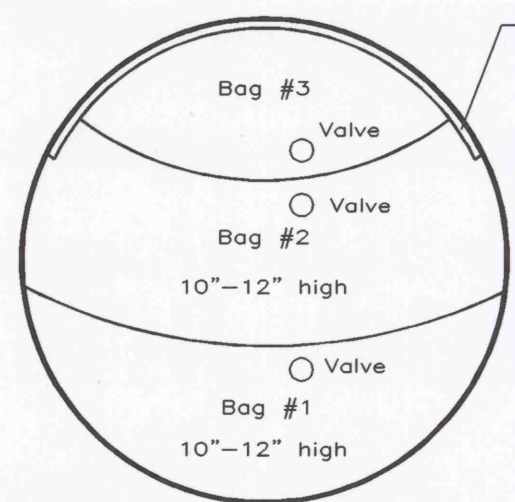
PLAN VIEW: 1" = 2'



1. The auger hole cut-through will be sealed by installing a 25.5" bentenite plug, which will be approximately 30" in length.
2. Outby the bentenite plug a 25.5 inch diameter by 46" long neoprene plug will be installed.
3. Finally, outby the neoprene plug a packsetter seal system (see plug detail) will be installed.

Packsetter Borehole Plug/Seal

22" to 30" Diameter Borehole



Section A-A

1. Use foam kits to form perimeter and seams where bags join.
2. Packsetter grout has a strength of 500+ psi strength when fully cured.
3. Bag #3 shall be pumped to a minimum of 200 KPA, as measured on in-line pressure gage. This is a minimum 5 ton active load. Do not exceed 400 KPA.
4. After pumping Bag #2, wait at least 15 minutes before pumping last bag. Bag #3.
5. Use 33.46" x 33.46" Packsetter bags.



James J. Szalankiewicz

PROJECT		TJS No. 4 Deep Mine	
FOR		TJS Mining, Inc. R.D. #1, Shelocta, PA 15774	
LOCATION		Plumcreek Twp., Armstrong Co.	
SEAM		UPPER FREEPORT COAL SEAM	
DRAWN BY	JMO	DATE	01-22-03
SCALE	As Noted	DRAWING NO.	Cut-Through

R2 2-3-03