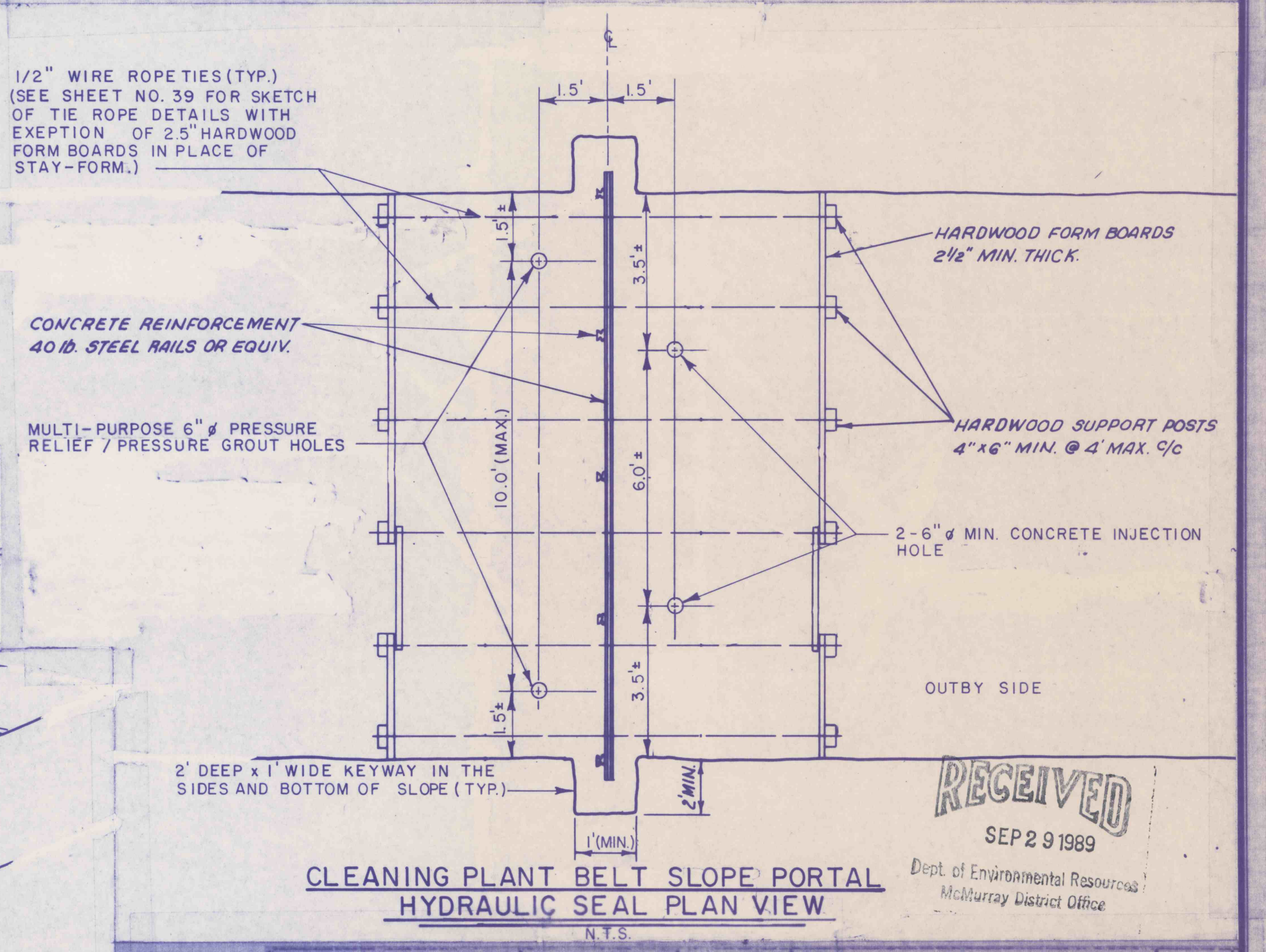
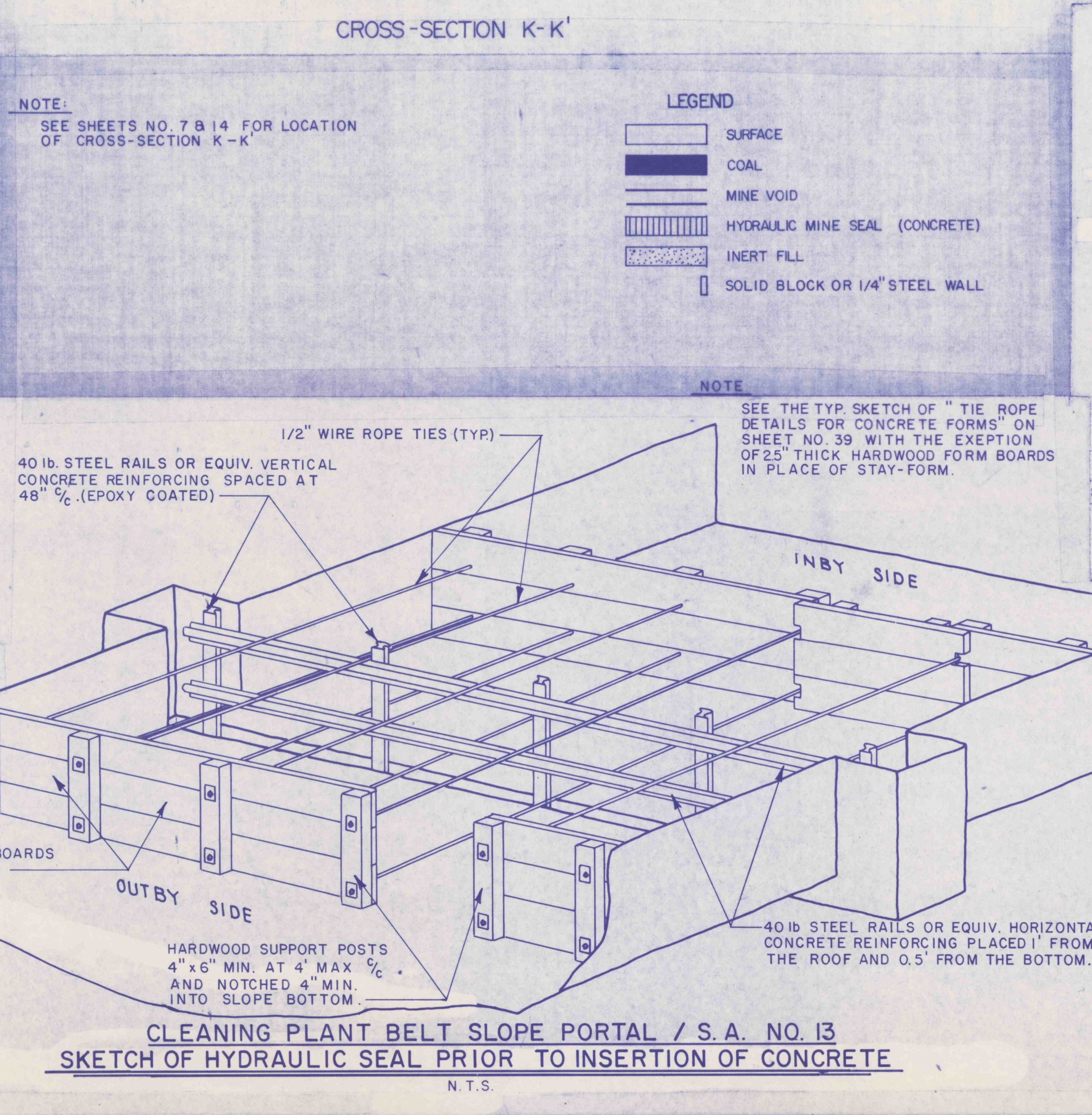
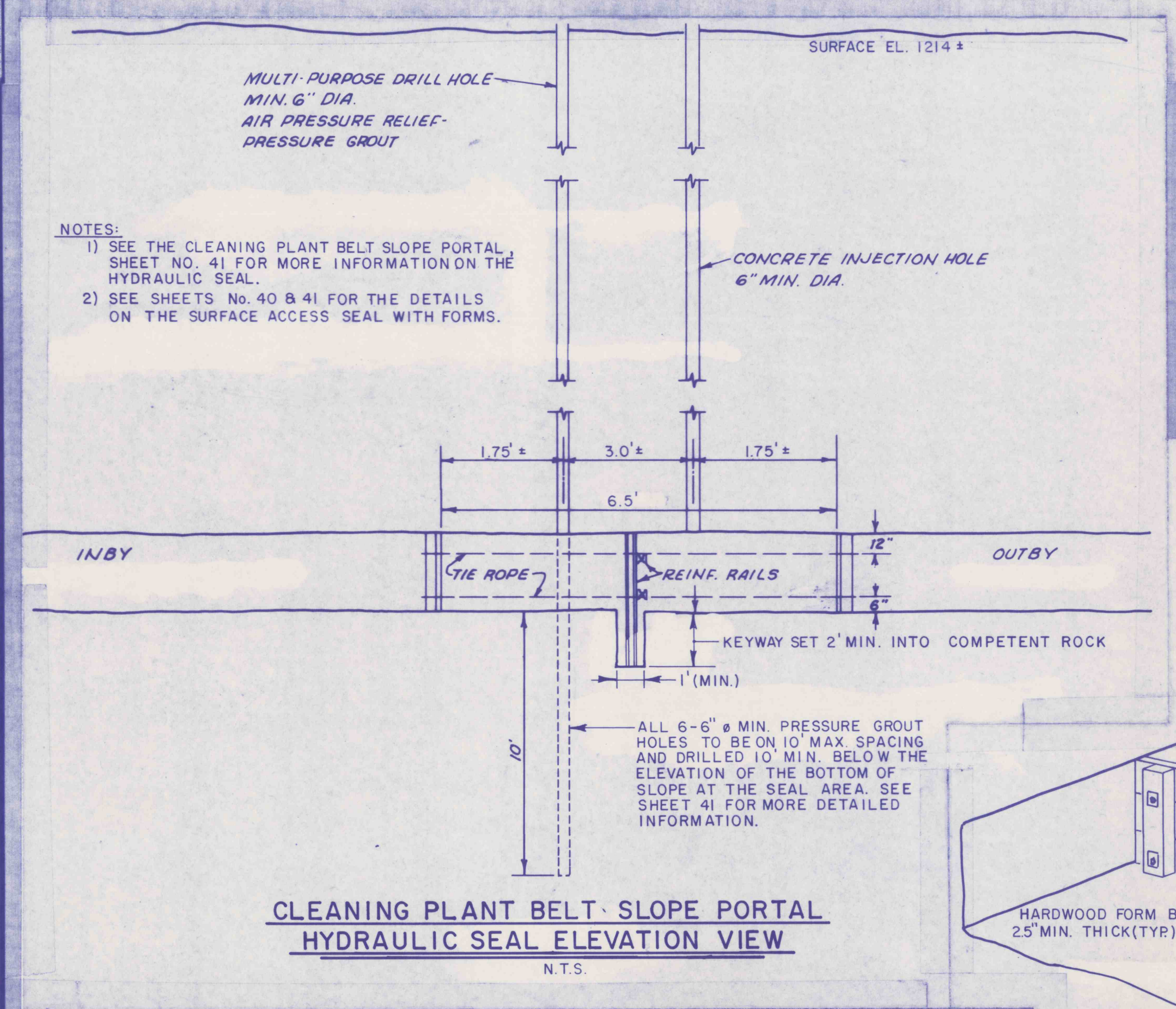


- GENERAL INSTRUCTIONS: SEAL AREA 13 CONSTRUCTION**
1. DRILL THE HOLES INTO MINE ENTRY AS INDICATED IN THE DRAWING AND/OR DIRECTED BY THE ENGINEER IN THE FIELD.
 2. PLACE AUXILIARY VENTILATION AS REQUIRED BY ALL APPLICABLE FEDERAL & STATE MINE REGULATIONS.
 3. SECURE THE APPLICABLE WORK AREA IN THE SLOPE BY SETTING REQUIRED SAFETY SUPPORTS.
 4. REMOVE BELT AND BELT STRUCTURE AS REQUIRED TO PROVIDE SAFE ACCESS TO SEAL LOCATIONS.
 5. ESTABLISH LOCATIONS FOR THE FORMS AND FOR THE BOTTOM AND RIB CUTS.
 6. MAKE BOTTOM AND RIB CUTS, REMOVE ALL LOOSE COAL, ROCK AND OTHER DEBRIS FROM SEAL AREAS.
 7. CONSTRUCT LOWER INBY FORM INCLUDING INSTALLATION OF WIRE ROPE AND EYE BOLTS THROUGH THE INBY FORM.
 8. CLOSE AND SECURE THE LOWER INBY FORM TRAP DOOR.
 9. MOVE REINFORCEMENT STEEL INTO LOWER SEAL AREA.
 10. SET VERTICAL STEEL MEMBERS AS INDICATED. ANGLE BRACKETS SHOULD BE SHOP WELDED TO VERTICAL MEMBERS AS SEATS FOR HORIZONTAL STEEL PRIOR TO TRANSPORT OF STEEL INTO MINE.
 11. PLACE AND TIE HORIZONTAL STEEL MEMBERS ON VERTICAL STEEL AS INDICATED; BE SURE TO PULL ALL TIE ROPES THROUGH REINFORCEMENT STEEL TO OUTBY SIDE OF LOWER SEAL AREA.
 12. CONSTRUCTION LOWER OUTBY FORM, PLACE TIE ROPES INTO OUTBY EYEBOLTS AND TAKE SLACK IN TIE ROPES WITH TURN-BUCKLES. DO NOT OVER-STRESS TIE ROPES.
 13. CLOSE AND SECURE LOWER OUTBY FORM TRAP DOOR.
 14. REPEAT STEPS 4 THROUGH 13 FOR CONSTRUCTION OF UPPER SEAL.
 15. INSERT CONCRETE INTO SEAL AREAS THROUGH DRILL HOLES FROM THE SURFACE.
 16. REDRILL MULTI-PURPOSE HOLES, FOR LOWER SEAL ONLY, AND DRILL PRESSURE GROUT HOLES ON 10' MAX SPACING AND DRILLED 10' MIN. BELOW THE ELEVATION OF SLOPE AT THE LOWER SEAL AREA. SEE SHEET NO. 41 FOR MORE INFORMATION.
 17. PRESSURE GROUT APPLICABLE DRILL HOLES IN 5' STAGES FROM THE BOTTOM UP TO PRE-DETERMINED ELEVATION AS SHOWN ON THIS SHEET OR DIRECTED BY THE ENGINEER.
 18. CORE DRILL THROUGH THE SEAL AREAS TO CHECK SEAL CONSTRUCTION. CAUTION SHOULD BE TAKEN TO AVOID DRILLING INTO THE REINFORCEMENT STEEL.
 19. PRESSURE GROUT CORE DRILL HOLES AND FILL ALL DRILL HOLES TO THE SURFACE WITH CONCRETE.



RECEIVED
SEP 29 1989
Dept. of Environmental Resources
McHurry District Office

ISSUED	CLEANING PLANT SLOPE PORTAL SEAL DETAILS	SCALE 1" = 10' 1/4" = 100'
REVISIONS	BIRD NO. 2 & 3 MINES BIRD COAL COMPANY	
	SITUATION STONY CREEK TOWNSHIP, CAMBRIA CO., PA. CONEMAUGH TWP., SOMERSET CO., PA.	
APPROVED:	JOB 86003 FILE	SHEET NO. 31
	GWIN, DOBSON & FOREMAN, INC. CONSULTING ENGINEERS ALTOONA, PENNSYLVANIA	DRAWN BY: ORB CHECKED: