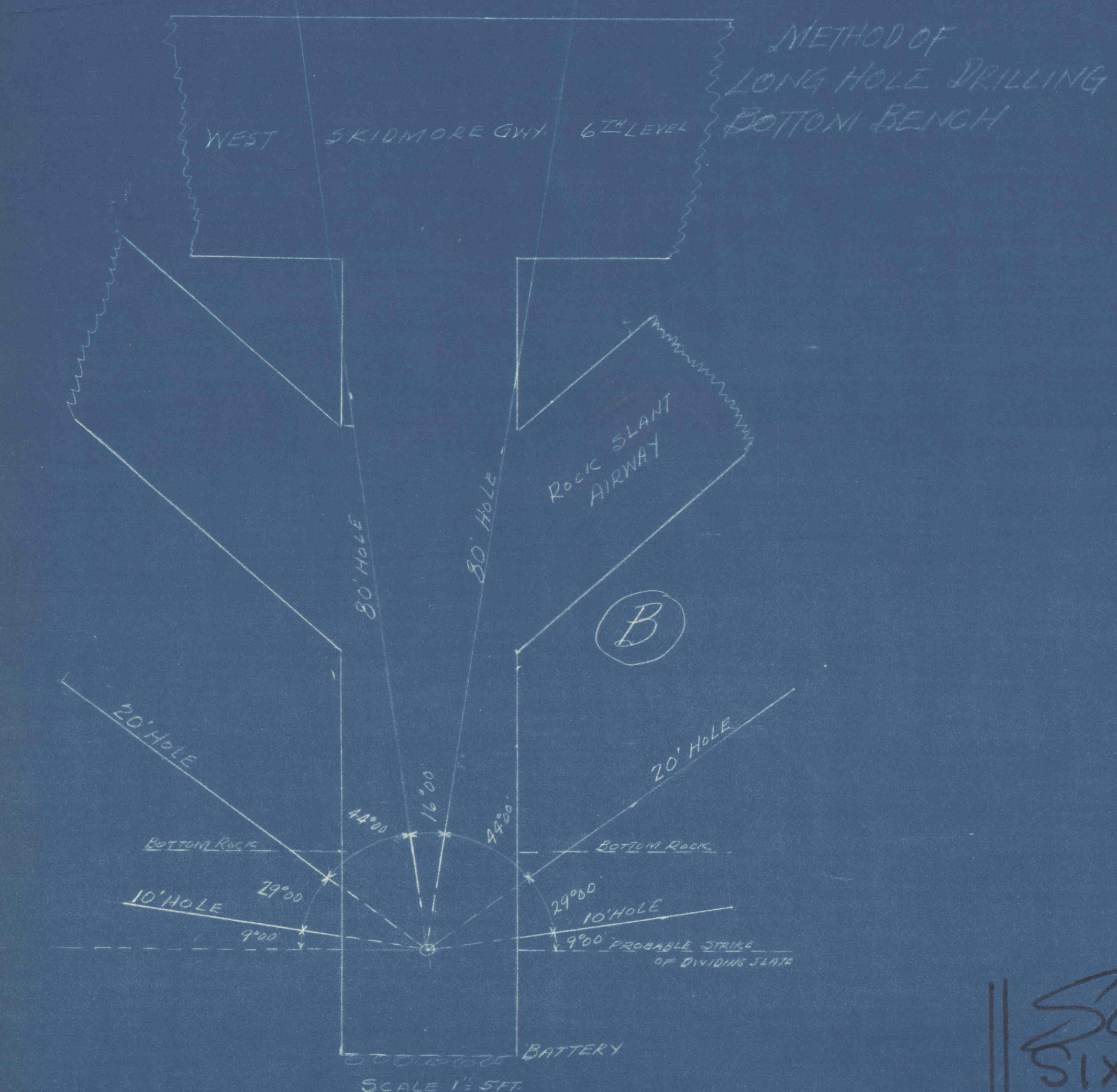


METHOD OF
LONG HOLE DRILLING

PILLAR LONG HOLE DRILLING
BETWEEN BREASTS

WEST PILLAR LINE FOR MAMMOTH VEIN TO PROTECT NO. 509 TUNNEL

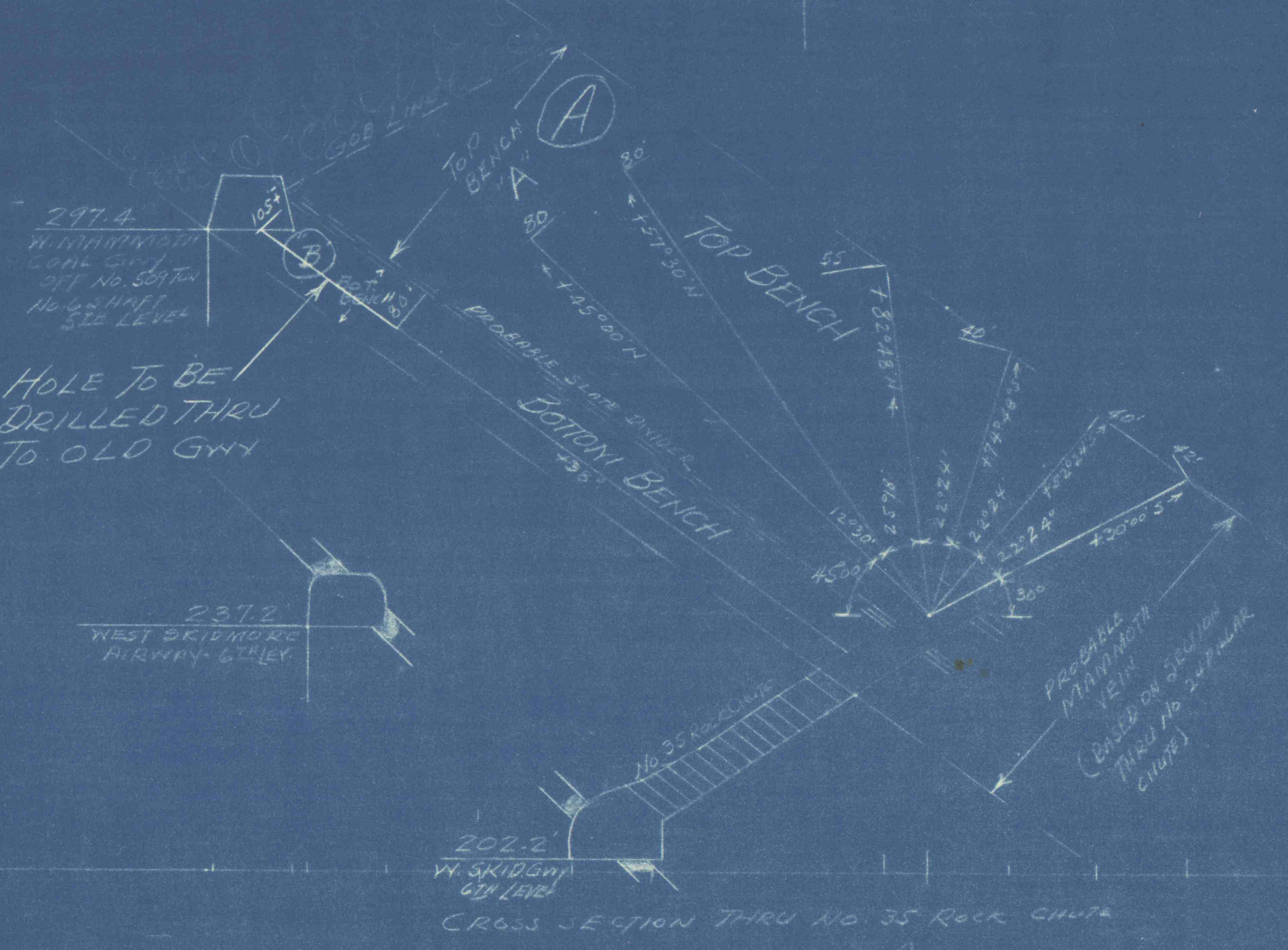


LONG HOLE METHOD
TOP BENCH "A"
20 WIDE - 40 THICK - 100 LIFT
EXPLOSIVES TO BE USED
390 PERMISSIBLE POUNDS
(3-11/16" CARTRIDGE IN EACH UPPER SHALL)
3000 CUBIC YARDS SLOPE
0.12 PERMISSIBLE POUNDS PER CU YD SLOPE
DEPENDENT ON COAL
PRIMACORD 1" PER FOOT OF HOLE
ROCK CHUTE 60" CENTERS
ROCK TAPPINGS 20" CENTERS
DETONATORS FROM 0-8
480 HOLES WOULD BE 0
12 LONG HOLES IN SEQUENCE
(2 DETONATORS IN LONG HOLES
" SKIDDER HOLES")

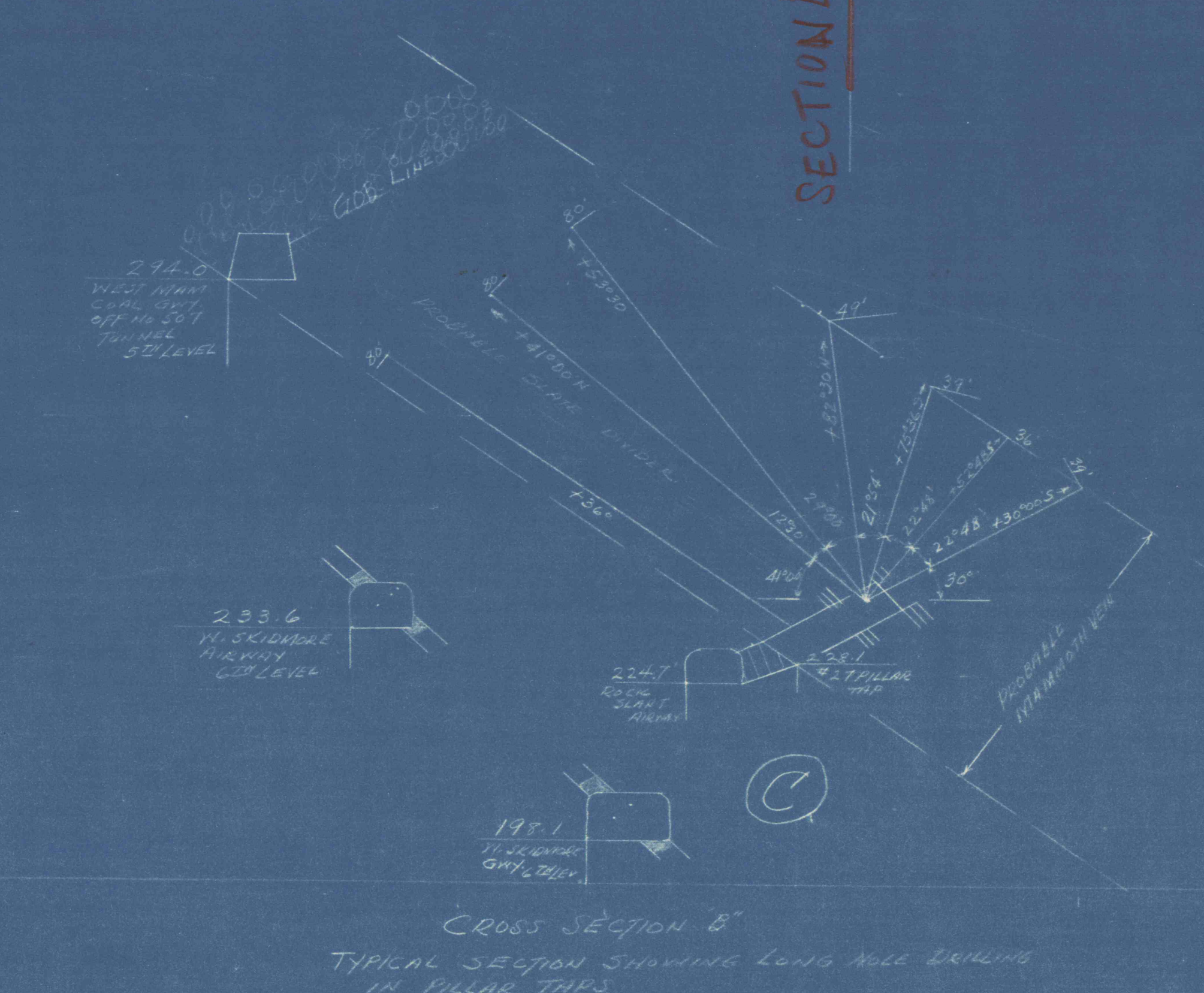
POINT OF DETONATION IS
1000' + FROM SHOT TO FIRING STATION

NO MEN IN SECTION OR ABOVE LEVELS
UNTY FIRING STATION

SOUTHERN FIELD. 1"=20'
SIXTH COLLIERY, 6TH LEVEL MAMMOTH VEIN.
MAUCH CHUNG TOWNSHIP, CARBON COUNTY, PA.
LEHIGH NAVIGATION & CO. PANTHER CREEK DISTRICT.



TOP BENCH "A"
2 ROWS - 6 HOLES EACH, ALL SHOWN
SPACED FOR 10' SLOPE DRILLING
ON COAL TO BE BLASTED IN TOP BENCH
2 OPENING HOLES EACH 416' - 6 FT LONG



CROSS SECTION "B"
TYPICAL SECTION SHOWING LONG HOLE DRILLING
IN PILLAR TIPS

Wm.
Killer & Sons, Inc. plan sent to
James J. Shohm, Mining Inspector
at per his request of letter dated Oct 11/1914
by J.S.S. on Nov. 13 - 1914
Plan received & print sent to
J.J. Shohm 11/19/14
Wm.

NO. 6 SHIFT
6TH LEVEL
PLAN AND SECTION DRAWING
LONG HOLE DRILLING TO MINE MAMMOTH
VEIN ON WEST SIDE OF STATE LINE
SCALE 1"=20'
OCT-25-1914

SEE SERVICE DEPT.
FILE 5520

DWG
G-452