

COAL MINERS POCKET BOOK - 1928 - 12TH. EDITION

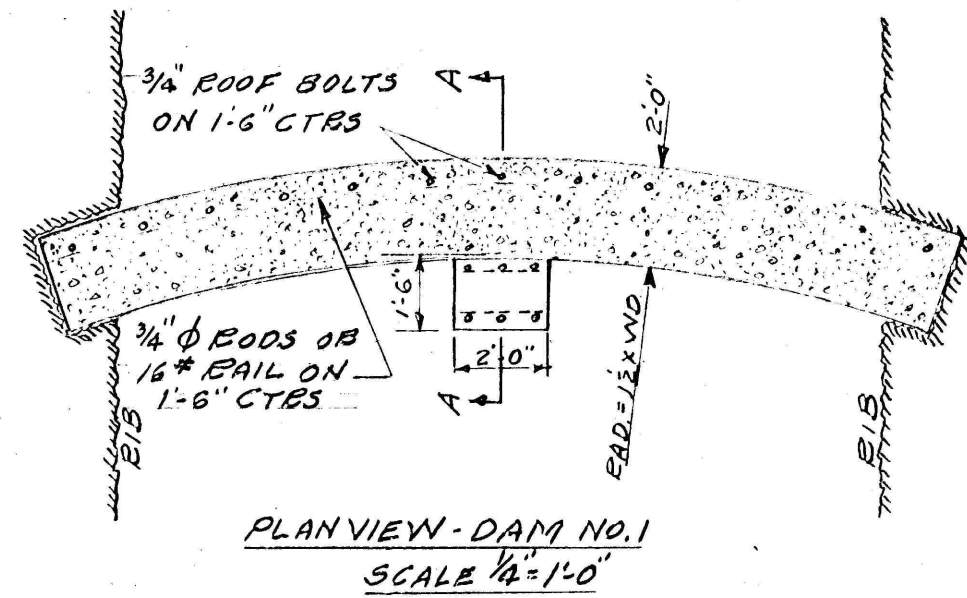
FORMULA:

T = THICKNESS OF DAM IN INCHES
R = SHORTER RADIUS IN INCHES = $1\frac{1}{2} \times 216" = 324"$
W = WIDTH OF OPENING IN INCHES = 216"
S = COMPRESSIVE STRENGTH CONC. SAELOD = 500 #/in.
P = WATER PRESSURE AT DAM = (14' DEPTH) = 6.08 #/in.

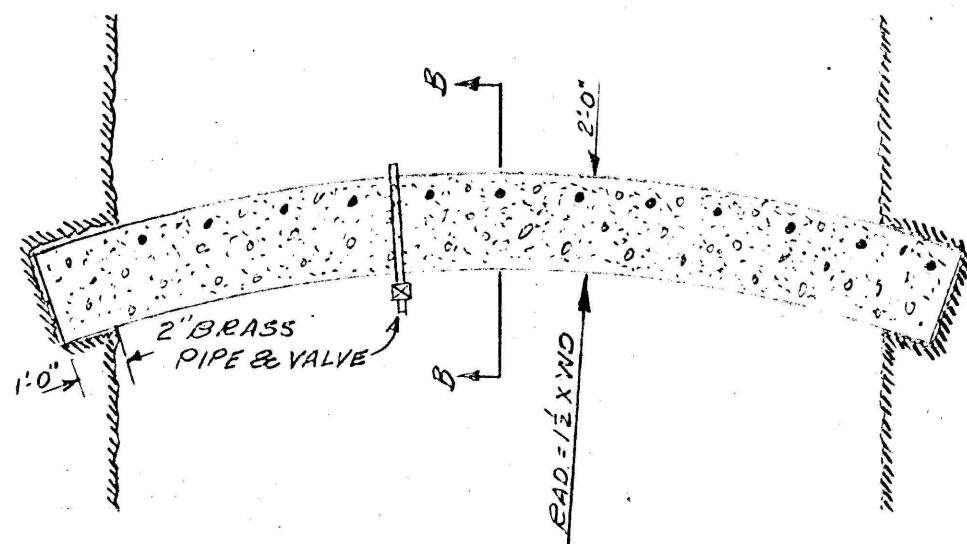
$$T = \frac{PW \sqrt{4R-1}}{4S}$$

$$T = \frac{6.08 \times 216 \sqrt{4 \times (324 - 1)}}{4 \times 50.0} = 23.64'' \text{ OR } 24''$$

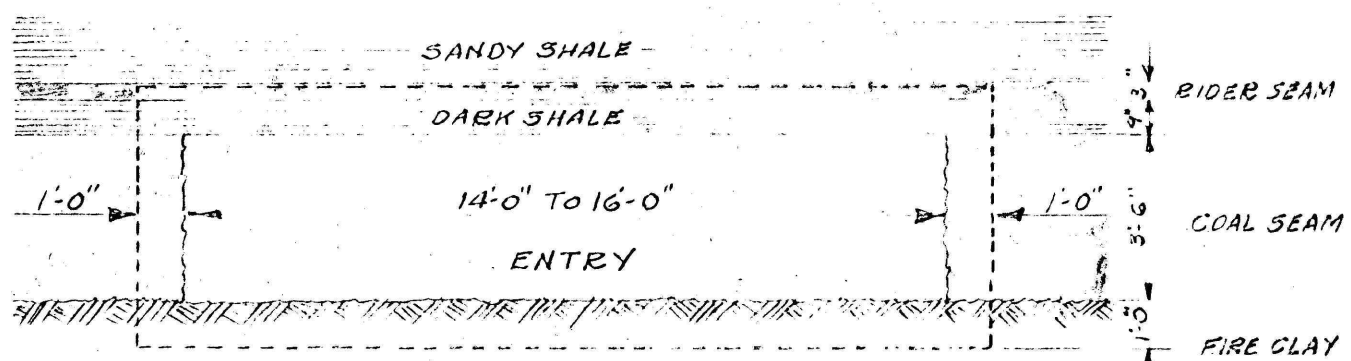
CONCRETE MIX = 1:2:4



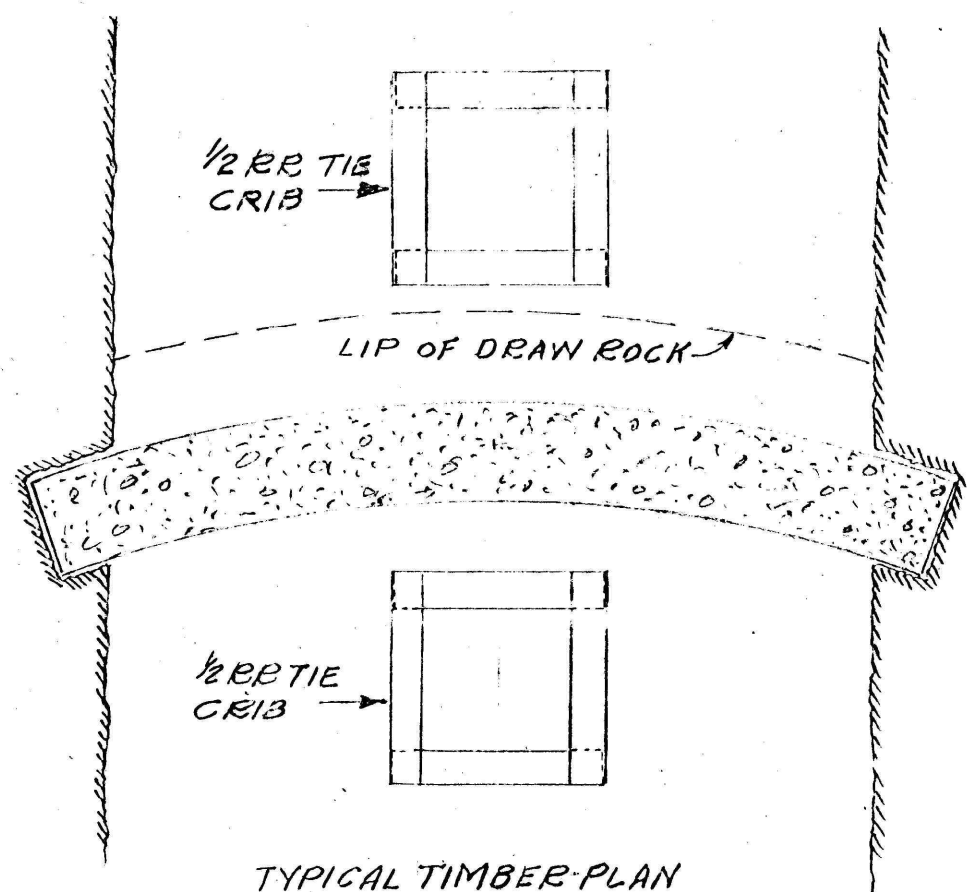
PLAN VIEW - DAM NO. 1
SCALE 1/4" = 1'-0"



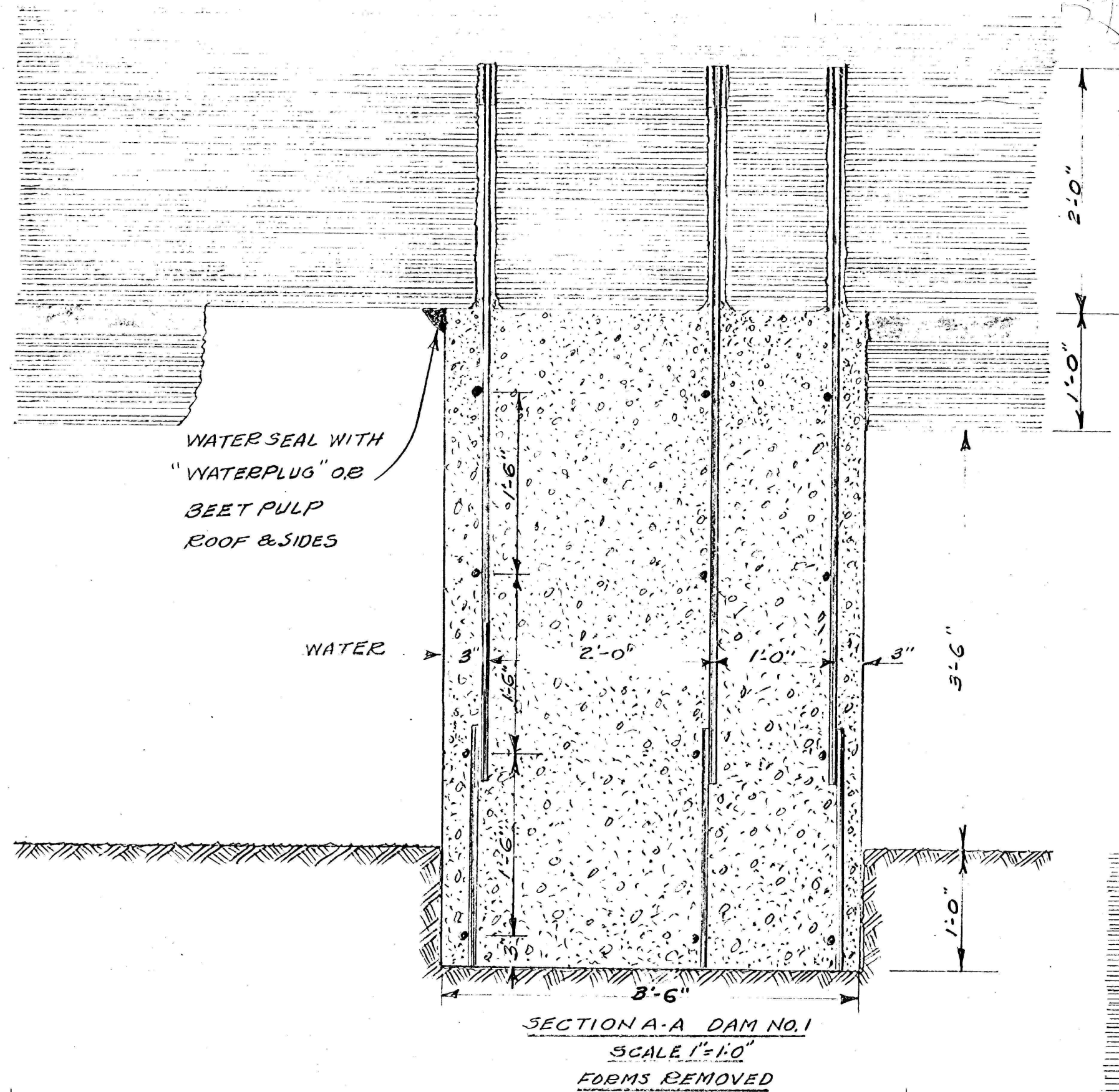
PLAN VIEW - DAM NO. 2 & 3
SCALE $\frac{1}{4}" = 1'-0"$



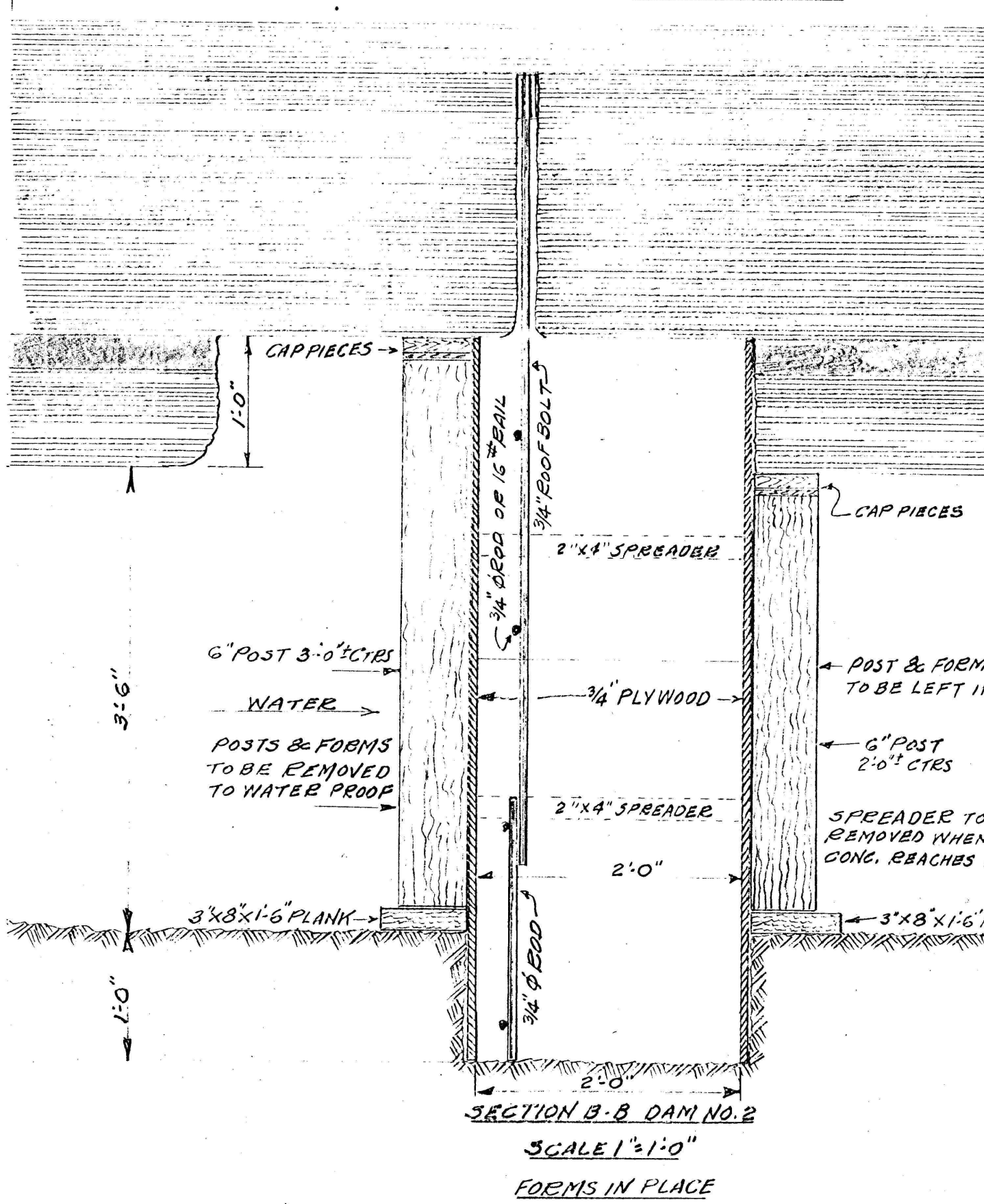
TYPICAL SECTION
SCALE $\frac{1}{4}'' = 1'-0''$



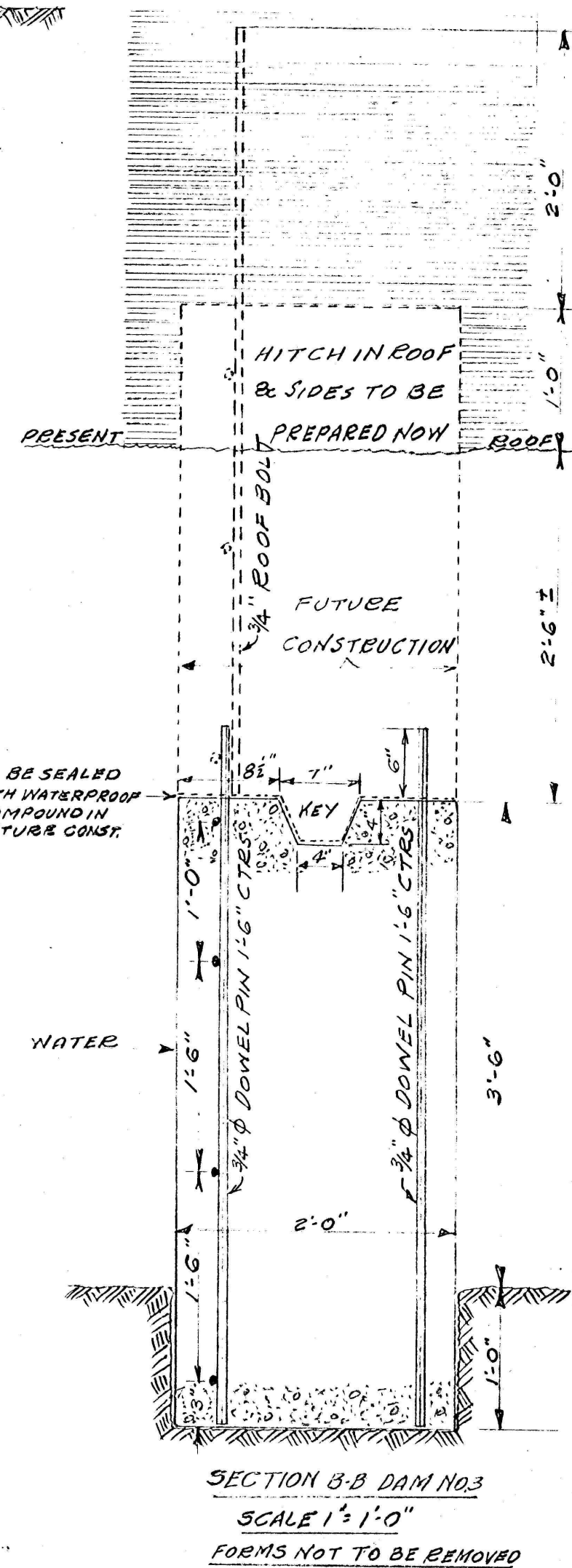
TYPICAL TIMBER-PLAN
AT DAM NO.1 & 2
SCALE 1/4"=1'-0"



SECTION A-A DAM NO. 1
SCALE 1"=1.0"
FORMS REMOVED



SECTION B-B DAM NO. 2
SCALE 1"=1'-0"
FORMS IN PLACE



SECTION B-B DAM NO.3
SCALE 1"=1'-0"
FORMS NOT TO BE REMOVED

PLAN AND SECTIONS
DAMS TO BE CONSTRUCTED
PINE NO. 1 DIP MINE
PINE TWP, INDIANA CO., PA
SCALE AS SHOWN APR. 30, 1963

NOTE:
ALL EXCAVATIONS TO BE
MADE WITHOUT SHOOTING