

STEEL BOILER PLATES (3 BR)	
ENG. NO. 759	
A	6 PLATES 22'-8 1/2" x 11'-0 3/4" x 1/8" SHELL
B	6 " 1'-9" x 11'-0 3/4" x 1/8" BUTT STRAP OUTER
C	6 " 1'-9" x 10'-6 1/2" x 1/8" " " INNER
D	3 " 1'-9" x 17'-3 1/2" x 1/8" FRONT END TOP
E	3 " 1'-9" x 17'-3 1/2" x 1/8" FRONT TUBE PLATE
F	3 " 1'-9" x 17'-3 1/2" x 1/8" BACK END TOP
G	3 " 1'-9" x 17'-3 1/2" x 1/8" " " BOTTOM
H	3 " 1'-9" x 17'-3 1/2" x 1/8" BACK TUBE PLATE CENTRE
I	6 " 8'-6" x 5'-5" x 1/8" " " WINGS
K	6 " 8'-6" x 5'-5" x 1/8" " " COMB. CHAM. BACK WINGS
L	3 " 10'-3 1/2" x 10'-3 1/2" x 1/8" " " CENTRE
M	3 " 19'-8 1/2" x 2'-9 1/2" x 1/8" " " SIDE CENTRE
N	6 " 14'-2 1/2" x 2'-8 1/2" x 1/8" " " WINGS
O	6 " 5'-2 1/2" x 2'-9" x 1/8" " " 22" WINGS
P	3 " 5'-4" x 2'-9 1/2" x 1/8" " " CENTRE
Q	12 " 2'-10" x 1'-1 1/2" x 1/8" " " CURVERS
R	3 " 6'-0" x 3'-0" x 1/8" " " WASHERS

STEEL RIVETS - 3 BR	
POSITION	DIAM. LEN. NO. CWT.
CIRCUMF. SEAMS END 5" TOP	1 1/16" 3 1/2" 4 7/8" 32.5 8.0
" " " BOT"	" 4 5/8" 4-60 10.7
HAND " " FRN"	" 4 1/4" 4-85 10.0
RIVET " " " TOP"	" 4 1/4" 30-0 6.5
END OF BUTT STRAPS	6 5/8" 90 2.5
LONGITUD. SEAMS	1 1/8" 4 1/2" 860 23.0
BOILER ENDS BACK	" 3 3/8" 285 3.7
" " FRONTS	" 3 3/8" 285 3.7
ENDS OF FURNACES & COMB. CHAM.	STOCK.

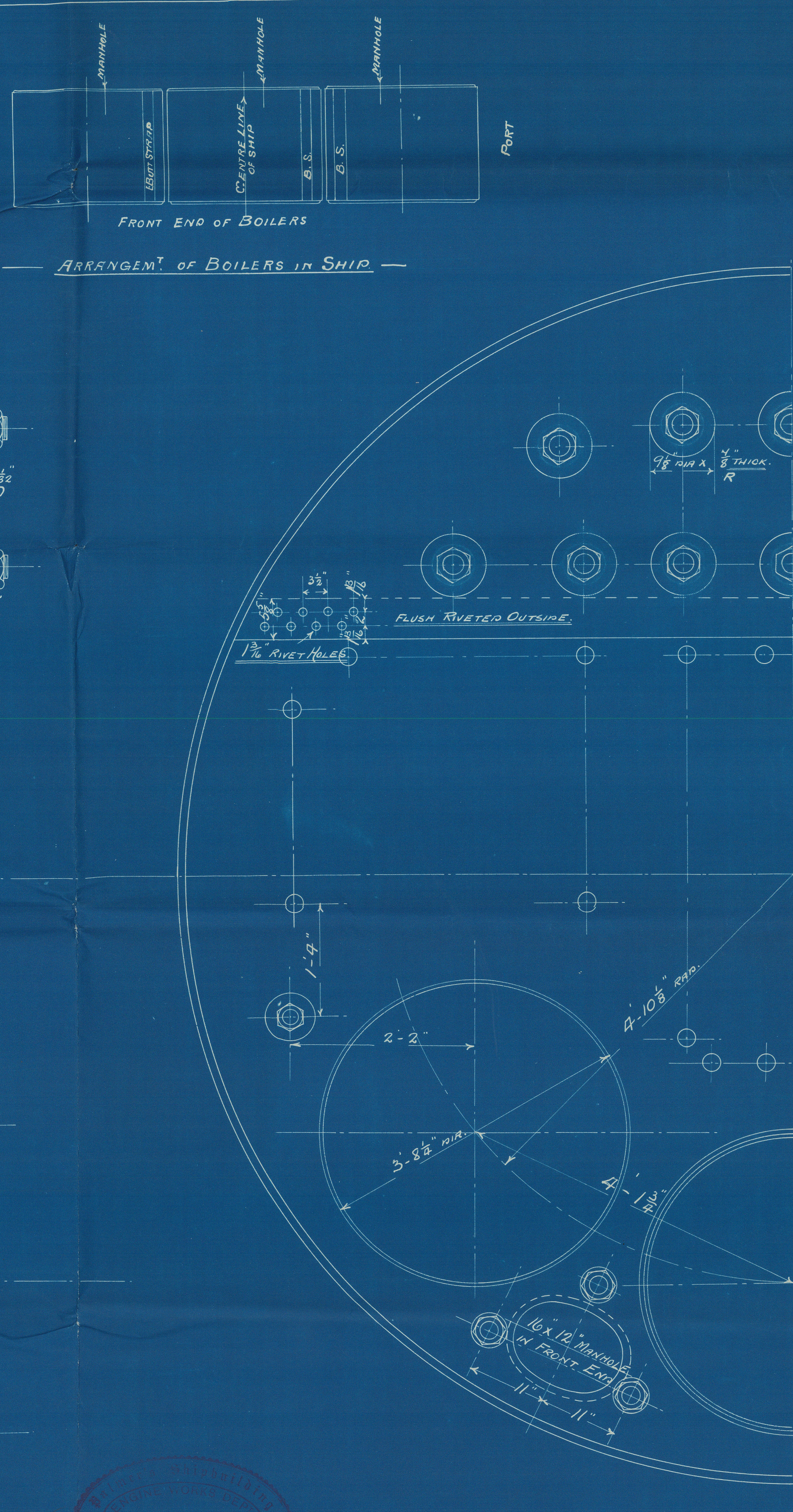
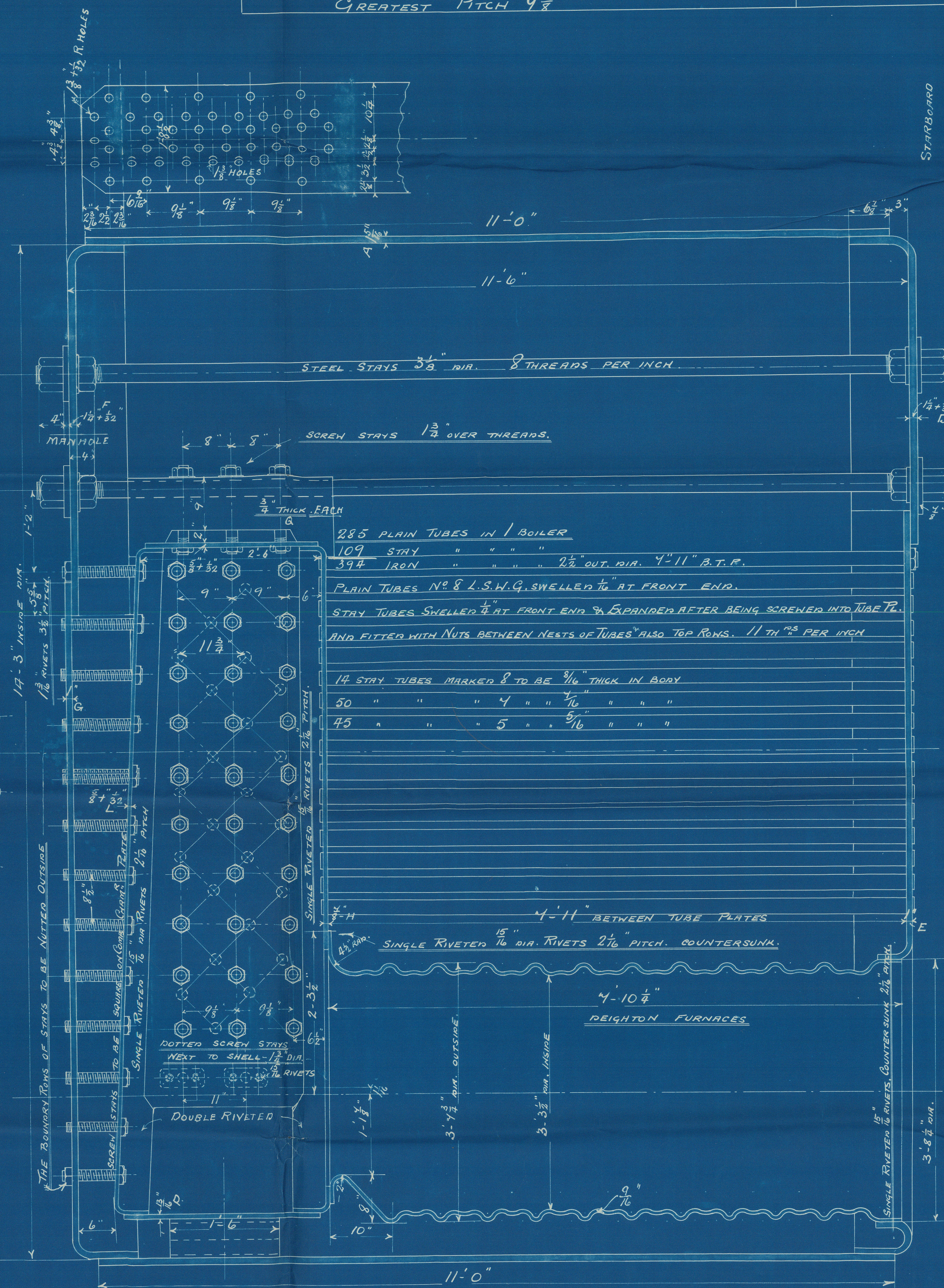
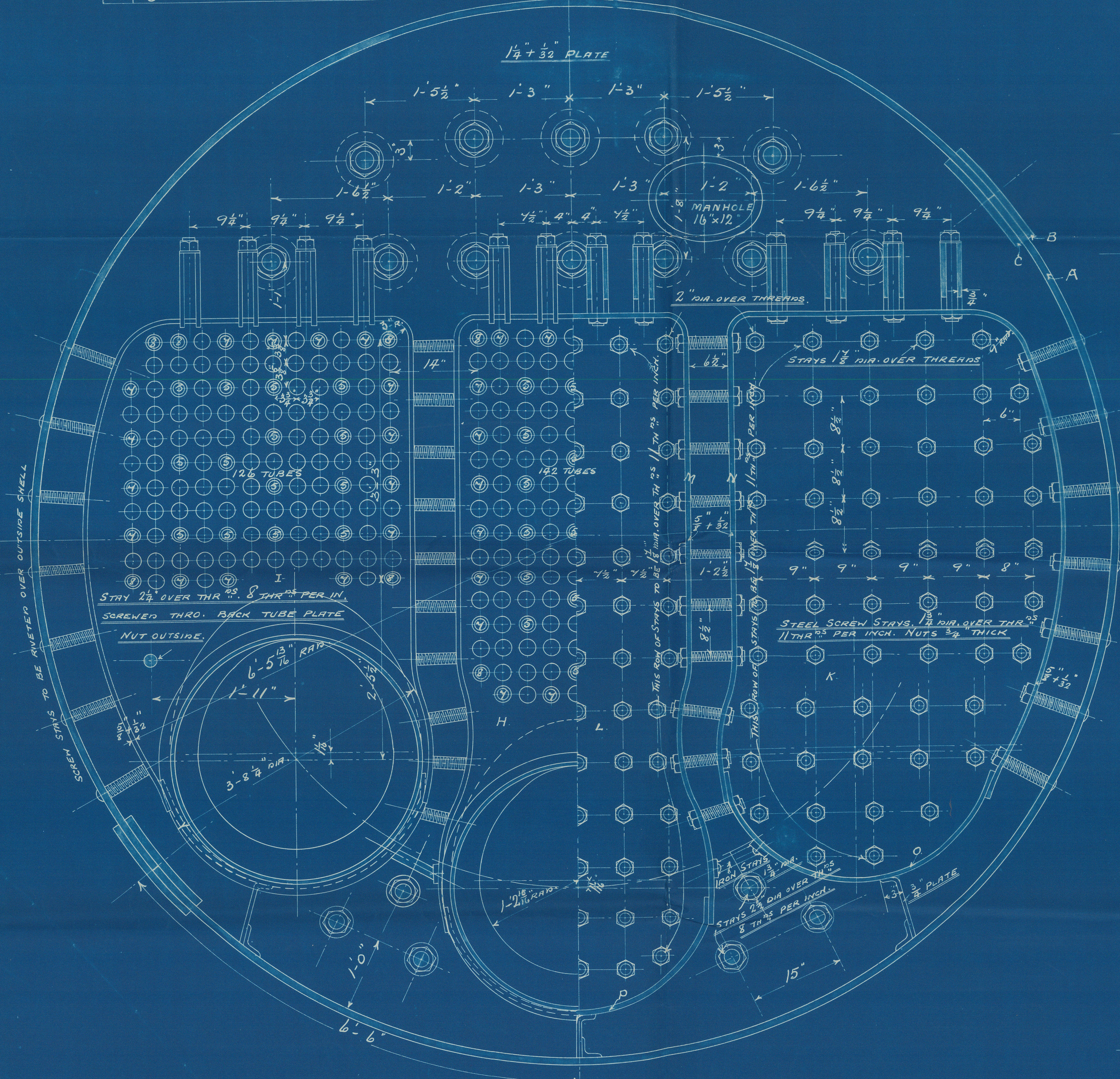
MAIN BOILERS

SCALE 1" = 1 FOOT.

3 OFF

HEATING SURFACE IN 1 BOILER	
TUBES 394 x 2 1/2" DIA x 4'-11"	2040 SQ. FT.
FURNACES	242 " "
COMBUSTION CHAMBERS	194 " "
BACK TUBE PLATES	44 " "
FRONT " "	31 " "
TOTAL	2581 SQ. FT.
3 BOILERS	7743 SQ. FT.
WORKING PRESSURE	180 LBS. / IN.
TEST " "	360 " "
SHELL RIVETING	
DOUBLE BUTT STRAP JOINT	
SHELL PLATE 1 1/8" BUTT STRAPS 1 1/2" RIVET HOLES 1 3/8"	
GREATEST PITCH 9 1/2"	

CONDITIONS OF CONSTRUCTION	
LONGITUDINAL SEAMS DOUBLE BUTT STRAP JOINTS, HOLES DRILLED IN PLACE AFTER BENDING THE PLATES, THEN TAKEN APART, THE BURR TAKEN OFF & THE HOLES SLIGHTLY COUNTERSUNK FROM THE INSIDE.	
CIRCUMFERENTIAL SEAM DOUBLE RIVETED LAP JOINTS, HOLES DRILLED IN PLACE AFTER BENDING THE PLATES THEN TAKEN APART, THE BURR TAKEN OFF & THE HOLES SLIGHTLY COUNTERSUNK FROM THE INSIDE.	
ALL HOLES DRILLED IN PLACE	
BOARD OF TRADE	
CONSTANT USED FOR SHELL	22.5
" " " LONG STAYS	185
" " " SHORT " "	135
" " " STAY TUBES 140 x 150	" " " SHORT " "
% STRENGTH OF PLATES AT JOINT	84.9%
" " " RIVETS	92%
% STRENGTH OF TUBE AT JOINT	84.9%
" " " RIVETS	85.9%



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BOILERS TO BE ALL STEEL EXCEPT TUBES WHICH ARE WRO. IRON

3 OFF THIS.

26-4-05

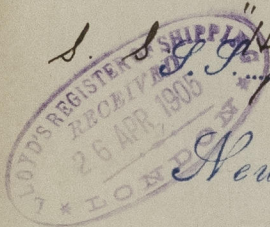


NO. 1714-3



Palmer Co Eng 759
Amended plan of
Main Boiler
180 lbs

S. S. "Hymettus"



Newcastle Report

N^o 50000



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Foundation