

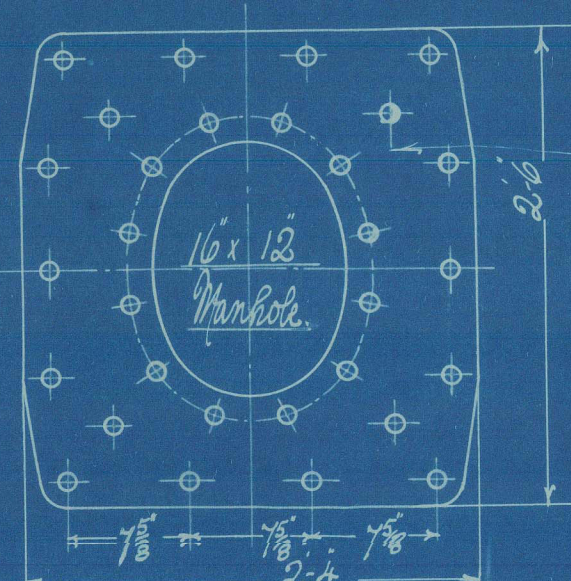
21/6/10

STEEL BOILER No A 125

Working Pressure = 180 lbs per sq inch (Lugs).

Scale 1 inch = 1 foot.

Note:
All plates, rivets, & stay bars to be of Siemens Martin Steel.
All rivet holes to be drilled in place after the plates are bent.
All flange plates to be annealed after flanging.
The screw stays are 1 1/2" effective diam. screwed into both plates and nutted at bottom. All screwed 10 threads per inch.
A manhole in shell 16" x 12" with 6" flange axis longitudinally and a doubling plate 2'-6" x 2'-4" x 3/8" thick fitted to suit it.



Manhole doubling plate 3/8" thick.

1/2" rivet holes
inner row counter sunk

Riveting at A

1 3/8" rivets
3/8" pitch

Riveting at B

Plan of Steel Flueing

1/2" rivets

1/2" pitch

Plate = 56%

Rivets = 92%

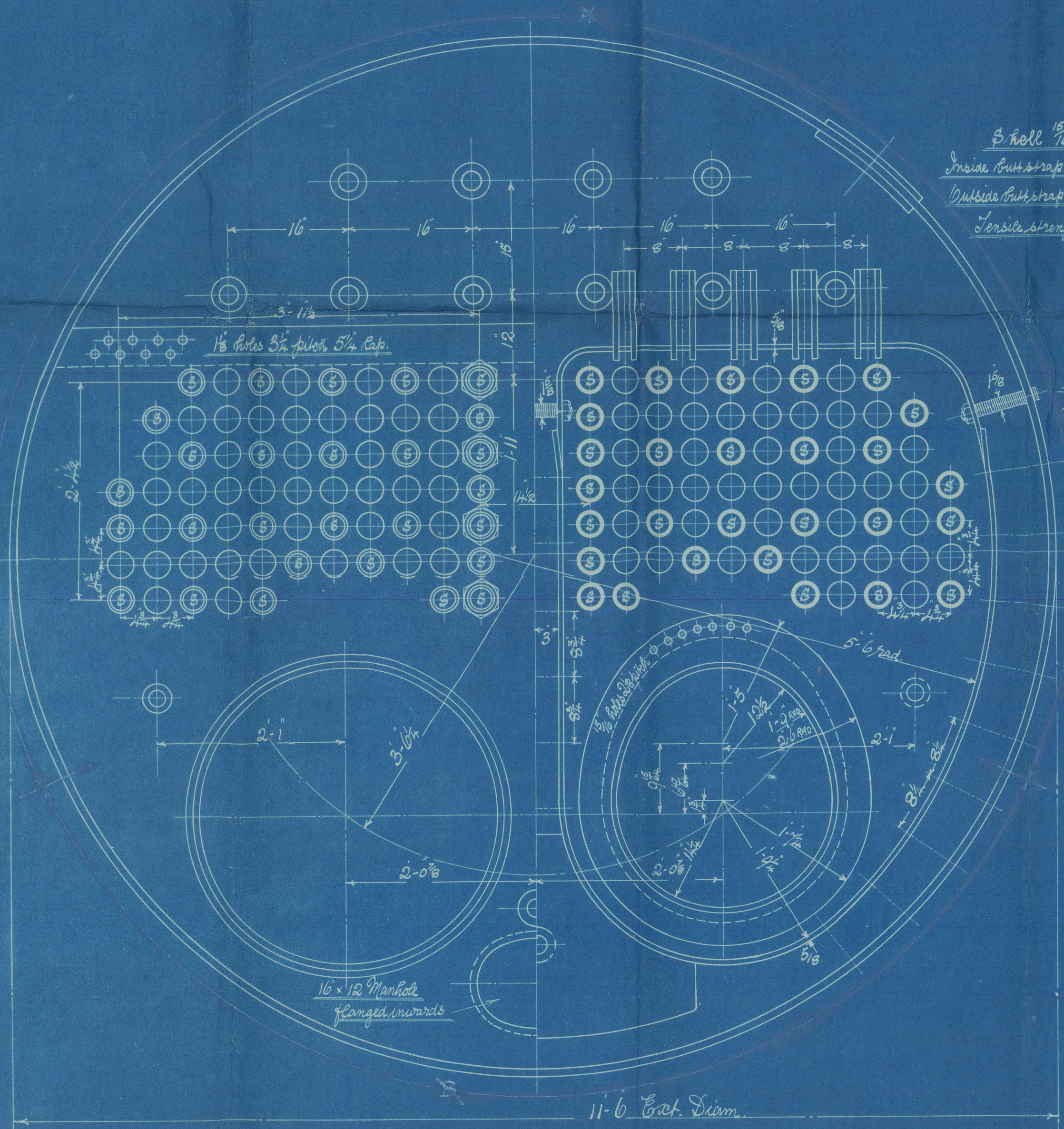
Riveting at A

1 3/8" rivets
3/8" pitch

Riveting at B

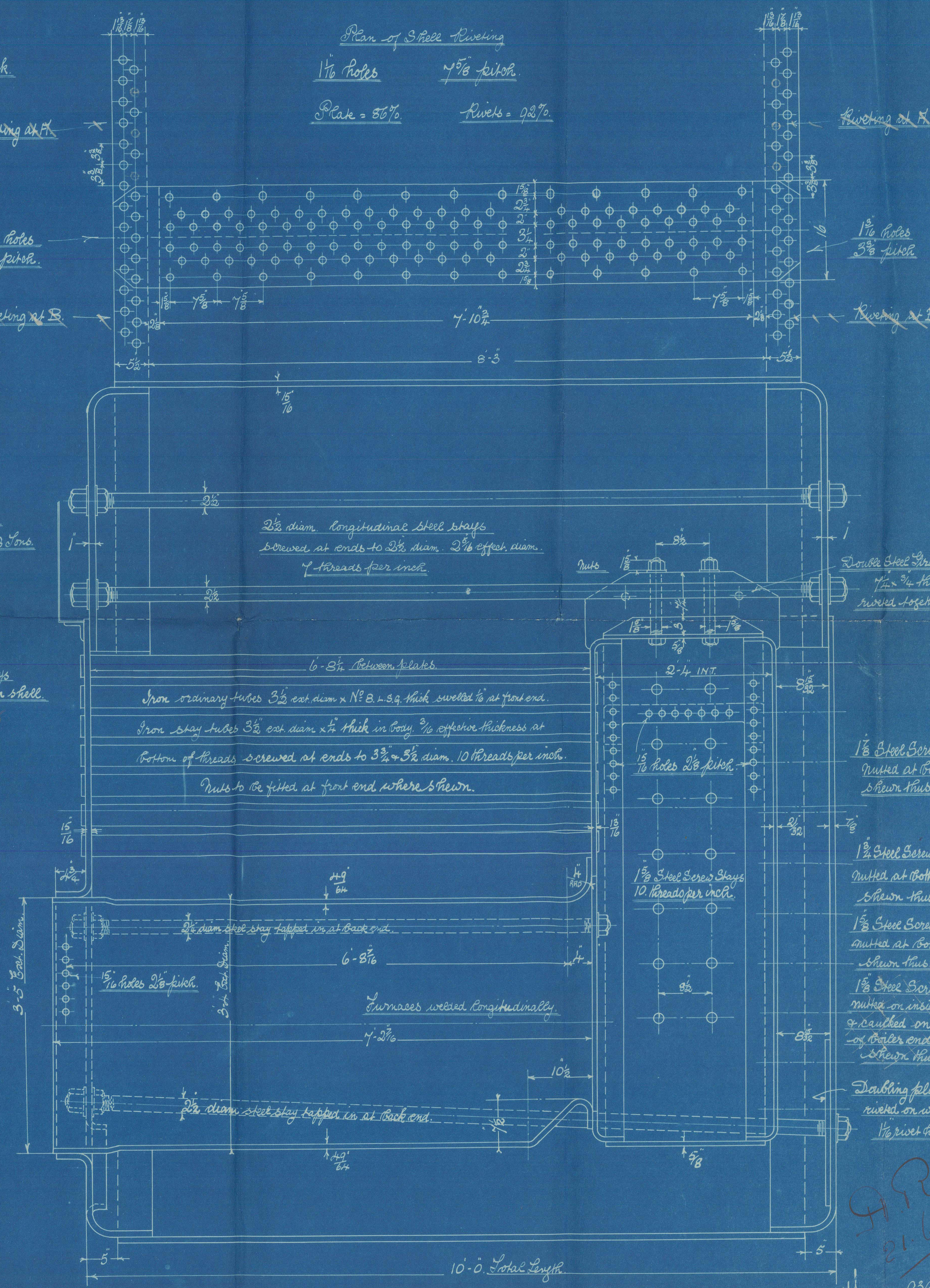
DIMENSIONS

LENGTH OF FIRE BARS	5'-6"
AREA OF FIRE GRATE	35.9 sq. ft.
DIAM. OF TUBES OUTSIDE	3 1/2"
LENGTH OF TUBES	6'-8 1/2"
NO. OF TUBES	138
AREA THROUGH TUBES	7.35 sq. ft.
SURFACE OF TUBES	84.5 sq. ft.
TOTAL HEATING SURFACE	1060 sq. ft.
WORKING PRESSURE	180 lbs



Shell 1/2" thick
Inside butt strap 1/2" thick
Outside butt strap 1/2" thick
Inside strength 23-33 tons

screw stays
caulked on shell
nuts



2 1/2" diam. longitudinal steel straps
screwed at ends to 3 1/2" diam. 2 1/2" effective diam.
7 threads per inch

6-8" between plates
Iron ordinary tubes 3 1/2" ext. diam. x 10 B.S.G. thick welded to at front end.
Iron stay tubes 3 1/2" ext. diam. x 1/2" thick in body. 3/16" effective thickness at
bottom of threads screwed at ends to 3 1/2" x 3 1/2" diam. 10 threads per inch.
Nuts to be fitted at front end where shown.

Double Steel Straps
1/2" x 1/2" thick
riveted together

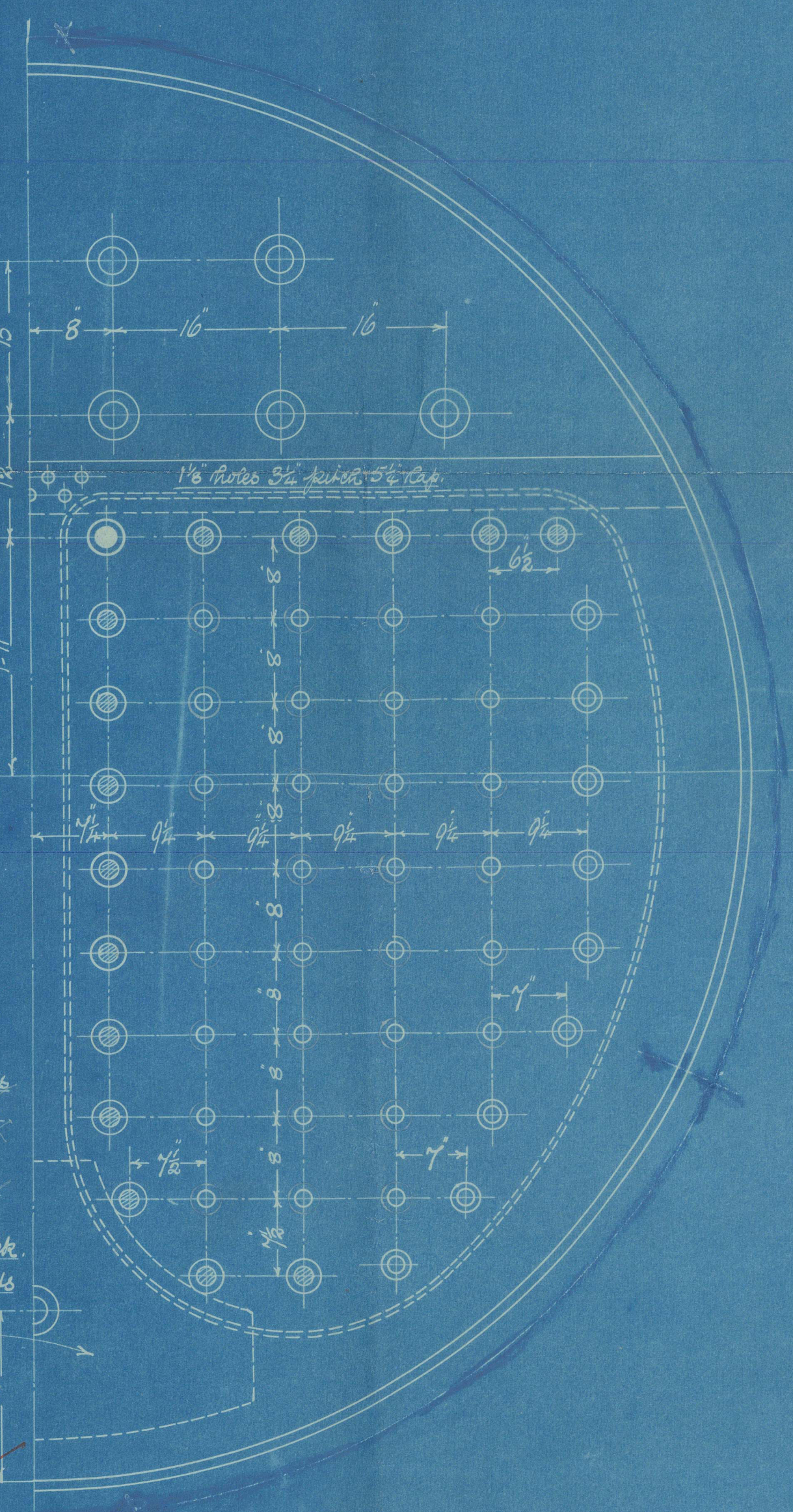
1 1/2" Steel Screw Stays
nutted at both ends
shown thus:

1 1/2" Steel Screw Stays
nutted at both ends
shown thus:

1 1/2" Steel Screw Stays
nutted at both ends
shown thus:

1 1/2" Steel Screw Stays
nutted on inside of C.B.
& caulked on outside
of boiler end
shown thus:

Doubling plate 3/8" thick
riveted on with 1 rivets
1/2" rivet holes



9394.B
16.6.10

No A 125

95

18.6.10



Amended plan of
Boiler for
Messrs Earles & Co

No A 125
s/s Apar
Hull Report No 23003

No 1468
Lloyds Test
360 lbs
J.B.
31.8.10



J. Barclay



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Lloyd's Register
Foundation

W1372-0058