

| SURFACES | ONE BOILER 30000 | THREE BOILERS |
|----------------------------|------------------|---------------|
| TUBES | 2100 | 6300 |
| FIREBOX TOP & SIDES | 158 | 474 |
| BACK | 82 | 246 |
| TUBEPLATE | 55 | 165 |
| FURNACES | 161 | 483 |
| TOTAL HEATING SURFACE | 2556 | 7668 |
| GRATE AREA (5' 6" BARS) | 63.3 | 190 |
| TUBE AREA | 1165 | 3495 |
| WATER | 160 | 480 |
| STEAM SPACE | 514 | 1542 |
| GRATE AREA HEATING SURFACE | 140.9 | |
| TUBE | 133.2 | |
| AREA | 543.1 | |
| WATER | 12.52 | |
| STEAM SPACE | 18.1 | |
| % BOILER ABOVE FIREBOX | 32.2 | |
| WEIGHT OF WATER | 268 TONS | 794 TONS |

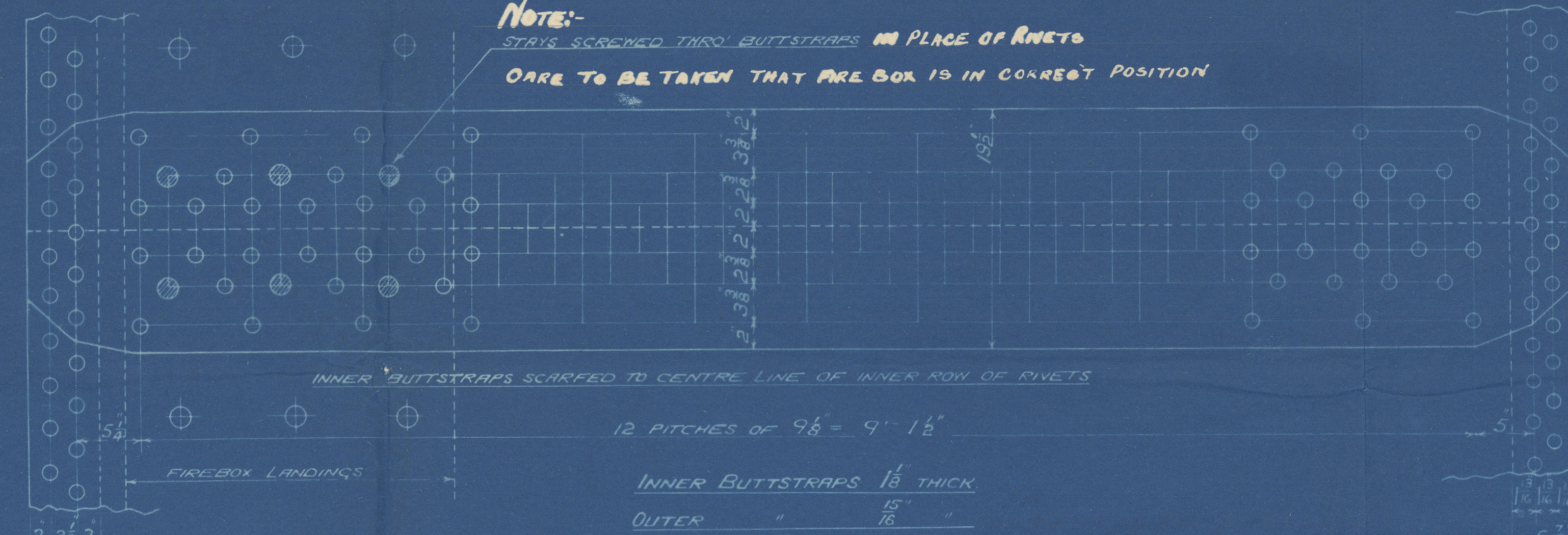
| RIVETING | LONG | BACK END | FRONT END |
|----------------|--------|----------|-----------|
| RIVET HOLE DIA | 1 1/8" | 1 1/8" | 1 1/8" |
| PITCH | 9 1/2" | 3 5/8" | 3 1/4" |
| % PLATE | 85.6 | 63 | 63 |
| % RIVET | 88.3 | 51.9 | 46.5 |

| LIMITS OF TENSILE STRENGTH & MATERIAL | |
|---------------------------------------|---------------|
| SHELL, BUTTSTAYS & CHIMNEYS | 28 TO 32 TONS |
| OTHER PLATES | 26 TO 30 |
| FURNACES | 24 TO 30 |
| MAIN STAYS | 28 TO 32 |
| SCREWED STAYS | 26 TO 30 |
| RIVET BARS | 26 TO 30 |

ALL RIVET HOLES DRILLED IN PLACE
MAIN STAYS SHELLED AT ENDS
AND TURNED DOWN AS SHOWN

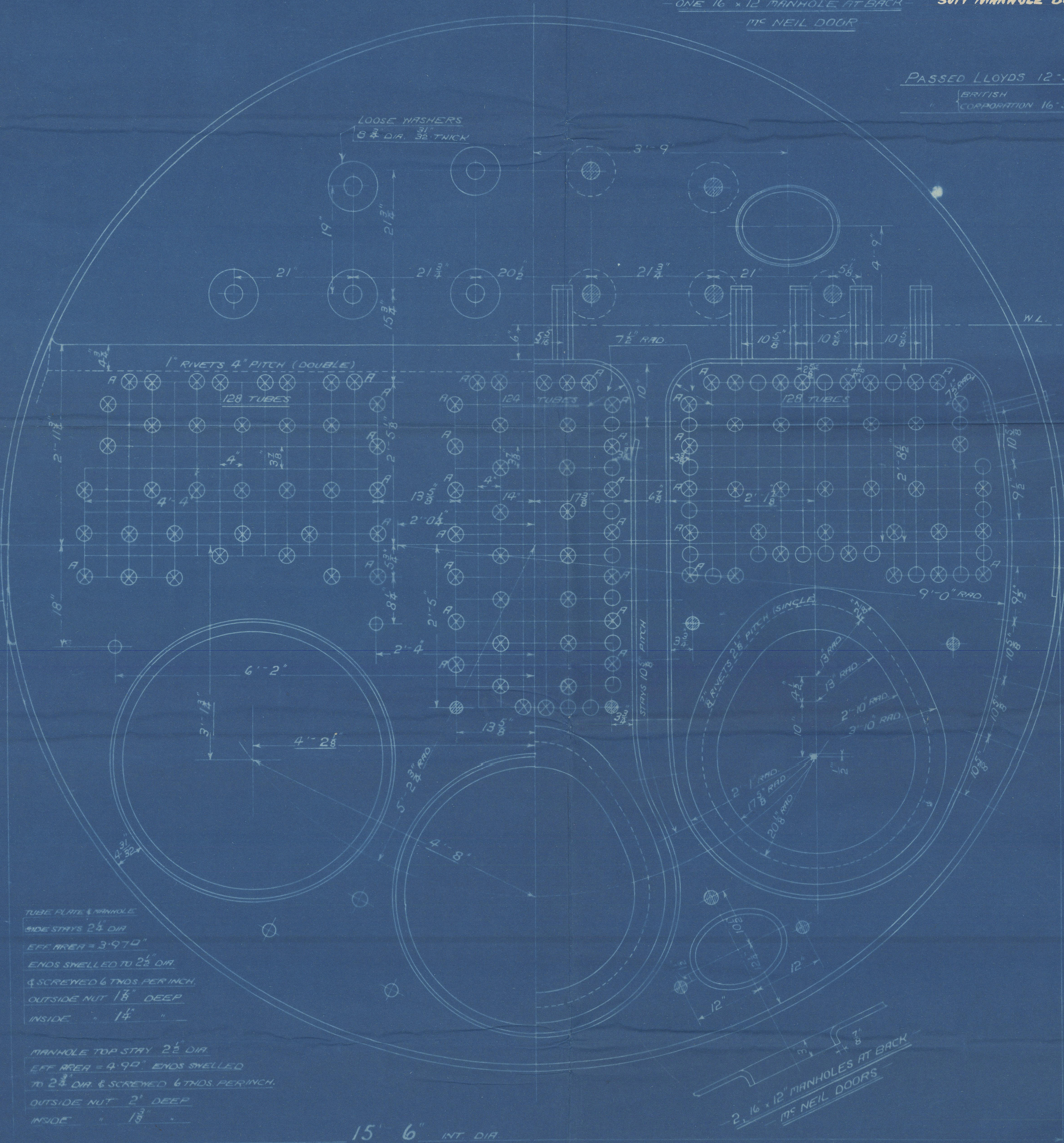
ONE 16" x 12" MANHOLE AT BACK
11" NEIL DOOR

PASSED LLOYDS 12-3-17
BRITISH
COMMISSION 16-3-17



NOTE:-
STAYS SCREWED THRU BUTTSTAYS IN PLACE OF RIVETS
CARE TO BE TAKEN THAT ARE BOX IS IN CORRECT POSITION

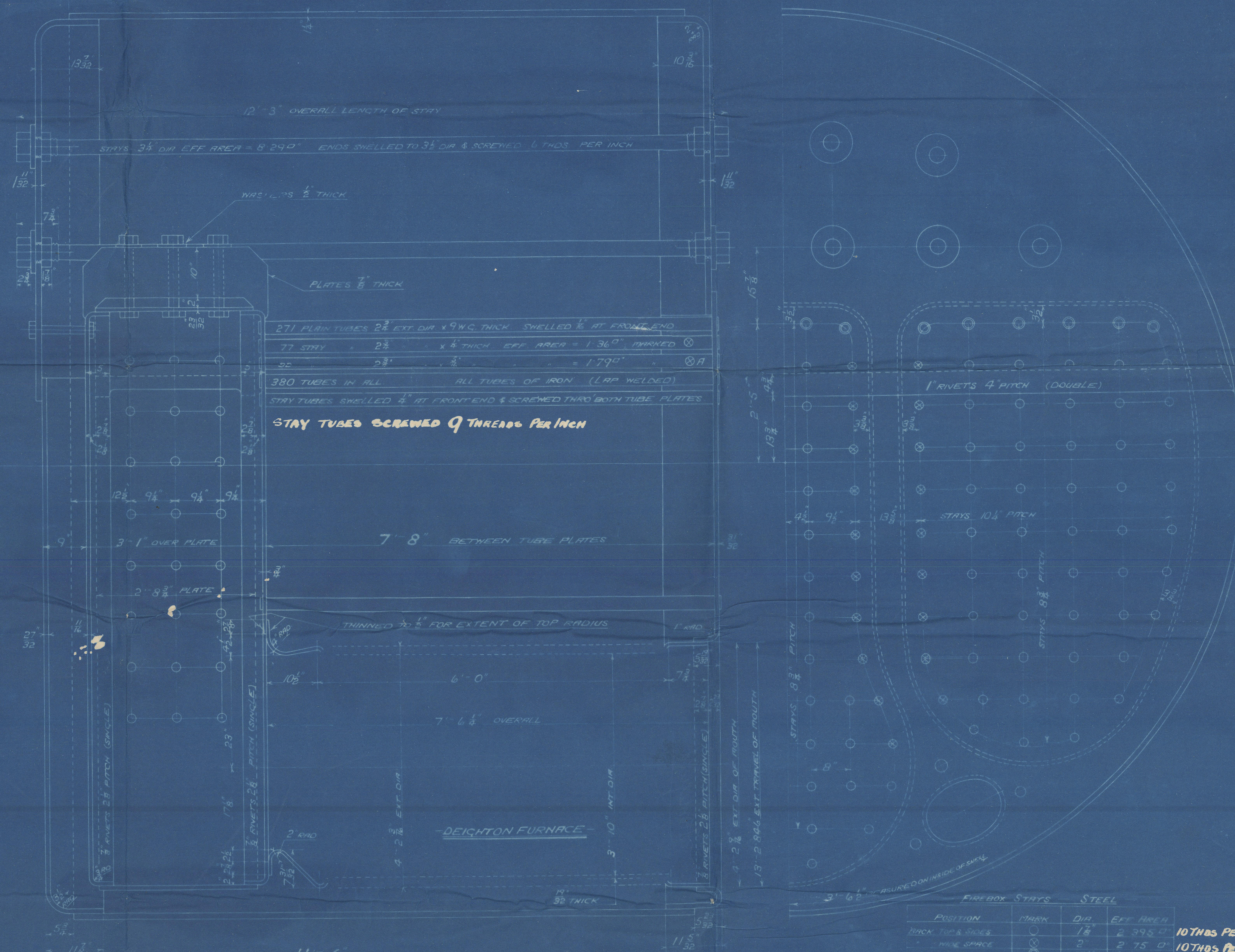
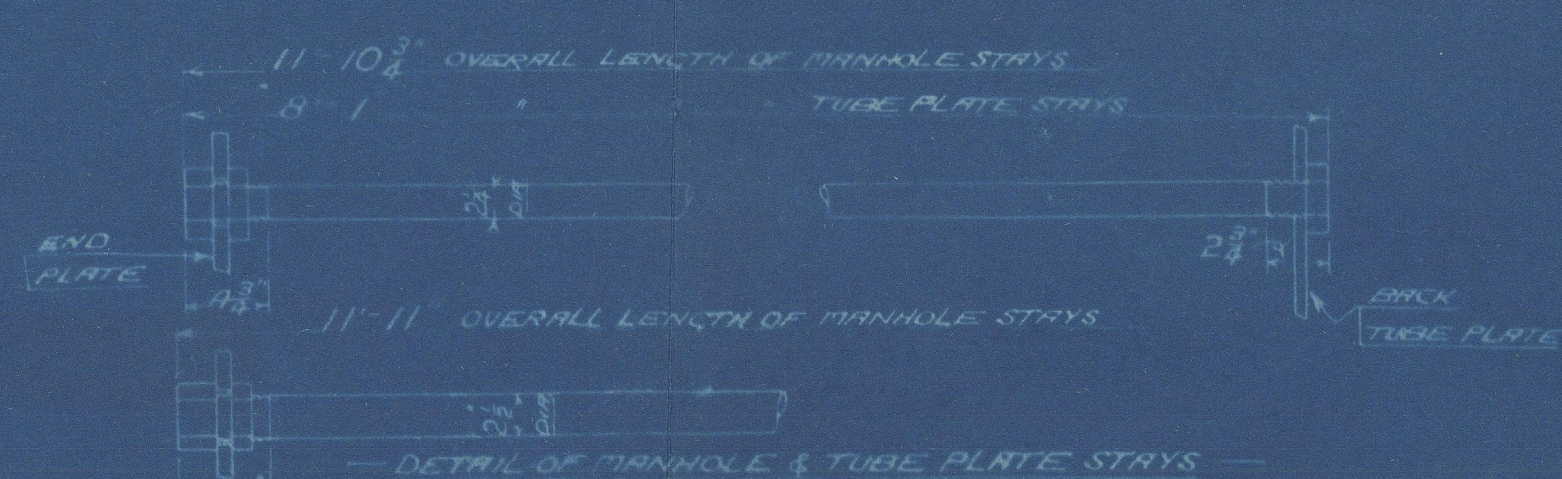
NOTE DIFFERENT SIZE & PITCH OF RIVETS IN BACK
AND FRONT CIRCUMFERENTIAL SEAMS



TUBE PLATE & MANHOLE
SIDE STAYS 2 1/2" DIA
EFF AREA = 3.970"
ENDS SHELLED TO 2 1/2" DIA
& SCREWED 6 THDS PER INCH
OUTSIDE NUT 1 1/2" DEEP
INSIDE 1 1/4"

MANHOLE TOP STAY 2 1/2" DIA
EFF AREA = 4.970" ENDS SHELLED
TO 2 1/2" DIA & SCREWED 6 THDS PER INCH
OUTSIDE NUT 2" DEEP
INSIDE 1 1/2"

15' 6" INT. DIA



MAIN BOILER (SECOND SERIES)

3 OFF

WORKING PRESSURE = 180 LBS PER SQ INCH
TO PASS LLOYDS SURVEY
SCALES 1" = 1 1/2" = ONE FOOT

CONTRACT No 530

ALL FIREBOX STAYS SCREWED THRU BOTH PLATES & NUT FITTED AT EACH END
EXCEPT STAYS FROM WING FIREBOX TO SHELL WHICH PROJECT 1/2" & ARE CHAINED.
ALL 1 1/2" NUTS 1 1/2" DEEP EXCEPT ON GRILLER TOPS WHERE THE OUTSIDE NUTS ARE 1 1/2" DEEP.

ALL 2" & 2 1/2" NUTS 1 1/2" DEEP

DAVID ROWAN & CO'S
REFERENCE
G 23496A
MARCH 7 1917

TRACING No 4681

"Homefield"

SUNDERLAND, 27511

W. DOXFORD & SONS LTD

(3) BOILERS N-530

WP = 180 LBS

"A" TYPE

W1004-0059

Port
Blr

No. 3535
LLOYD'S TEST
360 lbs.
G.A.H. 17.2.19

Star
Boiler

No. 3537
LLOYD'S TEST
360 lbs.
G.A.H. 24.2.19

Center
Blr

No. 3541
LLOYD'S TEST
360 lbs.
E.W.R. 3.3.19

SUNDERLAND RPT. No. 27511



173 MAY 1919

Lloyd's Register
Foundation