

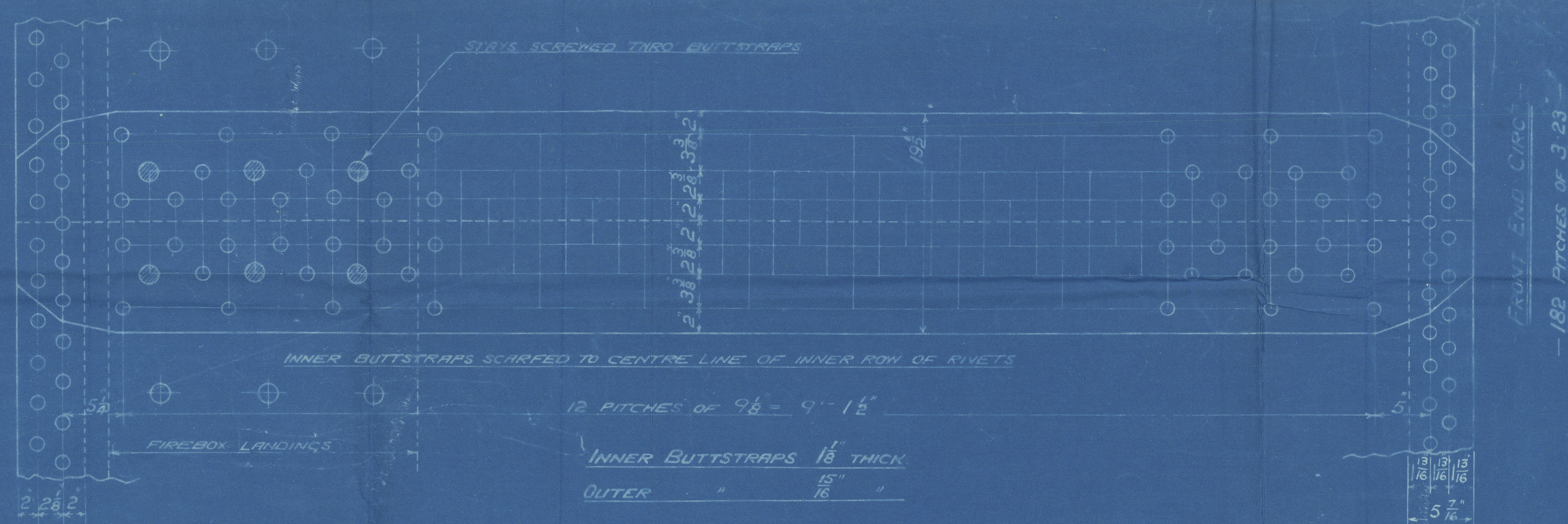
SURFACES	ONE BOILER	2 BOILERS
TUBES	2100	6300
FIREBOX TOP & SIDES	158	474
BACK	82	246
TUBE PLATE	55	165
FURNACES	161	483
TOTAL HEATING SURFACE	2556	7668
GRATE AREA (5' 6" BARS)	63.3	190
TUBE AREA	11.65	34.95
WATER	160	480
STEAM SPACE	514	1542
GRATE AREA HEATING SURFACE	1' 40" 2	
TUBE	1' 33" 2	
AREA	5.43	1
WATER	1' 2' 52	
STEAM SPACE	1' 8' 1	
% BOILER ABOVE FIREBOX	32.2	
WEIGHT OF WATER	26 TONS	79 TONS

LONG	BACK END	FRONT END
RIVET HOLE DIA	1 1/8	1 1/8
PITCH	9 1/2	9 5/8
% PLATE	85.4	63
% RIVET	88.3	51.9

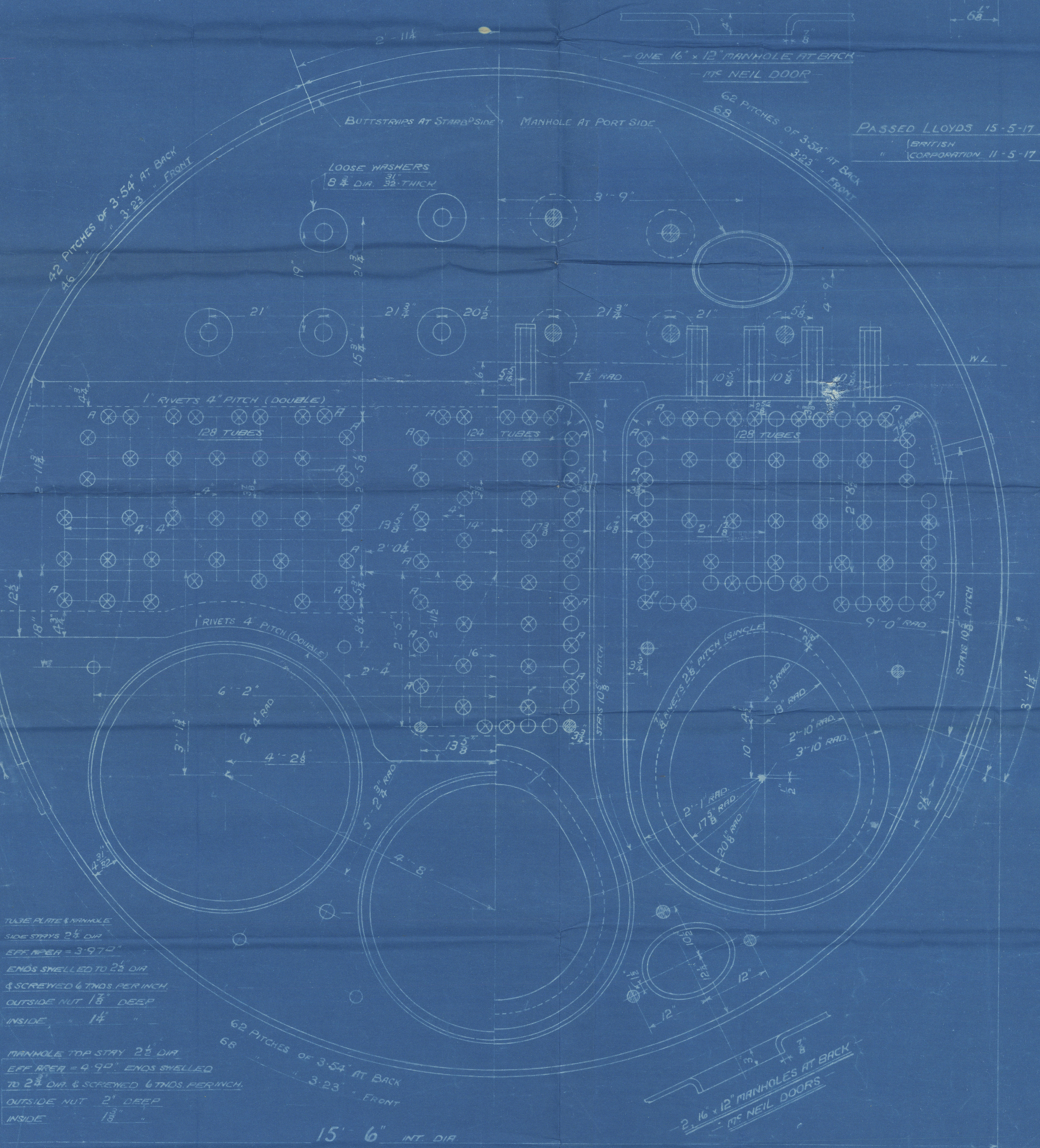
LIMITS OF TENSILE STRENGTH & MATERIAL	
SHELL, BUTTSTRAPS & GIRDERS	28 TO 32 TONS
OTHER PLATES	26 - 30
FURNACES	26 - 30
MAIN STAYS	28 - 32
SCREWED STAYS	26 - 30
RIVET BARS	26 - 30

ALL RIVET HOLES DRILLED IN PLACE
MAIN STAYS SHELLS AT ENDS BY
HYDRAULIC PRESSURE AND ANNEALED

BACK END CIRCLES
166 PITCHES OF 3.54



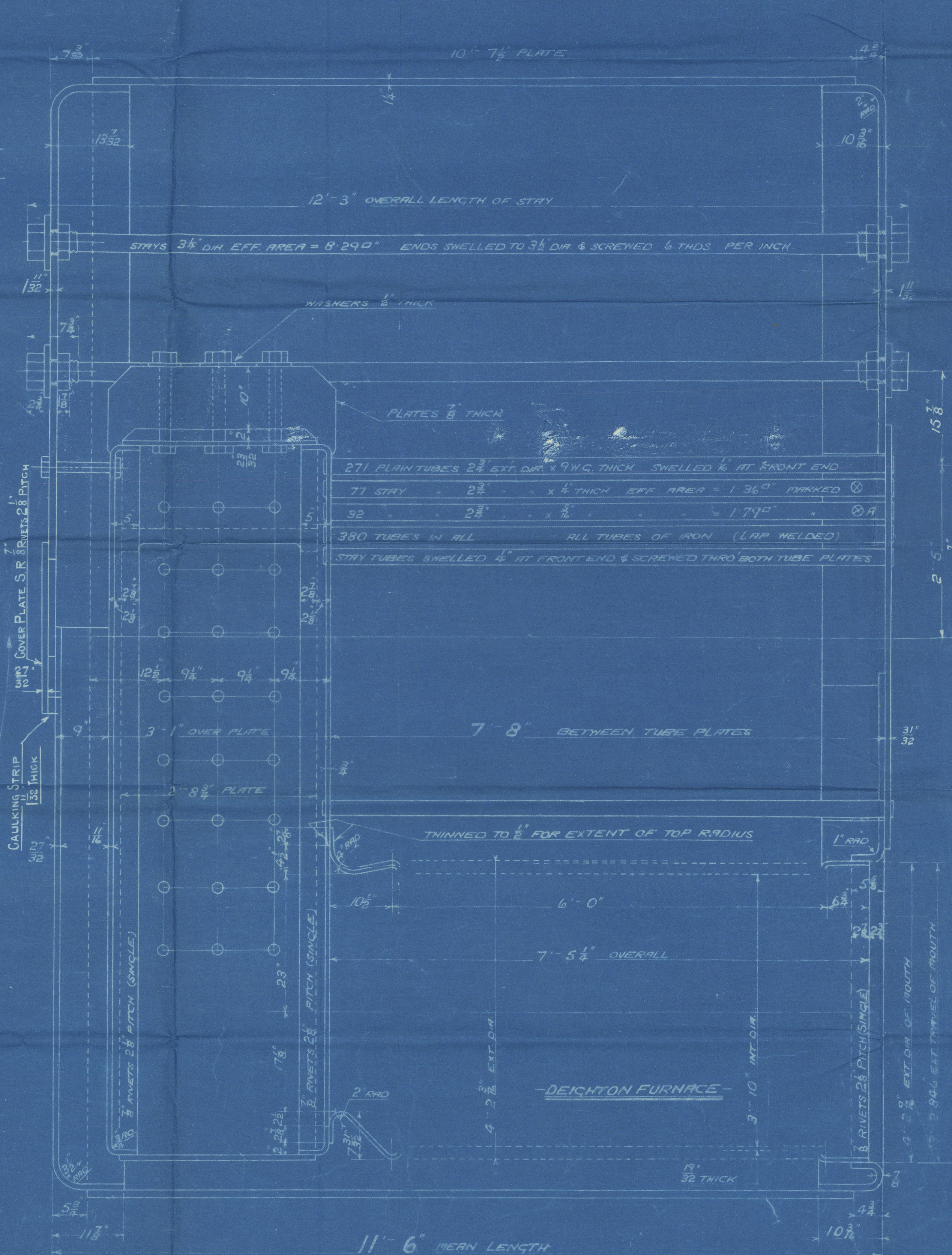
FRONT END CIRCLES
182 PITCHES OF 3.23



TUBE PLATE & MANHOLE
SIDE STAYS 2 1/2\"/>

MANHOLE TOP STAY 2 1/2\"/>

15' 6\"/>



MAIN BOILER (SECOND SERIES)
3 OFF (THIRD DESIGN)

ENC NO 504

WORKING PRESSURE = 180 LBS PER SQ INCH
TO PASS LLOYDS SURVEY
SCALES 1 1/4\"/>

FIREBOX STAYS - STEEL			
POSITION	MARK	DIA	EFF AREA
BACK TOP & SIDES	1	1 1/8	2' 39.5 O"
WIDE SPACE	2	2"	2' 75 O"
TOP END	3	2 1/2	3' 29 O"

ALL FIREBOX STAYS SCREWED THRU BOTH PLATES & NUT FITTED AT EACH END EXCEPT STAYS FROM WING FIREBOX TO SHELL WHICH PROJECT 8\"/>

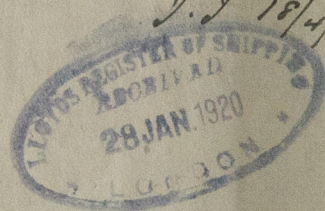
DAVID ROWAN & CO'S
REFERENCE
ROT 23500
MADE 7 MARCH 1917

DRC. NO 13.5422

Kincardo Boline.
No 504.

Showing bearing
plate on Boline lock
plate fitted one hole
made to enable lock
beam to be hydraulic
instead

J. J. 18/4/19.



"Harmonides"

No. 39560.

Boiler Eng No 504