

SURFACES	ONE BOILER	3 BOILERS
TUBES	2100 #	6300 #
FIREBOX TOP & SIDES	158 #	474 #
BACK	82 #	246 #
TUBE PLATE	55 #	165 #
FURNACES	161 #	483 #
TOTAL HEATING SURFACE	2536 #	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	1:40.4	
TUBE AREA	1:33.2	
WATER	1:2.52	
STEAM SPACE	1:8.1	
% BOILER ABOVE FIREBOX	32.2	
WEIGHT OF WATER	26 TONS	79 TONS

RIVETING -			
	LONG	BACK END CIRC	FRONT END CIRC
RIVET HOLE DIA	1 1/2	1 1/2	1 1/2
PITCH	9.125	9.54	9.23
% PLATE	85.6	63	63.3
% RIVET	88.9	51.9	46.5

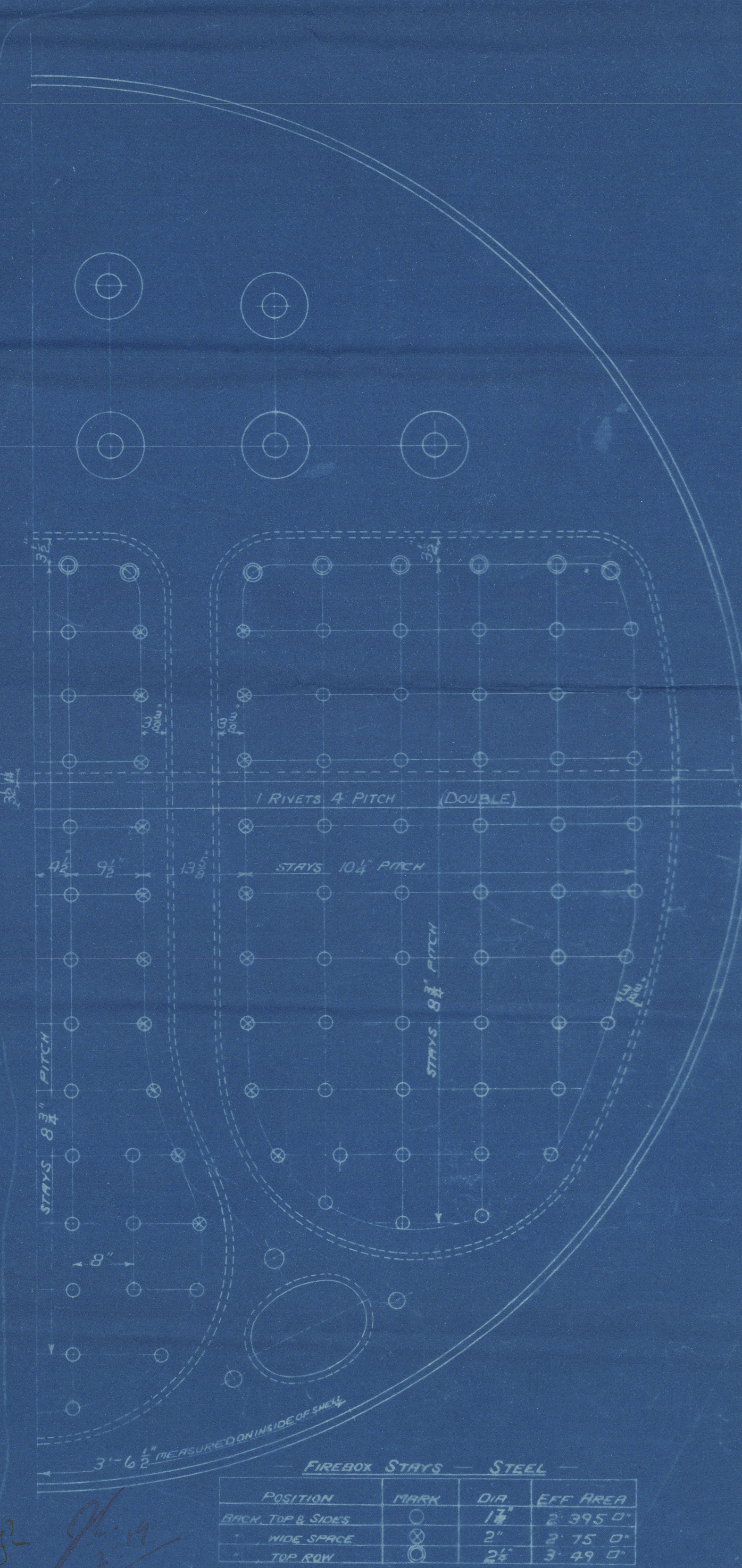
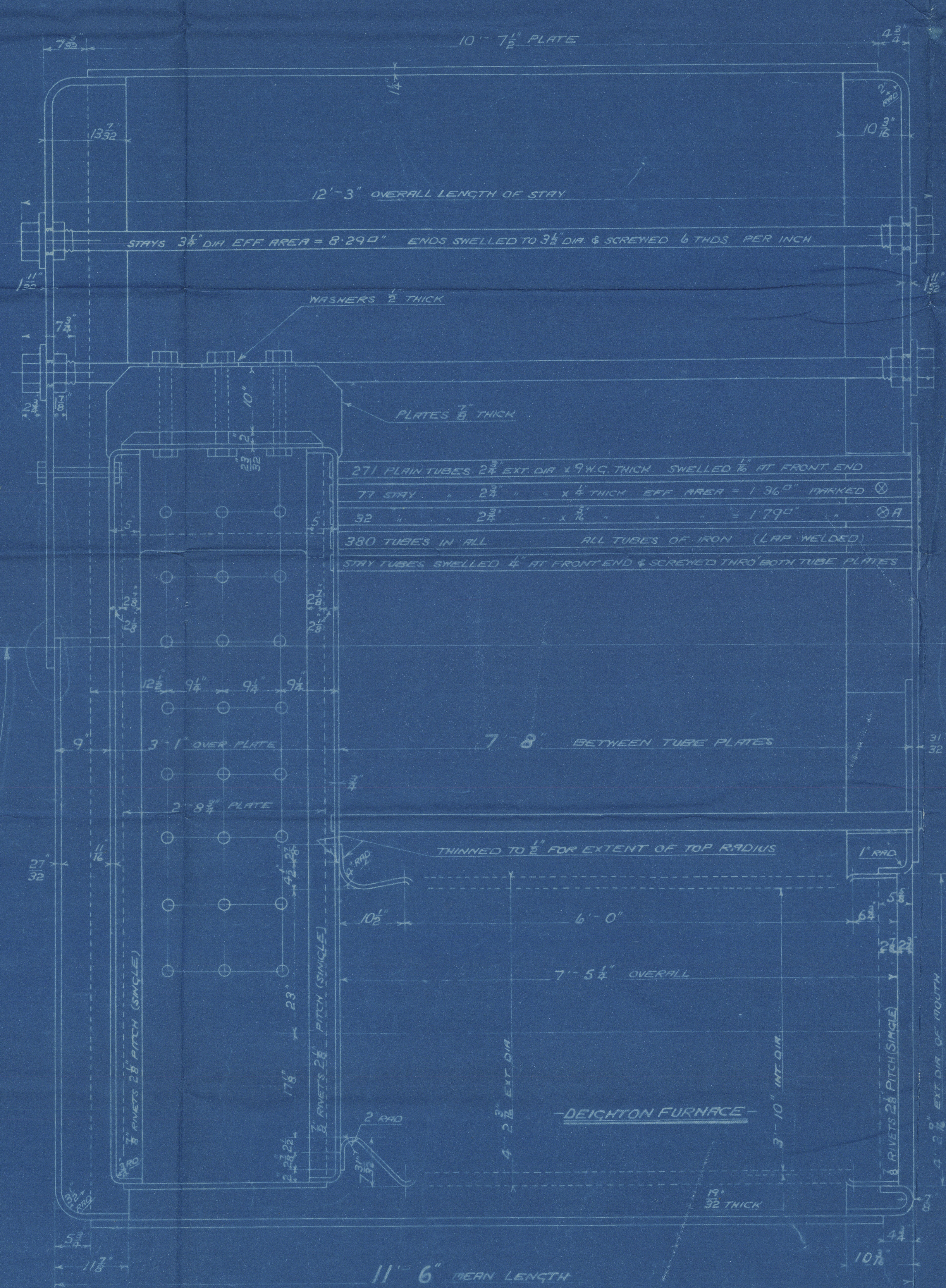
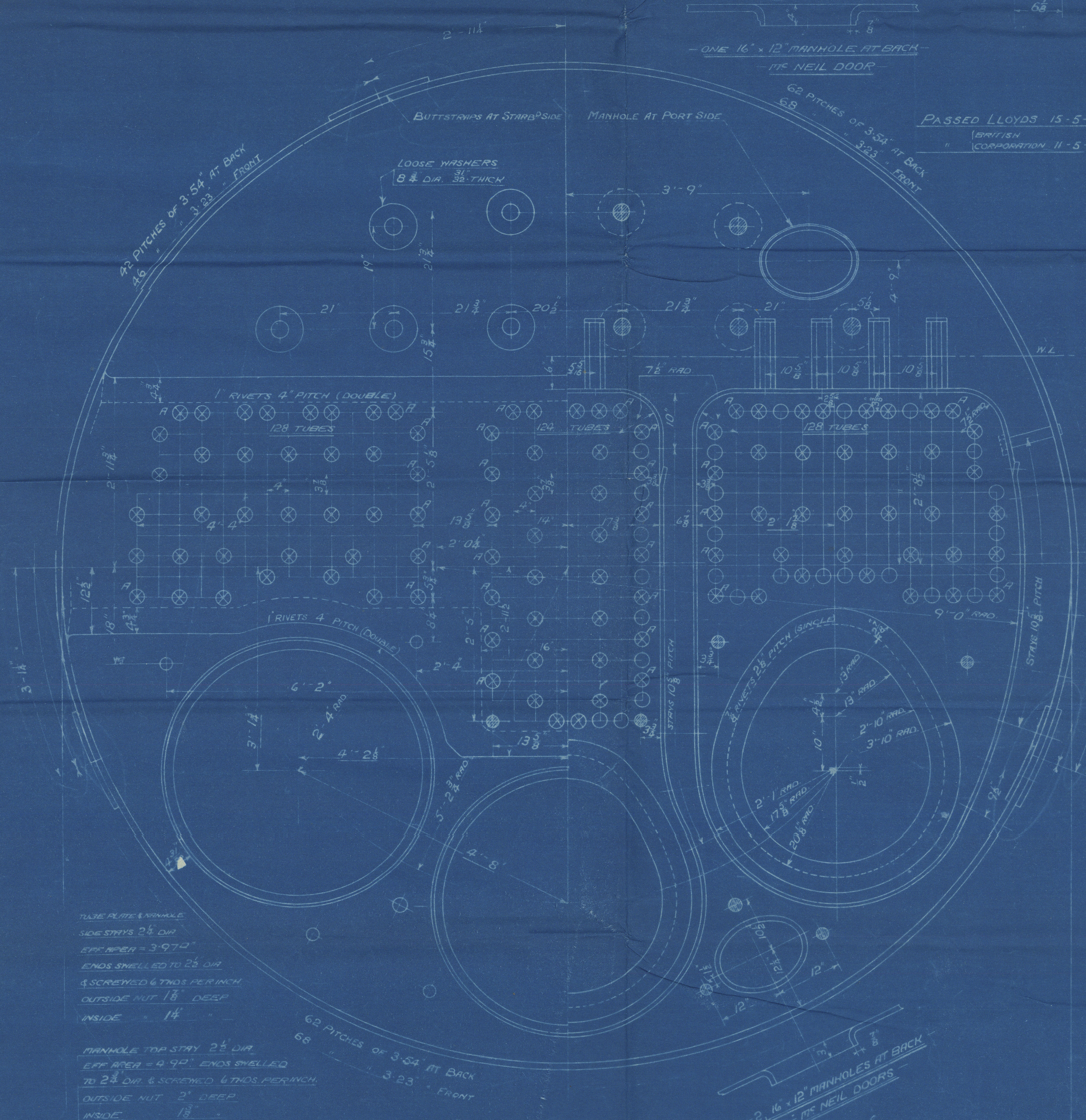
LIMITS OF TENSILE STRENGTH & MATERIAL			
SHELL, BUTTSTRAPS & GIRDERS	28 TO 32 TONS		
OTHER PLATES	26 - 30		
FURNACES	26 - 30		
MAIN STRAYS	28 - 32		
SCREWED STRAYS	26 - 30		
RIVET BARS	26 - 30		

ALL RIVET HOLES DRILLED IN PLACE
MAIN STRAYS SWELLED AT ENDS BY
HYDRAULIC PRESSURE AND RIVETED

BACK END CIRC
156 PITCHES OF 3.54

FRONT END CIRC
182 PITCHES OF 3.23

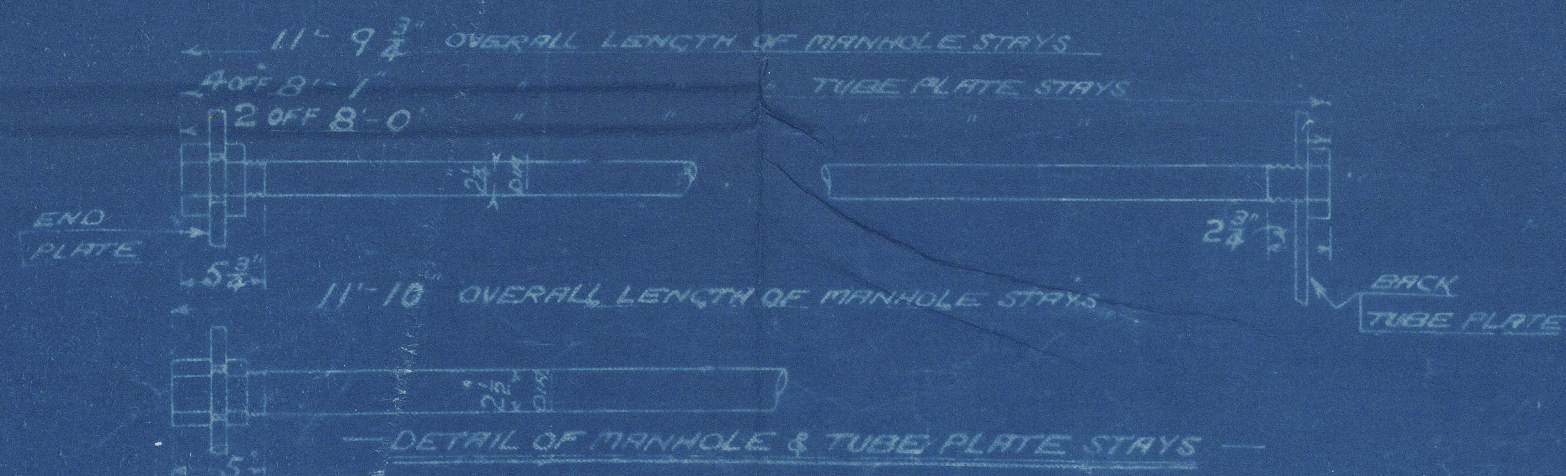
6/2/19



TUBE PLATE MANHOLE
SIDE STRAYS 2 1/2 DIA
EFF AREA = 3.97 sq
ENDS SWELLED TO 2 1/2 DIA
& SCREWED 6 THDS PER INCH
OUTSIDE NUT 1 1/2 DEEP
INSIDE 1 1/4

MANHOLE TOP STRAY 2 1/2 DIA
EFF AREA = 4.92 sq
ENDS SWELLED
TO 2 1/2 DIA & SCREWED 6 THDS PER INCH
OUTSIDE NUT 2\"/>

15' 6\"/>



11' 6\"/>

MAIN BOILER (SECOND SERIES)
THIRD DESIGN
3 OFF

ENC NO 504

WORKING PRESSURE = 180 LBS PER SQ INCH

TO PASS LLOYDS SURVEY

SCALES 1\"/>

FIREBOX STRAYS - STEEL			
POSITION	MARK	DIA	EFF AREA
BRICK TOP & SIDES	1	1 1/2	2.395 sq
WIDE SPACE	2	2	2.75 sq
TOP ROW	2 1/2	2 1/2	3.49 sq

ALL FIREBOX STRAYS SCREWED THRU BOTH PLATES & NUT FITTED AT EACH END
EXCEPT STRAYS FROM WING FIREBOX TO SHELL WHICH PROJECT 3\"/>

ALL 2\"/>

DAVID ROWAN & CO'S
REFERENCE

0.T.33500

TRACED 1\"/>

DRC. NO 13.5-122

Kincaid; No 504.

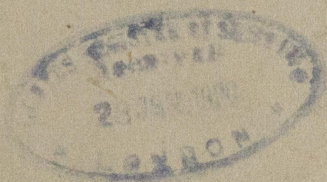
Three Main Rules.

180 U. W. P.

Standard A. 34.

Harmonides

96.39560.



© 2019

Lloyd's Register

W178-0224