

# SHELL RIVETING

## DOUBLE BUTT STRAP JOINTS

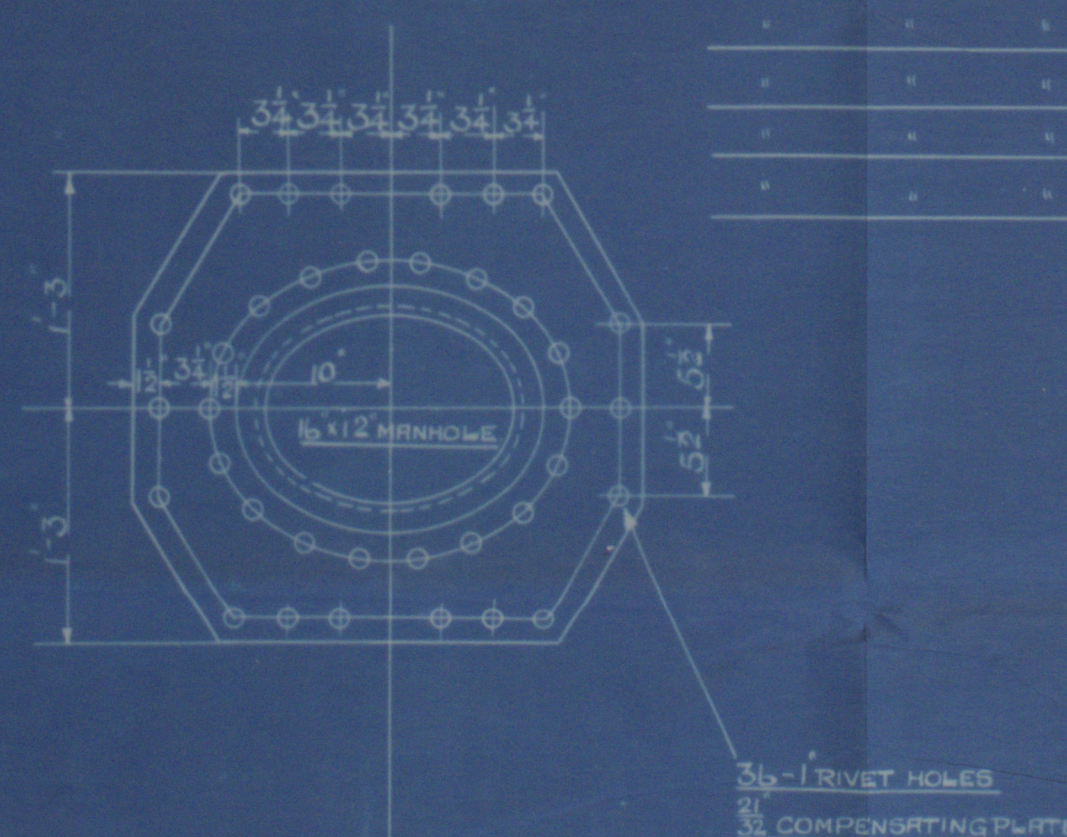
SHELL PLATES 3/4" THK. INNER BUTT STRAPS 1/2" THK. OUTER BUTT STRAPS 1/2" THK.

RIVET HOLES 8 DIA. GREATEST PITCH = 4 5/8"

PLATE SECTION 8 1/2" RIVET SECTION 9 1/2"

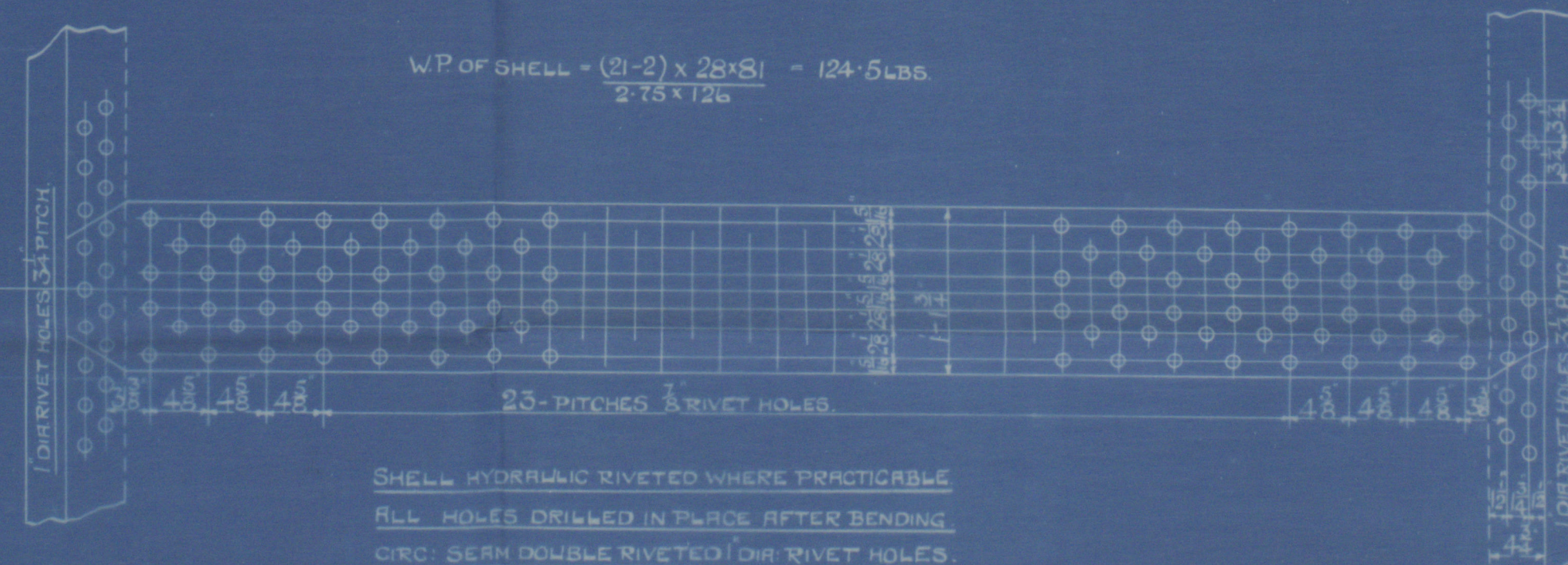
TENSILE STRENGTH OF SHELL PLATE 28 TO 32 TONS / sq

- \* FURNACES & COMB. CHAMBER PLATES 26 TO 30 TONS / sq
- \* END PLATES 26 TO 30 TONS / sq
- \* GIRDER PLATES 28 TO 32 TONS / sq
- \* MANHOLE RINGS 26 TO 30 TONS / sq
- \* STEAM SPACE STAYS 28 TO 32 TONS / sq
- \* MANHOLE STAYS 28 TO 32 / sq



HEATING SURFACE	
154 TUBES 3 EXT. DIA. 7.4" B.T.P.	886 sq
FURNACES	83 "
COMB. CHAMBERS	102 "
FRONT TUBE PLATE	26 "
BACK " "	22 "
TOTAL	1119 sq
Oil FUEL	
WORKING PRESSURE = 120 LBS	LLOYD SURVEY
TEST " = 250 "	

$$W.P. \text{ OF SHELL } = \frac{(21.2) \times 28.8}{2.75 \times 126} = 124.5 \text{ LBS}$$



SHELL HYDRAULIC RIVETED WHERE PRACTICABLE  
ALL HOLES DRILLED IN PLACE AFTER BENDING  
CIRC. SEAM DOUBLE RIVETED OR RIVET HOLES

ALL COMBUSTION CHAMBER SCREWED STAYS WROUGHT IRON SCREWED

9 THREADS PER INCH & NUTTED WHERE SHOWN WITH

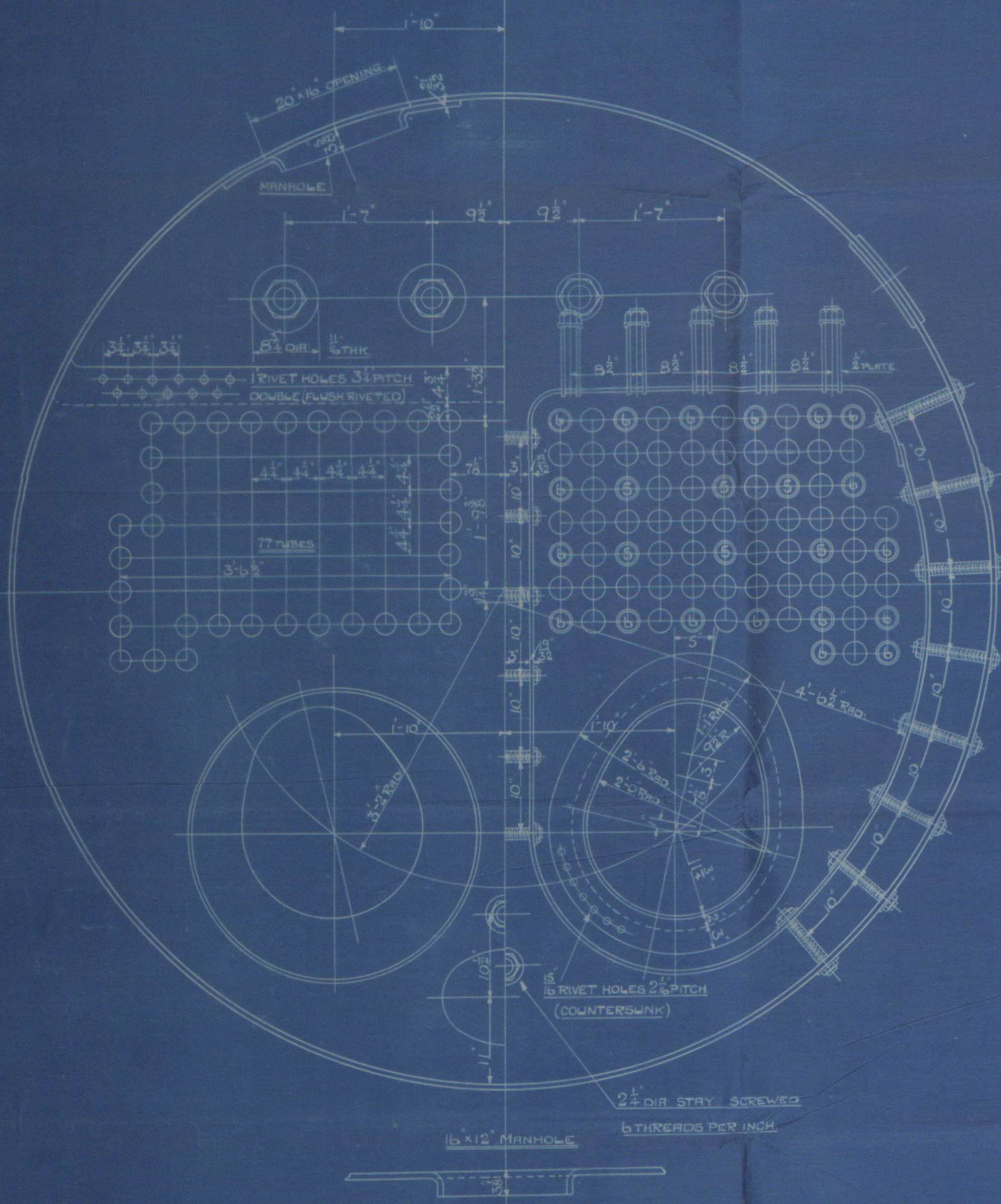
NUTS AT EACH END

COMBUSTION CHAMBER STAYS MARKED THUS ARE 1/2" DIA. NUTS DEEP

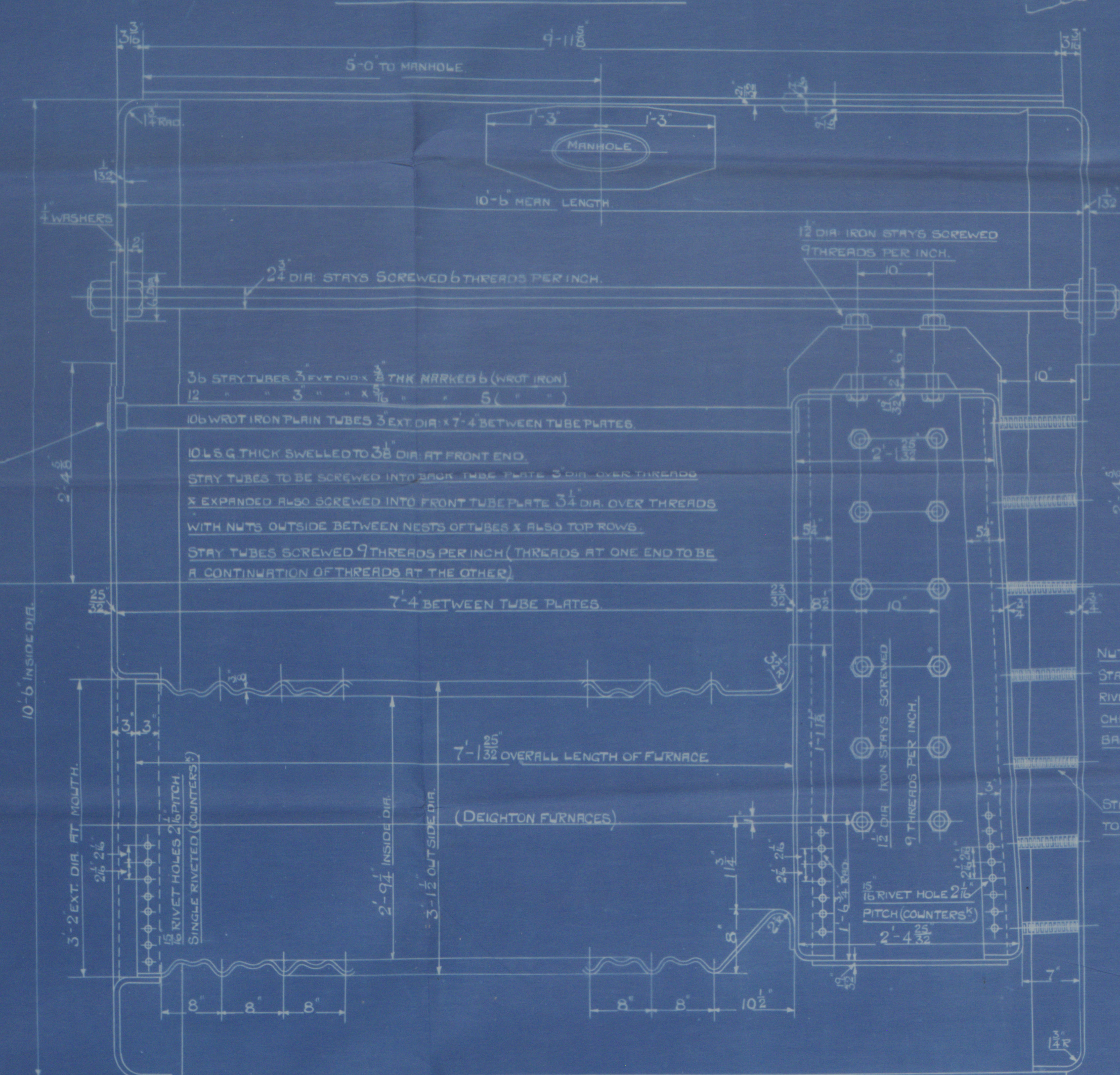


ALL COMBUSTION CHAMBER SCREWED STAYS OF BEST IRON

QUALITY & TO LLOYD TESTS & REQUIREMENTS



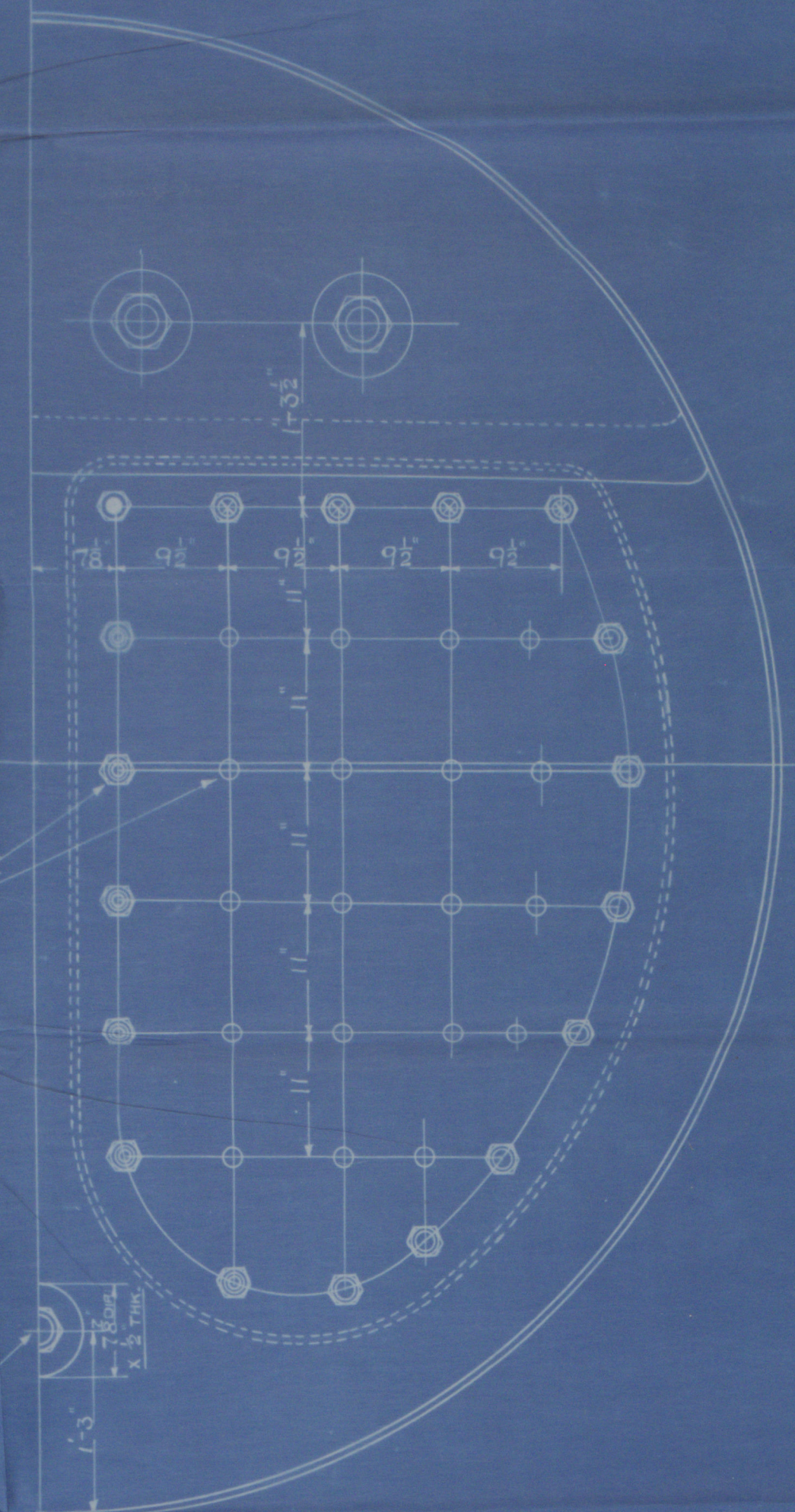
PLAIN TUBES SHELLLED 1/2" LARGER AT FRONT END



NUTS FITTED ON MARGINAL STAYS ONLY  
STAYS IN MIDDLE OF ROSES TO BE  
RIVETED OVER INSIDE COMB.  
CHAMBERS & TO PROJECT 8 IN.  
BACK OF BOILER & BE CURLED

STAYS SCREWED AT RIGHT ANGLES  
TO COMB. CHAMBER BACK

2 1/2" DIA. STAY SCREWED  
6 THREADS PER INCH



TO LLOYD REQUIREMENTS

**DONKEY BOILER.** (1 OFF PER ENG. NO)

SCALE 1" = 1 FOOT

ALL STEEL EXCEPT WHERE OTHERWISE STATED

ENG NO 978-9

NO 130771



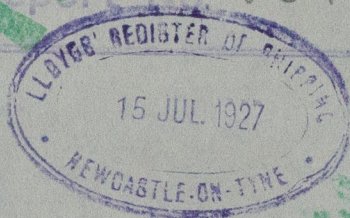
Palmer & Co.

Drum Boilers  
for Tyne No 9789.

Working Press 120 tons.  
S.S. "British Chivalry"

NEWCASTLE-ON-TYNE

Report No. 83900.



NEWCASTLE-ON-TYNE

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Lloyd's Register  
Foundation

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