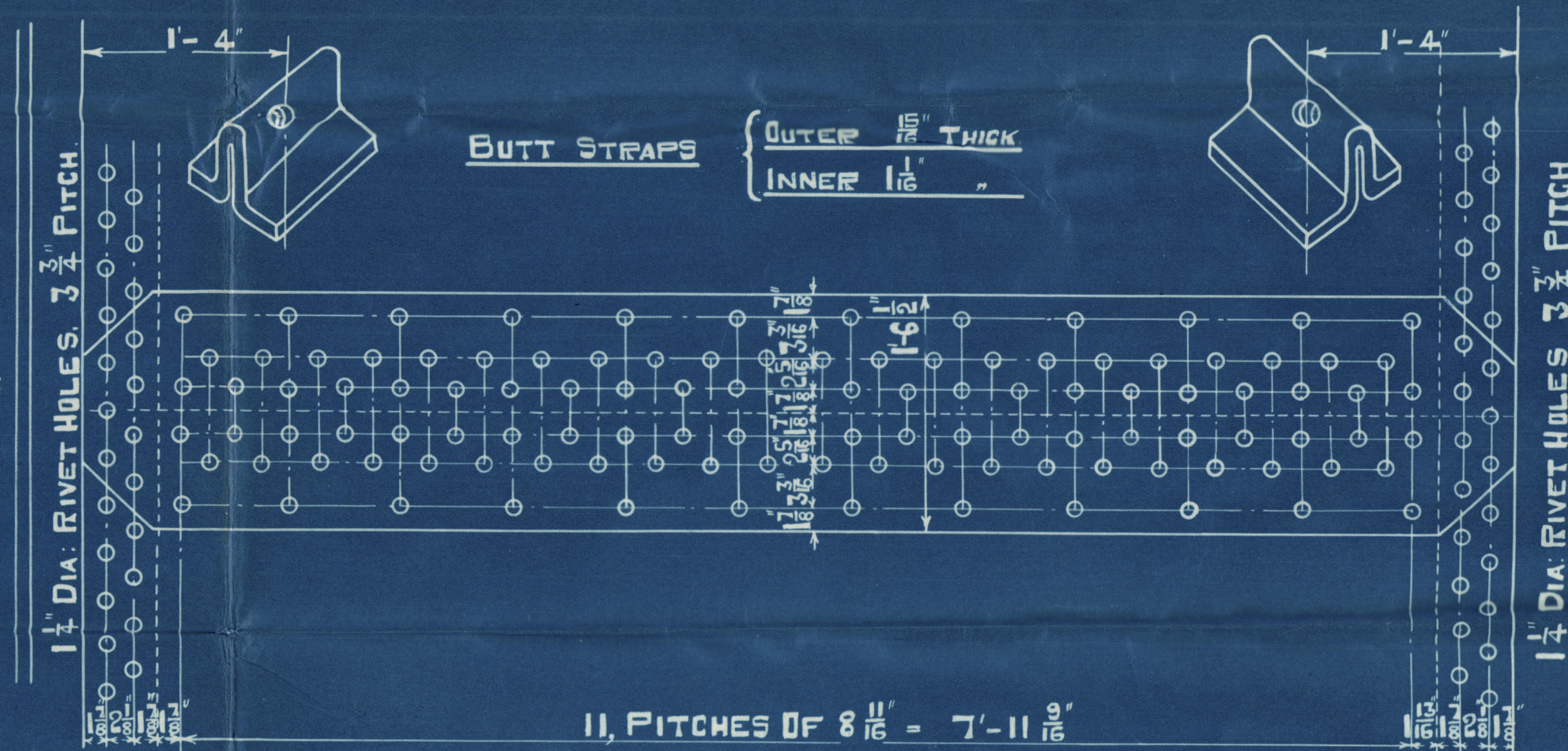


5 RIVETS 1 1/2" DIA.
1" PLATE.
4 LIFTING LUGS THUS.
PER BOILER.

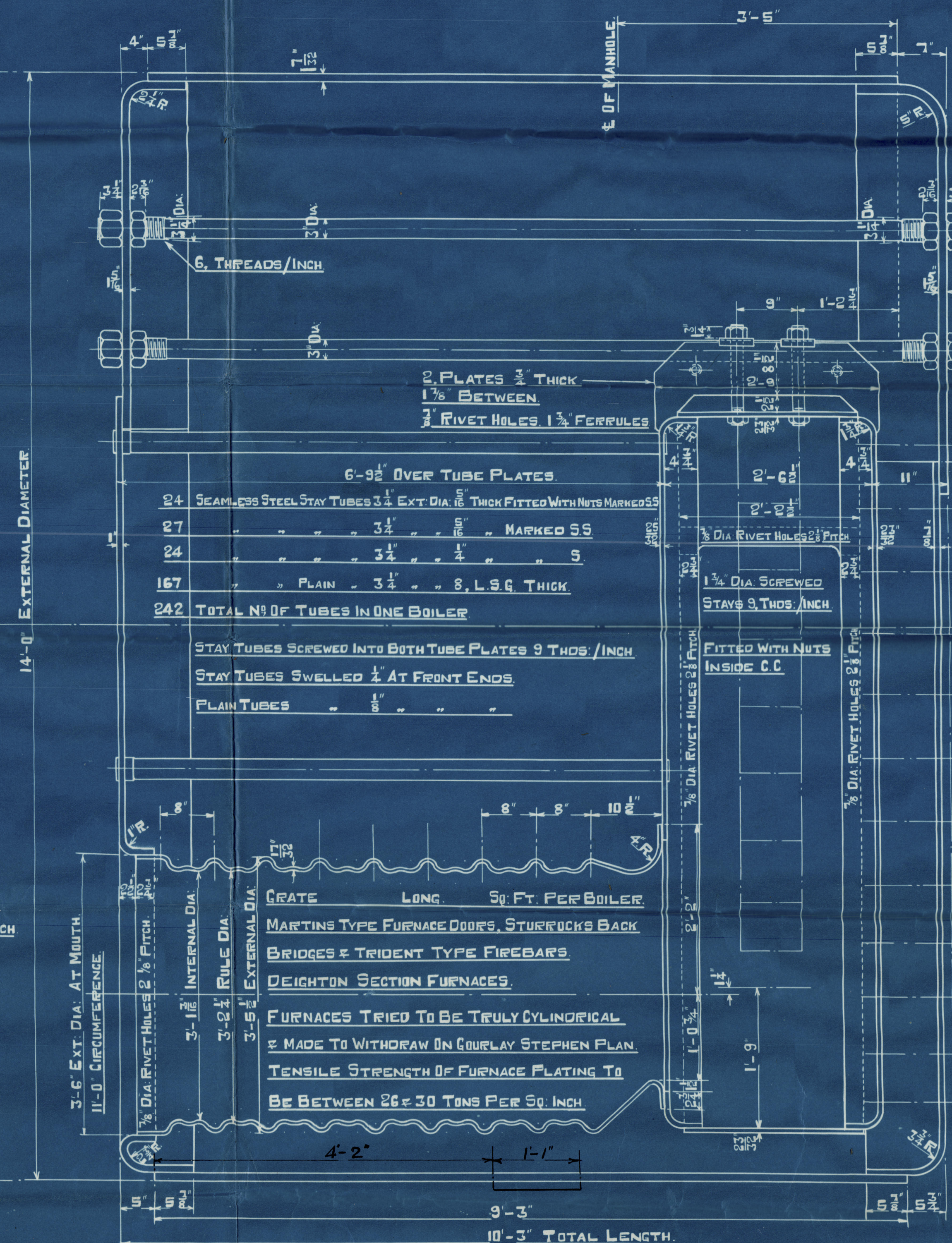
STRENGTH OF PLATE = 85.62%
" " RIVETS = 86.25%
SHELL W.P. = $\frac{(39-2) \times 29 \times 85.62}{2.75 \times 165.5625} = 201.7 \text{ LBS./SQ. IN.}$

MANHOLE 16" x 12"
HOLE IN SHELL 1'-8 1/2" x 1'-4 1/2"
COMPENSATING PLATE 3'-1" x 2'-9" x 1 1/2" THICK
32 RIVET HOLES 1 1/2" DIA.



BUTT STRAPS
OUTER 1 1/2" THICK
INNER 1 1/8"

11 PITCHES OF 8 1/16" = 7'-11 1/16"
1 1/2" PLATE. 1 1/2" DIA. RIVET HOLES 8 1/16" PITCH.



6 THREADS/INCH

2 PLATES 3/4" THICK
1 1/2" BETWEEN
3 RIVET HOLES 1 1/2" FERRULES

6-9 1/2" OVER TUBE PLATES
24 SEAMLESS STEEL STAY TUBES 3/4" EXT. DIA. 1/8" THICK FITTED WITH NUTS MARKED SS
27 " " " 3/4" " " " MARKED SS
24 " " " 3/4" " " " S
167 " PLAIN " 3/4" " " 8 L.S.G. THICK
242 TOTAL NO OF TUBES IN ONE BOILER

STAY TUBES SCREWED INTO BOTH TUBE PLATES 9 THDS./INCH
STAY TUBES SWELLED 1/4" AT FRONT ENDS
PLAIN TUBES " " " "

GRATE LONG. 90 FT. PER BOILER.
MARTINS TYPE FURNACE DOORS. STURROCK'S BACK
BRIDGES & TRIDENT TYPE FIREBARS.
DEIGHTON SECTION FURNACES.

FURNACES TRIED TO BE TRULY CYLINDRICAL
& MADE TO WITHDRAW ON COURLAY STEPHEN PLAN.
TENSILE STRENGTH OF FURNACE PLATING TO
BE BETWEEN 26 & 30 TONS PER SQ. INCH.

STAYS MARKED THUS O 2" DIA. 9 THDS./INCH
ALL OTHER STAYS 1 1/2" DIA. 9 " "
ALL C.C. BACK STAYS SCREWED INTO BOTH
PLATES & FITTED WITH NUTS
2" NUTS 1" DEEP. 1 1/2" NUTS 3/4" DEEP

LLOYD'S SURVEY

HEATING SURFACE ON TUBES = 1398 SQ. FT.
" " ELSEWHERE = 382 " "
TOTAL = 1780 " "

WORKING PRESSURE = 200 LBS. PER SQ. INCH

TEST " = 350 " " " "

ALL PLATES, STAYS & RIVETS OF STEEL. SMOKE TUBES OF SEAMLESS STEEL.

TENSILE STRENGTH OF SHELL PLATING BETWEEN 29 & 33 TONS/SQ. INCH

"	"	BUTT STRAPS	"	29 x 33	"	"
"	"	GIRDER PLATES	"	29 x 33	"	"
"	"	ALL OTHER PLATES	"	26 x 30	"	"
"	"	LONGITUDINAL STAYS	"	28 x 32	"	"
"	"	SCREWED	"	26 x 30	"	"

ALL HOLES DRILLED IN PLACE AFTER PLATES ARE BENT.

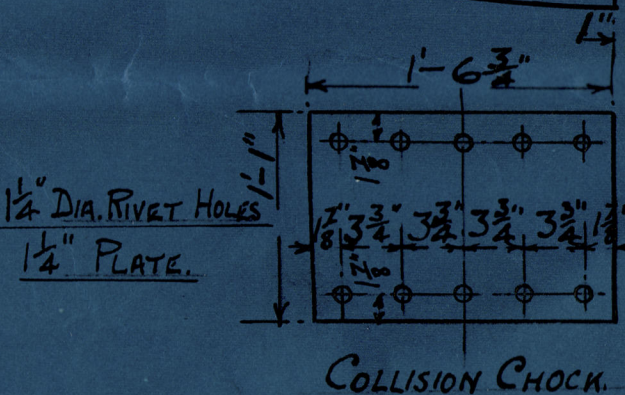


ONE THUS - PORT BOILER
& COLLISION CHECK
ONE WITH TOP MANHOLE TO OPPOSITE HAND - STARB? BOILER

TRACING No 733
CONTRACT 2735

G. H. M.
24/10/29.

W. H. M.



COLLISION CHECK

N. E. M. E. C^o. L^d.

C. No 2438.

MAIN. BOILERS

2. OFF.

R. & W. HAWTHORN

LESLIE & C^o L^d.

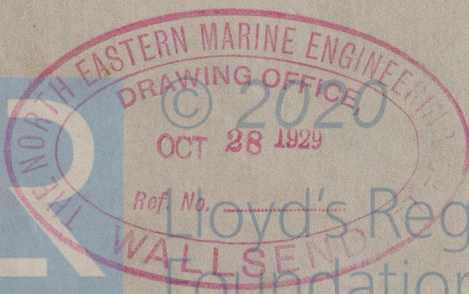
$\frac{5}{3}$. 570.

No 414.
LLOYDS TEST
350 LBS
WP. 200 LBS
W.B. 31-12-29

S. S. "KIRKWOOD."

NEWCASTLE ON TYNE.

Report No. 85288.



WS93-0140