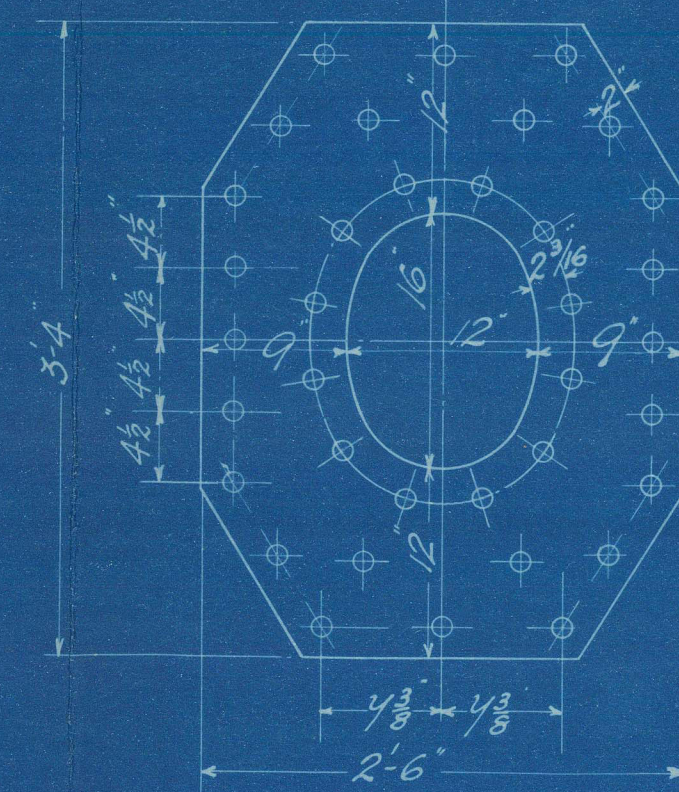


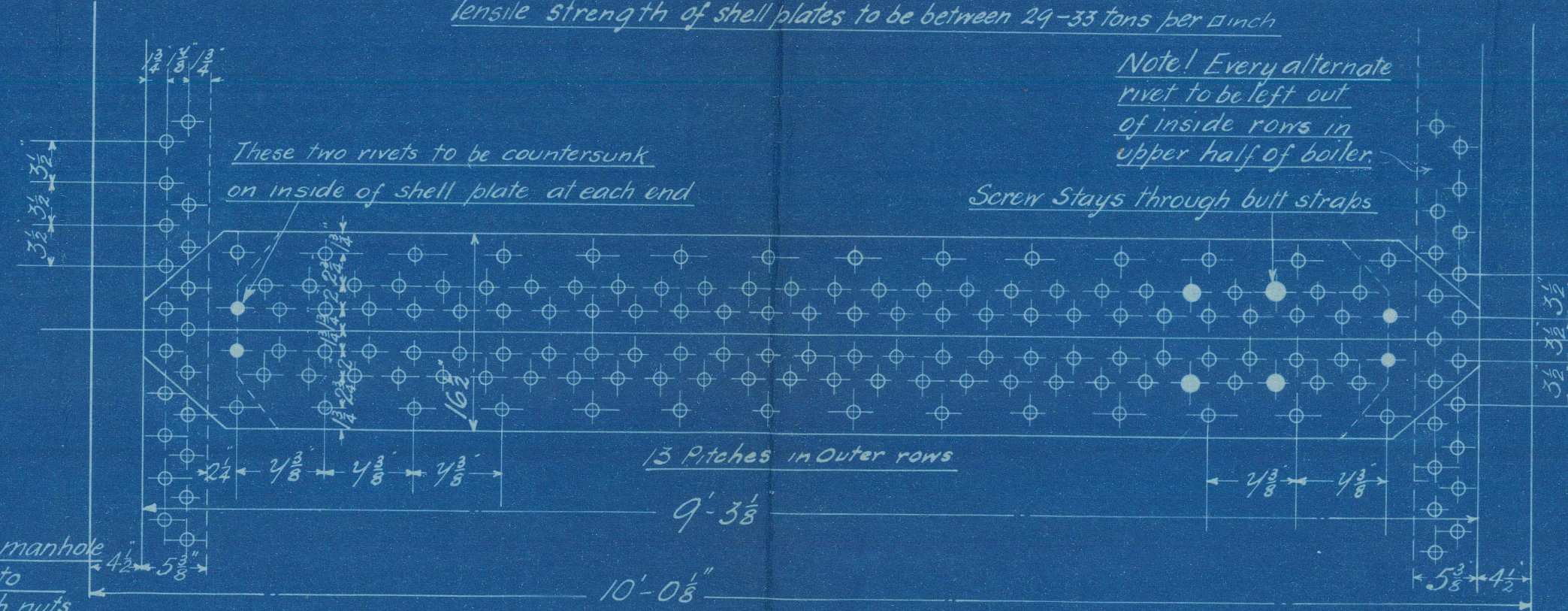
DIA^R OF BOILER 12'-4" inside.
 LENGTH OF DO 10'-2"
 NUMBER OF TUBES 168
 LENGTH OF DO 6'-5½"
 DIA^R OF DO 3½" AREA THRO TUBES 844 sq
 HEATING SURFACE IN TUBES 994 sq
 TOTAL HEATING SURFACE 1256 sq
 FIRE BAR SURFACE 5 ft bars 354
 DIA^R OF SAFETY VALVES
 CUBIC FEET OF STEAM SPACE 248
 WORKING PRESSURE 180 lbs LLOYDS

Doubling Plate 1" thick
 Rivets 1½" dia. Holes 1½" dia.
 Filled outside shell with shorter axis longitudinally.



Note! Studs on manhole
 doors are not to
 project through nuts
 when nuts are nipped
 up.

Circumferential Seams 3½" Pitch
 % Plate 68
 % Rivet 48.5
 Longitudinal Seams 4½" Pitch
 % Plate 84.4
 % Rivet 100
 Double Girth Straps 1" thick outside, ½" inside.
 All rivets in shell 1½" dia. Holes 1½" dia.
 Tensile strength of shell plates to be between 29-33 tons per inch.



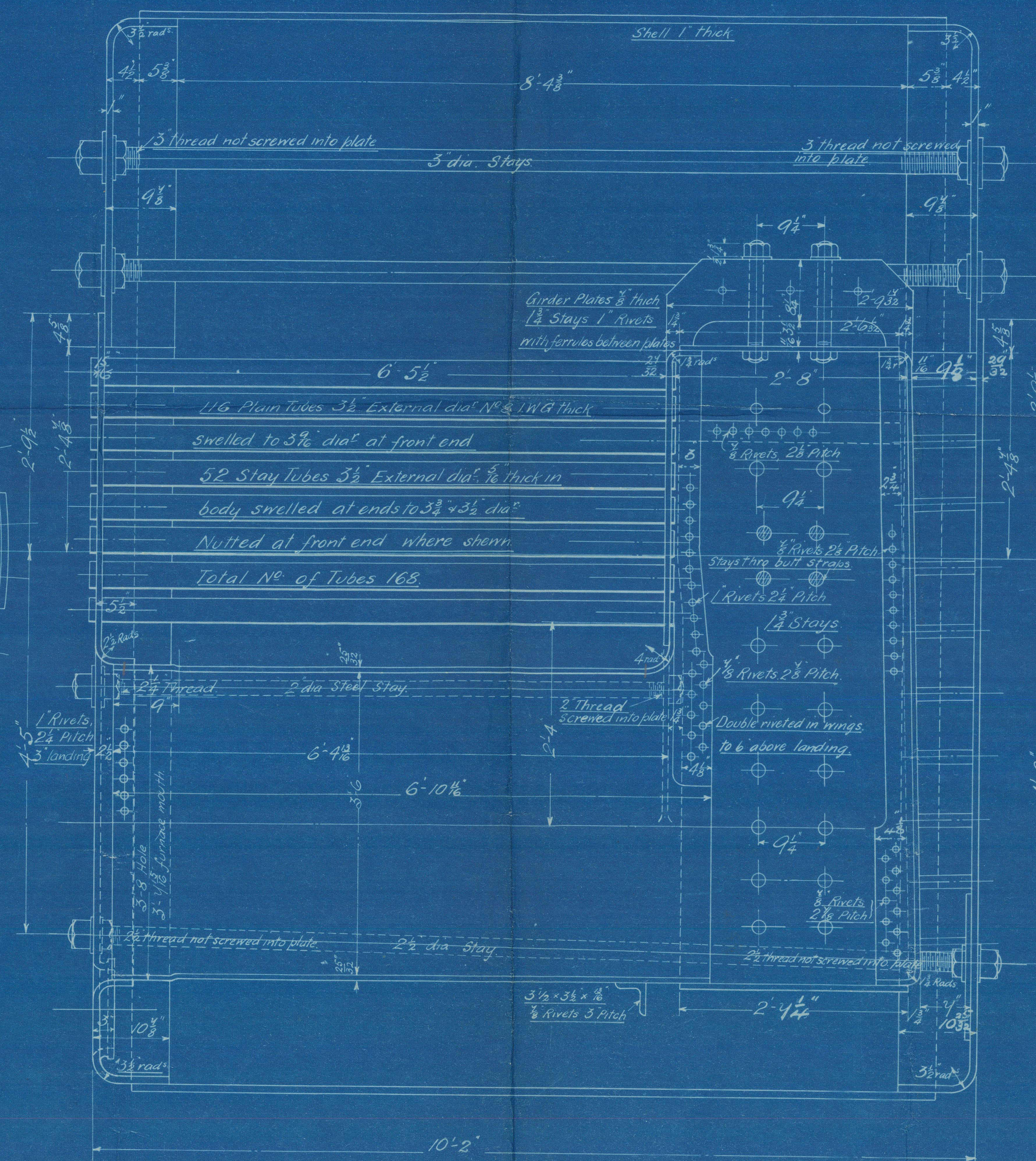
Note! Every alternate
 rivet to be left out
 of inside rows in
 upper half of boiler.

Note! The plates, rivets & stays of steel by the Siemens Martin process
 All rivet holes drilled throughout the boiler those in shell after plates are bent.
 All flanged plates to be annealed after the plates are bent.
 Stays are not to be welded. Tubes are of iron.
 The tensile strength of shell plates and girth straps to be between 29-33
 tons per square inch.
 The combustion chamber stays are screwed into both plates and are filled with
 nuts at each end. Washers on outside of shell only. None inside CC.

Particulars of Staying

Stays	Diam.	No of threads per inch.	Eff area at bottom of thread.
Steam Space Stays	3"	6	6.10 sq in.
Tube Plate	2"	8	2.66 "
Bottom	2½"	6	4.105 "
Stay Tubes ¾"	3½"	9	2.564 "
C.C. Stays	2"	8	2.66 "
"	1½"	10	2.394 "
"	1½"	10	2.066 "

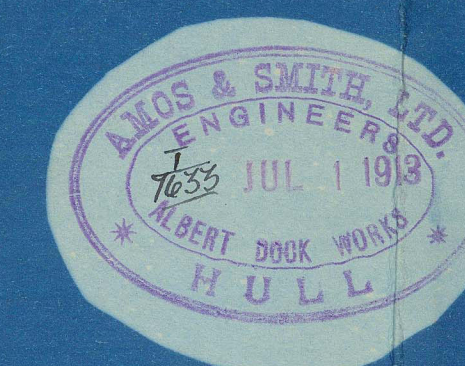
Ames & Smith L^{td}.
 Engineers.
 Albert Dock Works.
 Hull.



Care to be taken that CC Stays
 at the back are kept sufficiently
 clear of the round so that full nuts
 can be got upon the flat plate.



STEEL BOILER NO 2423



TITLE Steel Boiler
 DATE 27/4/13
 ORDN 2343
 IF MADE 4/11
 1 foot

10428

W807-0117 1/2

From AMOS & SMITH, Ltd., HULL.

Enclosure for

Lloyd's Surveyors
Hull

AMOS & SMITH'S

AMENDED BOILER

PLAN.

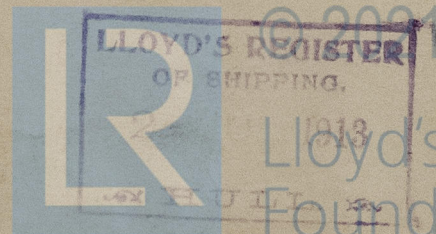
N^o 2423

s/s Okino
Hull Rpt No. 27166



RETAIN

W807-0117³/₂



Lloyd's Register
Foundation