

T.S. SHIP No 526

STERNFRAME & RUDDER

SCALES: 1" = 3' = 1 FOOT.

NOTES:-

Sternframe to be of Cast or Forged Steel (with no holes).

Rudder with the Upper Stock of Cast or Forged Steel $\frac{3}{4}$ Tons U.T.S. of 9" dia Shank set off and a horizontal shaped Coupling with Lower Flange welded integral (as per sketch).

Rudder Stock to comply with P1003 of Rules. Facing Surfaces of Coupling to be Machined.

Rudder Mainpiece & Arms to be of Cast or Forged Steel. Gudgeons Welded to Mainpiece. Top Gudgeon to form Rudder Staple.

Rudder to be of the Welded Double Plate Type made of Manganese Steel (no holes in Arms).

Centre Line of Rudder Stock to be in line with Centre Line of Pintles. Portable Tapered Steel Pintles $\frac{3}{4}$ to $\frac{3}{8}$ Dia.

Top Pintle arranged as Locking Pintle.

All Corners of Rudder & Sternframe to be Slightly Rounded.

All to Lloyd's Tests & Requirements.

The Main Parts of Stern & Rudder Frames to be Electric welded together with the siting of welds, welding preparation, welding technique and quality of welds all to the satisfaction of Lloyd's Surveyor. All welds stress relieved on completion.

Length 270' B.P. Speed 14 Knts. $\frac{1}{16}$ Dia.

A = Area of Rudder about Fore Edge of Main Piece = 88-70 sq ft. (including fairing plates).

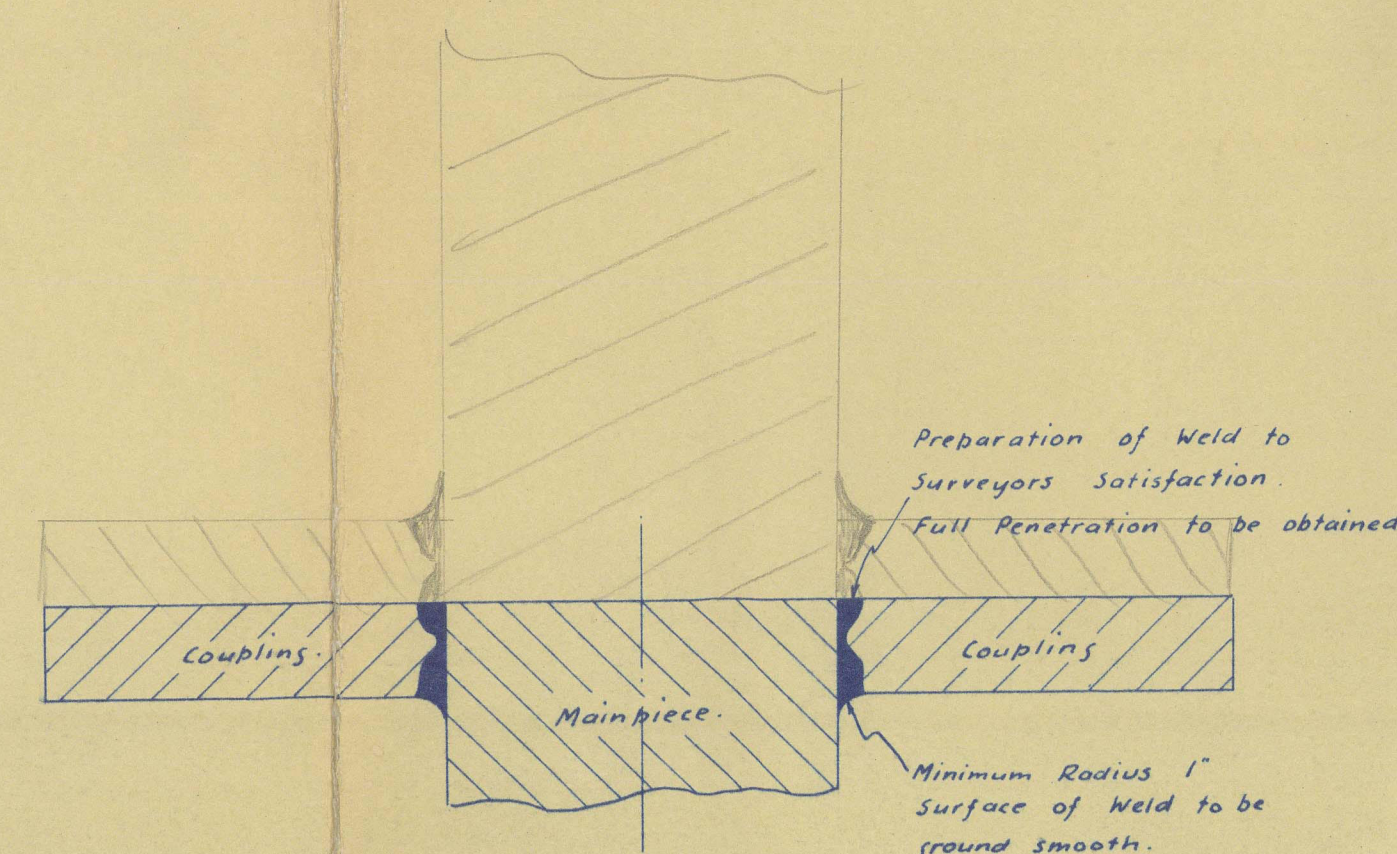
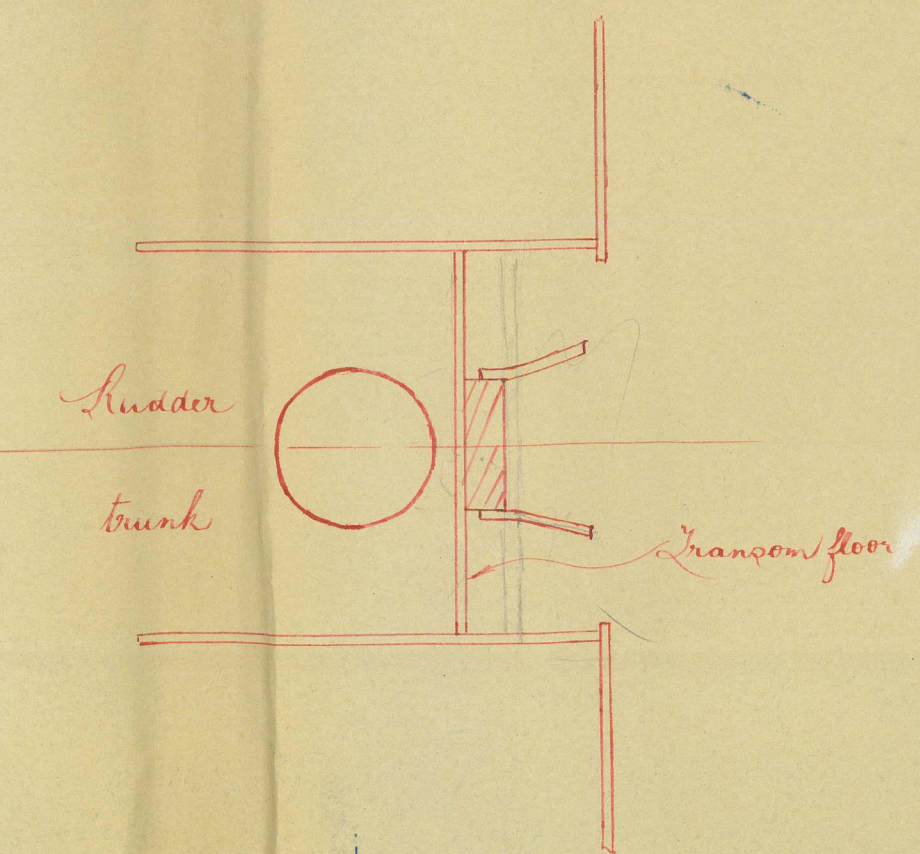
D = Distance of Centre of Gravity of Rudder about Centre Line of Pintles = 1-05 Feet.

A x D = 244-2 $\frac{1}{16}$ Dia.

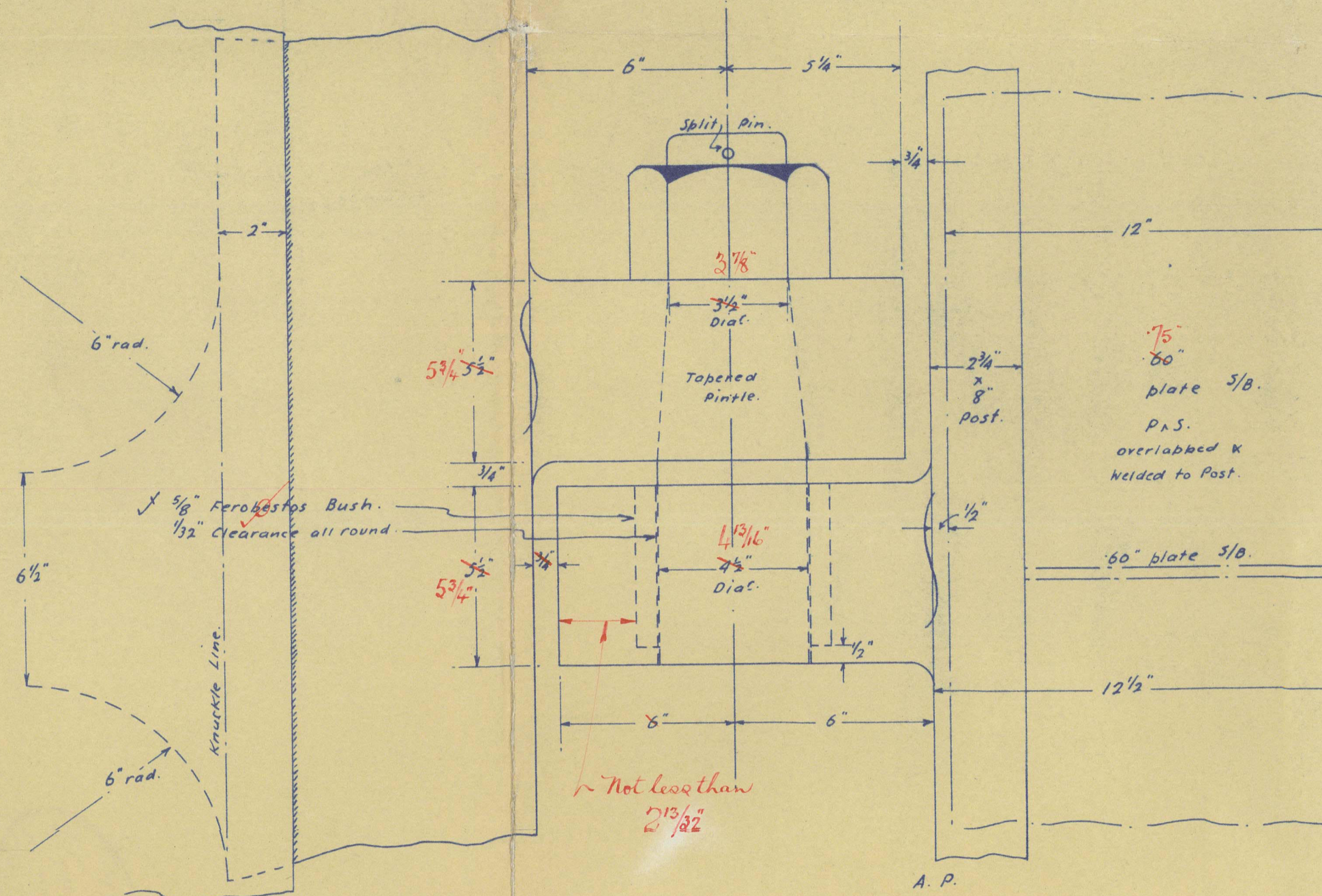
Diameter of Rudder Stock = $\frac{3}{4}$ + 10% Owners Requirements = $\frac{3}{4}$ Diameter.

Welding throughout to be to Surveyors Satisfaction.

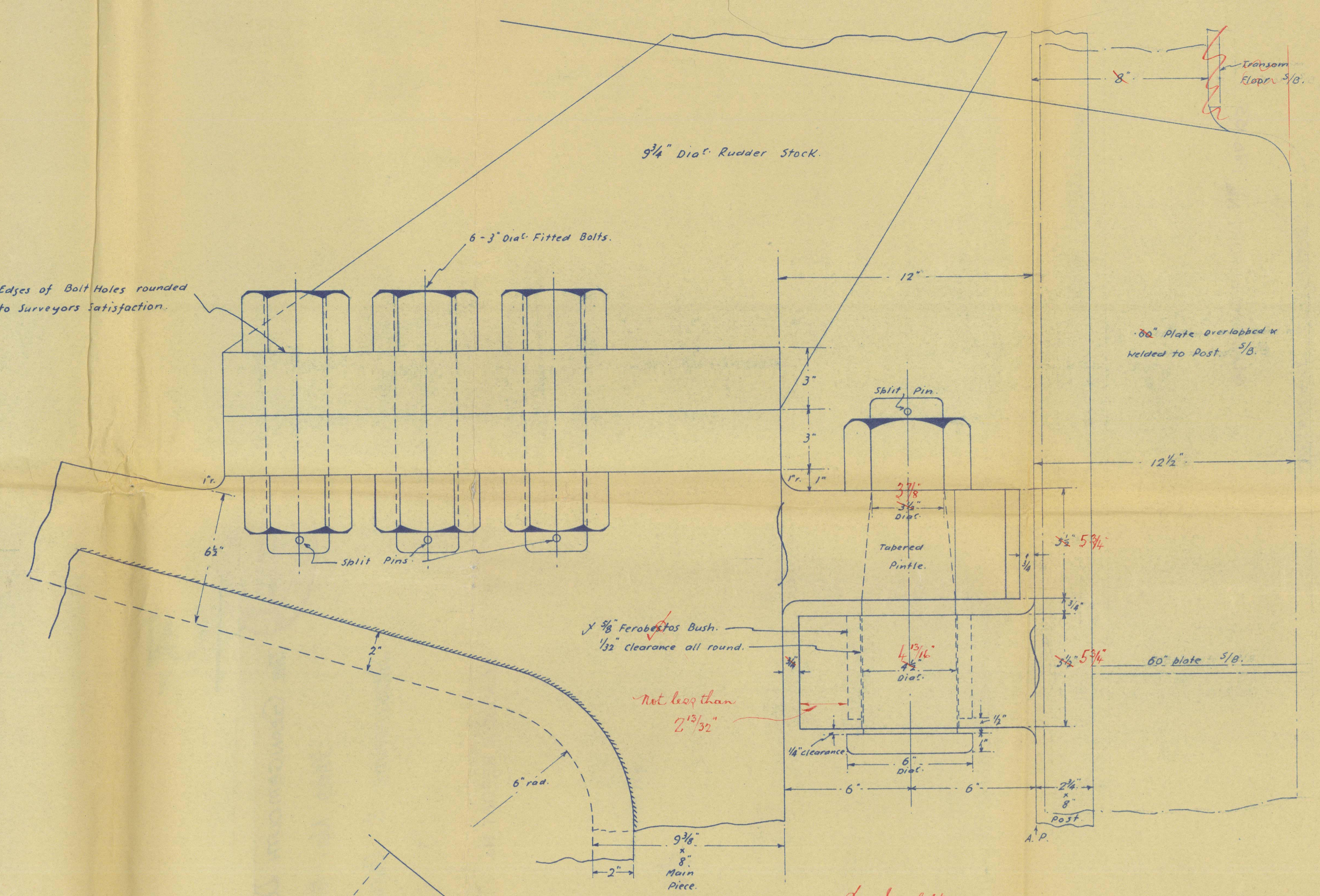
Steel for welding to be of weldable quality containing not more than 0.25% of carbon.



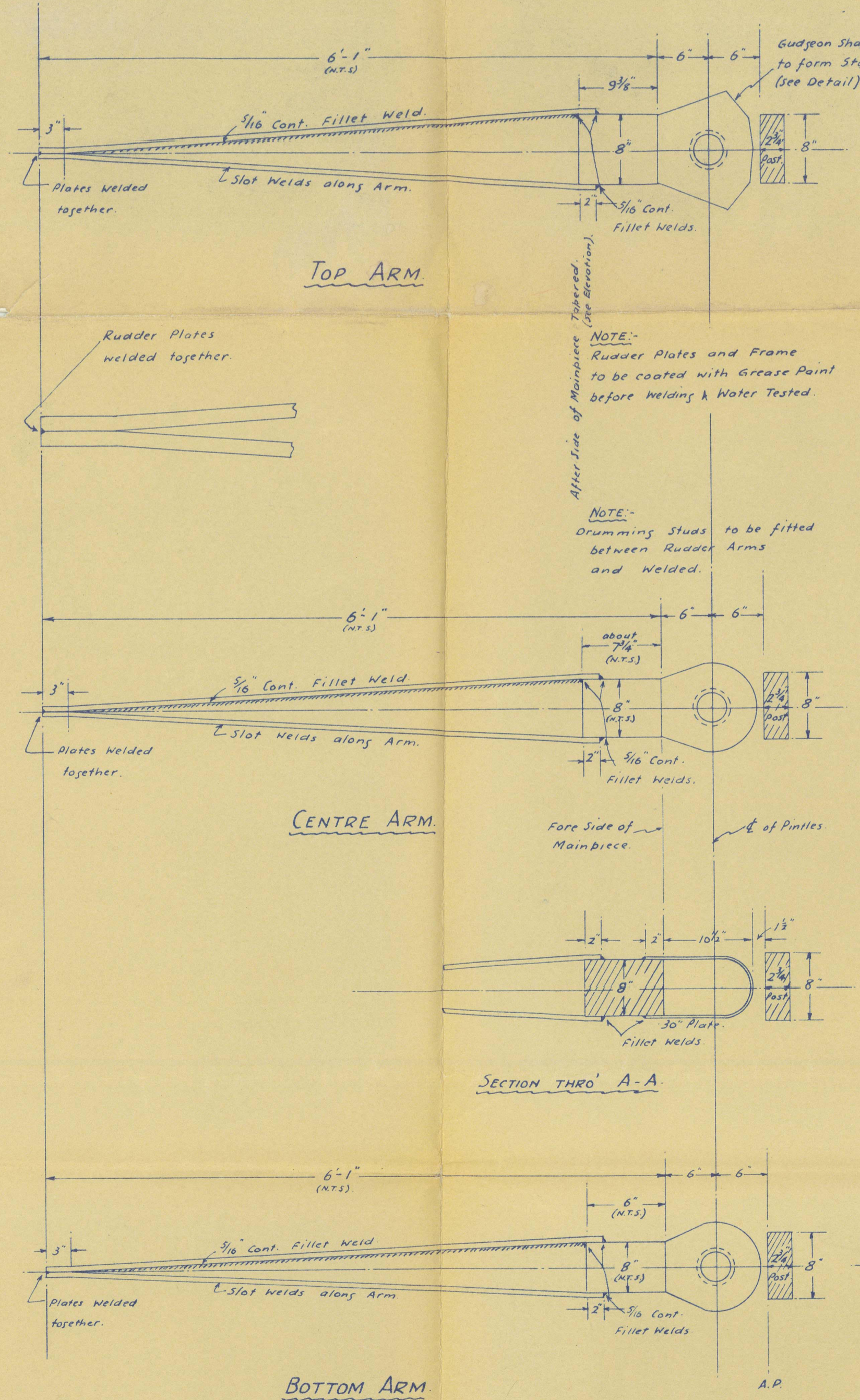
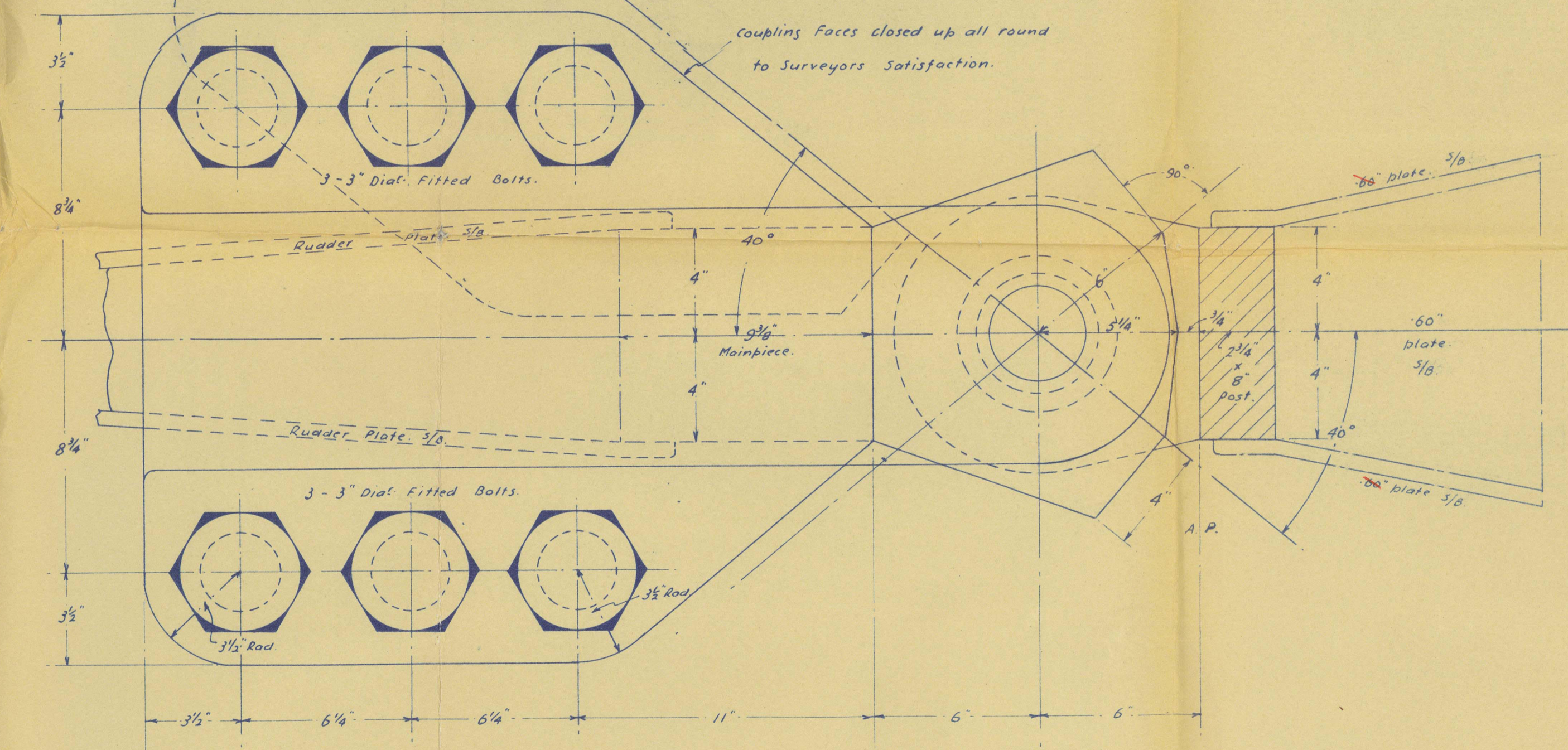
SECTION THRO' LOWER COUPLING
SHOWING WELDING TO MAINPIECE
(not to scale).



CENTRE GUDGEON & PINTLE ETC.



COUPLING, TOP GUDGEON & PINTLE



BOTTOM ARM

RUDDER:-

Double Plate Rudder

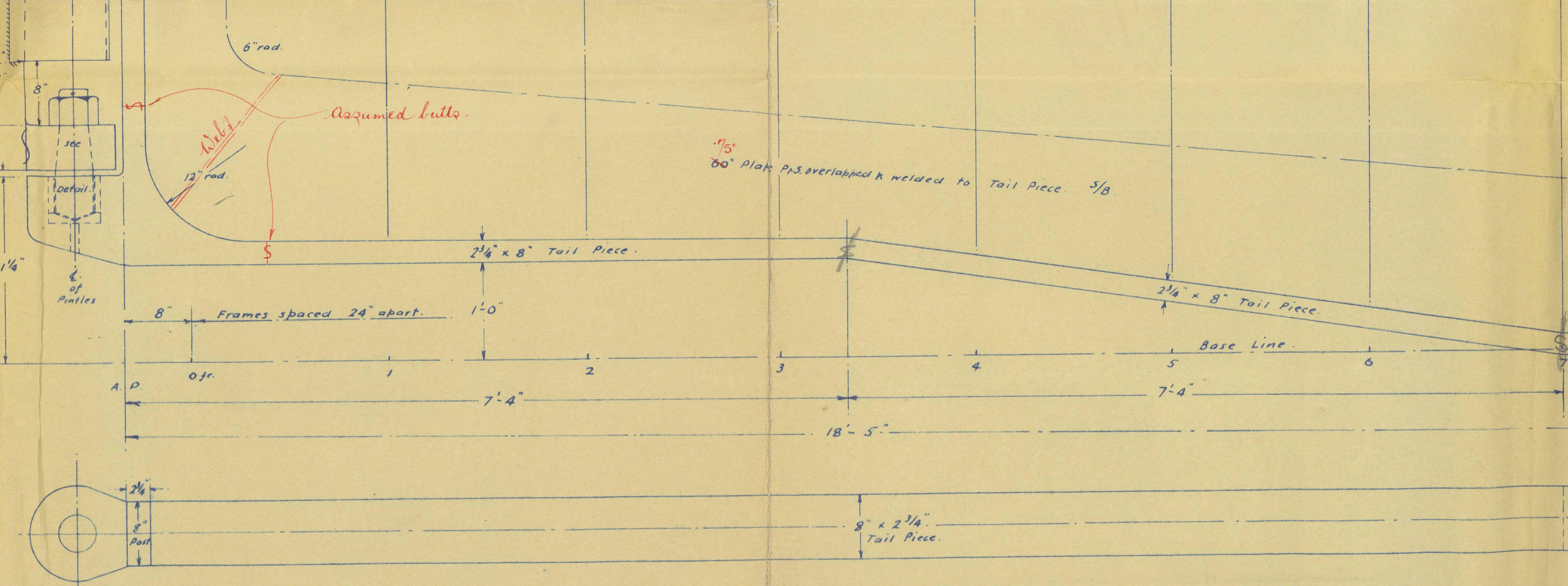
Port Side Plate welded direct to Arms & Frame

Starboard Side Plate Slot welded to Arms & Frame

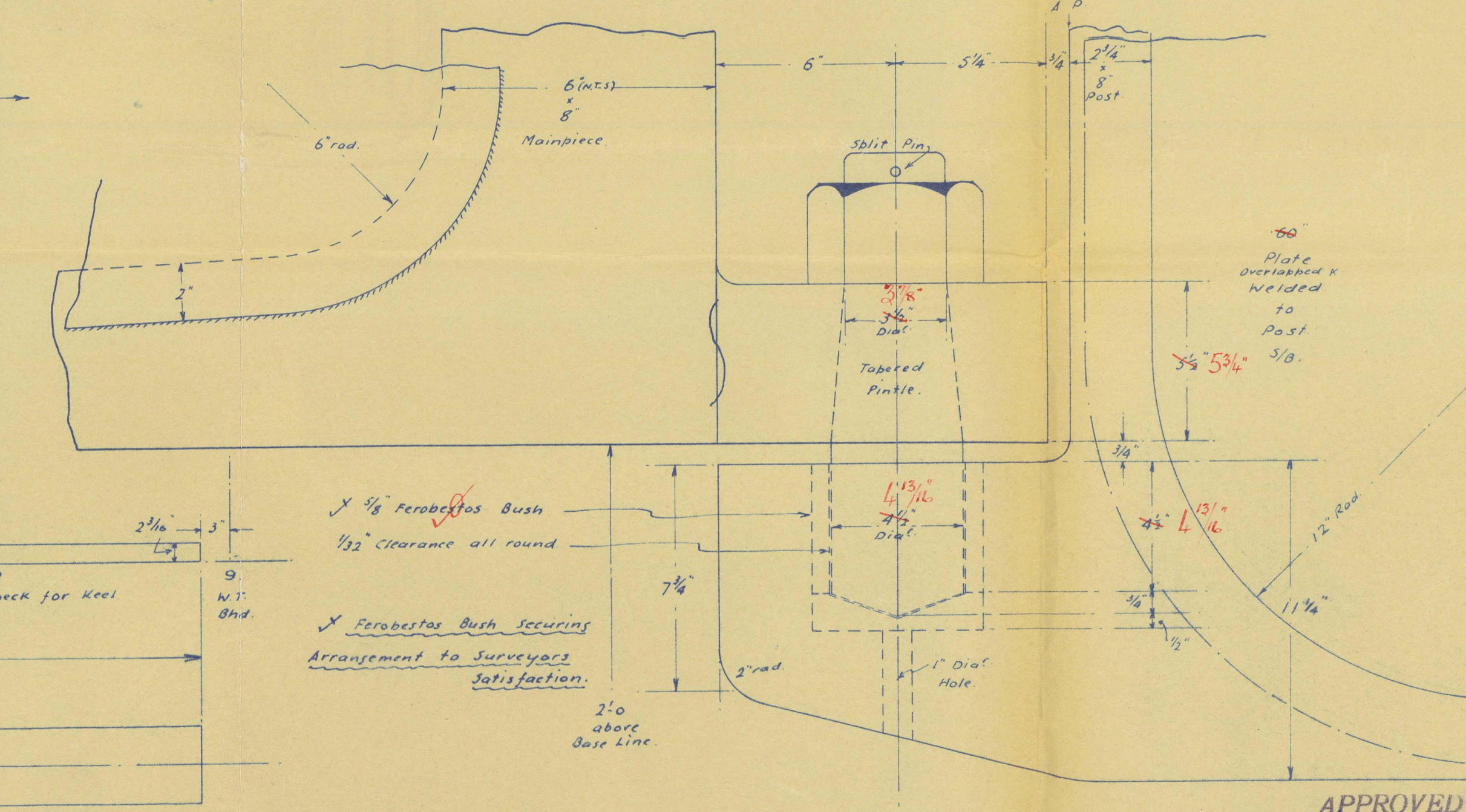
All supplied & fitted by Shipbuilders

NOTE: Dimensions marked (N.P.S.) NOT TO SCALE

NOTE: ITEMS MARKED $\frac{1}{8}$ SUPPLIED AND FITTED BY SHIPBUILDERS

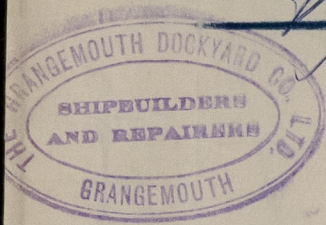


PLAN OF TAIL PIECE



BOTTOM GUDGEON & PINTLE

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THE GRANGEMOUTH DOCKYARD Co., LTD.

YARD No. 526.

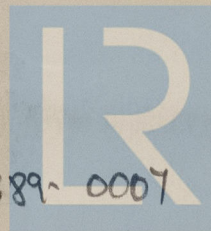
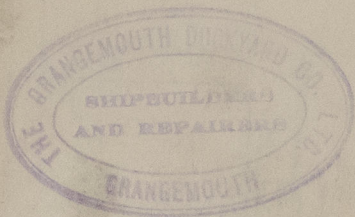
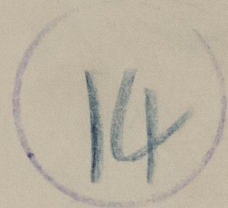
STERNFRAME & RUDDER. Moana Roa

GLASGOW REPORT No 91590

MOANA ROA



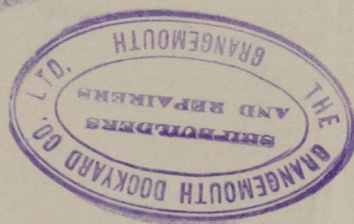
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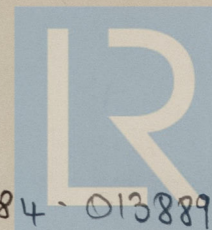
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YARD No. 526.

STERNFRAME & RUDDER.

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