

# NUMERALS

36.25 54.79  
400 36.25  
14500 FIRST N° 91.04  
400  
36416 SECOND N°

D = 36.25, d = 24.70  $\frac{L}{D} = 11.03$

# EQUIPMENT NO. 36717.

3800W ANCHORS (STOCKLESS) 63½ CWTs. COLL. WTS. 182 CWTs.  
1 STREAM " 17½ " EX. STOCK.  
270 FMS. 2½" STUD LINK CHAIN CABLE MIN. Wt. 682½ CWTs.  
90 " 4½" STEEL WIRE STREAM  
120 " 5" " " TOWLINE  
HAWSEERS & WARPS AS PER RULE.

JOHN READHEAD & SONS, LD.  
SHIPBUILDERS & ENGINEERS,  
SOUTH SHIELDS.

# PROPOSED STEAMER. 482

# MIDSHIP SECTION.

DIMENSIONS AS PER RULE.

LENGTH 400.00.  
BREADTH 54.79.  
DEPTH 36.25.

CLASS 100A.1: WITH FREEBOARD & TONNAGE OPENING.

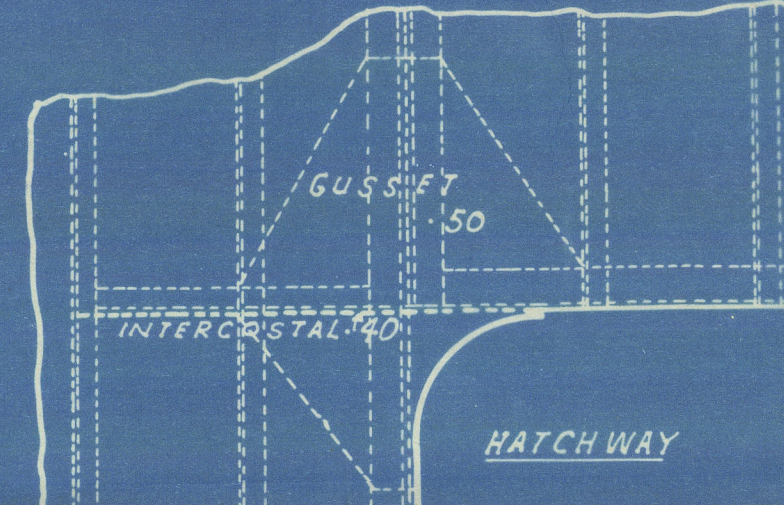
SCALE 3" = 1 FOOT.

# SECTION OF UPPER DECK HATCH END BEAMS.

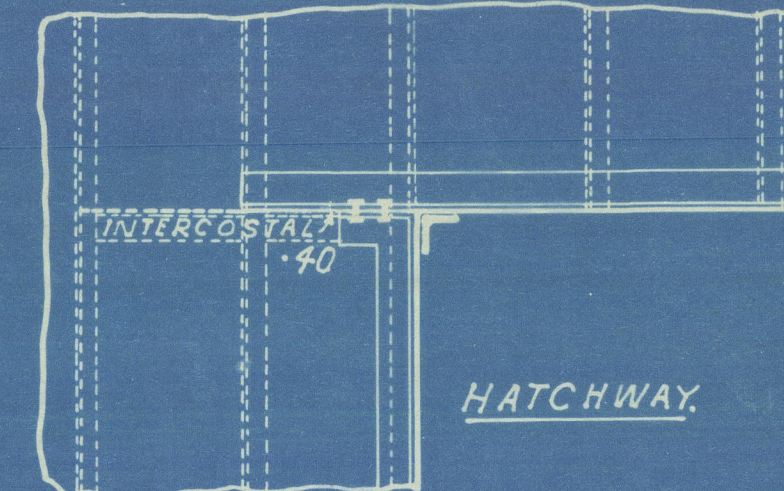
6" x 6" x 40  
6" x 6" x 60  
6" x 6" x 70 N° 104  
6" x 6" x 70 N° 203  
GUSSET 30  
6" x 6" x 60 N° 104  
6" x 6" x 70 x 203  
HATCH SIDE TO SHIPS SIDE.

# SECTION OF 2ND DECK HATCH END BEAMS.

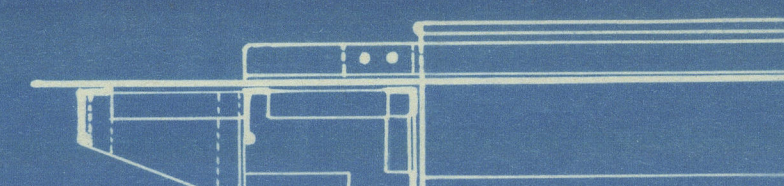
6" x 6" x 40  
6" x 6" x 60  
6" x 6" x 70 N° 104  
6" x 6" x 70 N° 203  
HATCH SIDE TO SHIPS SIDE.



UPPER DECK HATCHWAYS



SECOND DECK HATCHWAYS.



CORNER CONNECTION OF DECK ANGLES

# UPPER DECK

DECK PLATING 48" x 36" OUTSIDE LINE OF HATCHWAYS; 38" x 36" INSIDE OF LINE.  
OVERLAPPED BUTTS DOUBLE RIVETED FOR ½ LEN. SINGLE AT ENDS.  
BEAMS 8" x 3" x 44 BULB ANGLES ON EVERY FRAME AFT ½ LEN. FROM FORWARD.  
FORWARD OF THIS POINT 9" x 3" x 44 B.A. ON EVERY FRAME  
HATCH END BEAMS. SEE DETAIL SKETCH.

# SECOND DECK

DECK PLATING 36" OUTSIDE LINE OF HATCHWAYS; 34" INSIDE LINE; 30" AT ENDS  
OVERLAPPED BUTTS DOUBLE RIVETED FOR ½ LEN. SINGLE AT ENDS.  
BEAMS 10½" x 3½" x 48 BULB ANGLES ON EVERY FRAME  
HATCH END BEAMS. SEE DETAIL SKETCH.

# FRAMES

BETWEEN END BHDs; EXCEPT PAINTING FRAMES (SEE PROFILE) SPACED 28" APART CENTRES OF BULB ANGLES 12" x 3½" x 70 OR 12" x 3½" x 60 IF NEW B.E.S. SECTION. EXTENDING TO 2ND DK ON EVERY FRAME  
IN TWEEN DKS; BETWEEN ½ LENGTH FROM AFT & ½ LENGTH FROM FORWARD TO BE ON ALTERNATE FRAMES ONLY OF BULB ANGLES 7" x 3½" x 34 SCARPHED 18" ON TO MAIN FRAMES & EXTENDED TO UPPER DECK. THESE FRAMES ALSO TO BE FITTED AT ENDS OF HATCHWAYS  
FORWARD OF ½ LENGTH FROM STEM BULB ANGLE FRAMES 7" x 3½" x 44 WITH INTERMEDIATE FRAMES 6" x 3" x 34 ANGLES SCARPHED 18" ON TO MAIN FRAMES & EXTENDED TO UPPER DECK.  
AFT OF ½ LENGTH FROM AFT INTERMEDIATE FRAMES 5" x 3" x 34 ANGLES SCARPHED 18" ON TO MAIN FRAMES & EXTENDED TO UPPER DECK.  
IN PEAKS; SPACED 26" APART CENTRES 8" x 3" x 34 BULB ANGLES EVERY FRAME.  
IN AFTER PEAK UP TO 2ND DK & TWEEN DECK, FRAMES 8" x 3" x 34 BULB ANGLES & 5½" x 3" x 34 ANGLES ALTERNATELY, BRACKETED TO DECK & EXTENDED TO UPPER DECK.  
IN FORE PEAK MAIN FRAMES TO UPPER DK & 2ND DK ALTERNATELY WITH INTERMEDIATE FRAMES 6" x 3" x 36 ANGLES SCARPHED & BRACKETED TO DECK.  
SIDE FRAMES IN BOILER SPACE & PERMANENT BUNKERS INCREASED .06 IN THICKNESS.  
BOTTOM FRAMES FROM ¾ LENGTH FORWARD TO COLLISION BHD TO BE 6" x 6" x 45 ANGLES WITH TWO ROWS OF RIVETS EACH FLANGE.  
DOUBLE REVERSE FRAMES TO BE FITTED TO FLOORS UNDER ENGINES AND BOILER BEARERS & UNDER THRUST SEAT TO BEYOND THE GIRDER.

# FLOORS

41 (.50 IN ENGINE SPACE .51 IN BOILER SPACE) ON EVERY 3RD FRAME EXCEPT IN ENGINE SPACE & UNDER BOILER BEARERS & FORWARD OF ¾ LEN. FORWARD & IN BOTH PEAKS, WHERE THEY ARE TO BE ON EVERY FRAME.  
PARTIAL FLOORS UNDER THRUST SEATING.  
WATERTIGHT FLOORS IN DOUBLE BOTTOM (EXCEPT WHERE .50 THICK) TO BE INCREASED .08 IN THICKNESS & STIFFENED BY ANGLES 3½" x 3½" x 30 SPACED 30" APART.

MARGIN PLATE; 39" x 53 (IN B.S. 59) 34½" x 53 AT AFTER END.  
LUGS 6" x 6" x 50 ALL FORE & AFT. IN B.S. 55. (16 RIVETS)  
ADDITIONAL LUG 6" x 6" x 50 ON OPPOSITE SIDE ON EVERY FRAME (8 RIVETS).  
IN LIEU OF RULE GUSSET PLATE.

# BULKHEADS

AMIDSHIP BHDs; PLATING 34" (1.04) AT BOLTS & LIMBERS TO .26. VERTICAL STIFFENERS 12" x 3½" x 48 & ANGLES SPACED 30" APART BRACKETED TOP & BOTTOM. (12" x 3½" x 42 IF NEW B.E.S. SECTION).  
BOUNDARY ANGLES 3½" x 3½" x 10 THICKER THAN PLATING.  
DIVISION BHD. AFT; PLATING 36" (1.04) AT LIMBERS TO .26. VERTICAL STIFFENERS 12" x 3½" x 64 B. ANGLES SPACED 30" APART, BRACKETED TOP & BOTTOM. (12" x 3½" x 56 IF NEW B.E.S. SECTION). BOUNDARY ANGLE 3½" x 3½" x 10 THICKER THAN PLATING.  
DIVISION BHD. FORD; PLATING 36" (1.04) AT LIMBERS TO .26. VERTICAL STIFFENERS 12" x 3½" x 54 CHANNELS, SPACED 30" APART, BRACKETED TOP & BOTTOM.  
BOUNDARY ANGLES 3½" x 3½" x 10 THICKER THAN PLATING.  
AFTER PEAK BHD; PLATING 38" (1.10) TO .30. STIFFENED HORIZONTALLY BY SEMI-BOX BEAM & VERTICALLY BY BULB ANGLES 9" x 3" x 50 SPACED 26" APART & BRACKETED TOP & BOTTOM. BOUNDARY ANGLE 3½" x 3½" x 10 THICKER THAN PLATING.  
COLLISION BHD. FORD; BELOW 2ND DECK PLATING 44" (1.10) TO .28. STIFFENED HORIZONTALLY BY SEMI-BOX BEAM & VERTICALLY BY BULB ANGLES 11½" x 3½" x 40 LOWER & 9" x 3½" x 54 UPPER SPACED 26" APART & BRACKETED TOP & BOTTOM & TO WATERTIGHT FLAT. BOUNDARY ANGLE 3½" x 3½" x 10 THICKER THAN PLATING.  
DITTO TWEEN DKS; PLATING 26" STIFFENED VERTICALLY BY 4½" x 3" x 34 ANGLES & 5½" FLANGE ALTERNATELY SPACED 26" APART & RIVETED TO TOP & BOTTOM BARS. BOUNDARY ANGLE 3½" x 3½" x 36.

# SHAFT TUNNEL

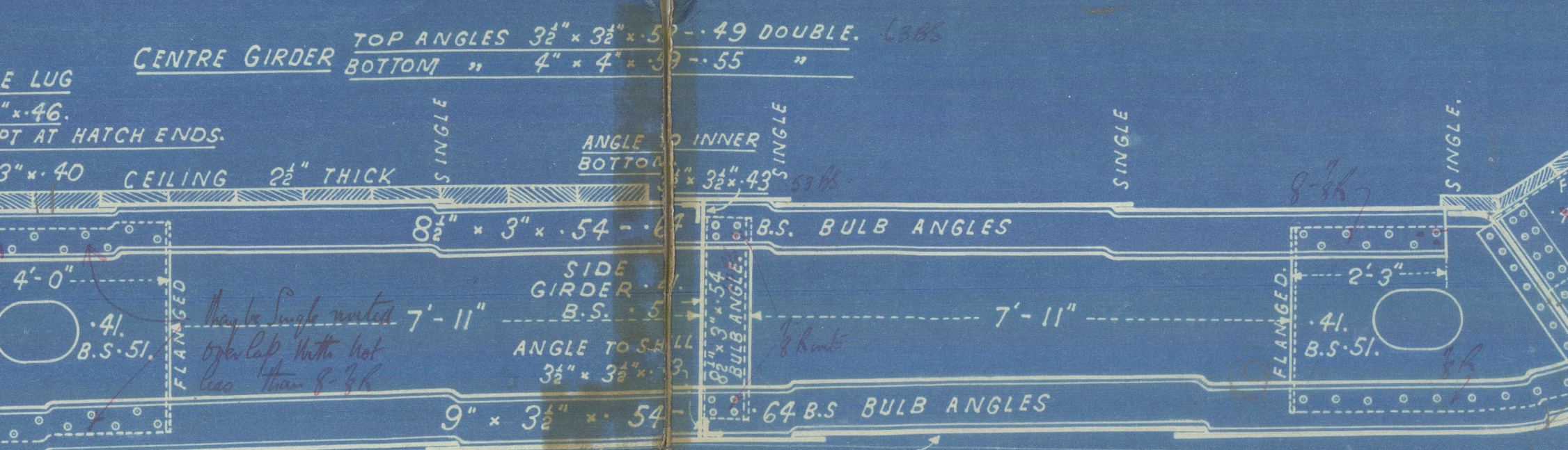
SIDE PLATES; 40" TOP .36 & 40" x 46 UNDER HATCHWAYS.  
STIFFENERS 6" x 3" x 40 ANGLES SPACED 36" APART. BASE ANGLES 3½" x 3½" x 30.  
VERTICAL CONNECTIONS 3½" x 3½" x 40.

# FORGINGS

STEM; 9½" x 28"  
STERN FRAME  
PROPR. POST. 108" x 7½"  
RUDDER " 9" x 7½"  
RUDDER AS PER TABLES.

# INNER BOTTOM

CENTRE STRAKE; 53" x 51 - 43, B.S. 57. OVERLAPPED BUTTS TREBLE RIVETED FOR ½ LEN. DOUBLE AT ENDS.  
HOLDS; 49 - 39, " " DOUBLE " " " SINGLE " "  
ENGINE SPACE; 88 & 51, " " TREBLE " " " TREBLE " "  
BOILER " 57, " " TREBLE " " " TREBLE " "



FLAT KEEL PLATE  
65" x 77 x .66. OVERLAPPED BUTTS QUADRUPE RIVETED FOR ½ LENGTH TREBLE AT ENDS.  
THESE THREE STRAKES TO MAINTAIN THEIR AMIDSHIP THICKNESS FORWARD TO COLLISION BHD.

NOTE: IN THE FORE & AFTER PEAKS THE SHELL PLATING HAS BEEN INCREASED .02 IN VIEW OF FRAME SPACING BEING 26"

Side and bottom shell plating to be increased .01 also bulk between Bhd and bottom. Bhd in line with frame spacing

NOTE: FORWARD OF ¾ LENGTH FORD THE RIVETS IN THE SHELL PLATING & FRAMES AT BOTTOM & FRAMES TO FLOORS 3" DIA. 58 DIAS. APART CENTRES.



These John Andrew & Co. Ltd.

Midship Section  
of  
Proposed 400'—0"  
Steamer

now  
S/S No 482

S. S. "SOUTHGATE".  
NEWCASTLE ON TYNE.

Report No. 80705.

Dimitrios A. Kydonieff



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Lloyd's Register  
Foundation

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