

SCANTLING NUMERALS			
1ST LONG ₂ NUMERALS		(L × D)	14.281
2ND	"	L × (B + D)	39.729
PROPORTION TO UPPER DE.		$\frac{L}{D}$	13.25
"	"	"	10.72
% OF LENGTH OF SUPERSTRUCTURES TO SHIPS LENGTH			45.51%

EQUIPMENT NO.		
L x (B+D)	435 x (58.5 + 32.83)	39,729
F/CLE	412 x 75 x 75	232
BRIDGE	126.5 x 77.5 x 75	735
POOP	30.38 x 75 x 75	171
BRIDGE DE HOUSE	66 x 8.0 x 50	264
BOAT DE HOUSE	22 x 9.0 x 50	99
SUM		41,230

EQUIPMENTS			QTY	UNIT	AMOUNT	REMARKS
3- BOWER ANCHORS, STOCKLESS, COLLECTIVE WT.			207	CONT.		
1- STREAM ANCHOR, ORDINARY EX. STOCK			202			
STUD CHAIN CABLE		300 FMS	2%	LB		
STEEL WIRE FOR STREAM ANCHOR		1-120 "	5	CB		
TOW LINE	STEEL WIRE (FLEXIBLE)	1-130 "	5	CB		
HAWKERS,	" (FLEXIBLE)	2-100 "	2%	CB		
WARPS,	" (")	2-100 "	2%	CB		

FORGING & CASTING		
STEM		10 1/8" x 2 5/8"
STERN FRAME	RUDDER POST.	—
	PROPELLER	—

KEEL AND SHELL PLATING		
KEEL PLATE		51°-85° — 75°
BOTTOM "		69°-49 (108°-72° PLATE FOR)
SIDE "		65° — 46°
BOSS "		75°
FILE SIDE PLATE		42°
BRIDGE "		42°
GOOP "		40°
SHEER STRAKE	75°-94° (RULE 51°-92°)	50°-84°
STRAKE BELOW	90°-80° (RULE 51°-82°)	50°-84°
SHEER STRAKE DOUBLED WITH 80° AT BRIDGE ENDS.		

ENGINE	CASING
COAMING PLATE	30" 34" WHERE EXPOSED
CASING	26" 30" " "
COAMING ANGLE	75 x 75 x 8 A. EVERYWHERE
STIFFENERS	75 x 65 x 75 A. 33" SPACED APART

		DECK HOUSES		
		UPPER DS	BRIDGE DS	BOAT DS
HOUSE	PLATE	25'	25'	20'
COAMING	ANGLE	150 x 90 x 9 A	150 x 90 x 9 A	150 x 90 x 9 A
TOP	ANGLE	75 x 75 x 8 A	75 x 75 x 8 A	65 x 65 x 8 A
STIFFENERS		90 x 75 x 8 A	75 x 65 x 7.5 A	65 x 65 x 8 A
+	SPACING	33" SPACED APART		
ALL DIVISIONAL STEEL WALL		25' LOWER WHERE LIABLE TO CORRODE		
		SUCH AS IN W.C. & BATH		
		20'		

BILGE KEELS (173'-3" AMIDSHIP)	
PLATE	10"x.44" WITH 60x30 H.R.B.
CONNECTING ANGLE	125 x 90 x 13 A.
DEPTH OF GIRDER	12'

		DOUBLE BOTTOM		
		★ L & E - ENDS		
CENTRE	PLATES	45" x 85" - 45"	60" x 55"	REMARKS
GROD	KEEL ANGLES	100x100x13.5 B.A	100x100x13.5 B.A	
	TOP "	90x90x13.5 - 17.5 B.A	150x150x13.5 B.A	
	VERT "	90x90x11 A	130x130x11 A	
SIDE	PLATES	41"	45" B 42"	
	TOP ANGLES	90x90x13 A	130x130x13 A	150x150x12.5 A UNDER THRUST SEATINGS
GRODERS	BOTTOM "	90x90x13 A	150x150x12.5 A	
	VERT "	75.75x12 A	150x150x12.5 A	
SOLID	PLATES	43"	43"	
	FRAMES	90x90x13 A	90x90x13 A	130x130x13.5 A FORK OF 30.5 A
FLOORS	REV. FRAMES	90x90x13 A	130x130x13.5 A	150x150x13.5 A UNDER THRUST SEATINGS
	" W.T. PLATES	49"	49"	
FLOORS	BOUNDARY A	130x130x12.5 A	130x130x12.5 A	
	STIFFENERS	180x75x9 B.B A	180x75x9 B.B A	50x62 30" APART
INNER	M.L. STRAKE	50x11" x 11"	50x11" x 11"	
	WALL PLATE	45" x 45" AT FORE END	52"	
BOTTOM	MAIN PL	40" x 55" - 53"	52"	
	SHULL ANG	130x130x13.5 A	90x90x13.5 A	3/8" x 53" AT AFT END
DETAILS OF SCANTLING UNDER MAIN ENGINE SEATING AS PER SKETCH				

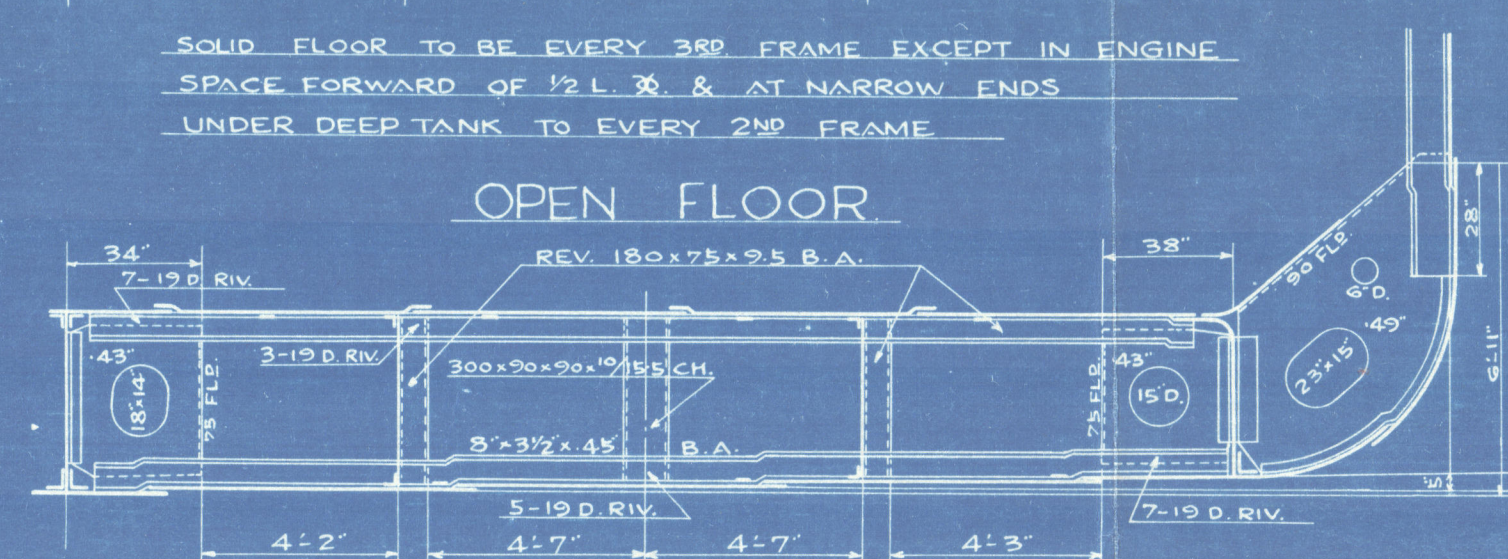
STRENGTHENING OF BOTTOM FORWARD.

FROM FORWARD OF 1/2 L W TO COLLISION BOW. PITCH OF RIVET IN FRAMES TO BE 5/2 D. (TWO COMPLETE ROWS ON FRAMES 1301301315.5 A. FROM MARGIN PLATE TO MARGIN PLATE) FRAME BACK 1300.75 A. TO BE FITTED FROM FORWARD OF 3/8 L W TO COLL BOW FROM MARGIN PLATE TO MARGIN PL. INTL ADDITIONAL SIDE GIRDERS TO BE FITTED NOT MORE THAN 2' APART 7/2 HT. GIRDERS EXTENDING AS FAR FORWARD AS PRACTICABLE.

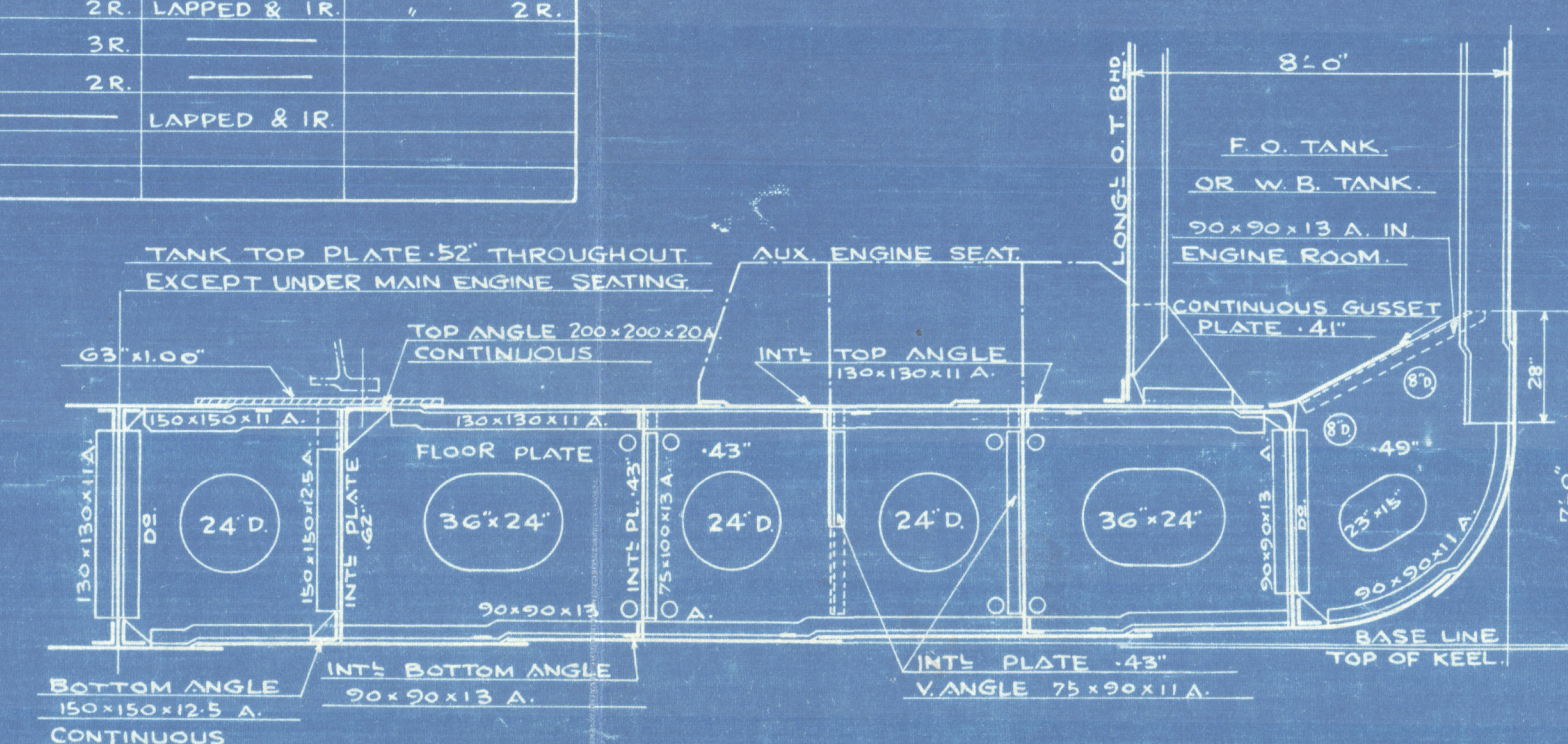
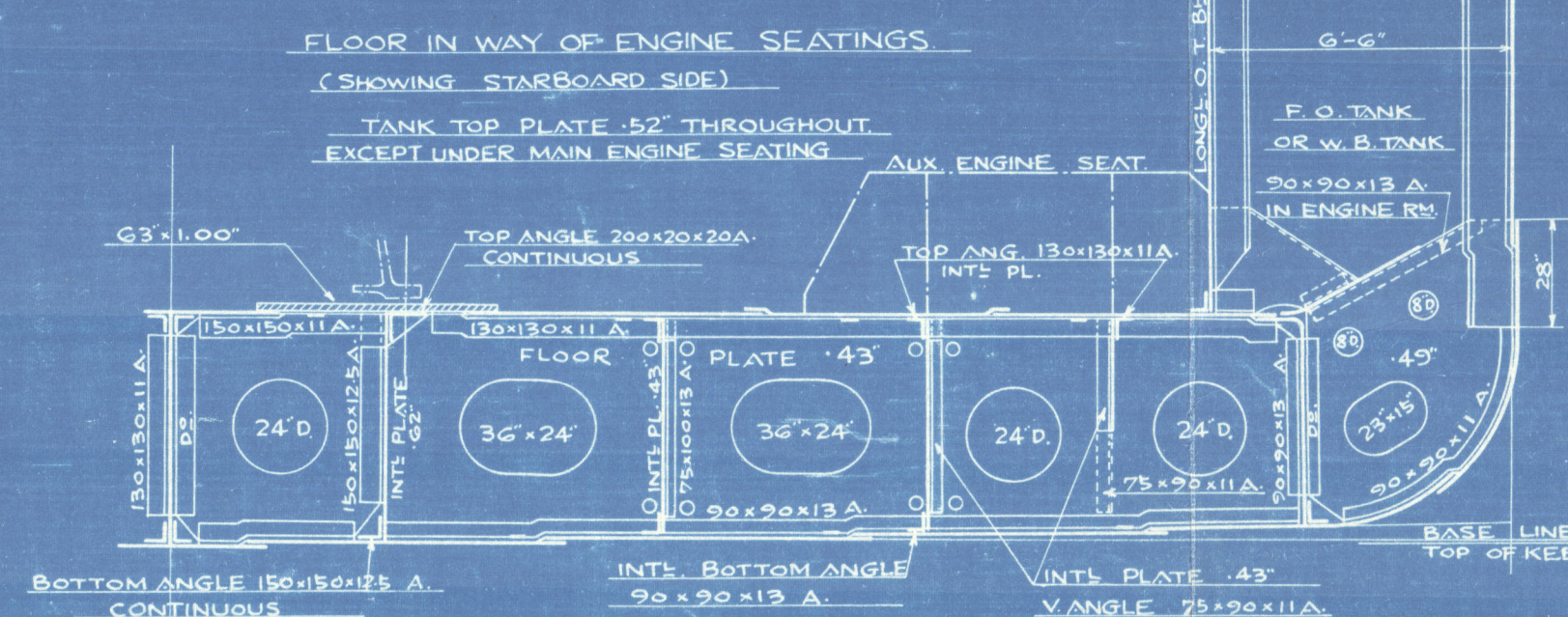
FLOOR PLATE OR INTL SIDE GIRDERS ARE NOT TO BE FLANGED.

PLATE PLATING TWO STRAKES OF NEXT KEEL TO HAVE 1" THICK. 8' ANOTHER ONE STRAKE OF NEXT KEEL TO HAVE 1" THICK. 8' AT F.S. 27. MAINTAINED FORWARD TO COLLISION BOW.

RIVETING	NOTE	(EDGE CONNECTION)	
	$\frac{1}{2}$ L. 30	AT ENDS	IN WAY OF BRIDGE
KEEL PLATE	2 R.	2 R.	
BOTTOM PL.	"	BELOW 44" - 1 R. ABOVE 44" - 2 R.	
SIDE PLATE	"		
SHEER STRAKE	2 R.	0 R.	
STRAKE BELOW	"	1 R.	
FCLE SIDE PL.			
BRIDGE "	2 R.		
POOP SIDE PL.		1 R.	
M. L. STRAKE	2 R.		
OTHER STRAKE	"		
MARGIN PL.	"	2 R.	
UPPER DECK			
STORMING PL.		1 R.	1 R.
UP DECK PLATE	2 R.	1 R.	1 R.
OTHER DECK PL.	ABOVECAST OPEN.	1 R.	



END CONNECTIONS			
	1/2 L. END	AT END	IN WAY OF BRIDGE DECK
KEEL PLATES	LAPPED 4 R	LAPPED 3 R	
BOTTOM PLATES	“ 4 R	“ 3 R	
SIDE PLATES	“ 3 R	“ 3 R	
SHEER STRAKES	“ 5 R	“ 3 R	
BELOW STRAKES	“ 4 R	“ 3 R	
BRIDGE 3RD SIDE	“ 4 R		
SOLE & DOOP SIDE		LAPPED 1 R	
INNER BOTTOM			
M.L. STRINGER	LAPPED 3 R	LAPPED 2 R	
OTHER STRAKES	“ 2 R	“ 2 R	
MARGIN PLATES	“ 3 R	“ 3 R	
CENTRE GIRDER	“ 3 R	“ 3 R	
UPPER DE STRINGER PL	“ 5 R	“ 3 R	LAPPED 28 1/2 R
“ “ PLATES	“ 5 R	“ 1 R	“ 2 R
2ND DE STRINGER PL	“ 2 R	“ 2 R	“ 2 R
“ “ PLATES	“ 2 R	LAPPED 1 R	“ 2 R
BRIDGE 5TH STRINGER PL	“ 3 R	_____	_____
“ “ PLATES	“ 2 R	_____	_____
DOOP & FOLE GIRDERS & STRINGER PLATES	_____	LAPPED 1 R	_____



DECKS			
	BRIDGE DS	F/CLE DS	POOP DS
STRINGER PL.	60"x55"	35"x35"	37"x35"
STRINGER ANGLES	130x130x14 A.	90x90x10 A.	90x90x10 A.
SHELL	_____	_____	_____
G. WATER WAY A.	_____	_____	_____
DECK PLATES	44" ABREAST OPES 3'5" WITHIN	40" UNDER WWS 3'5"	3'6"
WOOD PLANKS	220 O.P.M. CREW SPACE	_____	_____

	UPPER DECK		
	IN WAY OF STRENGTH DE	50'x110'x110'x110'	IN WAY OF BRIDGE
STRINGER PLATES	60'x110'x110'x110'	50'x110'x110'x110'	50'x110'x110'x110'
STRINGER ANGLES	50'x110'x110'x110'	50'x110'x110'x110'	50'x110'x110'x110'
SHELL	200'x200'x25 A.	200'x200'x110 A. AT ENDS.	200'x200'x110 A.
DE PL ABREAST/STOE.	78'x72'x110'x110'	78'x72'x110'x110'	78'x72'x110'x110'
DE PL UNDER OPENING	4'x110'x110'x110'	4'x110'x110'x110'	4'x110'x110'x110'
WOOD PLANK	28'x110'x110'x110'	28'x110'x110'x110'	28'x110'x110'x110'

		2ND DECK	
		IN WAY OF UPPER DS 63' x 12" (RULE SIZE 48' x 41") 32' x 12" AT ENDS	IN WAY OF BRIDGE DS 63' x 38" (RULE SIZE 48' x 38")
STRINGER PLATES			
STRINGER ANGLES	75' x 75' x 12" - 2' A.		75' x 75' x 12" A.
SHELL ANGLES	90' x 90' x 13" - 9' A.		130' x 100' x 15" A.
DS PL. ABREAST OPS.	37' - 31"		34' - 42' INWAY
DS PL. WITHIN A.	34' - 31"		34' - DEEP TAN

		TANK SIDE BRACKETS				
		ENGINE ROOM	15% FROM STEM	CARGO HOLDS		1/2 L-15% F.W.
ACTUAL (d)		19'-4"	20'-7"	20'-7"	20'-7"	20'-7"
TANK SIDE RLY.		.49"	.47"	.49"	.47"	.47"
GUSSET PLATES		.41"	.41"	.41"	.41"	.41"
NO OF RIV.	TO FRAME	16-22 D RIV	20-22 D RIV	16-22 D RIV	14-22 D RIV	
	TO GUSSET	10-22 D RIV	13-22 D RIV	10-22 D RIV	10-22 D RIV	
	TO MARGIN PL	11-22 D RIV	15-22 D RIV	11-22 D RIV		
V-ANGLE/MARGIN PL		90x90x13 A	130x130x15 A	130x130x15 A	130x130x15 A	
	FLOOR PL	90x90x13 A	130x130x15 A	125x90x13 S A	125x90x13 S A	
GUSSET PLATES		CONTINUOUS	CONTINUOUS	CONTINUOUS	CONTINUOUS	
NO OF RIV IN WAY OF TANK TOP FLAT	TO FRAME	_____	_____	_____	_____	
	TO TANK TOP	_____	_____	_____	_____	
HT OF TANK SIDE RLY CORRECTORS FOR STAMMING		19'-4"	20'-6"	20'-6"	20'-6"	

FRAMINGS	
FRAME SPACES	
BOTH PEAKS	24"
FORWARD OF 3/4 L. Ø	27"
ELSEWHERE	33" (RULE 29.42")

FRAMES IN AFT PEAK TANK.

FRAME 329.45 B.A. EXTENDS TO UPPER DS.

FRAME IN POOP 87.39.445 B.A. TO ALT FRAME & BRACKETED TO DECK.

INTERMEDIATE ANGLE FRAME 150.90.10 A HEEL FREE.

FRAME IN WAY OF TUNNEL RECESS

FRAME IN TUNNEL 97.39.475 B.A. EXTENDS TO TUNNEL RECESS TOP

FRAME IN CARGO HOLD 97.39.475 B.A. EXTENDS TO UPPER & POOP DS

HEEL BKT TO TUNNEL RECESS TOP INTERMEDIATE FRAME

ANGLE IN POOP 150.90.10.5 A HEEL BKT TO UPP DS

FRAMES IN AFT CARGO HOLDS.

FRAME 300.90.90.10.65 CH EXTENDS TO 2ND DE TWEEFN BLOW FRAME

FRAME 329.4475 B.A. EXTENDS TO UPP DS. HEEL CONNECTED BELOW FRAME

NEXT HOLD FRAME 300.90.90.10.65 CH EXTENDS TO UPP DS WEEL CUT DOWN

TO FORM 200.90.10.A. BETWEEN UPP - 2ND DS.

FRAMES IN DEEP TANK AND ENGINE ROOM.

FRAME 300x90x90x191/2" CH. EXTENDS TO 2ND DE. TWEEN DE.

FRAME 8"x3 1/2"x45" B.A. EXTENDS TO UPP DE OR BRIDGE DE. WHERE

FITTED, HEEL BRACKETED TO DE, WEB CUT DOWN TO FORM

7"x3 1/2"x45" A. BETWEEN UPP-BRIDGE DE.

FRAMES IN FORE CARGO HOLD

FRAME 300x200x10¹⁶ INCH. EXTENDS TO 2ND DE TW DS. FRAME 9'3"x14'25" EXTENDS TO UP DE OR BRIDGE DS. WHERE FITTED HEEL CONNECTED TO FRAME WEB CUT DOWN TO FORM 7'3"x14'47 1/2" BETWEEN UPPER BRIDGE AND NEXT HOLD FRAME. 300x90x9x5/16 INCH. EXTENDS TO UP DE OR BRIDGE DS. WHERE FITTED WEB CUT DOWN TO FORM 200x90x10 1/2" BETWEEN UPPER DE DS & 185x90x10 1/2" BETWEEN UPPER BRIDGE DS

FRAMES IN WAY OF 77' FRAME SPACING

FRAME 300x200x10¹⁶ INCH. EXTENDS TO UPPER FILE DS. WHERE FITTED WEB CUT DOWN TO FORM 150x90x10 1/2" ON ALTERNATE FRAME. UPPER 72" DE. EXCEPT IN WAY OF FILE DS WHERE WEB CUT DOWN TO FORM 200x90x10 1/2" ON ALTERNATE FRAME. BETWEEN UP-72" DS. & ON EVERY FRAME BETWEEN UP-FILE DS (REV. A 105x90x10 1/2" 15 FT. FORT & AFT FITTED BELOW 2ND DS. IN WAY OF 15% L TO FORWARD) (& DEPTH OF FRAMES IN FORE PEAK TANK.

FRAME 8'5"x35'4 1/2" B.A. EXTENDS TO UPPER DS. FRAME IN FILE 8'5"x35'4 1/2" B.A. TO ALT. FRAME INTERMEDIATE ANGLE 150x90x10 1/2" HEEL BRACKETED TO DS.

N.B. - SEE ALSO CONSTRUCTION PROFILE & DECK PLAN

M.V. "KOYEI MARU"
Nagasaki Report No.1940.

S. N.º 550

M.S. "KOYEI-MARU"
MIDSHIP SECTION
(FINISHED PLAN)
SCALE 1/4" TO 1 FT.
435'-0" x 58'-6" x 32'-10"



M.V. "KOYEI MARU"

Nagasaki Report No.1940.

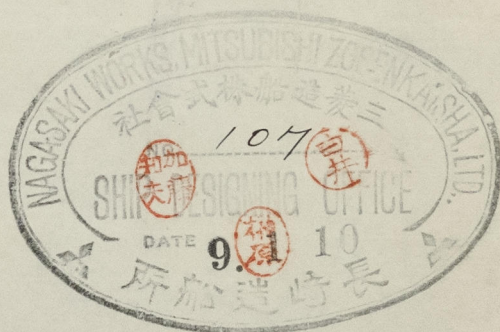
S.No 550

M.S. "KOYEI-MARU"
MIDSHIP SECTION.

(FINISHED PLAN.)

SCALE 1/4" TO 1 FT.

435'-0" x 58'-6" x 32'-10"



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