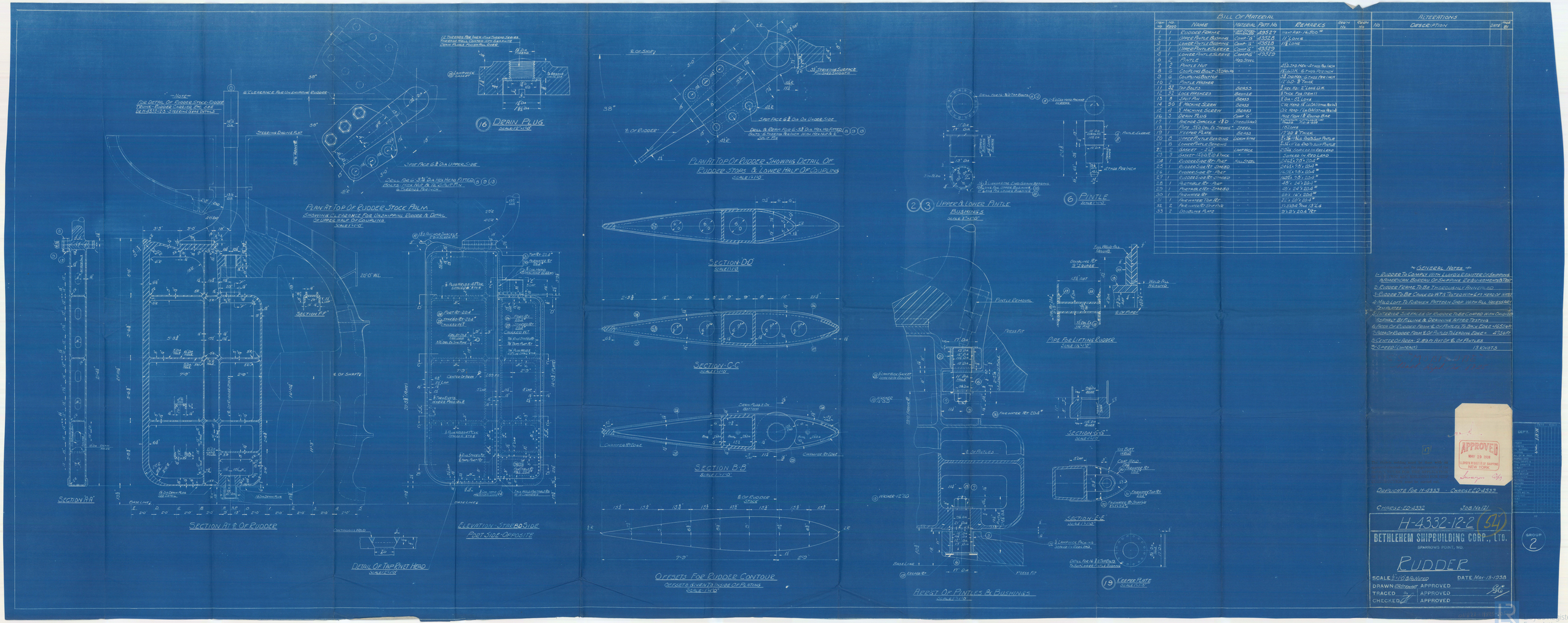

Bill Of Material

Item No.	No. Req.	Name	Material Part No.	Remarks	Drawg No.	Equipt No.
1	1	Rudder Frame	Mild Steel 43527	Heat Rat. 16,500#		
2	1	Upper Pintle Bushing	Comp. "B" 43528	11/Long		
3	1	Lower Pintle Bushing	Comp. "B" 43528	11/Long		
4	1	Upper Pintle Sleeve	Comp. "B" 43529			
5	1	Lower Pintle Sleeve	Comp. "B" 43529			
6	1	Pintle	Mild Steel			
7	2	Pintle Nut	"	11/0 Std Hex - 3" Thds Per Inch		
8	8	Coupling Bolt - 3" Diam.	"	18/Long, 8" Thds Per Inch		
9	6	Coupling Bolt No.	"	3/8 Std Hex - 6" Thds Per Inch		
10	1	Pintle Washer	"	12" O.D. - 3/4" Thick		
11	32	Set Bolts	Bronze	3/4" Rd. - 2" Long G.M.		
12	32	Lock Washers	Bronze	3/8" Thick For Item 11.		
13	8	Cotter Pin	Brass	3/8" Dia. - 3" Long		
14	32	3/4" Machine Screw	Brass	Oval Head 1/4" Long Round Head		
15	4	3/4" Machine Screw	Brass	Oval Head 1/4" Long Round Head		
16	3	Drain Plug	Comp. "B"	Hex Thdd 1" & Round Bar		
17	1	Bronze Shackle "B"	(Unspecified)	Proof Test 50,000#		
18	1	Pipe - 3/0 Dia. Extra	Steel	18/Long		
19	1	Keeper Plate	Mild Steel	12" O.D. - 3/4" Thick		
20	8	Upper Pintle Spring	Piano Wire	2 1/2" - Full Out Upper Pintle		
21	8	Lower Pintle Spring	"	2 1/2" - 17 1/2" Out Lower Pintle		
22	1	Gasket - 3/4"	Compack	30/Long Soft Lead		
23	3	Gasket - 1/8" Thick	"	3/8" Long Soft Lead		
24	1	Rudder-Side Rt. - Port	Mild Steel	3'-6 1/2" x 7'-0" x 1/2"		
25	1	Rudder-Side Rt. - Starbd.	"	3'-6 1/2" x 7'-0" x 1/2"		
26	1	Rudder-Side Rt. - Port	"	16'-0" x 7'-0" x 1/2"		
27	1	Rudder-Side Rt. - Starbd.	"	16'-0" x 7'-0" x 1/2"		
28	1	Bottom Rt. - Aft	"	17'-0" x 4'-0" x 1/2"		
29	1	Mortheel Rt. - Starbd.	"	17'-0" x 4'-0" x 1/2"		
30	1	Freeboard Rt.	"	50'-0" x 16" x 1/2"		
31	1	Freeboard Top Rt.	"	50'-0" x 10" x 1/2"		
32	2	Freeboard Stiffener	"	11 3/4" Tees - 3/4" x 6"		
33	2	Coupling Plate	"	33" x 20" x 1/2"		

Alterations

No.	Description	Date	Drawg No.

General Notes

1. Rudder To Comply With Lloyd's Register Of Shipping & Inspection Bureau Of Shipping Requirements Total
2. Rudder Frame To Be Thoroughly Annealed
3. Rudder To Be Chalk Water Tight Without Heat Treat
4. Hold Lost To Furnish Pattern Ship With All Necessary Templates
5. Interior Surfaces Of Rudder To Be Coated With Oil Resist By Galvine & Dennison Refer Testing
6. Piece Of Rudder From ℄ Of Pintle To Back Edge = 46.5 Feet
7. Piece Of Rudder From ℄ Of Pintle To Bottom Edge = 47.5 Feet
8. Center Of Press. 2.83 Ft Aft Of ℄ Of Rudder
9. Speed (Contract) 13 Knots

APPROVED
MAY 13 1938
LLOYD'S REGISTER OF SHIPPING
NEW YORK

Duplicate For H-4333 Change ED-4333

Change: ED-4332 Job No. 121

H-4332-12-2 (54)

BETHLEHEM SHIPBUILDING CORP., LTD.
SPARROWS POINT, MD.

Rudder

Group 2

Scale 1/4" = 1'-0" Blueprint Date May 13-1938

Drawn Blueprint Approved

Traced Approved

Checked Approved