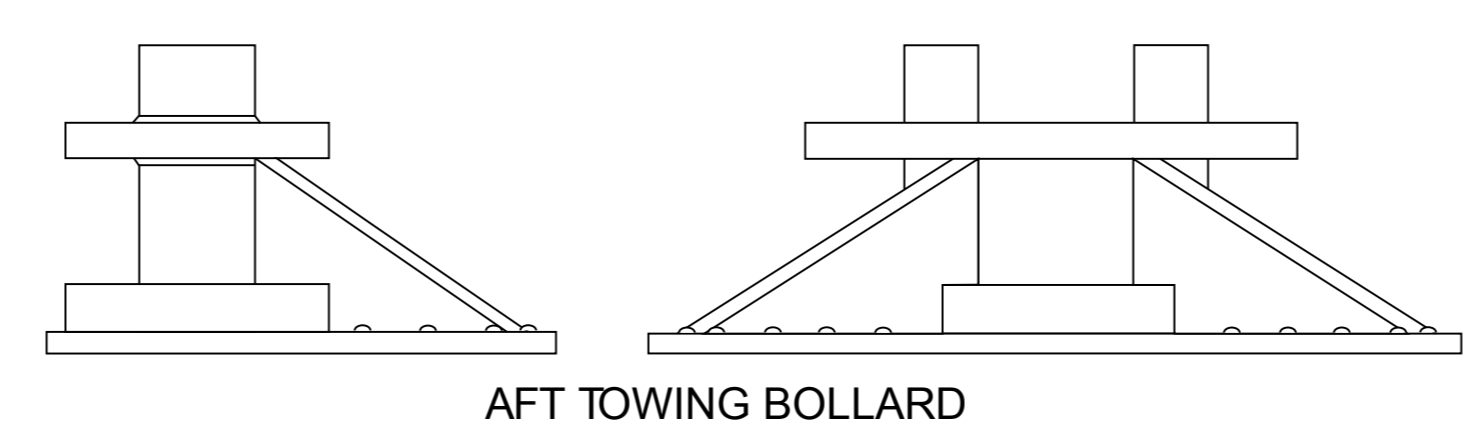
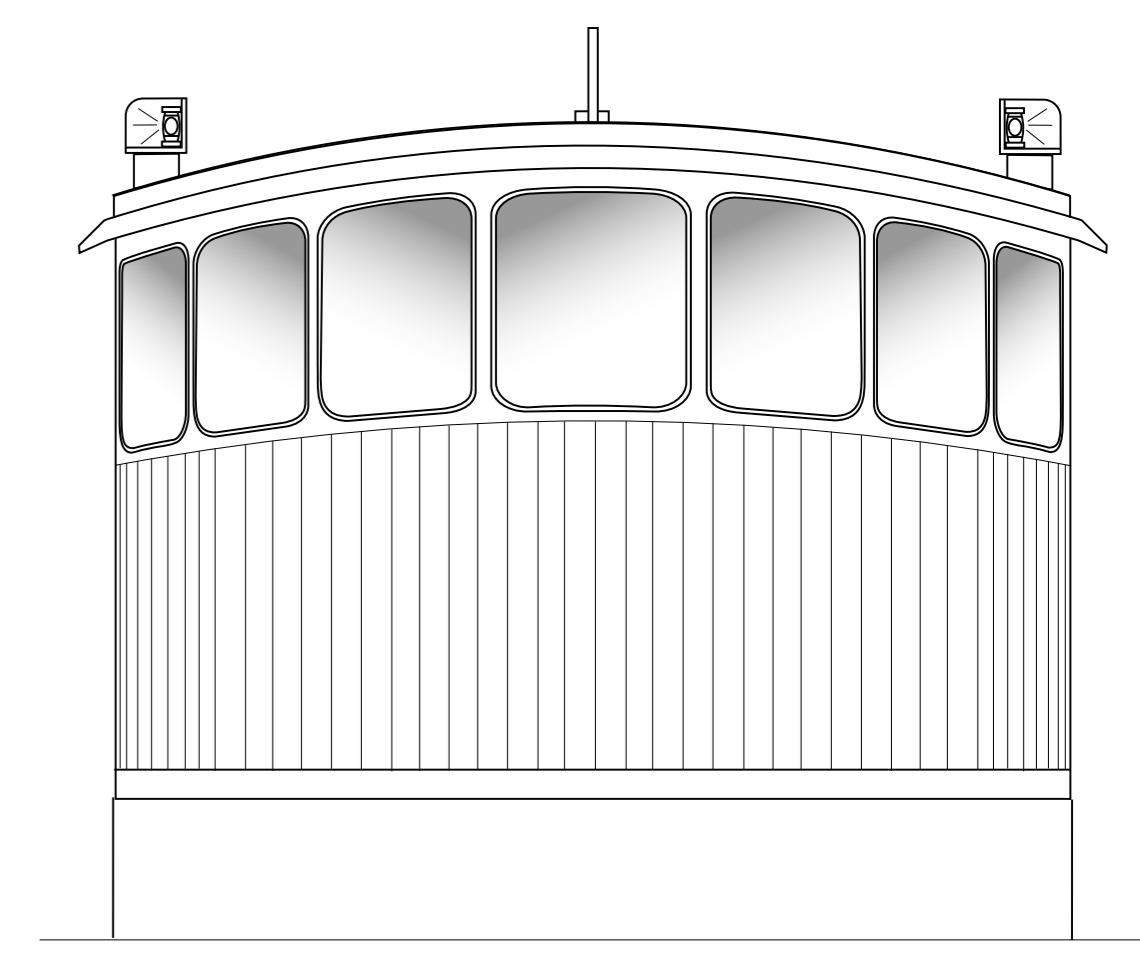
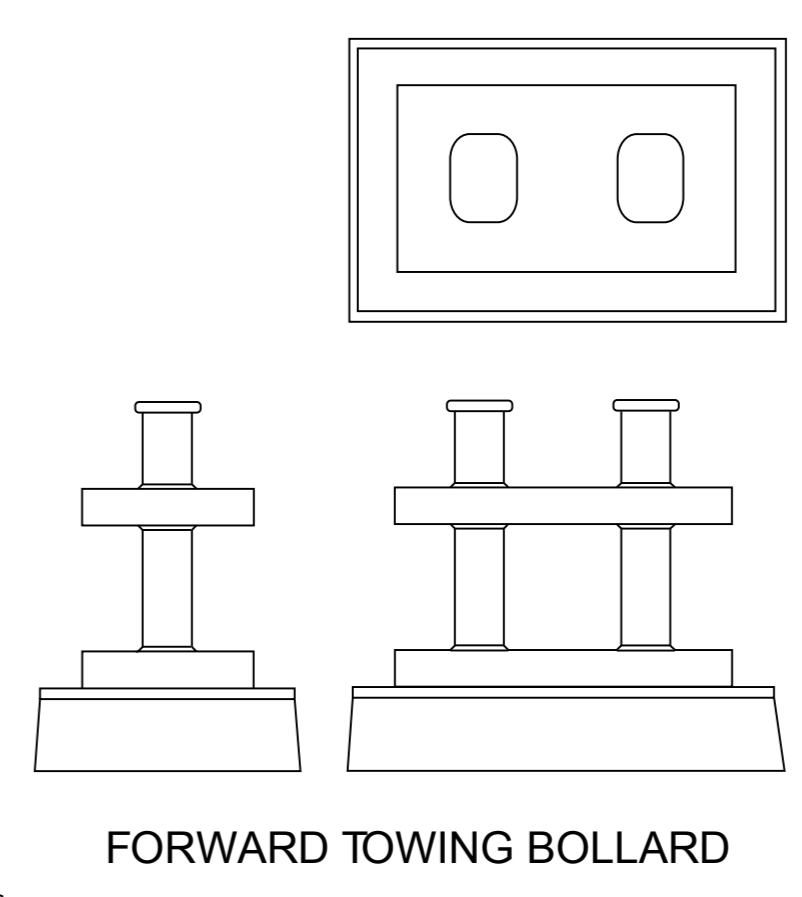


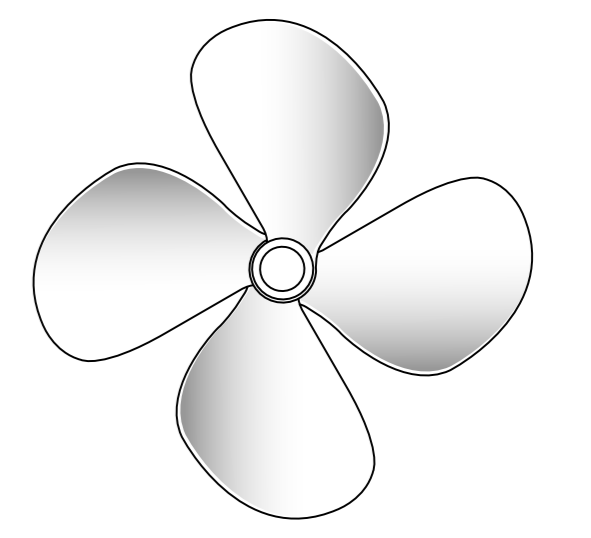
WOOD RUBBING STRAKES



AFT TOWING BOLLARD

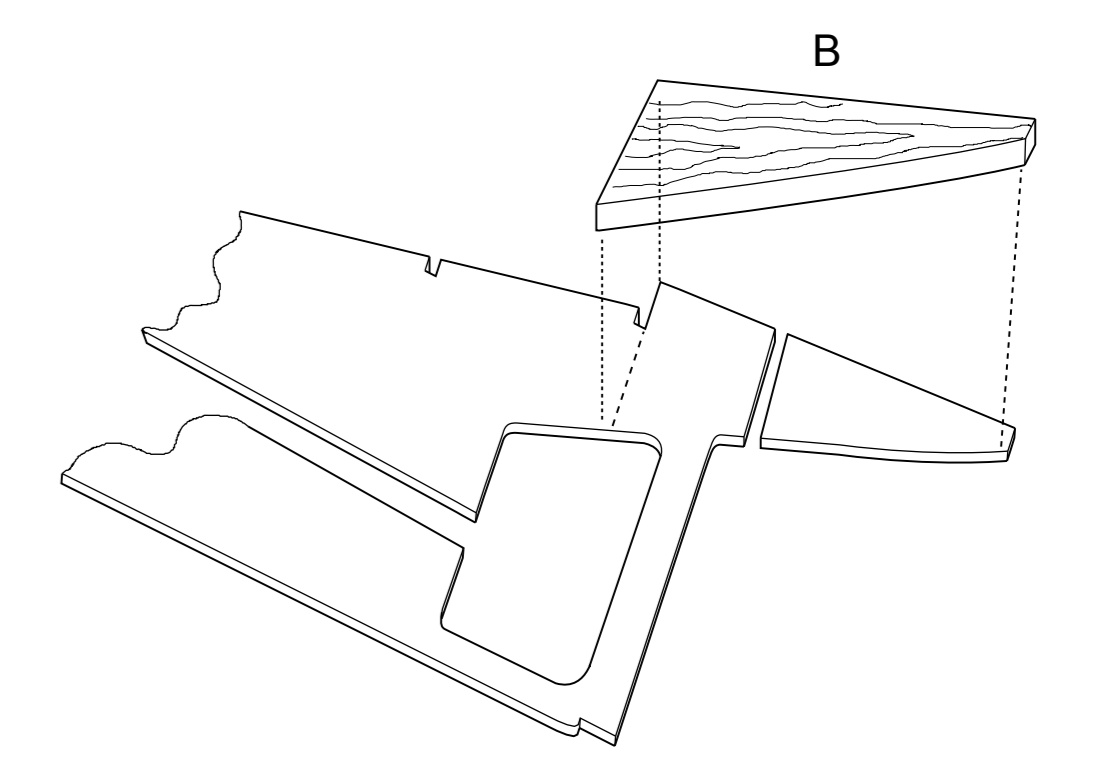
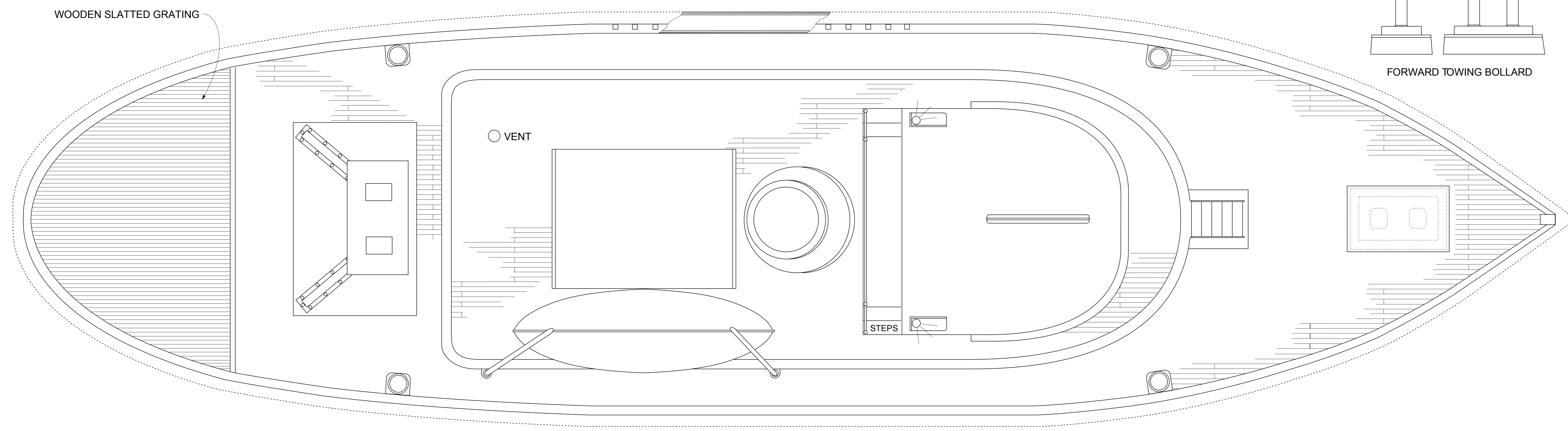


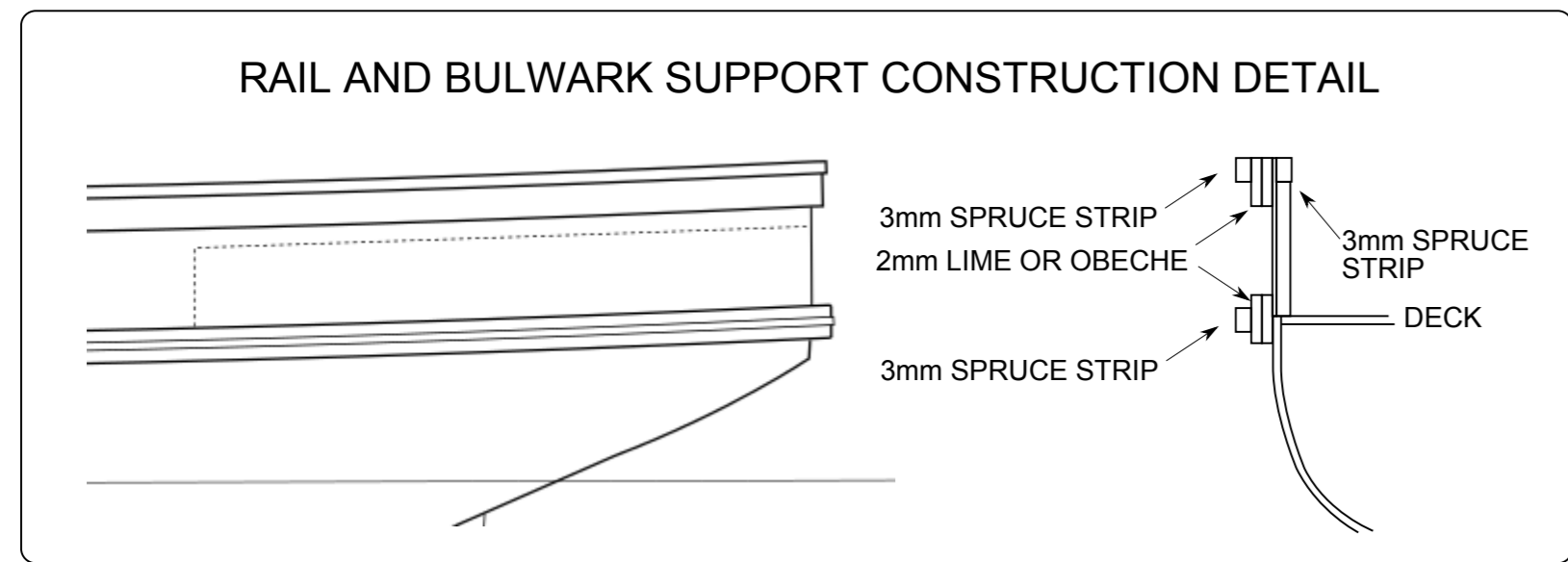
FORWARD TOWING BOLLARD



TYPICAL FOUR BLADED PROPELLER

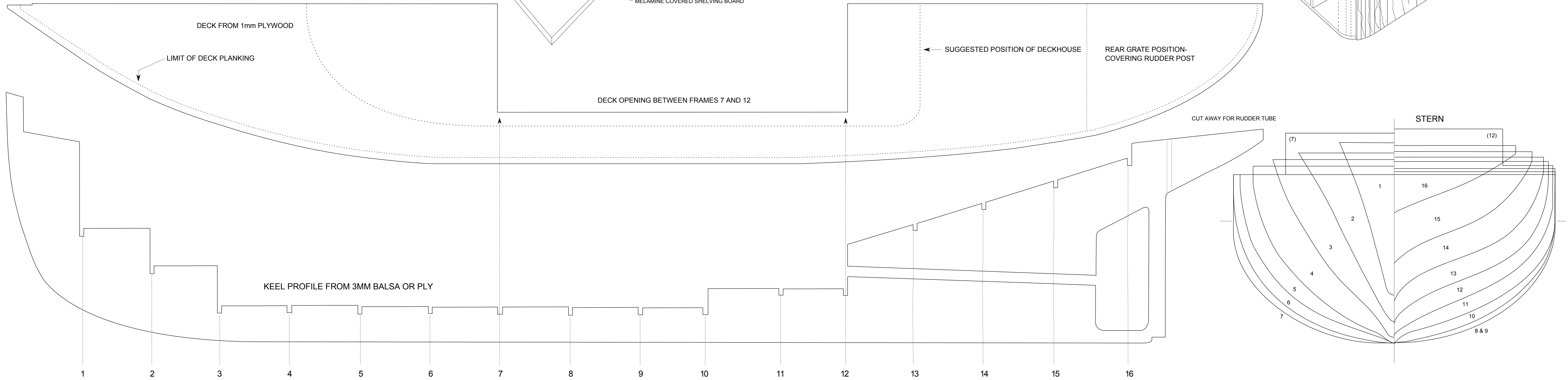
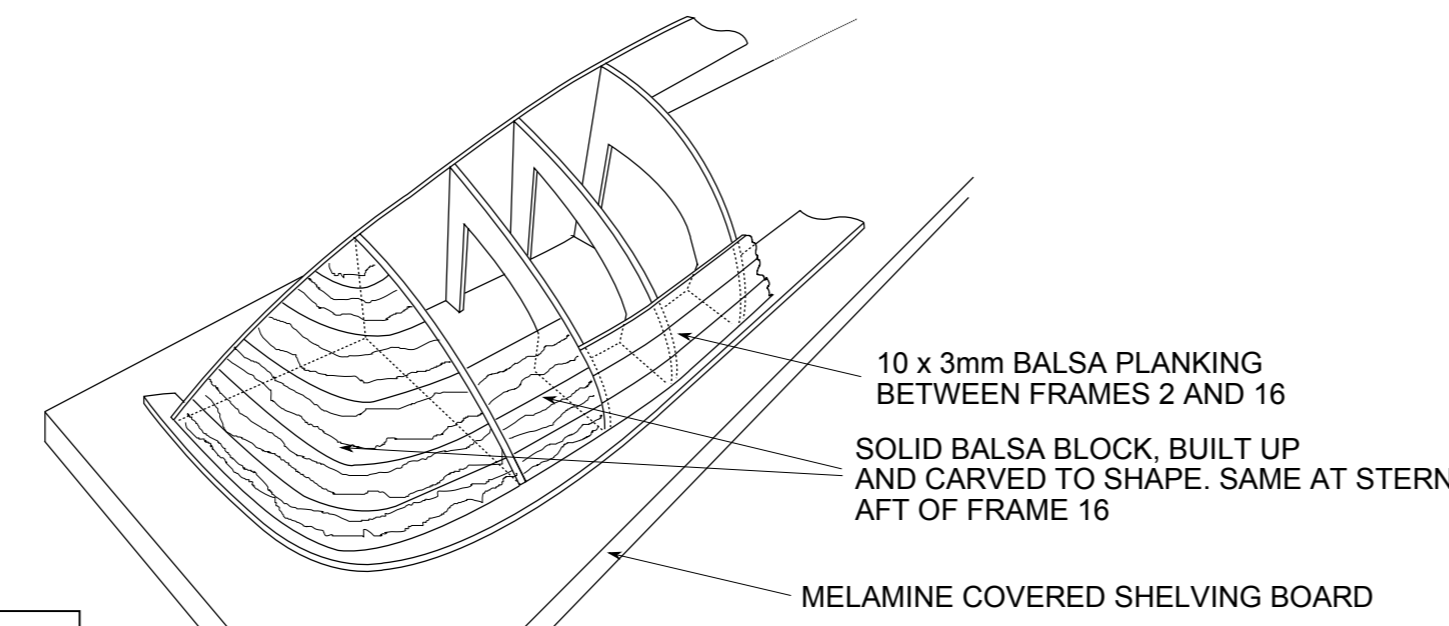
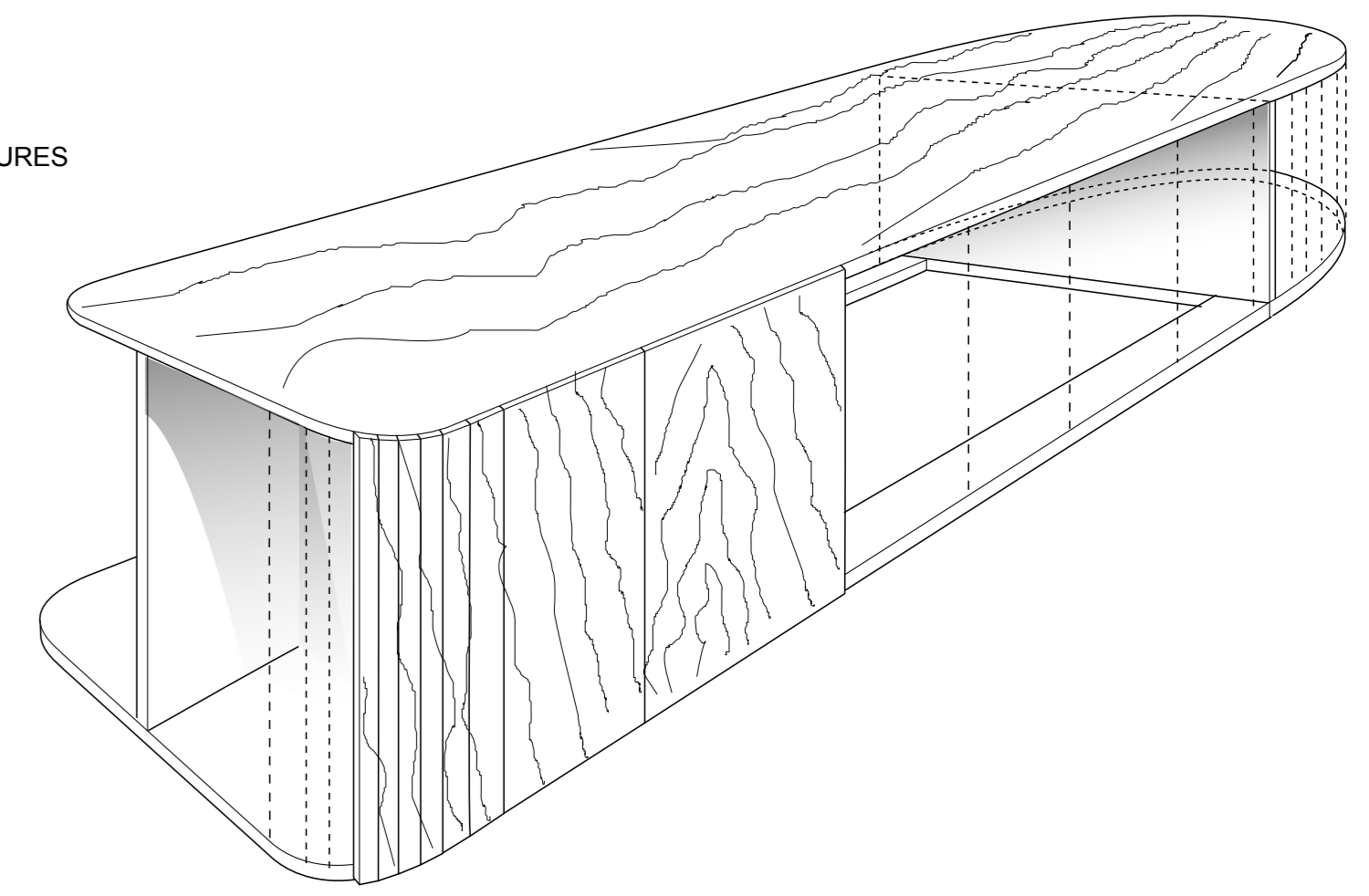
WOODEN SLATTED GRATING



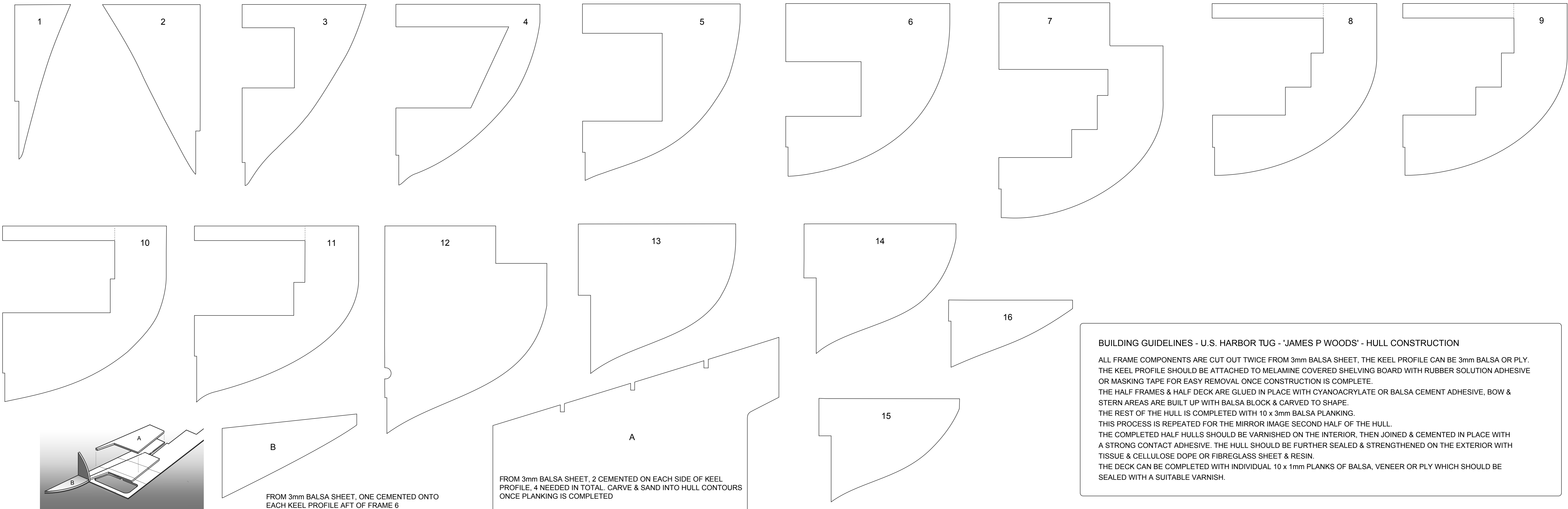


Model Boats
JAMES P. WOODS
TYPICAL U.S. HARBOUR TUG
1:35 SCALE, DESIGNED AND DRAWN BY DERMOT CURNYN
PLAN No: MM2143 No. OF SHEETS: 2 OF 2 First published in Model Boats, March 2019

SUGGESTED SIMPLE BOX CONSTRUCTION FOR SUPERSTRUCTURES
BALSA PANELS WITH THIN SLATS OF 3mm BALSA TO FORM AROUND CORNERS AT REAR AND CURVATURE OF FRONTAGE. WIDER PANELS CAN BE USED IN THE CENTRAL SECTIONS
ALL BUILT UP 'IN-SITU' ON DECK TO ENSURE THAT THE SUPERSTRUCTURE FOLLOWS THE SAME DECK SHEER



THESE SUPPORTS SHOULD BE CUT AWAY AFTER HULL CONSTRUCTION TO CREATE DECK HATCH OPENING



BUILDING GUIDELINES - U.S. HARBOR TUG - 'JAMES P WOODS' - HULL CONSTRUCTION

ALL FRAME COMPONENTS ARE CUT OUT TWICE FROM 3mm BALSA SHEET, THE KEEL PROFILE CAN BE 3mm BALSA OR PLY. THE KEEL PROFILE SHOULD BE ATTACHED TO MELAMINE COVERED SHELVING BOARD WITH RUBBER SOLUTION ADHESIVE OR MASKING TAPE FOR EASY REMOVAL ONCE CONSTRUCTION IS COMPLETE.

THE HALF FRAMES & HALF DECK ARE GLUED IN PLACE WITH CYANOACRYLATE OR BALSA CEMENT ADHESIVE. BOW & STERN AREAS ARE BUILT UP WITH BALSA BLOCK & CARVED TO SHAPE.

THE REST OF THE HULL IS COMPLETED WITH 10 x 3mm BALSA PLANKING.

THIS PROCESS IS REPEATED FOR THE MIRROR IMAGE SECOND HALF OF THE HULL.

THE COMPLETED HALF HULLS SHOULD BE VARNISHED ON THE INTERIOR, THEN JOINED & CEMENTED IN PLACE WITH A STRONG CONTACT ADHESIVE. THE HULL SHOULD BE FURTHER SEALED & STRENGTHENED ON THE EXTERIOR WITH TISSUE & CELLULOSE DOPE OR FIBREGLASS SHEET & RESIN.

THE DECK CAN BE COMPLETED WITH INDIVIDUAL 10 x 1mm PLANKS OF BALSA, VENEER OR PLY WHICH SHOULD BE SEALED WITH A SUITABLE VARNISH.