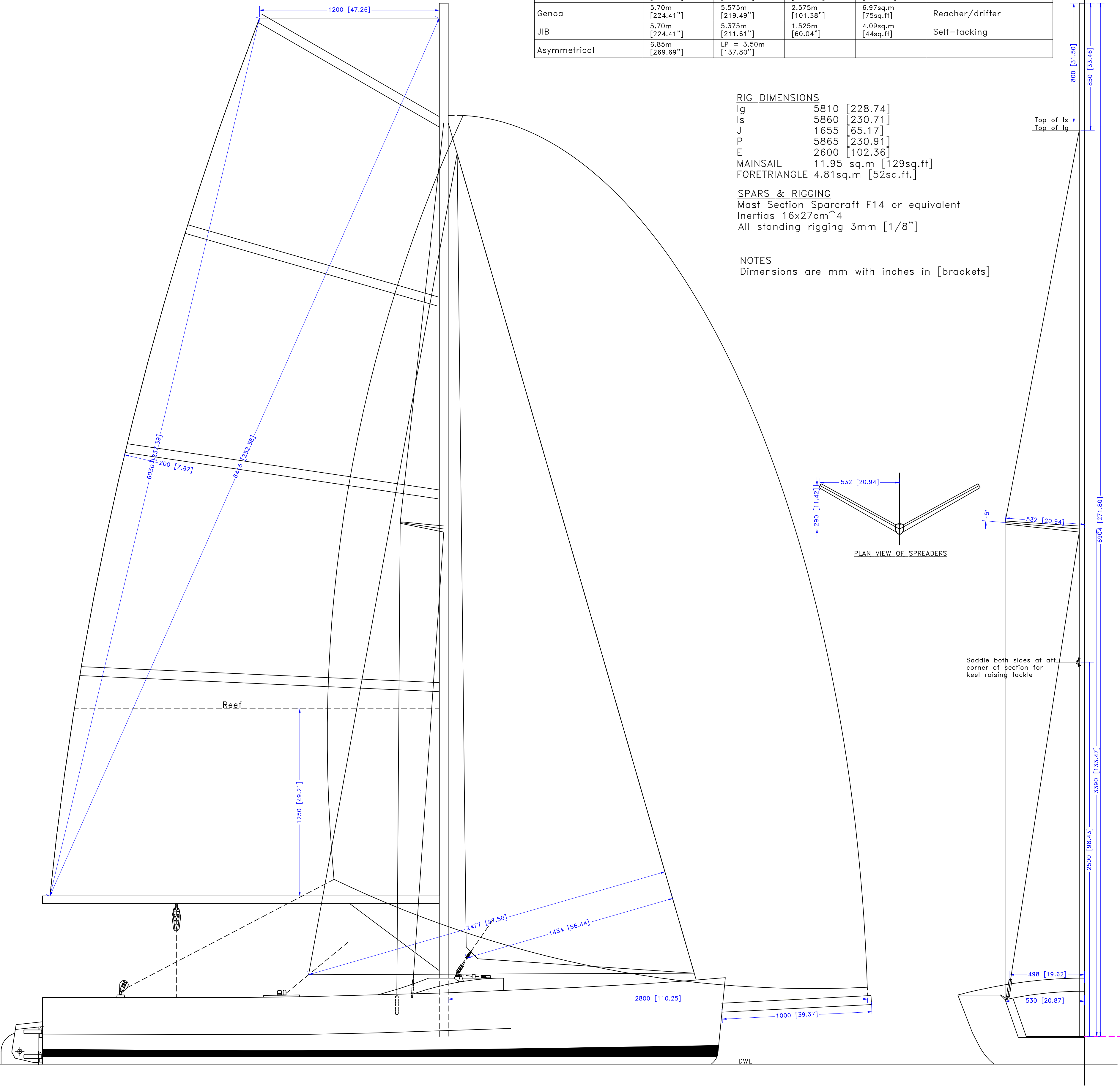


SAIL	LUFF	LEECH	FOOT	AREA	COMMENTS
MAINSAIL	5.865m [230.91"]	6.03m [237.39"]	2.60m [102.36"]	11.95sq.m [129sq.ft]	1 Reef
Genoa	5.70m [224.41"]	5.575m [219.49"]	2.575m [101.38"]	6.97sq.m [75sq.ft]	Reacher/drifter
JIB	5.70m [224.41"]	5.375m [211.61"]	1.525m [60.04"]	4.09sq.m [44sq.ft]	Self-tacking
Asymmetrical	6.85m [269.69"]	LP = 3.50m [137.80"]			

RIG DIMENSIONS
lg 5810 [228.74]
ls 5860 [230.71]
J 1655 [65.17]
P 5865 [230.91]
E 2600 [102.36]
MAINSAIL 11.95 sq.m [129sq.ft]
FORETRIANGLE 4.81sq.m [52sq.ft.]

SPARS & RIGGING
Mast Section Sparcraft F14 or equivalent
Inertias 16x27cm⁴
All standing rigging 3mm [1/8"]

NOTES
Dimensions are mm with inches in [brackets]



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Didi Sport 15

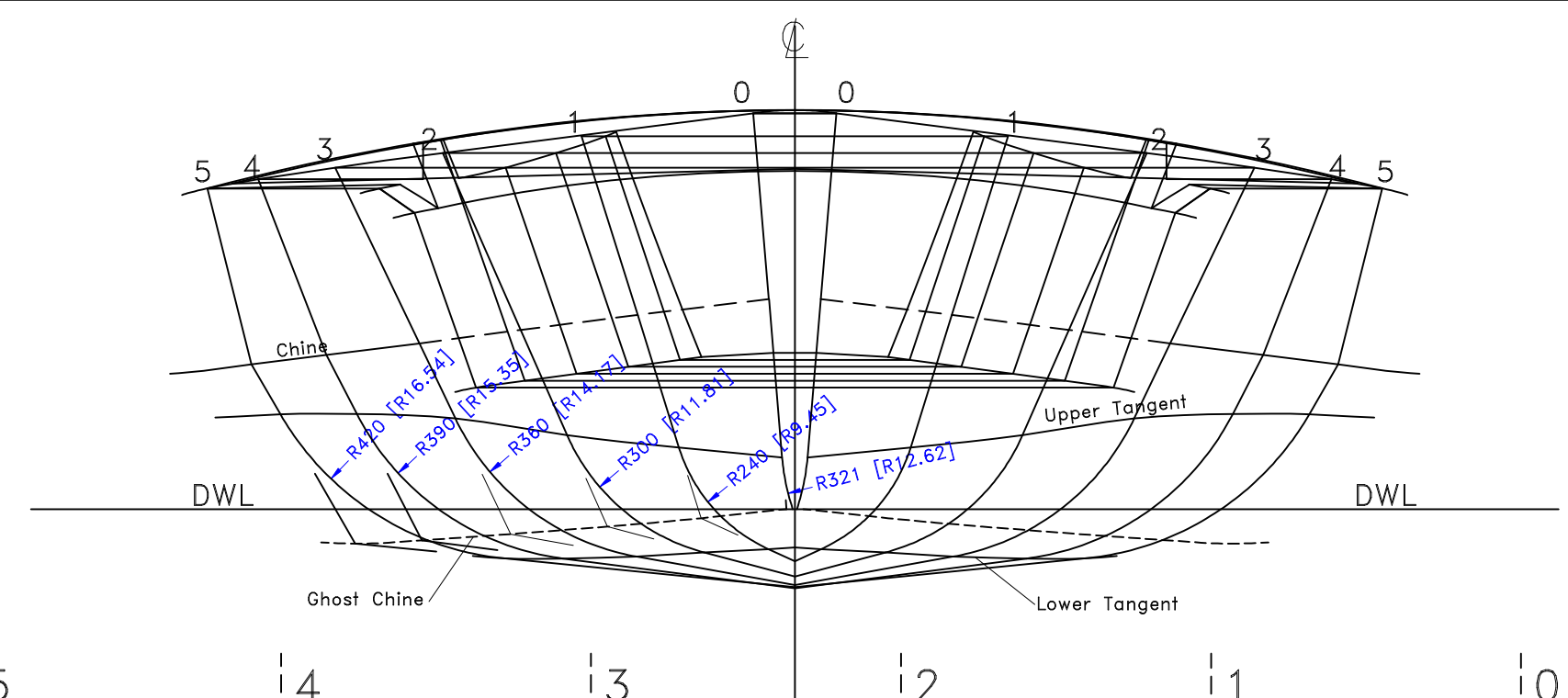
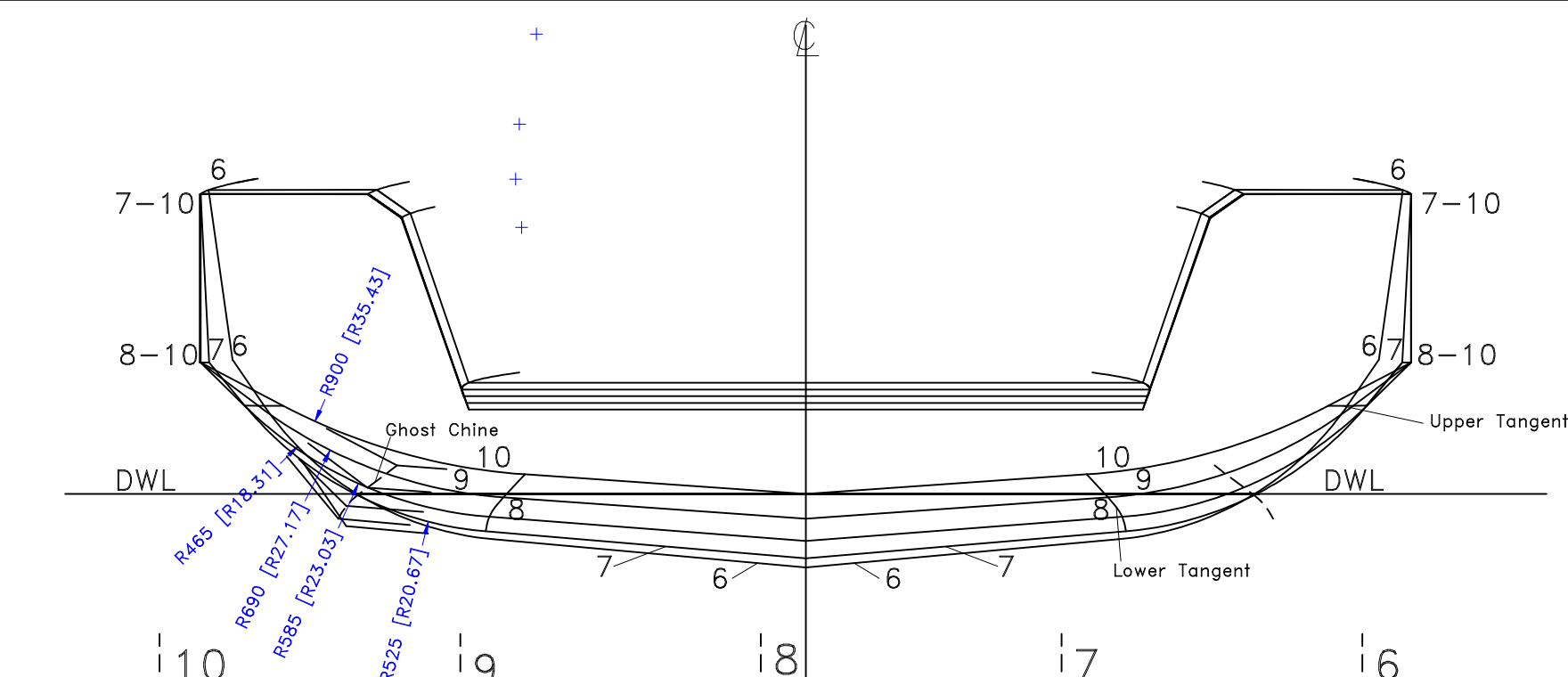
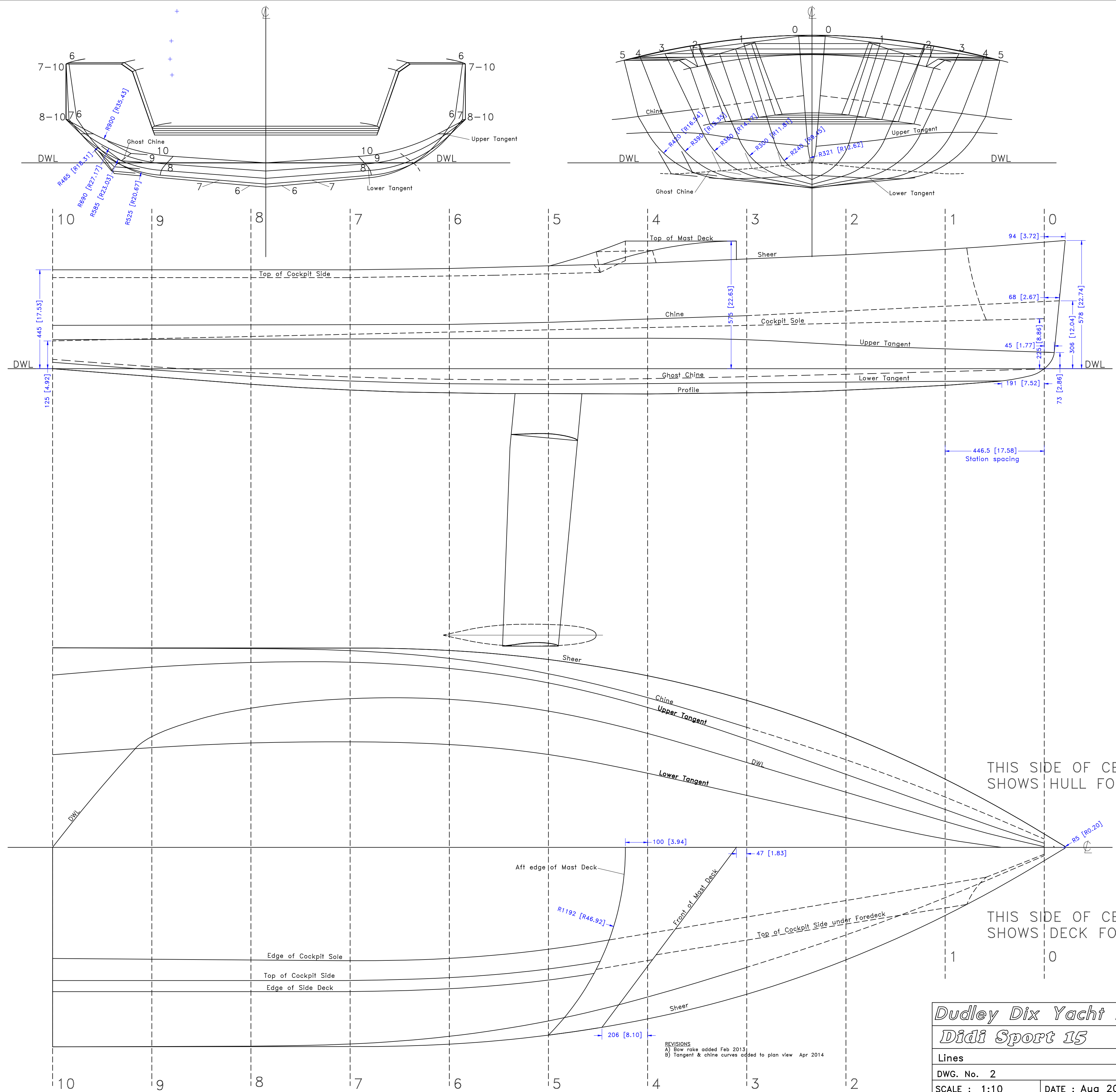
Sail Plan

DWG. No. 1

SCALE : 1:15

DATE : Dec 2010

1340-1272 N. Great Neck Rd #343
Virginia Beach VA
23464-2330 USA
Tel 757-962-9273
Email dudley@dixdesign.com
Web http://dixdesign.com/



THIS SIDE OF CENTRELINE
SHOWS HULL FORM

THIS SIDE OF CENTRELINE
SHOWS DECK FORM

REVISIONS
A) Bow rake added Feb 2013
B) Tangent & chine curves added to plan view Apr 2014

Dudley Dix Yacht Design

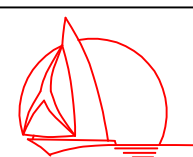
Didi Sport 15

Lines

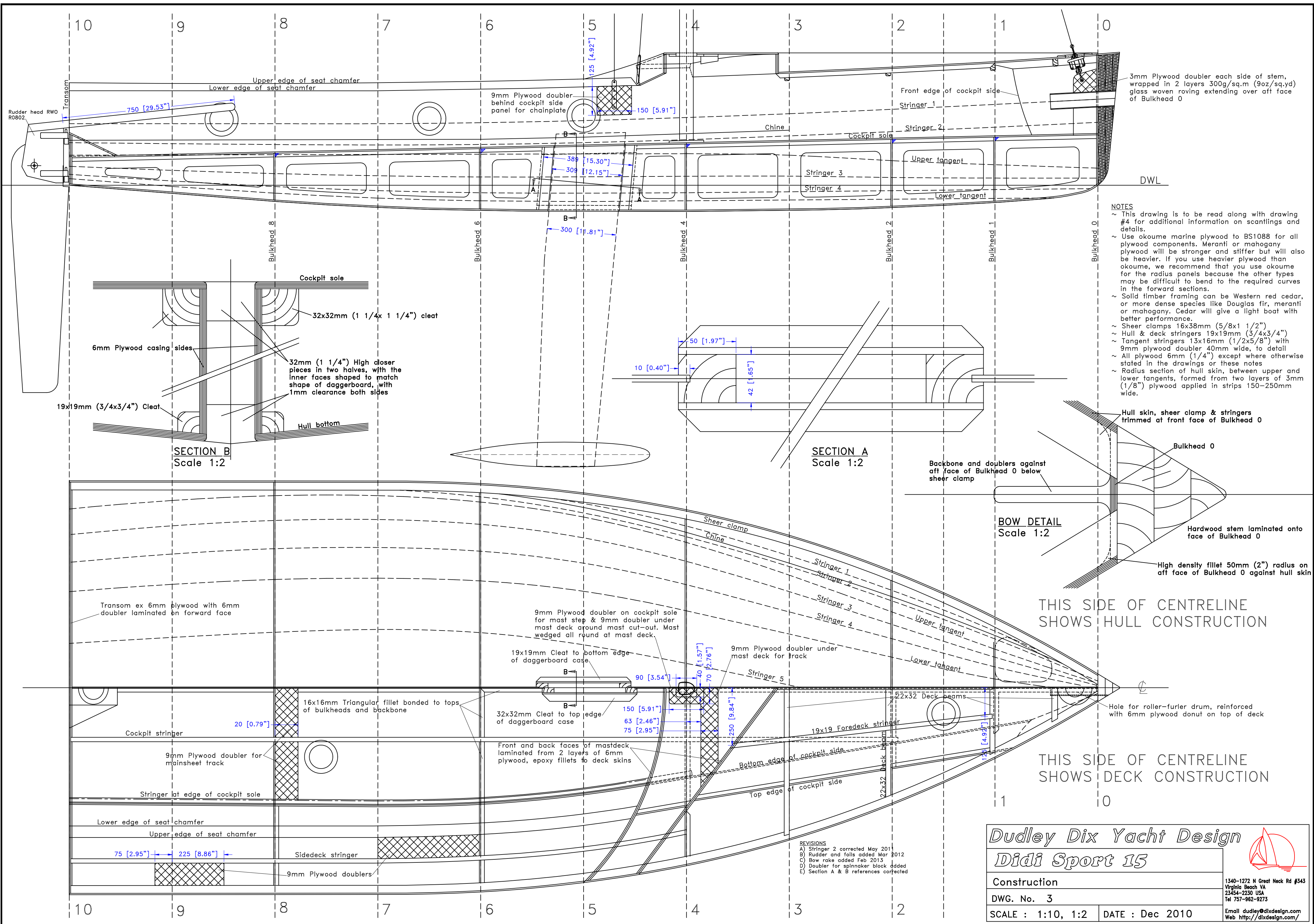
DWG. No. 2

SCALE : 1:10

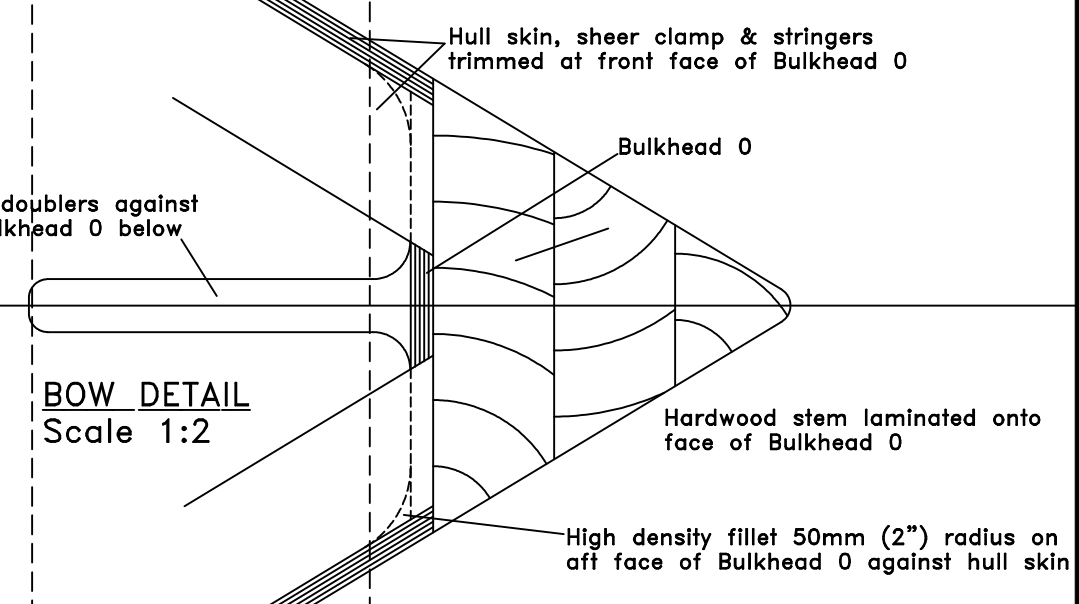
DATE : Aug 2010



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Virginia Beach VA
23454-2230 USA
Tel 757-962-9273
Email dudley@didydesign.com
Web http://didydesign.com/



- NOTES
- ~ This drawing is to be read along with drawing #4 for additional information on scantlings and details.
 - ~ Use okoume marine plywood to BS1088 for all plywood components. Meranti or mahogany plywood will be stronger and stiffer but will also be heavier. If you use heavier plywood than okoume, we recommend that you use okoume for the radius panels because the other types may be difficult to bend to the required curves in the forward sections.
 - ~ Solid timber framing can be Western red cedar, or more dense species like Douglas fir, meranti or mahogany. Cedar will give a light boat with better performance.
 - ~ Sheer clamps 16x38mm (5/8x1 1/2")
 - ~ Hull & deck stringers 19x19mm (3/4x3/4")
 - ~ Tangent stringers 13x16mm (1/2x5/8") with 9mm plywood doubler 40mm wide, to detail
 - ~ All plywood 6mm (1/4") except where otherwise stated in the drawings or these notes
 - ~ Radius section of hull skin, between upper and lower tangents, formed from two layers of 3mm (1/8") plywood applied in strips 150-250mm wide.



THIS SIDE OF CENTRELINE SHOWS HULL CONSTRUCTION

THIS SIDE OF CENTRELINE SHOWS DECK CONSTRUCTION

- REVISIONS
- A) Stringer 2 corrected May 2011
 - B) Rudder and falls added Mar 2012
 - C) Bow rake added Feb 2013
 - D) Doubler for spinnaker block added
 - E) Section A & B references corrected

Dudley Dix Yacht Design

Didi Sport 15

Construction

DWG. No. 3

SCALE : 1:10, 1:2

DATE : Dec 2010

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Web <http://dixdesign.com/>

Upper edge of seat chamfer
Lower edge of seat chamfer

9mm Plywood doubler behind cockpit side panel for chainplate

Front edge of cockpit side

3mm Plywood doubler each side of stem, wrapped in 2 layers 300g/sq.m (9oz/sq.yd) glass woven roving extending over aft face of Bulkhead 0

DWL

SECTION B
Scale 1:2

SECTION A
Scale 1:2

BOW DETAIL
Scale 1:2

32x32mm (1 1/4x 1 1/4") cleat

6mm Plywood casing sides

32mm (1 1/4") High closer pieces in two halves, with the inner faces shaped to match shape of daggerboard, with 1mm clearance both sides

19x19mm (3/4x3/4") Cleat

Hull bottom

Transom ex 6mm plywood with 6mm doubler laminated on forward face

9mm Plywood doubler on cockpit sole for mast step & 9mm doubler under mast deck around mast cut-out. Mast wedged all round at mast deck.

19x19mm Cleat to bottom edge of daggerboard case

32x32mm Cleat to top edge of daggerboard case

16x16mm Triangular fillet bonded to tops of bulkheads and backbone

9mm Plywood doubler for mainsheet track

Cockpit stringer

Stringer at edge of cockpit sole

Lower edge of seat chamfer

Upper edge of seat chamfer

Siddeck stringer

9mm Plywood doublers

9mm Plywood doubler under mast deck for track

Front and back faces of mastdeck laminated from 2 layers of 6mm plywood, epoxy fillets to deck skins

Stringer 5

19x19 Foredeck stringer

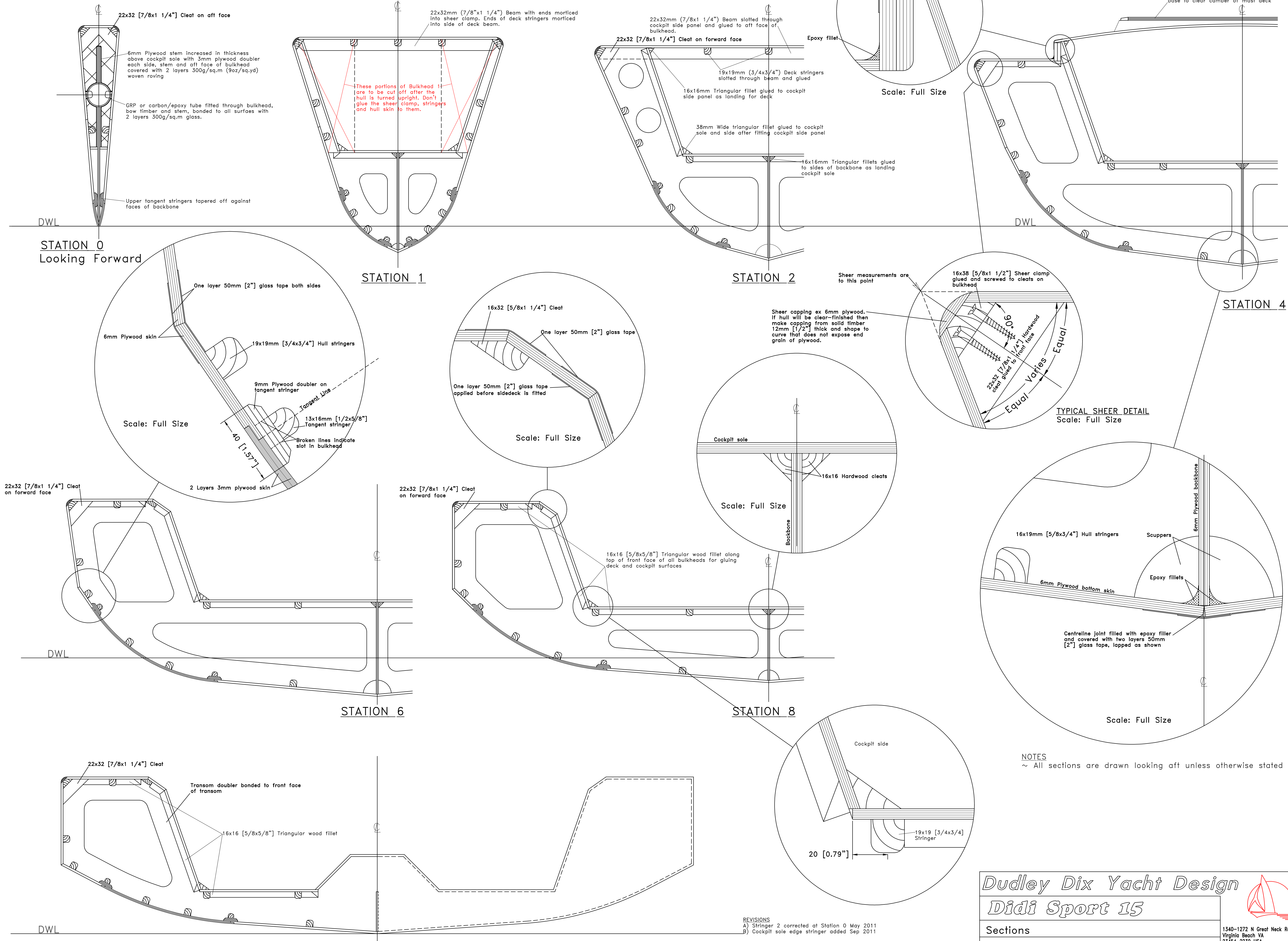
Top edge of cockpit side

Bottom edge of cockpit side

22x32 Deck beams

22x32 Deck beam

Hole for roller-furler drum, reinforced with 6mm plywood donut on top of deck



Dudley Dix Yacht Design

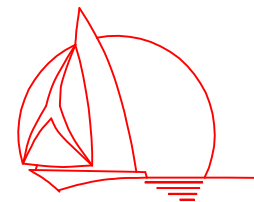
Didi Sport 15

Sections

DWG. No. 4

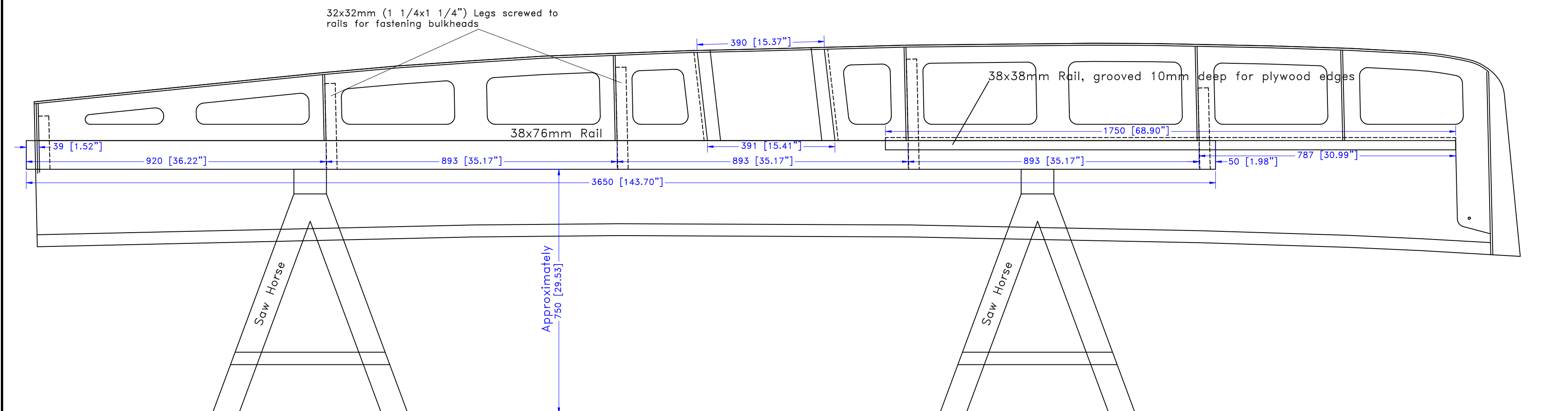
SCALE : 1:5, 1:1

DATE : Dec 2010

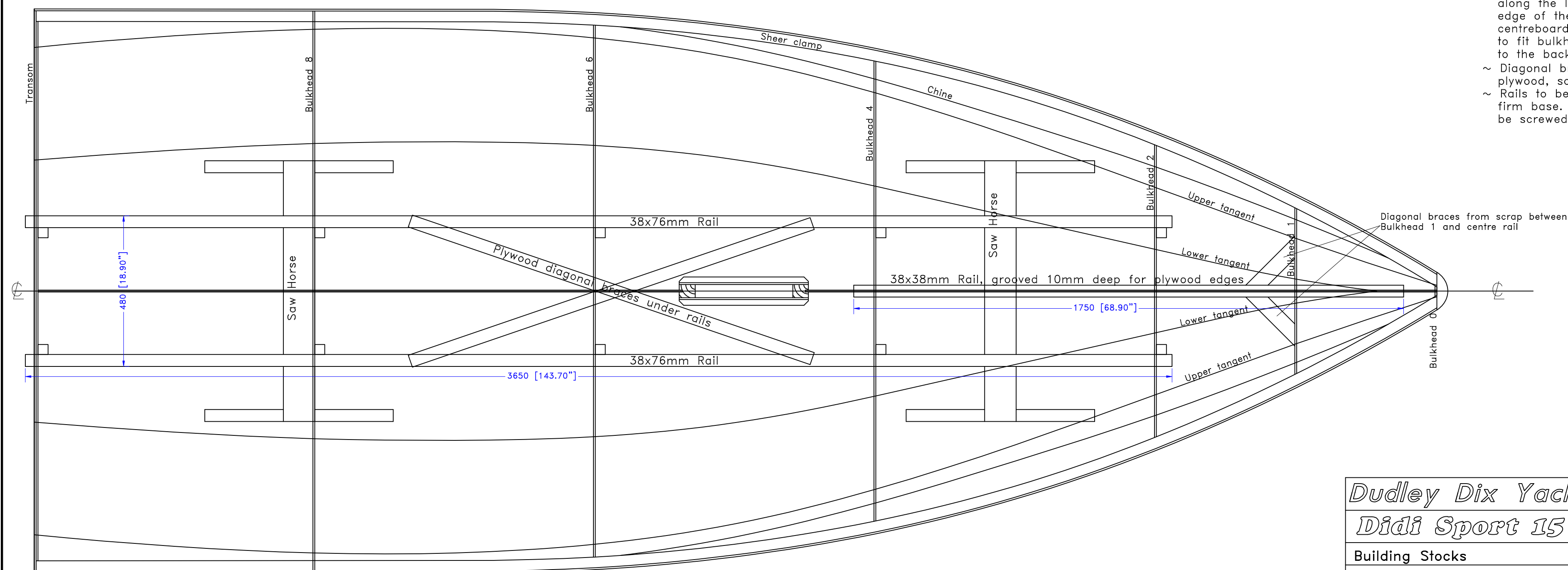


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Virginia Beach VA
23454-2230 USA
Tel 757-962-9273
Email dudley@dixdesign.com
Web <http://dixdesign.com/>

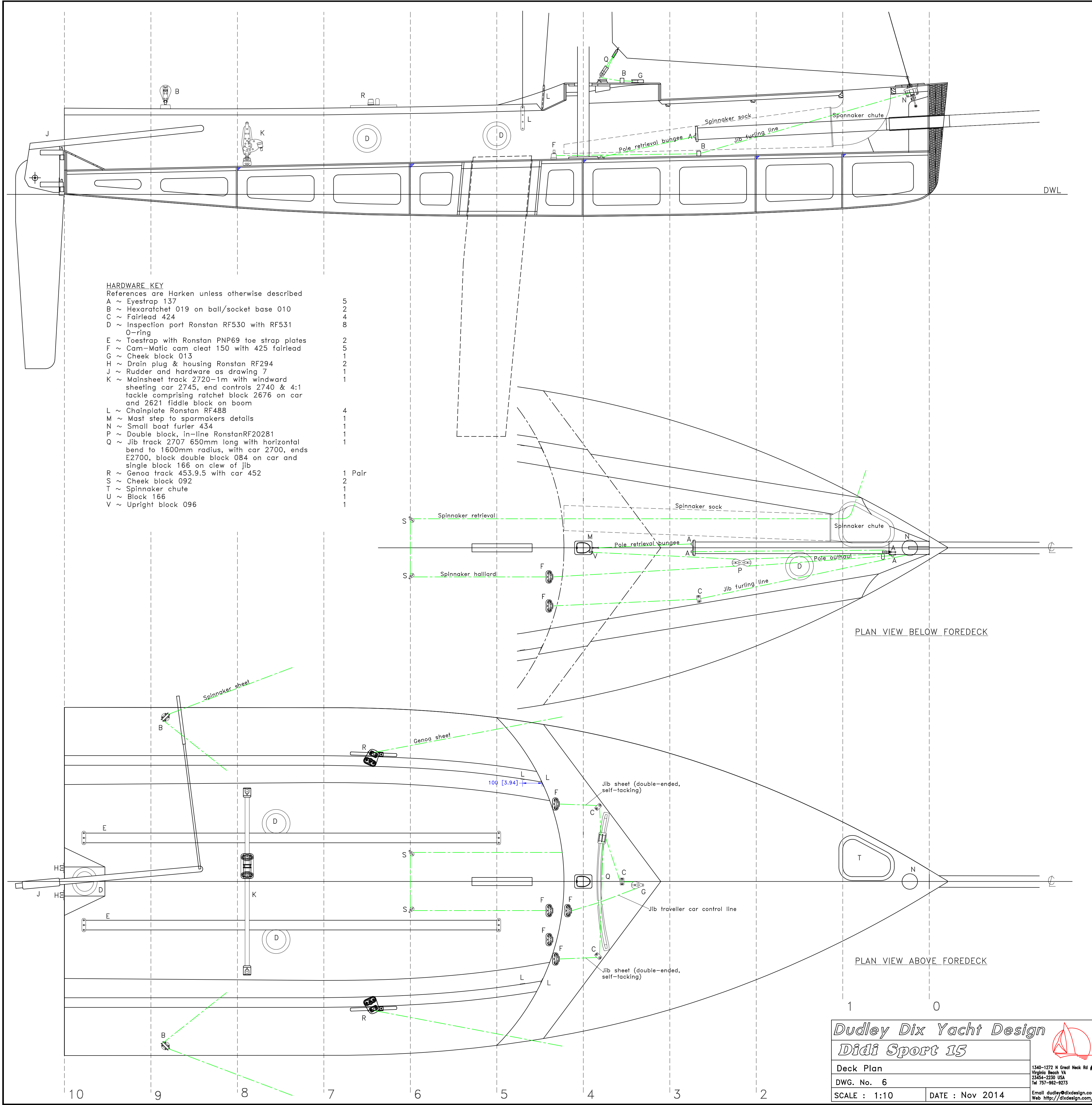
REVISIONS
A) Stringer 2 corrected at Station 0 May 2011
B) Cockpit sole edge stringer added Sep 2011



- NOTES
- ~ Height of sawhorse is only a suggestion based on stock bought item and can be adjusted to suit what you have available
 - ~ bulkheads are perpendicular to waterline so on the stocks they are $\pm 1.25^\circ$ out of vertical. Measure the angle that they meet the edge of the backbone using a bevel gauge and use it to set the angle for the legs that attach the bulkheads to the rails.
 - ~ Cut a 6mm wide and 10mm deep groove along the length of the rail shown to the edge of the backbone forward of the centreboard slot. Also cut transverse slots to fit bulkheads 1, 2 and 4. Tie the rail to the backbone with electrical ties.
 - ~ Diagonal braces are cut from scrap plywood, screwed to bottom of rails.
 - ~ Rails to be screwed to saw horses for a firm base. Other components of beds to be screwed to rails.



Dudley Dix Yacht Design		
Didi Sport 15		
Building Stocks		1340-1272 N Great Neck Rd #343 Virginia Beach VA 23454-2230 USA Tel 757-962-9273 Email dudley@dixdesign.com Web http://dixdesign.com/
DWG. No. 5		
SCALE : 1:10	DATE : Dec 2010	



- HARDWARE KEY**
References are Harken unless otherwise described
- | | |
|---|--------|
| A ~ Eyestrapp 137 | 5 |
| B ~ Hexaratchet 019 on ball/socket base 010 | 2 |
| C ~ Fairlead 424 | 4 |
| D ~ Inspection port Ronstan RF530 with RF531 O-ring | 8 |
| E ~ Toestrap with Ronstan PNP69 toe strap plates | 2 |
| F ~ Cam-Matic cam cleat 150 with 425 fairlead | 5 |
| G ~ Cheek block 013 | 1 |
| H ~ Drain plug & housing Ronstan RF294 | 2 |
| J ~ Rudder and hardware as drawing 7 | 1 |
| K ~ Mainsheet track 2720-1m with windward sheeting car 2745, end controls 2740 & 4:1 tackle comprising ratchet block 2676 on car and 2621 fiddle block on boom | 1 |
| L ~ Chainplate Ronstan RF488 | 4 |
| M ~ Mast step to sparmakers details | 1 |
| N ~ Small boat furler 434 | 1 |
| P ~ Double block, in-line RonstanRF20281 | 1 |
| Q ~ Jib track 2707 650mm long with horizontal bend to 1600mm radius, with car 2700, ends E2700, block double block 084 on car and single block 166 on clew of jib | 1 |
| R ~ Genoa track 453.9.5 with car 452 | 1 Pair |
| S ~ Cheek block 092 | 2 |
| T ~ Spinnaker chute | 1 |
| U ~ Block 166 | 1 |
| V ~ Upright block 096 | 1 |

PLAN VIEW BELOW FOREDECK

PLAN VIEW ABOVE FOREDECK

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Didi Sport 15

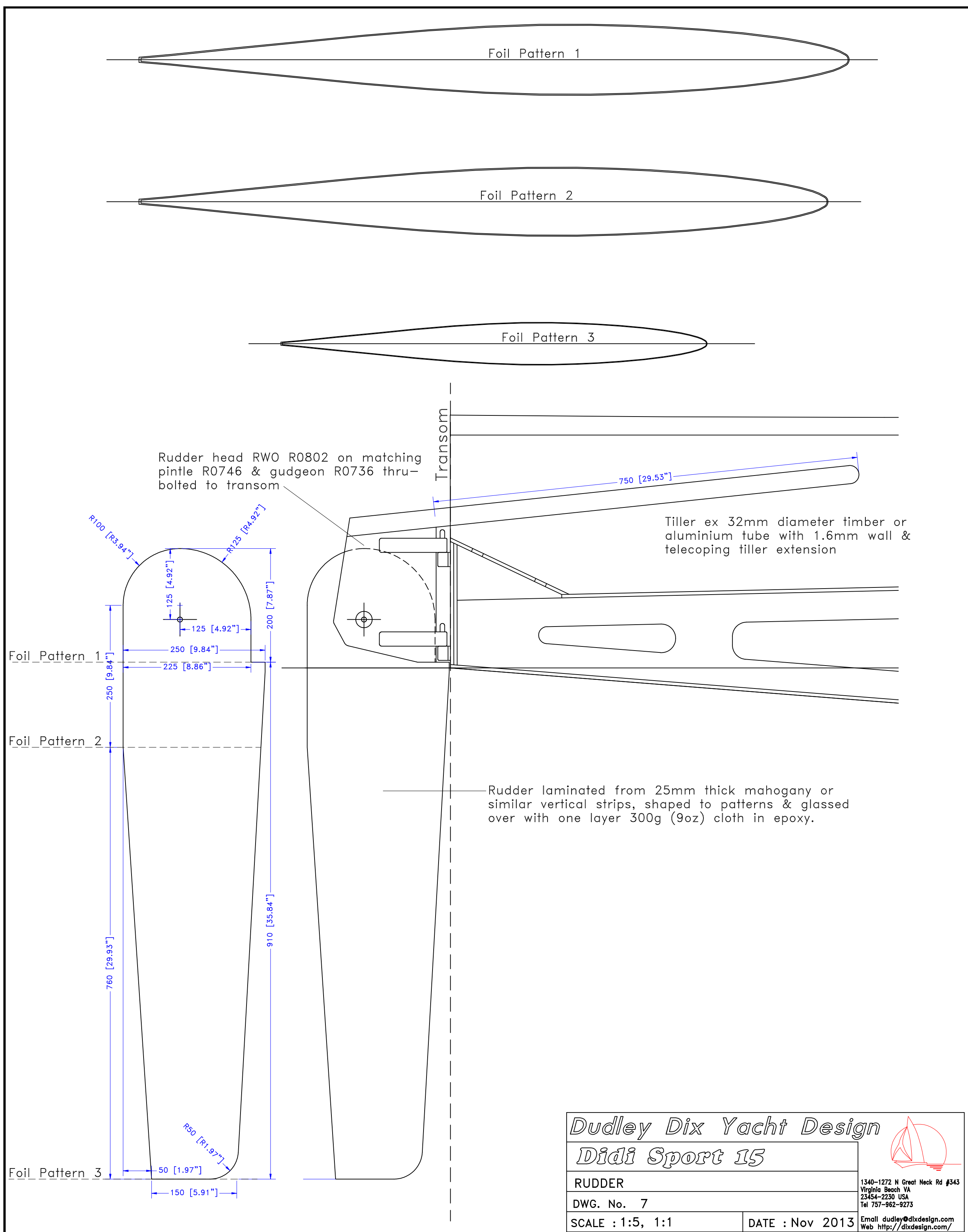
Deck Plan

DWG. No. 6

SCALE : 1:10

DATE : Nov 2014

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Virginia Beach VA
23454-2330 USA
Tel 757-863-9273
Email dudley@didydesign.com
Web http://didydesign.com/



8mm Pre-stretched braided lifting line, upper end shackled to padeye on side of mast at spreaders.

4:1 Lifting tackle formed with Harken 226 double block, 245 fiddle/V-jam/becket block, shackle & 6mm prestretched braided line. Stow tackle against mast when not in use.

Lifting strap formed from 4mm braided line looped 7 times through holes and securely lashed. Use as handle for board without bulb. Shackle lifting tackle to strap when bulb is attached.

Fibreglass tubes formed to be easy sliding fit over 12mm [1/2"] S/S pin, tubes epoxied through daggerboard to receive lifting strap (& locking pins when ballast bulb is used).

30Ø Hardwood dowels 100mm long fitted through and glued into daggerboard, projecting equally both sides, as stops

Upper foil pattern applies for all of this portion of daggerboard, from top down to start of taper

This section of daggerboard has linear taper, with upper foil pattern applied at top and lower foil pattern applied at bottom. Use straight edge to check for bumps and hollows between pattern positions.

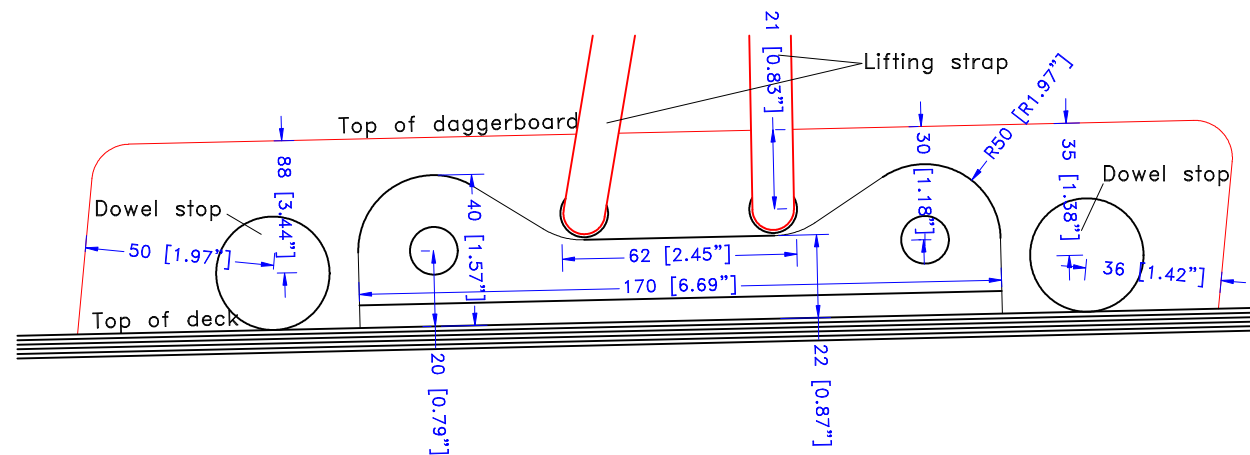
DAGGERBOARD CONSTRUCTION

~ Laminate daggerboard blank from Douglas fir or timber of equal strength, glued with resorcinol or epoxy.
~ Shape blank to inner curves of foil sections & dimensions shown.
~ Sheathe daggerboard with 4 layers 300g/sq.m [9oz/sq.yd] bi-directional E-glass fabric, 1st & 3rd layers at $\pm 45^\circ$ & 2nd & 4th layers at 0/90°
~ Fair glassed daggerboard to outer curves of foil patterns.

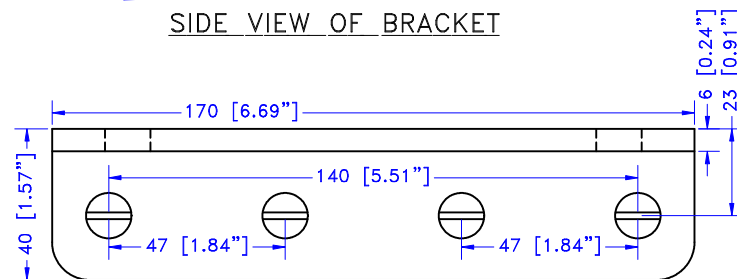
Daggerboard has linear taper over this section, with upper foil pattern applied at top and lower foil pattern applied at bottom. Use straight edge to check fairness.

Fibreglass tubes as described above but installed for bolting ballast bulb

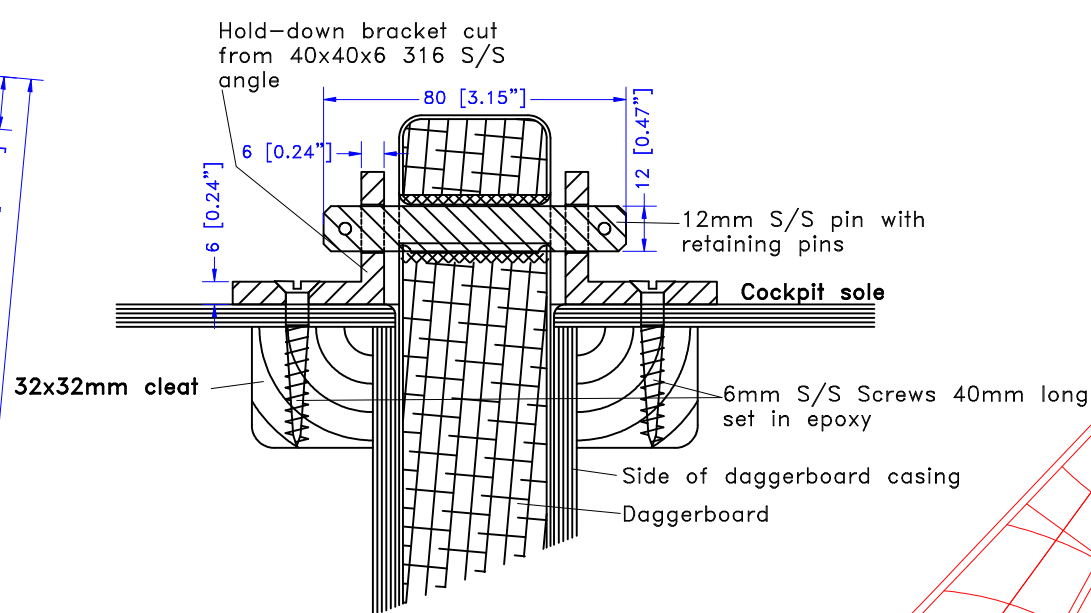
Bottom of daggerboard trimmed off after shaping core and before glassing



SIDE VIEW OF BRACKET



PLAN VIEW OF BRACKET



SECTION THRU HOLD-DOWN BRACKET
Scale 1:2

UPPER FOIL PATTERN

LOWER FOIL PATTERN

REVISIONS
A) Top of board & bracket modified for 2 pins Jan 2017

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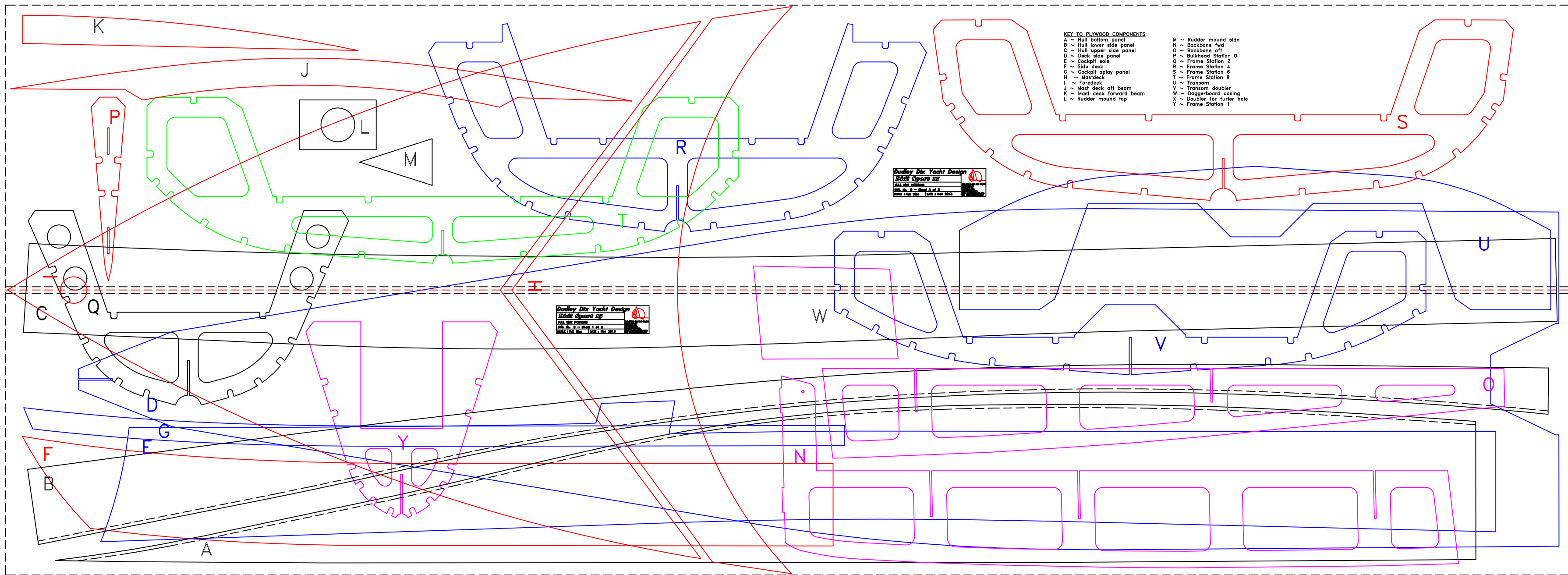
DAGGERBOARD & BULB

DWG. No. 8

SCALE : 1:5, 1:2

DATE : Apr 2014

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Virginia Beach VA
23454-2230 USA
Tel 757-962-9273
Email dudley@dixdesign.com
Web <http://dixdesign.com/>



KEY TO PLYWOOD COMPONENTS

A ~ Hull bottom panel
B ~ Hull lower side panel
C ~ Hull upper side panel
D ~ Deck side panel
E ~ Cockpit sole
F ~ Side deck
G ~ Cockpit splay panel
H ~ Mastdeck
I ~ Foredeck
J ~ Mast deck aft beam
K ~ Mast deck forward beam
L ~ Rudder mound top

M ~ Rudder mound side
N ~ Backbone fwd
O ~ Backbone aft
P ~ Bulkhead Station 0
Q ~ Frame Station 2
R ~ Frame Station 4
S ~ Frame Station 6
T ~ Frame Station 8
U ~ Transom
V ~ Transom doubler
W ~ Daggerboard casing
X ~ Doubler for furler hole
Y ~ Frame Station 1

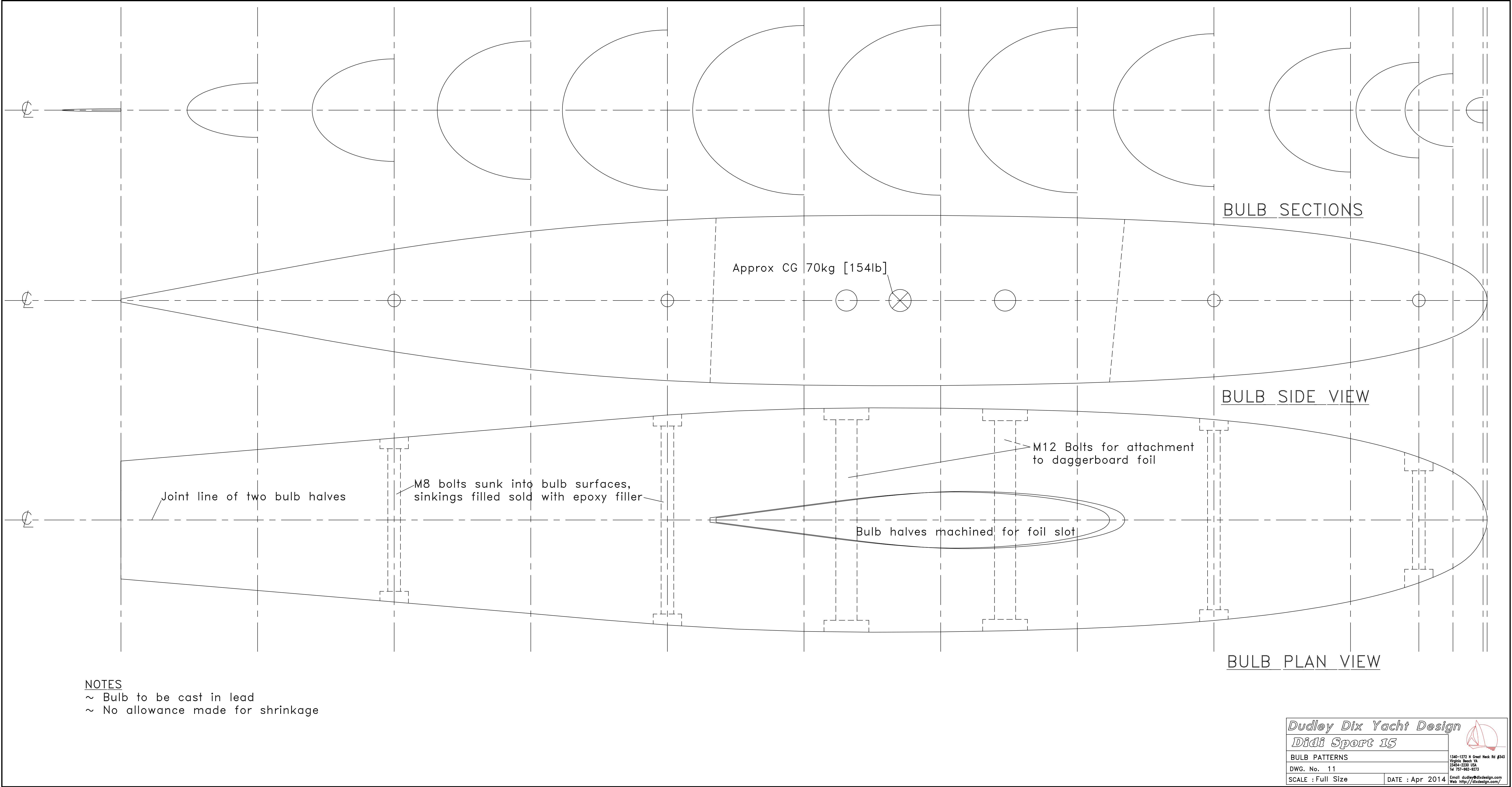
NOTES RE USE OF FULL-SIZE PATTERNS

1. The patterns are plotted onto two strips of paper 914mm (36") wide. Tape the strips together carefully so that the lines continue smoothly from one strip to the next. They are set out so that the component lines cross the red dashed line along the meeting edges. Join them so that the red dashed lines coincide.
2. They are plotted to the maximum accuracy that we can achieve but there is always potential for minor differences due to unavoidable tolerances in the plotting equipment. If you find a small misalignment of the lines at the meeting edges of two strips, adjust the positioning of the strips to minimise the error while taping them together.
3. The panel shapes are overlaid on top of each other to minimise plotting area but are easily identifiable using the the colours and the alphabetical key on this drawing and pattern sheet 2.
4. Fasten the patterns securely to the plywood sheets with tape and/or drawing pins before starting to transfer the shapes. Ensure that they cannot move during the process. Work on top of them carefully and in socks, not shoes.
5. There are various ways to transfer the shapes onto your plywood sheets, two of which are described below as a) and b). This design has mainly straight lines making up the shapes that you will be cutting so I suggest that you use method a).
 - a) Tape the patterns onto the plywood sheet and poke through the patterns to make holes in the plywood with a bradawl. Prick the holes at the ends of all straight lines and at intervals of about 100mm (4") along all curved lines. Also mark the centreline and waterline clearly. Next, remove the patterns and draw in the lines by "joining the dots" with a pen or dark pencil. For straight line sections this can be done with a straight-edge. For curved sections use a flexible batten held in place with panel pins to give the curve.
 - b) Tape sheets of carbon paper onto the underside of the patterns along the lines that are to be traced. Next, tape the patterns onto the plywood sheet. Run a dress-maker's wheel along all of the lines for the relevant bulkhead. Use firm pressure and steer the wheel very carefully to keep it on the line.

Dudley Dix Yacht Design		
Didi Sport 15		
OVERVIEW OF HULL/DECK/BULKHEAD PATTERNS		
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DWG. No. 10		
SCALE : 1:10	DATE : Nov 2013	Email dudley@dixdesign.com Web http://dixdesign.com/

REVISIONS

A) Text errors corrected, Mylar changed to paper Apr 2014



KEY TO PLYWOOD COMPONENTS

- A ~ Hull bottom panel

B ~ Hull lower side panel

C ~ Hull upper side panel

D ~ Cockpit sole

E ~ Cockpit side

F ~ Side deck

G ~ Cockpit splay panel

HX ~ Mastdeck starboard

HY ~ Mastdeck port

IX ~ Foredeck starboard

IY ~ Foredeck port

J ~ Mast deck aft beam

K ~ Mast deck forward beam

L ~ Rudder mound top
- M ~ Rudder mound side

N ~ Backbone fwd

O ~ Backbone aft

P ~ Bulkhead Station 0

Q ~ Frame Station 2

R ~ Frame Station 4

S ~ Frame Station 6

T ~ Frame Station 8

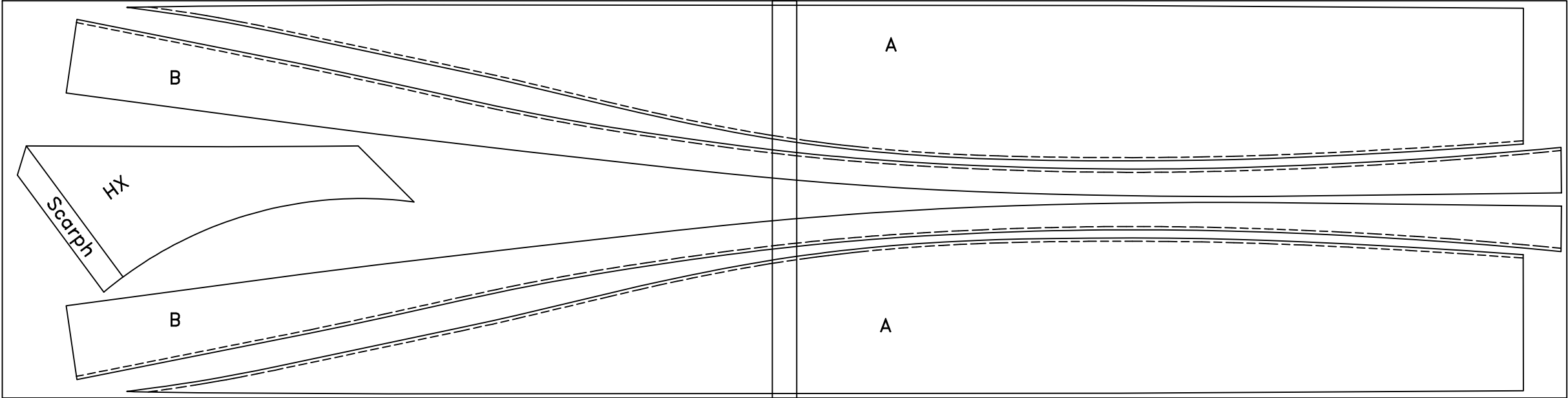
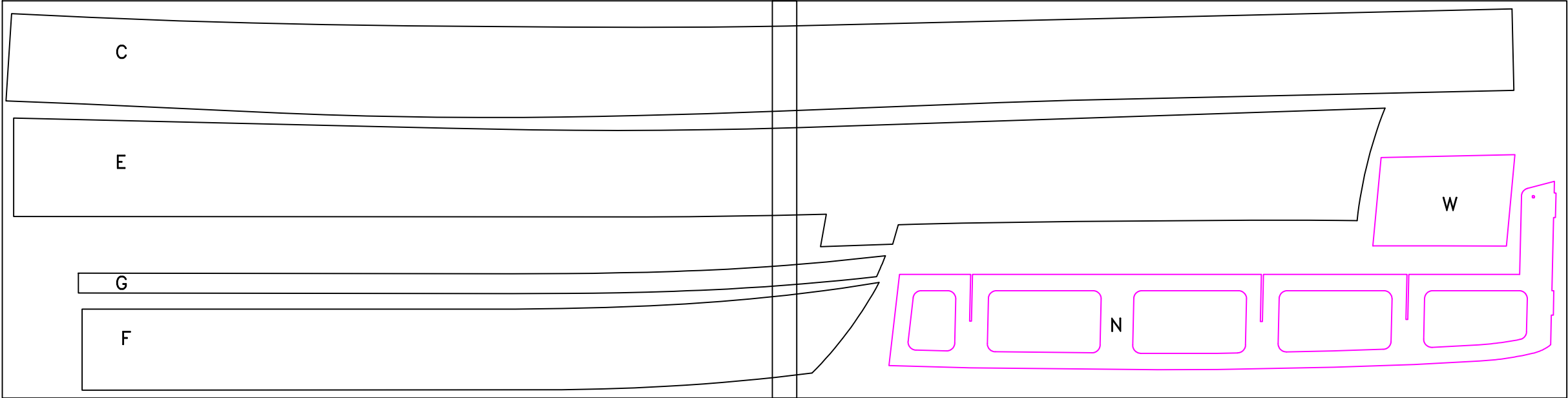
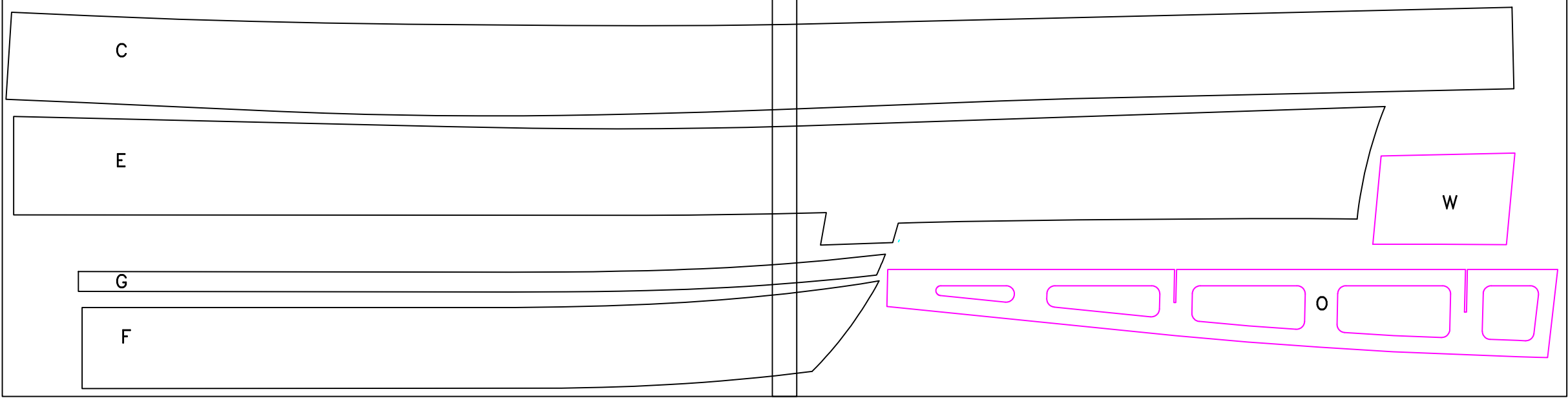
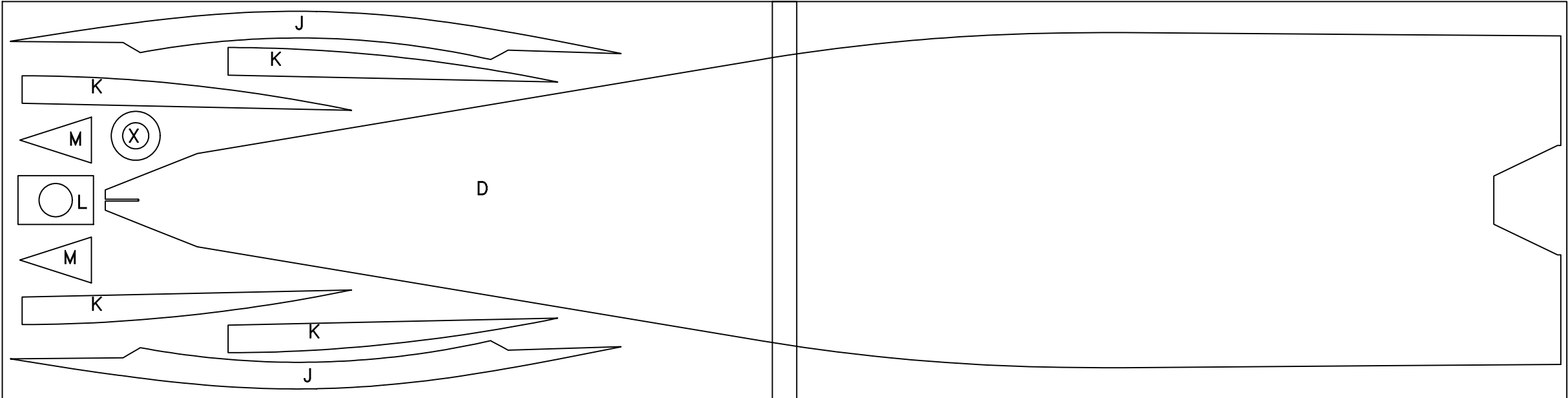
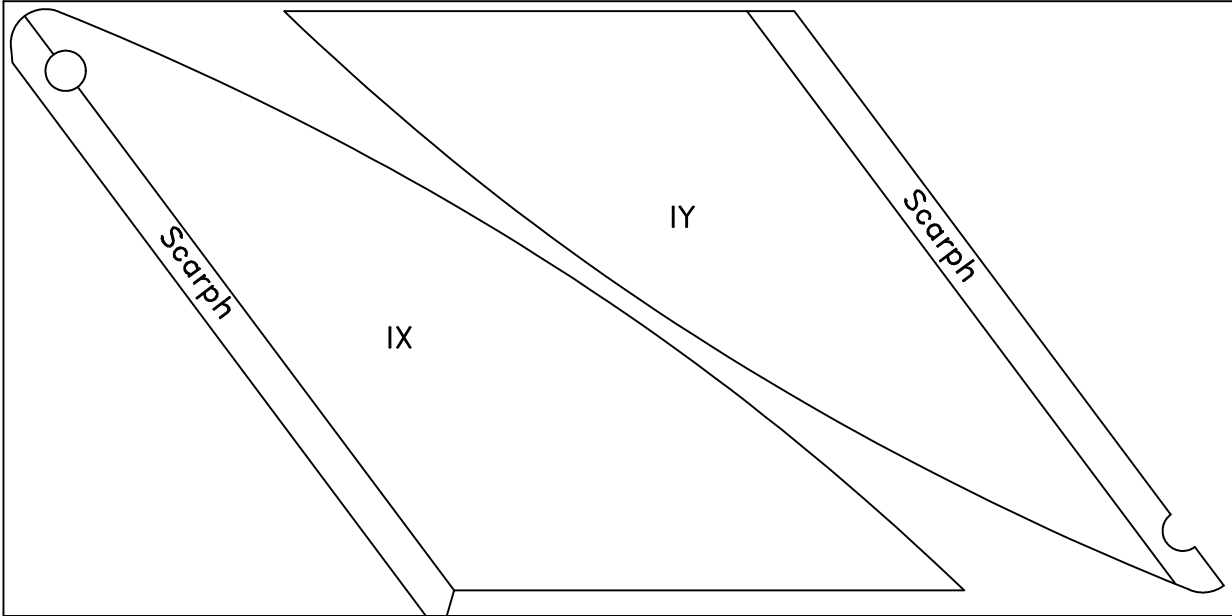
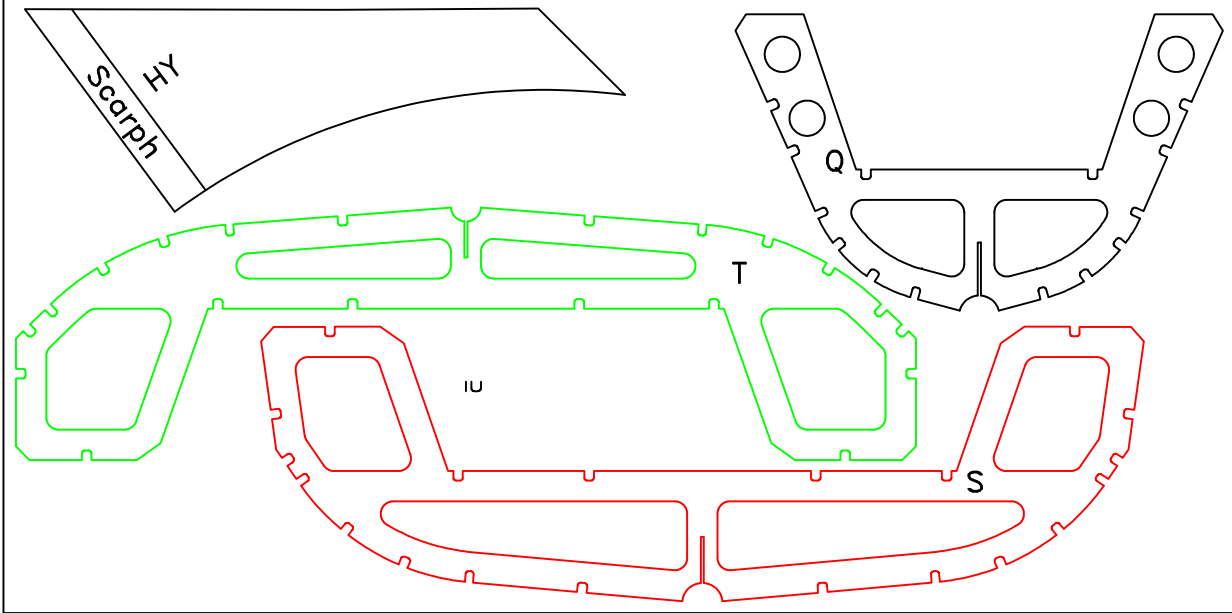
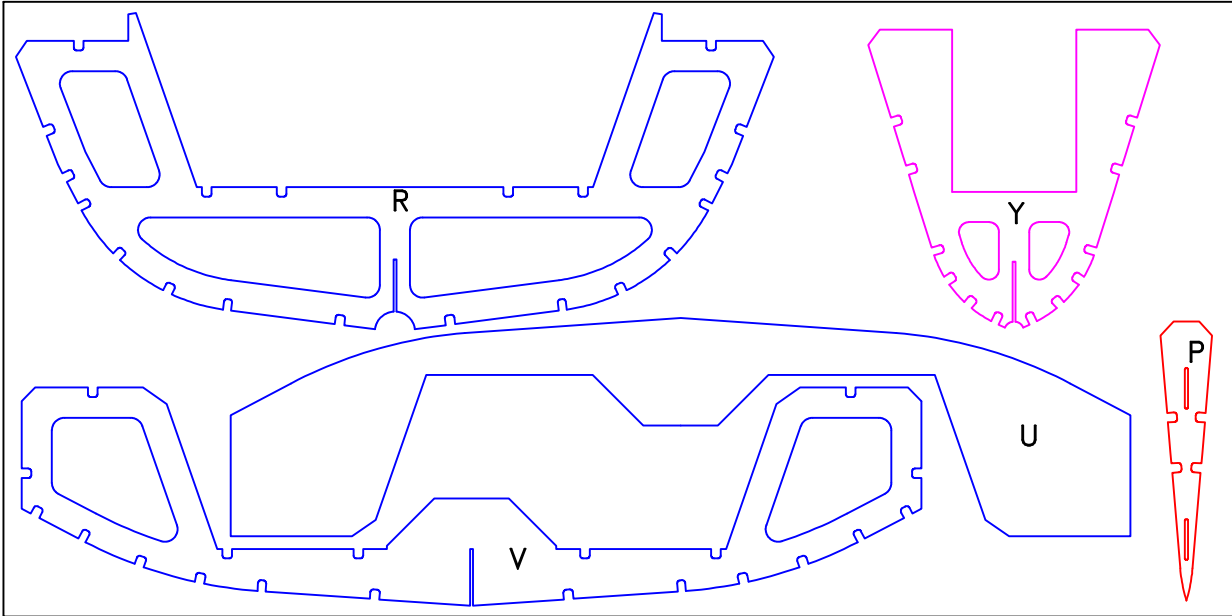
U ~ Transom

V ~ Transom doubler

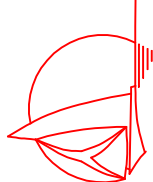
W ~ Daggerboard casing

X ~ Doubler for furler hole

Y ~ Frame Station 1



This drawing shows the panel layout as used for our CNC kits to this design. The plywood is efficiently used to minimise the number of sheets required. It is supplied to builders so that those with kits can identify the components and those without kits can work to the same panel layout and efficiency.



Dudley Dix Yacht Design

Didi Sport 15

CNC KIT PANEL LAYOUT

DWG. No. 12

SCALE : 1:15

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Virginia Beach VA

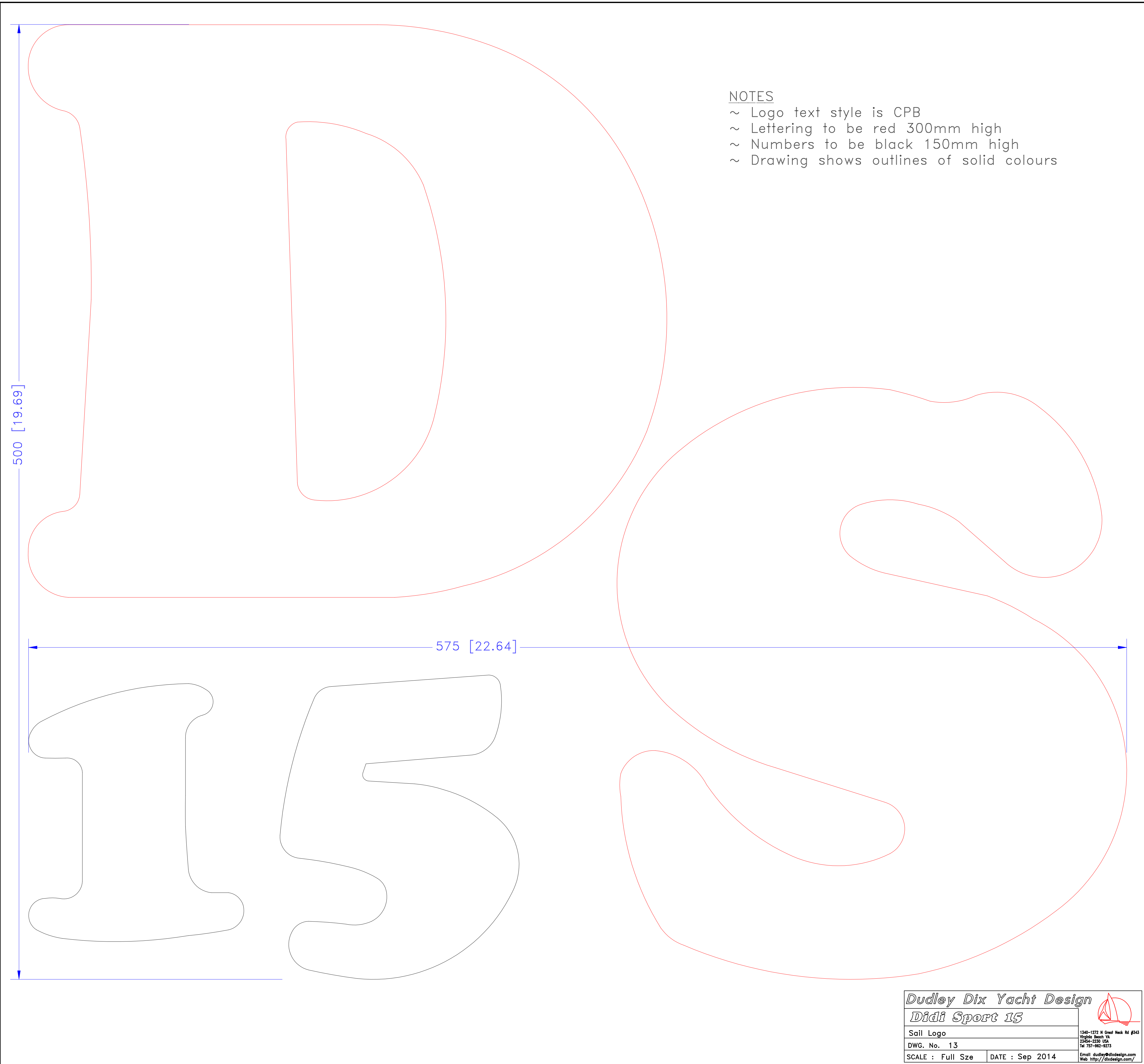
23454-2230 USA

Tel 757-962-9273

Email dudley@dididesign.com

Web <http://dididesign.com/>

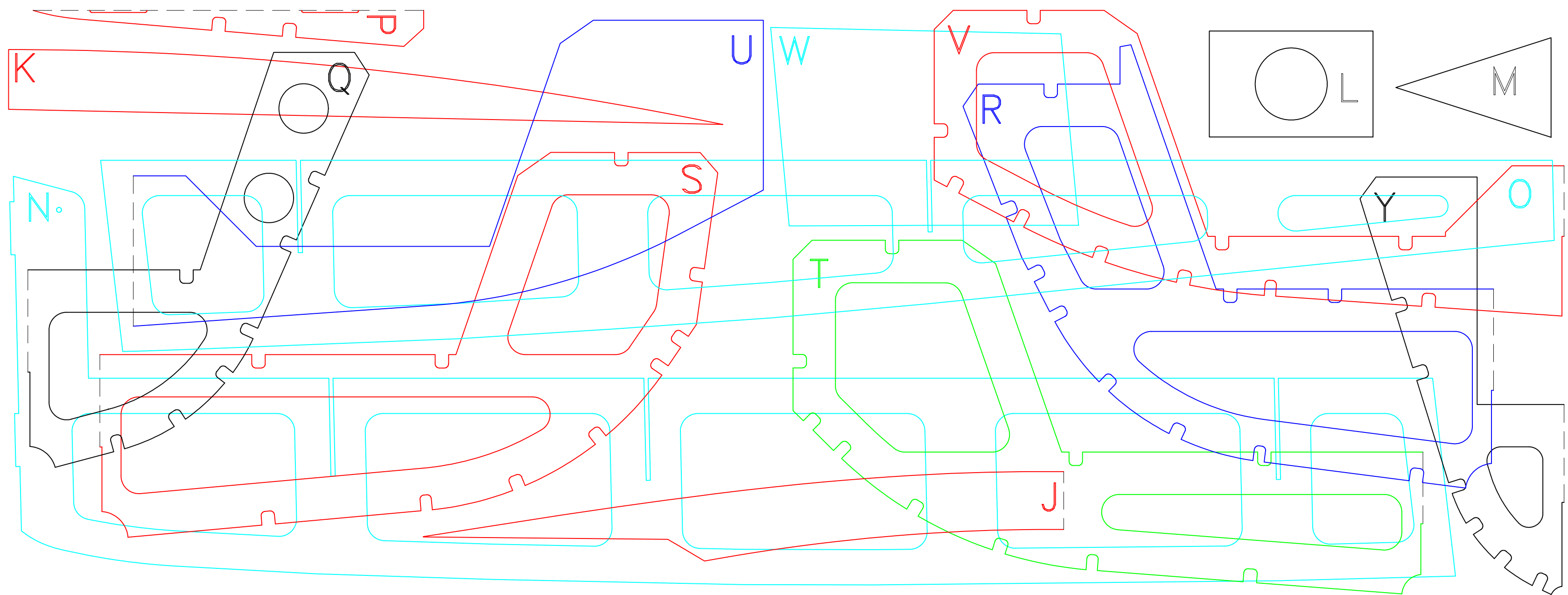
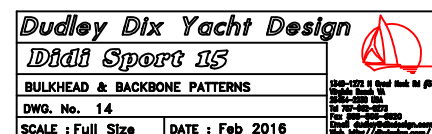
DATE : Apr 2014



J ~ Mast deck aft beam
K ~ Mast deck forward beam
L ~ Rudder mound top
M ~ Rudder mound side
N ~ Backbone forward
O ~ Backbone aft
P ~ Bulkhead Station 0
Q ~ Frame Station 2
R ~ Frame Station 4
S ~ Frame Station 6
T ~ Frame Station 8
U ~ Transom
V ~ Transom Doubler
W ~ Daggerboard casing side
Y ~ Frame Station 1

1~ Frames & bulkheads are shown as halves and must be mirrored on other side of centreline, which is shown on each frame or bulkhead as a dashed line.

2~ Alphabetic references correspond to those of the optional patterns with hull and deck skin panels, hence the missing letters.



J	~	Mast deck aft beam
K	~	Mast deck forward beam
L	~	Rudder mound top
M	~	Rudder mound side
N	~	Backbone forward
O	~	Backbone aft
P	~	Bulkhead Station 0
Q	~	Frame Station 2
R	~	Frame Station 4
S	~	Frame Station 6
T	~	Frame Station 8
U	~	Transom
V	~	Transom Doubler
W	~	Daggerboard casing side
Y	~	Frame Station 1

1. The patterns are plotted onto two strips of paper 914mm (36") wide. Tape the strips together carefully so that the lines continue smoothly from one strip to the next. They are set out so that the component lines cross the red dashed line along the meeting edges. Join them so that the red dashed lines coincide.
2. They are plotted to the maximum accuracy that we can achieve but there is always potential for minor differences due to unavoidable tolerances in the plotting equipment. If you find a small misalignment of the lines at the meeting edges of two strips, adjust the positioning of the strips to minimise the error while taping them together.
3. The panel shapes are overlaid on top of each other to minimise plotting area but are easily identifiable using the the colours and the alphabetical key on this drawing and pattern sheet 2.
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5. There are various ways to transfer the shapes onto your plywood sheets, two of which are described below as a) and b). This design has mainly straight lines making up the shapes that you will be cutting so I suggest that you use method a).
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 - b) Tape sheets of carbon paper onto the underside of the patterns along the lines that are to be traced. Next, tape the patterns onto the plywood sheet. Run a dress-maker's wheel along all of the lines for the relevant bulkhead. Use firm pressure and steer the wheel very carefully to keep it on the line.

REVISIONS

Dudley Dix Yacht Design Didi Sport 15		
OVERVIEW OF STANDARD PATTERNS		
DWG. No. 15		1340-1272 N Great Neck Rd #34A Virginia Beach VA 23454-2230 USA Tel 757-962-9273
SCALE : 1:5	DATE : Feb 2016	Email dudley@dixdesign.com Web http://dixdesign.com/