

DRAWING LIST

Delivered	Design	Dwg	Description	Customer	Date
Forged Custom Metal Fab-	16'6"x7'6"	Skiff			
	508	-1	Main Views		6/10/15
		-2	Inboard Views		6/10/15
		-2-1	Keel Layout		6/22/15
		-2-2	Girder Layout		6/22/15
		-2-3	Skin Layout		6/22/15
		-2-4	Cockpit Sole Layout		6/22/15
		-2-5	Transom		6/22/15
		-2-6	Bow		6/22/15
		-2-7	Side Deck Layout		6/22/15
		-2-8	Push Knee Layout		6/22/15
		-2-9	Stem Marks Layout		6/22/15
		-2-10	Bottom Plate Cut Layout		6/22/15
		-2-11	Topside Plate Cut Layout		6/22/15
		-PL-1	1/4" 5086 Stock Nesting		6/22/15
		-PL-2	3/16" 5086 Stock Nesting		6/22/15
		-PL-3	3/16" 5052 Stock Nesting		6/22/15
		-B-1	Typcial B-1 Flange		6/22/15
		-C-1	Typcial Skin Joints		6/22/15
		-F-1	Frame 1		6/22/15
		-F-2	Frame 2		6/22/15
		-F-3	Frame 3		6/22/15
		-F-4	Frame 4		6/22/15

***** NC Cut Parts *****

Response Marine, Inc.

Boat: FCMF 16

File: \Des\ForgedCustomMetalFab\FCMF 16

Rev. Date: 6/22/15

Print Date: 6/22/15

Tposides & Bottom are HAND CUT, not listed here

3/16" Parts- 5052

<u>Part #</u>	<u>Pieces</u>	<u>Description</u>	<u>Bend</u>
ALB	1	Anchor Locker Bottom	
BS2-B	2	Bottom Stringer 2, Aft	
BS2-BP	1	Bottom Stringer 2/Girder, Aft Port	
BS2-BS	1	Bottom Stringer 2/Girder, Aft Stbd	
DB-AP	1	Deck Body, Fwd of F3, Port	
DB-AS	1	Deck Body, Fwd of F3, Stbd	
DB-B	1	Deck Body, F3-F5	
DB-C	1	Deck Body, F5-Tran	
DM-AP	1	Deck Margin, Port, Fwd	
DM-AS	1	Deck Margin, Stbd, Fwd	
DM-BP	1	Deck Margin, Port, Aft	
DM-BS	1	Deck Margin, Stbd, Aft	
F1	1	Frame 1	
F2	1	Frame 2	Y, Flange B-1
F2P	1	Frame 2, port	
F2S	1	Frame 2, stbd	
F3	1	Frame 3	Y, Flange B-1
F3-P	1	Frame 3, port	Y, Flange B-1
F3-S	1	Frame 3, stbd	Y, Flange B-1
F4	1	Frame 4	Y, Flange B-1
F4-P	1	Frame 4, port	
F4-S	1	Frame 4, stbd	
SD-AP	1	Side & Foredeck, Port	
SD-AS	1	Side & Foredeck, Stbd	
SDC-AP	1	Side Deck Coaming, Port Fwd	
SDC-AS	1	Side Deck Coaming, Stbd Fwd	
TSL-BP	1	Topsides Stringer, Port, Mid	Y, Flange B-1
TSL-BS	1	Topsides Stringer, Stbd, Mid	Y, Flange B-1
TSL-CP	1	Topsides Stringer, Port, Aft	Y, Flange B-1
TSL-CS	1	Topsides Stringer, Stbd, Aft	Y, Flange B-1
	31	Sub Total 3/16" 5086 parts	

3/16" Parts- 5086 MarineBend

<u>Part #</u>	<u>Pieces</u>	<u>Description</u>
C-AP	1	Chine Port, Fwd
C-AS	1	Chine Starboard, Fwd
C-BP	1	Chine Port, Aft
C-BS	1	Chine Starboard, Aft
FDC	1	Foredeck Coaming
SD-BP	1	Side Deck, Aft Port
SD-BS	1	Side Deck, Aft Stbd
SDC-BP	1	Side Deck Coaming, Port Aft
SDC-BS	1	Side Deck Coaming, Stbd Aft
TCO-P	1	Transom Coaming Side Vertical, Port
TCO-S	1	Transom Coaming Side Vertical, Stbd
TDC-P	1	Transom Deck Coaming, Port
TDC-S	1	Transom Deck Coaming, Stbd
	13	Sub Total 3/16" 5086 parts

1/4" Parts- 5086 H116 Marine

BOW	1	Bow Stiffener, Vertical
BS-1AP	1	Bottom Stringer 1, Port
BS-1AS	1	Bottom Stringer 1, Stbd
BS-1B	2	Bottom Stringer 1, Aft
BS-2AP	1	Bottom Stringer 2, fwd, Port
BS-2AS	1	Bottom Stringer 2, fwd, Stbd
KA	1	Keel, Fwd
KB	1	Keel, Aft
PKDB-P	1	Push Knee, Bow Doubler, Port
PKDB-S	1	Push Knee, Bow Doubler, Stbd
PKDD-P	1	Push Knee, Deck Doubler, Port
PKDD-S	1	Push Knee, Deck Doubler, Stbd
PK-F1P	1	Push Knee, Aft Flange, Port
PK-F1S	1	Push Knee, Aft Flange, Stbd
PK-F2	2	Push Knee, Top Flange
PK-F3	2	Push Knee, Face Flange
PK-F4	2	Push Knee, Lower Flanges
PK-P	1	Push Knee, Main Web, Port
PK-S	1	Push Knee, Main Web, Stbd
TR	1	Transom
TR-L	1	Transom Lip
TSL-A	2	Topsides Stringer, Bow transverse

27 Sub Total 1/4" Parts

71	Total Parts
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Response Marine, Inc.
 Stock List for FCMF 16'
 File: FCMF\
 revised: 6/22/15

Print Date: 6/22/15

EXTRUSION

	QTY	Description	Alloy	Length	Wt/Ft	Wt
6/22/15	4	1.5x.188" Square Tube	6061 T6	24	1.140	109
6/22/15	1	1.5" x .188" Flat Bar	6061 T6	12	0.331	4

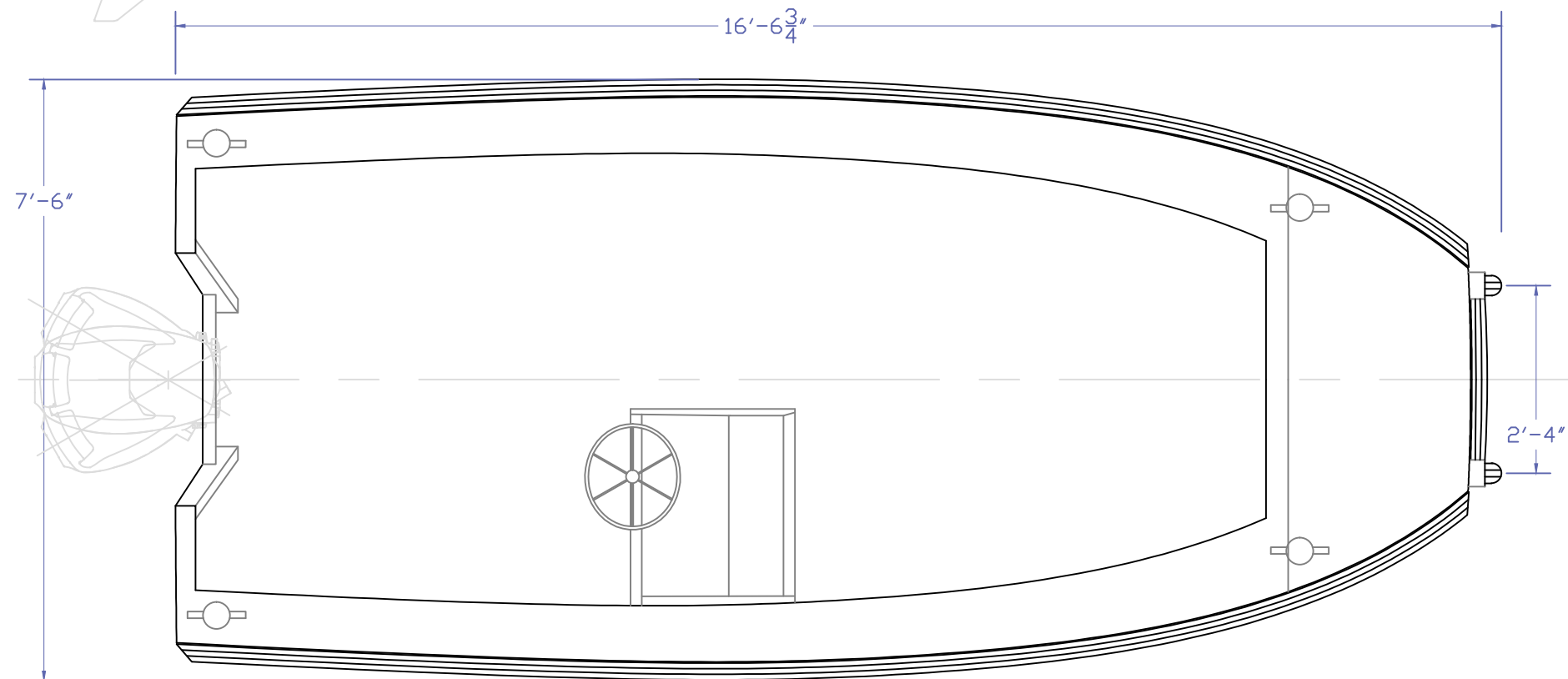
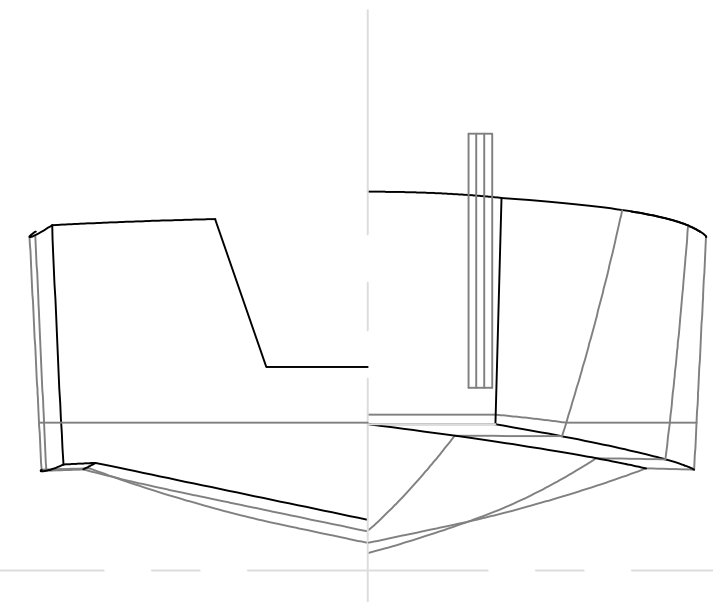
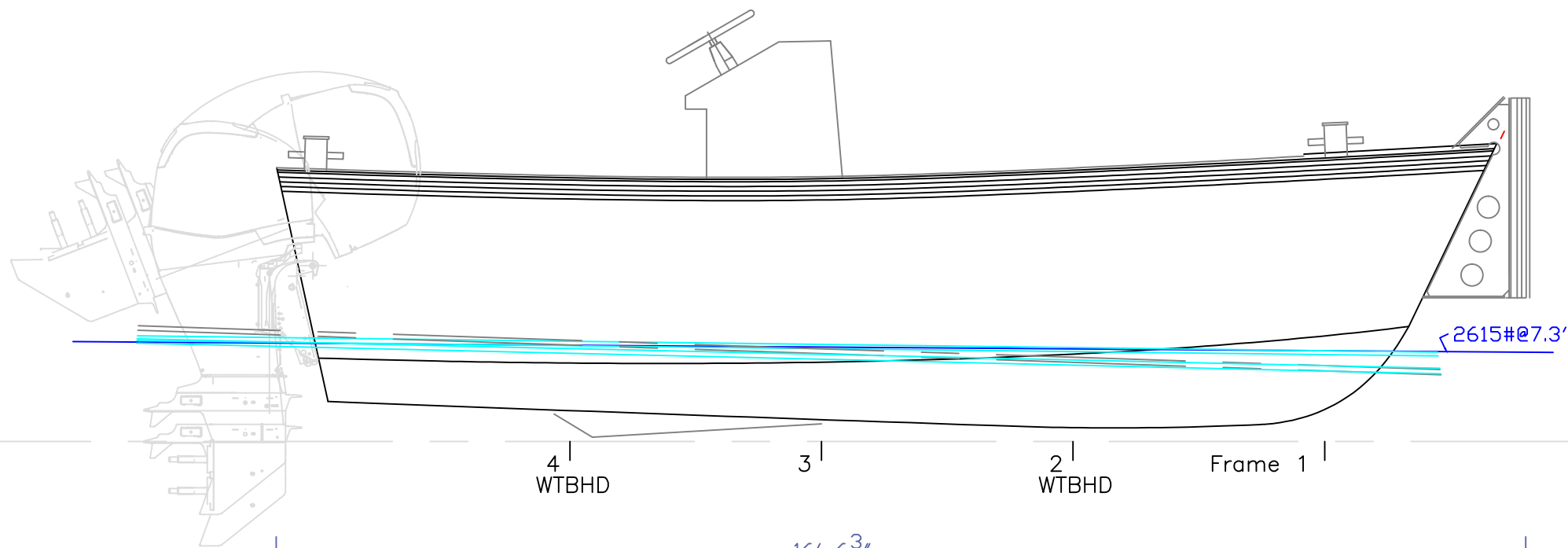
Sub Total Extrusio	113
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SHEET/PLATE

ID	QTY	Description	Thick	Width	Lngth	lbs/ft^2	lbs
6/22/15	2	3/16" Sheet- 5052 H32	0.190	60	120	2.700	270
6/22/15	1	3/16" Sheet- 5052 H32	0.190	48	120	2.700	108
6/22/15	4	3/16" Sheet- 5052 H32	0.190	48	96	2.700	346
6/22/15	2	3/16" Sheet- 5086 H116 (Marine, ASTM B-928-04)	0.190	72	240	2.700	648
6/22/15	2	3/16" Sheet- 5086 H116 (Marine, ASTM B-928-04)	0.190	60	120	2.700	270
6/22/15	2	1/4" Plate- 5083 or 5086 H116 (Marine, ASTM B-928-04)	0.250	60	120	3.600	360
		1/4" Plate- 5083 or 5086 H116 (Marine, ASTM B-928-04)	0.250			3.600	0

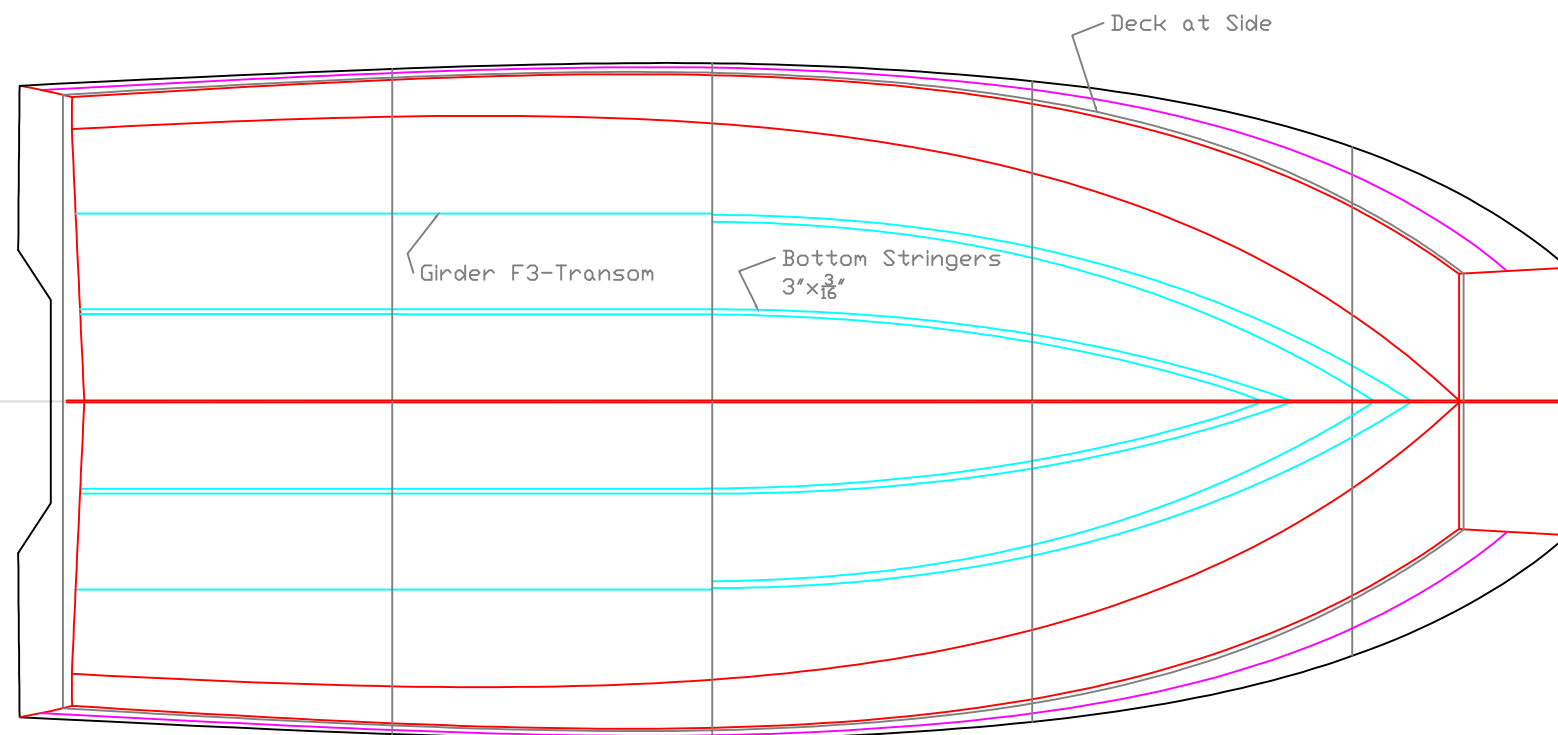
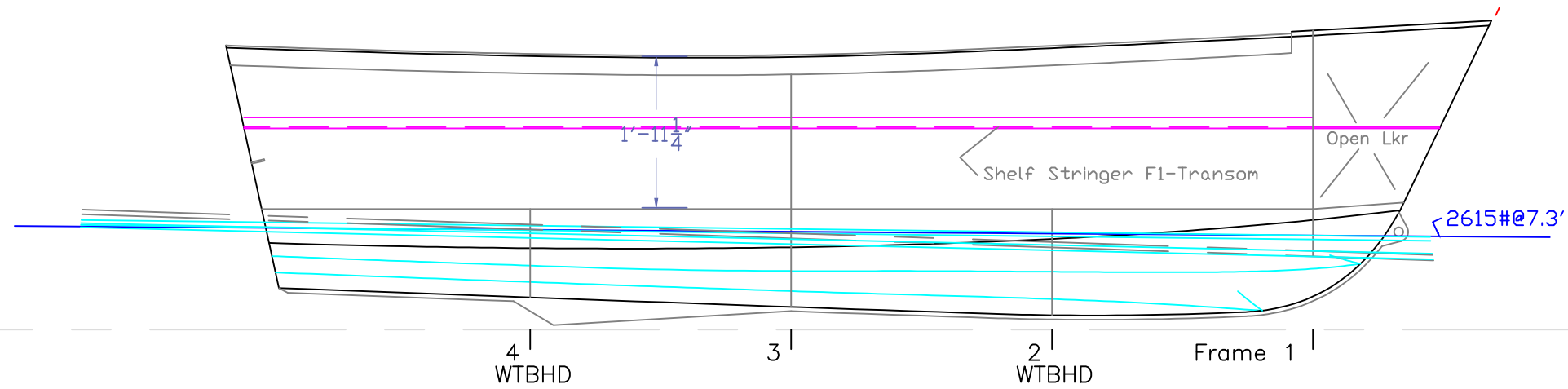
Total Sheet/Plate	2,002
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Total Aluminum	2,115
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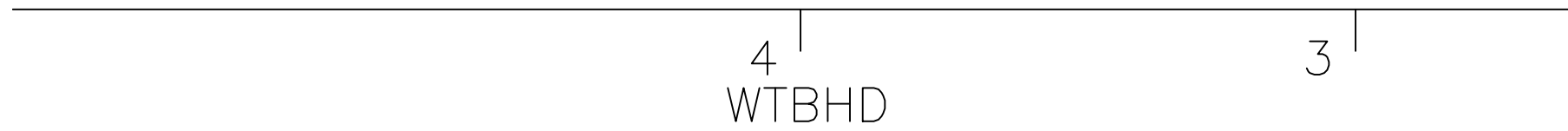
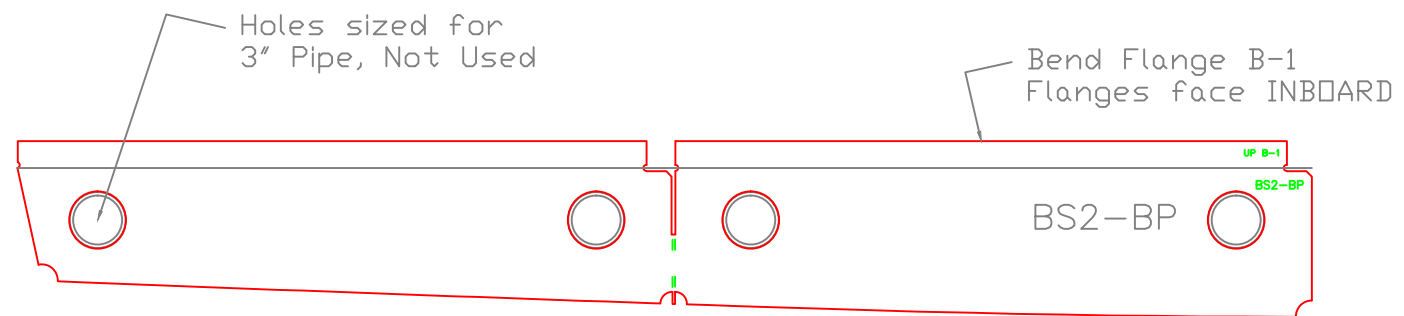
MAIN VIEWS

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1/2" = 1'	DES/DWN WAL/JCC	DATE 6/10/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-1



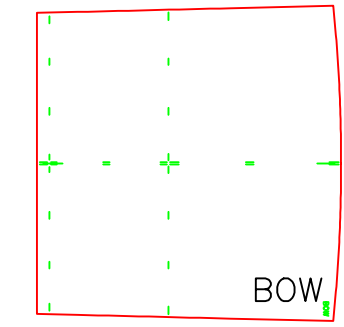
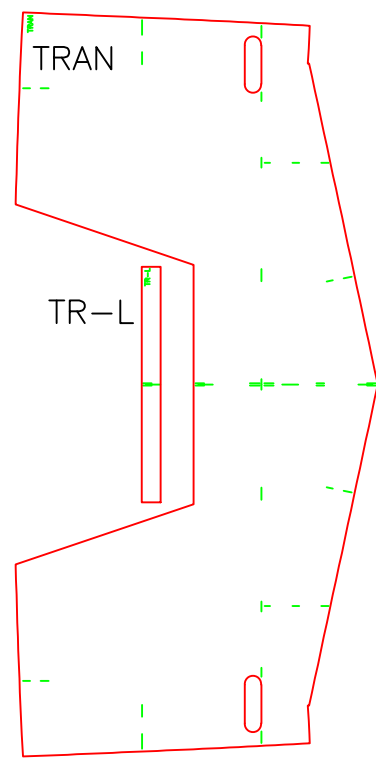
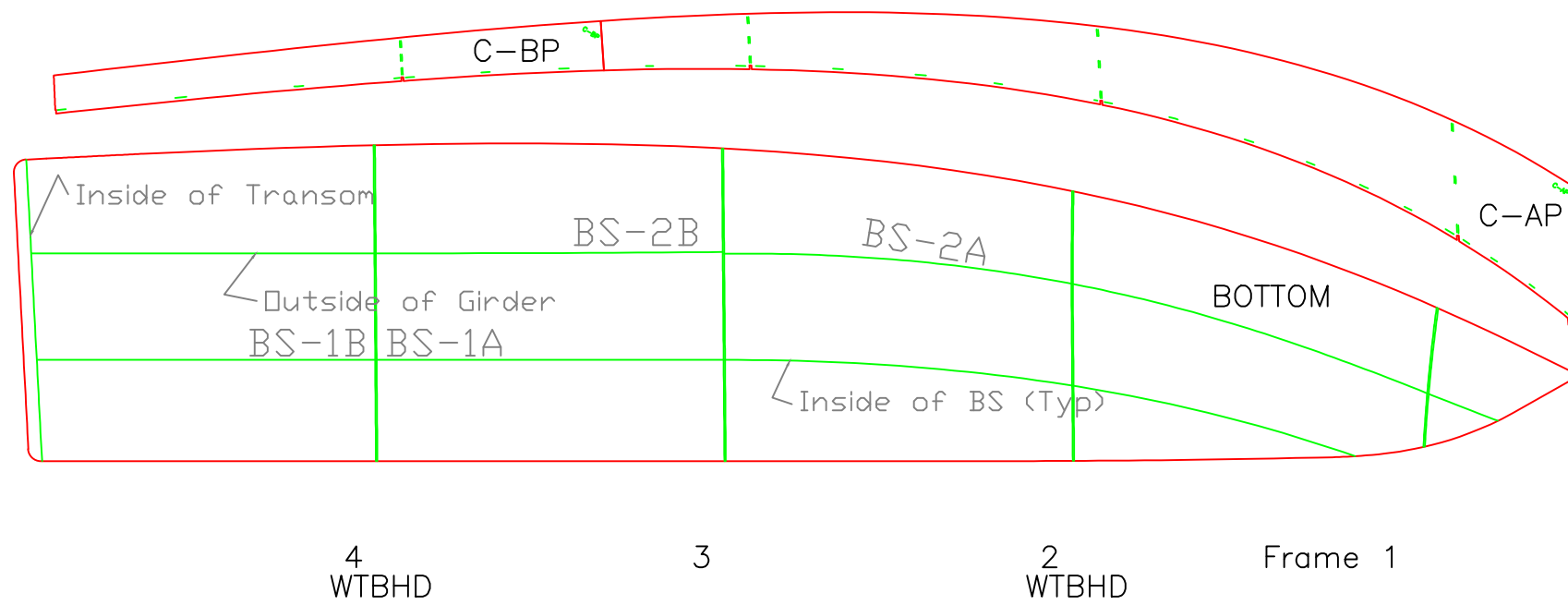
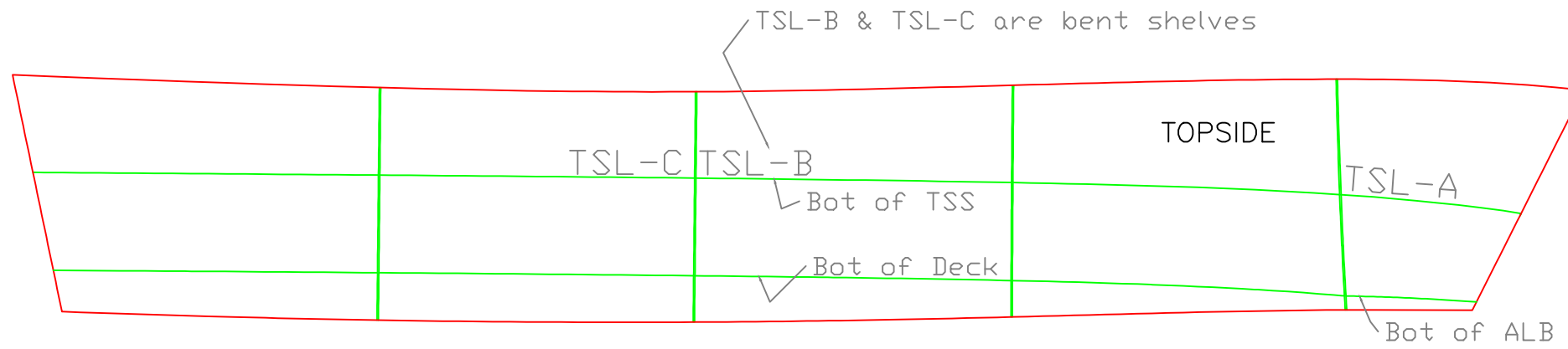
INBOARD VIEWS

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1/2" = 1'	DES/DWN WAL/JCC	DATE 6/10/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2



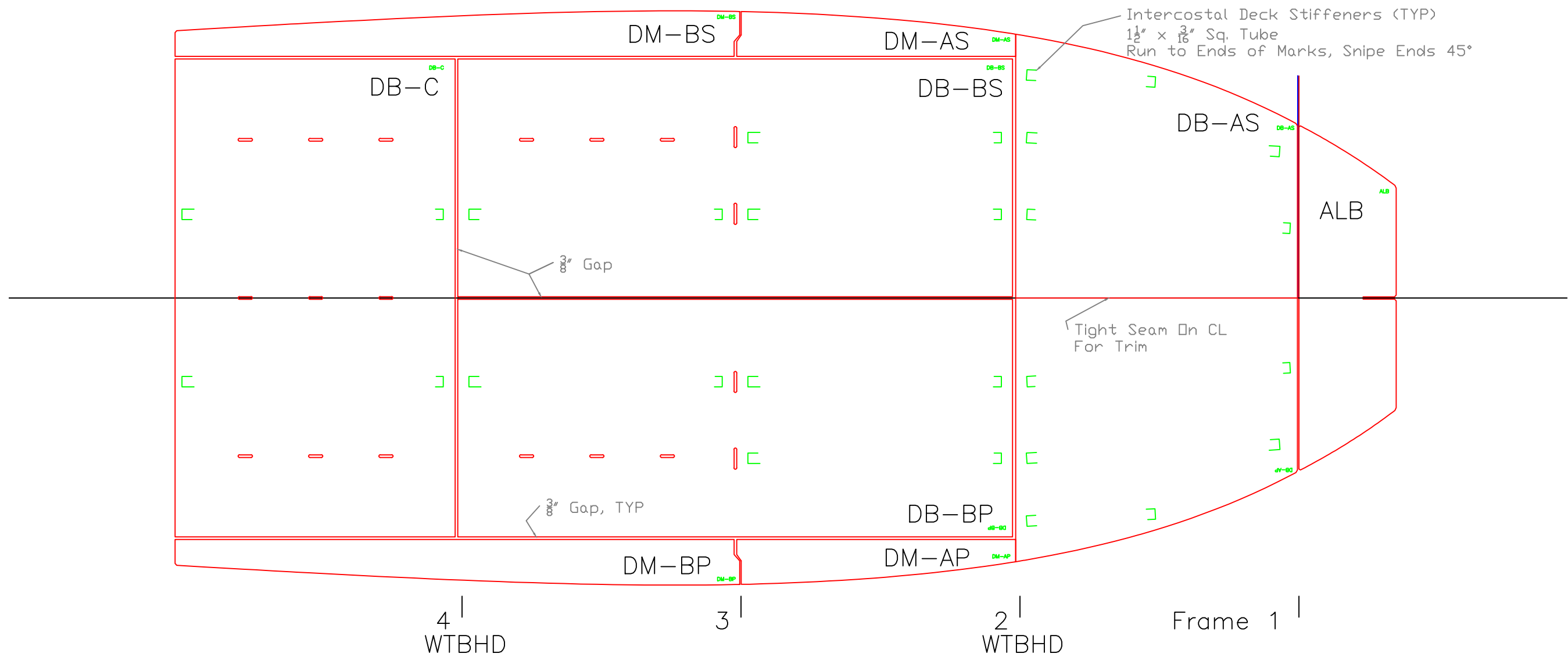
GIRDER LAYOUT

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1"=1'	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-2



SKIN LAYOUT

16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-3



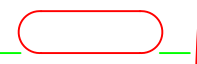
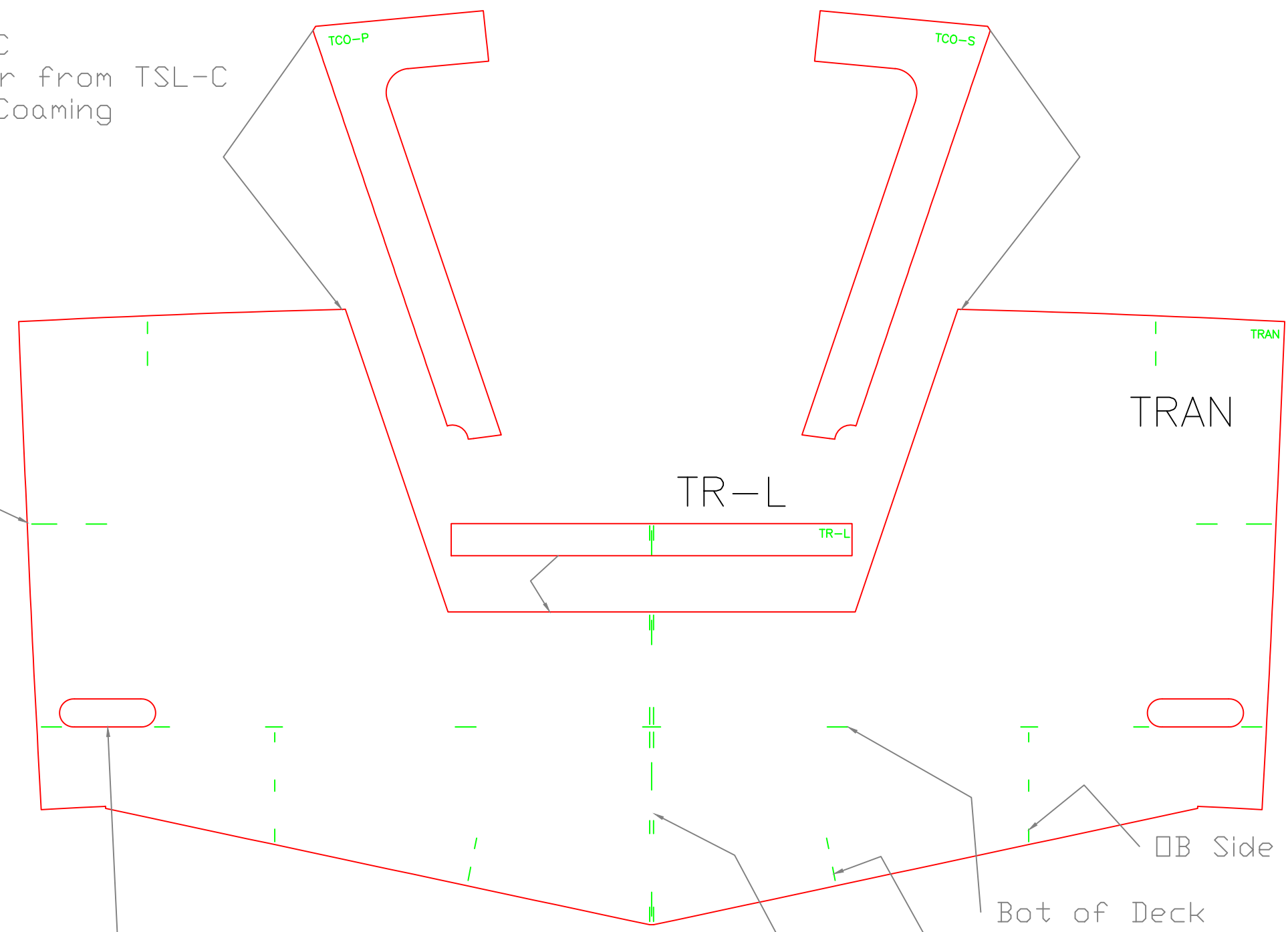
COCKPIT SOLE LAYOUT

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 3/4" = 1'	DES/DWN WAL	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-4

Bot of TSL-C
 Add Stiffener from TSL-C
 to Transom Coaming

TCO-P

TCO-S



Cutouts
 for SeaStop Scuppers
 Install w/ SeaStop Shims

Keel

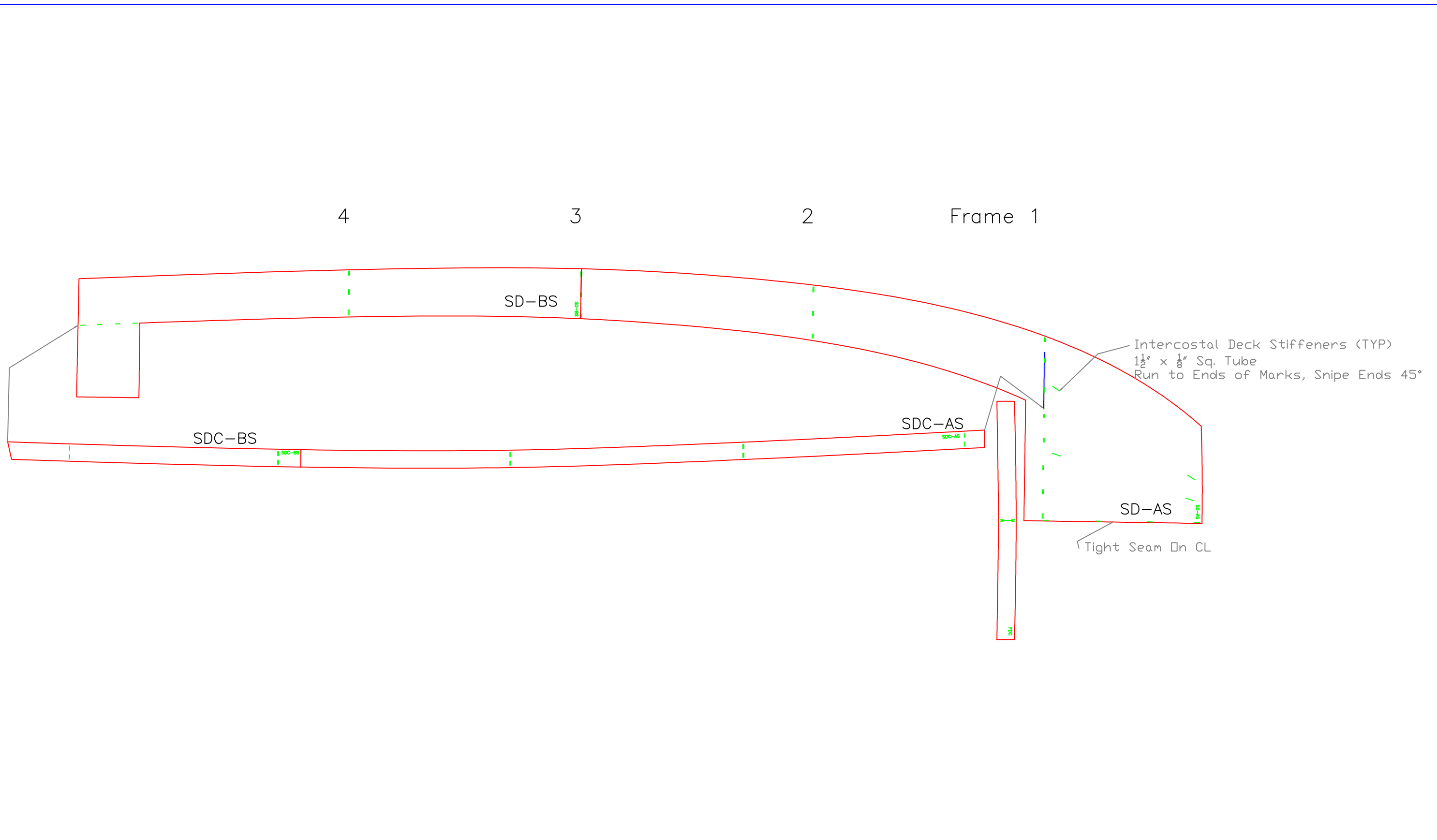
Bot of Deck

IB Side of BS-1

IB Side of Girder

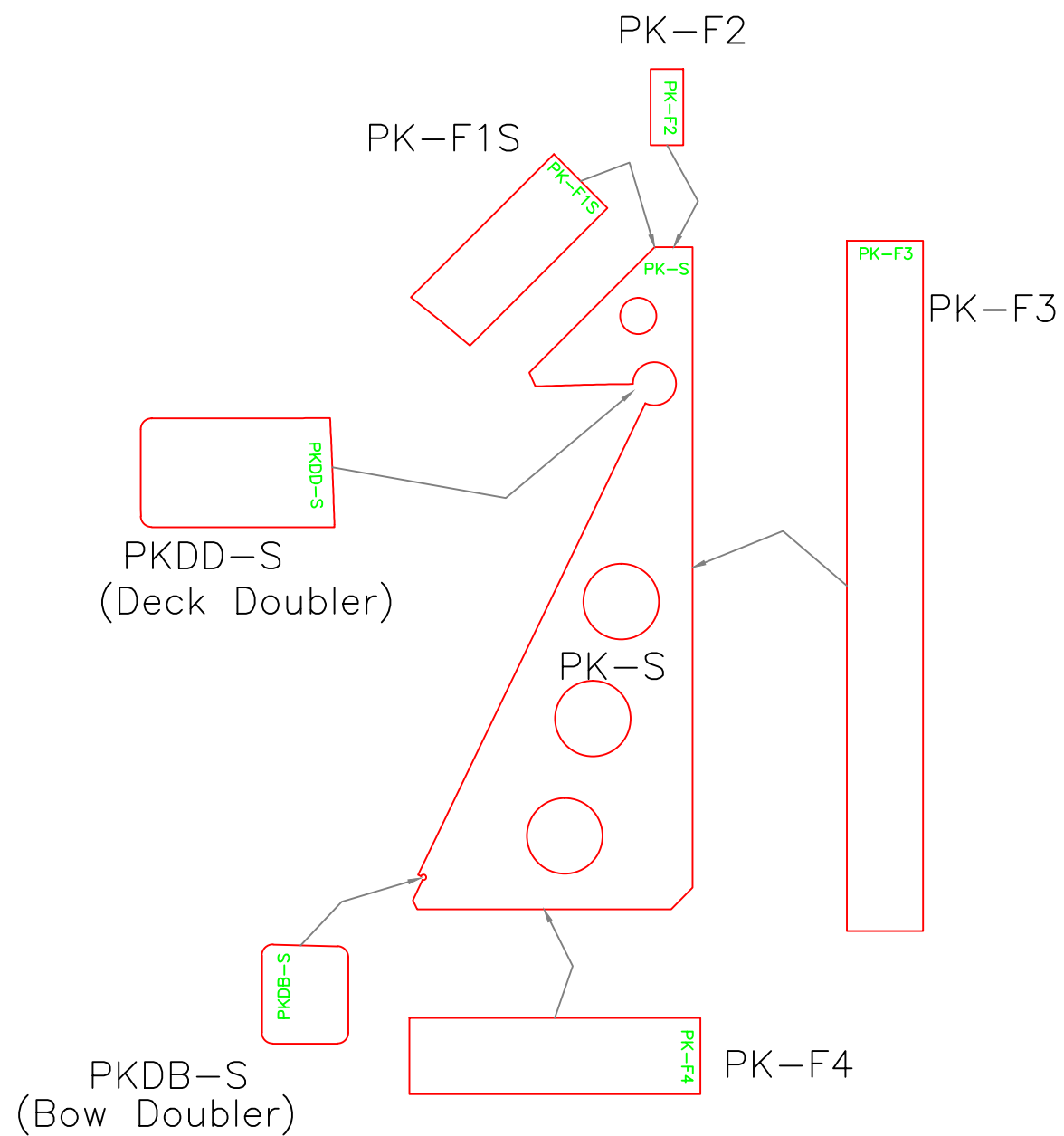
TRANSOM

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1 1/2=1'	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-5



SIDE DECK LAYOUT

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 3/4"=1'	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-7

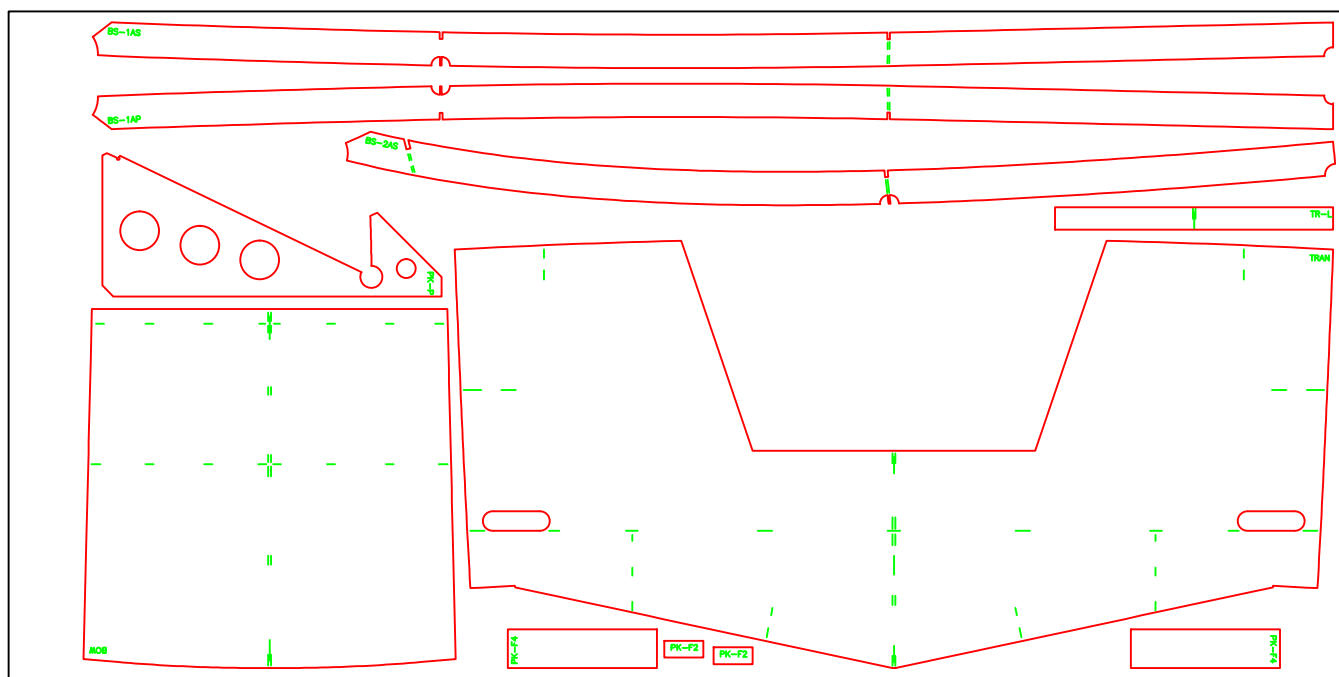


- All Parts are $\frac{1}{4}$ " 5086
- Flanges & Doublers are centered on Web.

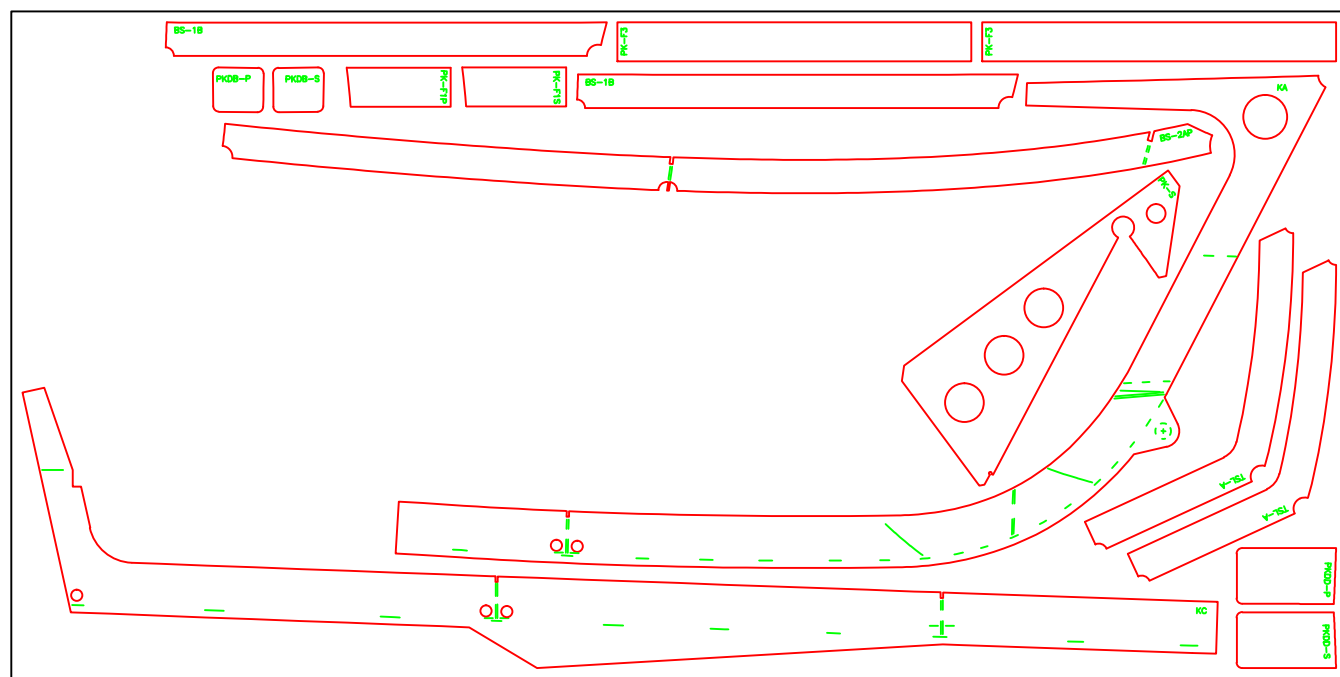
PUSH KNEE LAYOUT

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1 1/2"=1'	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-2-8

FCMF 16, Response # 508
 Plate 4-1
 .250"x 60x120", 5086 Marine, ASTM B928



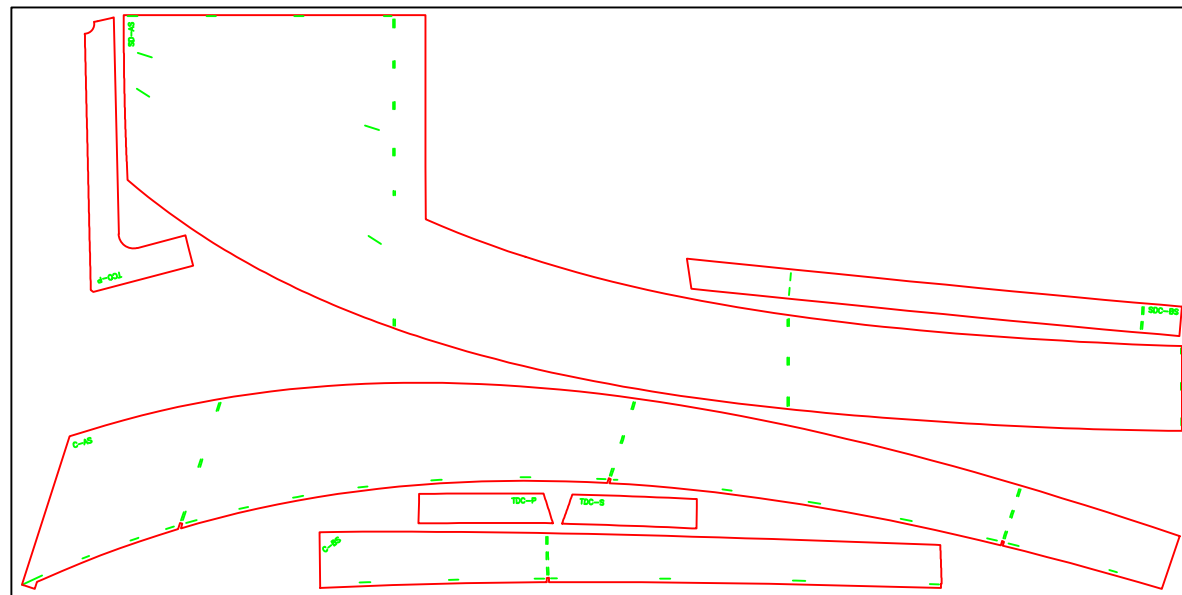
FCMF 16, Response # 508
 Plate 4-2
 .250"x 60x120", 5086 Marine, ASTM B928



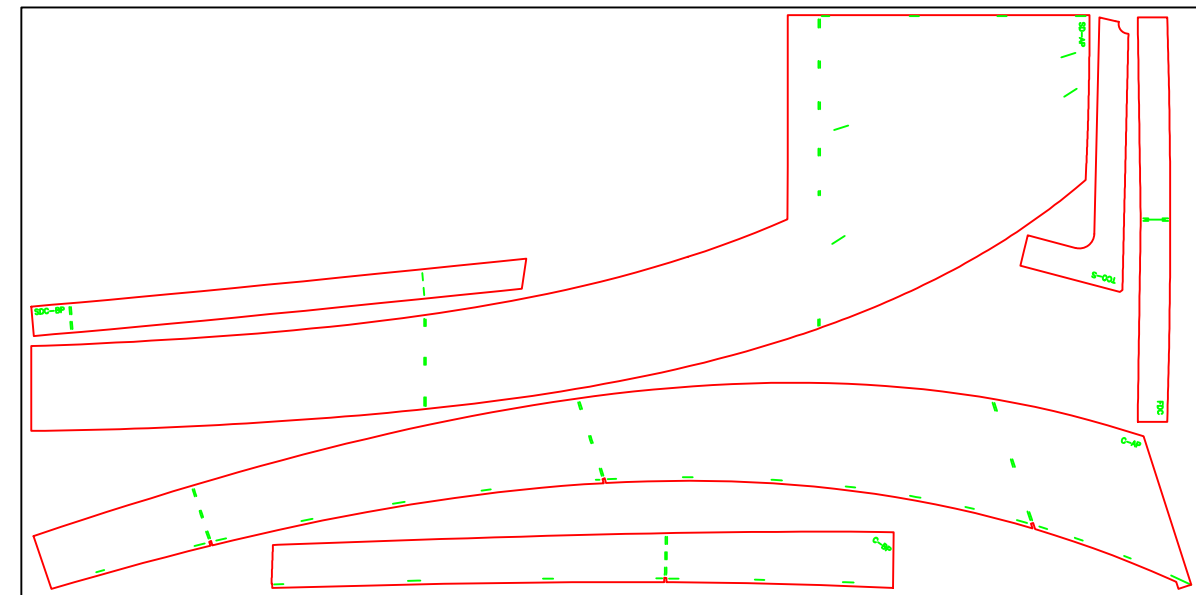
1/4" 5086 Stock Nesting

16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-PL-1

FCMF 16, Response # 508
Plate 3-3
.190"x60x120", 5086 Marine, ASTM B928



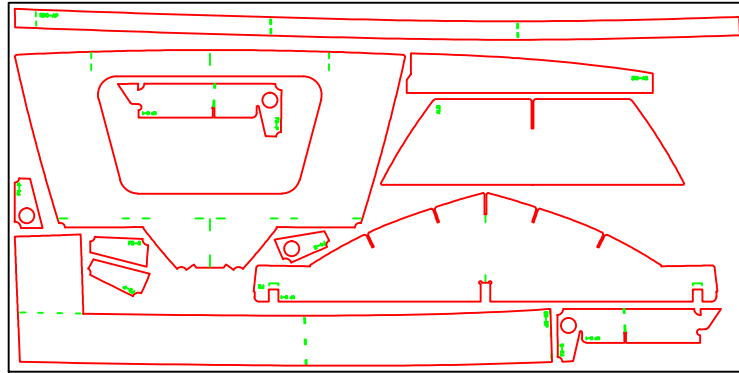
FCMF 16, Response # 508
Plate 3-4
.190"x60x120", 5086 Marine, ASTM B928



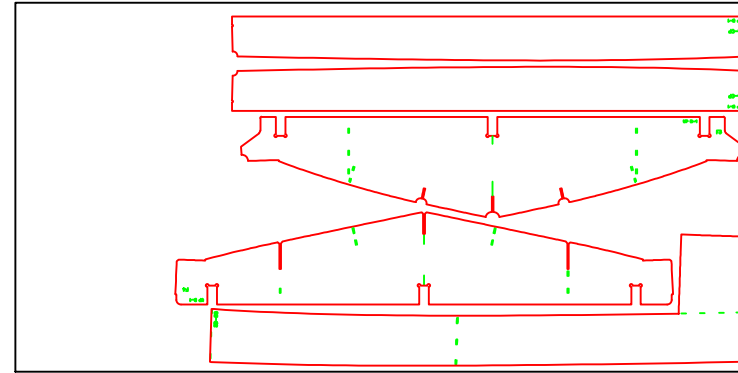
3/16" 5086 Stock Nesting

16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc. Newburyport, MA, www.responsemarine.com		SHEET DWG. NO. 508-PL-2

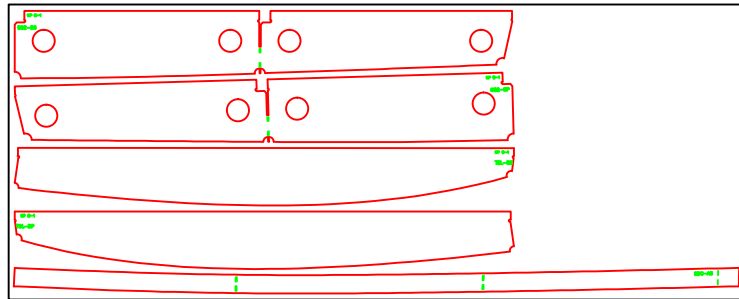
FCMF 16, Response # 508
 Plate 3A-1
 .190"x60x120", 5052 H32



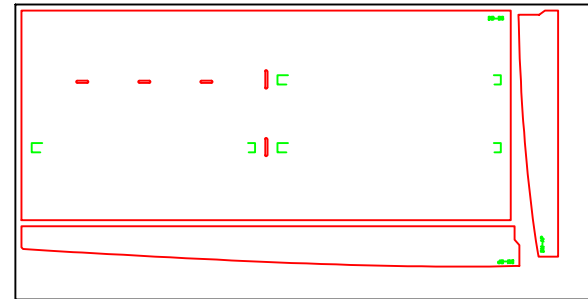
FCMF 16, Response # 508
 Plate 3A-2
 .190"x60x120", 5052 H32



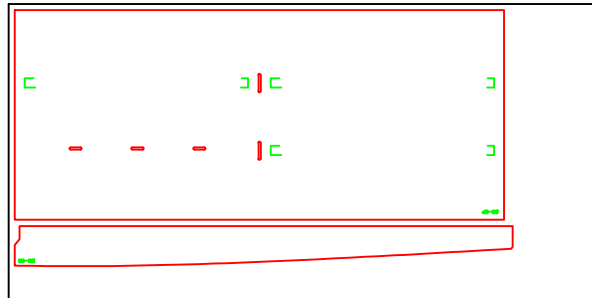
FCMF 16, Response # 508
 Plate 3A-3
 .190"x48x120", 5052 H32



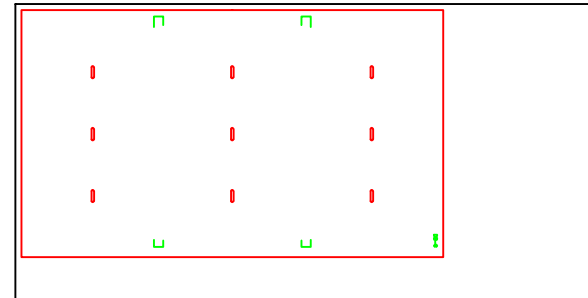
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 Plate 3A-4
 .190"x48x96", 5052 H32



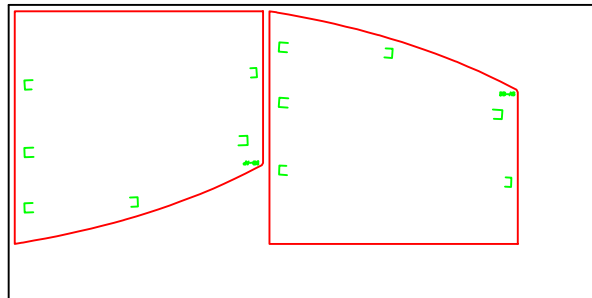
FCMF 16, Response # 508
 Plate 3A-5
 .190"x48x96", 5052 H32



FCMF 16, Response # 508
 Plate 3A-6
 .190"x48x96", 5052 H32



FCMF 16, Response # 508
 Plate 3A-7
 .190"x48x96", 5052 H32



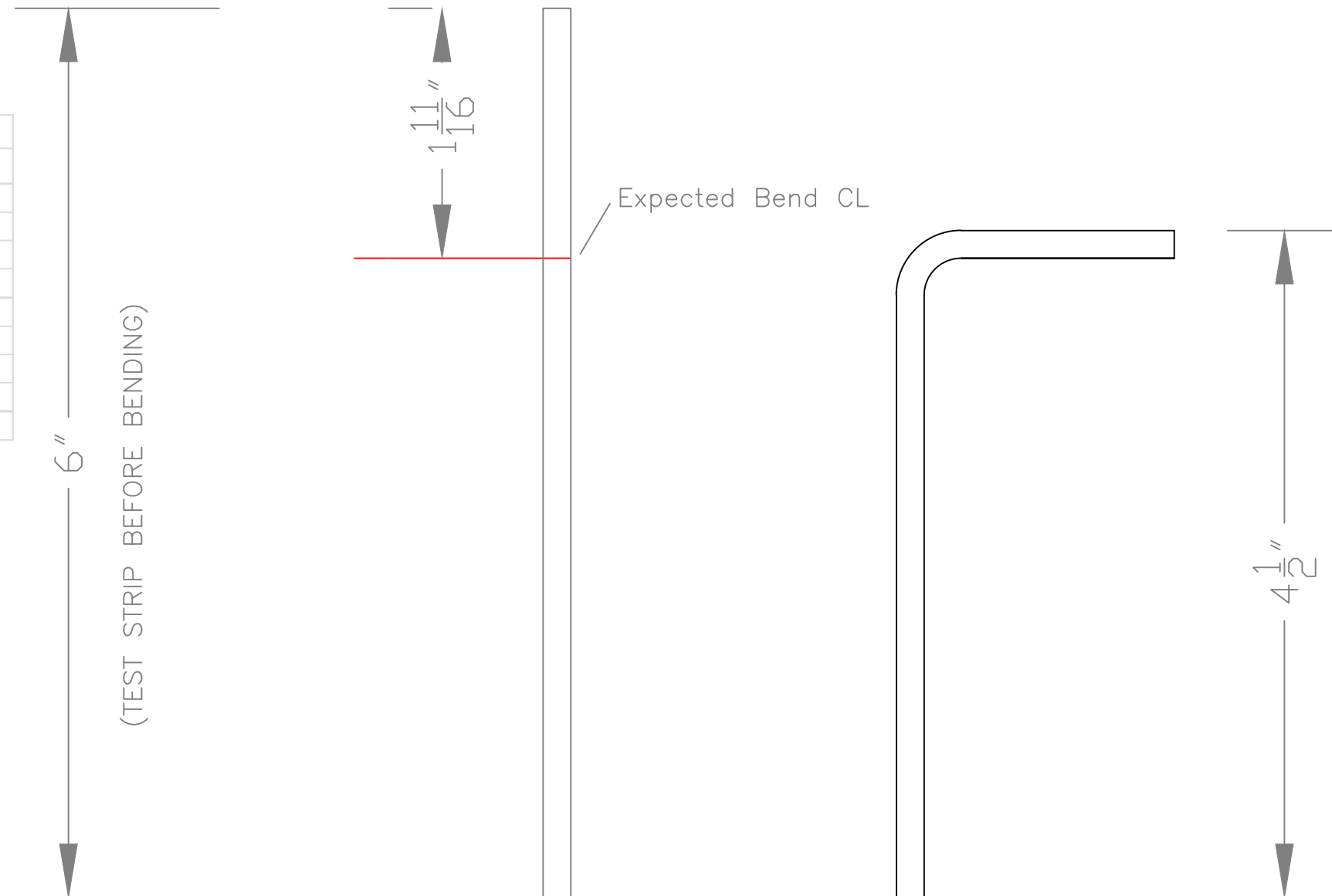
3/16" 5052 Stock Nesting

16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-PL-3

"B-1" FLANGE BENDING: $\frac{3}{16}$ " 5052 H32 Stock

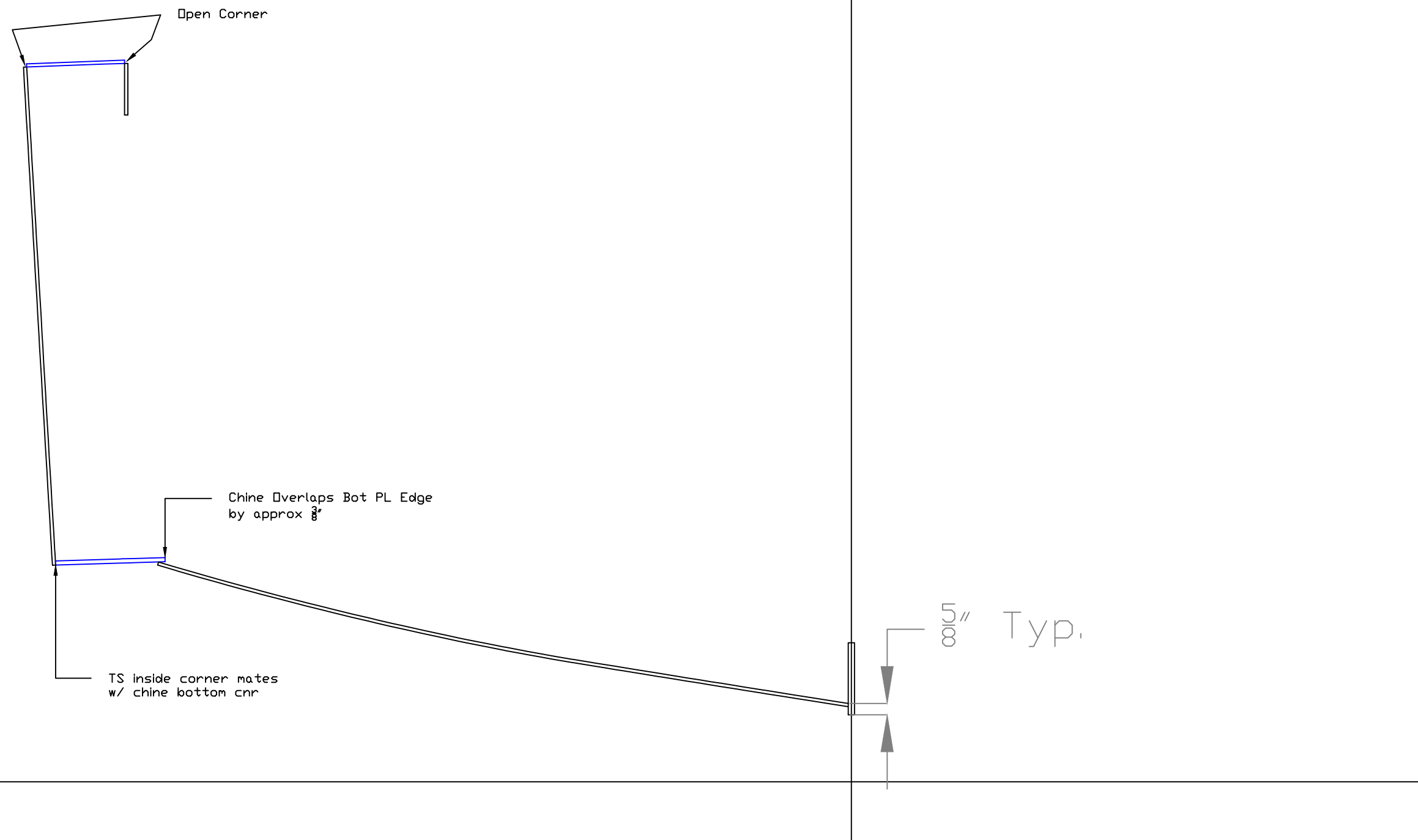
- 1) Confirm results with test strips for height to Top of Flange before bending frames.
- 2) Inside Bend Radius is $\sim\frac{1}{8}$ " to $\frac{1}{4}$ ". Bend is 90°.
- 3) Expected Back Gauge setting is $1\frac{11}{16}$ ", but confirm and adjust.
- 4) This same set up applies to all parts listed at left. Frame Flanges Bend AFT. TSL Flanges Bend UP.

Part #	Pieces	Description	Bend
F2	1	Frame 2	Y, Flange B-1
F3	1	Frame 3	Y, Flange B-1
F3-P	1	Frame 3, port	Y, Flange B-1
F3-S	1	Frame 3, stbd	Y, Flange B-1
F4	1	Frame 4	Y, Flange B-1
TSL-BP	1	Topsides Stringer, Port, Mid	Y, Flange B-1
TSL-BS	1	Topsides Stringer, Stbd, Mid	Y, Flange B-1
TSL-CP	1	Topsides Stringer, Port, Aft	Y, Flange B-1
TSL-CS	1	Topsides Stringer, Stbd, Aft	Y, Flange B-1



TYPICAL B-1 FLANGE

16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG NO. 508-B-1



TYPICAL SKIN JOINTS

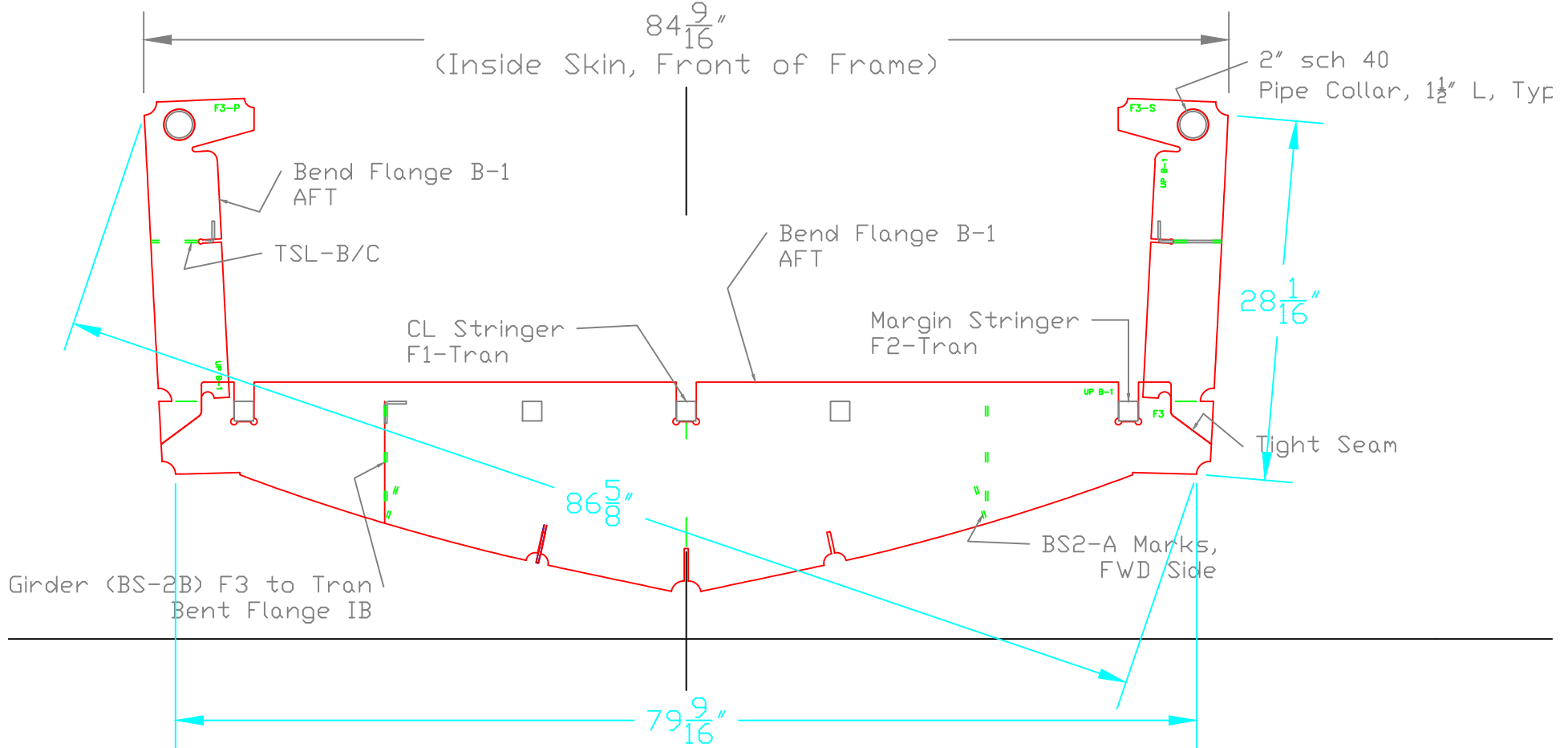
16' Skiff		
For: Forged Custom Metal Fab		
SCALE NONE	DES/DWN WAL	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG NO. 508-C-1

L'kg Fwd
Flanges Shown
Before Bending

$84\frac{9}{16}$ "

(Inside Skin, Front of Frame)

2" sch 40
Pipe Collar, $1\frac{1}{2}$ " L, Typ



FRAME 3

16' Skiff		
For: Forged Custom Metal Fab		
SCALE 1" = 1'	DES/DWN WAL/JCC	DATE 6/22/15
Response Marine, Inc.		SHEET
Newburyport, MA, www.responsemarine.com		DWG. NO. 508-F-3

REVISIONS