ACTIVITY: To Construct the Stern Section of the STEM Class Ship – Mega Block 1.

NOTES:

- Ensure optimal utilization of all materials to reduce waste.
- Ensure all cutting surfaces are protected when cutting materials with the use of a cutting board.

MATERIAL REQUIREMENTS:

Sharpie
Clear Ruler
Exacto Knife
Cutting Board
Foam Board
Black Plastic Sheets
Scissors
Glue Gun
Canada Flag

DEFINITIONS AND ACRONYMS:

Definitions:

Bulkhead - A dividing wall or barrier between compartments in a ship
Deck – A structure approximately horizontal, extending across a ship
Longitudinal – Situated along the length of the ship
Port - The left side of the ship
Shell - The outer most structure of a ship
Starboard – The right side of the ship
Stern - The back most part of the ship
Transverse - Situated across the width of the ship

Acronyms:

DWG - Drawing
FWD - Forward
LKG FWD - Looking Forward
LKG DOWN – Looking Down
LKG PORT – Looking Port
PS – Port Side
STBD – Starboard
TYP - Typical, meaning the same on both sides

STEPS:

1. **Stern - Transverse Bulkhead**

   1.1 Using Attachment 1 (DWG No: A01-STERN PACKAGE-001) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

2. **Stern – Longitudinal Bulkhead**

   2.1 Using Attachment 2 (DWG No: A01-STERN PACKAGE-002) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

3. **Stern – Deck**

   3.1 Using Attachment 3 (DWG No: A01-STERN PACKAGE-003) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

4. **Stern - Shell**

   4.1 Using Attachment 4 (DWG No: A01-STERN PACKAGE-004) follow the 'NOTES' section to mark-up, cut and fold Black Plastic Paper using Scissors to the exact measurements stipulated on the drawing.

5. **Stern – Assembly**

   5.1 Using Attachment 5 (DWG No: A01-STERN PACKAGE-005) follow the 'NOTES' section to assemble Transverse Bulkhead, Longitudinal Bulkhead, Deck & Shell to form Mega Block 1.
   5.2 Use glue gun to secure sections.

6 **Mast Assembly**

   6.1 Using Attachment 6 (DWG No: A01-STERN PACKAGE-006) measure, mark-up and cut Black Plastic Paper using Scissors to the exact measurements stipulated on the drawing.
   6.2 Follow the 'NOTES' section to create the circular section of the Mast.
   6.3 Assemble as per drawing and use glue gun to secure.
   6.4 Install Flag as per drawing.

ATTACHMENTS:

1 - DWG No: A01-STERN PACKAGE-001 Stern - Transverse Bulkhead Mega Block 1
2 - DWG No: A01-STERN PACKAGE-002 Stern – Longitudinal Bulkhead Mega Block 1
3 - DWG No: A01-STERN PACKAGE-003 Stern – Deck Mega Block 1
4 - DWG No: A01-STERN PACKAGE-004 Stern – Shell Mega Block 1
5 - DWG No: A01-STERN PACKAGE-005 Stern – Stern Assembly Mega Block 1
6 - DWG No: A01-STERN PACKAGE-006 Mast Assembly

ACTIVITY: To Construct Midship Section of a STEM Class Ship – Mega Block 2.

NOTES:

- Ensure optimal utilization of all materials to reduce waste.
- Ensure all cutting surfaces are protected when cutting materials with the use of a cutting board.
- Take note of the quantity required within the bill of materials section of the drawing attachments.

MATERIAL REQUIREMENTS:

Sharpie
Clear Ruler
Exacto Knife
Cutting Board
Foam Board
Black Plastic Sheets
Scissors
Glue Gun

DEFINITIONS AND ACRONYMS:

Definitions:

Bulkhead - A dividing wall or barrier between compartments in a ship
Deck – A structure approximately horizontal, extending across a ship
Longitudinal – Situated along the length of the ship
Port - The left side of the ship
Shell - The outer most structure of a ship
Starboard – The right side of the ship
Stern - The back most part of the ship
Transverse - situated across the width of the ship

Acronyms:

DWG - Drawing
FWD - Forward
LKG FWD - Looking Forward
LKG DOWN – Looking Down
LKG PORT – Looking Port
PS – Port Side
STBD – Starboard
TYP - Typical, meaning the same on both sides

STEPS:

1. **Midship – Transverse Bulkhead**

1.1 Using Attachment 1 (DWG No: A01-MIDSHIP PACKAGE-001) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.
1.2 Repeat step 1.1 to create a second Transverse Bulkhead section.

2. **Midship – Longitudinal Bulkhead**

2.1 Using Attachment 2 (DWG No: A01-MIDSHIP PACKAGE-002) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

3. **Midship – Deck**

3.1 Using Attachment 3 (DWG No: A01-MIDSHIP PACKAGE-003) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

4. **Midship - Shell**

4.1 Using Attachment 4 (DWG No: A01-MIDSHIP PACKAGE-004) measure, mark-up and cut out section of Black Plastic Paper using Scissors, to the exact measurements stipulated on the drawing.
4.2 Measure, mark-up and fold section of Black Plastic Paper to exact measurements stipulated on the drawing to form the shape indicated.

5. **Midship - Assembly**

5.2 Using Attachment 5 (DWG No: A01-MIDSHIP PACKAGE-005) follow the 'NOTES' section to assemble Transverse Bulkhead, Longitudinal Bulkhead, Deck & Shell to form Mega Block 2.
5.3 Use glue gun to secure sections.

6 **Superstructure Assembly**

6.1 Using Attachment 6 (DWG No: A01-MIDSHIP PACKAGE-006) measure, mark-up and cut Black Plastic Paper using Scissors to the exact measurements stipulated on the drawing.
6.2 Follow the 'NOTES' section to form the structure indicated on the drawing.
6.3 Use glue gun to secure.

ATTACHMENTS:

1 - DWG No: A01-MIDSHIP PACKAGE-001 Midship – Transverse Bulkhead Mega Block 2
2 - DWG No: A01-MIDSHIP PACKAGE-002 Midship – Longitudinal Bulkhead Mega Block 2
3 - DWG No: A01-MIDSHIP PACKAGE-003 Midship – Deck Mega Block 2
4 - DWG No: A01-MIDSHIP PACKAGE-004 Midship – Shell Mega Block 2
5 - DWG No: A01-MIDSHIP PACKAGE-005 Midship – Midship Assembly Mega Block 2
6 - DWG No: A01-MIDSHIP PACKAGE-006 Superstructure Assembly

ACTIVITY: To Construct Bow Section of a STEM Class Ship – Mega Block 3.

NOTES:

- Ensure optimal utilization of all materials to reduce waste.
- Ensure all cutting surfaces are protected when cutting materials with the use of a cutting board.

MATERIAL REQUIREMENTS:

Sharpie
Clear Ruler
Exacto Knife
Cutting Board
Foam Board
Black Plastic Sheets
Scissors
Glue Gun

DEFINITIONS AND ACRONYMS:

Definitions:

Bow - The forward most part of the ship
Bulkhead - A dividing wall or barrier between compartments in a ship
Curvature - Being curved or the degree to which something is curved
Deck – A structure approximately horizontal, extending across a ship
Longitudinal – Situated along the length of the ship
Port - The left side of the ship
Shell - The outer most structure of a ship
Starboard – The right side of the ship
Stern - The back most part of the ship
Transverse - Situated across the width of the ship

Acronyms:

DWG - Drawing
FWD - Forward
LKG FWD - Looking Forward
LKG DOWN – Looking Down
LKG PORT – Looking Port
PS – Port Side
STBD – Starboard
TYP - Typical, meaning the same on both sides

STEPS:

1. **Bow – Transverse Bulkhead**

   1.1 Using Attachment 1 (DWG No: A01-BOW PACKAGE-001) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

2. **Bow – Longitudinal Bulkhead**

   2.1 Using Attachment 2 (DWG No: A01-BOW PACKAGE-002) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

3. **Bow – Deck**

   3.1 Using Attachment 3 (DWG No: A01-BOW PACKAGE-003) measure, mark-up and cut out section of Foam Board using an Exacto Knife to the exact measurements stipulated on the drawing.

4. **Bow - Shell**

   4.1 Using Attachment 4 (DWG No: A01-BOW PACKAGE-004) follow the 'NOTES' section to mark-up, fold and cut Black Plastic Paper using Scissors to the exact measurements stipulated on the drawing.
   4.2 Use Glue Gun to secure sections.

5. **Bow - Assembly**

   5.1 Using Attachment 5 (DWG No: A01-BOW PACKAGE-005) assemble Transverse Bulkhead, Longitudinal Bulkhead, Deck & Shell to form Mega Block 3.
   5.2 Use Glue Gun to secure sections.

ATTACHMENTS:

1 - DWG No: A01-BOW PACKAGE-001 Bow – Transverse Bulkhead Mega Block 3
2 - DWG No: A01-BOW PACKAGE-002 Bow – Longitudinal Bulkhead Mega Block 3
3 - DWG No: A01-BOW PACKAGE-003 Bow – Deck Mega Block 3
4 - DWG No: A01-BOW PACKAGE-004 Bow – Shell Mega Block 3
5 - DWG No: A01-BOW PACKAGE-005 Bow – Bow Assembly Mega Block 3

ACTIVITY: Final Assembly of the STEM Class Ship for the Royal Canadian Navy.

NOTES: Following Assembly ship will be launched.

MATERIAL REQUIREMENTS:

Clear Ruler
Glue Gun
Duct Tape
Clothes Pins/Safety Pins

DEFINITIONS AND ACRONYMS:

Definitions:

Port - The left side of the ship
Super Structure: The parts of a Ship other than Mast, built above its Hull and Main Deck
Shell - The outer most structure of a ship
Mast – A long pole that rises vertically from a ship

Acronyms:

DWG - Drawing
LKG DOWN – Looking Down
LKG PORT – Looking Port
FWD – Forward

STEPS:

1. Assembly

1.1 Using Attachment 1 (A01-MEGA BLOCK PACKAGE-001) follow the 'NOTES' section to assemble STEM Class Ship 1.
1.2 Use Glue Gun to secure sections.
1.3 Use Duct Tape to seal edges.

ATTACHMENTS:

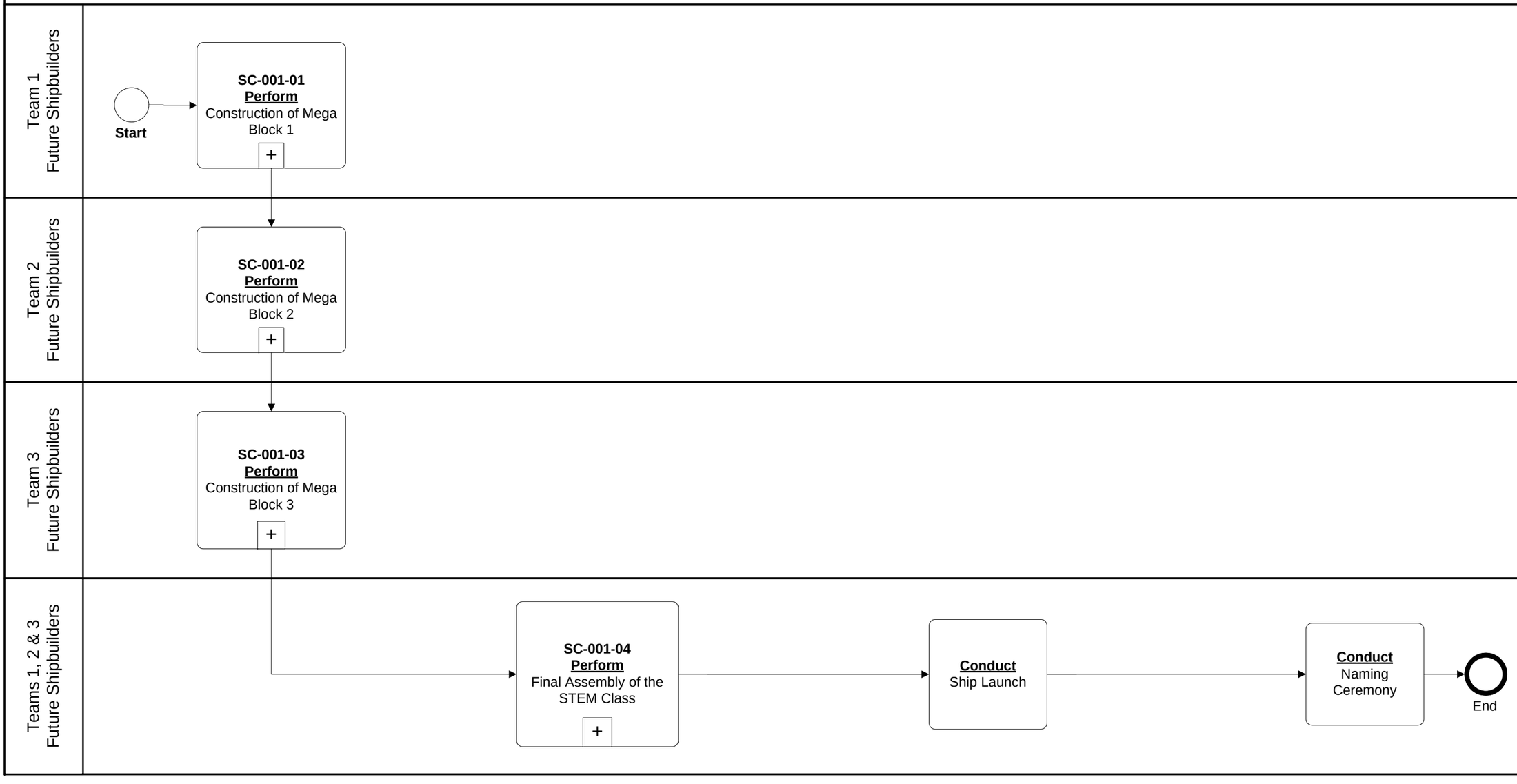
1 - DWG No: A01-MEGA BLOCK PACKAGE-001 Mega Block Join – Ship 1

Irving Shipbuilding Inc.

SC-001 Manufacture and Assembly of the STEM Class Ship

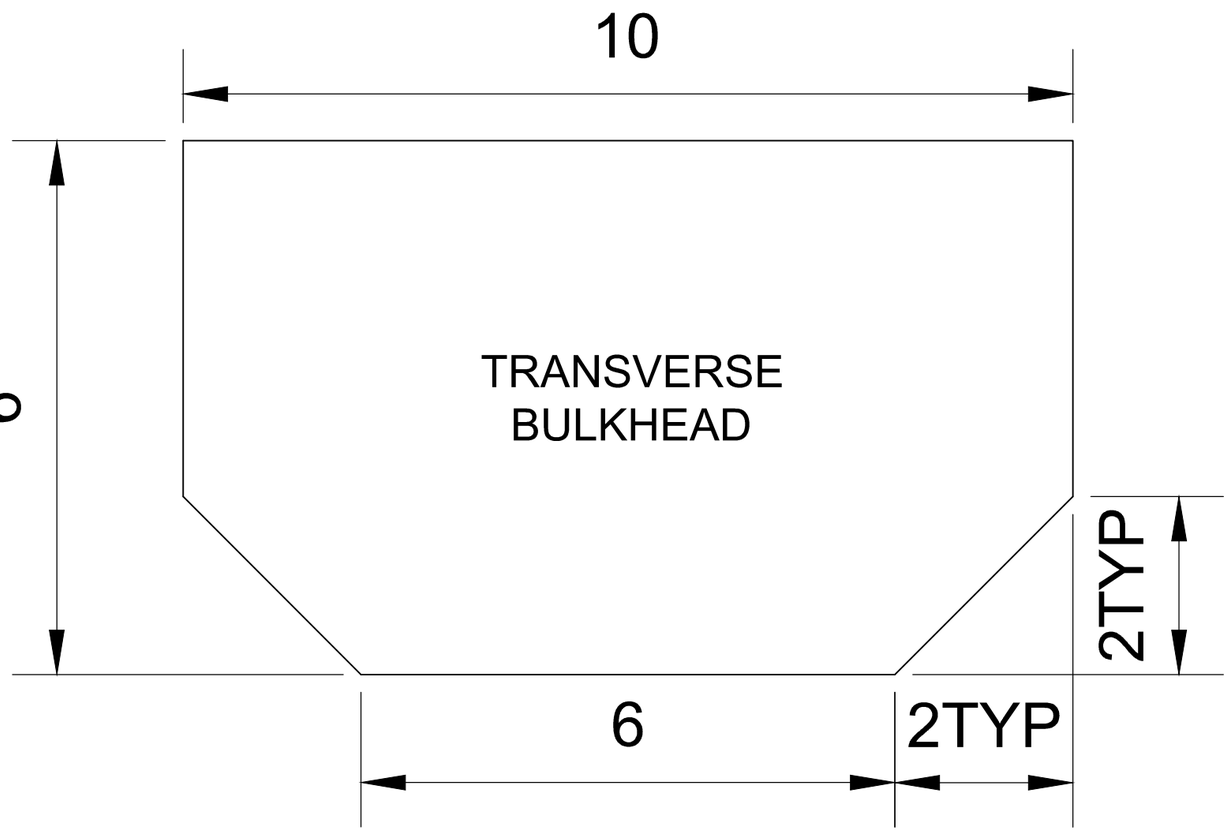
Purpose: **To Manufacture and Assemble a STEM Class Ship for the Royal Canadian Navy**

Scope: This Process Applies to the STEM Class Program Only

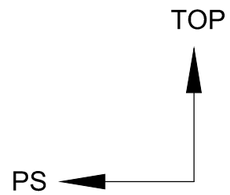


BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
MIDSHIP - TRANSVERSE BULKHEAD	2	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



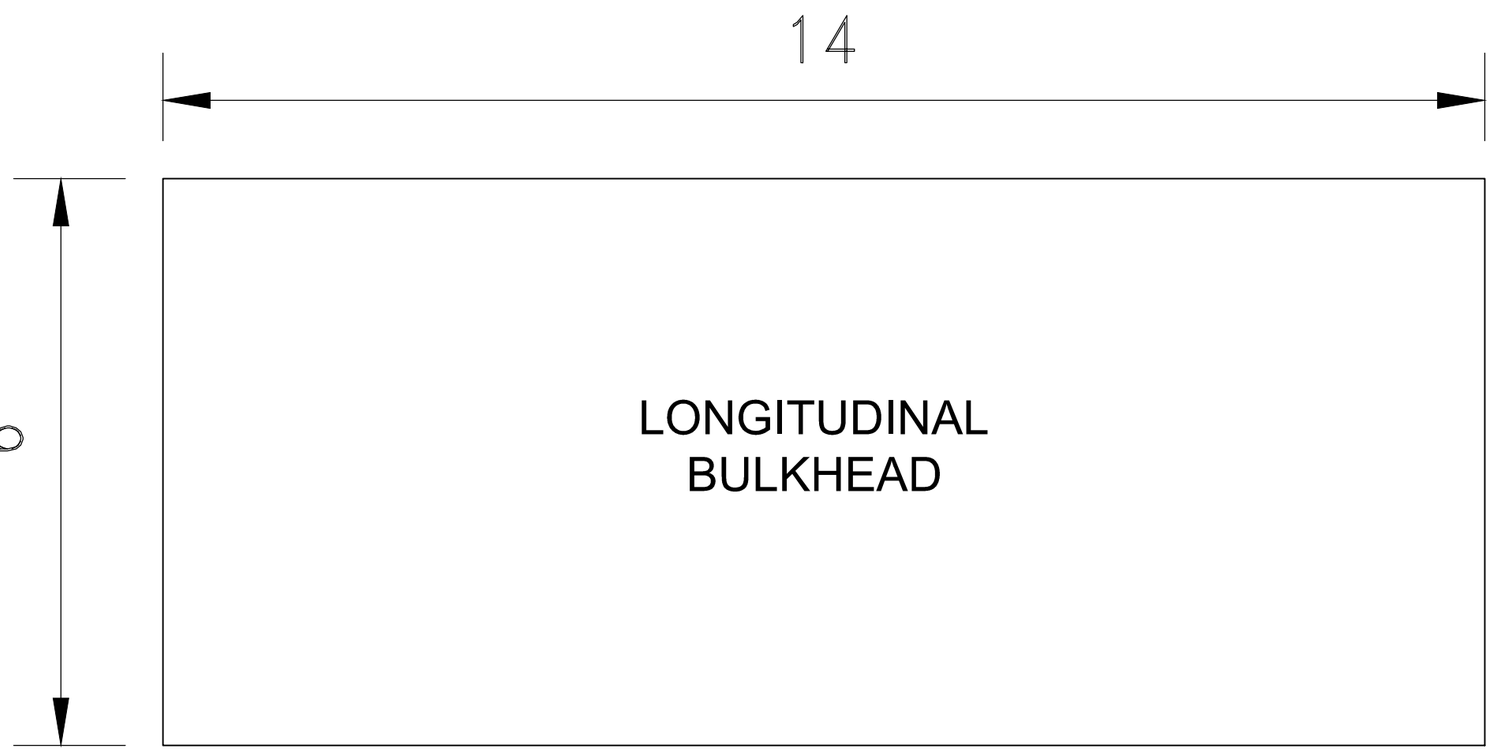
SECTION
LKG FWD



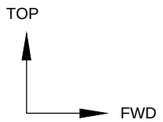
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING MIDSHIP - TRANSVERSE BULKHEAD MEGA BLOCK 2		
STEM CLASS	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
SHIP 1	DWG NO A01-MIDSHIP PACKAGE-001		REV A

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
MIDSHIP - LONGITUDINAL BULKHEAD	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



SECTION
LKG PORT



IRVING
Irving Shipbuilding Inc.

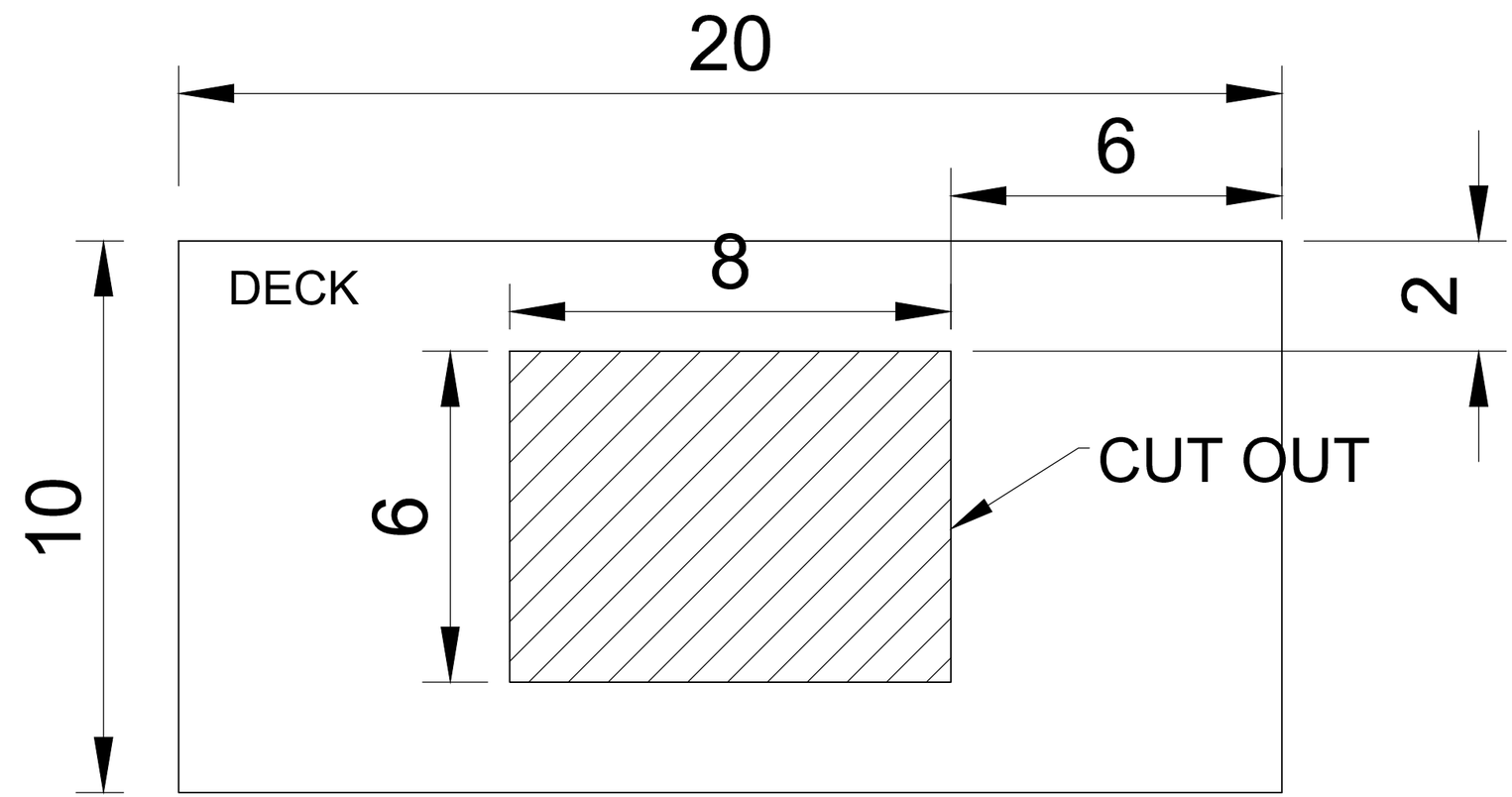
FABRICATION DRAWING
MIDSHIP-LONGITUDINAL BULKHEAD
MEGA BLOCK 2

STEM
CLASS
SHIP 1

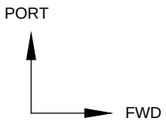
DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D		
SHEET	1	DATE	2018-10-29
DWG NO	A01-MIDSHIP PACKAGE-002	REV	A

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
MIDSHIP - DECK	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



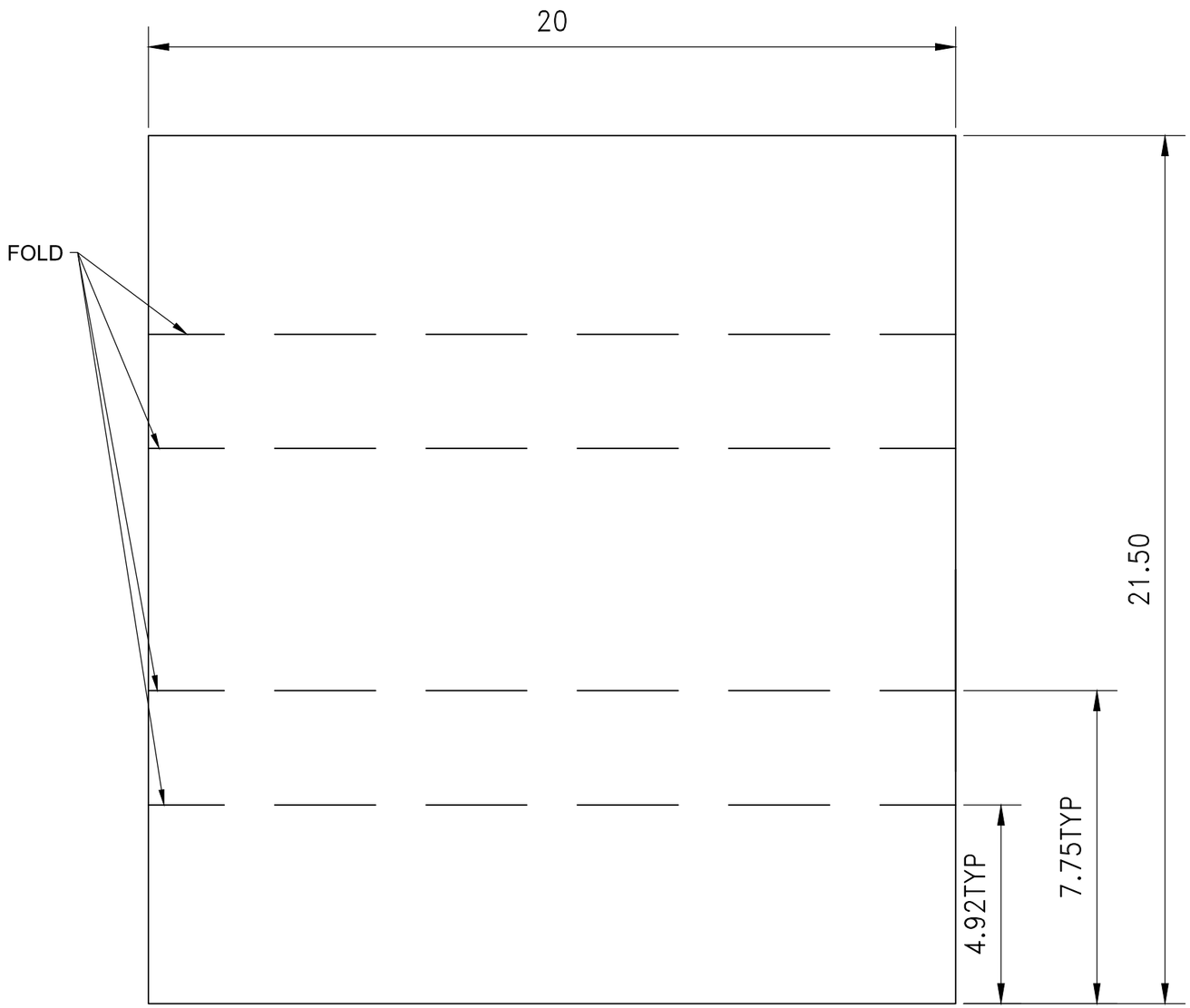
PLAN VIEW
LKG DOWN



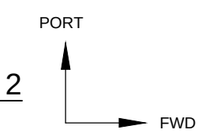
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING MIDSHIP - DECK MEGA BLOCK 2		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-MIDSHIP PACKAGE-003		REV A

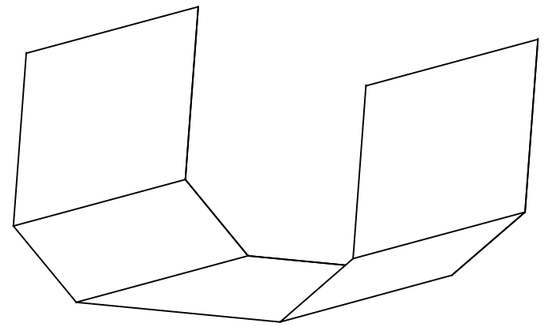
BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
MIDSHIP - SHELL	1	21.5X28CM BLACK PLASTIC PAPER

NOTES:
1.ALL DIMENSIONS IN CENTIMETERS
2.DRAW AND FOLD ALONG FOLD LINES



PLAN VIEW 2
LKG DOWN





3D VIEW

IRVING
Irving Shipbuilding Inc.

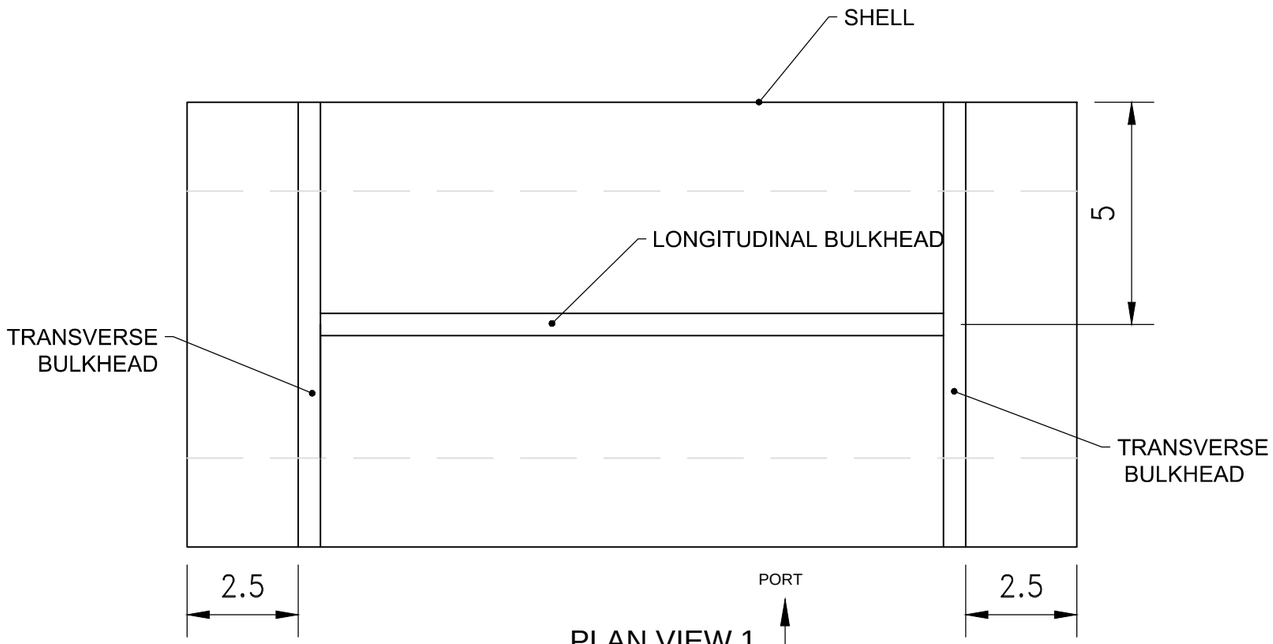
FABRICATION DRAWING
MIDSHIP-SHELL
MEGA BLOCK 2

STEM CLASS
SHIP 1

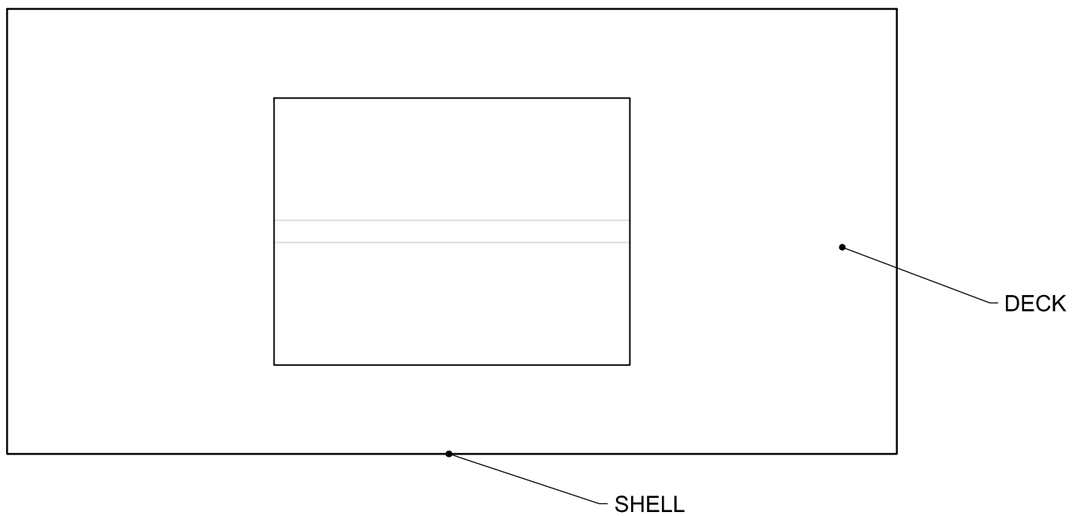
DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D		
SHEET	1	DATE	2018-10-29
DWG NO	A01-MIDSHIP PACKAGE-004	REV	A

PARTS LIST	
NAME	QUANTITY
MIDSHIP - SHELL	1
MIDSHIP - LONGITUDINAL BULKHEAD	1
MIDSHIP - TRANSVERSE BULKHEAD	2
MIDSHIP - DECK	1

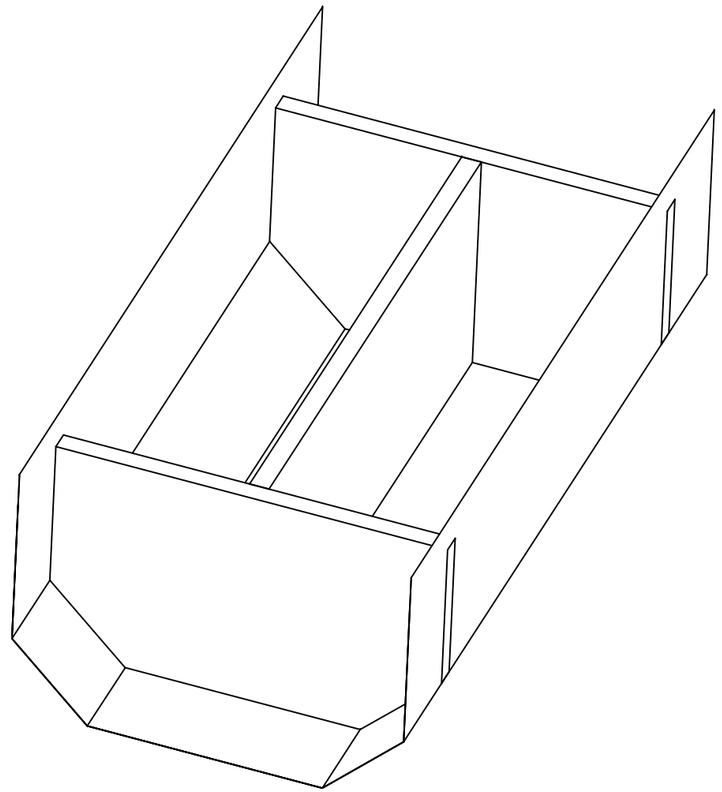
NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2.INSTALL TRANSVERSE AND LONGITUDINAL BULKHEADS ONTO THE SHELL AS SHOWN IN PLAN VIEW 1.
3.INSTALL DECK ON TOP AS SHOWN IN PLAN VIEW 2.



PLAN VIEW 1
LKG DOWN
BULKHEAD INSTALLATION

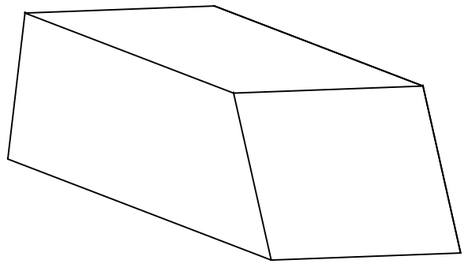


PLAN VIEW 2
LKG DOWN
DECK INSTALLATION



3D VIEW
(DECK NOT SHOWN FOR CLARITY)

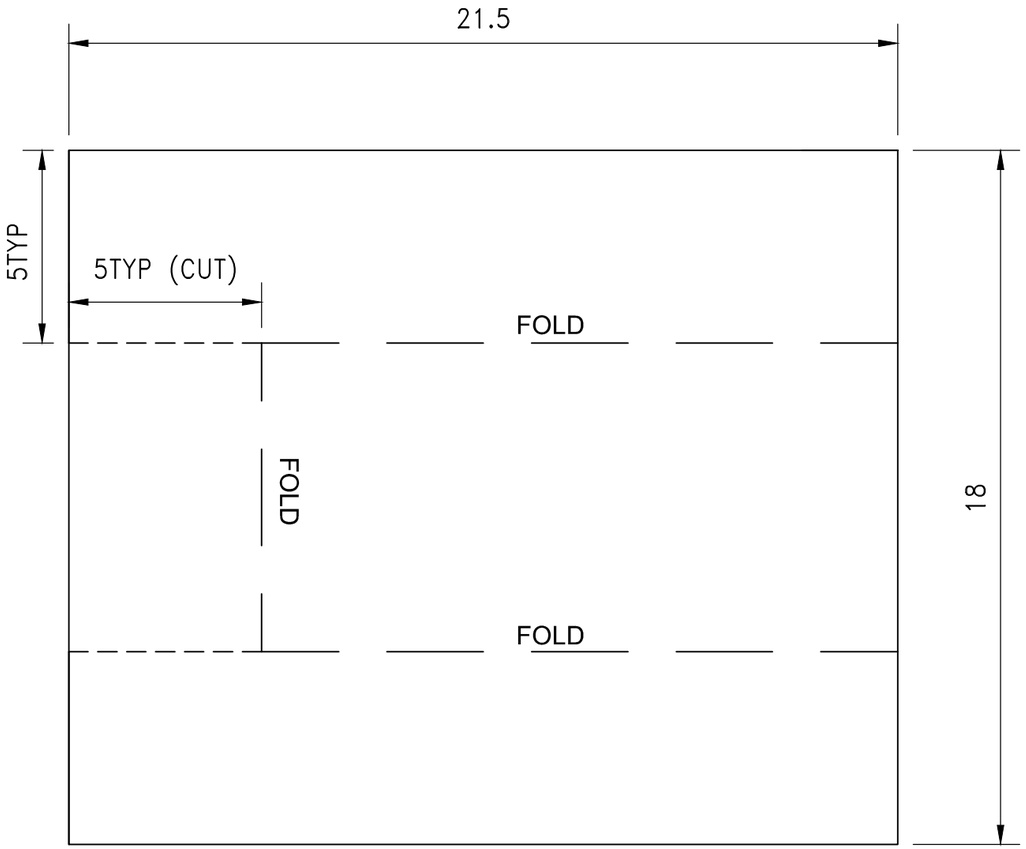
IRVING Irving Shipbuilding Inc.	ASSEMBLY DRAWING MIDSHIP ASSEMBLY MEGA BLOCK 2		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-MIDSHIP PACKAGE-005		REV A



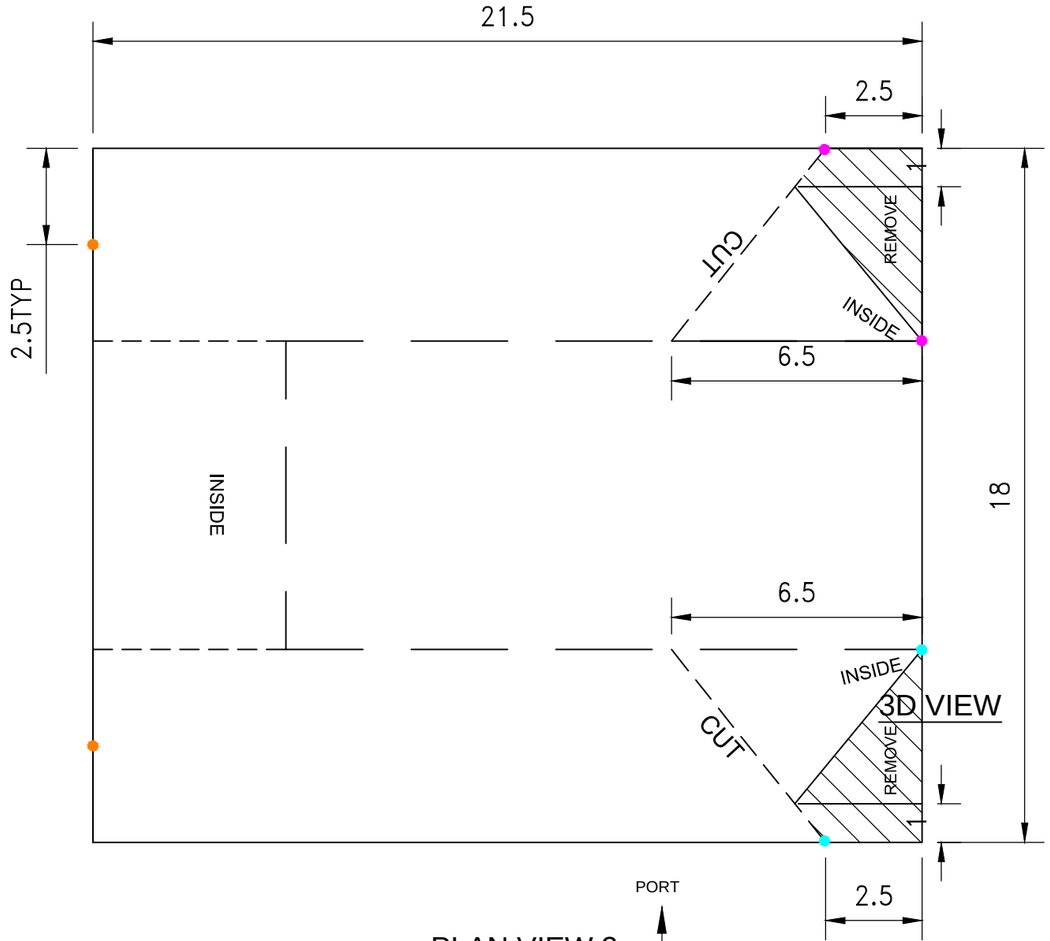
3D VIEW

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
SUPERSTRUCTURE	1	21.5X28CM BLACK PLASTIC PAPER

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2. FOLD ALONG FOLD LINES, AND CUT SECTIONS AS SHOWN.
2. ONCE FOLDING AND CUTTING IS COMPLETE, BRING THE ORANGE CIRCLES TOGETHER WITH THE MIDDLE SECTION INSIDE.
3. BRING THE BLUE CIRCLES TOGETHER, WITH THE INNER TRIANGLES ON THE INSIDE AS INDICATED.DO THE SAME WITH THE OTHER SIDE (PINK CIRCLES).



PLAN VIEW 1
LKG DOWN
DECK INSTALLATION



3D VIEW

PLAN VIEW 2
LKG DOWN
DECK INSTALLATION

IRVING Irving Shipbuilding Inc.

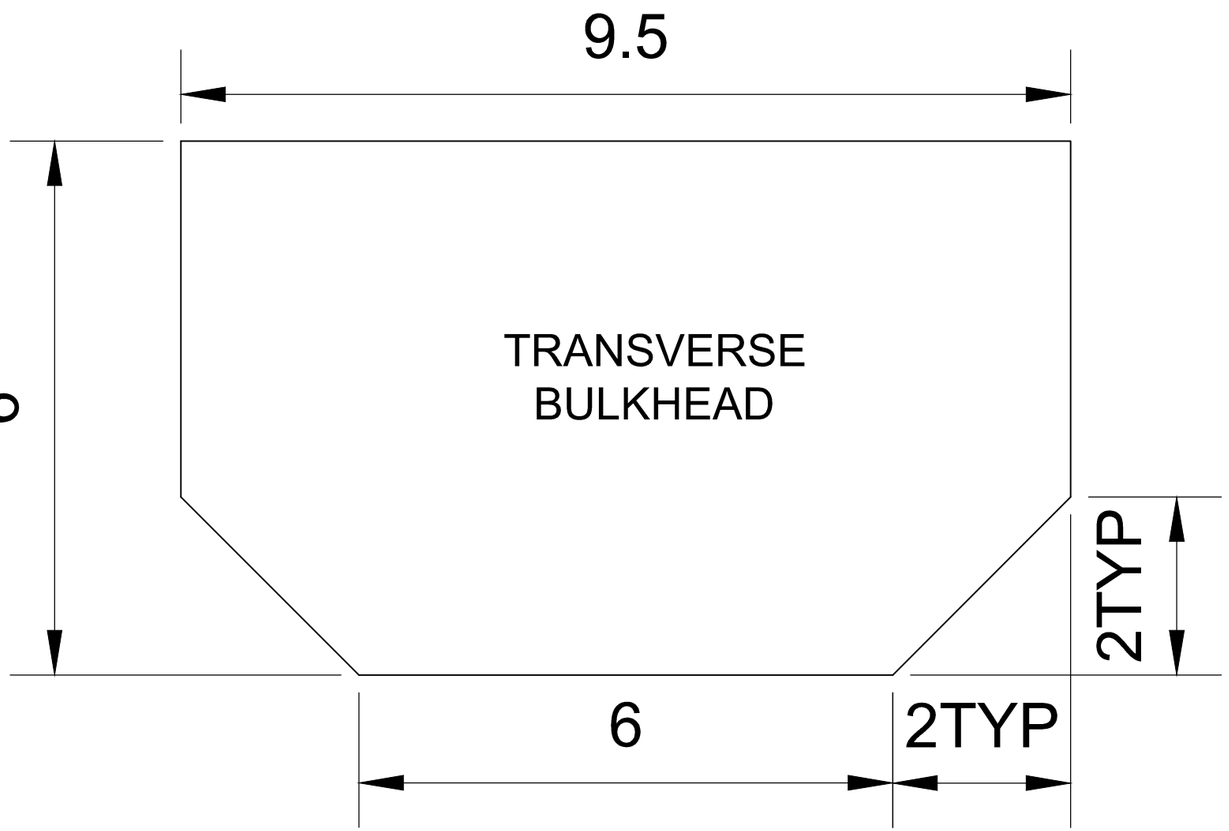
ASSEMBLY DRAWING
SUPERSTRUCTURE ASSEMBLY

STEM CLASS
SHIP 1

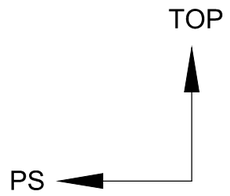
DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D		
SHEET	1	DATE	2018-10-29
DWG NO	A01-MIDSHIP PACKAGE-006	REV	A

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
STERN - TRANSVERSE BULKHEAD	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



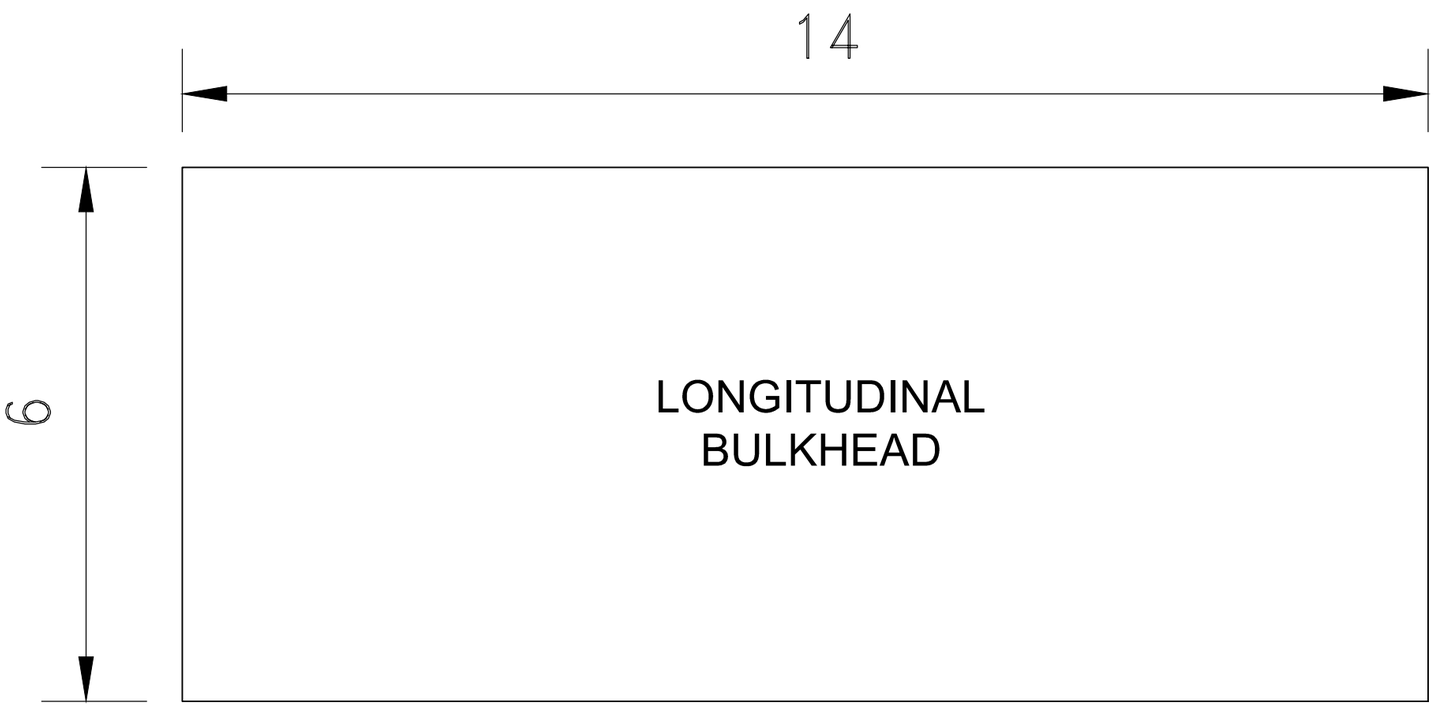
SECTION
LKG FWD



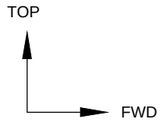
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING STERN - TRANSVERSE BULKHEAD MEGA BLOCK 1		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-STERN PACKAGE-001		REV A

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
STERN - LONGITUDINAL BULKHEAD	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



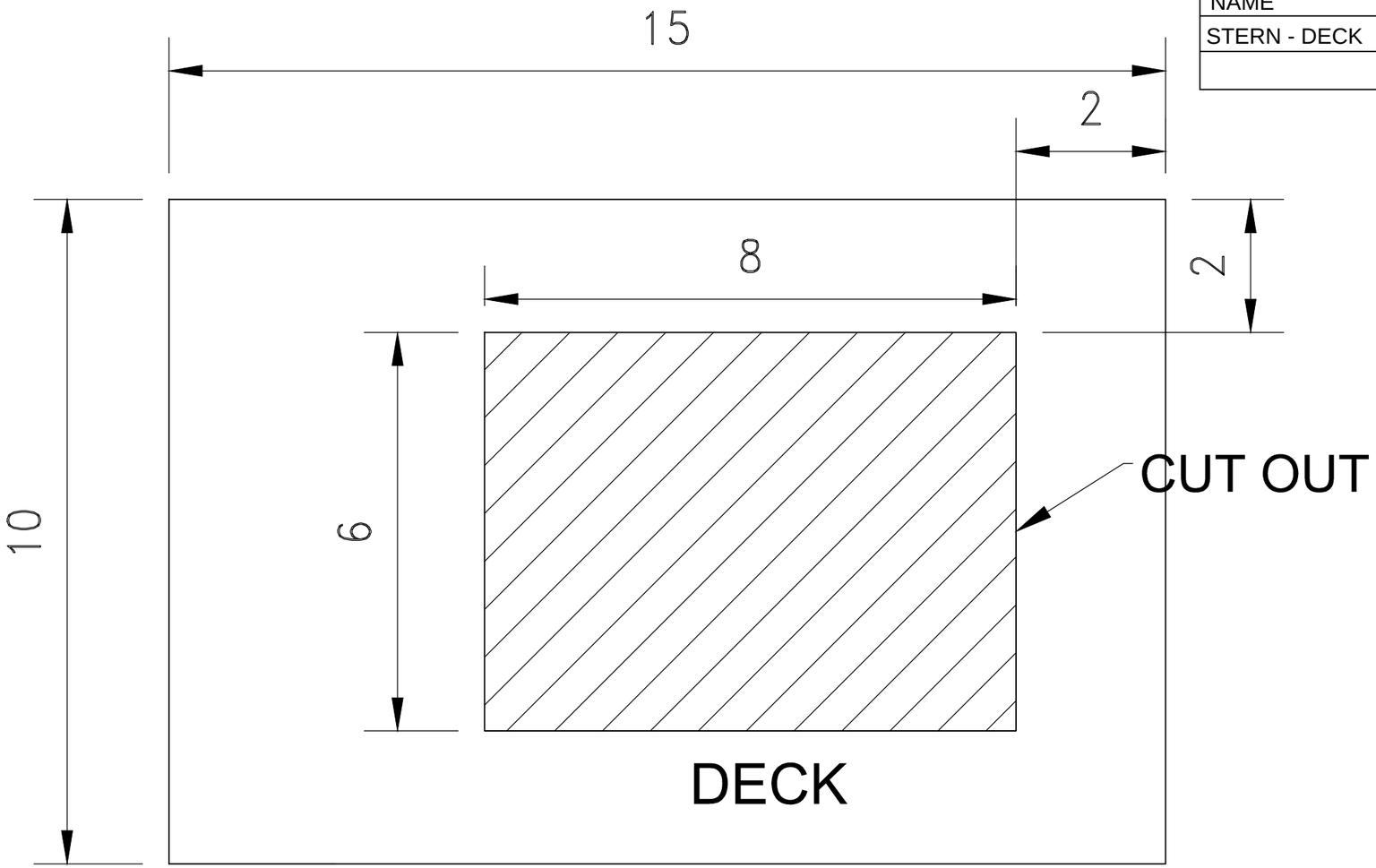
SECTION
LKG PORT

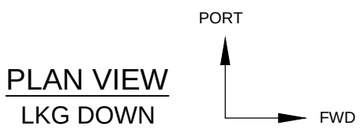


IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING STERN - LONGITUDINAL BULKHEAD MEGA BLOCK 1	
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS
	UNITS MILLIMETERS	SCALE NTS / SIZE D
	SHEET 1	DATE 2018-10-29
	DWG NO A01-STERN PACKAGE-002	REV A

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
STERN - DECK	1	0.5CM THICK FOAM BOARD

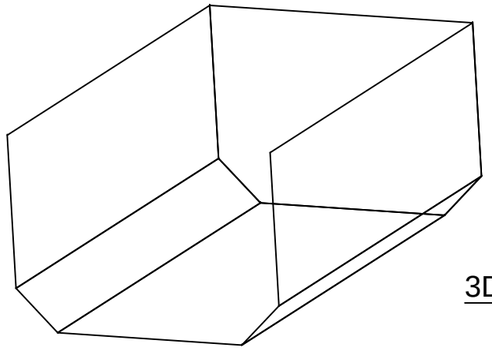
NOTES:
1. ALL DIMENSIONS IN CENTIMETERS





PLAN VIEW
LKG DOWN

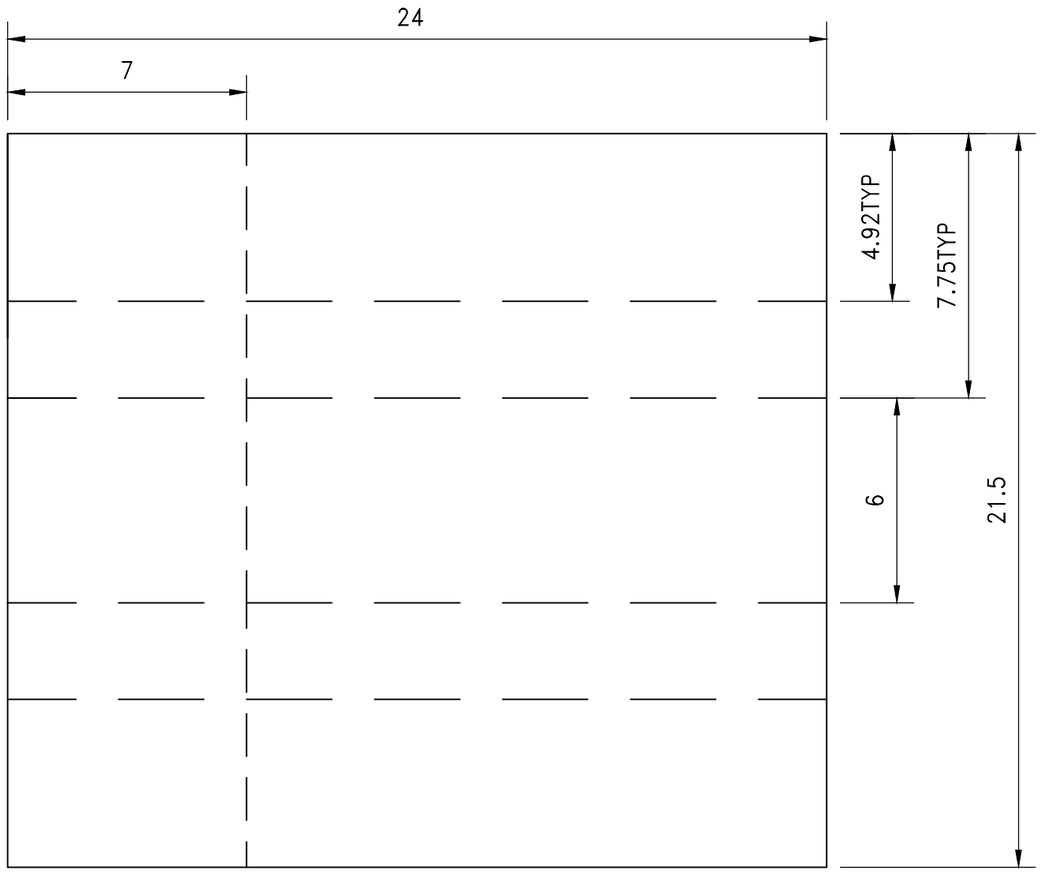
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING STERN - DECK MEGA BLOCK 1		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-STERN PACKAGE-003		REV A



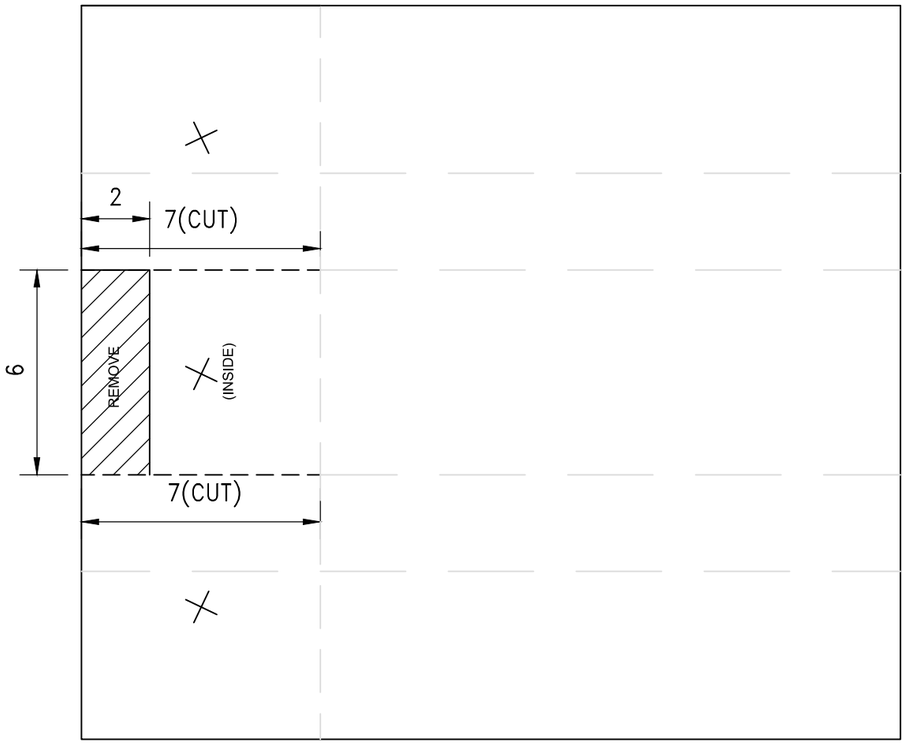
3D VIEW

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
STERN - SHELL	1	21.5X28CM BLACK PLASTIC PAPER

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2. FIRST DRAW ALL THE FOLD LINES AS SHOWN IN PLAN VIEW 1, DO NOT FOLD YET.
3. CUT ALONG THE LINES SHOWN IN PLAN VIEW 2.
4. MARK AN X IN THE CENTER OF THE THREE END SECTIONS.
5. FOLD ALONG THE FOLD LINES.
6. BRING THE END SECTIONS TOGETHER SO THAT THE X'S ALL OVERLAP, WITH THE MIDDLE SECTION ON THE INSIDE.



PLAN VIEW 1
LKG DOWN

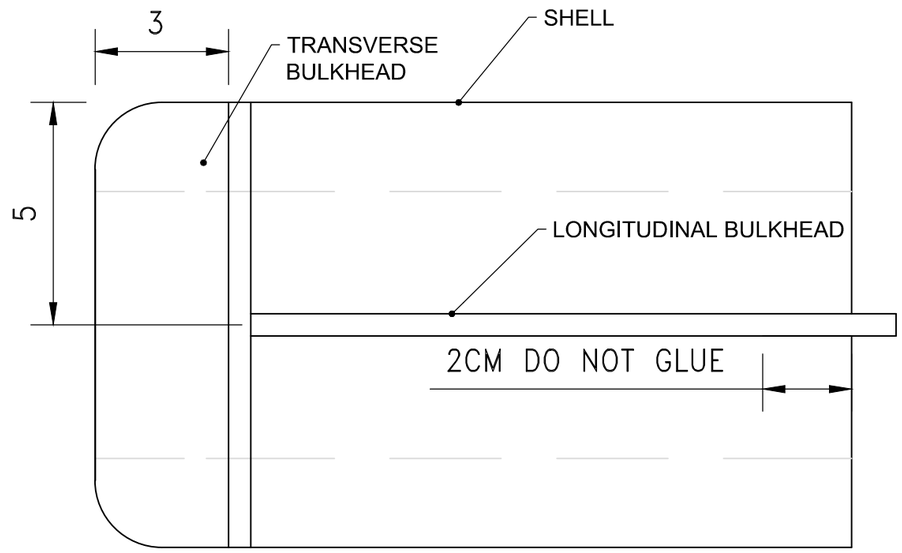


PLAN VIEW 2
LKG DOWN

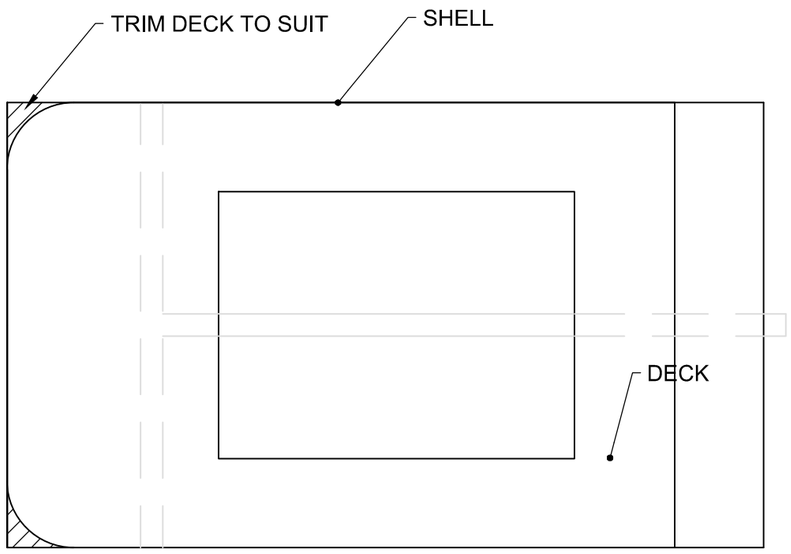
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING STERN - SHELL MEGA BLOCK 1		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-STERN PACKAGE-004		REV A

PARTS LIST	
NAME	QUANTITY
STERN - SHELL	1
STERN - LONGITUDINAL BULKHEAD	1
STERN- TRANSVERSE BULKHEAD	1
STERN - DECK	1

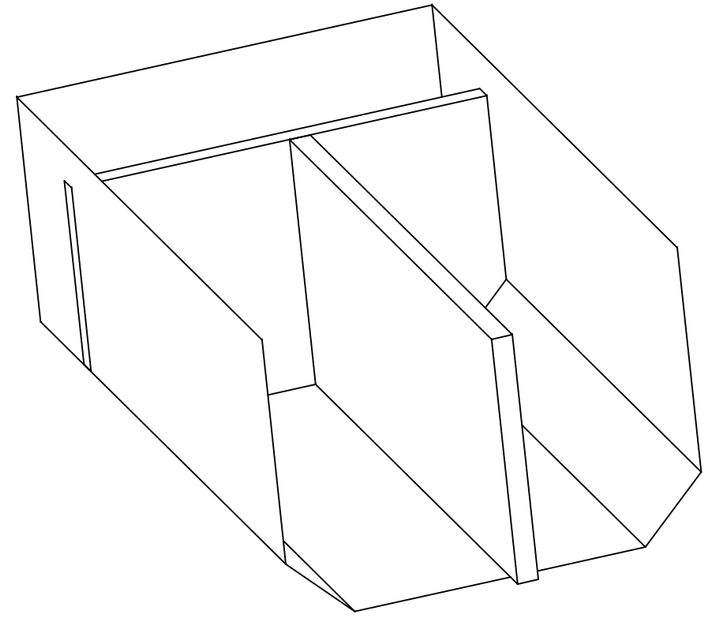
NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2. INSTALL TRANSVERSE AND LONGITUDINAL BULKHEADS ONTO THE SHELL AS SHOWN IN PLAN VIEW 1.
3. INSTALL DECK ON TOP AS SHOWN IN PLAN VIEW 2.



PLAN VIEW 1
LKG DOWN
BULKHEAD INSTALLATION



PLAN VIEW 2
LKG DOWN
DECK INSTALLATION

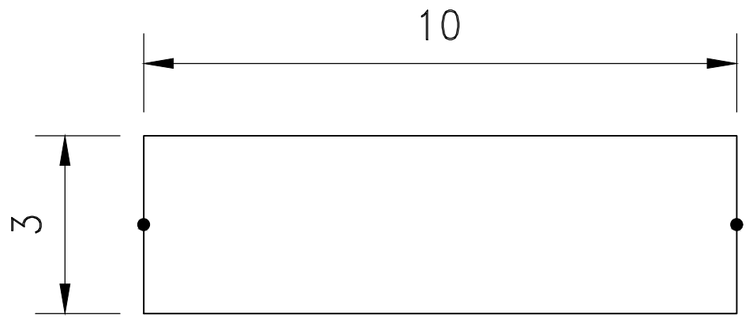


3D VIEW
(DECK NOT SHOWN FOR CLARITY)

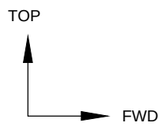
IRVING Irving Shipbuilding Inc.	ASSEMBLY DRAWING STERN ASSEMBLY MEGA BLOCK 1		
STEM CLASS	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
SHIP 1	DWG NO A01-STERN PACKAGE-005		REV A

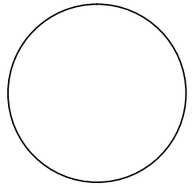
BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
MAST	1	21.5X28CM BLACK PLASTIC PAPER

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2. ROLL THE PAPER OVERLAPPING THE BLACK DOTS.
3. USE ROLLED PAPER TO TRACE A CIRCLE FOR THE TOP.
4. INSTALL FLAG ON TOP.

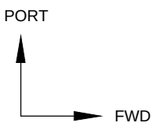


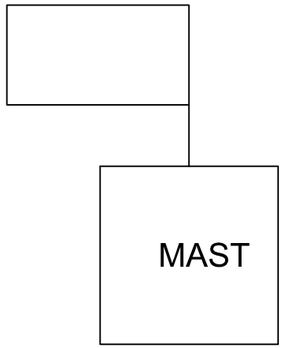
SECTION 1
LKG PORT



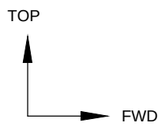


PLAN VIEW
LKG DOWN





SECTION 2
LKG PORT



IRVING
Irving Shipbuilding Inc.

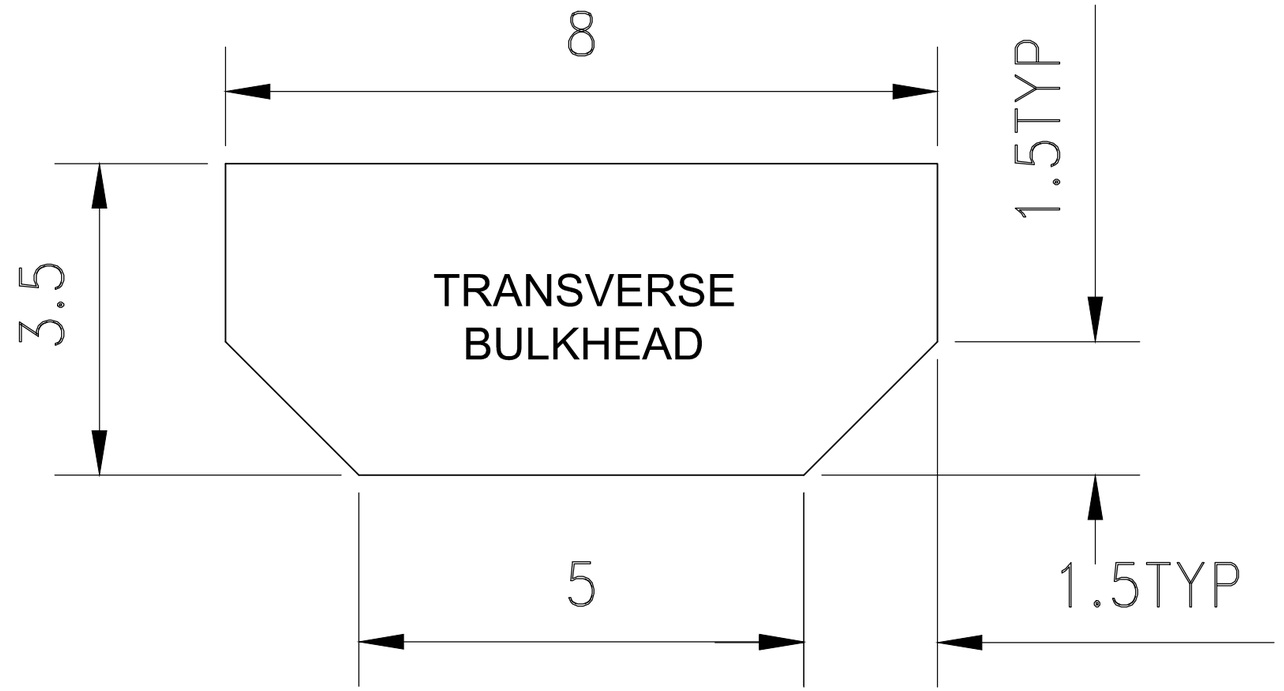
ASSEMBLY DRAWING
MAST ASSEMBLY

STEM CLASS
SHIP 1

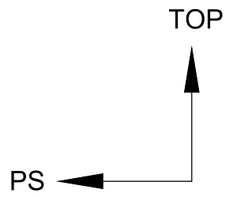
DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D	SHEET	1
DATE	2018-10-29	DWG NO	A01-STERN PACKAGE-006
REV	A		

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
BOW - TRANSVERSE BULKHEAD	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



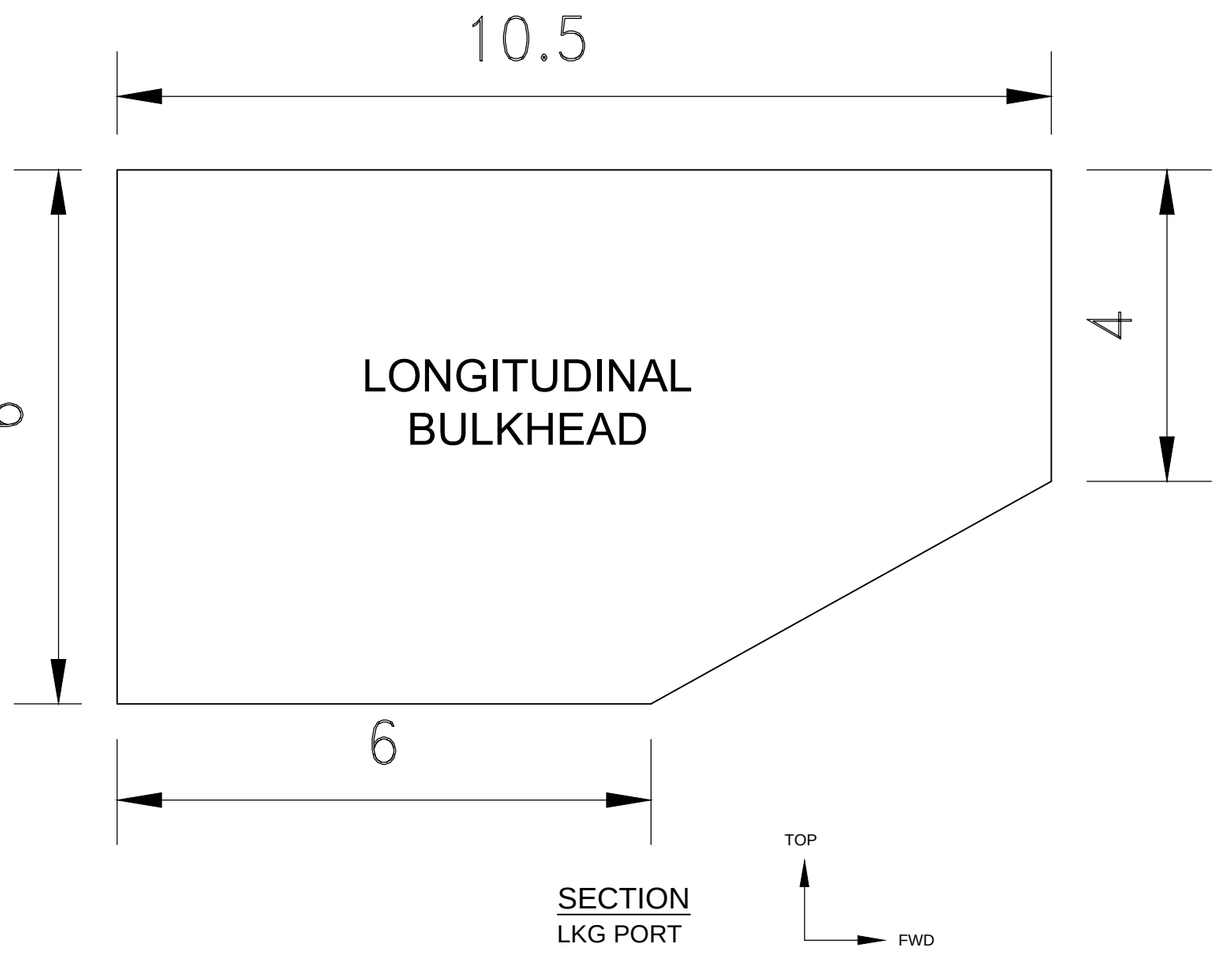
SECTION
LKG FWD



IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING BOW - TRANSVERSE BULKHEAD MEGA BLOCK 3		
STEM CLASS	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
SHIP 1	DWG NO A01-BOW PACKAGE-001		REV A

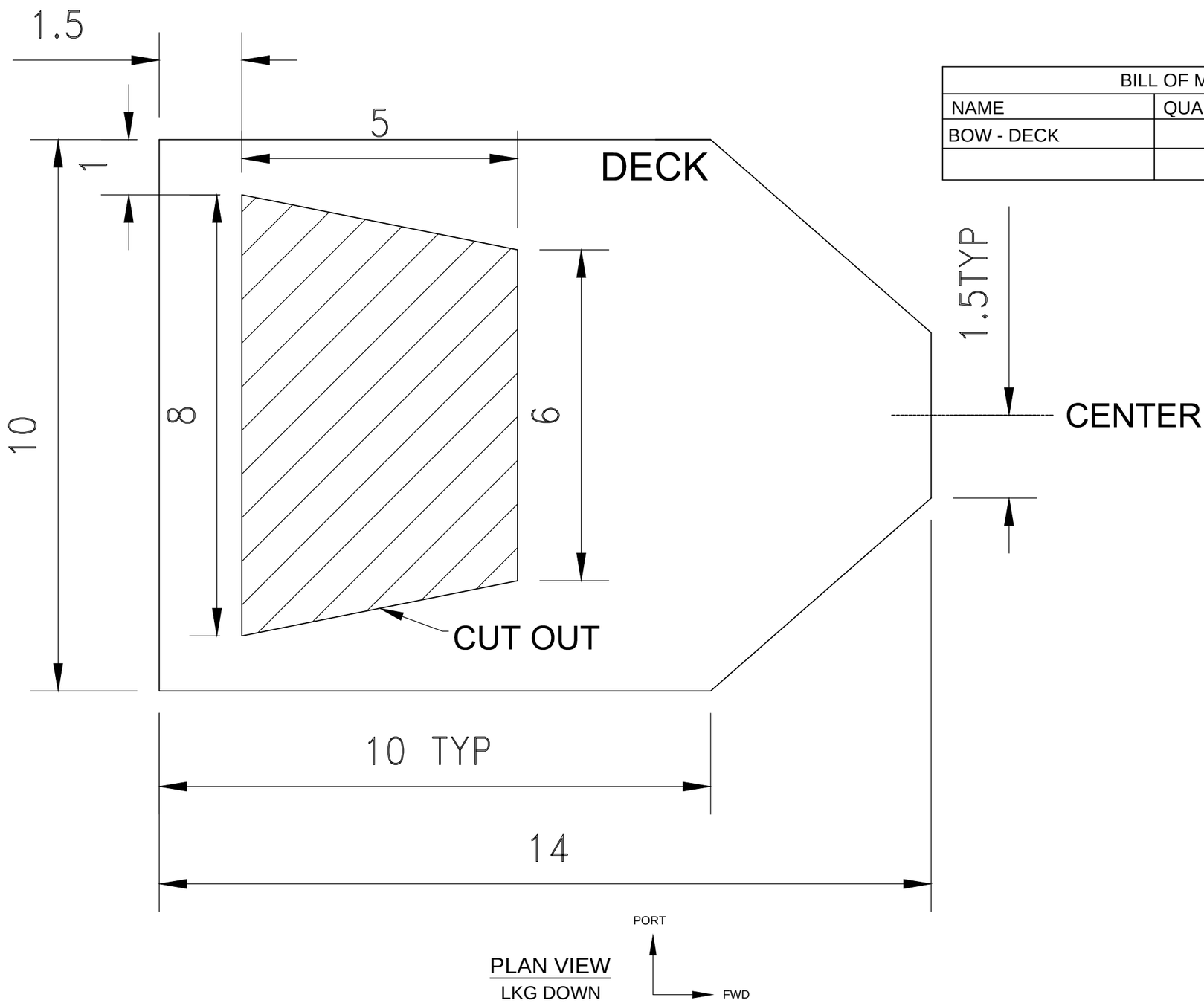
BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
BOW - LONGITUDINAL BULKHEAD	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS



SECTION
LKG PORT

IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING BOW - LONGITUDINAL BULKHEAD MEGA BLOCK 3		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-BOW PACKAGE-002		REV A

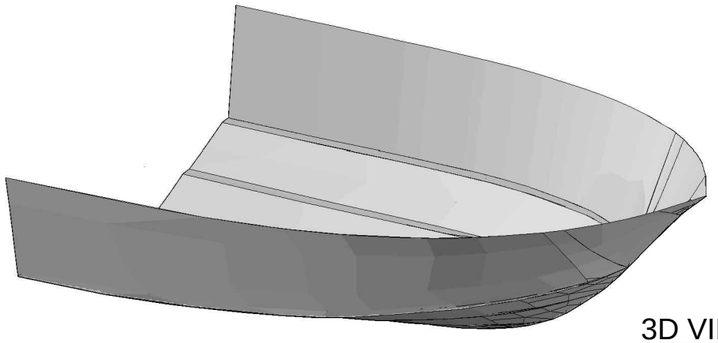


BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
BOW - DECK	1	0.5CM THICK FOAM BOARD

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS

PLAN VIEW
LKG DOWN

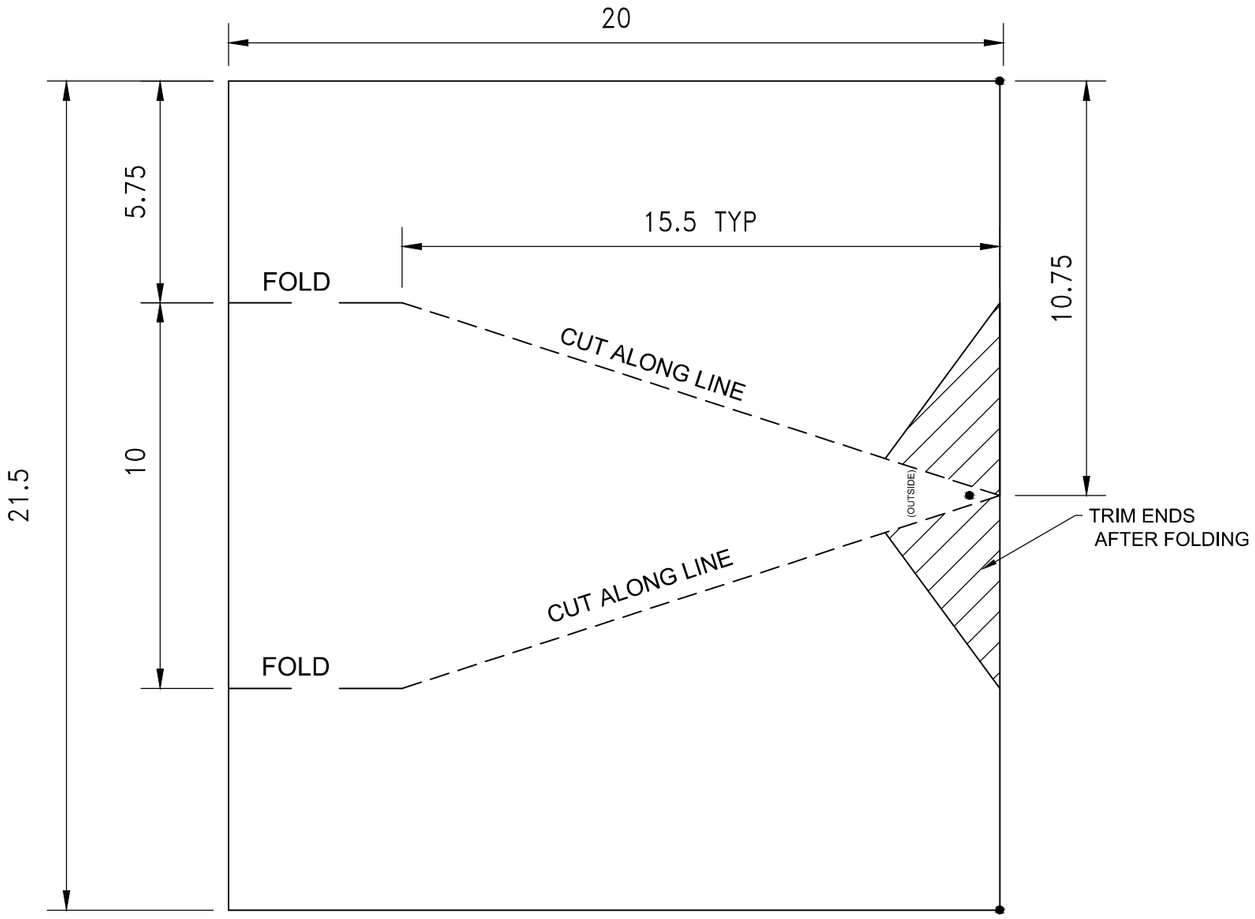
IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING BOW - DECK MEGA BLOCK 3		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-BOW PACKAGE-003		REV A



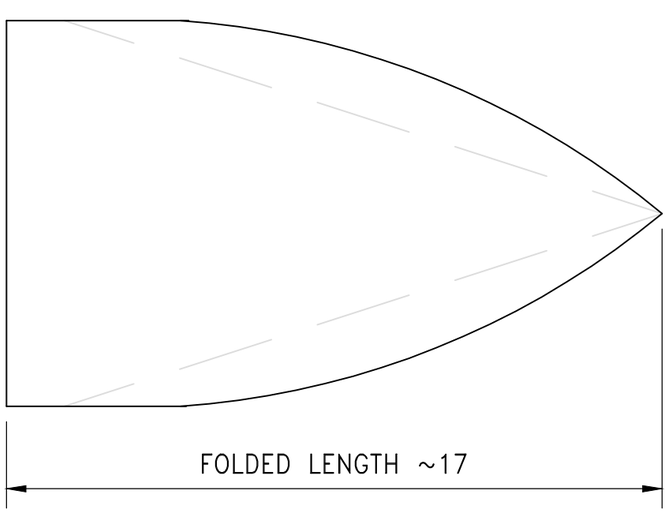
3D VIEW

BILL OF MATERIALS		
NAME	QUANTITY	MATERIAL DESCRIPTION
BOW - SHELL	1	21.5X28CM BLACK PLASTIC PAPER

NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2.DRAW FOLD LINES AND CUT LINES.
3.CUT ALONG CUT LINE.
4. BRING THE CORNERS MARKED WITH A CIRCLE TOGETHER TO OVERLAP, WITH THE MIDDLE SECTION, THE MIDDLE SECTION SHOULD BE ON THE OUTSIDE. STAPLE THESE 3 POINTS TOGETHER FIRST, THEN GLUE.

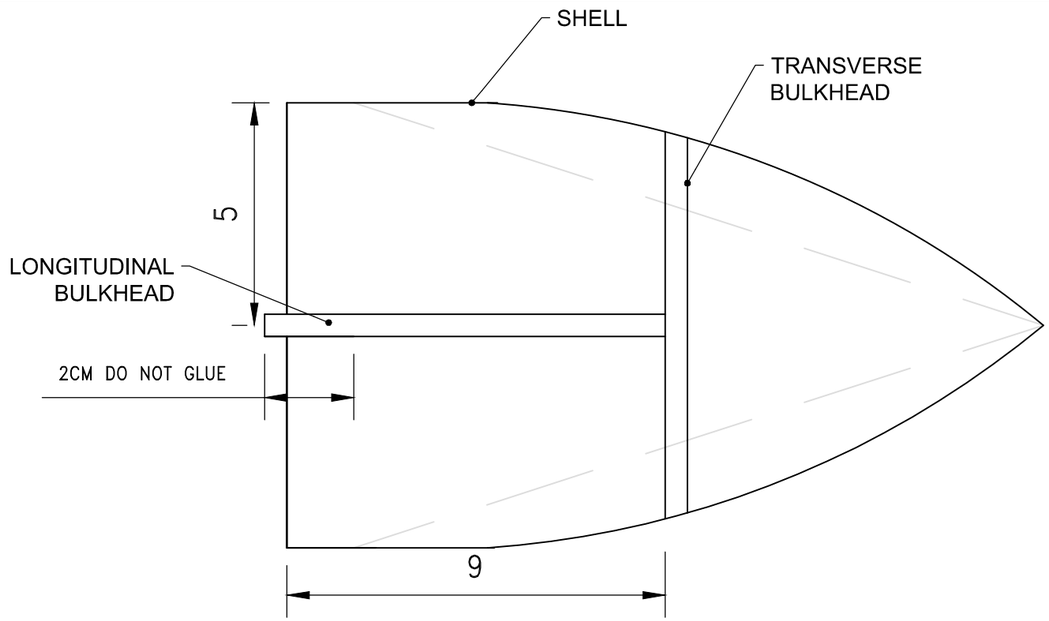


PLAN VIEW 1
LKG DOWN
UNFOLDED



PLAN VIEW 2
LKG DOWN
UNFOLDED

IRVING Irving Shipbuilding Inc.	FABRICATION DRAWING BOW - SHELL MEGA BLOCK 3		
STEM CLASS SHIP 1	DWN K. JACKMAN	CHK C.BANKS	
	UNITS MILLIMETERS	SCALE NTS	SIZE D
	SHEET 1	DATE 2018-10-29	
	DWG NO A01-BOW PACKAGE-004		REV A



PLAN VIEW 1

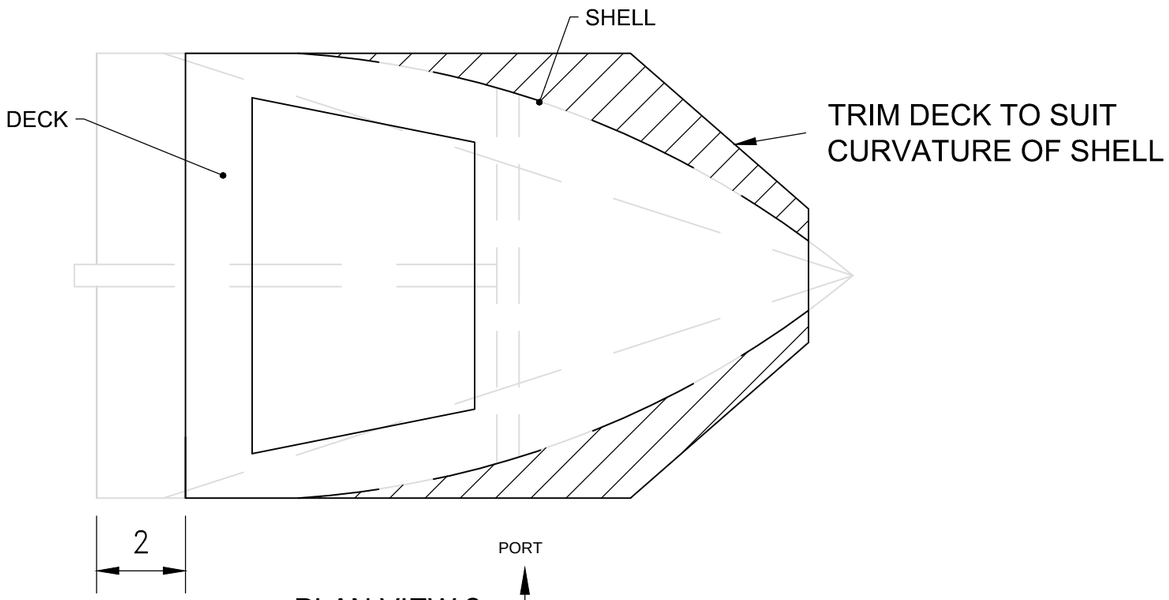
LKG DOWN

BULKHEAD INSTALLATION

PARTS LIST	
NAME	QUANTITY
BOW - SHELL	1
BOW - LONGITUDINAL BULKHEAD	1
BOW - TRANSVERSE BULKHEAD	1
BOW - DECK	1

NOTES:

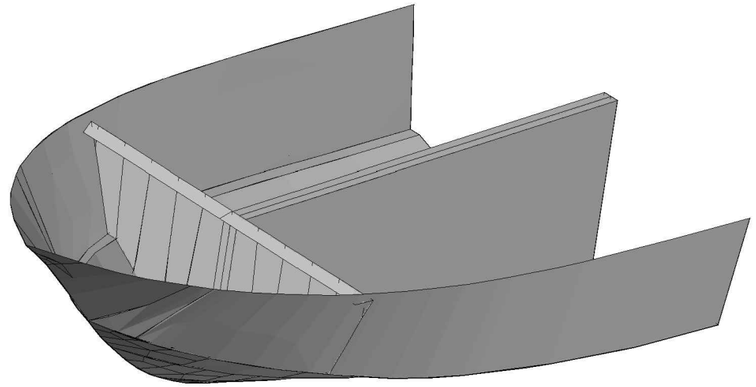
1. ALL DIMENSIONS IN CENTIMETERS
2. TRIM BOTTOM PART OF BULKHEADS TO SUIT CURVATURE OF THE SHELL IF NEEDED.
3. TRIM THE DECK TO SUIT THE CURVATURE OF THE SHELL.



PLAN VIEW 2

LKG DOWN

DECK INSTALLATION



3D VIEW

(DECK NOT SHOWN FOR CLARITY)

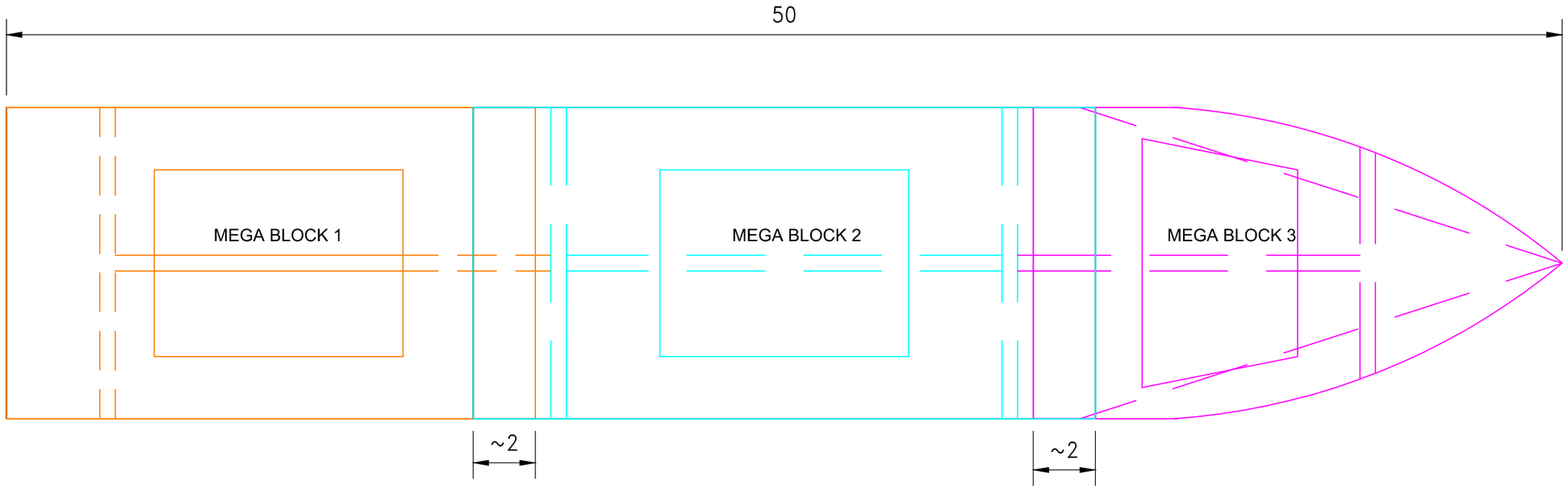
IRVING Irving Shipbuilding Inc.

ASSEMBLY DRAWING
BOW ASSEMBLY
MEGA BLOCK 3

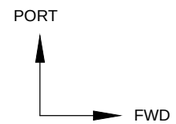
STEM CLASS

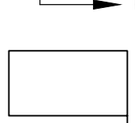
SHIP 1

DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D		
SHEET	1	DATE	2018-10-29
DWG NO	A01-BOW PACKAGE-005	REV	A



PLAN VIEW
LKG DOWN

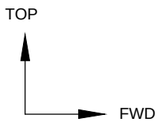


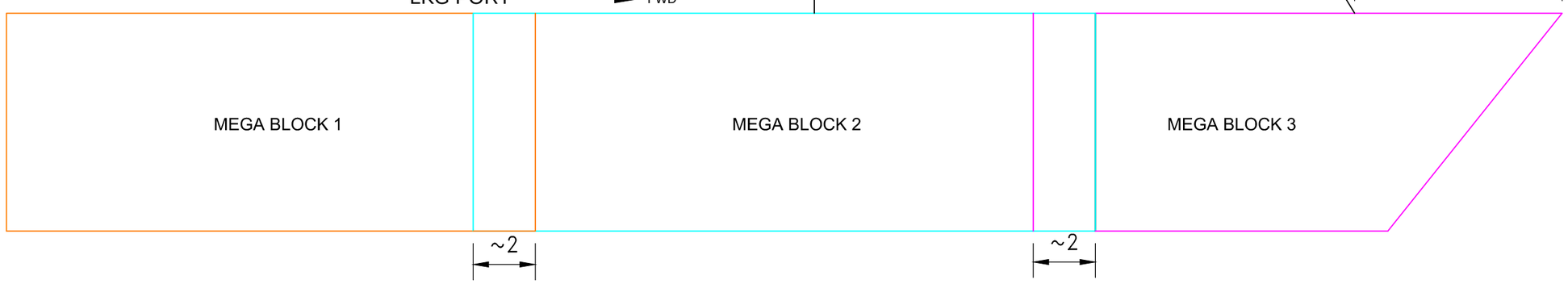


MAST

SUPERSTRUCTURE

SECTION
LKG PORT





NOTES:
1. ALL DIMENSIONS IN CENTIMETERS
2. OVERLAP THE MEGA BLOCK SHELLS TO GET A FULL SHIP LENGTH OF 50CM. OVERLAP'S ARE APPROXIMATELY 2CM.
3.MAY NEED TO TRIM DECKS AND OR LONGITUDINAL BULKHEADS TO FIT MEGA BLOCKS TOGETHER.
3. DO NOT GLUE THE SUPERSTRUCTURE ON, LIGHTLY TAPE IT. YOU WILL NEED TO BE ABLE TO REMOVE THE SUPERSTRUCTURE TO ADD WEIGHT INSIDE.

IRVING Irving Shipbuilding Inc.

ASSEMBLY DRAWING
MEGA BLOCK JOIN
SHIP 1

STEM
CLASS

SHIP 1

DWN	K. JACKMAN	CHK	C.BANKS
UNITS	MILLIMETERS	SCALE	NTS
SIZE	D		
SHEET	1	DATE	2018-10-29
DWG NO	A01-MEGA BLOCK PACKAGE-001	REV	A