

Fisheries and Oceans
Pêches et Océans

SMALL CRAFT HARBOURS

RUSHBROOK HARBOUR ANCHOR INSTALL

DRAWING LIST		REVISION			
DRAWING NO.	DRAWING TITLE	A	B	C	D
RB-BW-000	DRAWING LIST				
RB-BW-001	GENERAL ARRANGEMENT				
RB-BW-002	MOORING ANCHOR LAYOUT				
RB-BW-003	BRIDGE LINES				
RB-BW-004	FLOAT B SECTION				
RB-BW-005	FLOAT C SECTION				
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RB-BW-007	FLOAT E SECTION				
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RB-BW-012	ALL SECTIONS				
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RB-BW-014	5 T ANCHOR				
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RB-BW-016	FLOAT CROSS SECTION				
RB-BW-017	KELLET				

Revision / Révision	Description/Description	Date/Date
Client/client		

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division
200 - 401 Burrard Street
Vancouver, Canada, V6C 3S4

Project title/Titre du projet

RUSHBROOK HARBOUR ANCHOR INSTALLATION

Approved by/Approuvé par
A.C.

Designed by/Concept par
S.L.

Drawn by/Dessiné par
S.L.

PWGC Project Manager/Administrateur de Projets TPsGC

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Client/client

Drawing title/Titre du dessin

DRAWING LIST

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
RB-BW	000	
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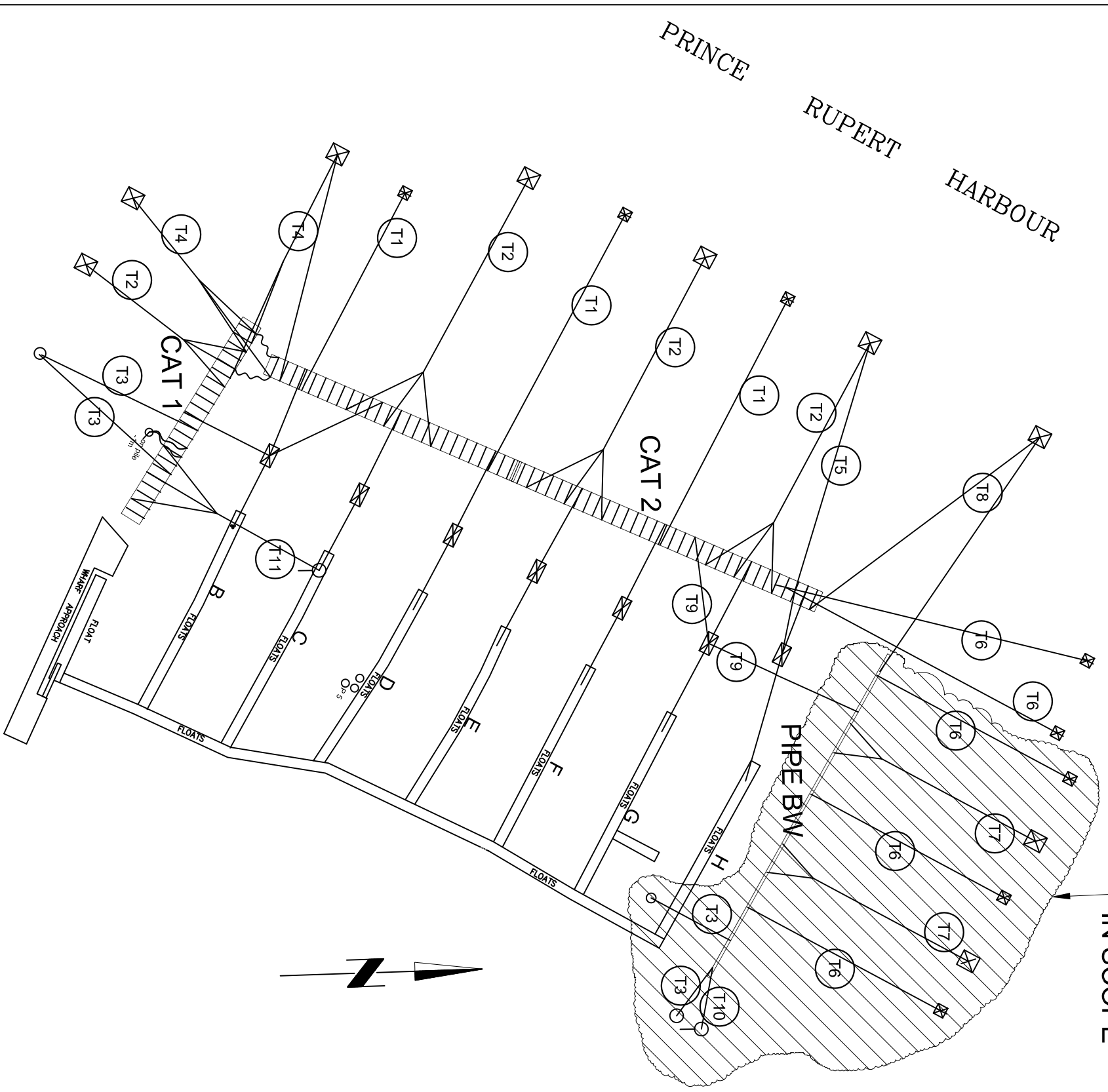


**NOT INCLUDED
IN SCOPE**

Not Shown: Recovery Lines, Bridge Lines Bridge, 1/2 Lock Block

DRAWING NOTES:

- Mooring system plan lengths and shall not be used for construction. Mooring line lengths and positioning to be provided by the Engineer or prior to construction.
- Bridge Lines (Kallet diagonal to Float) not shown
- Lines near other lines must be installed in the order specified by the Engineer on site. The direct lines from the kallet to the float are tightened after bridge lines are installed and tensioned.
- 5 and 10 T Anchors require approx. 5m of chain to pass through the anchor hole and wrap around the block. See dwg 12 for details on 10T anchor. 5 T anchors to be the same concept (steel same dia but shorter lengths to suit and outside dimensions of 4ftx4ftx4ft).
- Mooring lines attached to the breakwater or floats require 2m excess chain from tensioning adjustment.



**RUSHBROOKE HARBOUR
ANCHOR INSTALLATION**

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Small Craft Harbours Branch
Pacific Division
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Project title/Titre du projet

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Ressources Architecturales et de Directeur d'ingénierie, TRSOC

Client/client

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GENERAL ARRANGEMENT

Project No./No. du projet	Sheet/Feuille	Revision no./ La Revision no.
RB-BW	001	OF

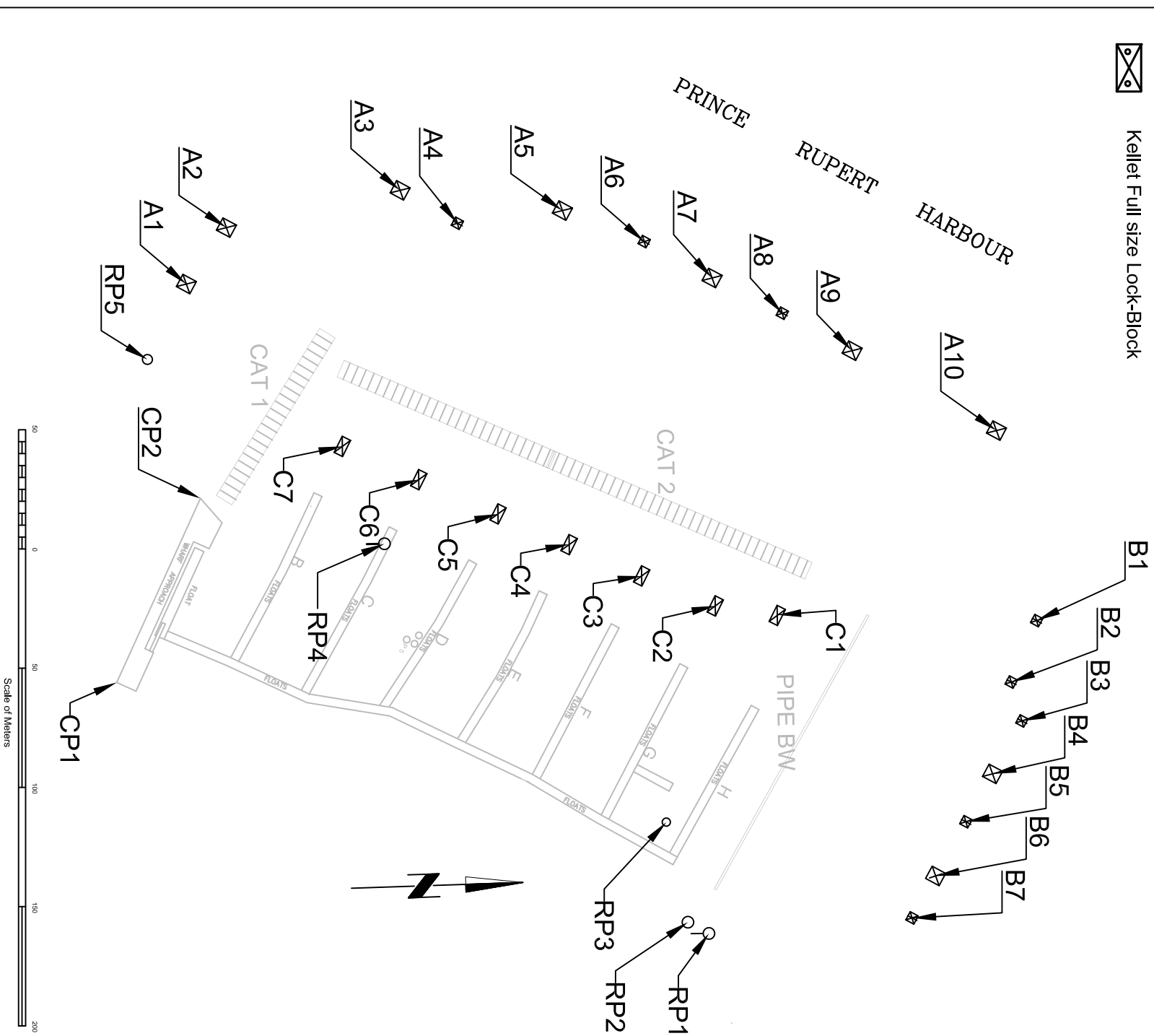


LEGEND

- Existing Rock Pin
- New 2" dia Rock Pin
- ⊗ 10T Anchors
- ⊗ 5T Anchors
- ⊗ Kelleit Full size Lock-Block

NOTE: ANCHORS TO BE PLACED WITHIN +/- 5.0M OF SPECIFIED LOCATIONS. ANCHORS FOUND TO BE OUT OF POSITION ARE TO BE REPOSITIONED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

NOTE: ANCHORS SHALL NOT BE DROPPED.



CONTROL POINTS - UTM			
POINT #	NORTHING	EASTING	ELEV.
CP1	6020335	415075	9
CP2	6020373	414999	9

ANCHOR LOCATION - UTM			
POINT #	NORTHING	EASTING	APPROX. DEPTH
A1	6020370	414909	6
A2	6020388	414886	16
A3	6020461	414873	46
A4	6020485	414888	50
A5	6020529	414884	65
A6	6020563	414898	77
A7	6020591	414914	82
A8	6020620	414930	84
A9	6020649	414947	81
A10	6020708	414982	83
B1	6020722	415063	81
B2	6020711	415088	80
B3	6020715	415104	78
B4	6020701	415126	76
B5	6020690	415146	74
B6	6020676	415168	71
B7	6020666	415185	70
C1	6020613	415057	74
C2	6020588	415052	64
C3	6020557	415038	53
C4	6020527	415024	47
C5	6020498	415010	49
C6	6020465	414995	38
C7	6020433	414980	25

ROCK PIN LOCATION - UTM			
POINT #	NORTHING	EASTING	APPROX. DEPTH
RP1	6020580	415189	14
RP2	6020572	415184	4
RP3	6020564	415142	27
RP4	6020450	415020	4
RP5	6020353	414941	1

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Client/client




Drawing Title/Titre du dessin

MOORING ANCHOR LAYOUT

Project No./No. du projet	Sheet/Feuille	Revision no./La Revision no.
RB-BW	002	
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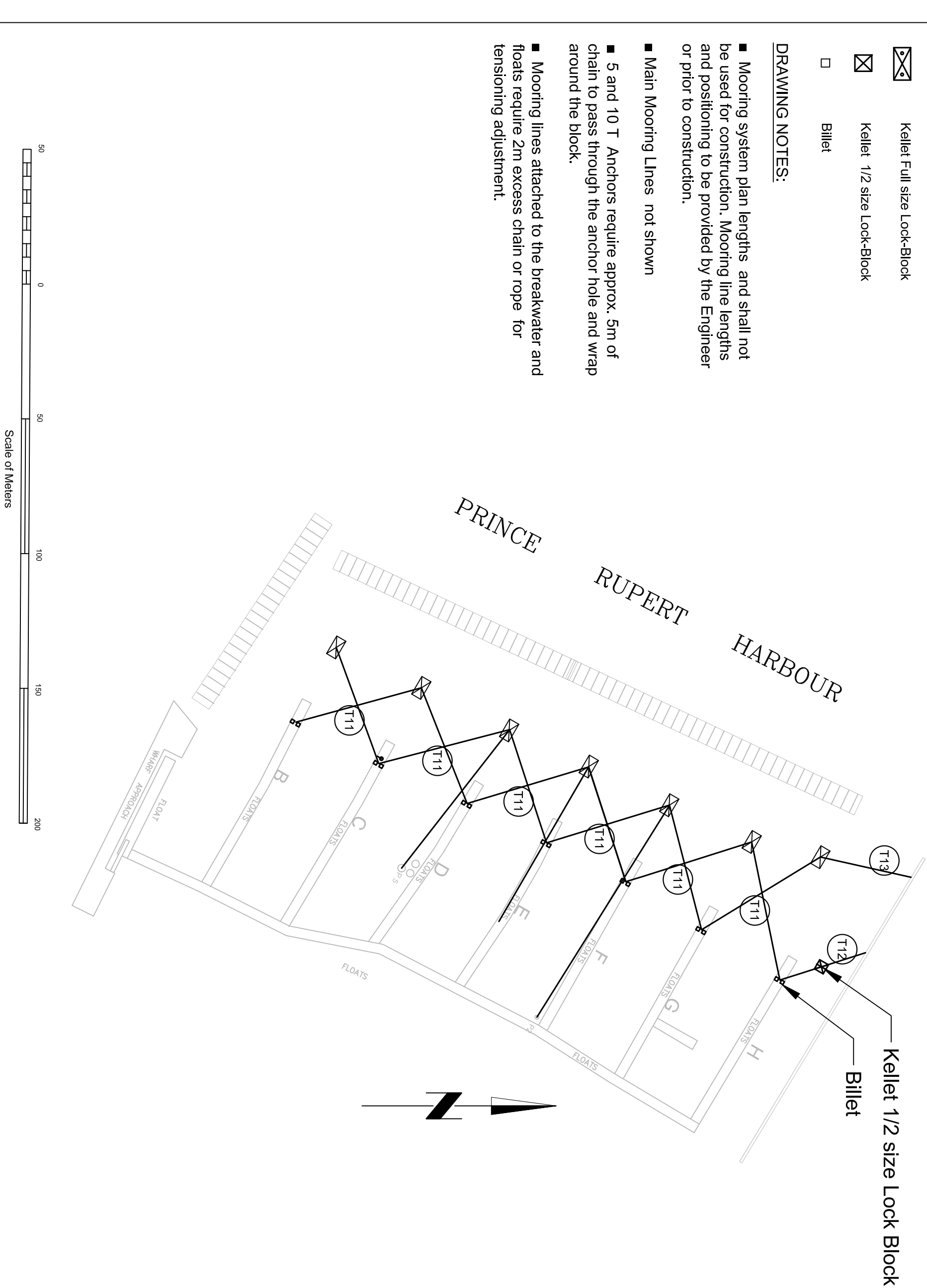


LEGEND

-  Kellet Full size Lock-Block
-  Kellet 1/2 size Lock-Block
-  Billet

DRAWING NOTES:

- Mooring system plan lengths and shall not be used for construction. Mooring line lengths and positioning to be provided by the Engineer or prior to construction.
- Main Mooring Lines not shown
- 5 and 10 T Anchors require approx. 5m of chain to pass through the anchor hole and wrap around the block.
- Mooring lines attached to the breakwater and floats require 2m excess chain or rope for tensioning adjustment.



Kellet 1/2 size Lock Block

Billet



REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

Revision / Révision	Description / Description	Date / Date

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RUSHBOOKE HARBOUR ANCHOR INSTALLATION

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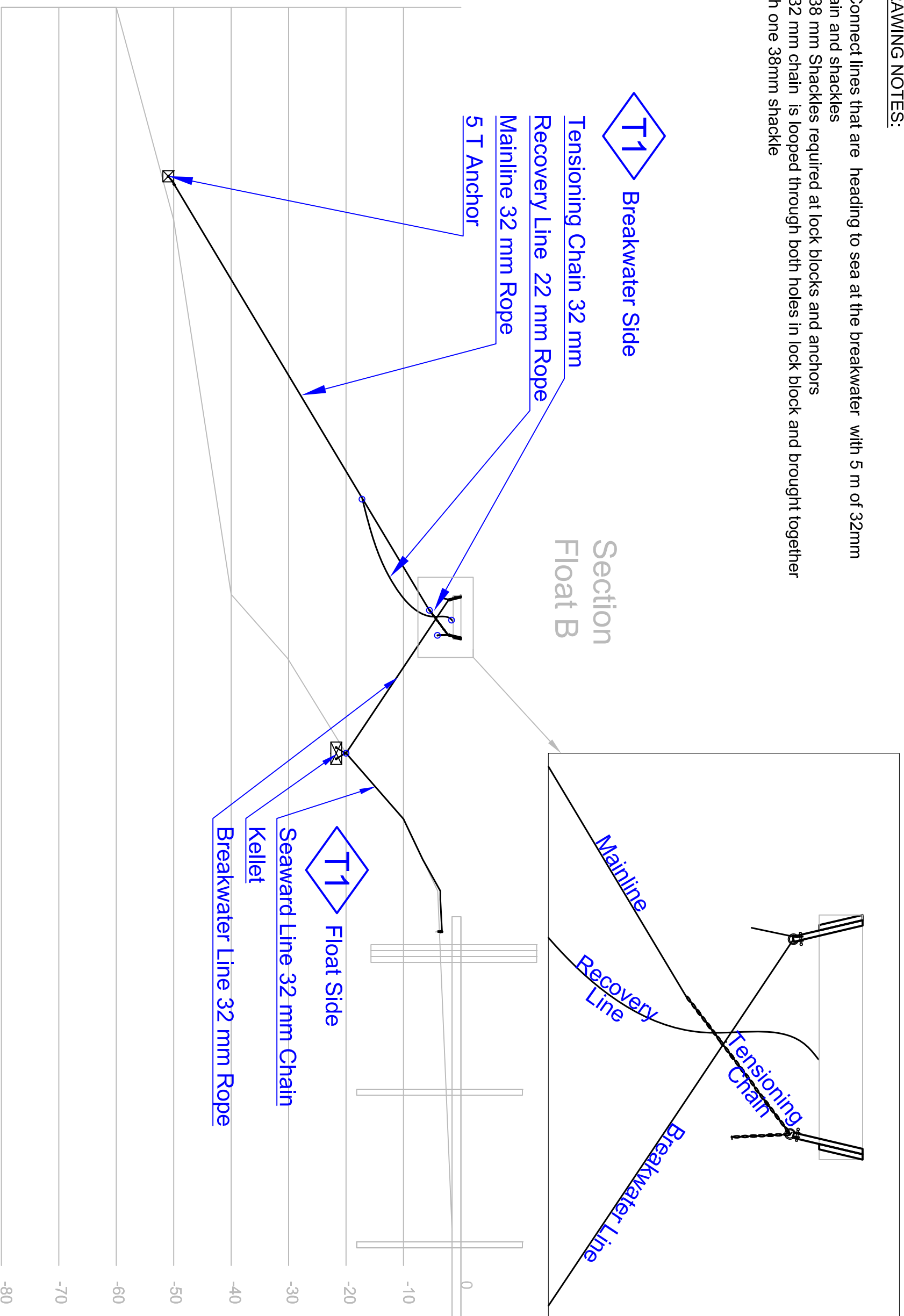
Drawing title/Titre du dessin
BRIDGE LINES

Project No./No. du projet
RB-BW
Sheet/Feuille
003
OF
Revision no./La Révision no.



DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
- 38 mm Shackles required at lock blocks and anchors
- 32 mm chain is looped through both holes in lock block and brought together with one 38mm shackle



TYPE T1

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division
 200 - 401 Burrard Street
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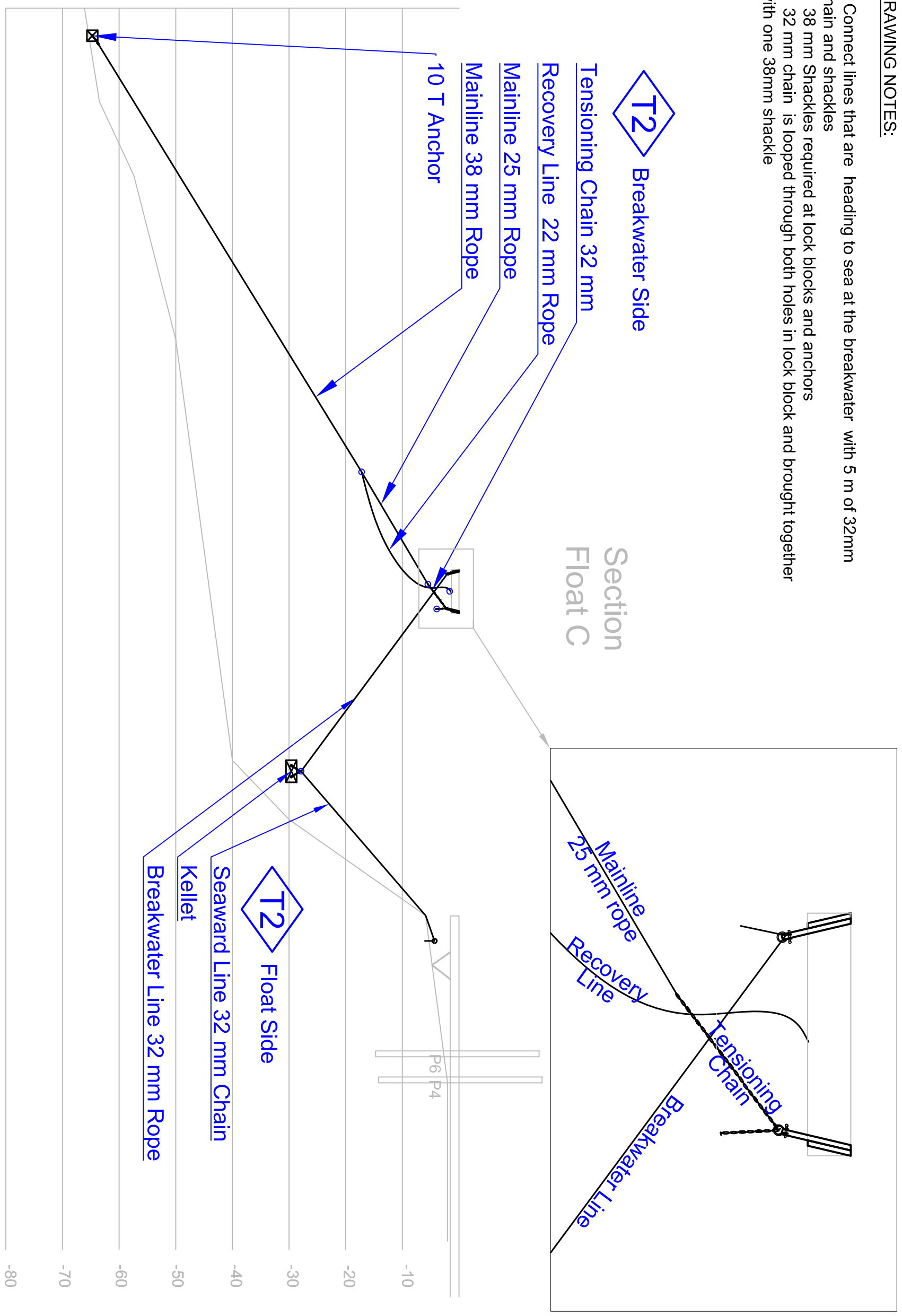
FLOAT B

Project No./No. du projet	Sheet/Feuille	Revision no./La Revision no.
RB-BW	004	
	OF	



DRAWING NOTES:

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TYPE T2

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RUSHBOOKE HARBOUR ANCHOR INSTALLATION

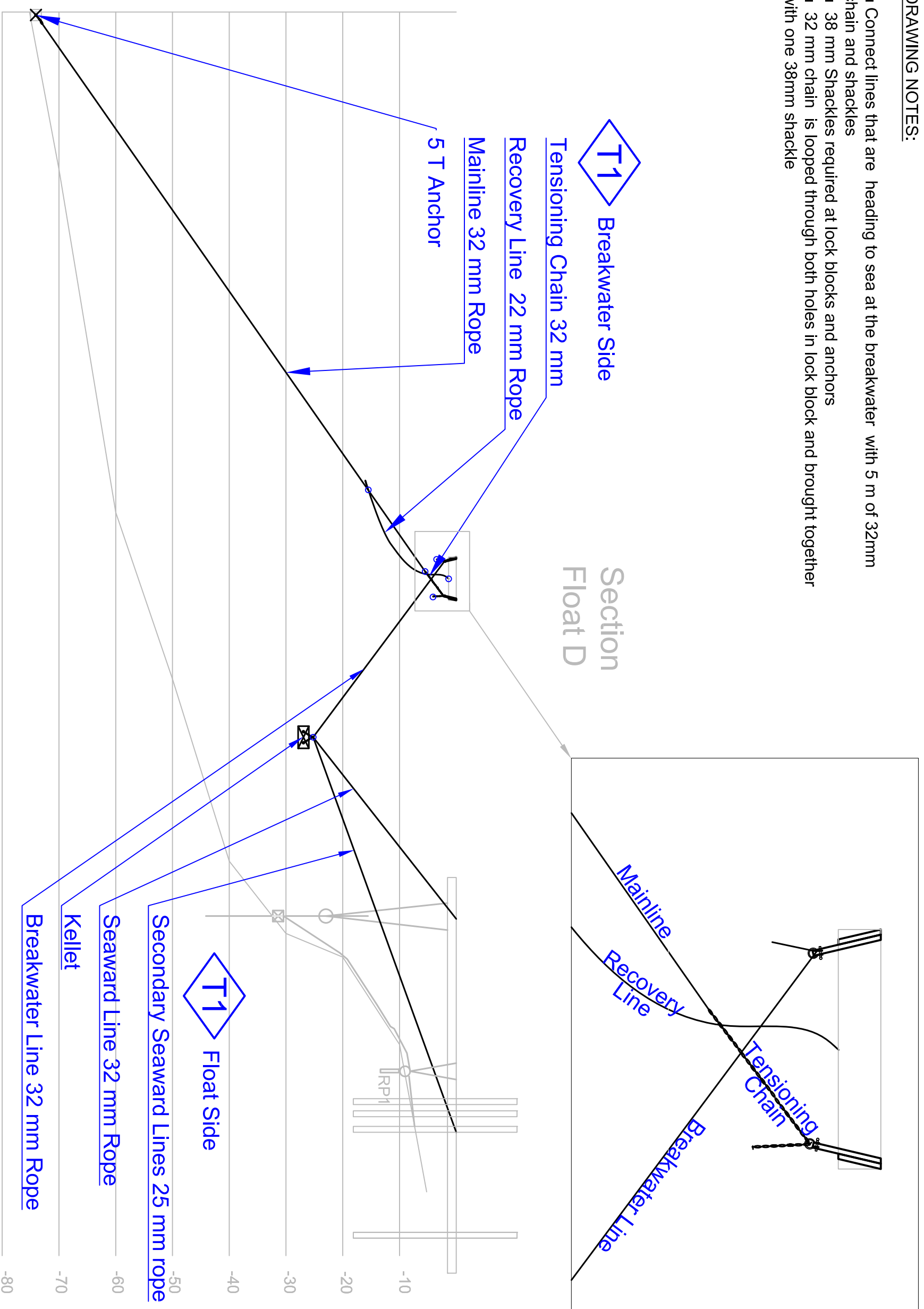
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 Client/client
 Drawing title/Titre du dessin
FLOAT C

Project No./No. du projet RB-BW	Sheet/Feuille 005	Revision no./La Revision no. OF 005
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DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
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TYPE T1

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division
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Projet title/Titre du projet

RUSHBOOKE HARBOUR ANCHOR INSTALLATION

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Drawing title/Titre du dessin

FLOAT D

Project No./No. du projet
RB-BW

Sheet/Feuille
006

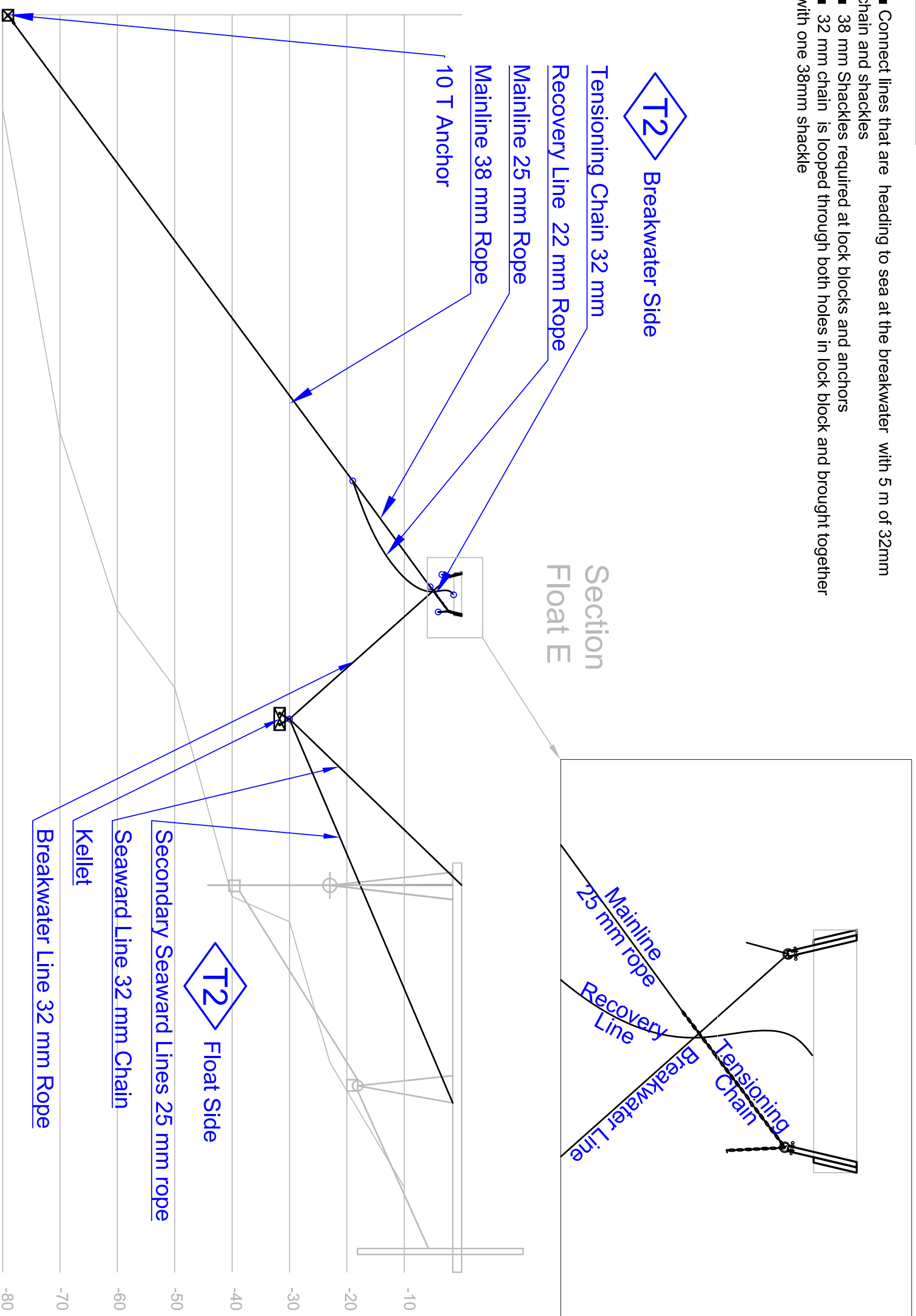
OF 005

Revision no./ La Revision no.



DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
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TYPE T2

Fisheries & Oceans Canada
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Client/client

Drawing title/Titre du dessin

FLOAT E

Project No./No. du projet

RB-BW

Sheet/Feuille

007

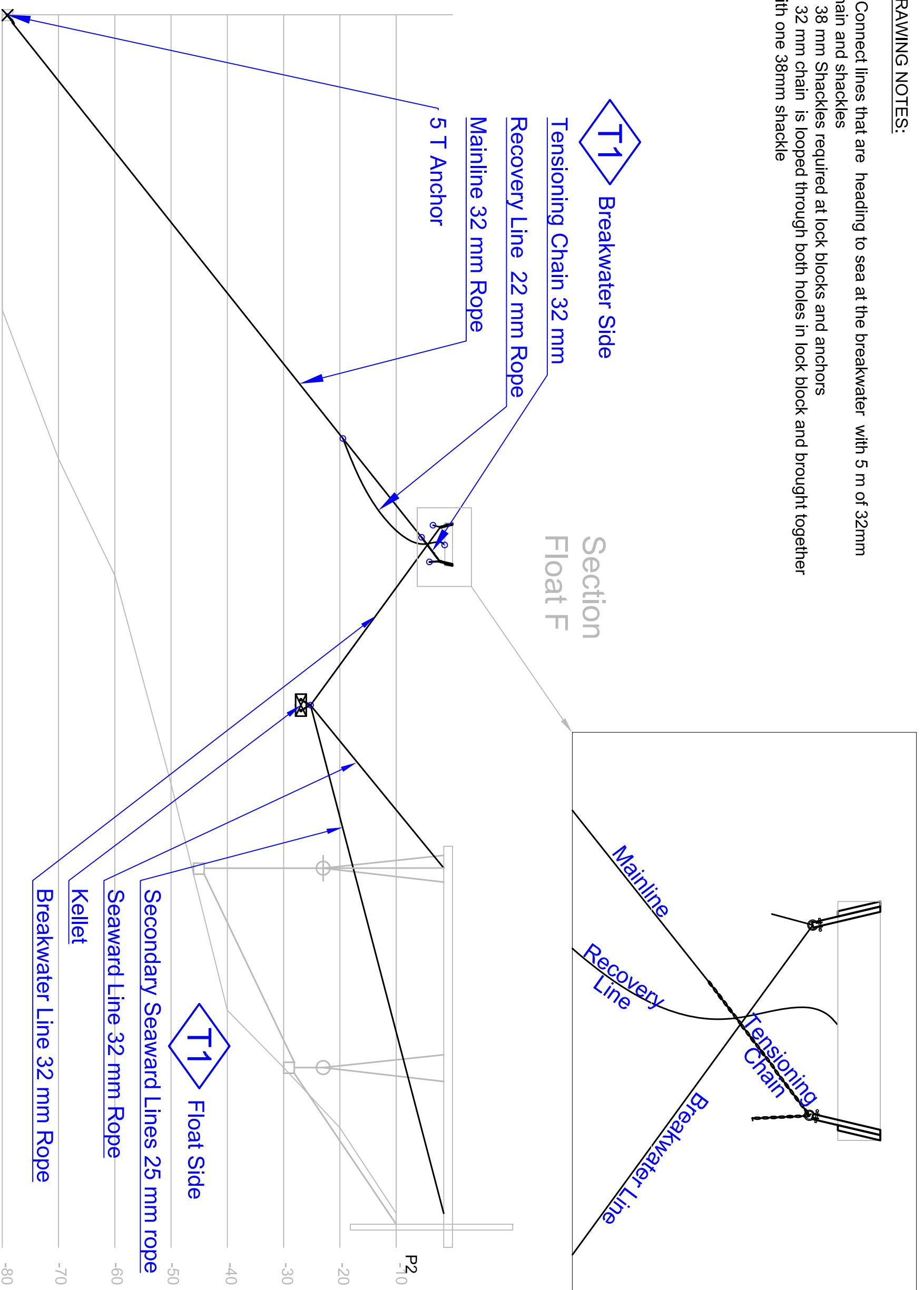
OF 005

Revision no./La Révision no.



DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
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TYPE T1

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 200 - 401 Burrard Street
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Client/client

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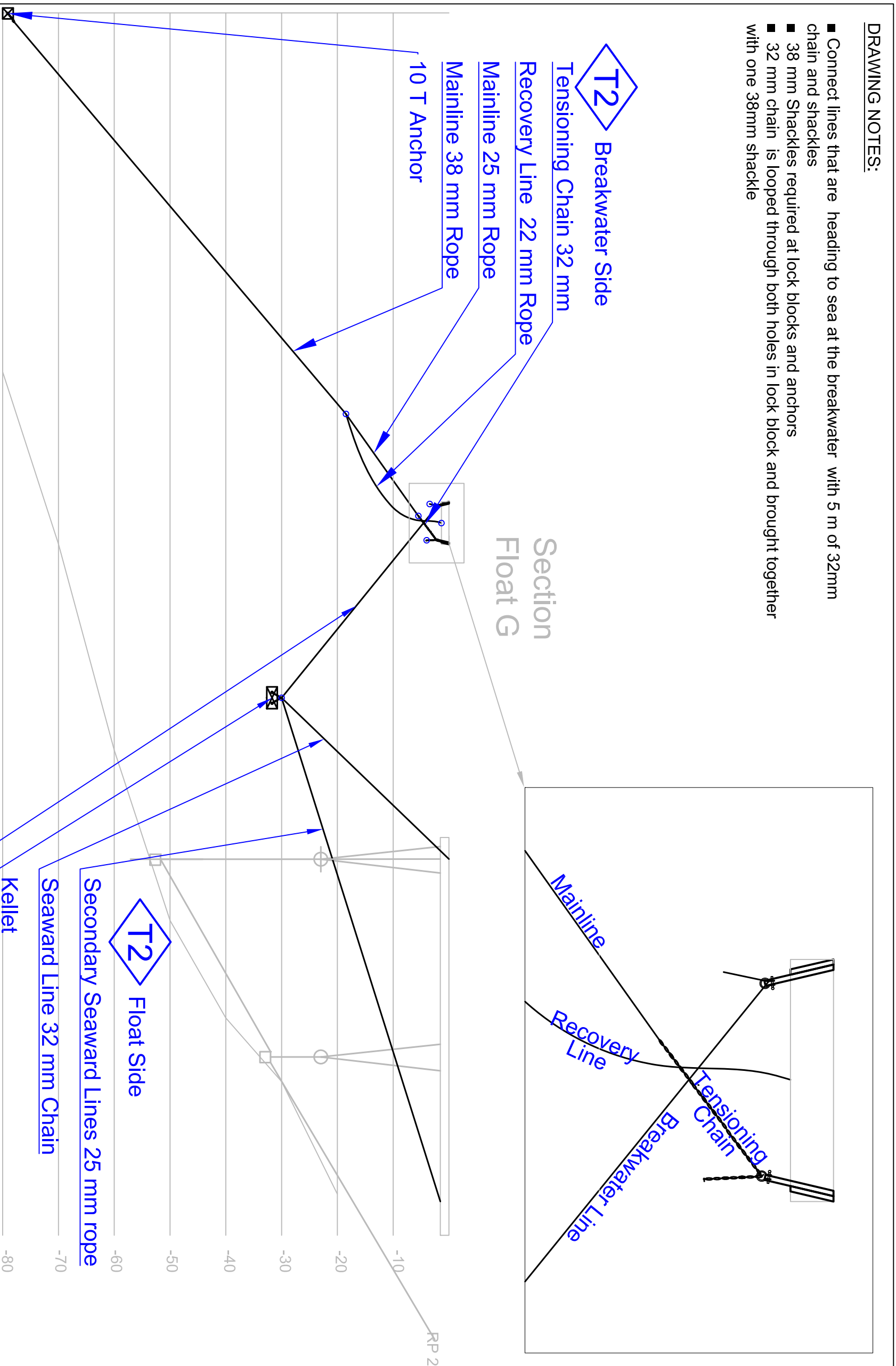
FLOAT F

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RB-BW	008	
	OF 005	



DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
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TYPE T2

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division
 200 - 401 Burrard Street
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Project title/Titre du projet

RUSHBOOKE HARBOUR ANCHOR INSTALLATION

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Client/client

Drawing title/Titre du dessin

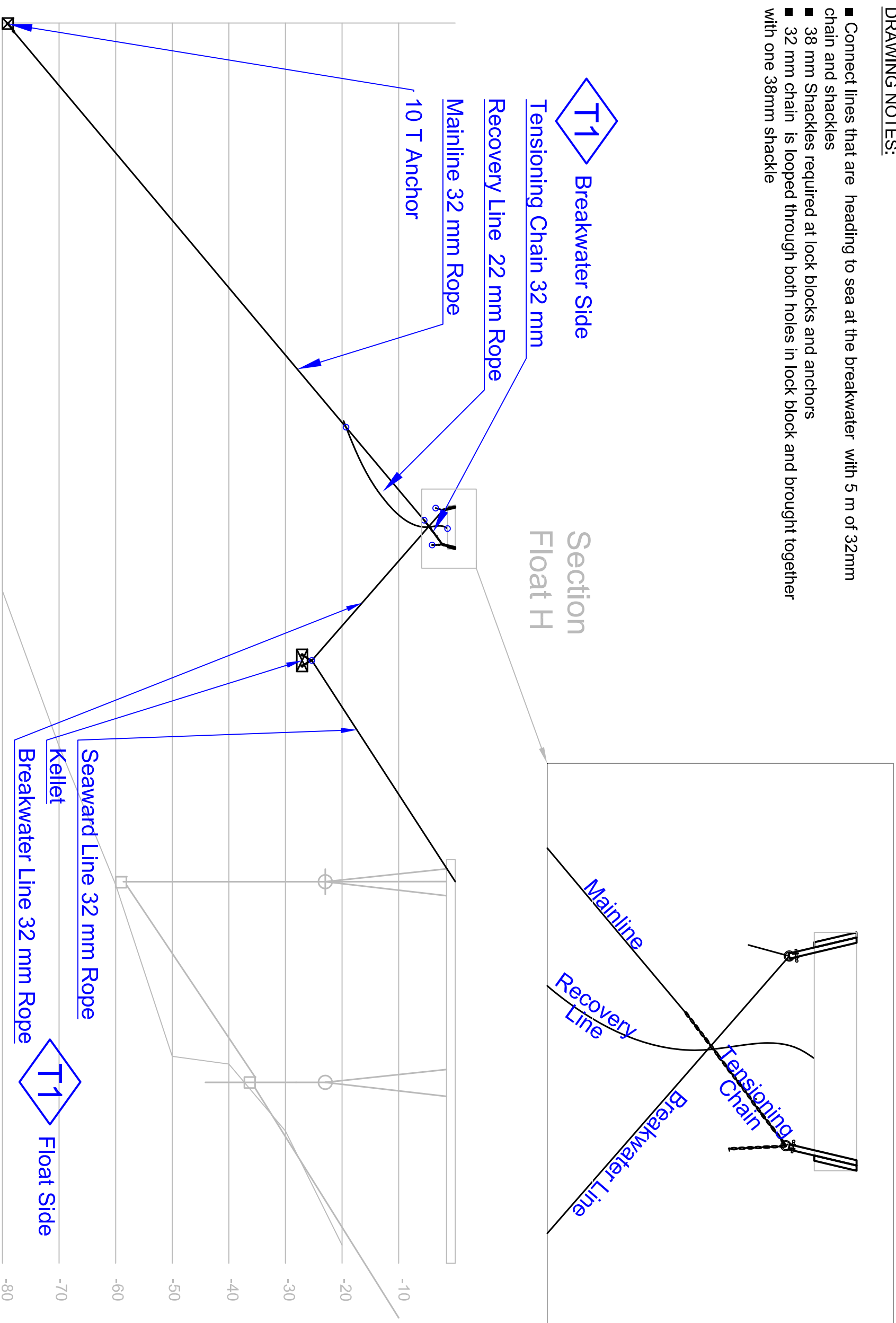
FLOAT G

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
RB-BW	009	
	OF 005	



DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
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TYPE T1

Revision / Révision	Description / Description	Date / Date

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division
 200 - 401 Burrard Street
 Vancouver, Canada, V6C 3S4

Project title/Titre du projet
RUSHBOOKE HARBOUR
ANCHOR INSTALLATION

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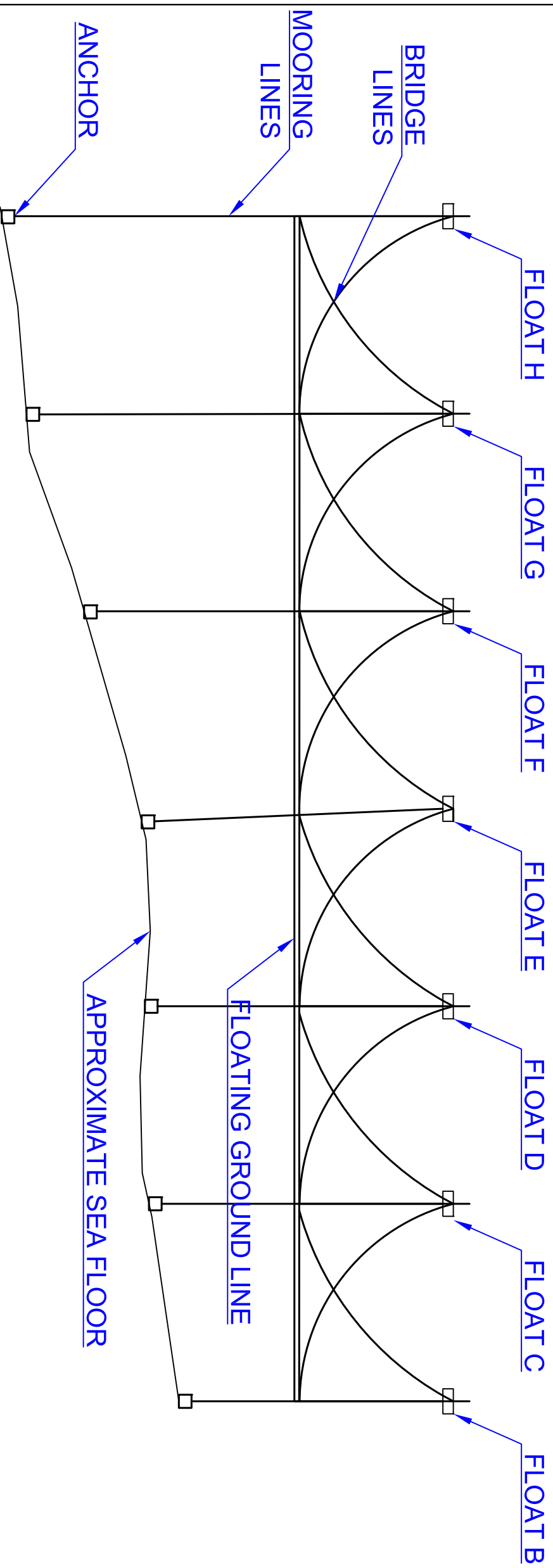
PWGSC Project Manager/Administrateur de Projets TRSQC
 PWGSC Architectural and Engineering Resources Manager/
 Ressources Architecturales et de l'Ingénierie, TRSQC

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FLOAT H

Project No./No. du projet
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010
 OF 005
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EXISTING MOORING SYSTEM TYPICAL DETAIL



RUSHBOOKE HARBOUR ANCHOR INSTALLATION

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EXISTING MOORING SYSTEM TYPICAL DETAIL

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011

OF 005

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Public Works and
Government Services
Canada

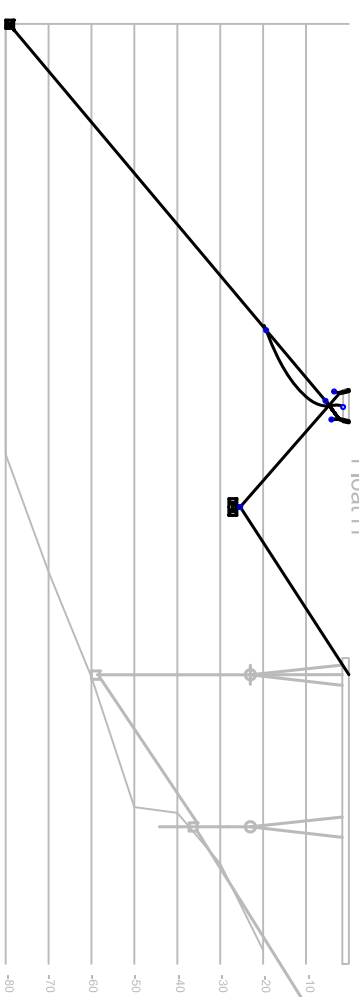
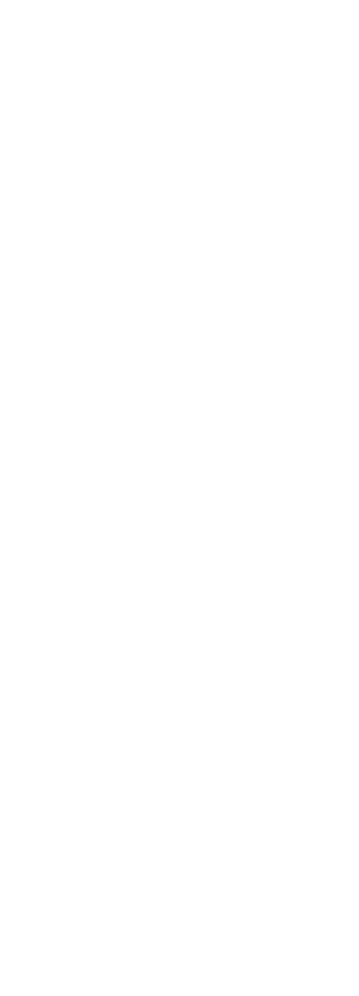
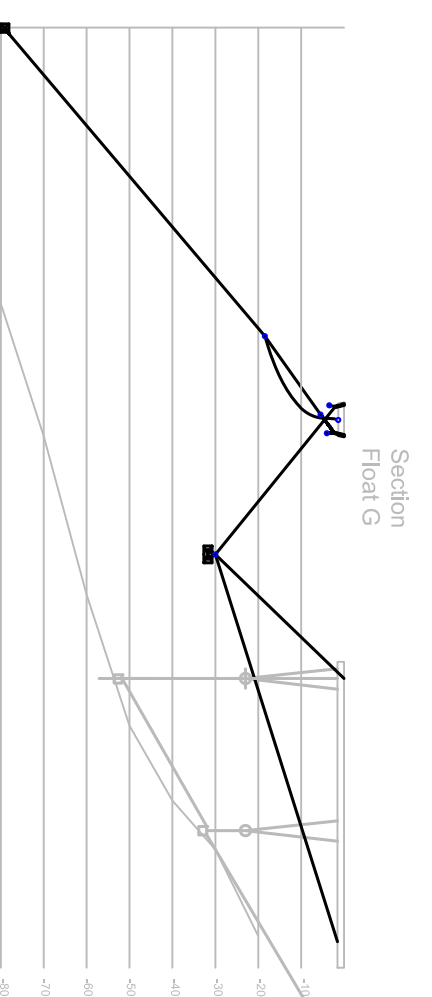
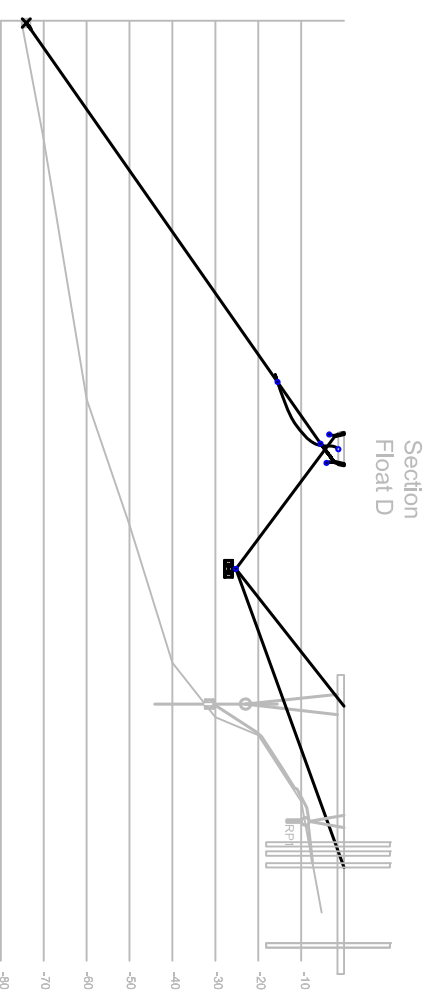
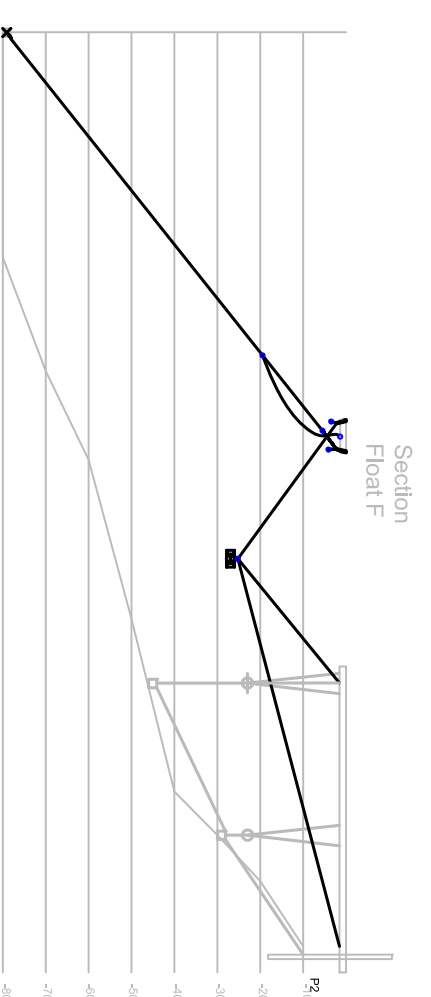
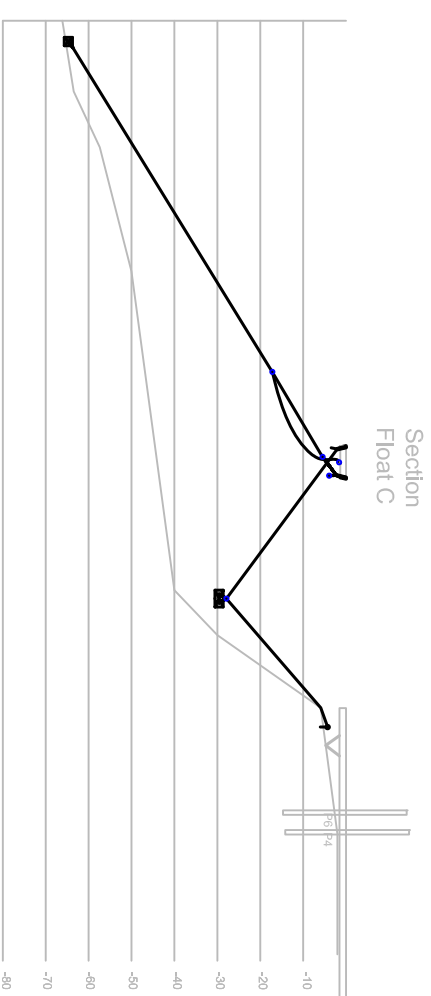
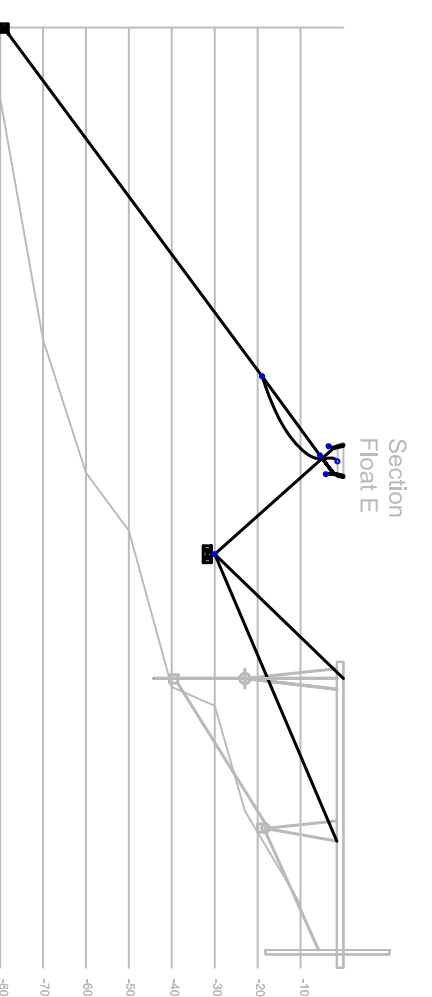
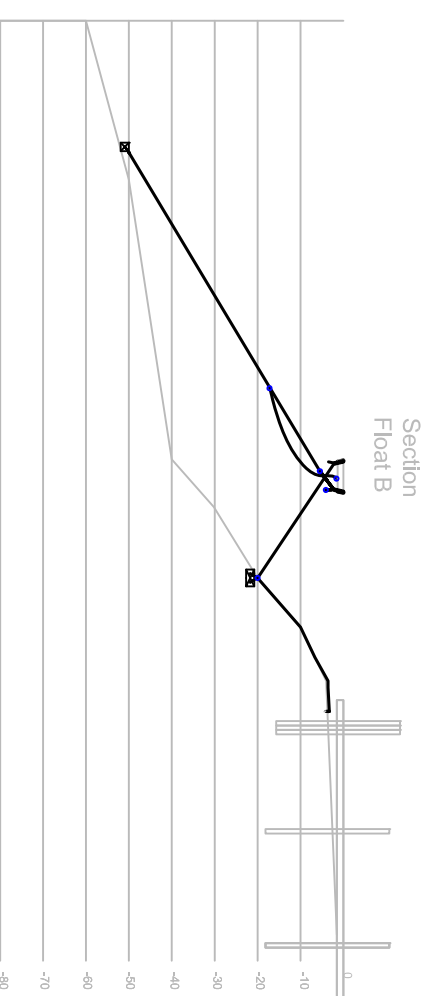


Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

DRAWING NOTES:

- Connect lines that are heading to sea at the breakwater with 5 m of 32mm chain and shackles
- 32 mm Shackles required at lock blocks and anchors
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Revision/ Révision	Description/Description	Date/Date

Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division

200 - 401 Burrard Street
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RUSHBOOKE HARBOUR
ANCHOR INSTALLATION

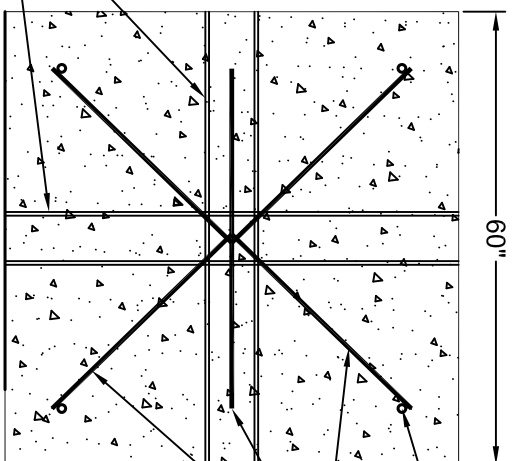
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PMGSC Project Manager/Administrateur de Projets TRSGC

PMGSC Architectural and Engineering Resources Manager/
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Client/client
Drawing title/Titre du dessin
ALL SECTIONS

Project No./No. du projet RB-BW	Sheet/Feuille 012	Revision no./ La Révision no. OF 005
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<p>Revision / Client / client</p>		
<p>Description / Description</p>		
<p>Date / Date</p>		
<p>Fisheries & Oceans Canada Small Craft Harbours Branch Pacific Division</p> <p>200 - 401 Burrard Street Vancouver, Canada, V6C 3S4</p>		
<p>Project title / Titre du projet</p> <p>RUSHBOOKE HARBOUR ANCHOR INSTALLATION</p>		
<p>Approved by / Approuvé par A.C.</p>		
<p>Designed by / Concepté par S.L.</p>		
<p>Drawn by / Dessiné par S.L.</p>		
<p>PWGSC Project Manager / Administrateur de Projets TRSGC</p>		
<p>PWGSC Architectural and Engineering Resources Manager / Ressources Architecturales et de Directeur d'Ingénierie TRSGC</p>		
<p>Client / client</p>		
<p>Drawing title / Titre du dessin</p> <p>10 T ANCHOR</p>		
<p>Project No. / No. du projet</p> <p>RB-BW</p>	<p>Sheet / Feuille</p> <p>013</p> <p>OF 013</p>	<p>Revision no. / La Revision no.</p>



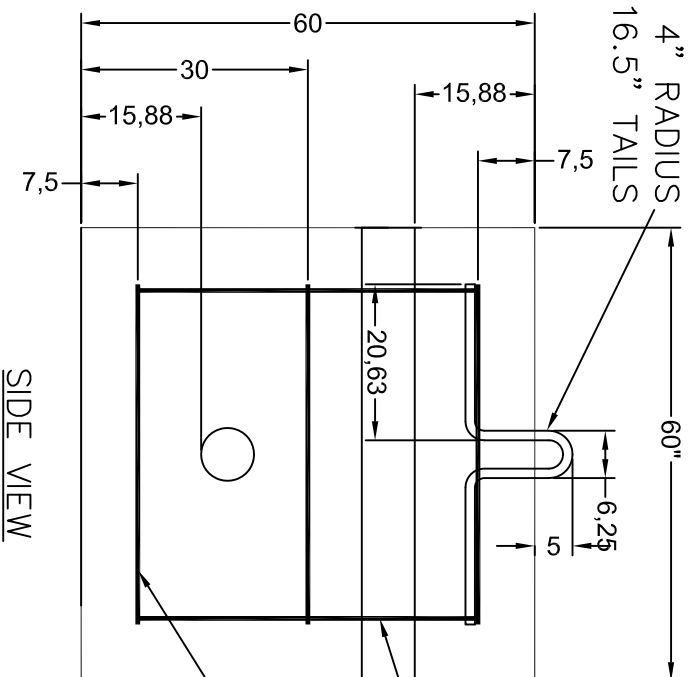
1" REINFORCING STEEL
4 REQUIRED

3 LAYERS OF 1" REINFORCING STEEL (TOP, MIDDLE, AND BOTTOM), CROSSING STEEL IS BENT AND OVERLAPPED AT CENTER, 9 REQUIRED.

6" PVC
PIPE INSERT

TOP VIEW

1" DIA. STEEL BAR
LIFTING LOOP BENT
TO 4" RADIUS
C/W 16.5" TAILS

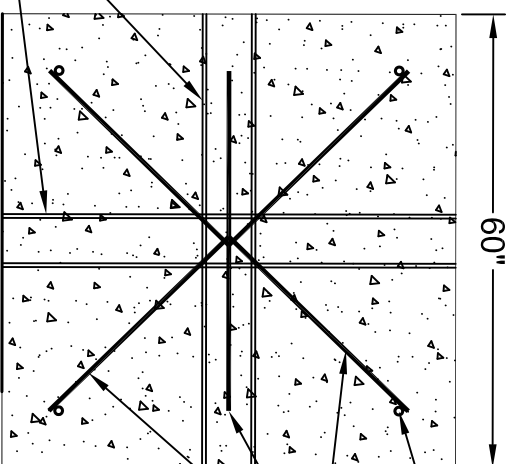


1" REINFORCING STEEL
4 REQUIRED

3 LAYERS OF 1" REINFORCING STEEL (SEE LAYOUT IN TOP VIEW)

SIDE VIEW

- NOTES:
1. ALL CONCRETE, FORMWORK AND REINFORCEMENT TO CONFORM TO MOST RECENT CSA/ASTM STANDARD.
 2. ALL REINFORCEMENT AND PVC SHALL HAVE MINIMUM 6" CONCRETE CLEAR COVER.
 3. STANDARD CONCRETE MIX DESIGN, 30 MPA MINIMUM.
 4. THE ESTIMATED GROSS WEIGHT OF THE BLOCK IS 19,000LBS.

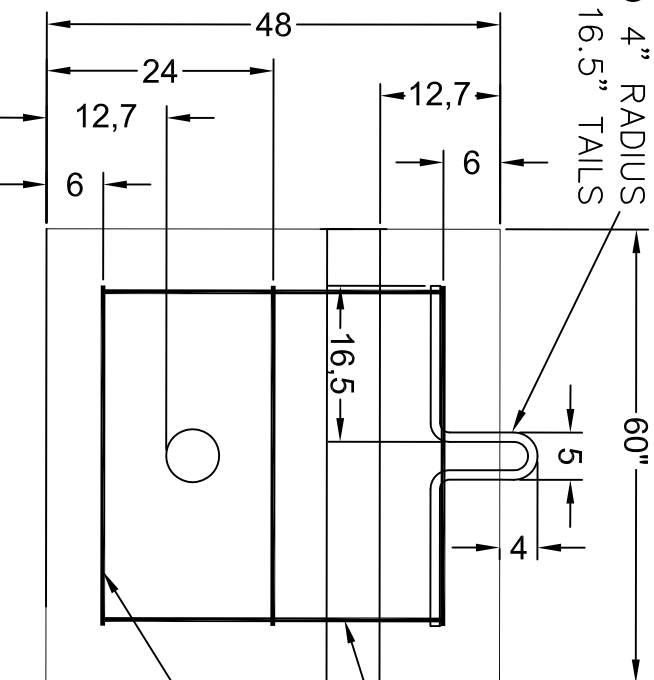


1" REINFORCING STEEL
4 REQUIRED

3 LAYERS OF 1" REINFORCING STEEL (TOP, MIDDLE, AND BOTTOM), CROSSING STEEL IS BENT AND OVERLAPPED AT CENTER, 9 REQUIRED.

TOP VIEW

1" DIA. STEEL BAR
LIFTING LOOP BENT
C/W 16.5" TAILS



1" REINFORCING STEEL
4 REQUIRED

3 LAYERS OF 1" REINFORCING STEEL (SEE LAYOUT IN TOP VIEW)

SIDE VIEW

- NOTES:**
1. ALL CONCRETE, FORMWORK AND REINFORCEMENT TO CONFORM TO MOST RECENT CSA/ASTM STANDARD.
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ANCHOR INSTALLATION**

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Drawing Title/Titre du dessin

5 T ANCHOR

Project No./No. du projet

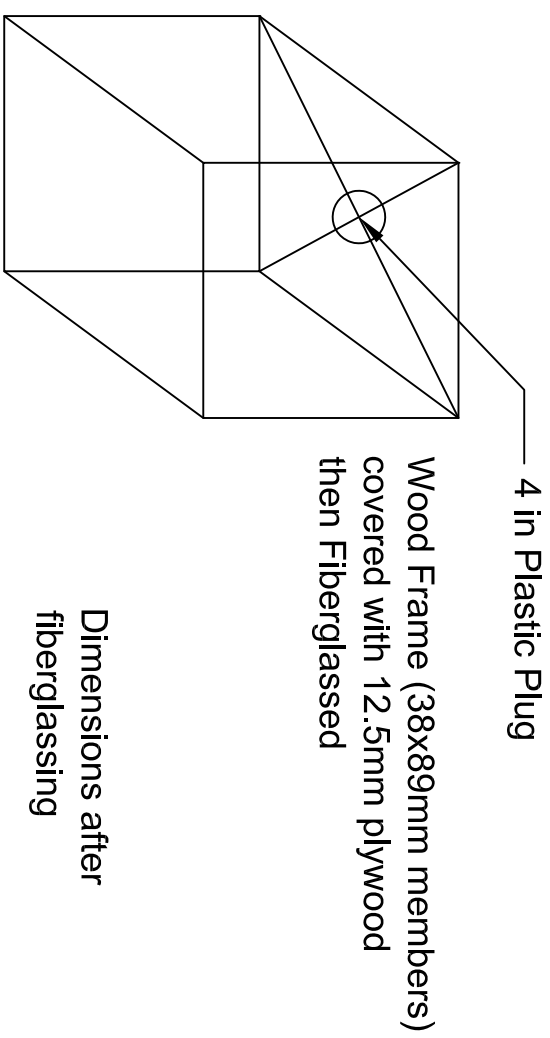
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RB-BW

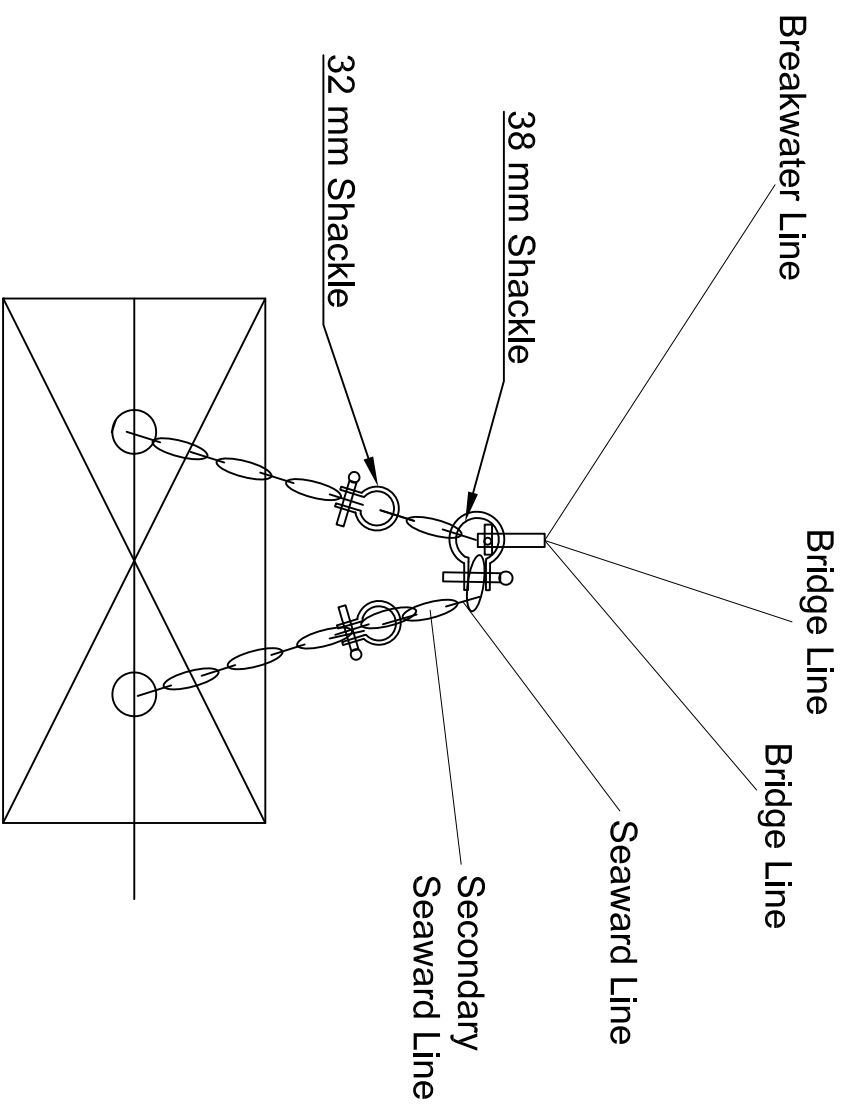
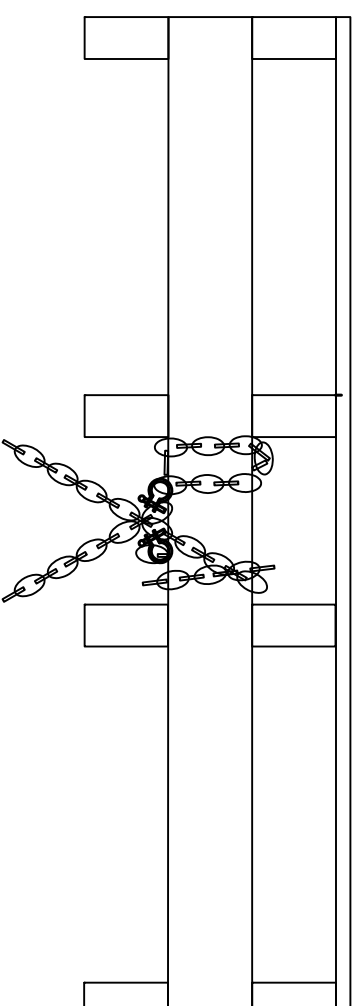
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OF 013

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La Révision no.



"DPW" Style Wood Billet
1169mm x 1169 x 610mm



Projet/ titre/Titre du projet

200 - 401 Burrard Street
Vancouver, Canada, V6C 3S4

**RUSHBOOKE HARBOUR
ANCHOR INSTALLATION**

Approved by/ Approuvé par
A.C.

Designed by/ Concepté par
S.L.

Drawn by/ Dessiné par
S.L.

PWGC Project Manager/ Administrateur de Projets TPSCC

PWGC Architectural and Engineering Resources Manager/
Ressources Architecturales et de Directeur d'Ingénierie, TPSCC

Client/ client

Drawing Title/ Titre du dessin

DETAILS

Project No./No. du projet

Sheet/Feuille

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015

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