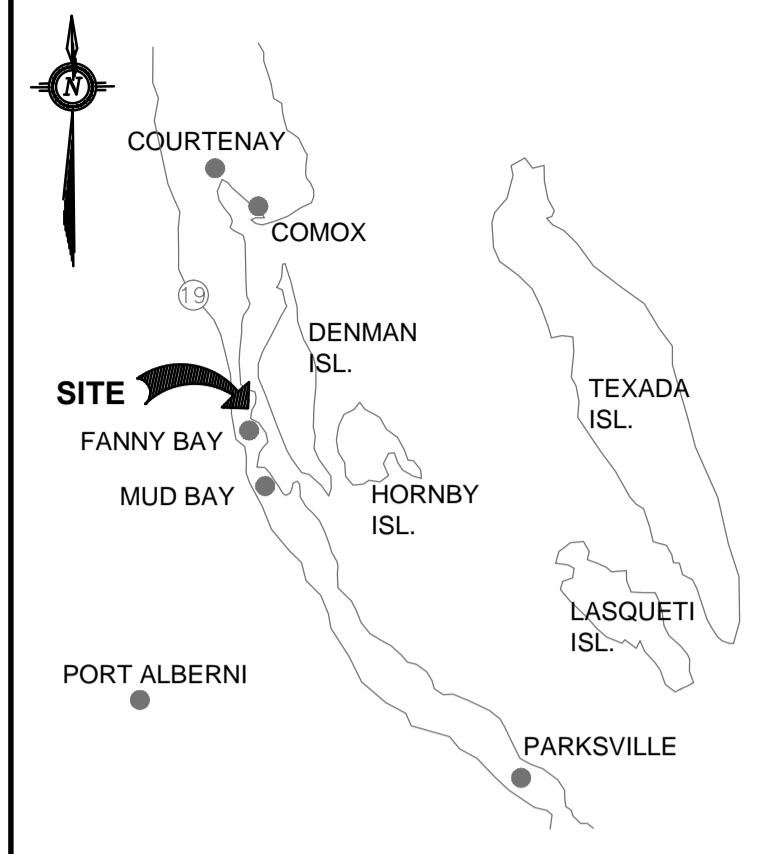


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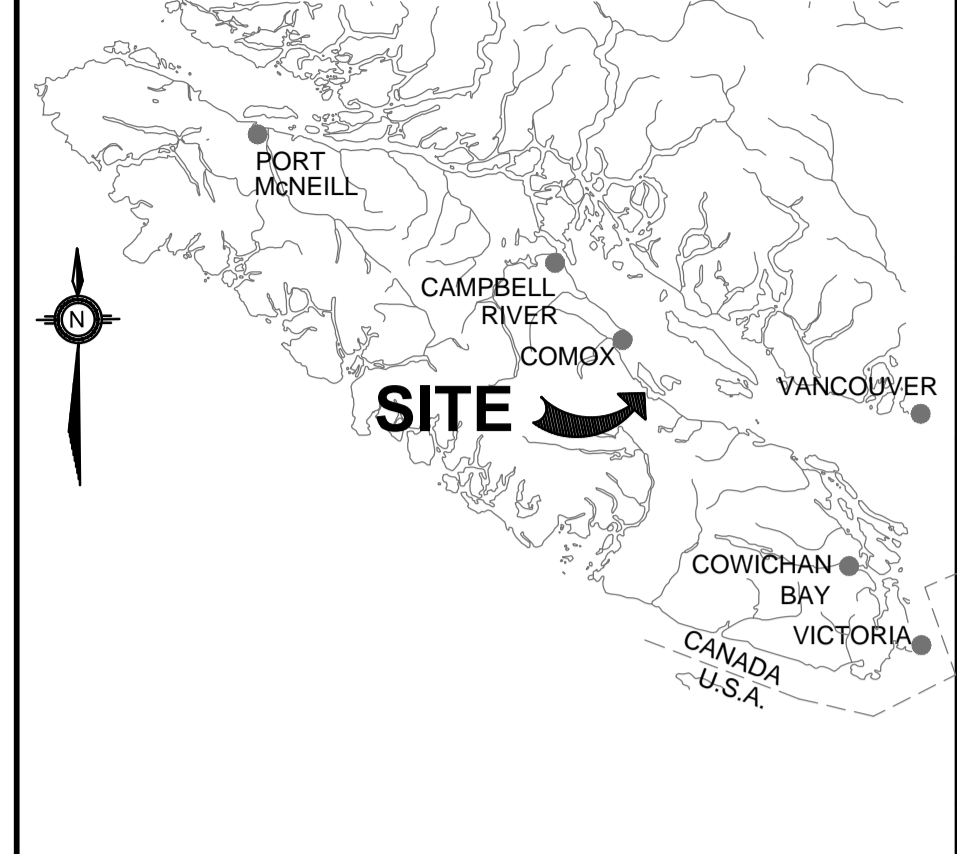
- | | |
|------------------------------------|--|
| 1. TIDES: | TIDE & CHART DATUM |
| HIGHER HIGH WATER LEVEL (H.H.W.L.) | +5.4 m |
| MEAN WATER LEVEL (M.W.L.) | +3.3 m |
| LOWER LOW WATER LEVEL (L.L.W.L.) | +0.1 m |
| 2. WIND: | DESIGN WIND PRESSURE (1 IN 50 YRS) = 0.52kPa |
| 3. SNOW: | S _s = 2.6kPa |
| SPECIFIED GROUND SNOW LOAD | S _r = 0.4kPa |
| SPECIFIED ASSOCIATED RAIN LOAD | PGA = 0.30 |
| 4. SEISMIC: | |
| 5. BOLLARD LOAD | = 50kN |

GENERAL NOTES:

- GENERAL**
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTES OTHERWISE.
 - ALL ELEVATIONS ARE IN METRES AND ARE TO HYDROGRAPHIC DATUM.
 - FACILITY PLAN BATHYMETRY AND TOPOGRAPHY BASED ON SURVEY PLAN BY CHICALO-BURRIDGE LAND SURVEYING, DATED MAY 2004
- STRUCTURAL AND MISCELLANEOUS STEEL**
- ALL ROLLED SECTIONS & MISCELLANEOUS PLATES TO BE GRADE 300W CONFORMING TO CAN CSA STD. G40.20/G40.21 UNLESS NOTED OTHERWISE.
 - ALL BOLTS TO CONFORM TO ASTM A325 UNLESS NOTED OTHERWISE.
 - ALL WELDING TO CONFORM TO CAN CSA STD. W47, W48 & W59. THE MINIMUM WELD SIZE TO BE 6mm.
 - ALL PIPE PILE SECTIONS SHALL BE STRAIGHT SEAM PIPE CONFORMING TO A252 GRADE 3 OR APPROVED EQUIVALENT.
 - WALL THICKNESS OF DOLPHIN STEEL PILES INCREASED BY 2.5mm AS CORROSION PROTECTION.



KEY PLAN



LOCATION PLAN

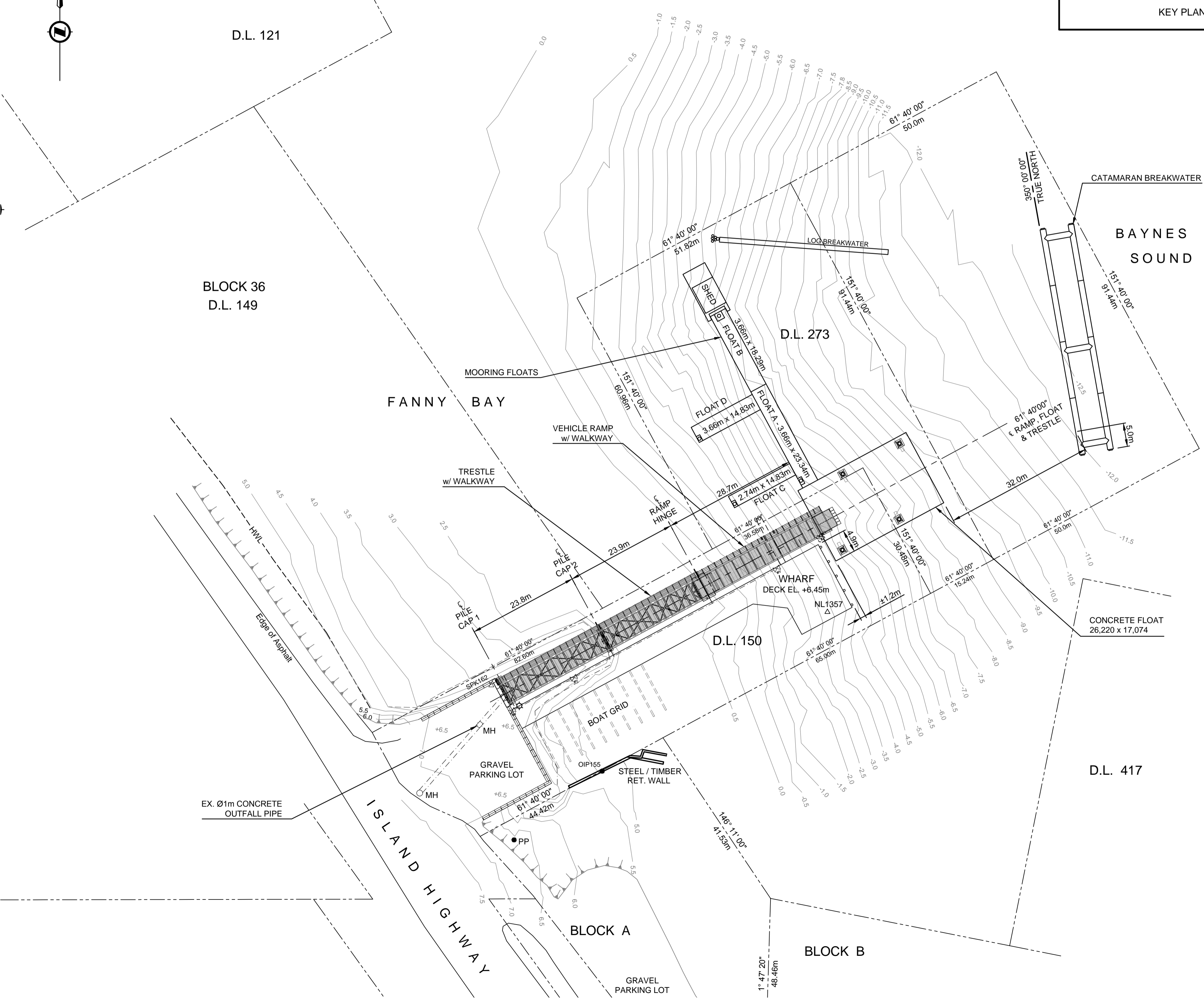
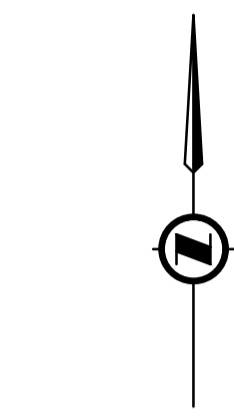
Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

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

PRELIMINARY NOT FOR CONSTRUCTION

VJA ENGINEERING
VILLHOLTH JENSEN & ASSOC. LTD.
CONSULTING ENGINEERS VANCOUVER, B.C.

PROFESSIONAL PROVINCE OF BRITISH COLUMBIA
A. E. PEDERSEN #14009
Arnold Pedersen



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Revision/	Description/Description	Date/Date
A	ISSUED FOR TENDER	16.02.12

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

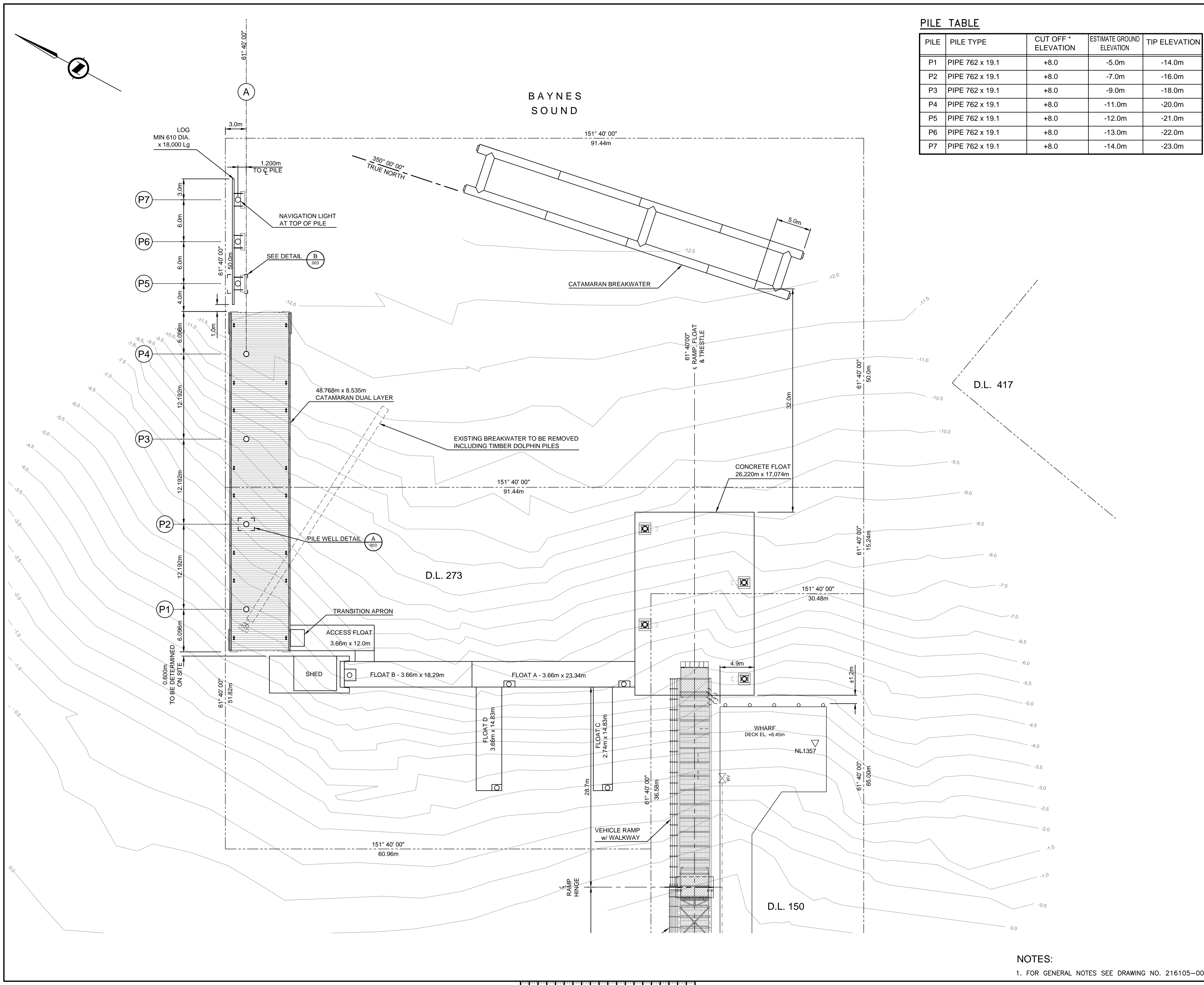
Project title/Titre du projet
**FANNY BAY HARBOUR
BREAKWATER**

Approved by/Approuvé par
A.P.
Designed by/Concept par
A.P.
Drawn by/Dessiné par
W.S.L.
PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSGC
Client/client
VJA

Drawing title/Titre du dessin
SITE PLAN

Project No./No. du projet 216105	Sheet/Feuille 001 OF	Revision no./ La Révision no. A
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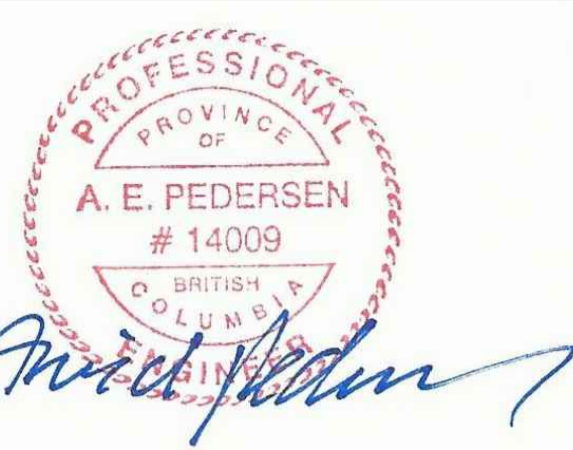


PILE TABLE

PILE	PILE TYPE	CUT OFF * ELEVATION	ESTIMATE GROUND ELEVATION	TIP ELEVATION
P1	PIPE 762 x 19.1	+8.0	-5.0m	-14.0m
P2	PIPE 762 x 19.1	+8.0	-7.0m	-16.0m
P3	PIPE 762 x 19.1	+8.0	-9.0m	-18.0m
P4	PIPE 762 x 19.1	+8.0	-11.0m	-20.0m
P5	PIPE 762 x 19.1	+8.0	-12.0m	-21.0m
P6	PIPE 762 x 19.1	+8.0	-13.0m	-22.0m
P7	PIPE 762 x 19.1	+8.0	-14.0m	-23.0m

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VANCOUVER, B.C.



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**Fisheries & Oceans Canada
Small Craft Harbours Branch
Pacific Division**

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

Project title/Titre du projet

**FANNY BAY HARBOUR
BREAKWATER**

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W.S.L.

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client
VJA

Drawing title/Titre du dessin

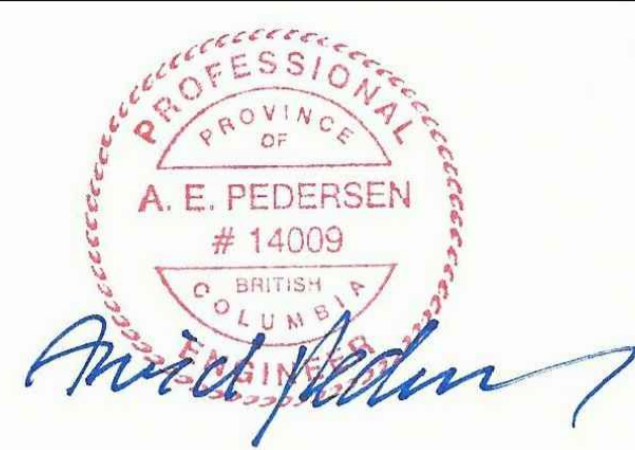
**FLOAT LAYOUT
GENERAL ARRANGEMENT**

Project No./No. du projet 216105	Sheet/Feuille 002 OF	Revision no./ Le Révision no. A
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NOTES:
1. FOR GENERAL NOTES SEE DRAWING NO. 216105-001

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VILLHOLTH JENSEN & ASSOC. LTD.
CONSULTING ENGINEERS
VANCOUVER, B.C.



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A	ISSUED FOR TENDER	16.02.12

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

Project title/Titre du projet

**FANNY BAY HARBOUR
BREAKWATER**

Approved by/Approve par
A.P.
Designed by/Concept par
A.P.
Drawn by/Dessine par
WSL

PWGSC Project Manager/Administrateur de Projets TPSSGC

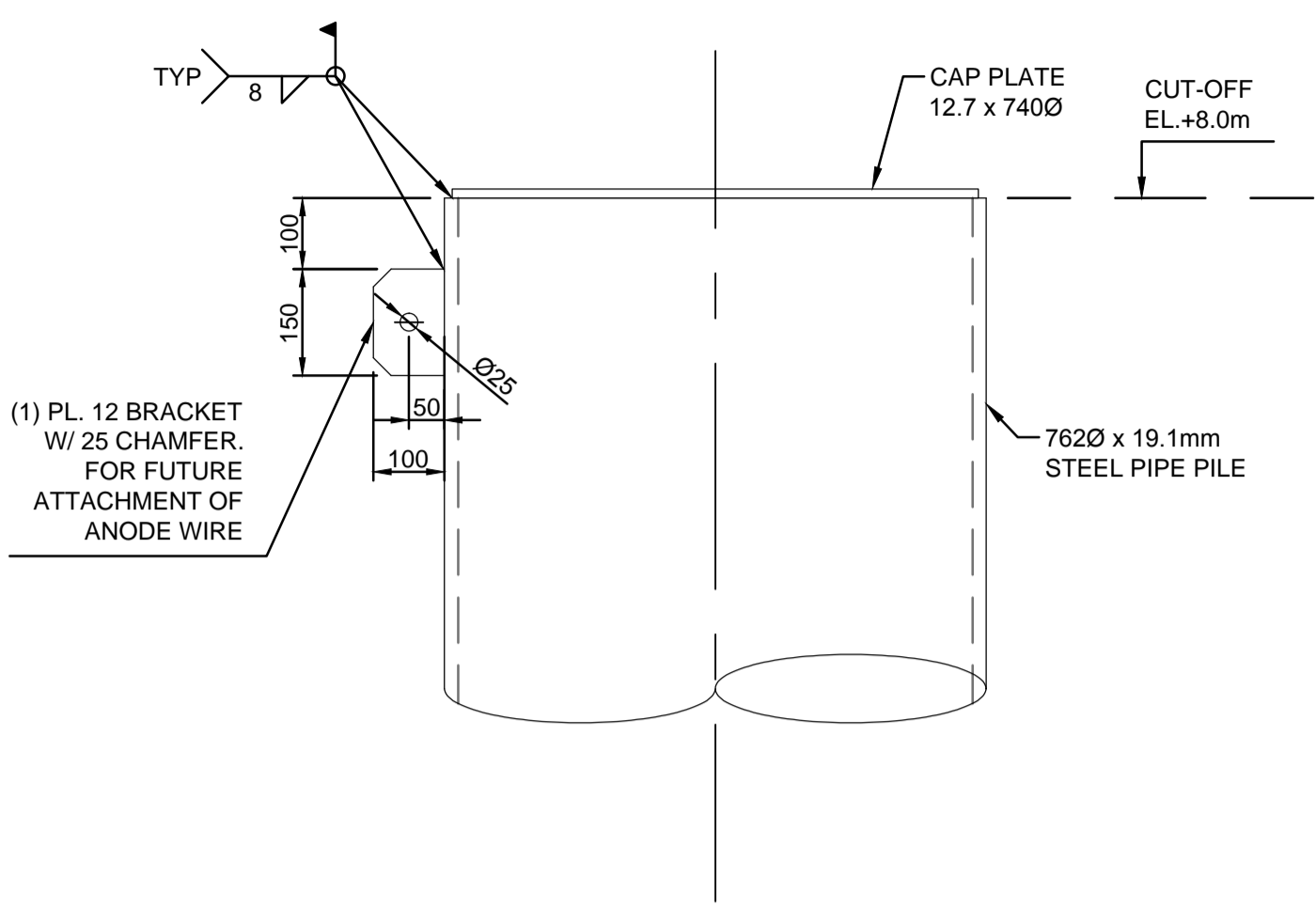
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Ressources Architectural et de Directeur d'ingénierie, TPSSGC

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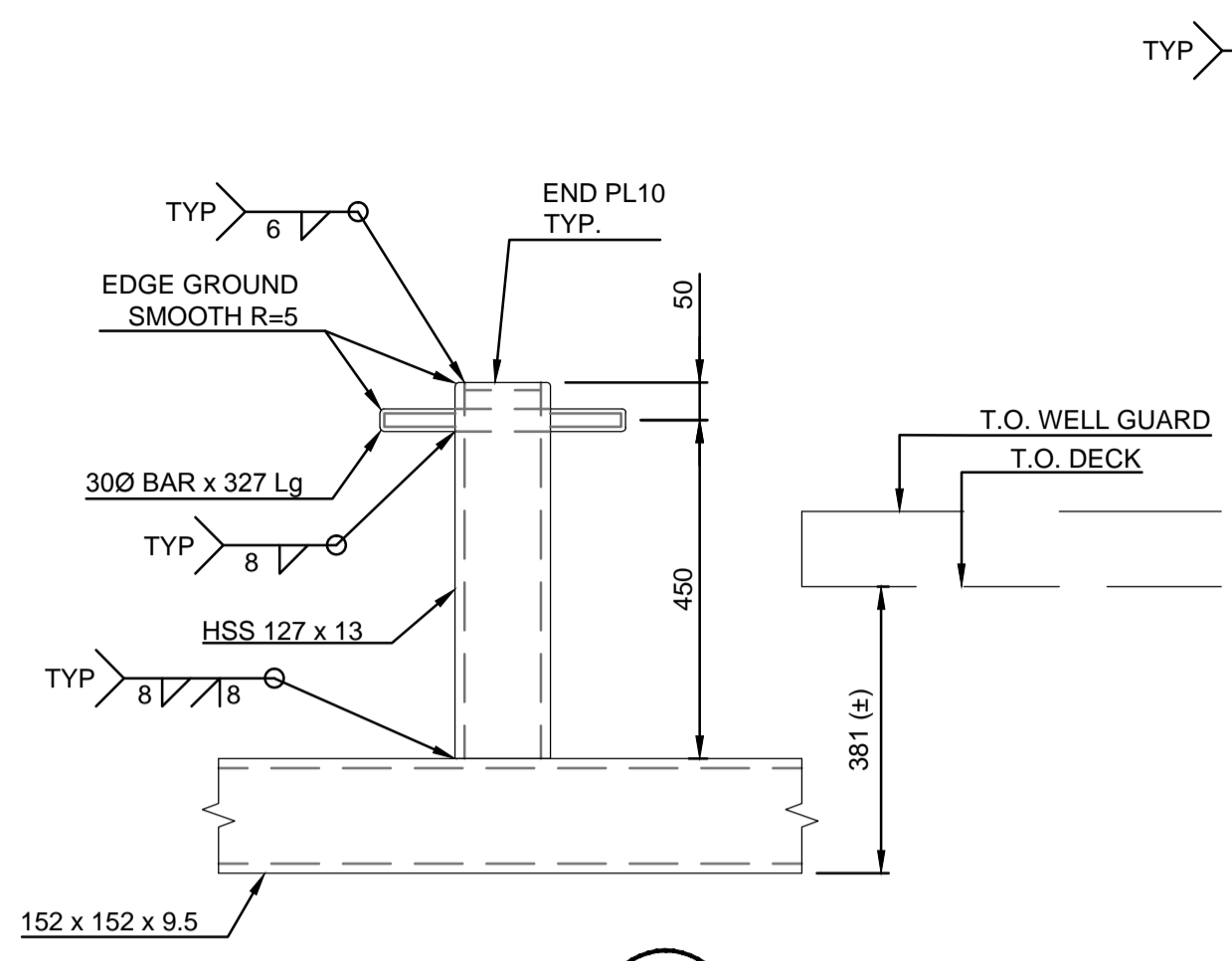
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PILE WELL & BOLLARD

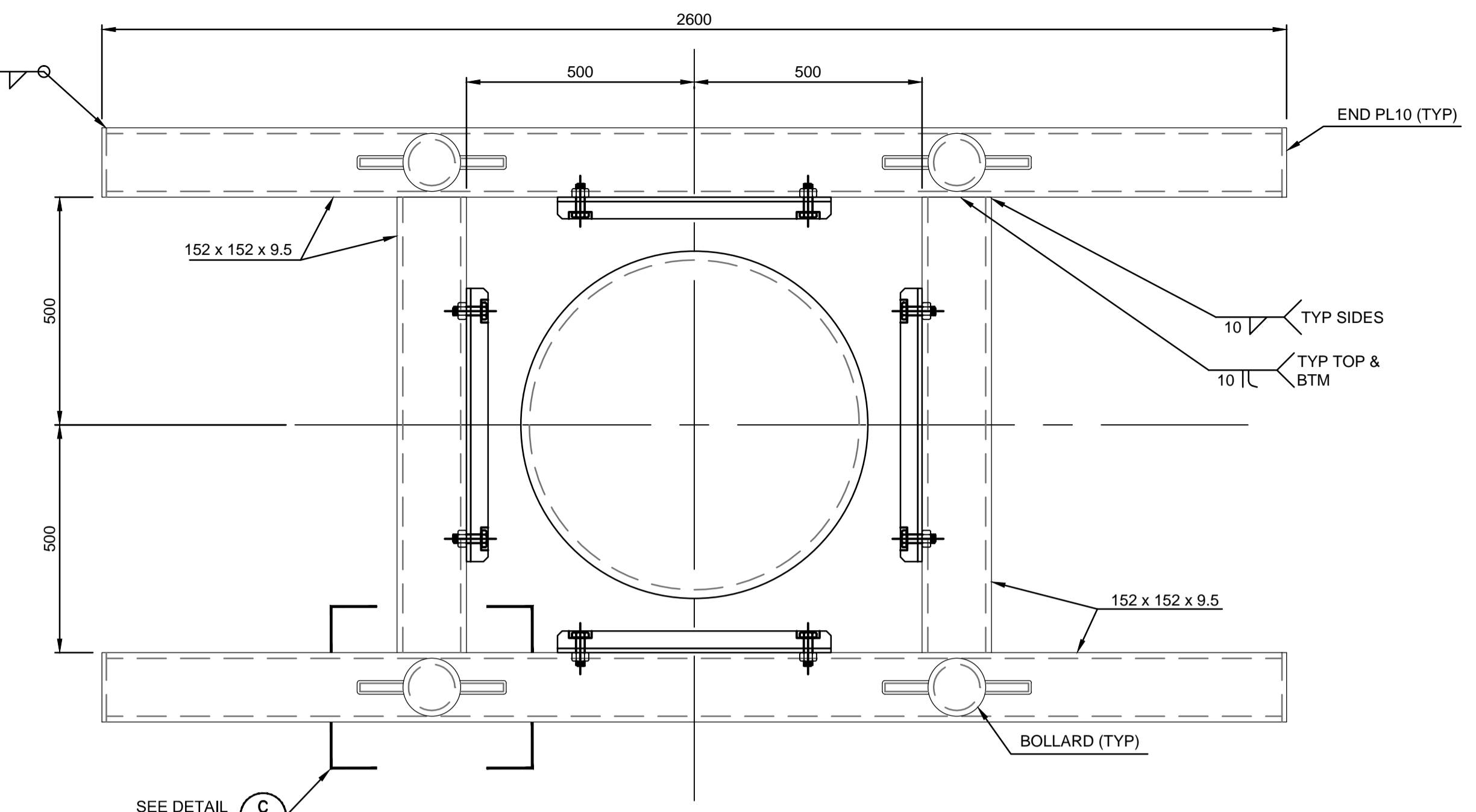
Project No./No. du projet 216105	Sheet/ Feuille 003 OF	Revision no./ La Revision no. A
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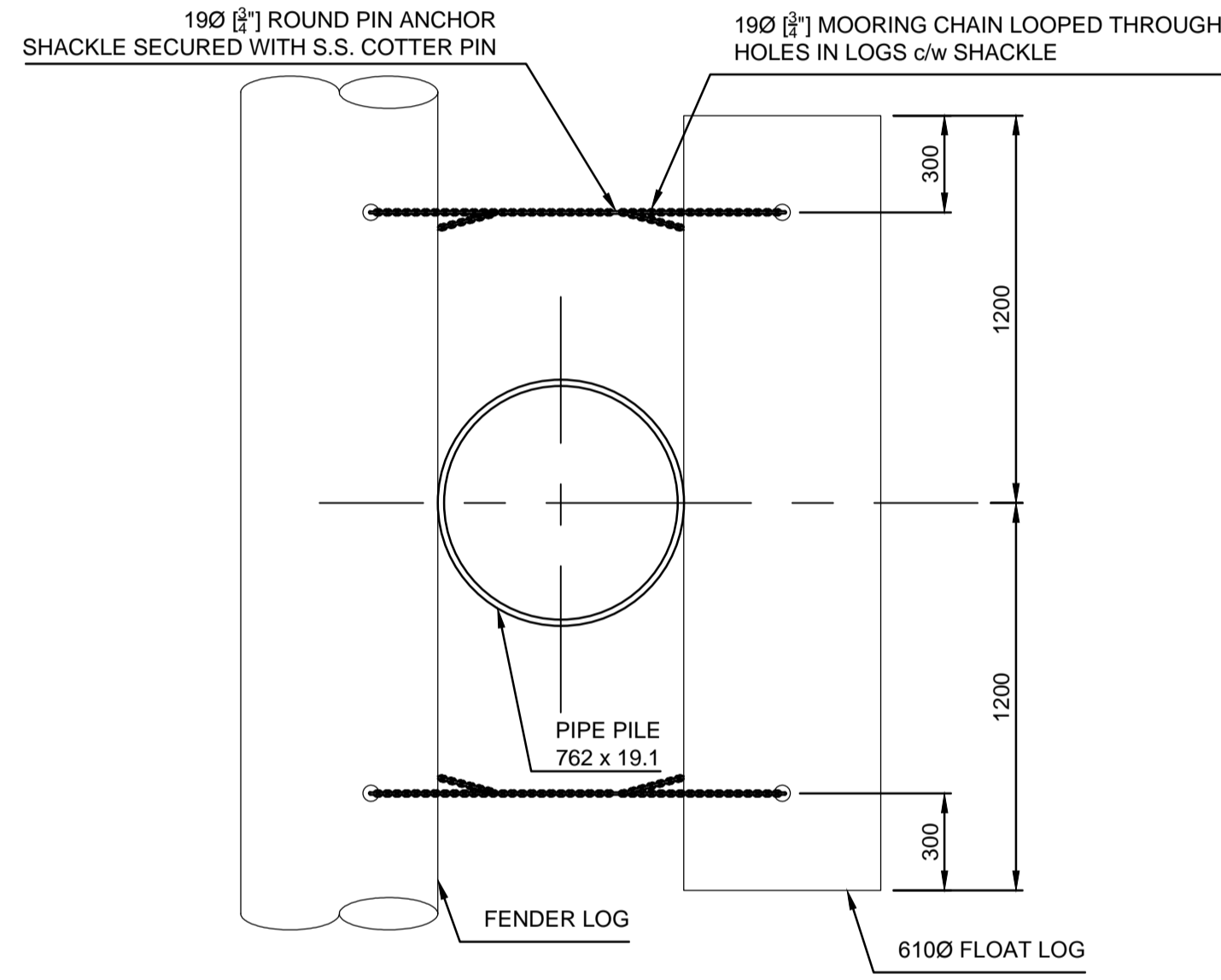
TYPICAL PILE TOP DETAIL
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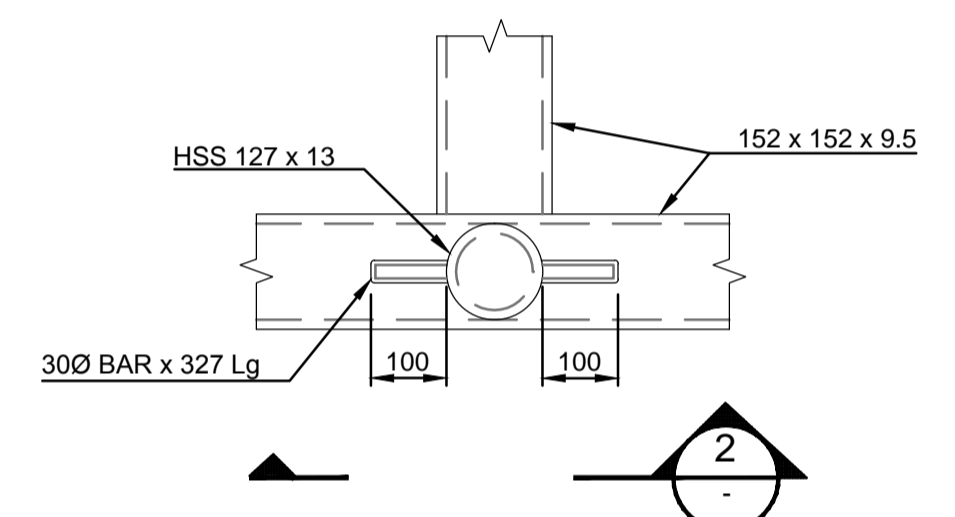
SECTION 2
SCALE 1:10



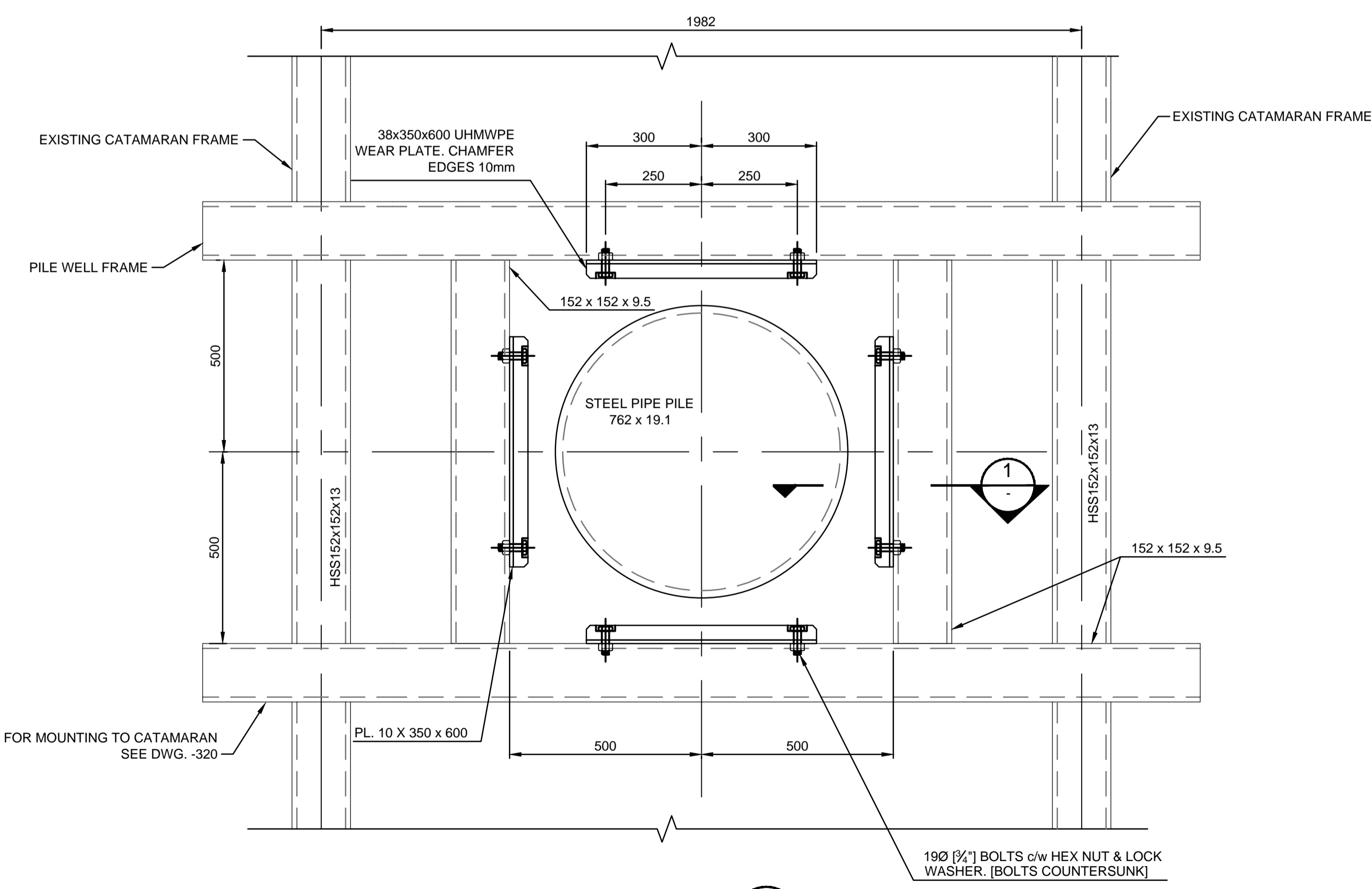
PILE WELL FRAME
SCALE 1:10
[4 REQD PER CATAMARAN]



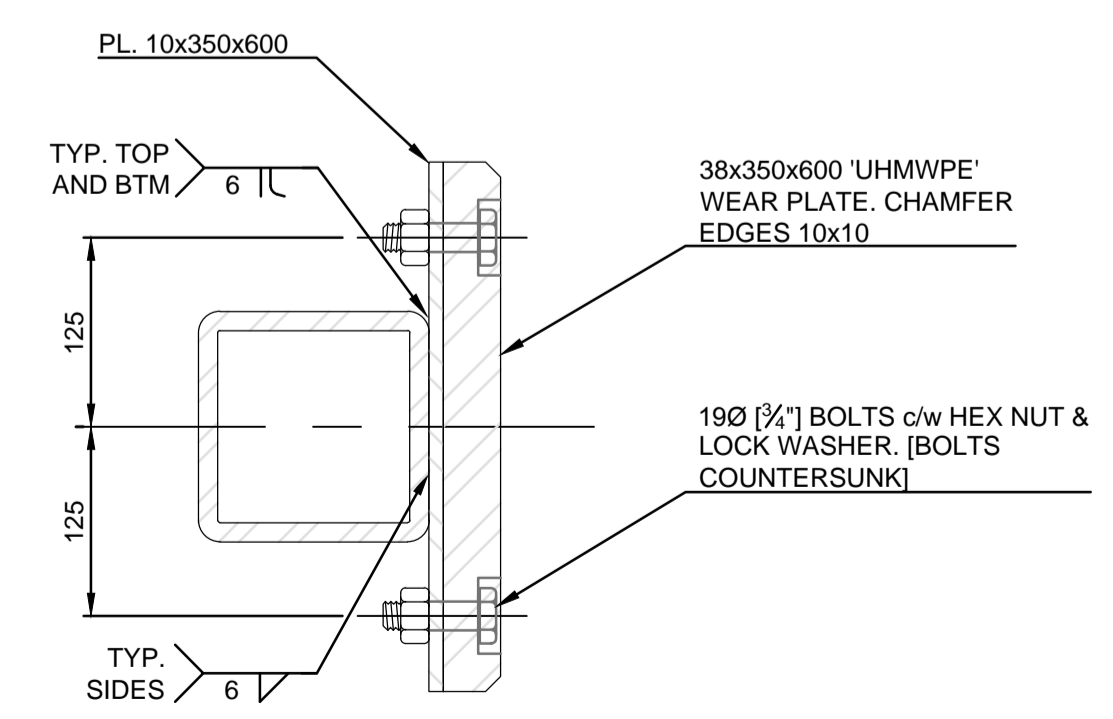
DETAIL B
SCALE 1:20



DETAIL C
SCALE 1:10

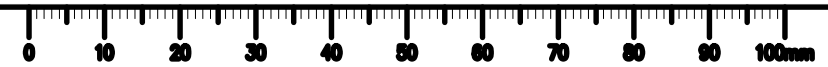


DETAIL A
SCALE 1:10



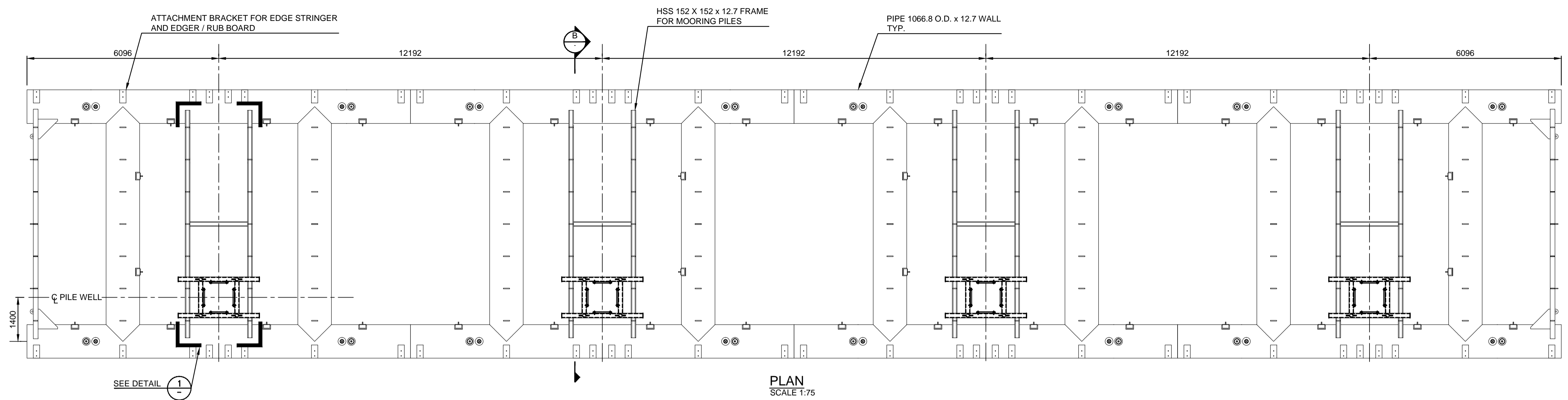
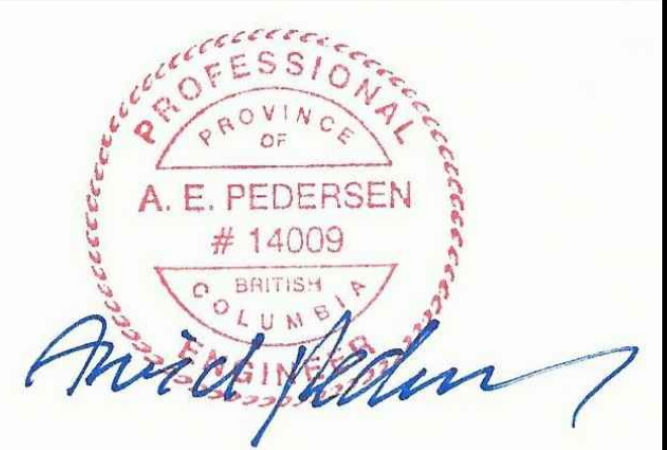
SECTION 1
SCALE 1:5

NOTES:
1. FOR GENERAL NOTES SEE DRAWING NO. 216105-001

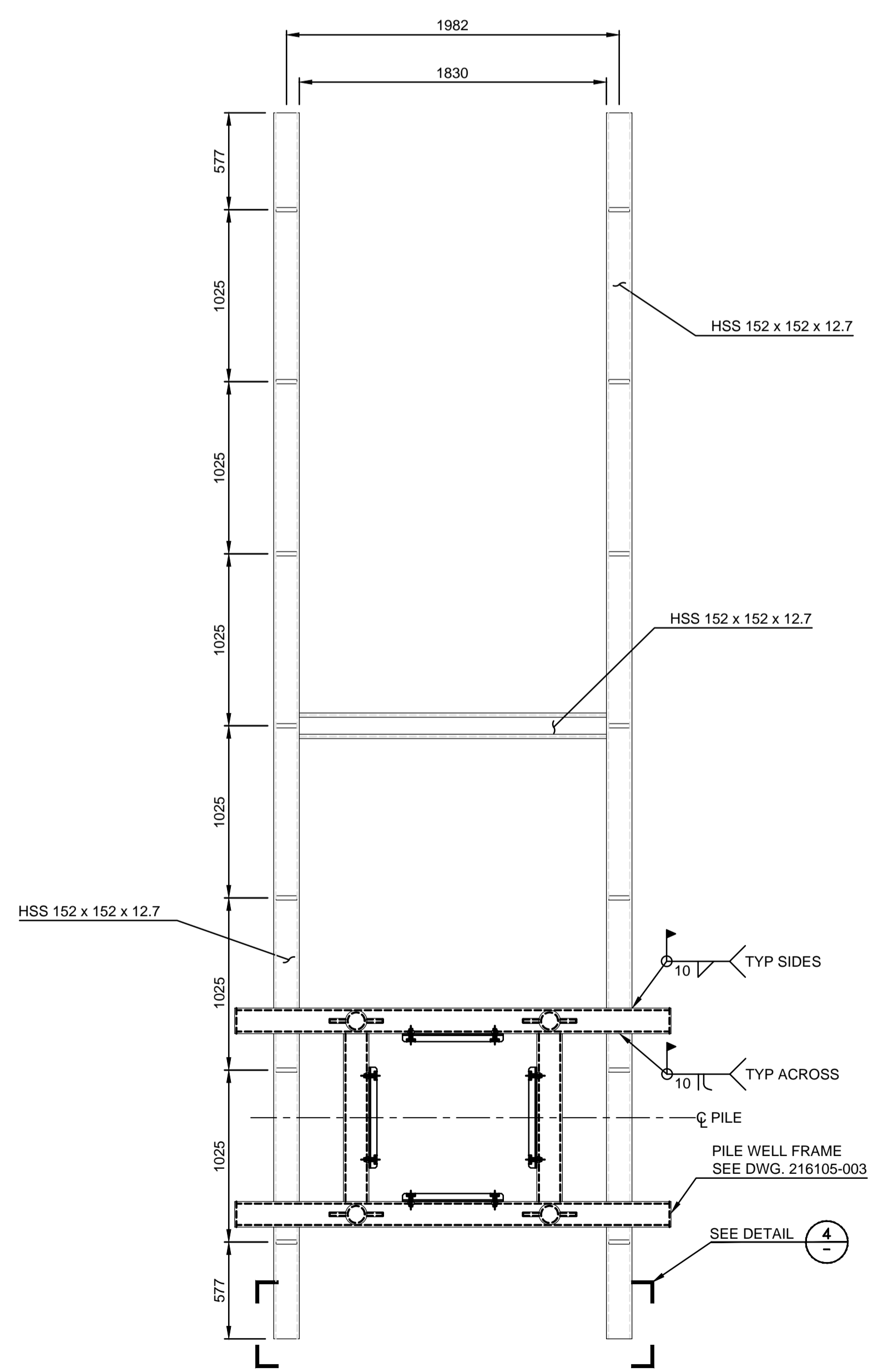


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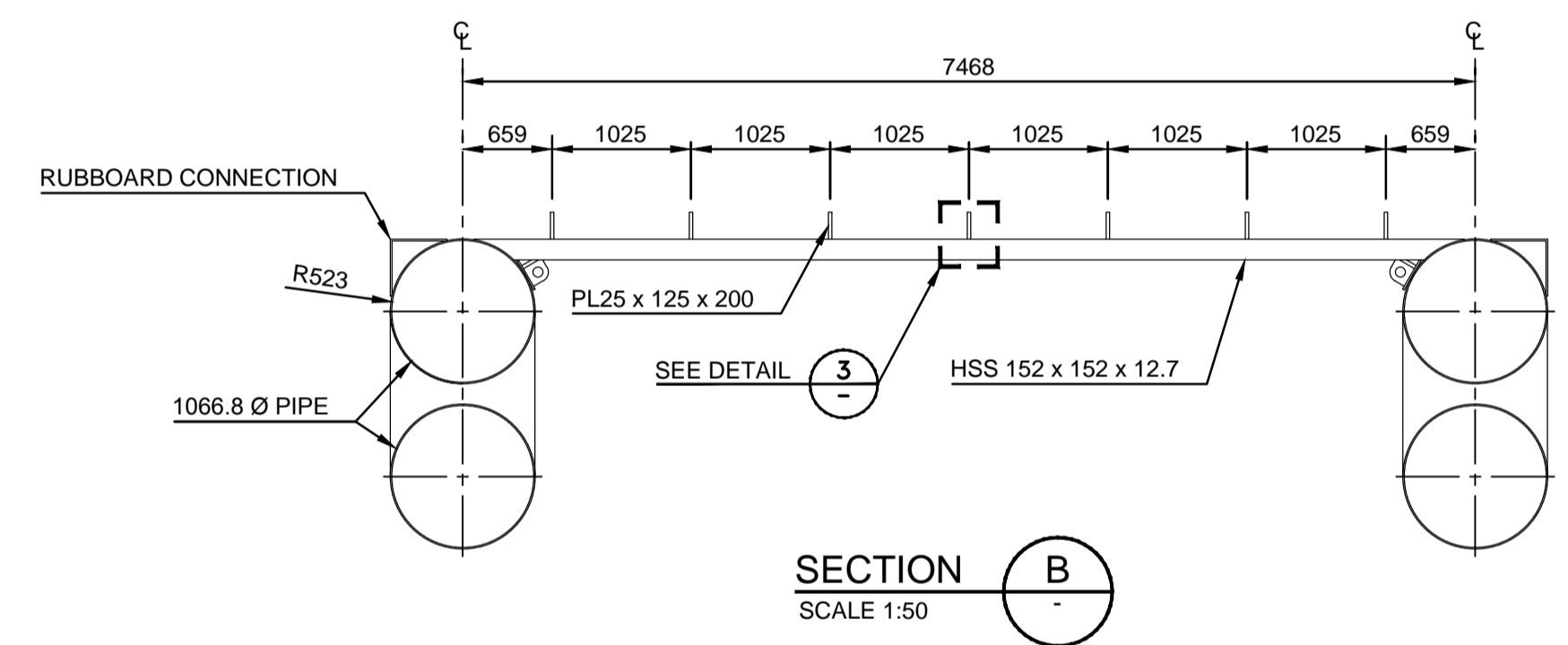
VJA ENGINEERING
VILLHOLTH JENSEN & ASSOC. LTD.
CONSULTING ENGINEERS
VANCOUVER, B.C.



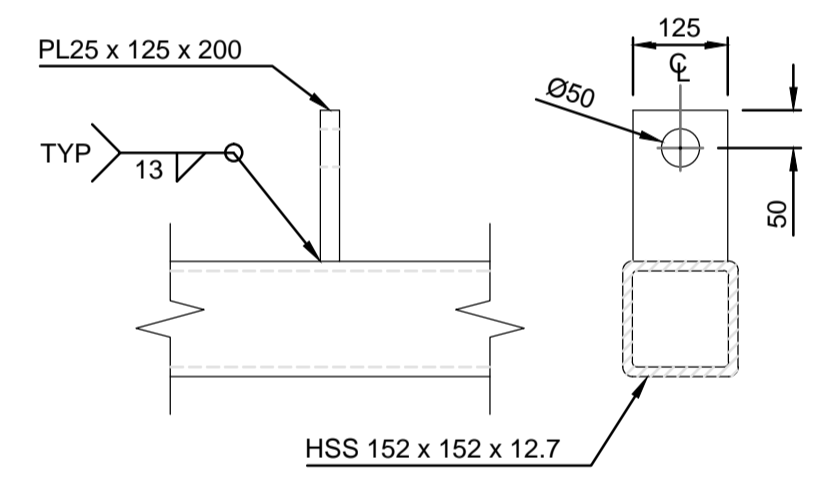
PLAN
SCALE 1:75



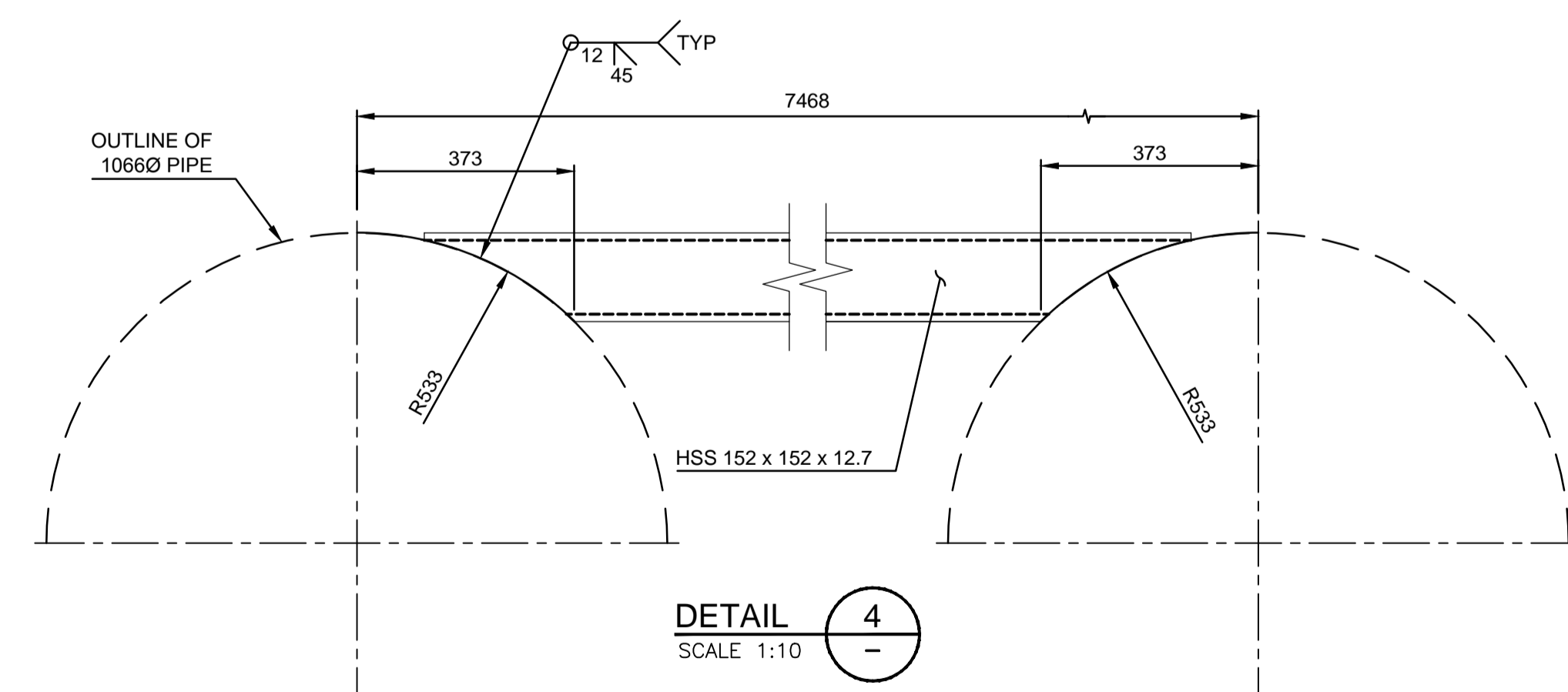
DETAIL 1
SCALE 1:25



SECTION B
SCALE 1:50



DETAIL 3
SCALE 1:10



DETAIL 4
SCALE 1:10

NOTES:
1. CATAMARAN DESIGNED BY KLA ENGINEERING LTD.
2. PILE FRAME DESIGNED BY VJA, SEE DWG 216105-003

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Revision/Revison	Description/Description	Date/Date
B	ISSUED FOR CONSTRUCTION	16/01/12
A	ISSUED FOR TENDER	15/09/13

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

FANNY BAY HARBOUR
CATAMARAN BREAKWATER

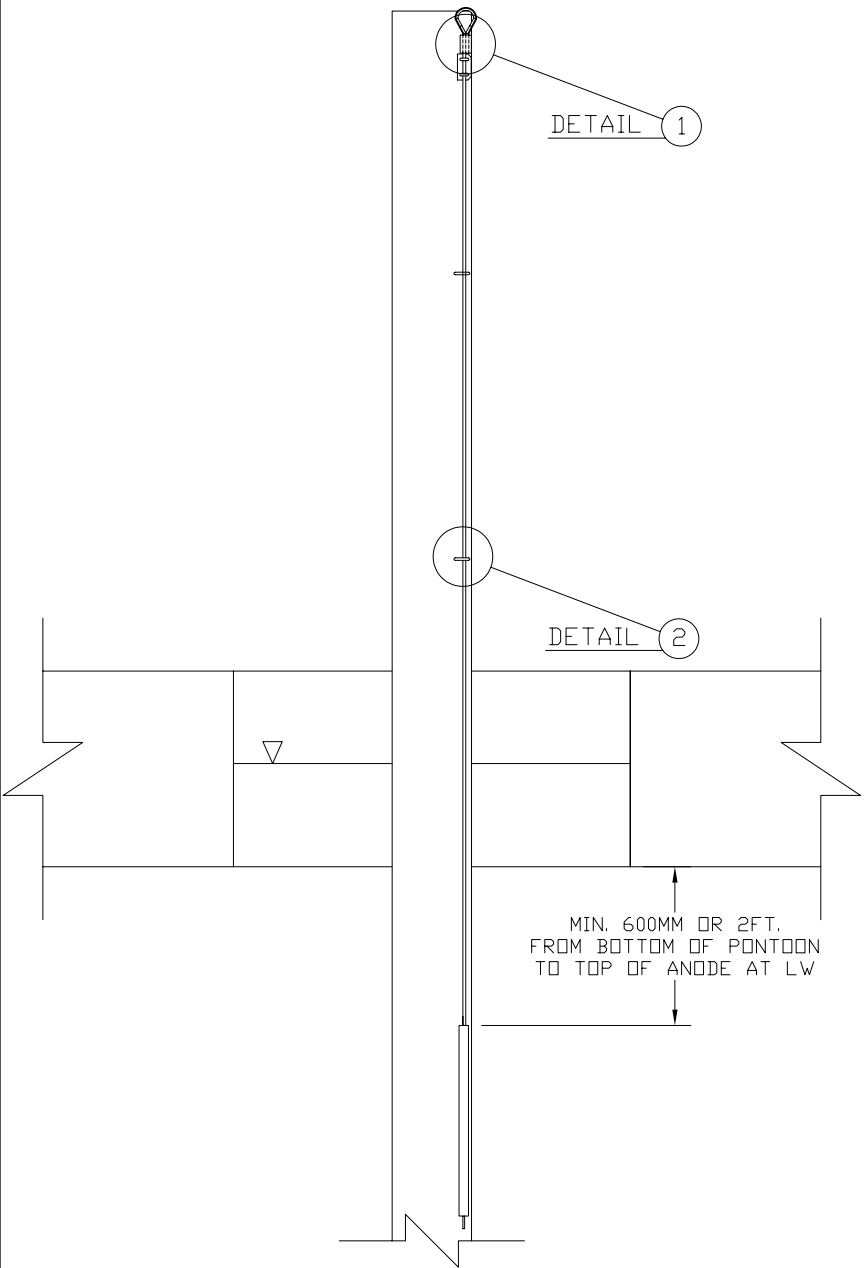
Approved by/Approve par
A.P.
Designed by/Concept par
A.P.
Drawn by/Dessine par
WSL
PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSGC

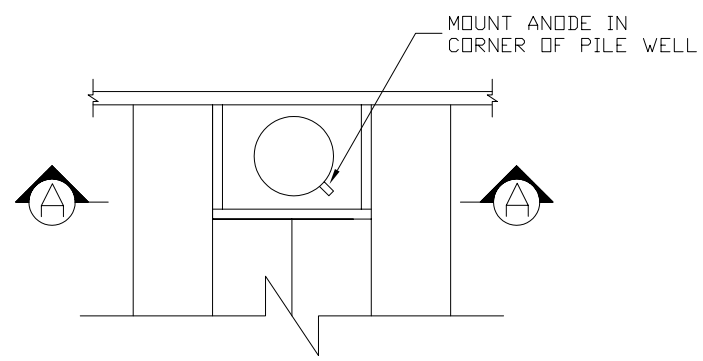
Client/client
SCH

Drawing title/Titre du dessin
160' DUAL LAYER
PILE MOORING WELL
C/W PILE WELL FRAME

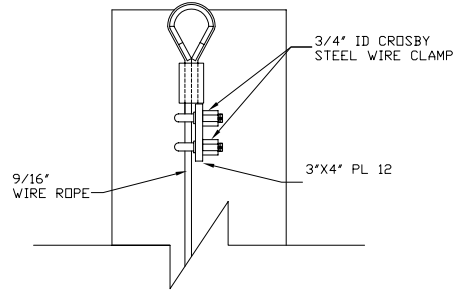
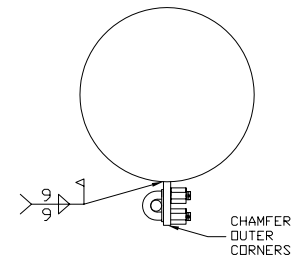
Project No./No. du projet	Sheet/ Feuille	Revision no./ La Révision no.
216105	320 OF	B



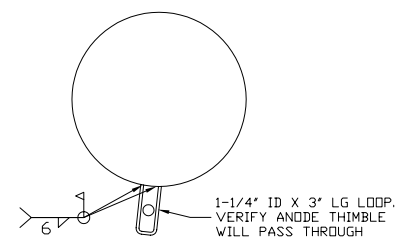
ELEVATION VIEW



PLAN VIEW




DETAIL 1



DETAIL 2



 Fisheries and Oceans Pêches et Océans Small Craft Harbours Branch	Tel: (604) 666-2226 Fax: (604) 666-7056 MORGAN.MEENTS@DFO-MPO.GC.CA	
	Title: ANODE INSTALLATION INSTRUCTIONS	
Scale: Not to Scale	Checked By:	Drawn By: MM
Drawn: MAY 23, 2008	Drawing No.: -	