

**Fisheries and Oceans
Canada**

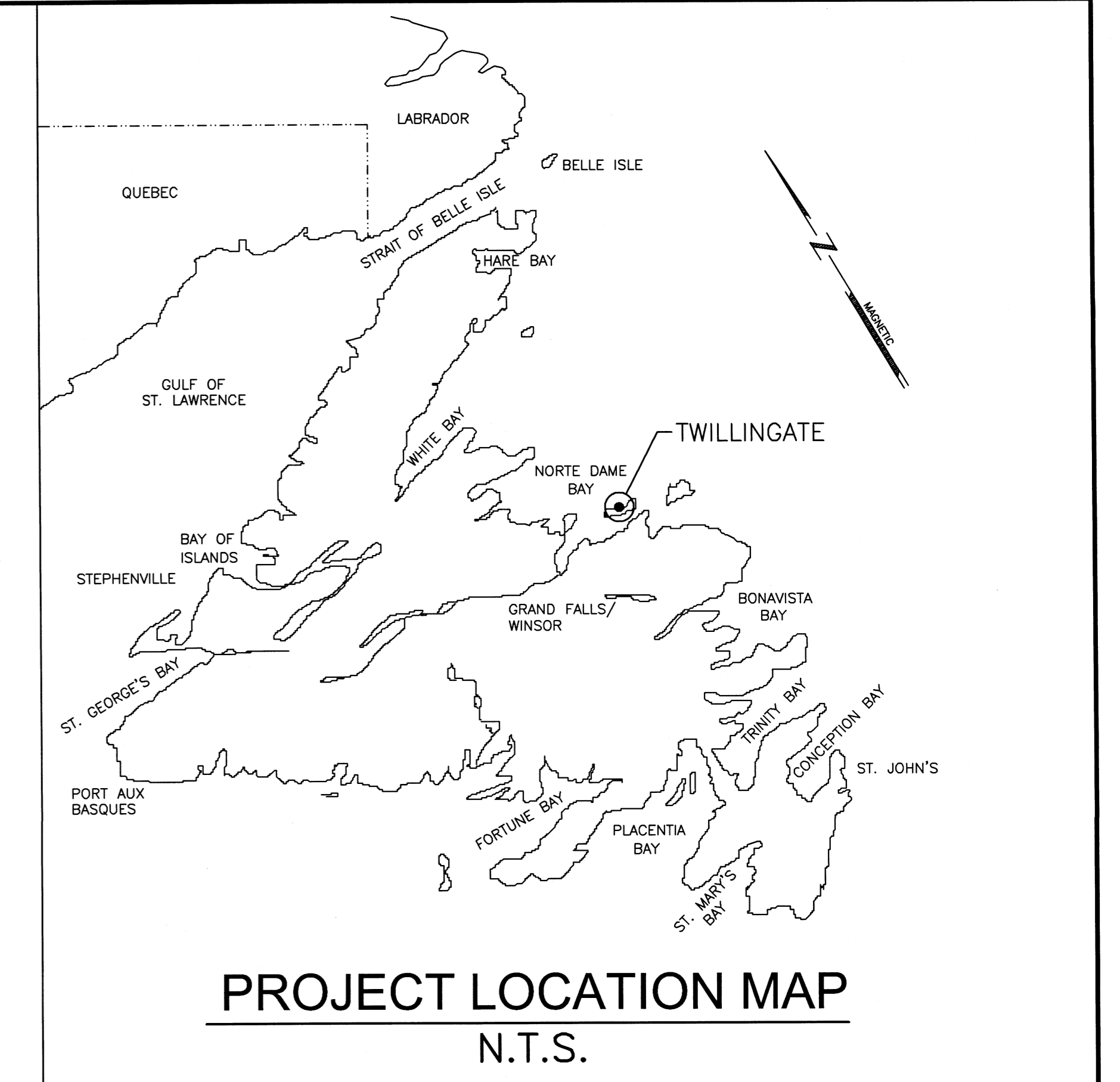
**Peches et Oceans
Canada**



Small Craft Harbours

Ports Pour Petits Bateaux

Newfoundland Region
St. John's, NL



**PROJECT: WHARF
REPAIRS**

**TWILLINGATE, NL
CANADA**

LIST OF DRAWINGS:

CIVIL

- C1 OF 10 – MAIN SITE PLAN
- C2 OF 10 – NEW ASPHALT PLAN & SECTION
- C3 OF 10 – ELEVATIONS
- C4 OF 10 – ELEVATIONS
- C5 OF 10 – ELEVATIONS & DETAILS
- C6 OF 10 – EXISTING & NEW DETAILS
- C7 OF 10 – EXISTING & NEW DETAILS
- C8 OF 10 – EXISTING & NEW DETAILS
- C9 OF 10 – EXISTING & NEW DETAILS
- C10 OF 10 – SMALL BOAT BASIN SITE PLAN & SECTION

PROJECT NO. 723455

ISSUED FOR TENDER 2021-04-12



SMALL CRAFT HARBOURS



- NOTES**
1. ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
 3. DO NOT SCALE FROM DRAWINGS.
 4. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO PROCEEDING WITH ANY PORTION OF THIS WORK.

PROFESSIONAL ENGINEER
STEPHEN PEARCE
 REGISTRATION NO. 12-04-21
 NEWFOUNDLAND & LABRADOR

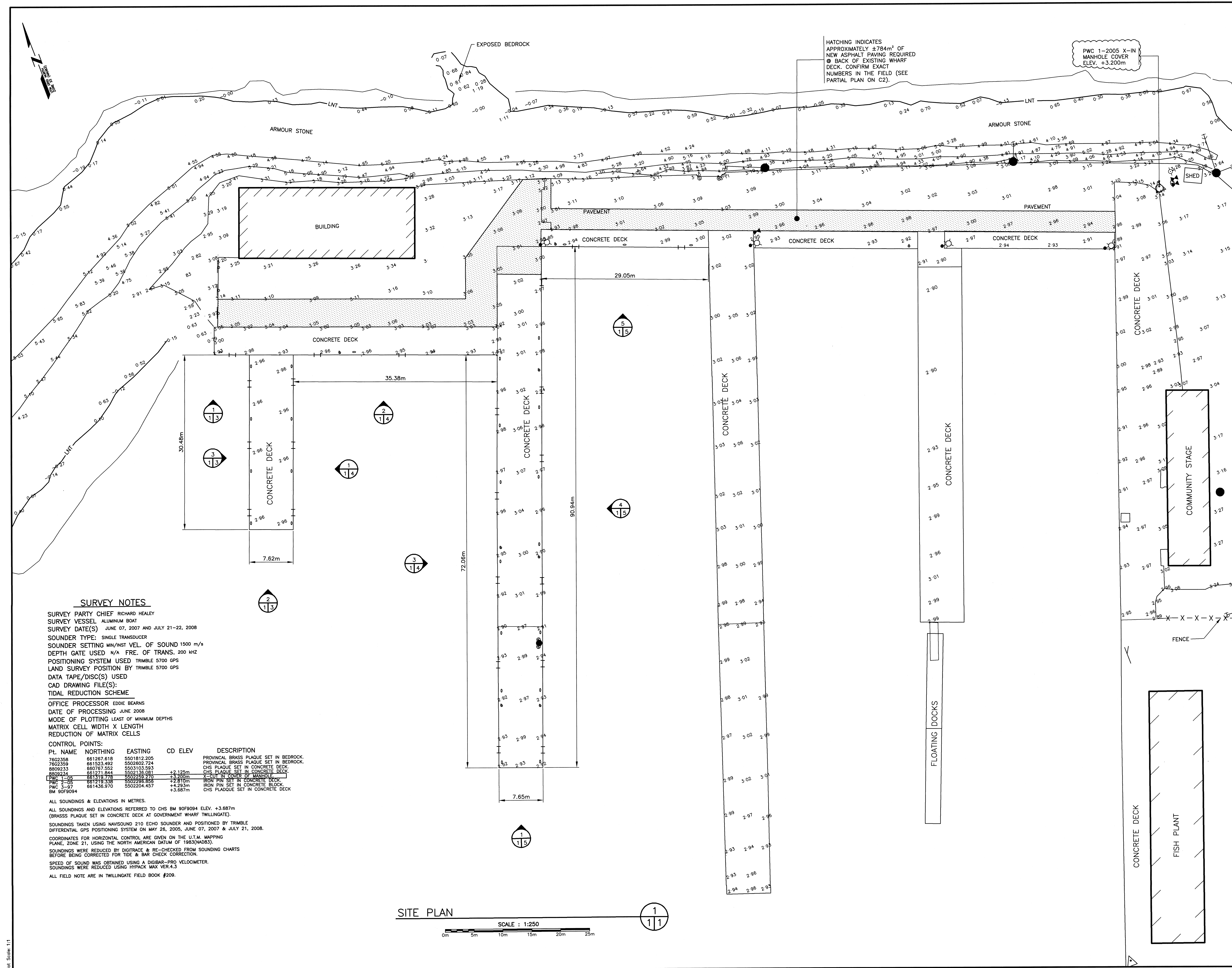
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 PERMIT HOLDER
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| revisions | | date |
| project | | project |

WHARF REPAIRS
TWILLINGATE, NL

MAIN SITE PLAN

| | | |
|---------------------|--------------------|---------------|
| designed | S. PEARCE | concu |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessine |
| date | JANUARY 2021 | |
| approved | | approuvé |
| Tender | <i>Paul Curran</i> | Soumission |
| DED Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C1 OF 10 | no. du dessin |



HATCHING INDICATES APPROXIMATELY ±784m² OF NEW ASPHALT PAVING REQUIRED @ BACK OF EXISTING WHARF DECK. CONFIRM EXACT NUMBERS IN THE FIELD (SEE PARTIAL PLAN ON C2).

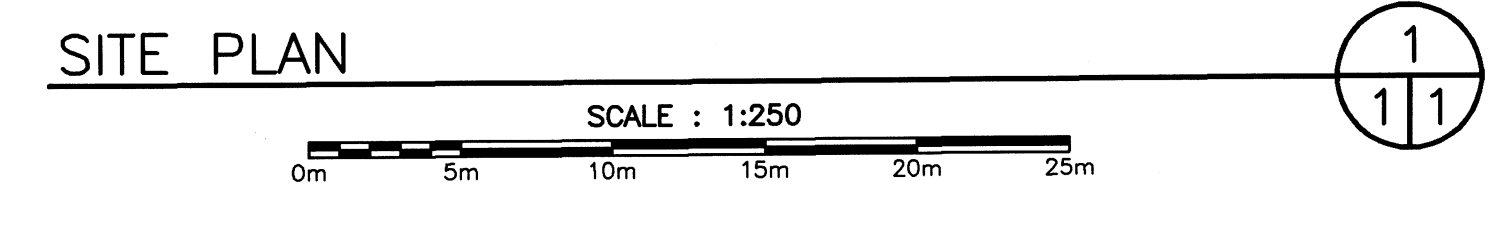
PWC 1-2005 X-IN MANHOLE COVER ELEV. +3.200m

SURVEY NOTES

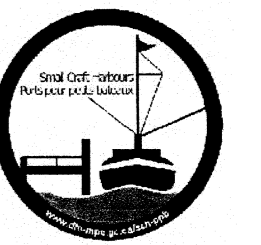
SURVEY PARTY CHIEF RICHARD HEALEY
 SURVEY VESSEL ALUMINUM BOAT
 SURVEY DATE(S) JUNE 07, 2007 AND JULY 21-22, 2008
 SOUNDER TYPE: SINGLE TRANSDUCER
 SOUNDER SETTING MIN/NST VEL. OF SOUND 1500 m/s
 DEPTH GATE USED N/A FRE. OF TRANS. 200 kHz
 POSITIONING SYSTEM USED TRIMBLE 5700 GPS
 LAND SURVEY POSITION BY TRIMBLE 5700 GPS
 DATA TAPE/DISC(S) USED
 CAD DRAWING FILE(S):
 TIDAL REDUCTION SCHEME
 OFFICE PROCESSOR EDDIE BEARNS
 DATE OF PROCESSING JUNE 2008
 MODE OF PLOTTING LEAST OF MINIMUM DEPTHS
 MATRIX CELL WIDTH X LENGTH
 REDUCTION OF MATRIX CELLS
 CONTROL POINTS:

| PL NAME | NORTHING | EASTING | CD ELEV | DESCRIPTION |
|------------|------------|-------------|---------|---|
| 76G2358 | 661267.618 | 5501812.205 | | PROVINCIAL BRASS PLAQUE SET IN BEDROCK. |
| 76G2359 | 661523.492 | 5502602.724 | | PROVINCIAL BRASS PLAQUE SET IN BEDROCK. |
| 86G2333 | 660767.552 | 5503103.583 | | CHS PLAQUE SET IN CONCRETE DECK. |
| 86G2334 | 661271.844 | 5502138.081 | +2.125m | CHS PLAQUE SET IN CONCRETE DECK. |
| CHS 1-05 | 661518.778 | 5502259.210 | +3.200m | CHS IN COCKER OF MANHOLE |
| PWC 2-05 | 661219.338 | 5502286.856 | +2.810m | IRON PIN SET IN CONCRETE DECK. |
| PWC 3-07 | 661436.970 | 5502204.457 | +4.293m | IRON PIN SET IN CONCRETE DECK. |
| BM 90F9094 | | | +3.687m | CHS PLAQUE SET IN CONCRETE DECK. |

ALL SOUNDINGS & ELEVATIONS IN METRES.
 ALL SOUNDINGS AND ELEVATIONS REFERRED TO CHS BM 90F9094 ELEV. +3.687m (BRASS PLAQUE SET IN CONCRETE DECK AT GOVERNMENT WHARF TWILLINGATE).
 SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE DIFFERENTIAL GPS POSITIONING SYSTEM ON MAY 26, 2005, JUNE 07, 2007 & JULY 21, 2008.
 COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983(NAD83).
 SOUNDINGS WERE REDUCED BY DIGITRACE & RE-CHECKED FROM SOUNDING CHARTS BEFORE BEING CORRECTED FOR TIDE & BAR CHECK CORRECTION.
 SPEED OF SOUND WAS OBTAINED USING A DIGIBAR-PRO VELOCIMETER.
 SOUNDINGS WERE REDUCED USING HYPACK MAX VER 4.3
 ALL FIELD NOTE ARE IN TWILLINGATE FIELD BOOK #209.

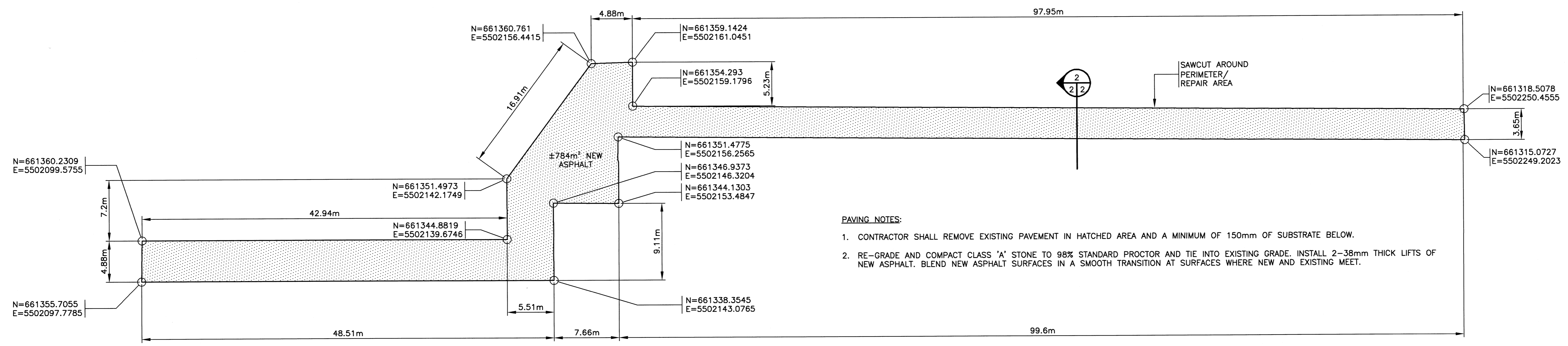


SMALL CRAFT HARBOURS



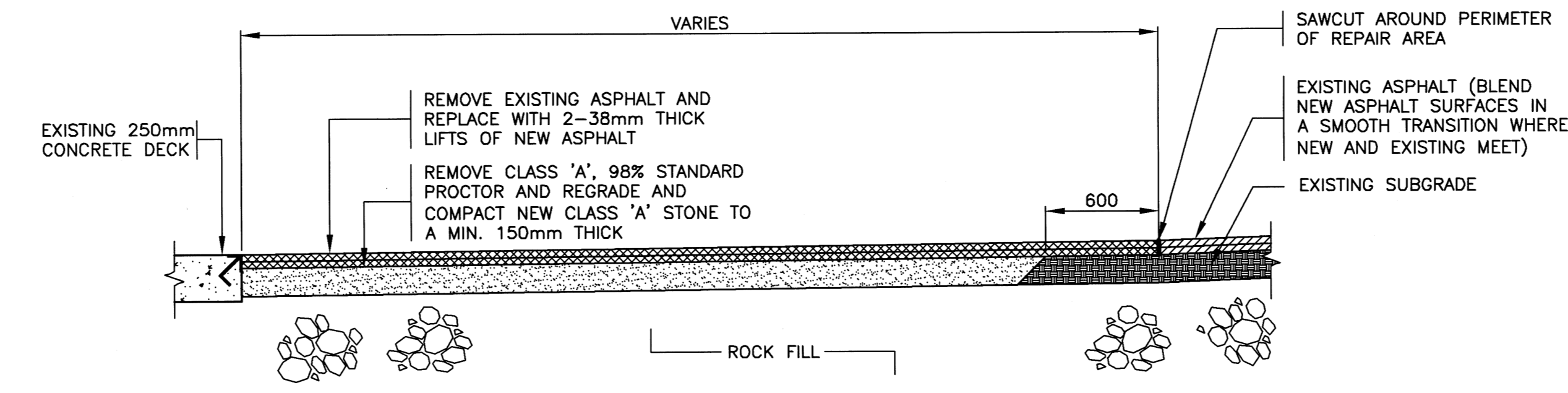
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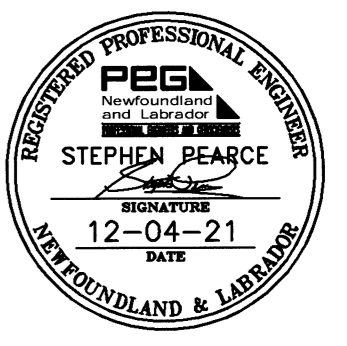


PAVING NOTES:
 1. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT IN HATCHED AREA AND A MINIMUM OF 150mm OF SUBSTRATE BELOW.
 2. RE-GRADE AND COMPACT CLASS 'A' STONE TO 98% STANDARD PROCTOR AND TIE INTO EXISTING GRADE. INSTALL 2-38mm THICK LIFTS OF NEW ASPHALT. BLEND NEW ASPHALT SURFACES IN A SMOOTH TRANSITION AT SURFACES WHERE NEW AND EXISTING MEET.

NEW ASPHALT PLAN
 SCALE : 1:250



TYPICAL ASPHALT REPAIR SECTION
 SCALE : 1:25



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| A | ISSUED FOR REVIEW | MAR 4 2021 |
| revisions | | date |

project: TWILLINGATE, NL
 drawing: NEW ASPHALT PLAN & SECTION

designed: S. PEARCE
 date: JANUARY 2021
 drawn: B. SCAPLEN
 date: JANUARY 2021

Tender: [Signature] Submission
 DFO Project Manager
 project number: 723455
 drawing no.: C2 OF 10

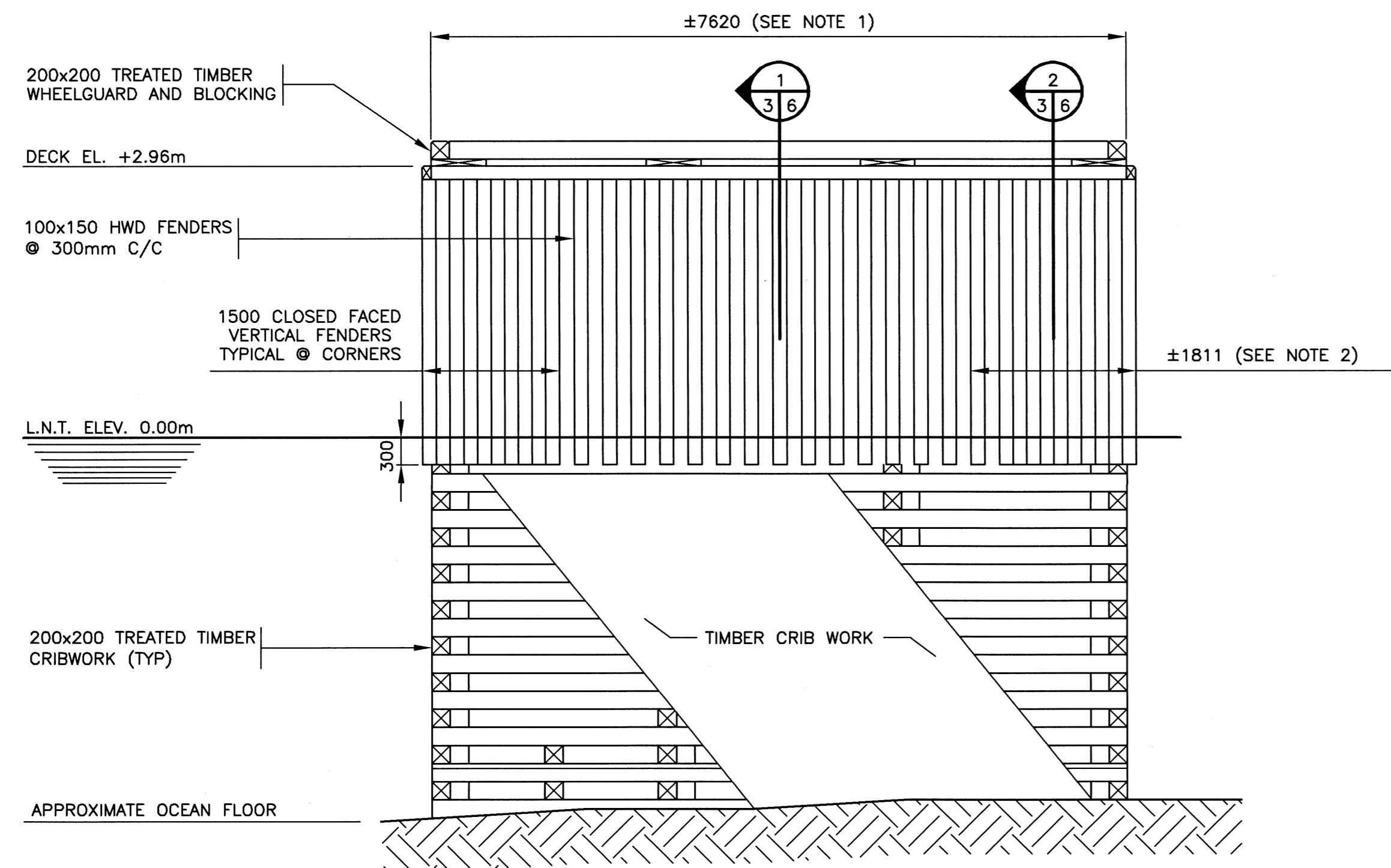
SMALL CRAFT HARBOURS



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- NOTES:
1. REMOVE 50% OF EXISTING WHEELGUARD, BLOCKING AND COPING OVER WIDTH INDICATED AND ENTIRE HORIZONTAL FENDER AND INSTALL NEW AS PER DETAIL 1/C6.
 2. REMOVE EXISTING VERTICAL FENDERS OVER WIDTH INDICATED AND INSTALL NEW AS PER DETAIL 2/C6.

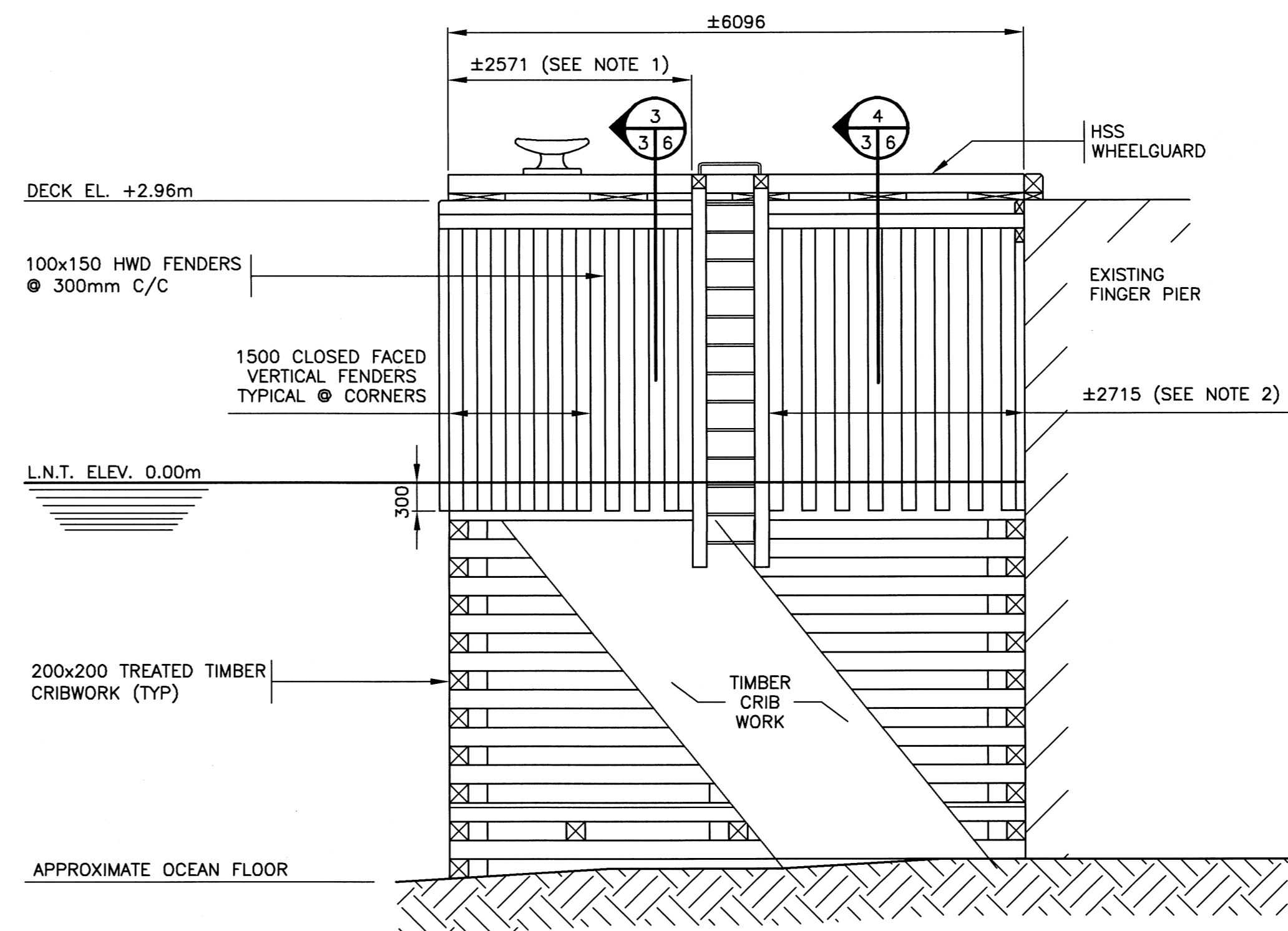


ELEVATION @ HEAD OF FINGER PIER

SCALE : 1:50

2
1/3

- NOTES:
1. REMOVE EXISTING TOP HORIZONTAL FENDER AND REPLACE WITH NEW AS PER DETAIL 3/C6.
 2. REMOVE EXISTING VERTICAL FENDERS OVER WIDTH INDICATED AND INSTALL NEW AS PER DETAIL 4/C6.

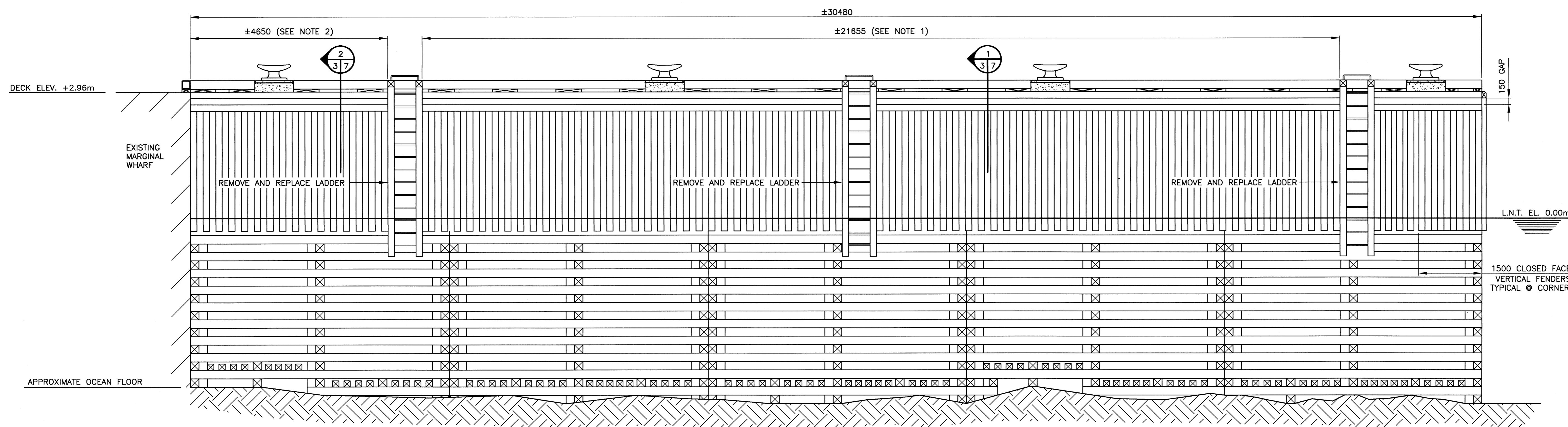


ELEVATION - MARGINAL WHARF

SCALE : 1:50

1
1/3

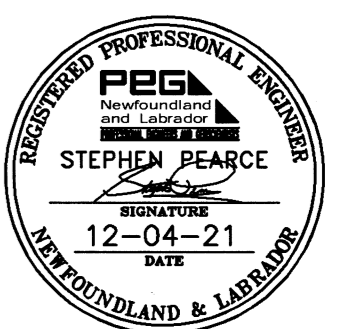
- NOTES:
1. REMOVE 50% OF EXISTING WHEELGUARD, BLOCKING AND COPING OVER WIDTH INDICATED AND ALL OF 2 HORIZONTAL FENDERS AND INSTALL NEW AS PER DETAIL 1/C7.
 2. REMOVE EXISTING TOP HORIZONTAL FENDER AND REPLACE WITH NEW AS PER DETAIL 2/C7.



ELEVATION - FINGER PIER WHARF (SEAWARD SIDE)

SCALE : 1:50

3
1/3



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| project | | project |

WHARF REPAIRS
 TWILLINGATE, NL

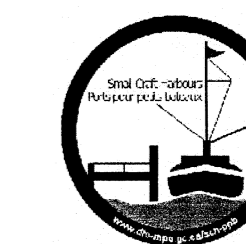
drawing dessin

ELEVATIONS

| | | |
|----------|--------------|----------|
| designed | S. PEARCE | conçu |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessiné |
| date | JANUARY 2021 | |
| approved | | approuvé |

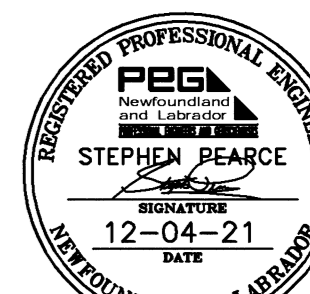
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|---------------------|--------------------|---------------|
| Tender | <i>Paul Curran</i> | Submission |
| DFD Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | | no. du dessin |

SMALL CRAFT HARBOURS



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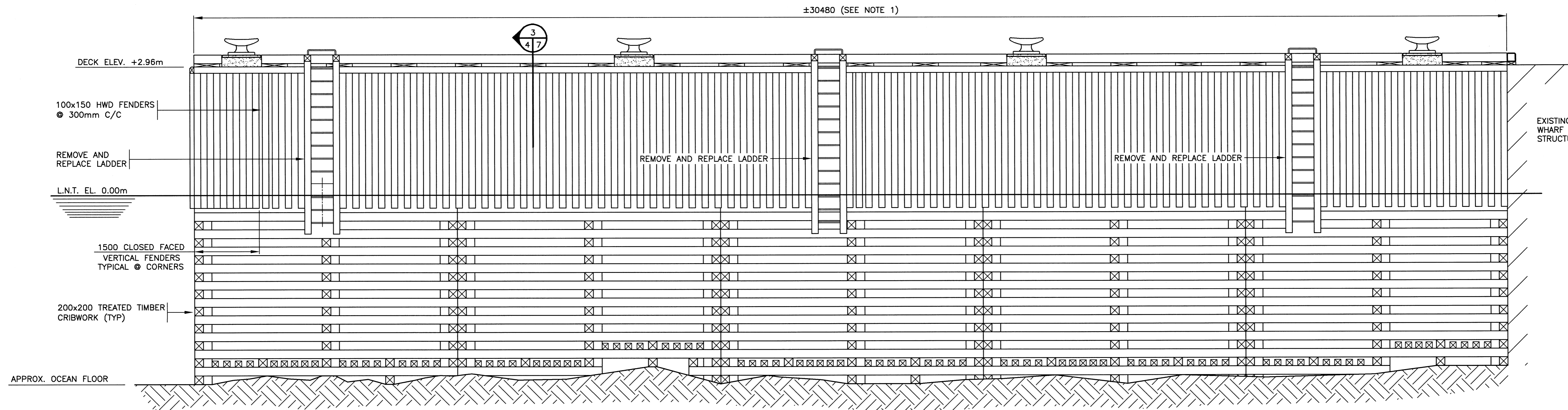
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WHARF REPAIRS
 TWILLINGATE, NL

ELEVATIONS

| | | |
|---------------------|--------------------|---------------|
| designed | S. PEARCE | concep |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | designe |
| date | JANUARY 2021 | |
| approved | | approve |
| Tender | <i>Paul Curran</i> | Submission |
| DDO Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C4 OF 10 | no. du dessin |

NOTES:
 1. REMOVE 50% OF WHEELGUARD, BLOCKING, COPING AND ALL OF HORIZONTAL FENDERS AND INSTALL NEW AS PER DETAILS 3/C7.



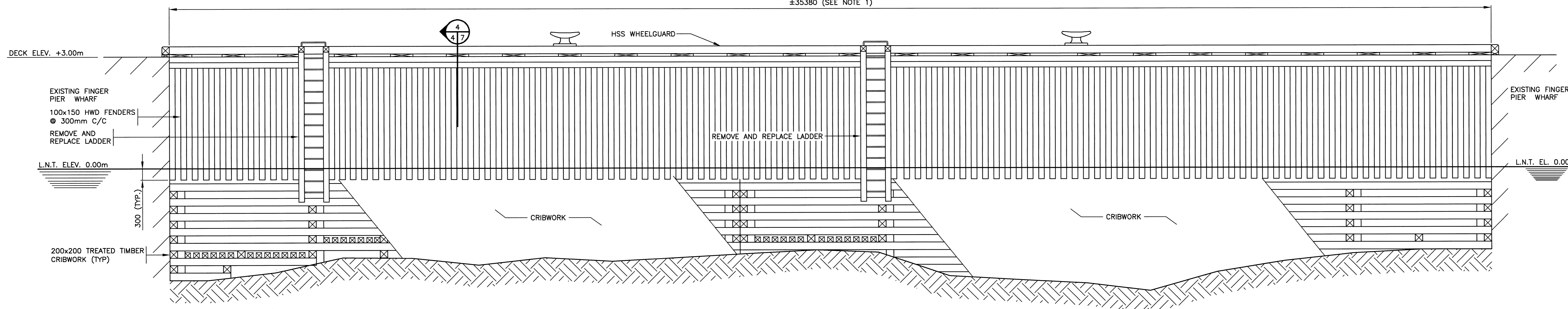
ELEVATION - FINGER PIER WHARF (LEAWARD SIDE)

SCALE : 1:50
 0m 1m 2m 3m 4m 5m

1
 14

NOTES:
 1. REMOVE HSS WHEELGUARD AS REQUIRED. REMOVE 50% OF BLOCKING, COPING AND ALL HORIZONTAL AND VERTICAL FENDERS AND INSTALL AS PER DETAIL 4/C7. (EXACT LENGTH OF WHEELGUARD TO BE REMOVED TO ACCOMMODATE COPING REMOVAL TO BE DETERMINED ON SITE).

±35380 (SEE NOTE 1)



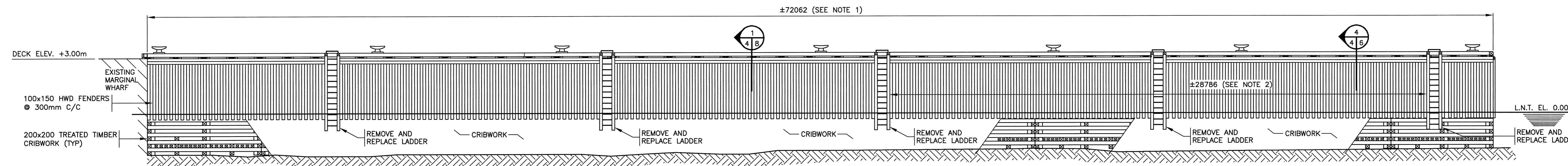
ELEVATION - MARGINAL WHARF

SCALE : 1:50
 0m 1m 2m 3m 4m 5m

2
 14

NOTES:
 1. REMOVE 50% OF WHEELGUARD, BLOCKING, COPING AND ALL OF 2 HORIZONTAL FENDERS AND INSTALL NEW AS PER DETAIL 1/C8.
 2. REMOVE VERTICAL FENDERS AND INSTALL NEW AS PER DETAIL 4/C6.

±72062 (SEE NOTE 1)



ELEVATION - FINGER PIER WHARF (SEAWARD SIDE)

SCALE : 1:100
 0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

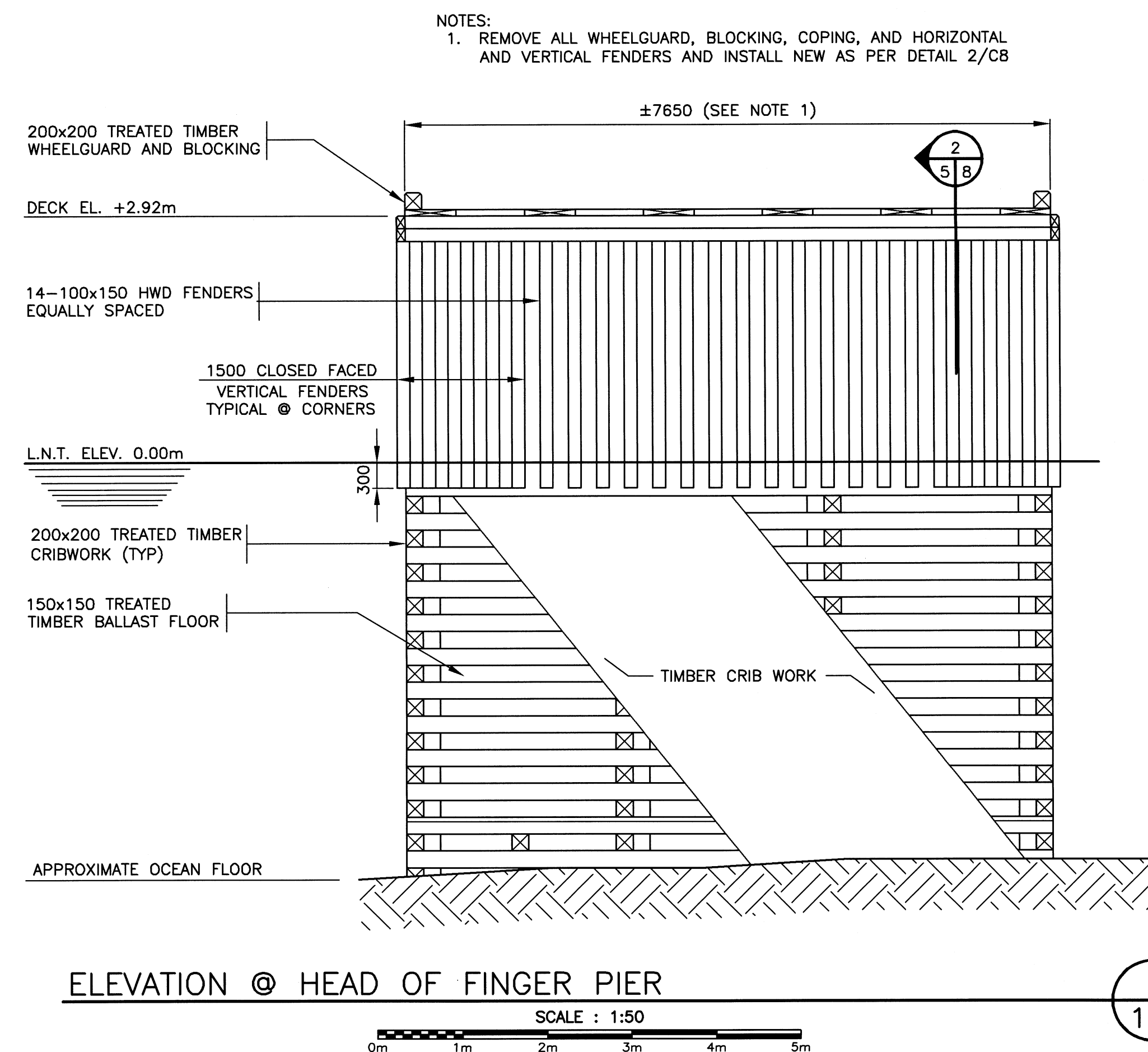
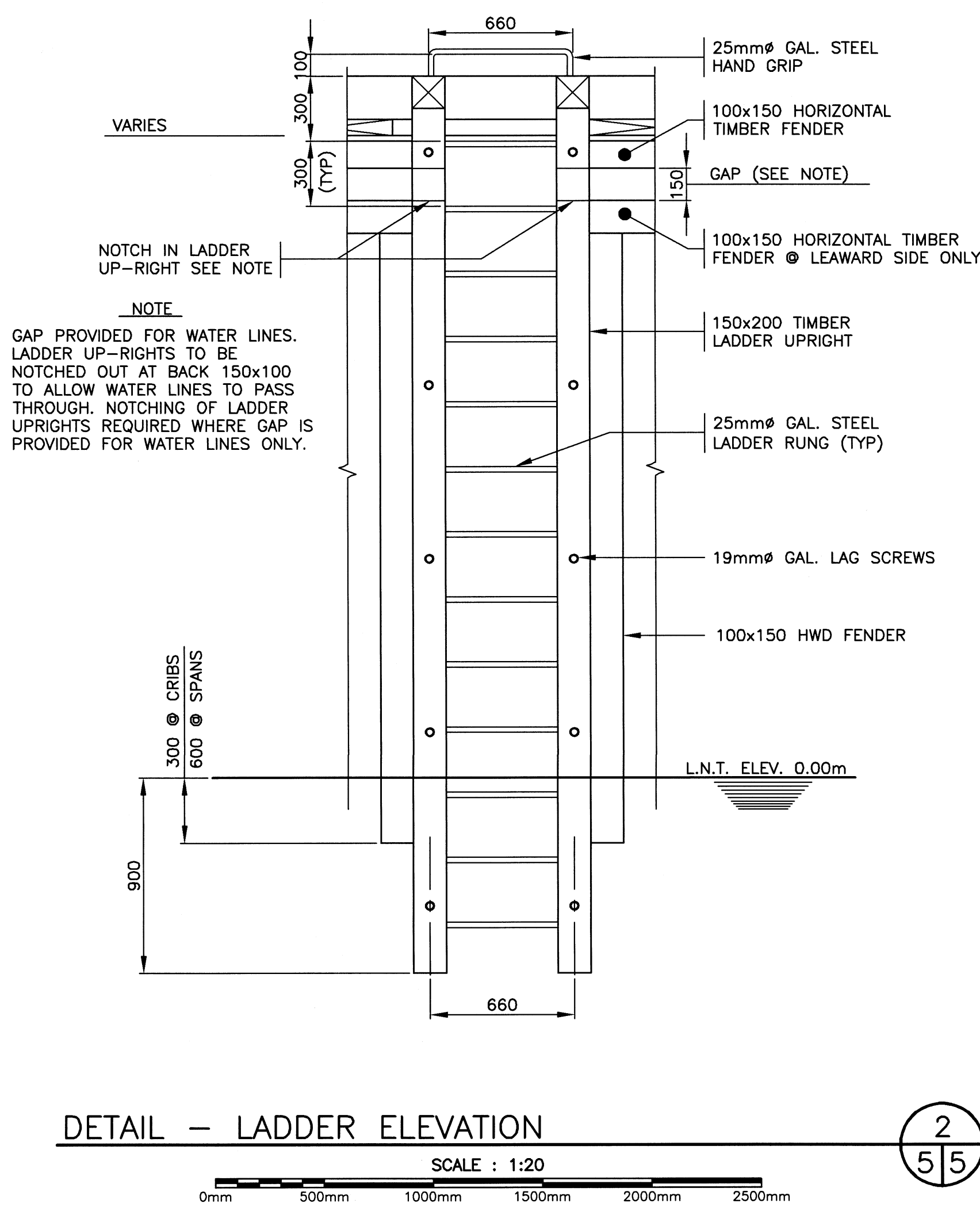
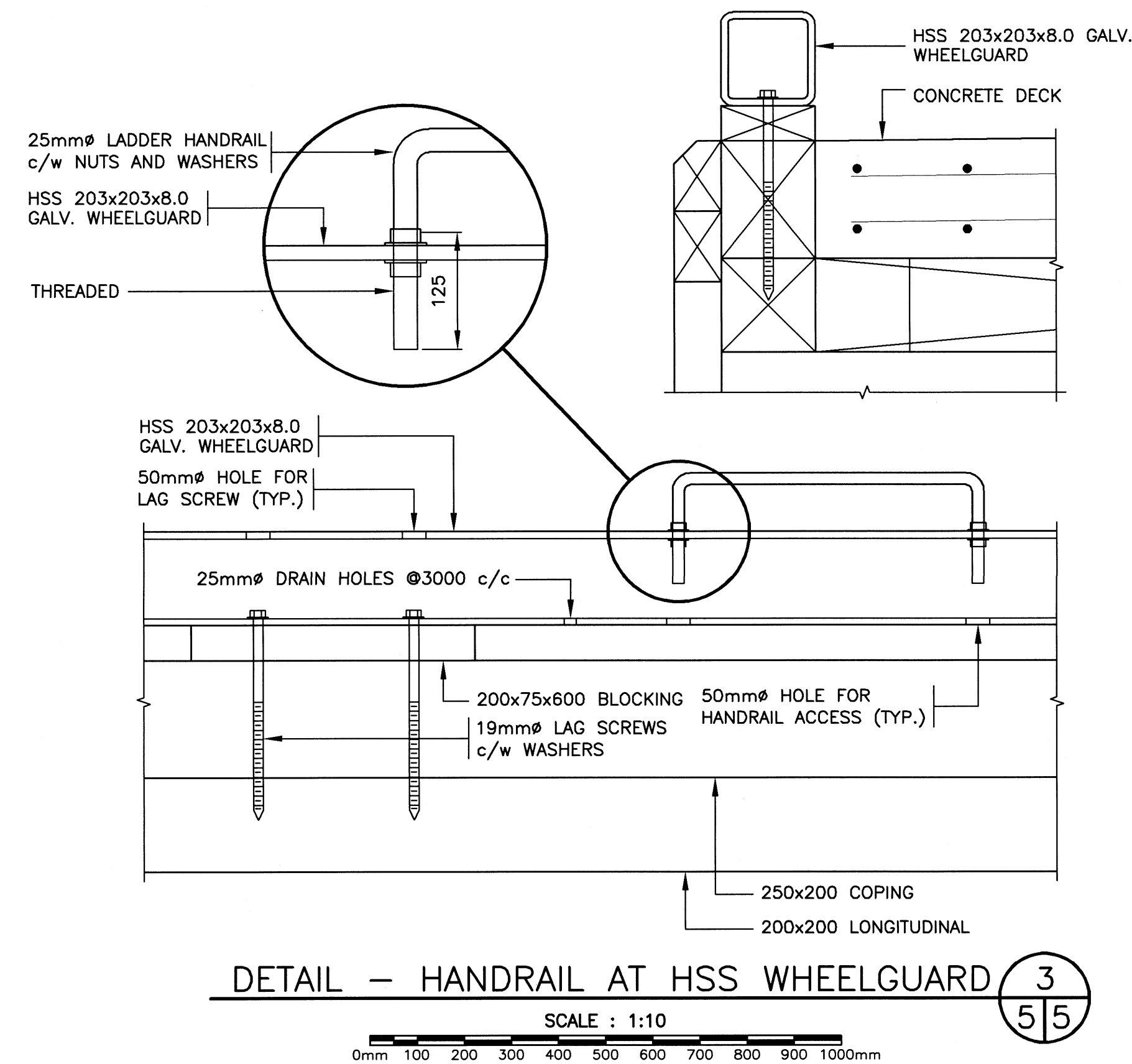
3
 14

SMALL CRAFT HARBOURS

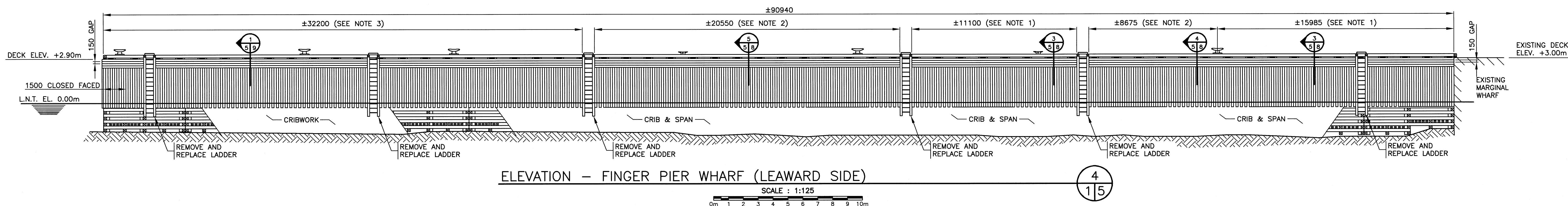


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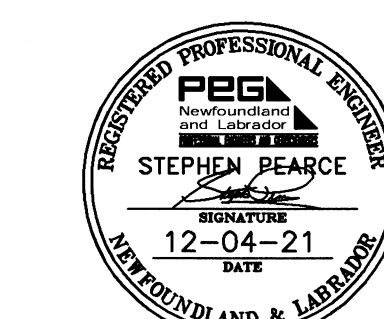
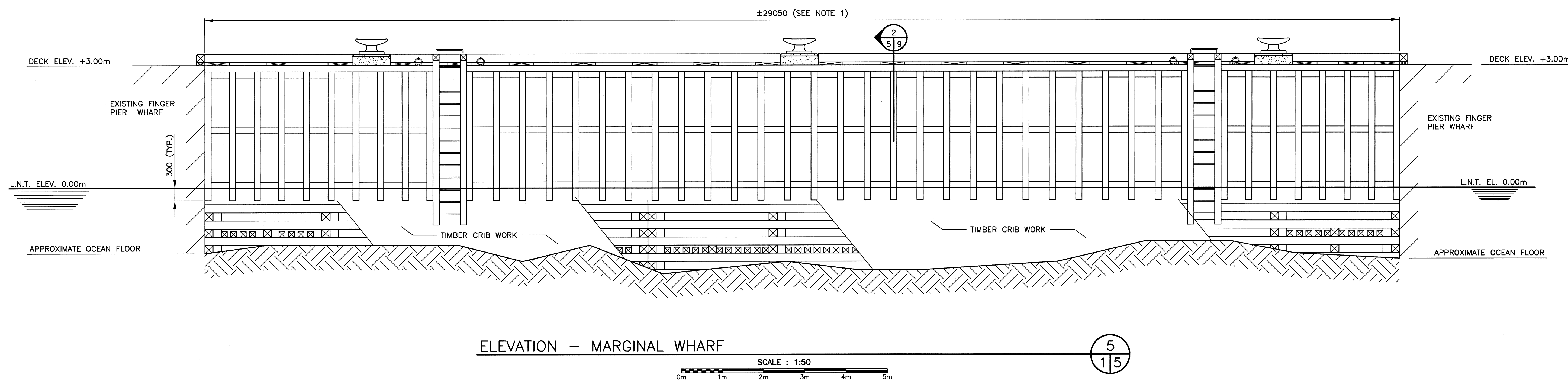
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- NOTES:
1. REMOVE 50% OF WHEELGUARD, BLOCKING, COPING AND ALL OF 3 HORIZONTAL FENDERS AND INSTALL NEW AS PER DETAIL 3/C8
 2. REMOVE AND REPLACE TOP HORIZONTAL FENDER AS PER DETAIL 4/C8
 3. REMOVE 50% OF WHEELGUARD, BLOCKING, COPING AND ALL OF HORIZONTAL AND VERTICAL FENDERS AND INSTALL NEW AS PER SECTION DETAIL 1/9



- NOTES:
1. REMOVE 50% OF ALL WHEELGUARD, BLOCKING, COPING, LADDERS AND ALL OF HORIZONTAL AND VERTICAL FENDERS AND INSTALL NEW AS PER DETAIL 2/C9



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WHARF REPAIRS
 TWILLINGATE, NL

ELEVATIONS
 & DETAILS

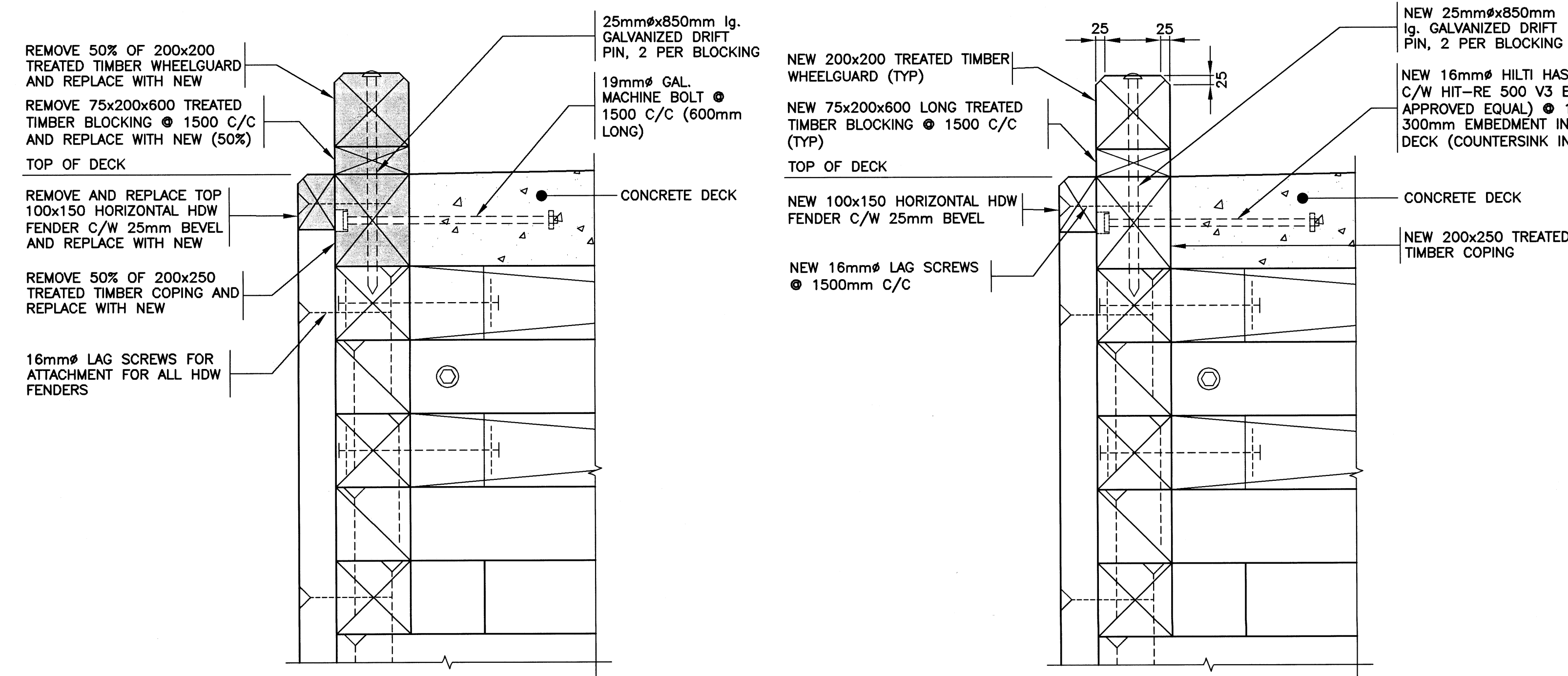
| | | |
|---------------------|--------------|---------------|
| designed | S. PEARCE | concep |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessine |
| date | JANUARY 2021 | |
| approved | | approuve |
| Tender | Paul Curran | Sourmission |
| DEO Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C5 OF 10 | no. du dessin |

SMALL CRAFT HARBOURS



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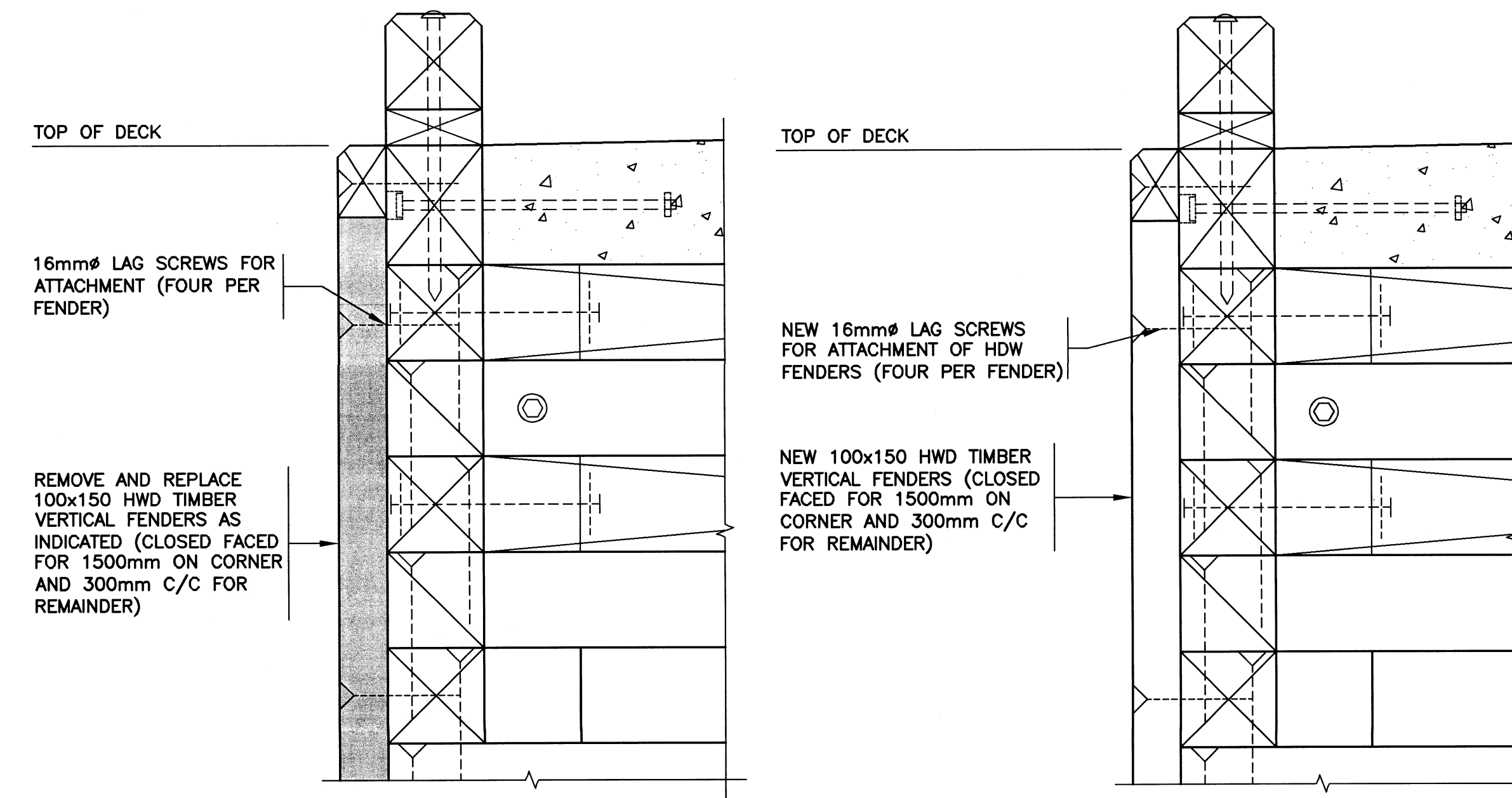
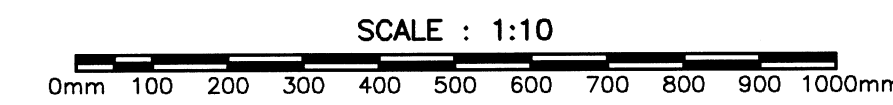


EXISTING

NEW

EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND 1 HORIZONTAL FENDER)

1
3/6

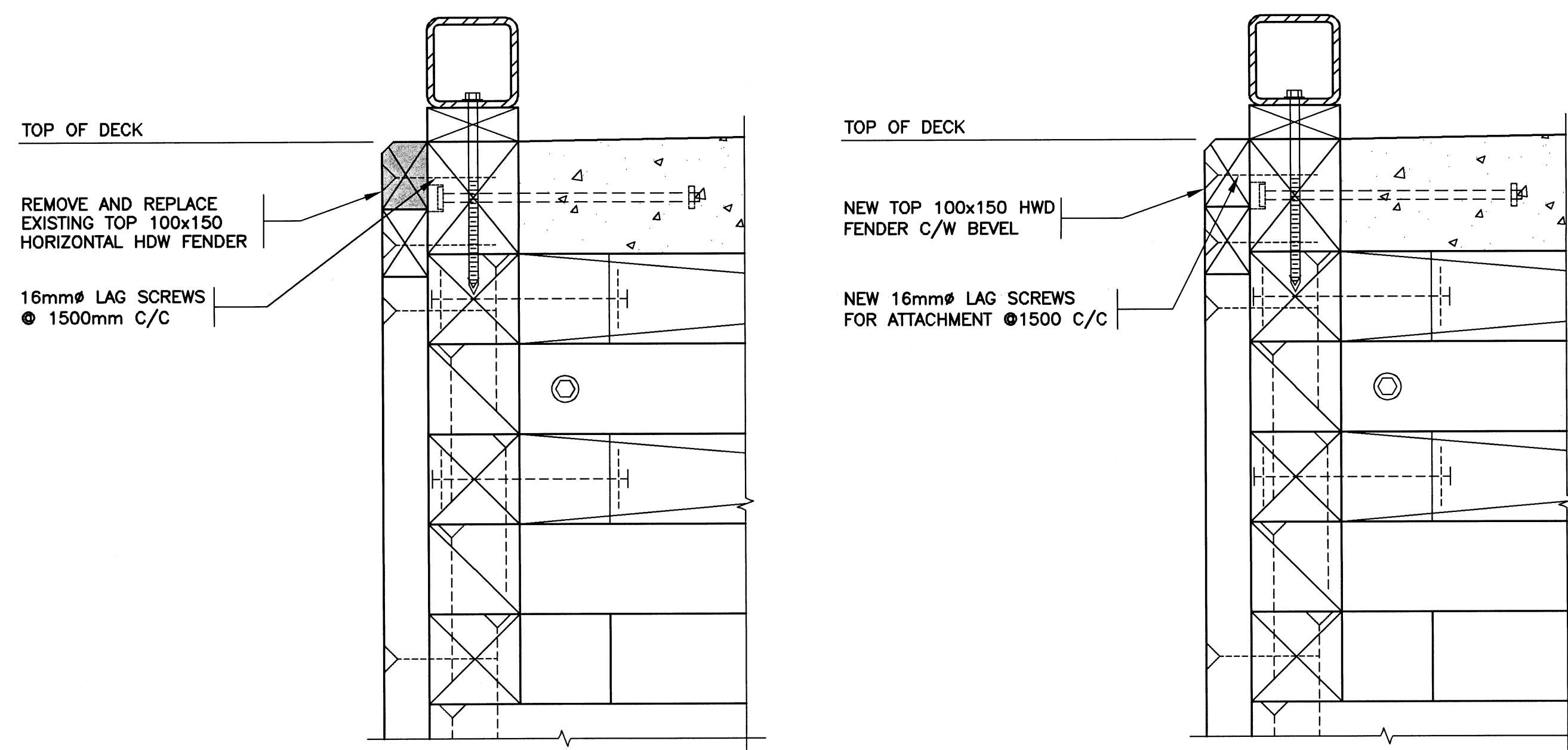
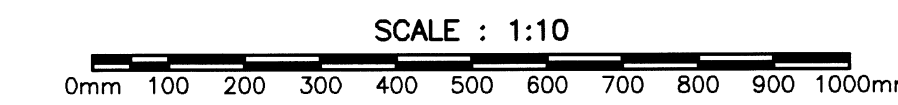


EXISTING

NEW

EXISTING & NEW DETAIL (VERTICAL FENDERS @ SINGLE HORIZONTAL)

2
3/6

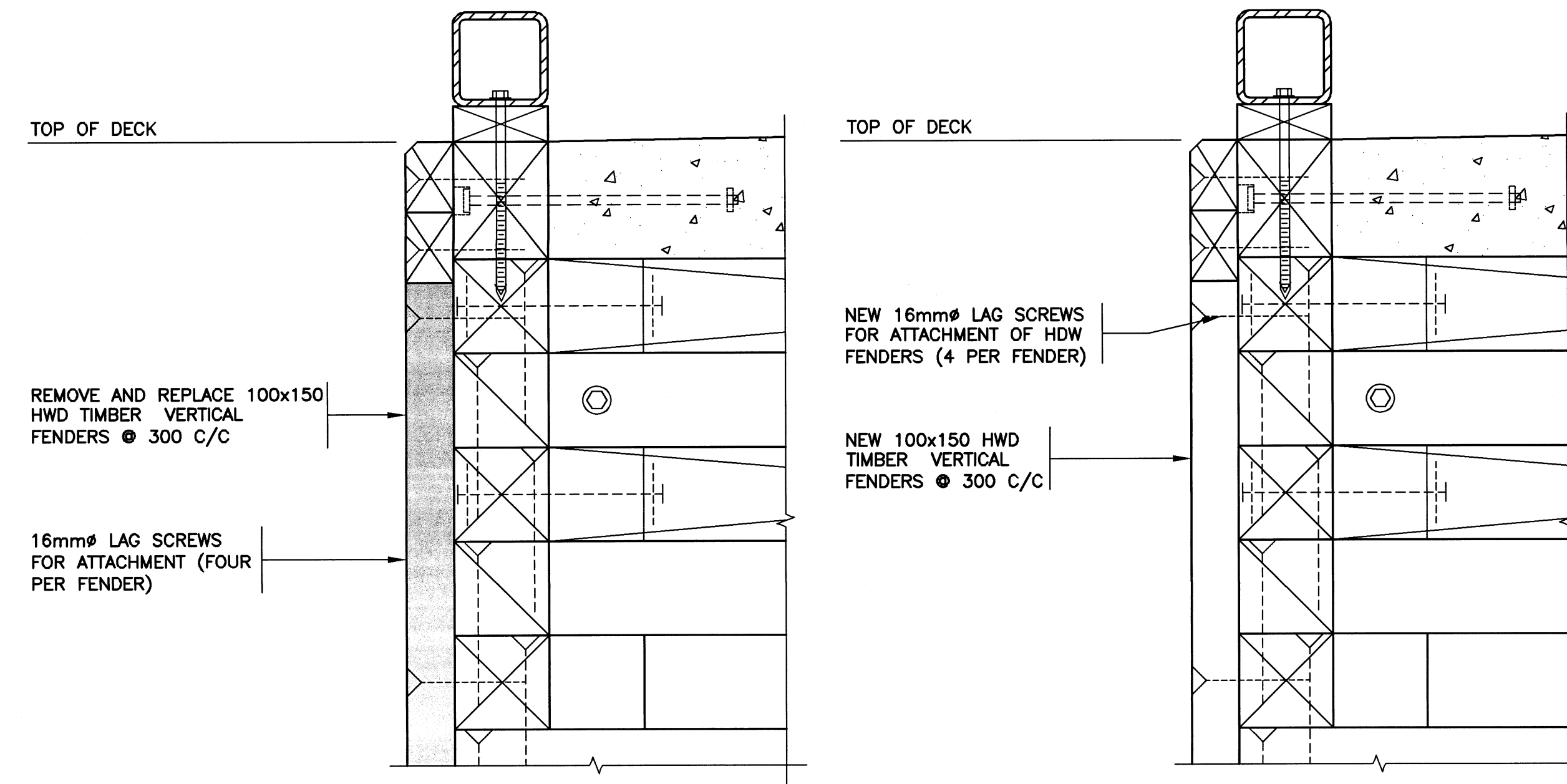
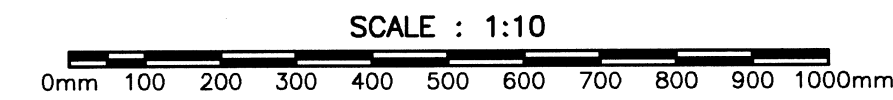


EXISTING

NEW

EXISTING & NEW DETAIL (TOP HORIZONTAL FENDER)

3
3/6

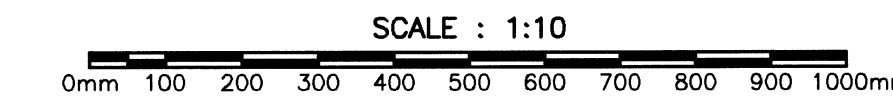


EXISTING

NEW

EXISTING & NEW DETAIL (VERTICAL FENDERS @ DOUBLE HORIZONTAL)

4
3/6 4
4/6



NOTE: BOTH DETAIL REFERENCES REFER TO VERTICAL FENDER REPAIRS ONLY, SEE DETAILS 3/6 AND 1/6 FOR OTHER WORK AT THIS SECTION.



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WHARF REPAIRS
 TWILLINGATE, NL

EXISTING & NEW
 DETAILS

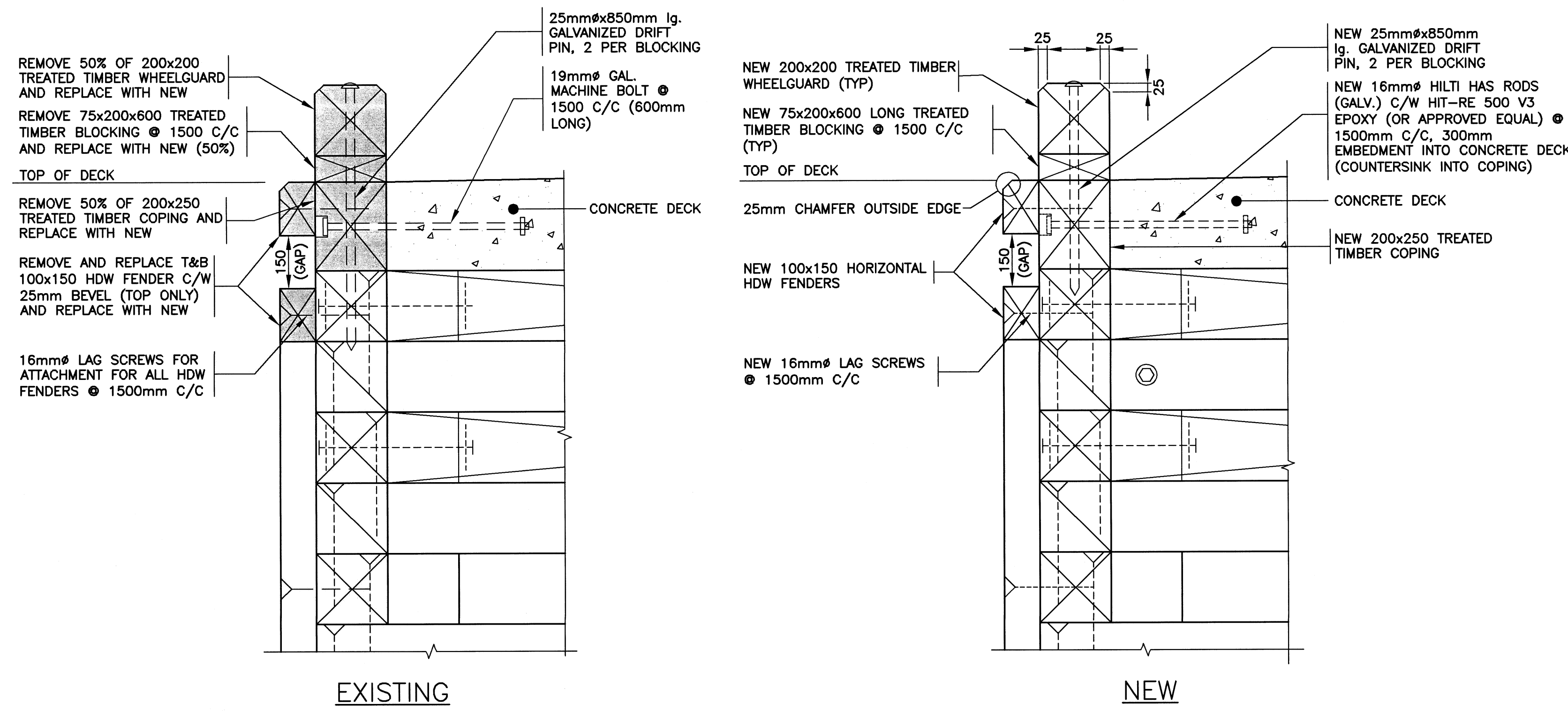
| | | |
|---------------------|--------------------|---------------|
| designed | S. PEARCE | concur |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessine |
| date | JANUARY 2021 | |
| approved | | approve |
| tender | <i>Paul Curran</i> | Sourmission |
| DFD Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C6 OF 10 | no. du dessin |

SMALL CRAFT HARBOURS

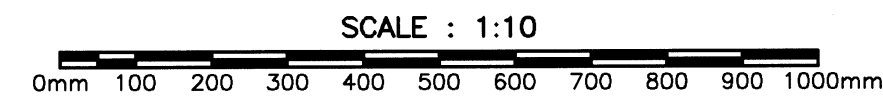


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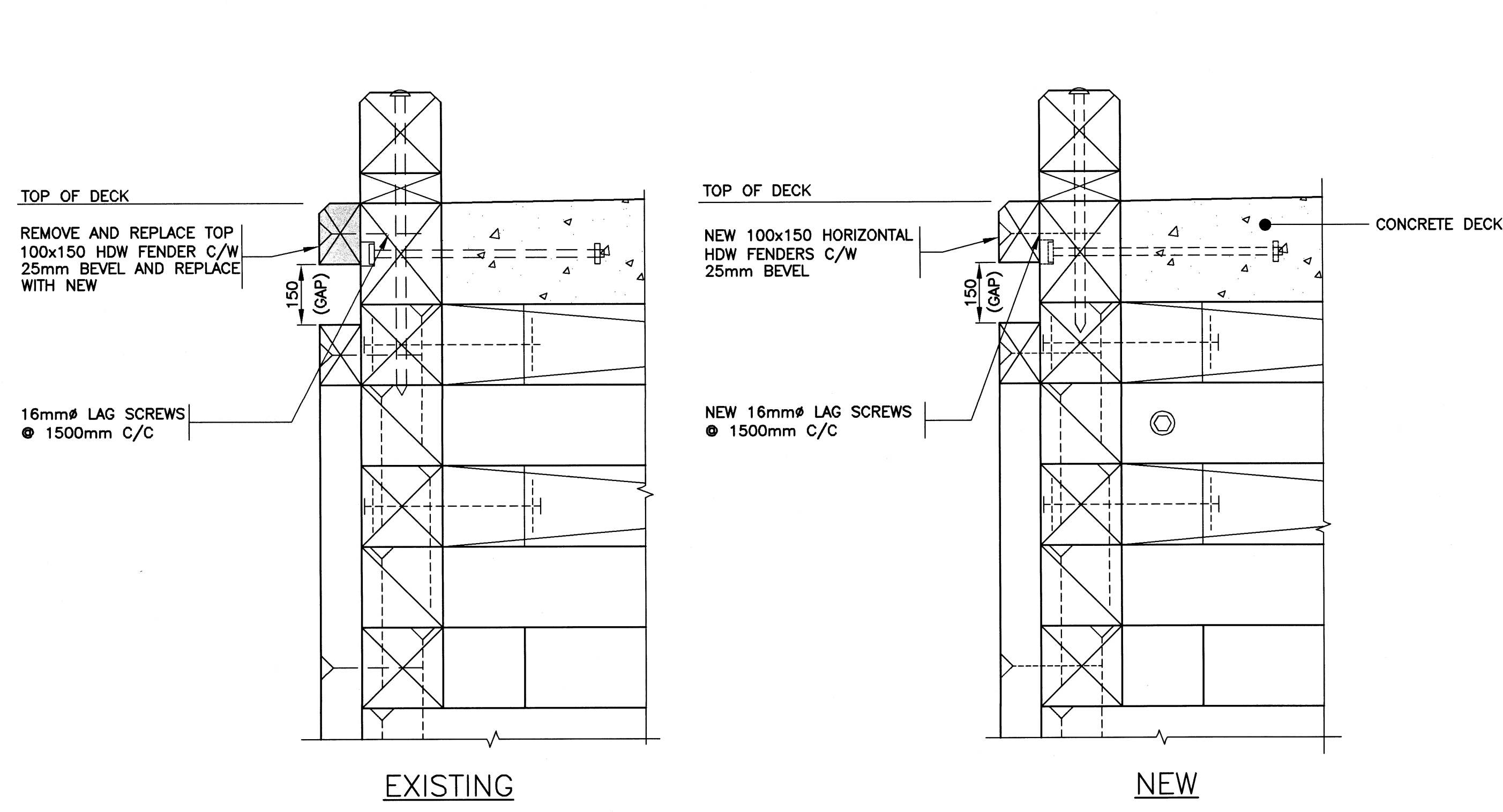
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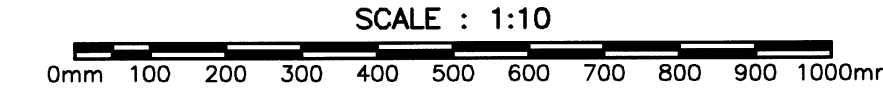
EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND 2 HORIZONTAL FENDERS)



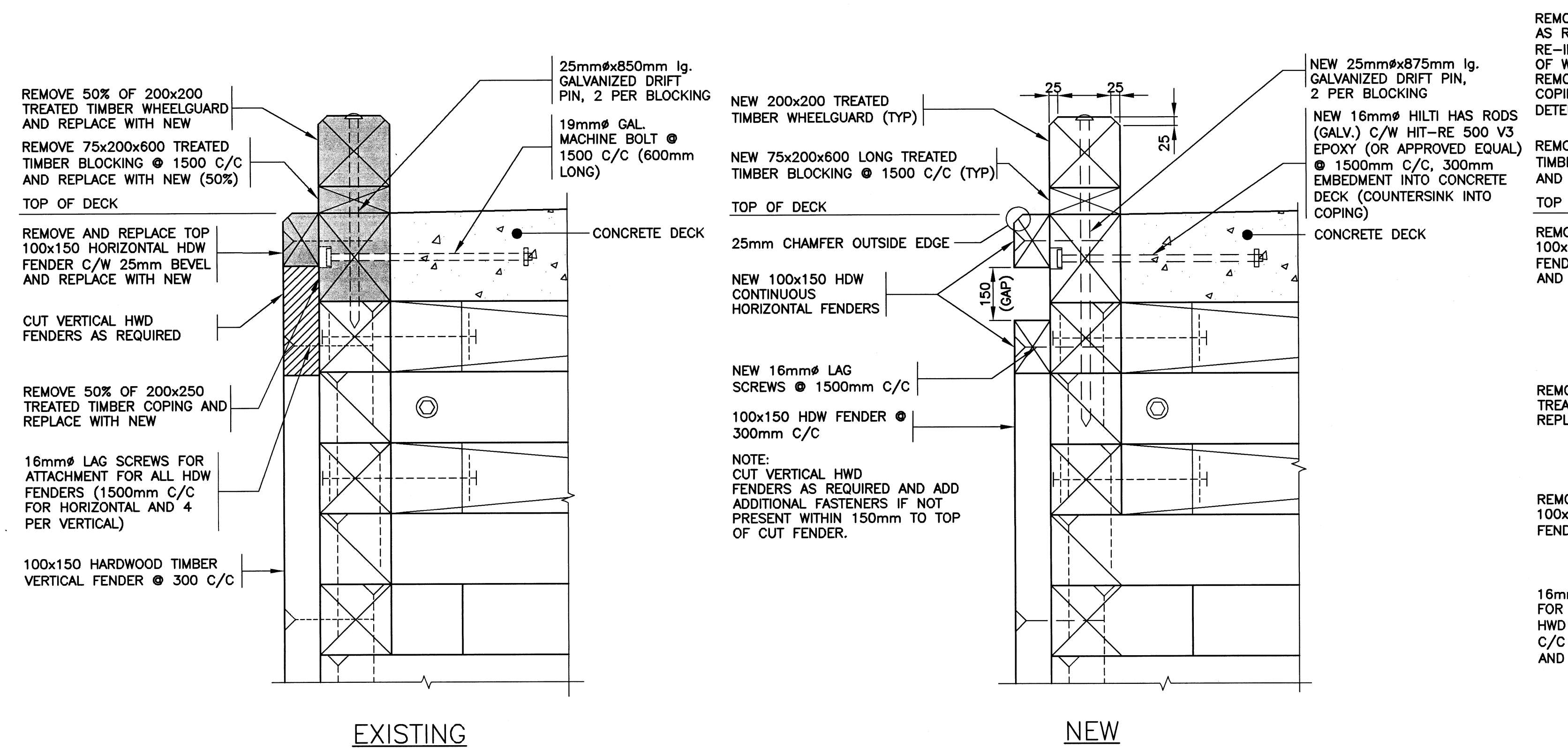
1
3/7



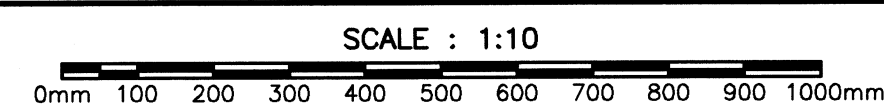
EXISTING & NEW DETAIL (TOP HORIZONTAL FENDER)



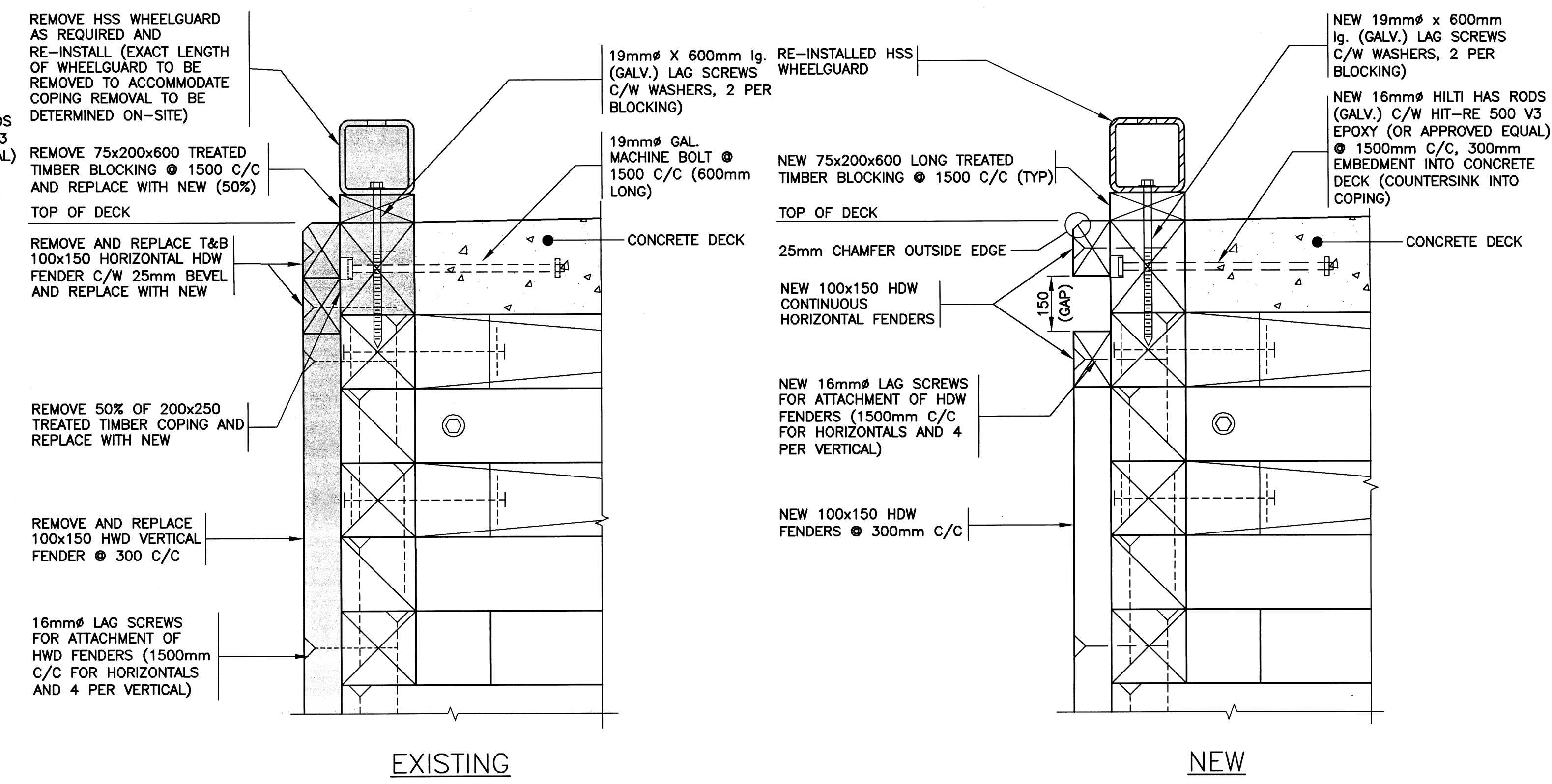
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3/7



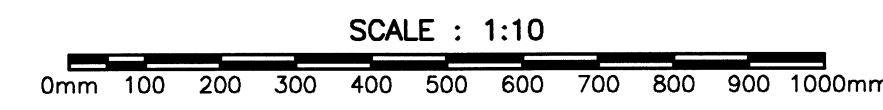
EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND 2 HORIZONTAL FENDERS)



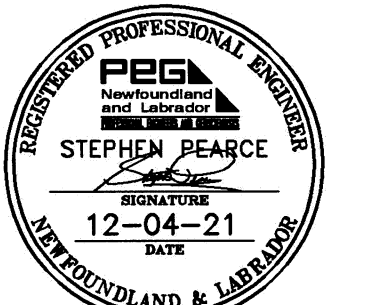
3
4/7



EXISTING & NEW DETAIL (W.G., BLOCKING, COPING, 2 HORIZONTAL FENDERS AND VERTICAL FENDERS)



4
4/7



PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGA PERMIT HOLDER
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 To Practice Professional Engineering
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 which is valid for the year 2021

| | | |
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| A | ISSUED FOR REVIEW | MAR. 4 2021 |
| revisions | | date |

project _____ project _____

WHARF REPAIRS
 TWILLINGATE, NL

drawing _____ dessin _____

EXISTING & NEW
 DETAILS

designed S. PEARCE conceu

date JANUARY 2021 date

drawn B. SCAPLEN dessine

date JANUARY 2021 date

approved _____ approuve

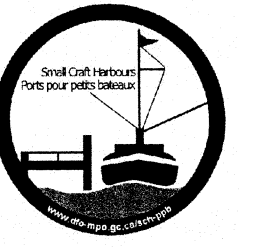
Tender *Paul Curran* Soumission

DFO Project Manager

project number 723455 no. du projet

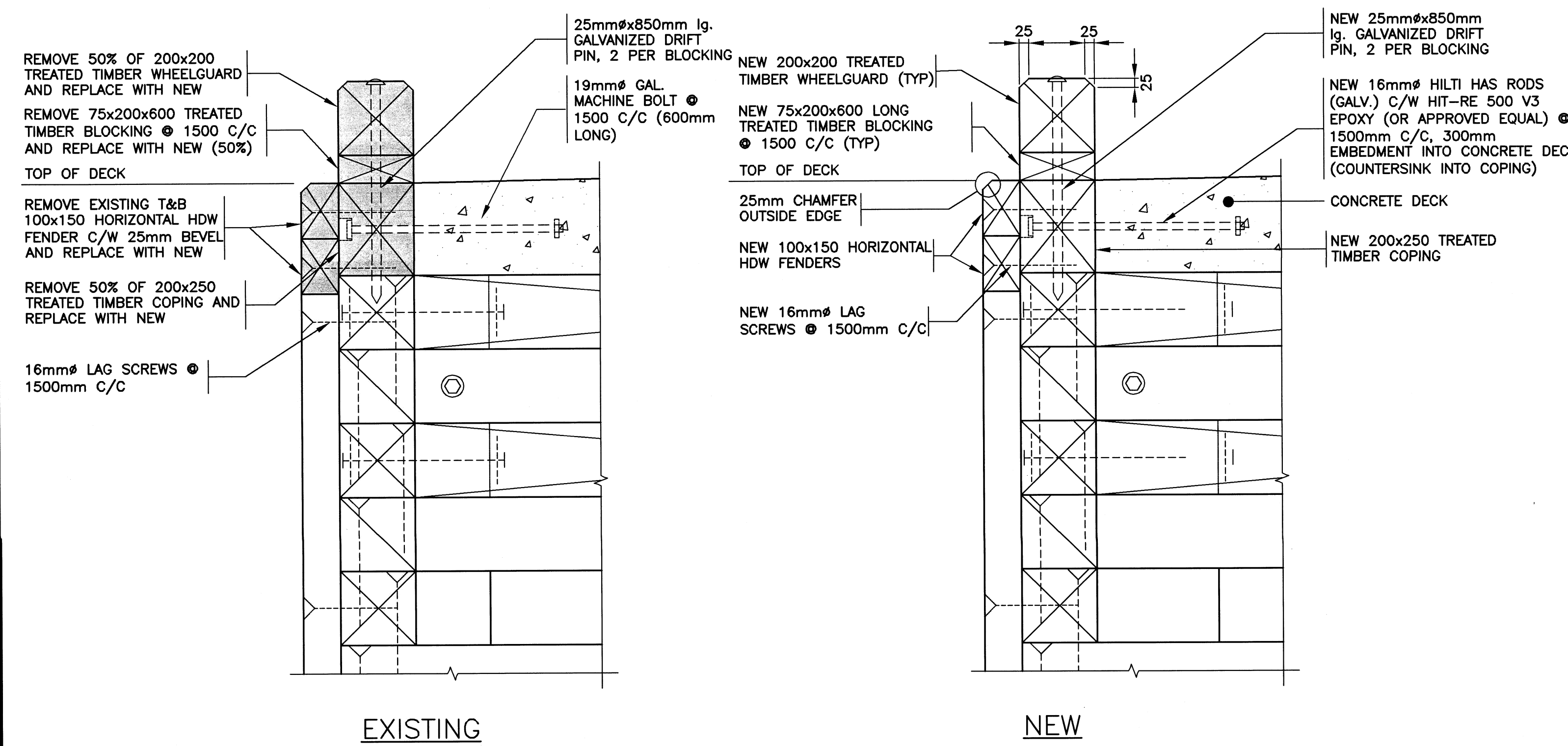
drawing no. C7 OF 10 no. du dessin

SMALL CRAFT HARBOURS

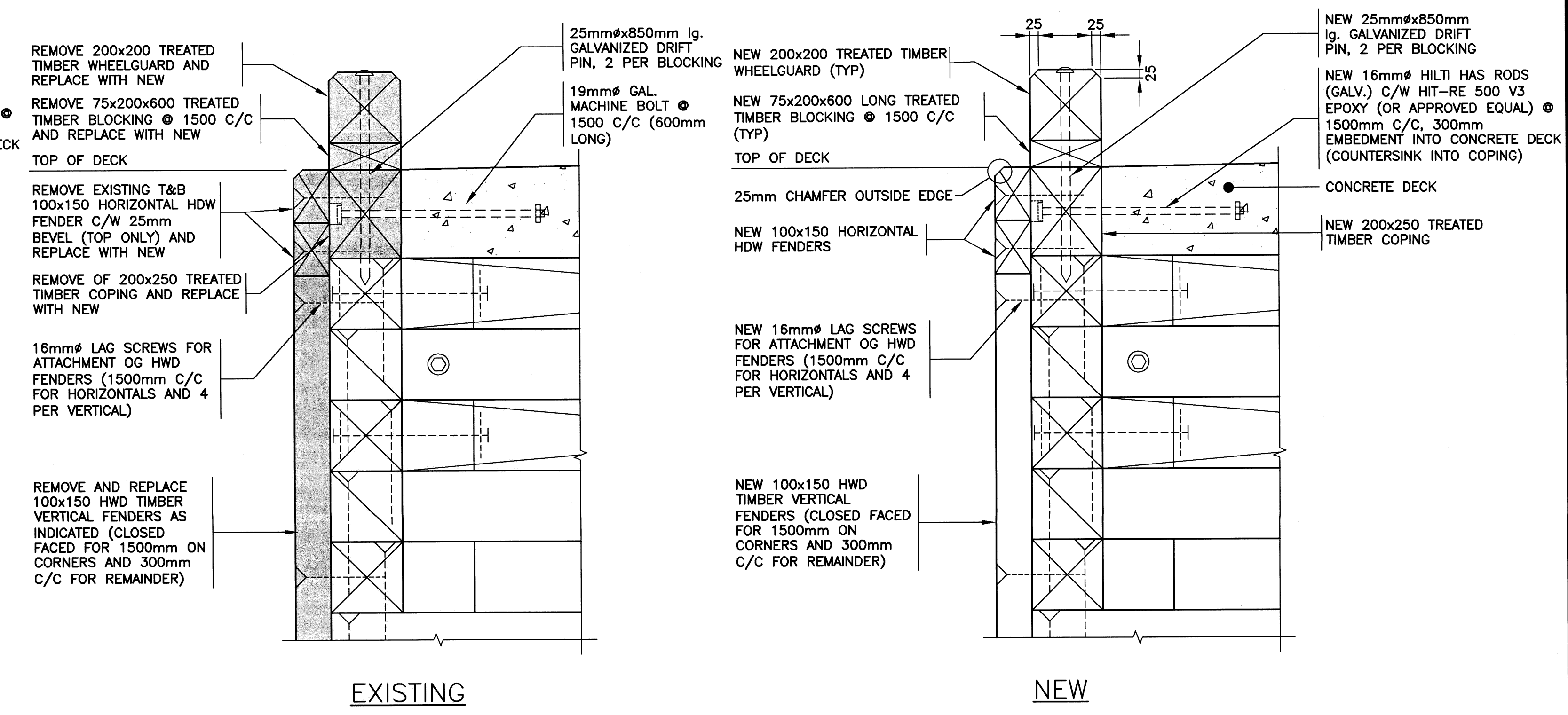
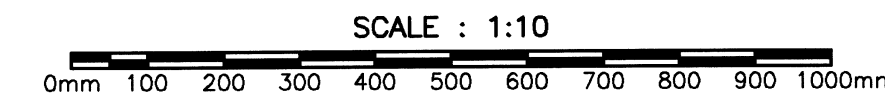


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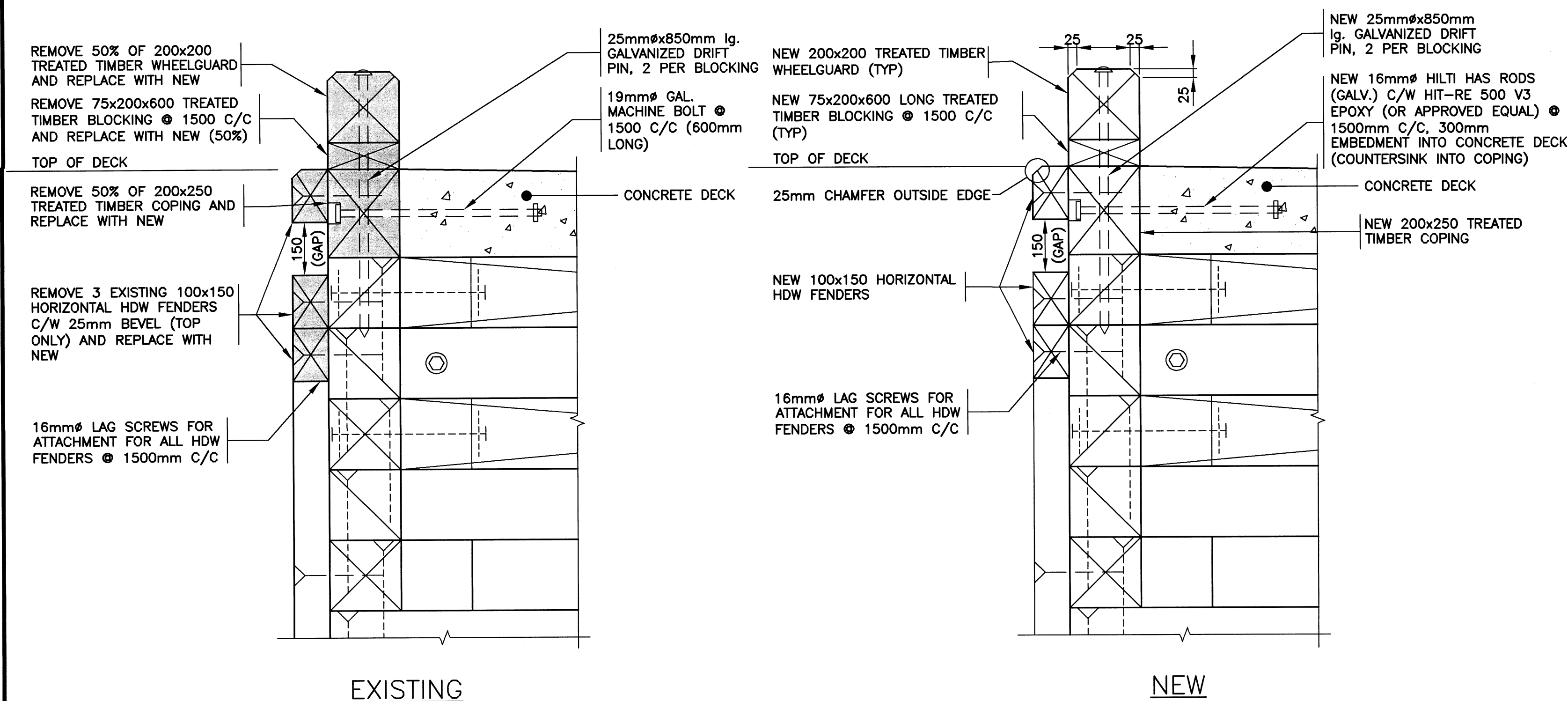
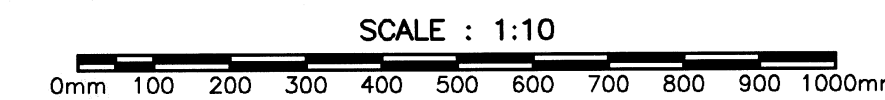
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2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
3. DO NOT SCALE FROM DRAWINGS.
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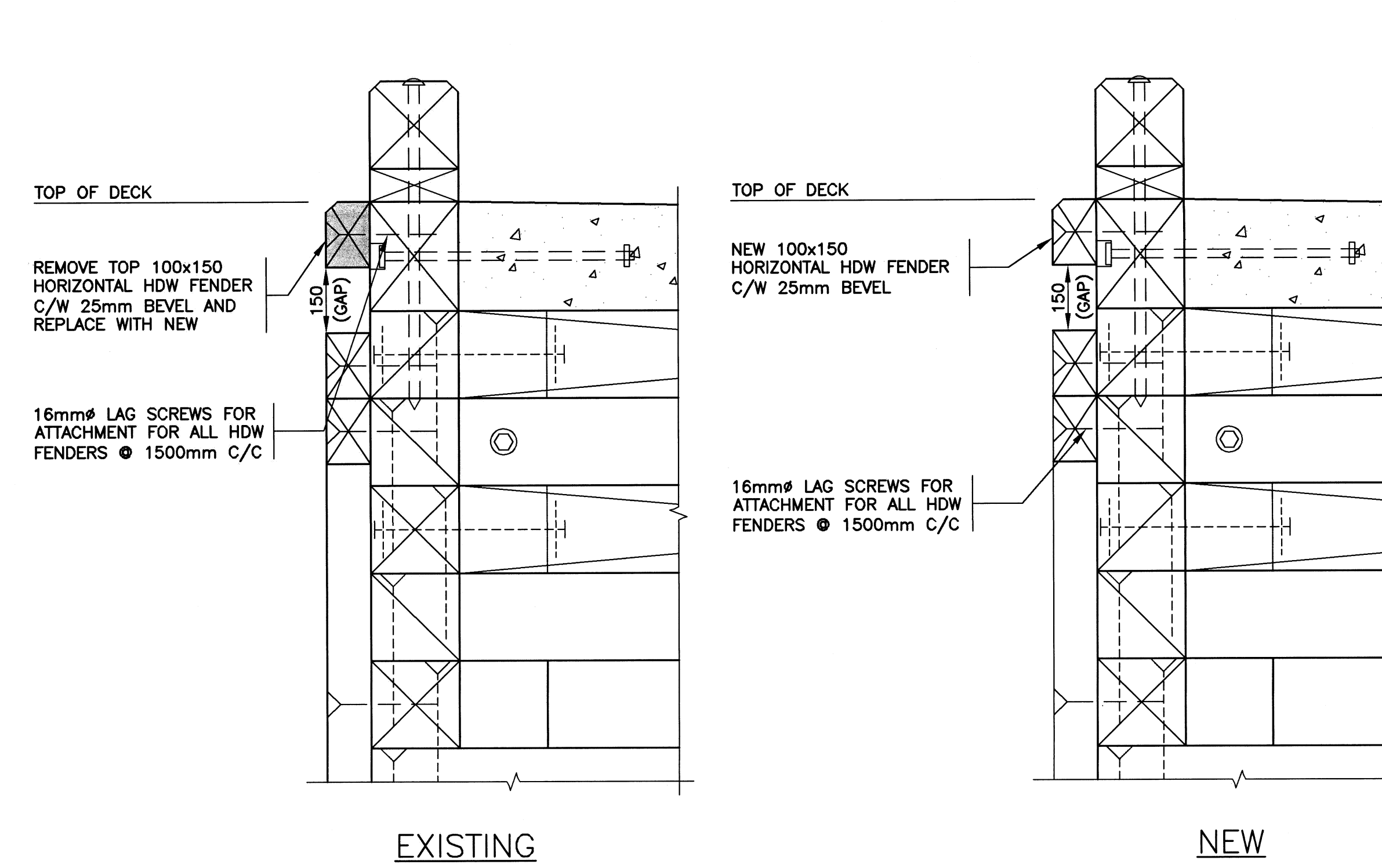
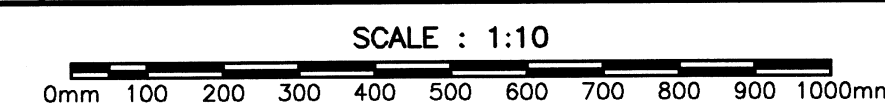
EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND 2 HORIZONTAL FENDERS) 1/8



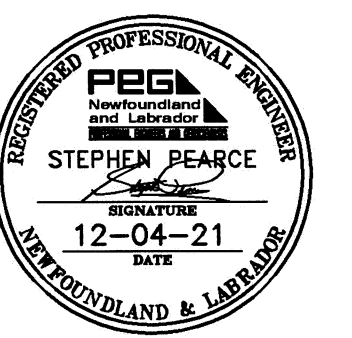
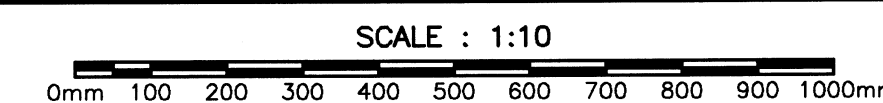
EXISTING & NEW DETAIL (W.G., BLOCKING, COPING, 2 HORIZONTAL FENDERS AND VERTICAL FENDERS) 2/8



EXISTING & NEW DETAIL (W.G., BLOCKING, COPING, AND 3 HORIZONTAL FENDERS) 3/8



EXISTING & NEW DETAIL (TOP HORIZONTAL FENDER) 4/8



PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGL PERMIT HOLDER
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| revisions | | date |
| project | | project |

WHARF REPAIRS
TWILLINGATE, NL

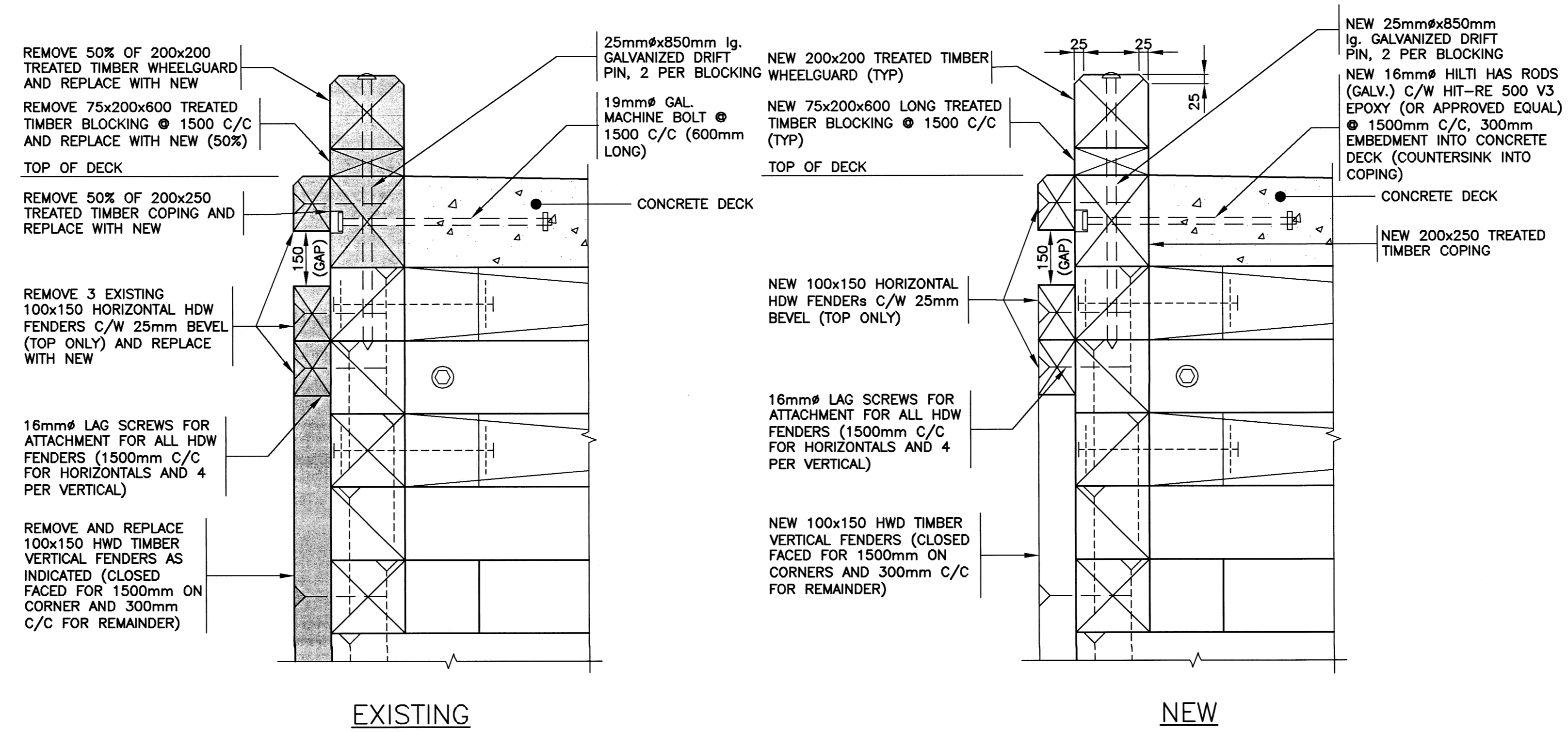
drawing no. **EXISTING & NEW DETAILS**

| | | |
|---------------------|--------------------|---------------|
| designed | S. PEARCE | concur |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessine |
| date | JANUARY 2021 | |
| approved | | approuvé |
| Tender | <i>Paul Curran</i> | Soumission |
| DFD Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C8 OF 10 | no. du dessin |



NOTES

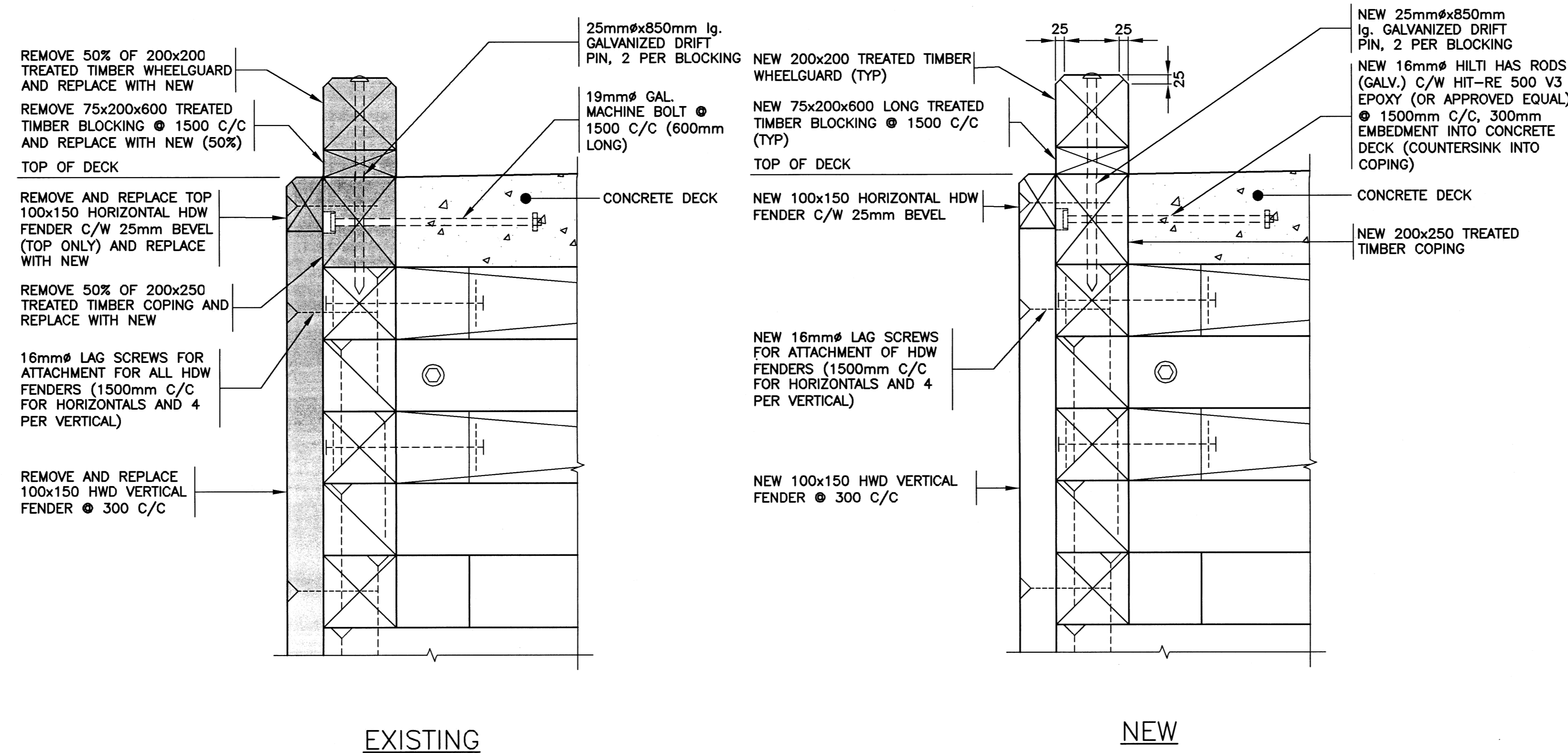
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EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND 3 HORIZONTAL FENDERS)

SCALE : 1:10
0mm 100 200 300 400 500 600 700 800 900 1000mm

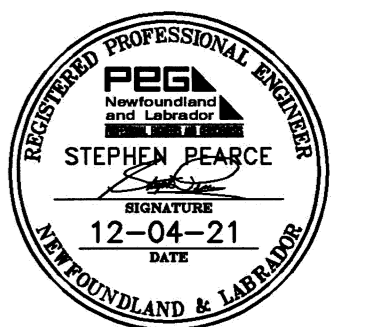
1
5/9



EXISTING & NEW DETAIL (W.G., BLOCKING, COPING AND HORIZONTAL FENDER)

SCALE : 1:10
0mm 100 200 300 400 500 600 700 800 900 1000mm

2
5/9



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WHARF REPAIRS
 TWILLINGATE, NL

EXISTING & NEW
 DETAILS

| | | |
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| designed | S. PEARCE | conçu |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | dessiné |
| date | JANUARY 2021 | |
| approved | | approuvé |

Tender *Paul* Submission
 DFO Project Manager
 project number **723455** no. du projet

NOTES
 SURVEY PARTY CHIEF RICHARD HEALEY
 SURVEY VESSEL ALUMINUM BOAT
 SURVEY DATE(S) BETWEEN JULY 17, 2017 & SEPTEMBER 18, 2019

SONDER TYPE: SINGLE TRANSDUCER
 SONDER SETTING: MIN/INST VEL. OF SOUND 1520 m/s
 DEPTH GATE USED: N/A FREQ. OF TRANS. 210 kHz

POSITIONING SYSTEM USED: DGPS (WITH OTF)
 LAND SURVEY POSITION BY: DGPS (WITH OTF)

DATA TAPE/DISC(S) USED:
 CAD DRAWING FILE(S):

TIDAL REDUCTION SCHEME:

OFFICE PROCESSOR: EDDIE BEARNS
 DATE OF PROCESSING: MAY 2019

MODE OF PLOTTING: LEAST OF MINIMUM DEPTHS
 MATRIX CELL WIDTH X LENGTH: REDUCTION OF MATRIX CELLS

CONTROL POINTS:

| PL NAME | EASTING | NORTHING | CD ELEV | DESCRIPTION |
|------------|------------|-------------|----------|--|
| 7662358 | 661267.618 | 5501812.205 | | PROVINCIAL BRASS PLAQUE SET IN BEDROCK |
| 7662359 | 661523.492 | 5502602.724 | | PROVINCIAL BRASS PLAQUE SET IN BEDROCK |
| 8809233 | 660767.552 | 5503103.593 | | CHS PLAQUE SET IN CONCRETE DECK |
| 8809234 | 661271.844 | 5502138.081 | +2.125 m | X-CUT IN COVER OF MANHOLE |
| PWC 1-05 | 661325.095 | 5502260.318 | +3.207 m | CHS PLAQUE SET IN CONCRETE DECK |
| BM 90F9094 | | | +3.687 m | BOLT SET IN BEDROCK OUTCROP |
| PWC 1-2009 | 661924.883 | 5504154.870 | +6.069 m | CROSS-CUT IN BOLT IN DECK |
| PWC 2-2009 | 661859.589 | 5504129.072 | | NAIL SET IN CONCRETE DECK |
| PWC 3-2009 | 661901.768 | 5504100.628 | | NAIL SET IN CONCRETE DECK |
| PWC 1-2017 | 660994.997 | 5502022.416 | +2.357 m | NAIL SET IN CONCRETE BLOCK |

ALL SOUNDINGS & ELEVATIONS IN METRES.

ALL SOUNDINGS & ELEVATIONS REFERRED TO PWC 1-2017 ELEV. +2.357 m (NAIL SET IN CONCRETE BLOCK) ESTABLISHED BY DGPS TRANSFER FROM PWC 1-2005 ELEV. +3.20m, LOCATED AT THE GOVERNMENT WHARF AT TWILLINGATE, NL ON AUGUST 09, 2017 BY PWSC SURVEY CREW.

PWC 1-2005 WAS ESTABLISHED FROM CHS BM 91F9094 ELEV. +3.687 m IN TWILLINGATE.

SOUNDINGS TAKEN USING NAVSOUND 210 ECHO SONDER AND POSITIONED BY TRIMBLE R7 DIFFERENTIAL GPS POSITIONING SYSTEM ON BETWEEN JULY 17, 2017 & MAY 27, 2019 BY PWSC SURVEY CREW.

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983 (NAD83).

SOUNDINGS WERE REDUCED BY DIGITRACE & RE-CHECKED FROM SOUNDING CHARTS BEFORE BEING CORRECTED FOR TIDE & BAR CHECK CORRECTION.

SOUNDINGS WERE REDUCED USING HYPACK MAX VER. 2013*A.

- PAVING NOTES**
- CONTRACTOR SHALL REMOVE EXISTING FILL AS REQUIRED AT NEW PAVED AREA LOCATIONS.
 - RE-GRADE AND COMPACT NEW 150mm MIN. THICK LAYER OF CLASS 'A' STONE AND 300mm THICK LAYER OF CLASS 'B'. FOLLOW THE EXISTING LAY OF THE LAND FOR GRADING. INSTALL 2-38mm THICK LIFTS OF NEW ASPHALT. BLEND NEW ASPHALT SURFACES IN A SMOOTH TRANSITION AT SURFACES WHERE NEW AND EXISTING MEET.
 - THERE IS APPROXIMATELY ±65m² OF NEW PAVEMENT REQUIRED FOR THE SMALLER OF THE TWO NEW PAVED LOCATIONS AND ±318m² IN THE LARGER. CONTRACTOR SHALL CONFIRM EXACT NUMBERS IN THE FIELD.

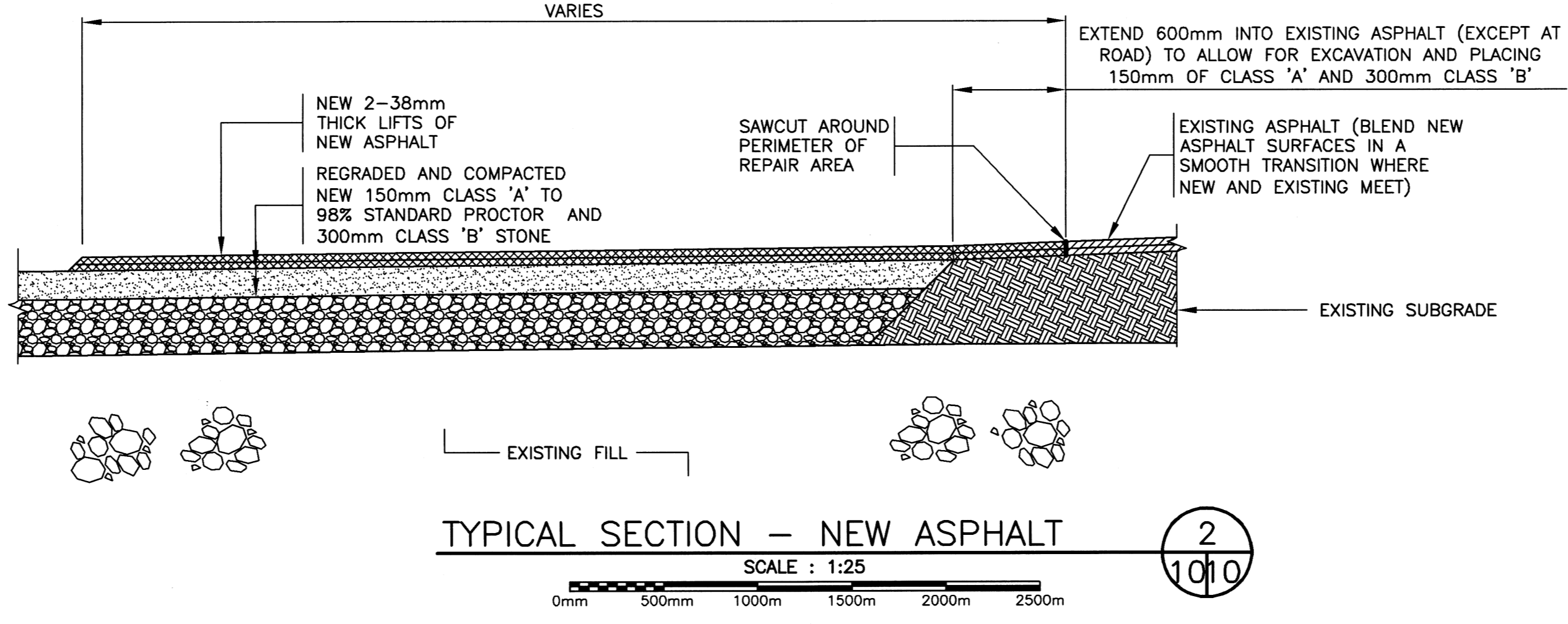
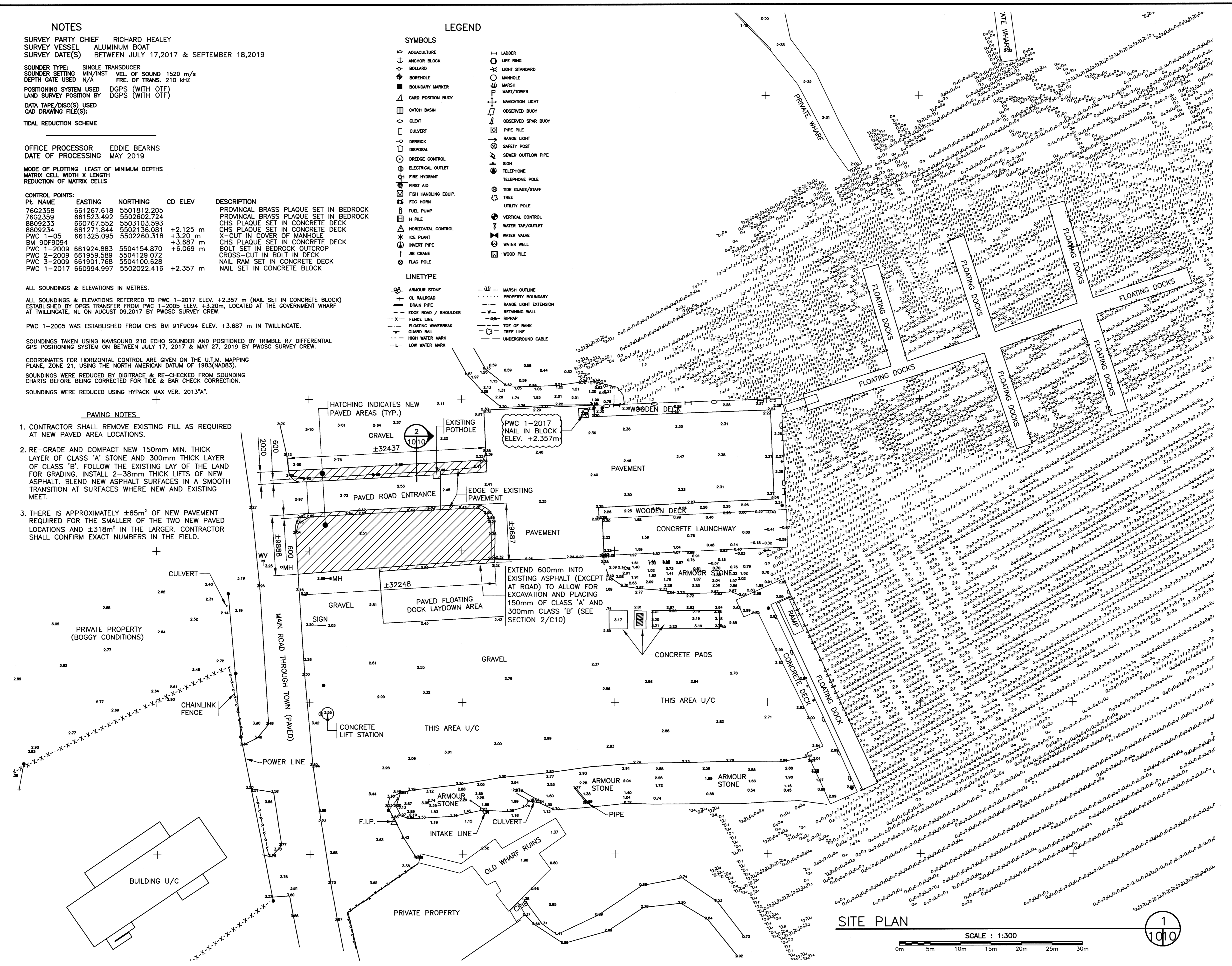
LEGEND

SYMBOLS

- ANCHOR BLOCK
- BOLLARD
- BORERHOLE
- BOUNDARY MARKER
- CARD POSITION BUOY
- CATCH BASIN
- CLEAT
- CULVERT
- DECK
- DISPOSAL
- DREDGE CONTROL
- ELECTRICAL OUTLET
- FIRE HYDRANT
- FIRST AID
- FISH HANDLING EQUIP.
- FOD HORN
- FUEL PUMP
- H PILE
- HORIZONTAL CONTROL
- ICE PLANT
- ICE PILE
- JIB CRANE
- LAG POLE
- LADDER
- LIFE RING
- LIGHT STANDARD
- MANHOLE
- MARSH
- MAST/TOWER
- NAVIGATION LIGHT
- OBSERVED BUOY
- OBSERVED SPAR BUOY
- PIPE PILE
- RANGE LIGHT
- SAFETY POST
- SEWER OUTFLOW PIPE
- SHOULDER
- TIDE GAUGE/STAFF
- UTILITY POLE
- VERTICAL CONTROL
- WATER TAP/OUTLET
- WATER WAKE
- WATER WELL
- WOOD PILE

LINE TYPE

- ARMOUR STONE
- CL. ROADWAY
- DRAIN PIPE
- EDGE ROAD / SHOULDER
- FENCE LINE
- FLOTTING WATERBREAK
- GUARD RAIL
- HIGH WATER MARK
- LOW WATER MARK
- MARSH OUTLINE
- PROPERTY BOUNDARY
- RANGE LIGHT EXTENSION
- RETAINING WALL
- RIPRAP
- TIDE OF BANK
- TREE LINE
- UNDERGROUND CABLE



SMALL CRAFT HARBOURS

Fisheries and Oceans Canada / Pêches et Océans Canada

- NOTES**
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| project | | project |

WHARF REPAIRS

TWILLINGATE, NL

SMALL BOAT BASIN

SITE PLAN & SECTION

| | | |
|---------------------|--------------|---------------|
| designed | S. PEARCE | constr. |
| date | JANUARY 2021 | |
| drawn | B. SCAPLEN | designe |
| date | JANUARY 2021 | |
| approved | | approve |
| Tender | | Submission |
| DFO Project Manager | | |
| project number | 723455 | no. du projet |
| drawing no. | C10 OF 10 | no. du dessin |