

**FISHERIES AND OCEANS
CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) 2012
PROJECT EFFECTS DETERMINATION REPORT**

GENERAL INFORMATION

1. Project Title: Finger Pier Extension, Old Perlican, Newfoundland	
2. Proponent: Fisheries and Oceans Canada, Small Craft Harbours (DFO SCH)	
3. Other Contacts (Other Proponent, Consultant or Contractor): Public Works and Government Services Canada	4. Role: OGD Consultant
5. Source of Project Information: Paul Curran, Regional Engineer, DFO Small Craft Harbours	
6. Project Review Start Date: April 20, 2020	
7. PATH No.: TBD	8. PWGSC File No.: R.104660.012
9. TC File No.: 2020-202375	

BACKGROUND

10. Background about Proposed Development (including a description of the proposed development): DFO, Small Craft Harbours are proposing to extend the existing finger pier structure in Old Perlican, Newfoundland (See Appendix A).

PROJECT REVIEW

11. DFO's rationale for the project review: Project is on federal land <input checked="" type="checkbox"/> and; <input checked="" type="checkbox"/> DFO is the proponent <input type="checkbox"/> DFO to issue <i>Fisheries Act</i> Authorization or <i>Species at Risk Act</i> Permit <input type="checkbox"/> DFO to provide financial assistance to another party to enable the project to proceed <input type="checkbox"/> DFO to lease or sell federal land to enable the project to proceed <input type="checkbox"/> Other	
12. Fisheries Act Sections (if applicable): n/a	
13. Other Authorities <ul style="list-style-type: none"> Transport Canada – Navigation Protection Program (NPP) and Environmental Affairs and Aboriginal Consultation Unit 	14. Other Authorities rationale for involvement: <ul style="list-style-type: none"> <i>Canadian Navigable Waters Act</i>
15. Other Jurisdiction: <ul style="list-style-type: none"> Department of Municipal Affairs and Environment – Water Resources Management Division 	

16. Other Expert Departments Providing Advice:

- Fisheries and Oceans Canada, Fisheries Protection Program (DFO-FPP)

17. Areas of Interest of Expert Departments:

- *Fisheries Act*

18. Other Contacts and Responses: n/a

19. Scope of Project (details of the project subject to review):

Project Description

DFO, Small Craft Harbours are proposing to extend the existing finger pier structure in Old Perlican, Newfoundland. The wharf extension will be crib and span construction, consisting of 2 new cribs and spans, measuring approximately 7.6m wide by 21.3m long. The structure will have a reinforced concrete deck. There may be some minor excavation required to seat the new cribs (See Appendix A).

Standard finger pier construction methods and equipment will likely be utilized. Stone required for the project will be obtained from an approved quarry in an upland location and trucked to the site. Heavy equipment consisting primarily of excavators and dump trucks working from the existing paved access to place the stone in location. There will be a small amount of material excavated for crib seat for the two cribs, since this wharf is a crib and span this material will be placed in the spans and covered with scour protection.

Operation/Maintenance

The Environmental Management System with an integrated Environmental Management Plan for the Harbour Authority of Old Perlican will cover operational aspects of environmental management at the harbour (fuelling, waste disposal, activities on the property and water). As such, environmental effects resulting from the SCH operations are not considered further in this project effects determination.

Decommissioning

This facility is not presently planned to be decommissioned. At the time of decommissioning, Small Craft Harbours will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and Fisheries and Oceans Canada policies.

Scheduling

The proposed project is scheduled to commence during the 2020-2021 fiscal year. Project commencement is subject to DFO SCH operational priorities and funding.

20. Location of Project:

The Project site may be accessed from local roads within the community of Old Perlican, which is accessible via provincial route 80, at coordinates 48° 05' 16" N, 53° 00' 29" W.

21. Environment Description:

Physical Environment

Old Perlican is located approximately 110 km northeast of Whitbourne off route 80. The Old Perlican harbor is an extensively developed area consisting of a harbour authority office, electrical/gear sheds, slipways, finger piers, floating docks, breakwaters and a paved parking area. The project site is located within the Northeastern Barrens Subregion of the Maritime Barrens Ecoregion. This subregion has lower fog frequency and somewhat warmer summers compared to subregions B and C.

Biological Environment

Within the northeastern barrens subregion Arctic-alpine species are absent from the heath vegetation and Yellow Birch is absent from the forest. The landscape is extensively forested with local heath vegetation particularly along the coast. The tills in the area are generally a shallow rolling ground moraine with sandy loam to loam texture. The Hylocomium-Balsam Fir type occupies mid-slopes and it is usually associated with gleyed podzols or gleysols.

Fauna within the project area is limited to nearshore fish species such as cunner, tomcod, sculpin, and winter flounder. Aquatic vegetation in the project area, though not abundant, consists of kelp, moss, and sea grass.

Species at Risk (Aquatic and Terrestrial)

A search of the Atlantic Canada Conservation Data Centre (ACDC) database was conducted on May 22, 2020 that produced a list of rare / unique species (i.e., plants and animals) within a 5 km buffer zone (standard ACDC procedure) of the site of the proposed work. All species were cross-referenced with Schedule 1 of the Species at Risk Act (SARA); *Larus argentatus* (Herring Gull), *Larus marinus* (Great Black-backed Gull), *Rhinanthus minor* (common yellowrattle) and *Agrostis canina* (Brown Bentgrass) were reported within this buffer.

22. Scope of Effects Considered (sections 5(1) and 5(2)):

Table 1: Potential Project / Environment Interactions Matrix

Project Phase / Physical Work/Activity	As per Section 5(1)			Section 5(1c)				Section 5(2)			Due Diligence			
	Fish (Fisheries Act)	Aquatic Species (SARA)	Birds (MBCA)	Health and Socio economic	Physical and cultural heritage	Land use	*HAPA Significance	Health and Socio economic	Physical and cultural heritage	*HAPA Significance	Water (ground, surface, drainage, etc)	Terrestrial / Aquatic Species	Soil/Marine sediments	Air Quality
Finger Pier Extension														
Finger Pier Extension Construction	P	-	P	-	-	-	-	P	-	-	P	P	P	P
Dredging	P	-	P	-	-	-	-	P	-	-	P	P	P	P
Operation / Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decommissioning / Abandonment	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*structure, site or thing that is of historical, archaeological, paleontological or architectural significance.

Legend: P = Potential Effect of Project on Environment; '-' = No Interaction

23. Environmental Effects of Project:

In the table above, potential environmental effects were identified. Scoped project activities such as dredging, disposal, wharf construction and infilling have the potential to effect the environment. Each of the potential effects are addressed here:

Fish / Fish Habitat

- Sedimentation and/or increased turbidity as a result of dredging, demolition or placement of construction materials may negatively impact fish and quality of potential fish habitat.
- Accidental discharge of heavy machinery fuel/fluids will negatively impact fish and potential fish habitat.

Bird/Bird Habitat

- Any type of hydrocarbon spill could result in bird or bird habitat loss.
- Noise / fumes may result in birds avoiding the site and surrounding area.

Health and Socio economic

- Potential for safety hazards to workers during demolition activities.

Water

- Sedimentation and/or increased turbidity as a result of dredging, demolition or placement of construction materials may decrease marine water quality at immediate project site.
- Demolition and construction activities taking place near the shoreline may result in run off / erosion.
- Accidental discharge of heavy machinery fuel/fluids will result in a decrease of marine water quality.

Aquatic species

- Sedimentation and/or increased turbidity as a result of removal of the existing wharf may negatively impact aquatic species near project site.
- Accidental discharge of heavy machinery fuel/fluids may negatively impact aquatic species near project site.

Soil (Surface and Subsurface)/Marine Sediments

- Demolition and construction activities at site or natural events (e.g. rainfalls) could result in erosion, sedimentation and/or increased turbidity.
- Improper disposal of waste material could result in contamination of soil.

Air Quality / Noise

- Some minor disruptions and annoyance to facility users and residents who live near the project site can be anticipated from project activities and the use of heavy equipment.

Navigation

- Potential for direct effects to navigation.

24. Mitigation Measures for Project (including Habitat Compensation):

Minimize duration of in water work.

Conduct instream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the demolition phase.

The in-water use of heavy equipment is not permitted. The operation of such equipment should be from dry / stable shoreline areas.

Work should be properly timed to avoid potential interference with commercial and/or recreational fisheries.

Appropriate sedimentation and/or increased turbidity control measures (e.g. silt curtains, booms, etc.), should be deployed where required.

All wastes should be recycled where possible or otherwise disposed of appropriately.

Remove all construction materials from site upon completion.

There should be no sedimentation and/or increased turbidity events as a result of proposed activities. If required, mitigation measures must be implemented such as installation of a turbidity barrier, construction of sediment ponds, etc.

Machinery should be well muffled and local municipality construction by-laws must be adhered to.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refueling must be done at least 100 m from any water body. Basic petroleum spill clean-up equipment should be on-site. All spills or leaks should be promptly contained, cleaned up and reported to the 24-hour environmental emergencies report system (1-800-563-9089). The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.

Weather conditions should be assessed on a daily basis to determine the potential risk on project activities.

Several environmental approvals / permits have been obtained on behalf of SCH. These include:

1. Transport Canada may provide approval under the Navigation Protection Act (NPA).
2. Fisheries and Oceans provided a letter of advice for the project outlining mitigation measures for the protection of fish and fish habitat.
3. NLDMAE provided Water Resources Permit to Alter a Water Body Minor Dredging Permit.

These approvals are attached in Appendix C and all conditions/mitigation measures must be reviewed and implemented by the contractor.

The project is covered under NL DMAE Terms & Conditions, and the conditions associated with Transport Canada's, Navigation Protection Act authorization. Fisheries and Oceans Canada, Fisheries Protection Program determined that the project would likely not result in Serious Harm to fish or fish habitat and prescribed several mitigation measures to help mitigate potential environmental impacts (included above).

The proponent should ensure that copies of all regulatory approvals are available on-site during project activities.

Workers in contact with hazardous materials (e.g. wastes) must be provided with and use appropriate personal protective equipment;

Proper safety procedures must be followed during the duration of the project as per applicable municipal, provincial, and federal regulations;

Employees will be trained in health and safety protocols (e.g. safe work practices, emergency response).

Environmental effects of the project on navigation are taken into consideration as part of the Project Effects Determination (PED) only when the effects are indirect, i.e. resulting from a change in the environment affecting navigation. Direct effects on navigation are not considered in the PED, but any measures necessary to mitigate direct effects will be included as terms and conditions associated with the work approved or permitted pursuant to the Navigation Protection Act.

25. Significance of Adverse Environmental Effects of project:

Significant adverse environmental effects are unlikely, taking into account mitigation measures.

26. Other Considerations (Public Consultation, Aboriginal Consultation, Follow-up)

Public Consultation

No negative public concern is expected as a result of this project. As such, public consultation was not deemed necessary as part of this determination. Although public consultation was not deemed necessary, the project was posted on the IAA registry for public comments on May 15, 2020 (Reference Number 80696).

Aboriginal Consultation

Aboriginal fishers are not known to utilize the Old Perlican SCH facility, nor are there any known aboriginal groups in the surrounding area. As such, aboriginal consultation was not deemed necessary as part of this determination

Government Consultation

Federal and provincial authorities likely to have an interest in the project were consulted by Public Works & Government Services Canada, Environmental Services, during the course of this assessment. A project description was distributed to the following authorities:

- Fisheries and Oceans Canada – Fisheries Protection Program
- Transport Canada – Navigation Protection Program and Environmental Affairs and Aboriginal Consultation Unit
- NL Department of Municipal Affairs and Environment, Water Resources (NLDMAE WR)

Accuracy and Compliance Monitoring

A follow-up program (as defined in S. 2(1) and as applicable to non-designated projects on federal lands) is a program for determining the effectiveness of any mitigation measures. Site monitoring (accuracy and compliance monitoring) may be conducted to verify whether required mitigation measures were implemented. The proponent must provide site access to Responsible Authority 27. Officials and/or its agents upon request

27. Monitoring and Compliance Requirements (e.g. *Fisheries Act* or *Species at Risk Act* requirements)

n/a

CONCLUSION

28. Conclusion on Significance of Adverse Environmental Effects:

The Federal Authority has evaluated the project in accordance with Section 67 of *Canadian Environmental Assessment Act (CEAA), 2012*. On the basis of this evaluation, the department has determined that the project is not likely to cause significant adverse environmental effects with mitigation and therefore can proceed using mitigative measures as outlined.

29. Prepared by:



30. Date: July 10, 2020

31. Name:

Natasha Warren

32. Title:

Environmental Specialist, PWGSC-ES

DECISION

33. Decision Taken

- DFO may exercise its power, duty or function, i.e. may issue the authorization - where the project is not likely to cause significant adverse environmental effects. Confirm below the specific power, duty or function that may be exercised.
- DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
 - DFO to proceed with project (as proponent)
 - DFO to provide financial assistance for project to proceed
 - DFO to provide federal land for project to proceed
- DFO has decided not to exercise its power, duty or function because the project is likely to cause significant adverse environmental effects.
- DFO to ask the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances

34. Approved by: _____

35. Date: _____

36. Name:

Paul Curran

37. Title:

Regional Engineer, DFO-SCH, NL

38. References:

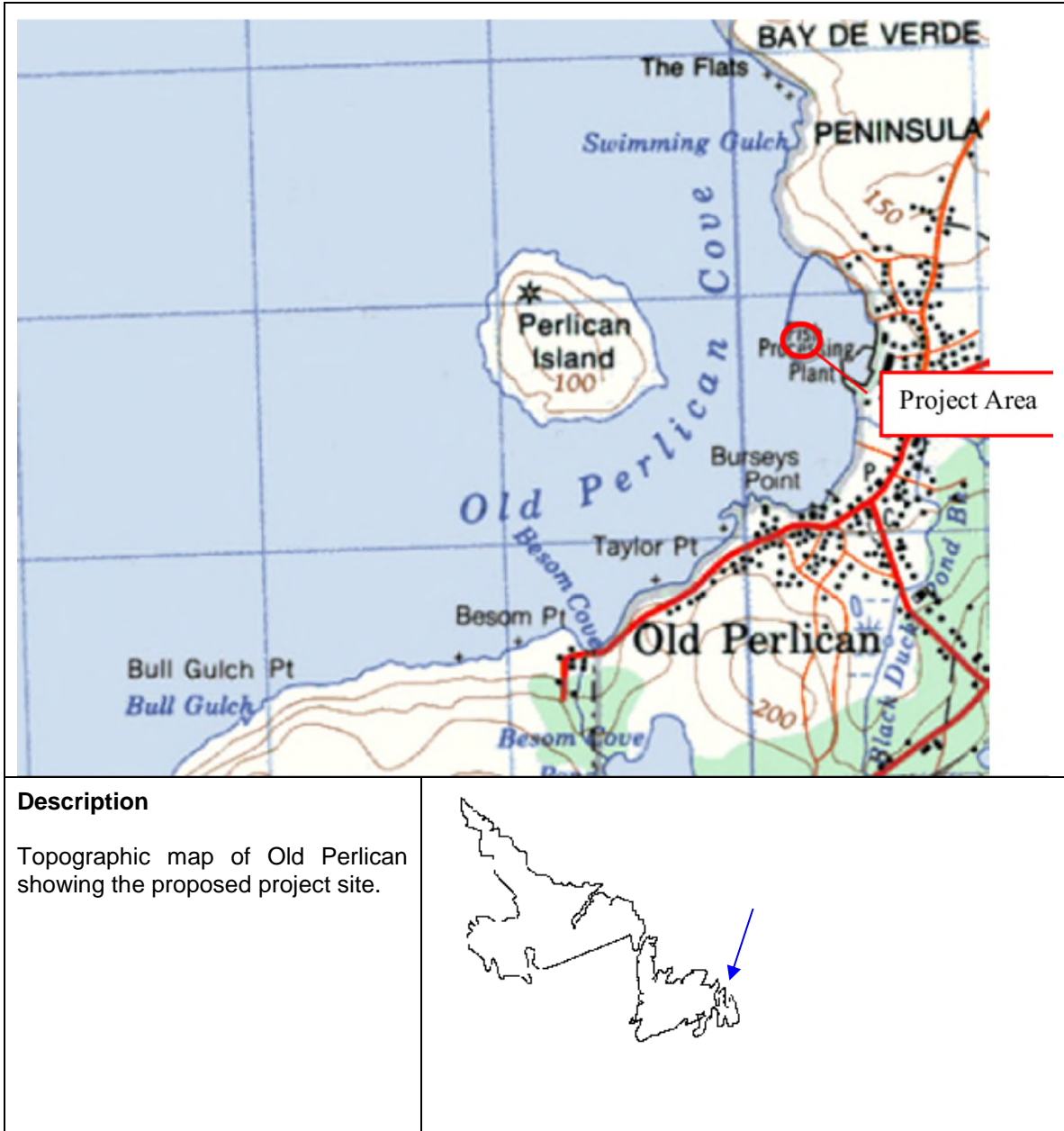
n/a

APPENDICES

- Appendix A: Topographic Map and Aerial Photograph
- Appendix B: Site Plan
- Appendix C: Regulatory Responses/Approvals

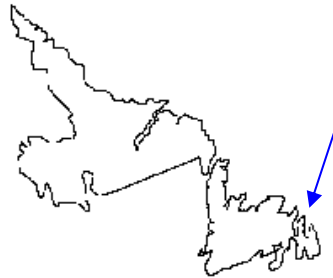
Appendix A
Topographic Map and Aerial Photograph

Figure 1:



Description

Topographic map of Old Perlican showing the proposed project site.

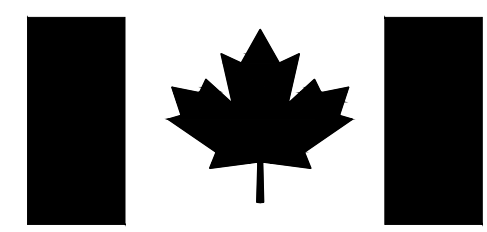


Topographic Map indicating project site.



Figure 2: photo of existing project site.

Appendix B
Site plan



Fisheries and Oceans
Canada

Pêches et Océans
Canada



Small Craft Harbours
Newfoundland Region
St. John's, NL.

Ports Pour Petits Bateaux

FINGER PIER EXTENSION

OLD PERLICAN

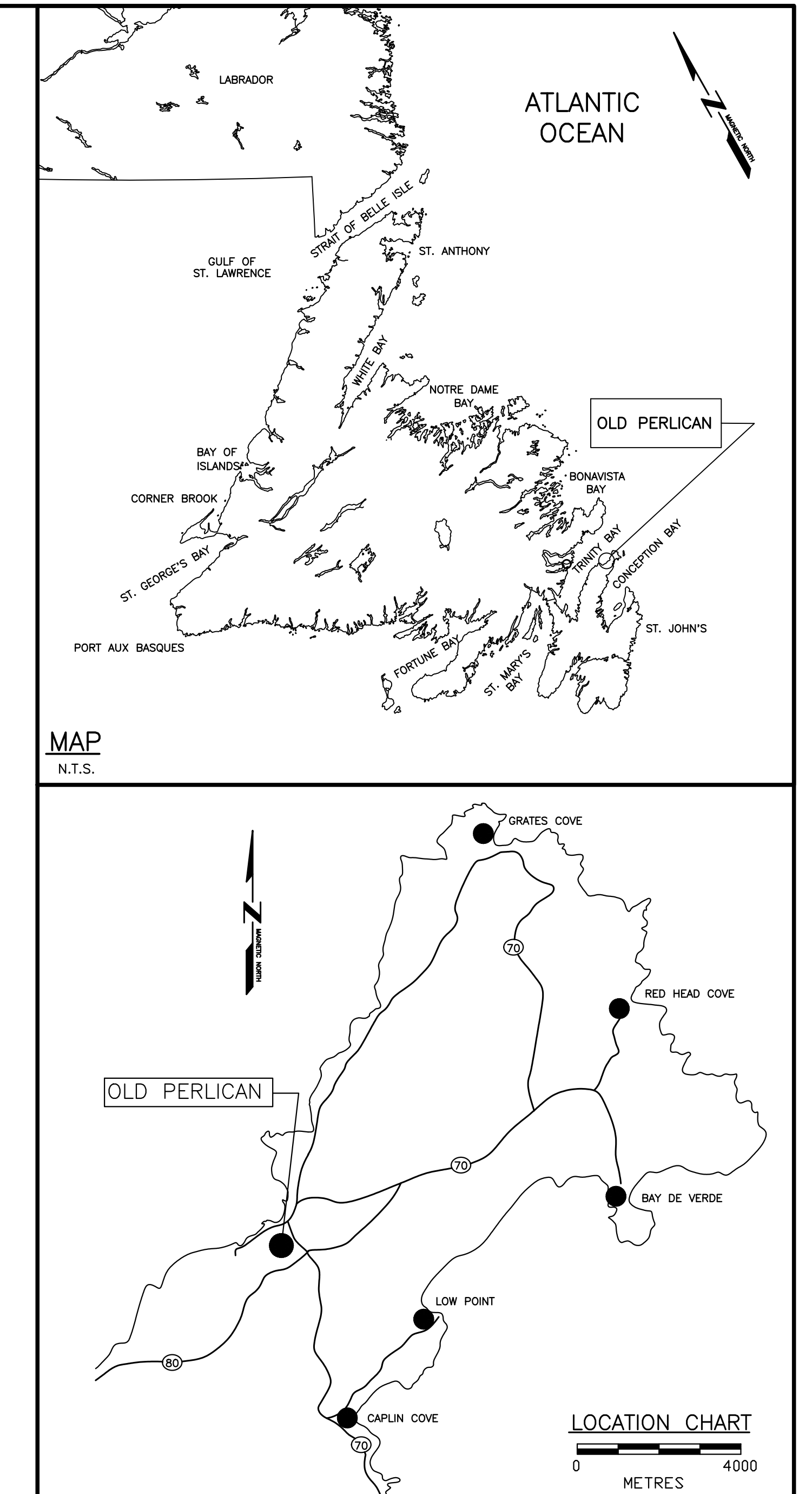
NEWFOUNDLAND AND LABRADOR

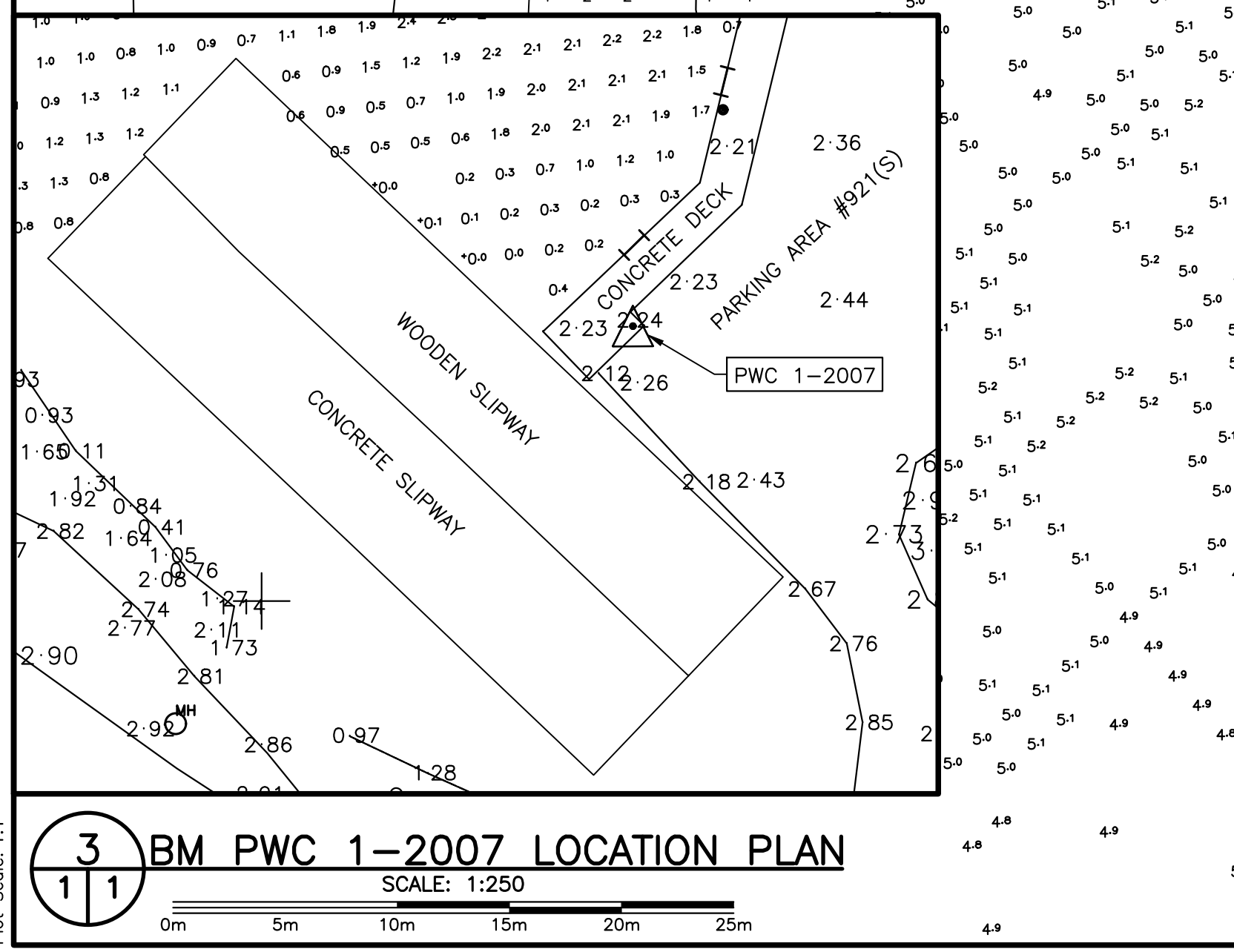
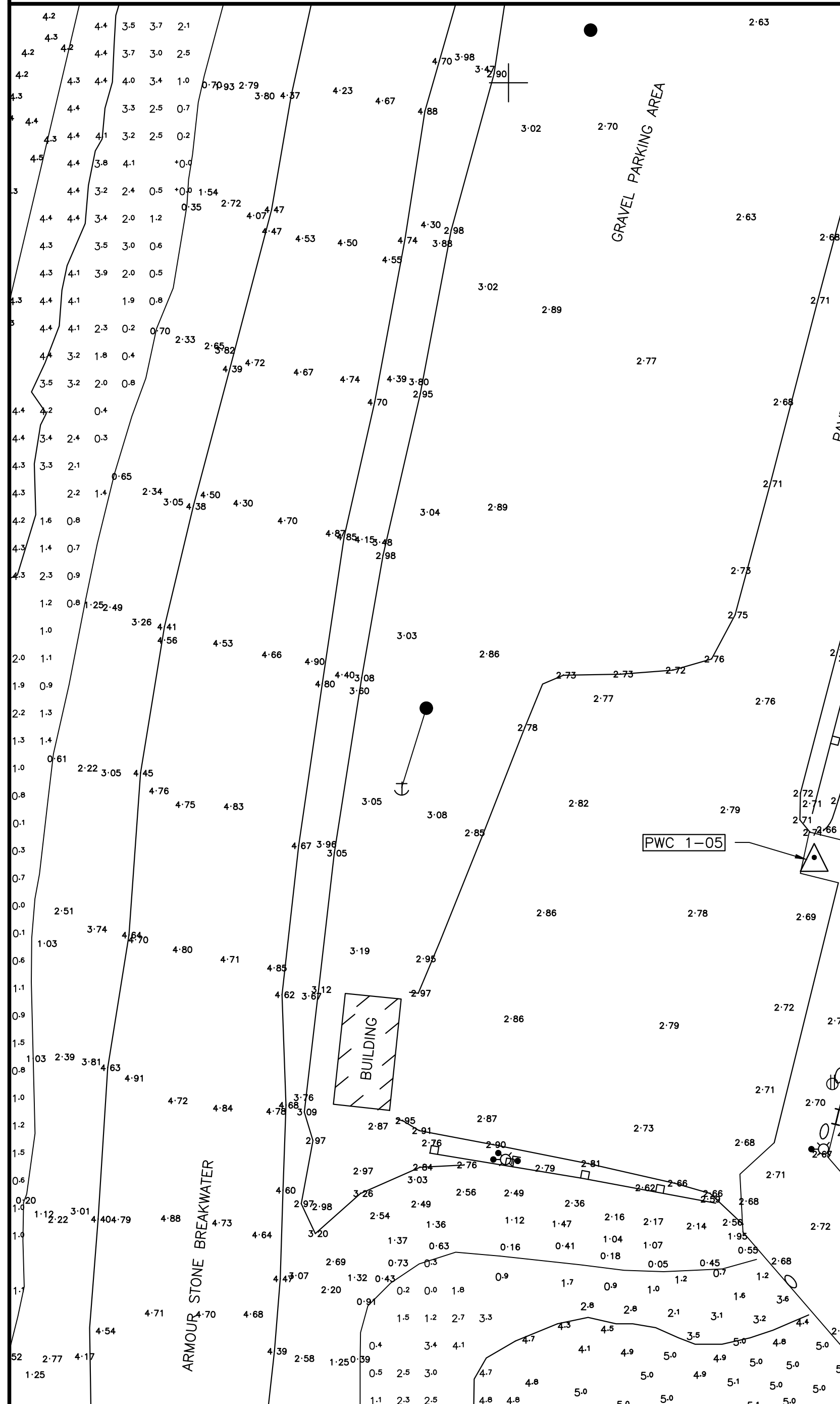
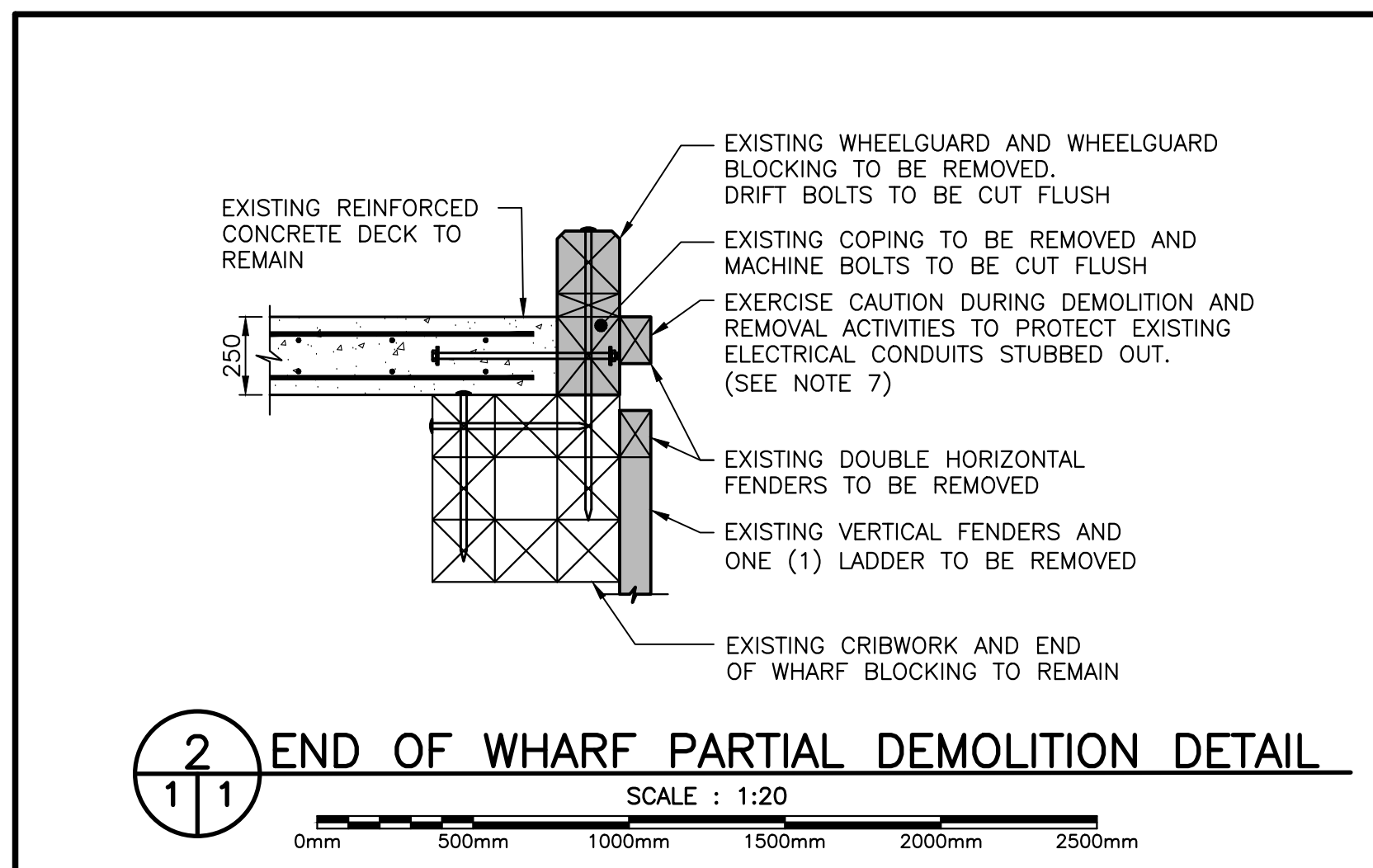
PROJECT NO. 723229-001

DRAWING LIST

CIVIL

C1	OF 7	EXISTING SITE PLAN
C2	OF 7	NEW SITE PLAN
C3	OF 7	PLAN, ELEVATION AND COMPONENT PLAN
C4	OF 7	NEW FINGER PIER SECTIONS
C5	OF 7	DETAILS SHEET 1
C6	OF 7	DETAILS SHEET 2
C7	OF 7	BOREHOLE LOGS





GENERAL NOTES:

- ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- ALL ELEVATIONS IN METERS.
- DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
- RELIABLE AS-BUILT INFORMATION IS LIMITED, EXISTING WHARF DETAILS SHOWN FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL CONFIRM ALL CRITICAL DIMENSIONS IN THE FIELD. CONTRACTOR TO BASE COSTS FOR DEMOLITION AND ASSOCIATED RISK ACCORDINGLY.
- THE CONTRACTOR SHALL DETERMINE WHAT SAFETY MEASURES NEED TO BE TAKEN DURING DEMOLITION/CONSTRUCTION ACTIVITIES.
- THIS IS AN ACTIVE FISHING AND PROCESSING SITE AND THEREFORE CONTRACTOR SHALL COORDINATE WORK AS NECESSARY AS NOT TO DISRUPT ONGOING ACTIVITIES BOTH ON THE EXISTING STRUCTURES AND IN THE UPLANDS AREA.
- TWO (2) 53mm Ø SPARE PVC ELECTRICAL CONDUITS STUBBED AND CAPPED THROUGH COPING AND HORIZONTAL FENDER. CONDUITS TO BE CONNECTED AND EXTENDED IN NEW WORK.

GENERAL LEGEND:

- OUTLINE OF NEW FINGER PIER EXTENSION
- APPROXIMATE BOREHOLE LOCATION

SURVEY NOTES

SURVEY PARTY CHIEF E.D. BEARNS
 SURVEY VESSEL ALUMINUM BOAT
 SURVEY DATE(S) BETWEEN JULY 23, 1998 - MAY 07, 2014

SOUNDER TYPE: SINGLE TRANSDUCER
 SOUNDER SETTING: MIN/WINST VEL OF SOUND 1500 m/s
 DEPTH GATED USED: N/A FREQ. OF TRANS. 210 KHZ
 POSITIONING SYSTEM USED: ON THE FLY DPGS
 LAND SURVEY POSITION BY:
 DATA TAPE(S) USED:
 CAD DRAWING FILE(S):

TIDAL REDUCTION SCHEME:

OFFICE PROCESSOR E.BEARNS
 DATE OF PROCESSING MAY 2014

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
84G4084	350672.894	5327396.591		PROVINCIAL BRASS PLAQUE SET IN BEDROCK
630440	349965.546	5326953.276		PROVINCIAL BRASS PLAQUE SET IN BEDROCK
PWC 1-2007	350566.552	5327812.261	+2.240 m	NAIL SET IN CONCRETE DECK
PWC 9801	350490.850	5327828.043	+0.926 m	STEM REMAINING IN CONCRETE DECK
PWC 9802	350563.951	5327780.206	+0.014 m	IRON PIN DRIVEN IN PAVEMENT
PWC 9803	350592.241	5327978.628	+2.178 m	NAIL RAMSET IN CONCRETE DECK
PWC 9904	350500.063	5327987.867	+2.07 m	NAIL RAMSET IN CONCRETE DECK

ALL SOUNDINGS & ELEVATIONS IN METERS.

ALL SOUNDINGS & ELEVATIONS REFERRED TO CHS "BARRY" 6218 ELEV. +2.183 m (BRASS PLAQUE SET IN CONCRETE DECK) ESTABLISHED FROM GEOCENTRIC BM 927391 ELEV. +60.762 m, USING 0.70m AS THE DIFFERENCE BETWEEN GEODETIC & CHART DATUM.

SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE DIFFERENTIAL GPS POSITIONING SYSTEM BETWEEN JULY 23, 1998 AND MAY 07, 2014.

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE UTM 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 MARK VER.4.3.

ALL FIELD NOTES ARE IN OLD PERLICAN BOOK #307A & 307B.

SURVEY LEGEND

SYMBOLS

⊕ ACCUMULATURE	⊕ LIFE RING
⊕ ANCHOR BLOCK	⊕ LIGHT STANDARD
⊕ BOLLARD	⊕ MANTH
⊕ BOREHOLE	⊕ MAST/TOWER
⊕ BOUNDARY MARKER	⊕ NAVIGATION LIGHT
⊕ CARD POSITION BUOY	⊕ OBSERVED BUOY
⊕ CATCH BASIN	⊕ OBSERVED SPAR BUOY
⊕ CLEAT	⊕ PIPE PILE
⊕ CULVERT	⊕ RANGE LIGHT
⊕ DERRICK	⊕ SAFETY POST
⊕ DISPOSAL	⊕ SEWER OUTFLOW PIPE
⊕ DREDGE CONTROL	⊕ SIGN
⊕ ELECTRICAL OUTLET	⊕ TELEPHONE
⊕ FIRE HYDRANT	⊕ TELEPHONE POLE
⊕ FOG HORN	⊕ TIDE GAUGE/STAFF
⊕ FUEL PUMP	⊕ UTILITY POLE
⊕ H PILE	⊕ VERTICAL CONTROL
⊕ ICE PLANT	⊕ WATER TAP/OUTLET
⊕ INVERT PIPE	⊕ WATER VALVE
⊕ JIB CRANE	⊕ WATER WELL
⊕ LADDER	⊕ WOOD PILE

LINE TYPE

— ARMOUR STONE	— MARCH OUTLINE
— CL. RAILROAD	— PROPERTY BOUNDARY
— DRAIN PIPE	— RANGE LIGHT EXTENSION
— EDGE ROAD / SHOULDER	— RETAINING WALL
— FENCE LINE	— RIPRAP
— FLOATING WAVEBREAK	— TOE OF BANK
— GUARD RAIL	— TREE LINE
— HIGH WATER MARK	— UNDERGROUND CABLE
— LOW WATER MARK	

Fisheries and Oceans Canada / **Pêches et Océans Canada**

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND AND LABRADOR

PERMIT HOLDER
 This Permit Allows
Meridian Engineering Inc.
 Member No. 04378

TO practice Professional Engineering in Newfoundland and Labrador:
 Permit No. as issued by PEG 20453,
 which is valid for the year 2020.

revisions	description	date
C	ISSUED FOR TENDER	31/03/20
B	ISSUED FOR 66% REVIEW	19/12/15
A	ISSUED FOR 33% REVIEW	19/11/25

FINGER PIER EXTENSION

OLD PERLICAN, NL

EXISTING SITE PLAN

designed C. FISHER concu
 date NOVEMBER 2019
 drawn P. MARSH desine
 date NOVEMBER 2019
 approved approve
 date
 Tender Soumission
 DFO Project Manager Administrateur de projets MPO
 project number no. du projet
723229-001
 drawing no. no. du dessin
C1 OF 7



GENERAL NOTES:

- ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
- ALL ELEVATIONS IN METERS.
- DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
- RELIABLE AS-BUILT INFORMATION IS LIMITED, EXISTING WHARF DETAILS SHOWN FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL CONFIRM ALL CRITICAL DIMENSIONS IN THE FIELD. CONTRACTOR TO BASE COSTS FOR DEMOLITION AND ASSOCIATED RISK ACCORDINGLY.
- THE CONTRACTOR SHALL DETERMINE WHAT SAFETY MEASURES NEED TO BE TAKEN DURING DEMOLITION/CONSTRUCTION ACTIVITIES.
- THIS IS AN ACTIVE FISHING AND PROCESSING SITE AND THEREFORE CONTRACTOR SHALL COORDINATE WORK AS NECESSARY AS NOT TO DISRUPT ONGOING ACTIVITIES BOTH ON THE EXISTING STRUCTURES AND IN THE UPLANDS AREA.

GENERAL LEGEND:

- [Symbol] DENOTES NEW FINGER PIER EXTENSION
- [Symbol] APPROXIMATE BOREHOLE LOCATION

SURVEY NOTES

SURVEY PARTY CHIEF EDDIE BEARDS
 SURVEY VESSEL ALUMINUM BOAT
 SURVEY DATE(S) BETWEEN JULY 23, 1998 - MAY 07, 2014

SOUNDER TYPE: SINGLE TRANSDUCER
 SOUNDER SETTING: MIN/WINST VEL OF SOUND 1500 m/s
 DEPTH GATE USED: N/A FREQ. OF TRANS. 210 KHZ

POSITIONING SYSTEM USED: ON THE FLY DPGS
 LAND SURVEY POSITION BY

DATA TAKE/LOG(S) USED: CAD DRAWING FILE(S):

TIDAL REDUCTION SCHEME:

OFFICE PROCESSOR E.BEARDS
 DATE OF PROCESSING MAY 2014

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
84G4084	350672.894	5327396.591		PROVINCIAL BRASS PLAQUE SET IN BEDROCK
630440	349965.546	5326953.276		PROVINCIAL BRASS PLAQUE SET IN BEDROCK
PWC 1-2007	350566.552	5327812.261	+2.240 m	NAIL SET IN CONCRETE DECK
PWC 9801	350490.850	5327828.043	+2.026 m	STEM REMAINING IN CONCRETE DECK
PWC 9802	350563.951	5327780.206	+3.014 m	IRON PIN DRIVEN IN PAVEMENT
PWC 9803	350592.241	5327978.628	+2.178 m	NAIL RAMSET IN CONCRETE DECK
PWC 9904	350500.063	5327987.867	+2.07 m	NAIL RAMSET IN CONCRETE DECK

ALL SOUNDINGS & ELEVATIONS IN METERS.

ALL SOUNDINGS & ELEVATIONS REFERRED TO CHS "BARRY" 6218 ELEV. +2.183 m (BRASS PLAQUE SET IN CONCRETE DECK) ESTABLISHED FROM GEOCEITIC BM 927391 ELEV. +60.762 m, USING 0.70m AS THE DIFFERENCE BETWEEN GEOCEITIC & CHART DATUM.

SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE DIFFERENTIAL GPS POSITIONING SYSTEM BETWEEN JULY 23, 1998 AND MAY 07, 2014.

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE UTM 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 NOTES ARE IN OLD PERLICAN BOOK #307A & 307B.

SURVEY LEGEND

SYMBOLS

- ACQUACULTURE
- ANCHOR BLOCK
- BOLLARD
- BOREHOLE
- BOUNDARY MARKER
- CARD POSITION BUOY
- CATCH BASIN
- CLEAT
- CULVERT
- DERRICK
- DISPOSAL
- DREDGE CONTROL
- ELECTRICAL OUTLET
- FIRE HYDRANT
- FISH HANDLING EQUIP.
- FOG HORN
- FUEL PUMP
- H PILE
- ICE PLANT
- INVERT PIPE
- JOB CRANE
- 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
- SIGN
- TELEPHONE
- TELEPHONE POLE
- TIDE GAUGE/STAFF
- UTILITY POLE
- VERTICAL CONTROL
- WATER TAP/OUTLET
- WATER VALVE
- WATER WELL
- WOOD PILE

LINE TYPE

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

1 NEW SITE PLAN
2 SCALE: 1:250

0m 5m 10m 15m 20m 25m

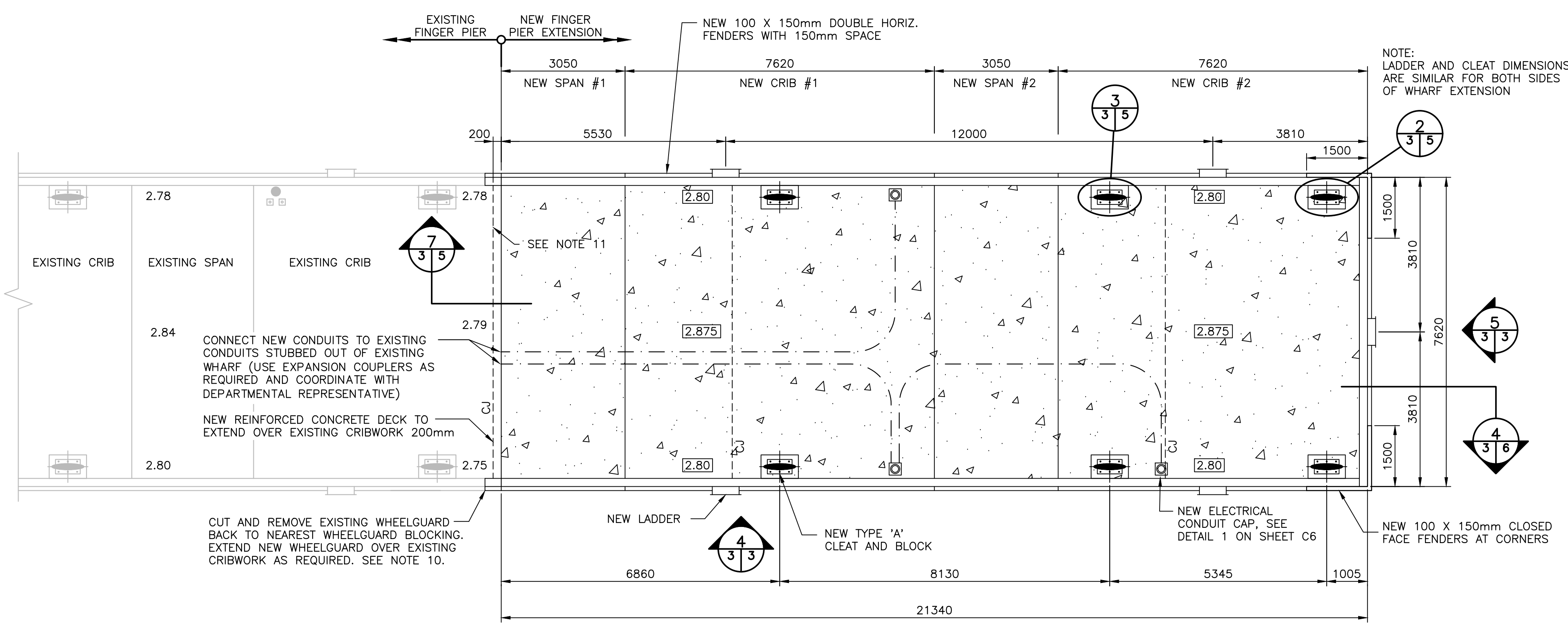
DESIGNED C. FISHER
 DATE NOVEMBER 2019
 DRAWN P. MARSH
 DATE NOVEMBER 2019
 APPROVED
 TENDER
 DFO PROJECT MANAGER
 PROJECT NUMBER 723229-001
 DRAWING NO. C2 OF 7

SMALL CRAFT HARBOURS

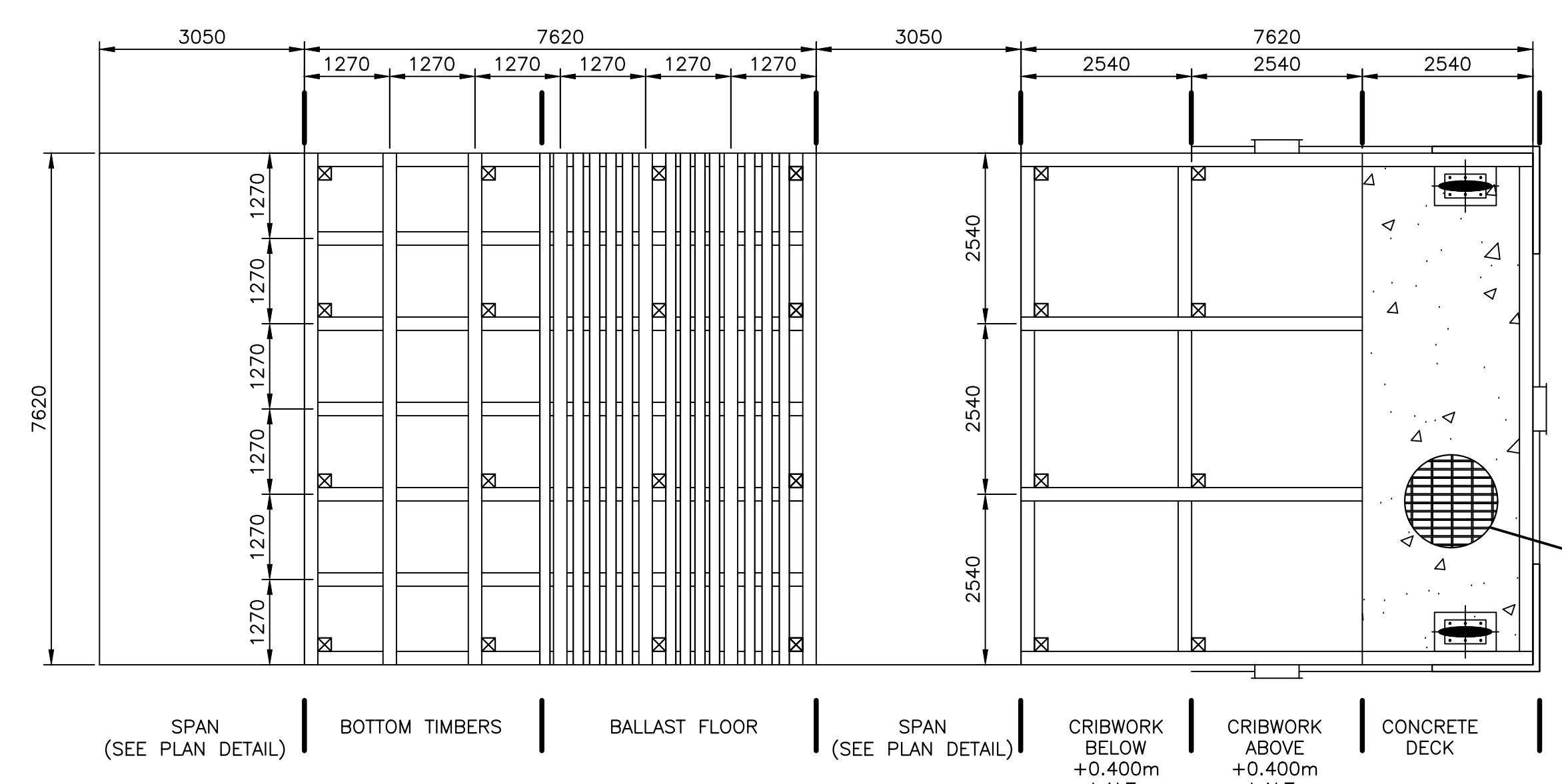


- GENERAL LEGEND:**
- NEW LADDER
 - NEW TYPE "A" CLEAT & BLOCK.
 - NEW FINISHED GRADE
 - EXISTING GRADE
 - NEW CONTROL JOINT (CENTERED OVER CROSSTIE)
 - NEW REINFORCED CONCRETE DECK
 - NEW ELECTRICAL CONDUIT CAP
 - NEW ELECTRICAL CONDUIT (53mm Ø PVC c/w NEW POLY FISH CORD)

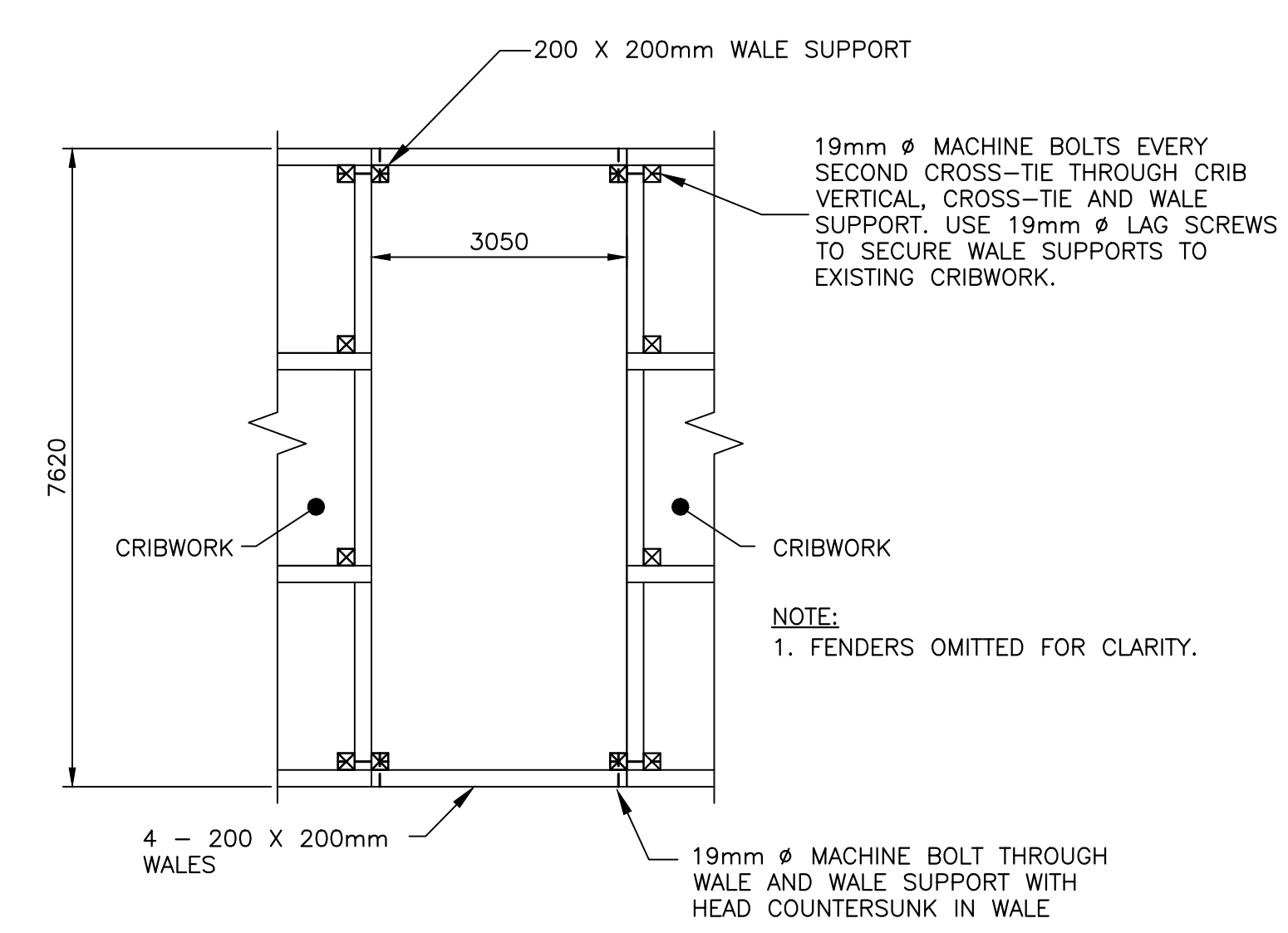
- GENERAL NOTES:**
1. ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
 2. ALL ELEVATIONS IN METERS.
 3. DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
 4. LOCATION OF LADDERS, CLEATS, AND PEDESTALS AS SHOWN ARE CONSIDERED APPROXIMATE. CONTRACTOR TO COORDINATE ACTUAL PLACEMENT WITH DEPARTMENTAL REPRESENTATIVE.
 5. CONTRACTOR SHALL COORDINATE LOCATION OF CONTROL JOINTS WITH DEPARTMENTAL REPRESENTATIVE IN THE FIELD.
 6. SPACING BETWEEN LADDERS SHALL IN NO CASE EXCEED 12.2m O.C.
 7. DURING EXCAVATION, CONTRACTOR TO TAKE MEASURES TO PREVENT UNDERMINING OF EXISTING ADJACENT STRUCTURES AND WHEN PLACING NEW CRIBWORK, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF THE ADJACENT STRUCTURES, AND SHALL DETERMINE WHAT MEASURES NEED TO BE TAKEN DURING CONSTRUCTION ACTIVITIES TO PREVENT UNDERMINING. CONTRACTOR SHALL CONFIRM EXISTING FINGER PIER CRIBSEAT ELEVATION PRIOR TO EXCAVATION.
 8. CONTRACTOR SHALL EXCAVATE AND INSTALL CRIBS ON HARD BOTTOM (MINIMUM CRIBSEAT ELEVATION -4.25m). SCRIBE CRIBS IF NECESSARY TO ENSURE FULL SUPPORT IS PROVIDED UNDER TIMBERS. IF GEOTECHNICAL CONDITIONS DIFFER FROM THOSE INDICATED, ADVISE DEPARTMENTAL REPRESENTATIVE IMMEDIATELY.
 9. CONTRACTOR TO EXCAVATE IN SUCH A MANNER AS TO ENSURE STABILITY OF SLOPES PRIOR TO AND DURING CRIB CONSTRUCTION.
 10. PROVIDE SMOOTH TRANSITION BETWEEN NEW AND EXISTING FEATURES, INCLUDING COPING, FENDERS, AND WHEELGUARD TO ENSURE NO HORIZONTAL OR VERTICAL OFFSET CREATED.
 11. CONTRACTOR SHALL TIE NEW CONCRETE DECK INTO EXISTING TO ENSURE A SMOOTH TRANSITION AND AVOID CREATING ANY LOW POINTS. MAINTAIN POSITIVE DRAINAGE TOWARDS WHARF EDGE.
 12. ALL ELECTRICAL WORK TO BE COMPLETED AS PER CANADIAN ELECTRICAL CODE C22.1, LATEST EDITION.



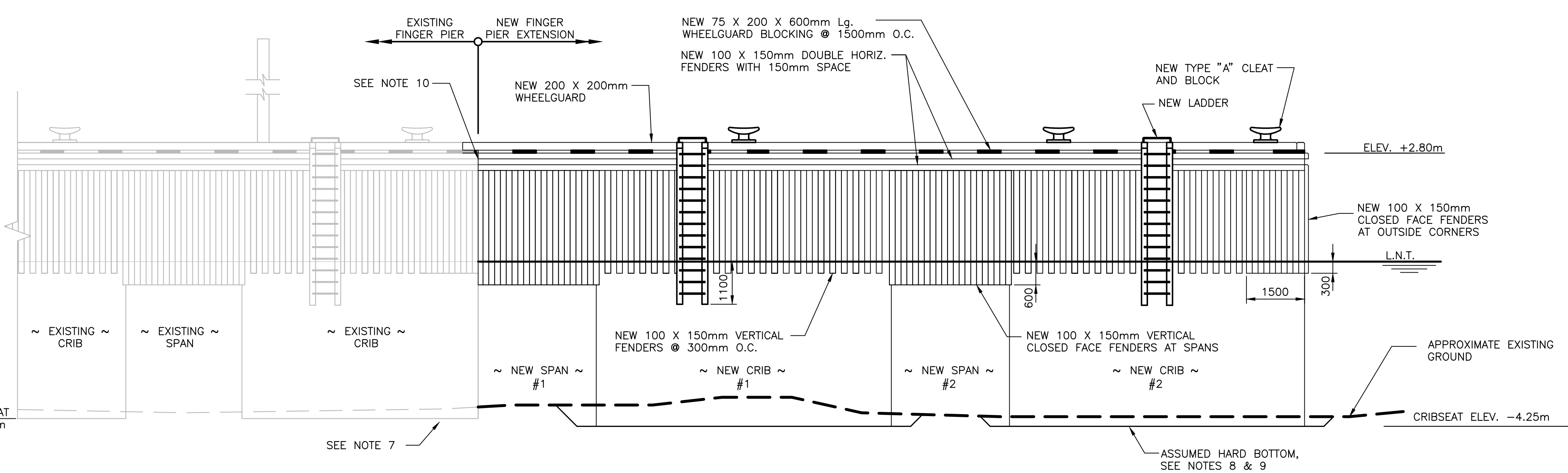
1 NEW FINGER PIER EXTENSION – DECK PLAN
SCALE : 1:75



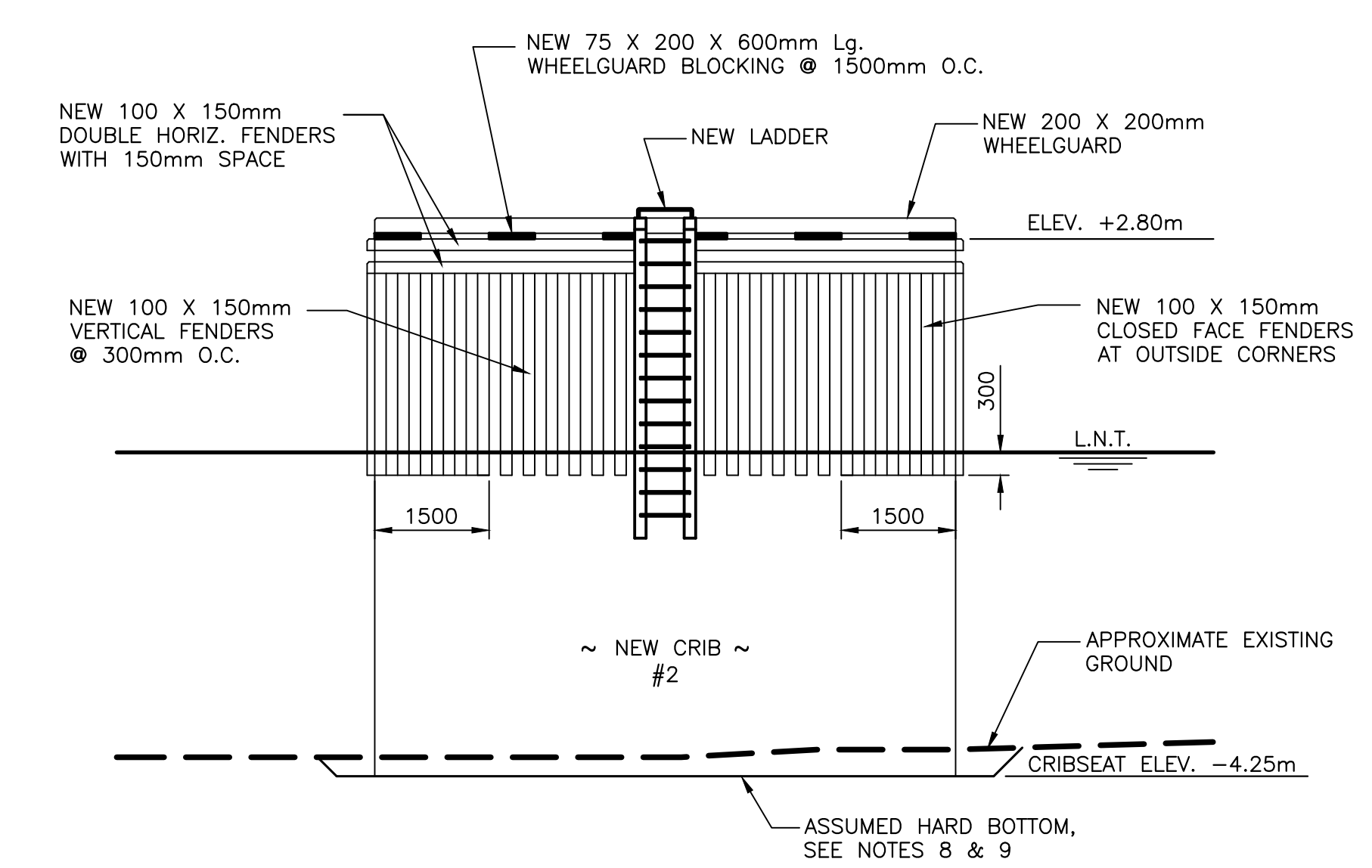
2 NEW FINGER PIER EXTENSION – COMPONENT PLAN
SCALE : 1:75



3 PLAN – SPAN DETAIL
SCALE : 1:75



4 NEW FINGER PIER EXTENSION – ELEVATION
SCALE : 1:75



5 NEW WHARF ELEVATION
SCALE : 1:75



PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
Member No. 04378
To practice Professional Engineering
in Newfoundland and Labrador
Permit No. as issued by PEG_N0453
which is valid for the year 2020.

revisions	date
C	ISSUED FOR TENDER 31/03/20
B	ISSUED FOR 66% REVIEW 19/12/05
A	ISSUED FOR 33% REVIEW 19/11/25

FINGER PIER EXTENSION
OLD PERLICAN, NL

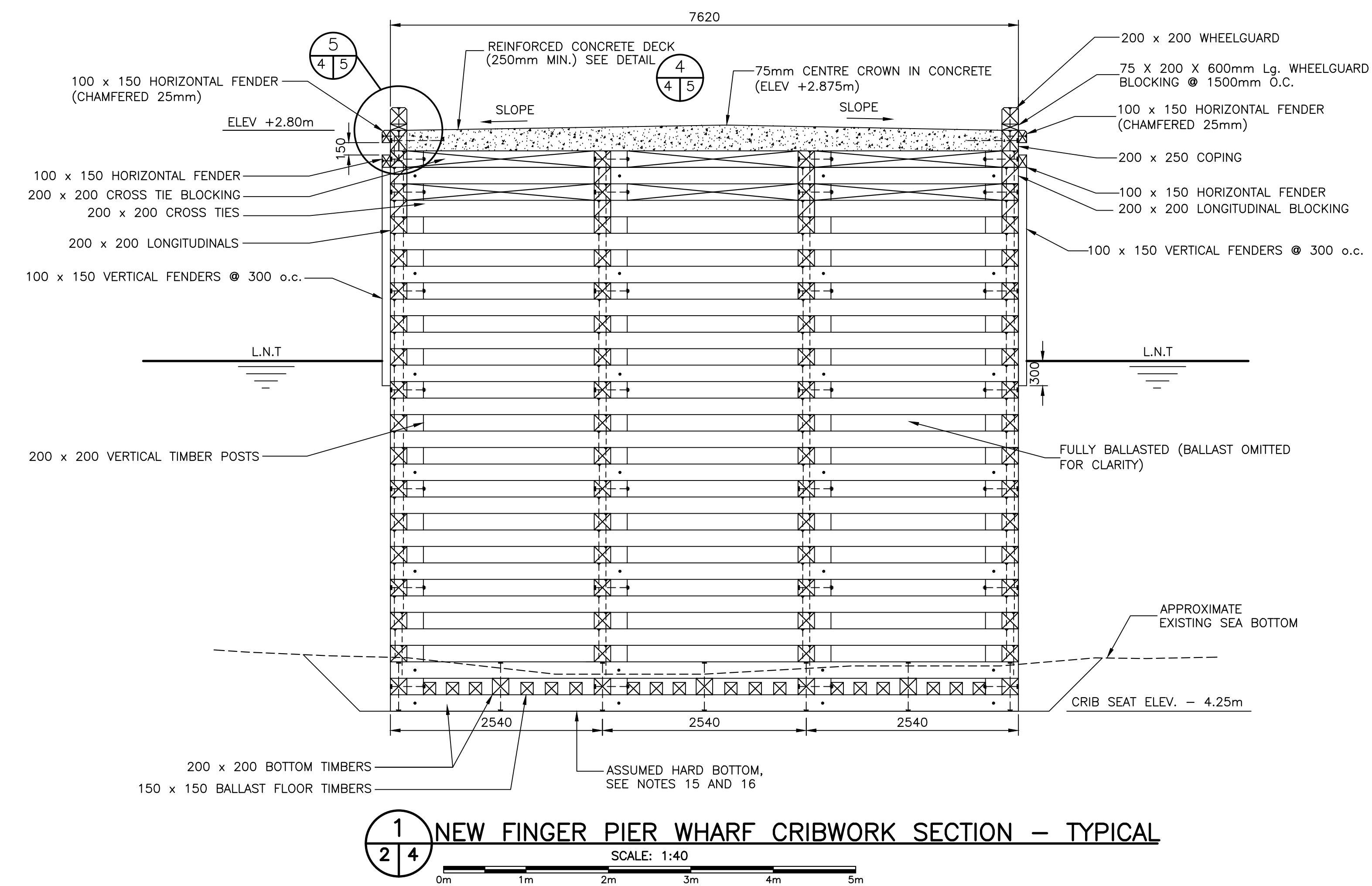
PLAN, ELEVATION & COMPONENT PLAN

designed C. FISHER	concu
date NOVEMBER 2019	
drawn P. MARSH	dessine
date NOVEMBER 2019	
approved	approuve
date	
Tender	Soumission
DFO Project Manager Administrateur de projets MPO	
project number 723229-001	no. du projet
drawing no. C3 OF 7	no. du dessin

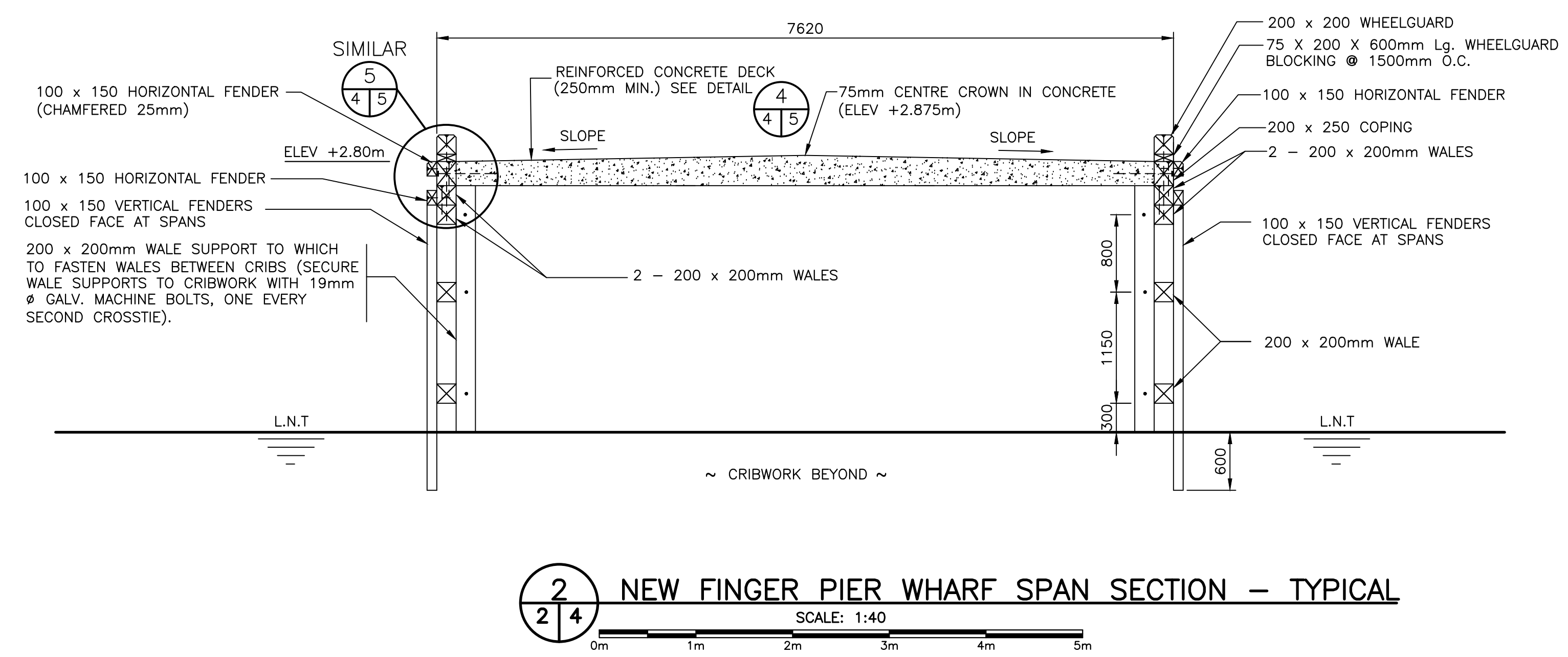


GENERAL NOTES:

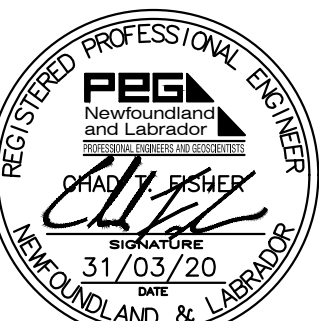
1. ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
2. ALL ELEVATIONS IN METERS.
3. DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
4. MINIMUM CONCRETE STRENGTH 35 MPa @ 28 DAYS.
5. REINFORCING STEEL YIELD STRENGTH 400 MPa.
6. REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3, LATEST EDITION, AND AS INDICATED BELOW:
 - A.) STRUCTURAL DECK:
 - 20M = 700mm LAP
 - 15M = 500mm LAP
 - B.) ALL OTHER AREAS:
 - 20M = 850mm LAP
 - 15M = 650mm LAP
7. ALL REBAR TO HAVE MIN. COVER OF 75mm UNLESS OTHERWISE NOTED.
8. ALL MACHINE BOLTS TO BE 19mm DIAMETER (GALVANIZED), UNLESS OTHERWISE NOTED.
9. ALL DRIFT BOLTS TO BE 19mm DIAMETER (GALVANIZED), AS NOTED ON DRAWINGS.
10. ALL TIMBER TO BE TREATED TO CSA 080, LATEST EDITION, UNLESS OTHERWISE NOTED.
11. REINFORCED CONCRETE DECK IS DESIGNED IN ACCORDANCE WITH THE CANADIAN HIGHWAY BRIDGE CODE, AND BASED ON THE CL-625 TRUCK AND ASSOCIATED AND LANE LOAD.
12. GALVANIZING WILL CONFORM TO ASTM A123/A123M, LATEST EDITION.
13. ALL LAG SCREWS TO BE GALVANIZED AND SIZED AS PER FOLLOWING:
 - LADDER UPRIGHTS - 19mm Ø
 - FENDERING - 16mm Ø
14. THE CONTRACTOR SHALL ENSURE THAT THE WALES ARE INSTALLED AT DIMENSIONS AS SHOWN ON THE DRAWINGS, PROVIDING ALL EQUIPMENT, LABOUR & MATERIALS, INCLUDING DIVING CREW IF NECESSARY.
15. CONTRACTOR SHALL EXCAVATE AND INSTALL CRIBS ON HARD BOTTOM (MINIMUM CRIBSEAT ELEVATION -4.25m). SCRIBE CRIBS IF NECESSARY TO ENSURE FULL SUPPORT IS PROVIDED UNDER TIMBERS. IF GEOTECHNICAL CONDITIONS DIFFER FROM THOSE INDICATED, ADVISE DEPARTMENTAL REPRESENTATIVE IMMEDIATELY.
16. CONTRACTOR TO EXCAVATE IN SUCH A MANNER AS TO ENSURE STABILITY OF SLOPES PRIOR TO AND DURING CRIB CONSTRUCTION.



1 NEW FINGER PIER WHARF CRIBWORK SECTION - TYPICAL
2 4 SCALE: 1:40



2 NEW FINGER PIER WHARF SPAN SECTION - TYPICAL
2 4 SCALE: 1:40



PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
Member No. 04378
To practice Professional Engineering
in Newfoundland and Labrador:
Permit No. as issued by PEG_N0453,
which is valid for the year 2020.

revisions	date
C	ISSUED FOR TENDER 31/03/20
B	ISSUED FOR 66% REVIEW 19/12/19
A	ISSUED FOR 33% REVIEW 19/11/20

project
FINGER PIER EXTENSION
OLD PERLICAN, NL

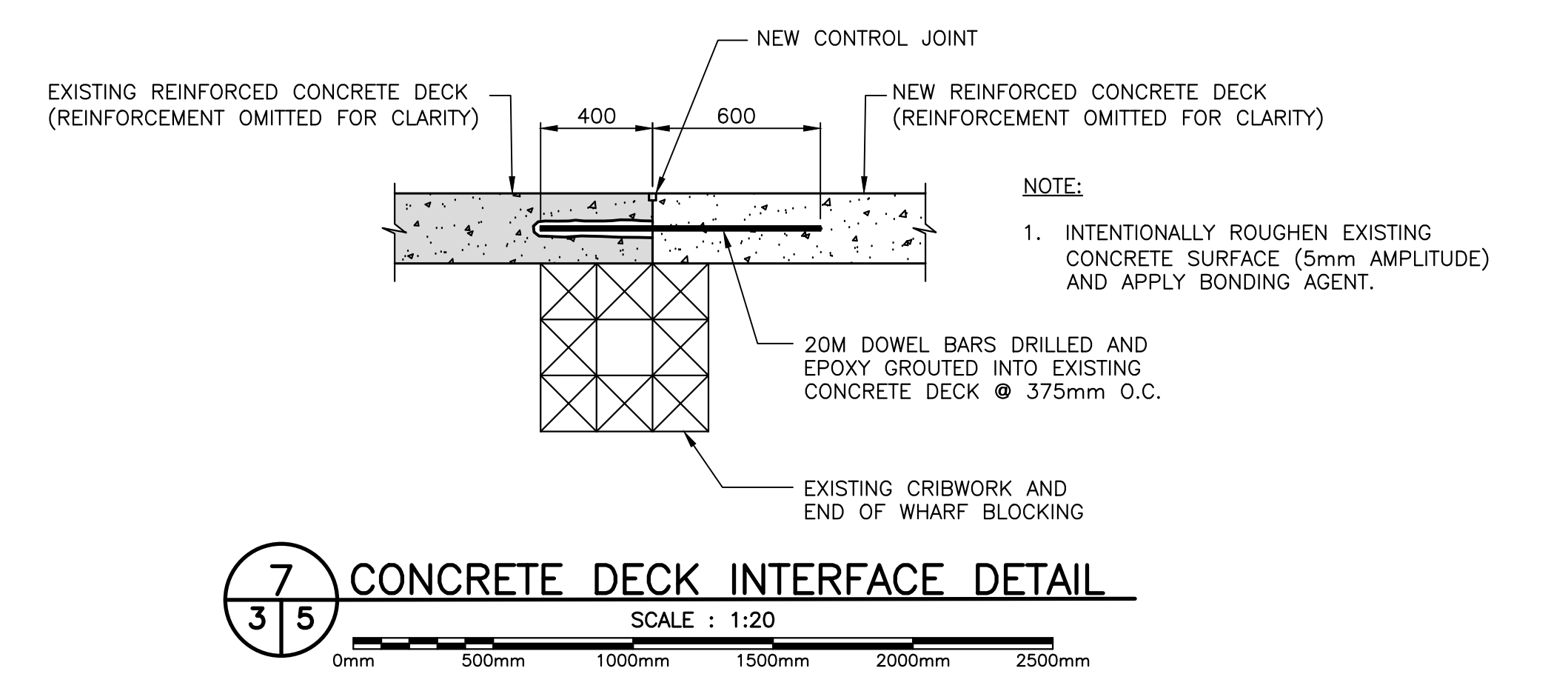
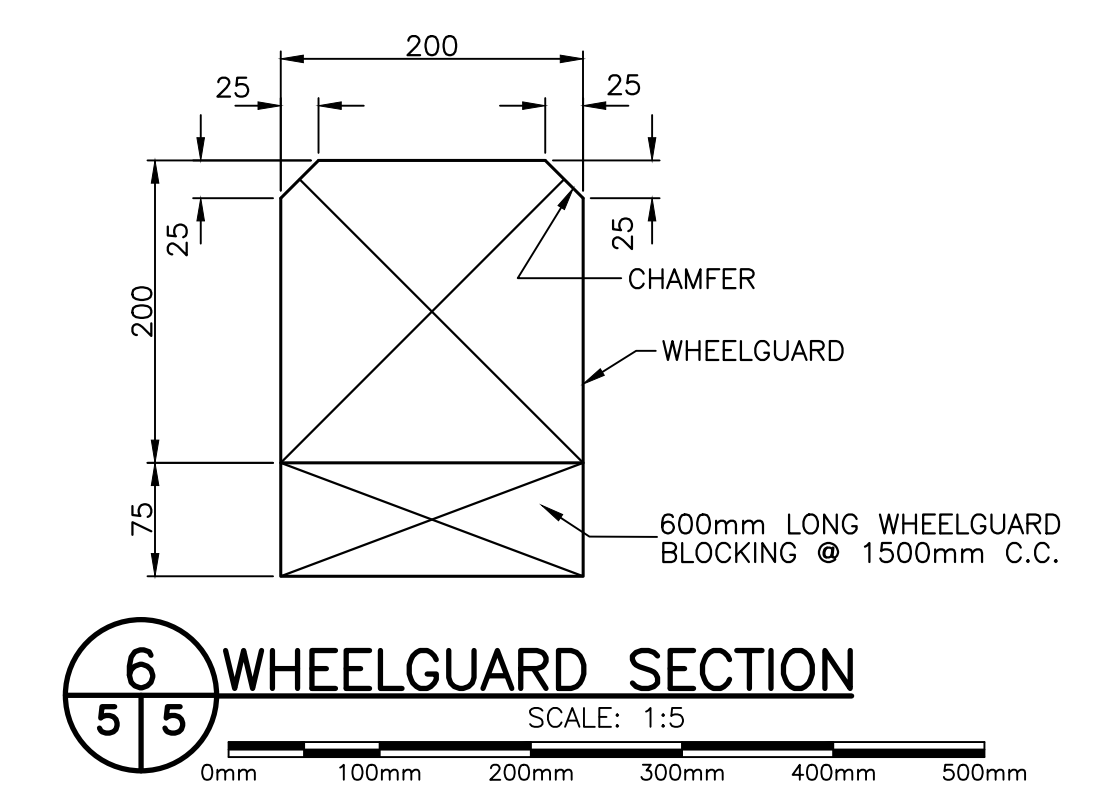
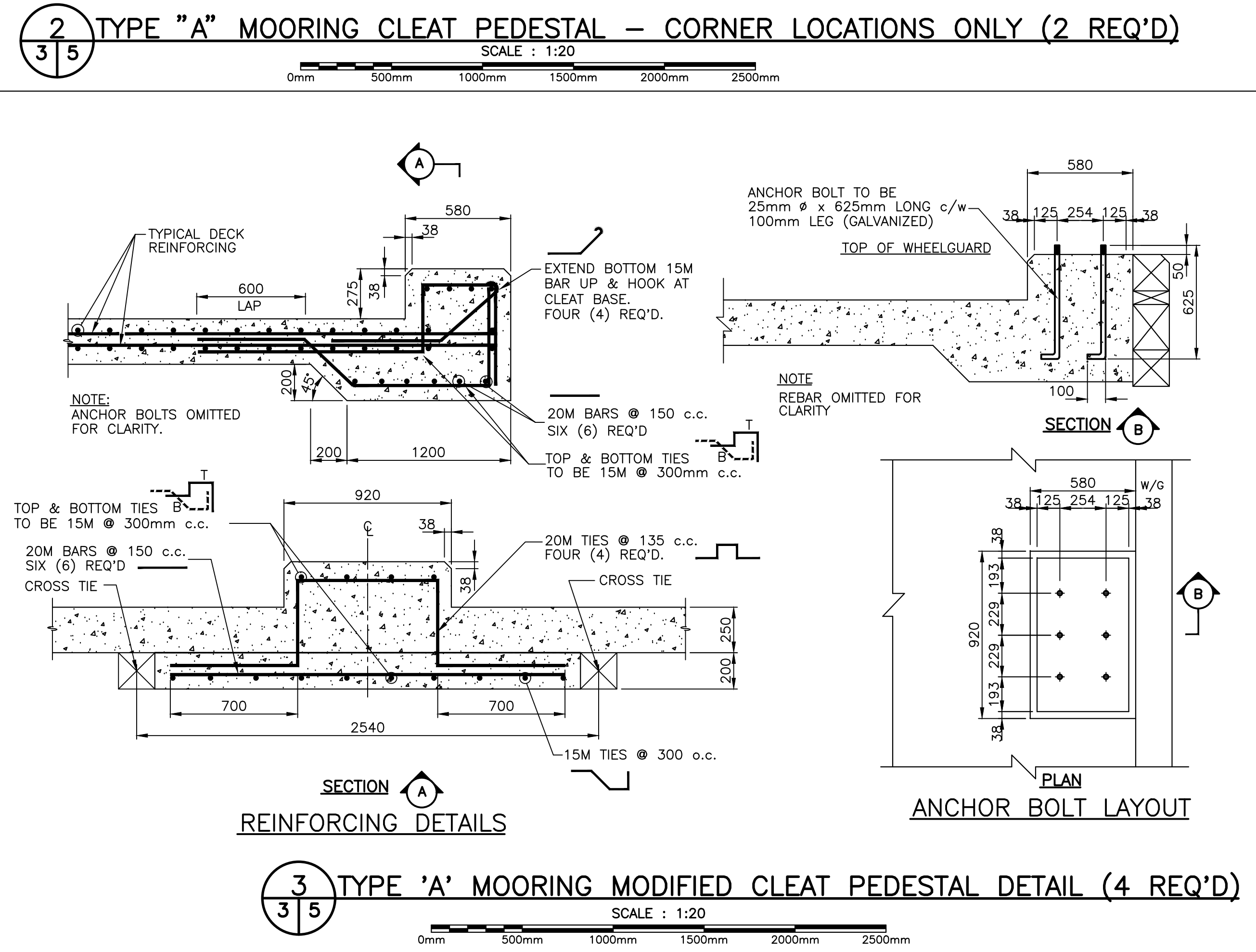
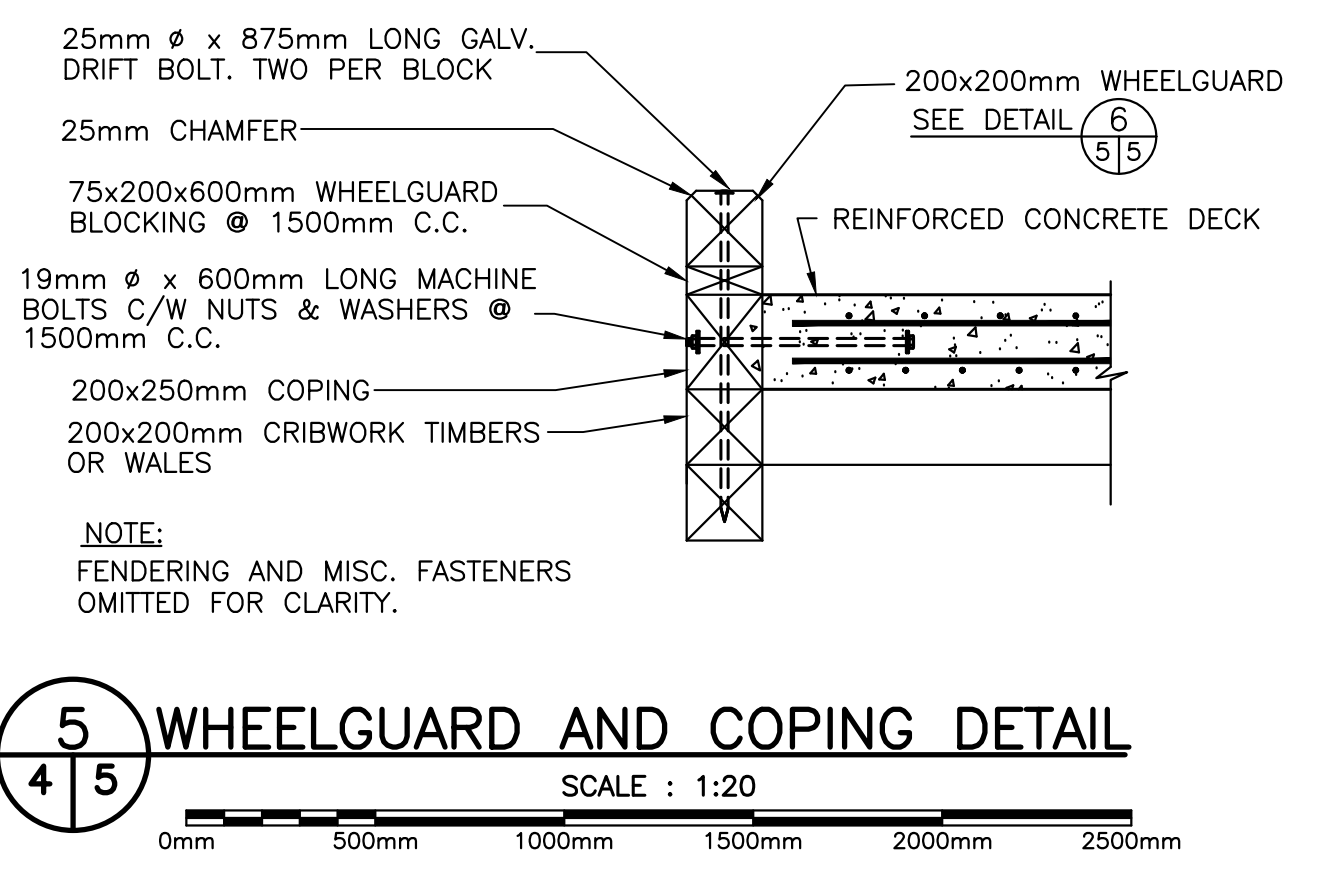
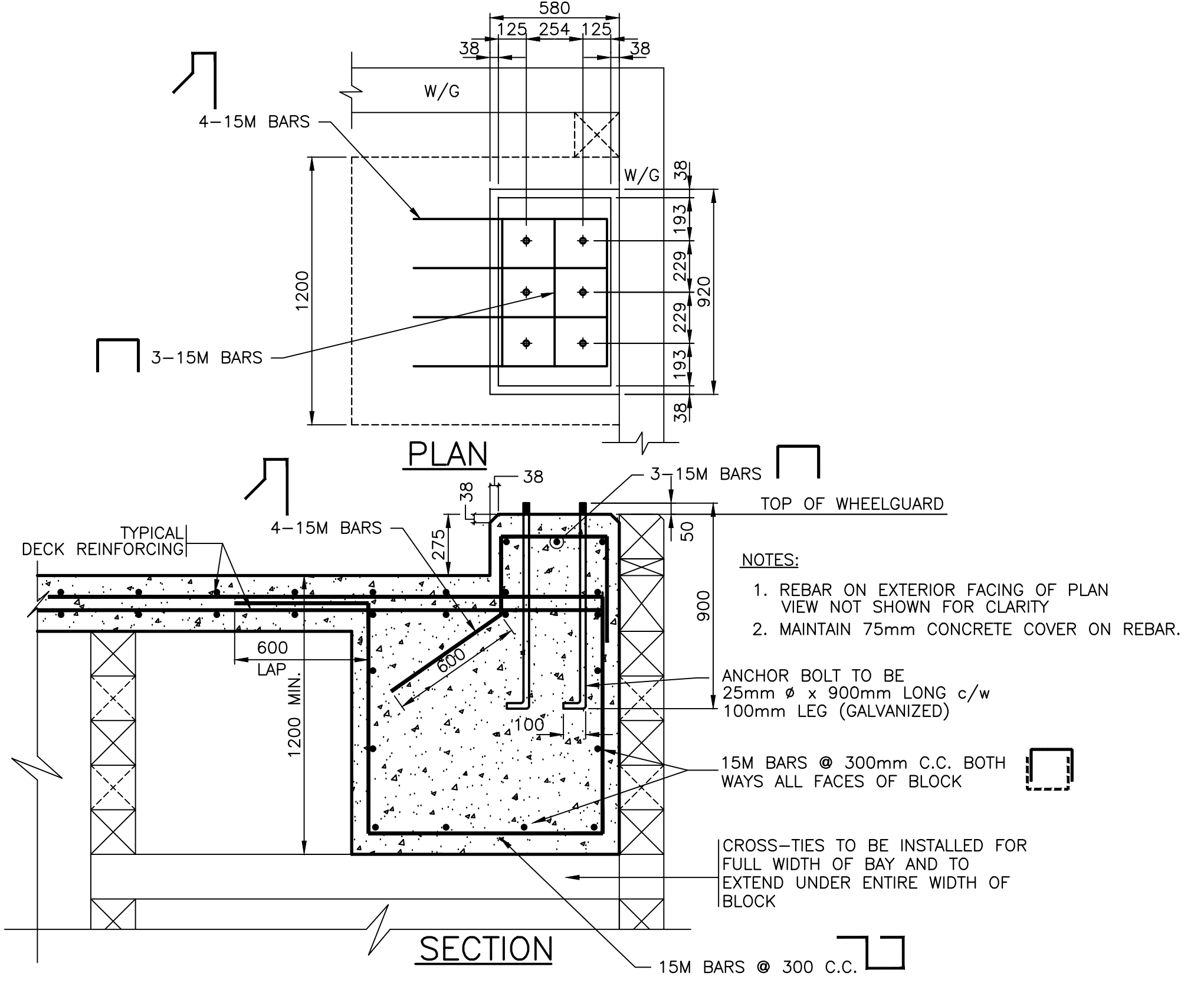
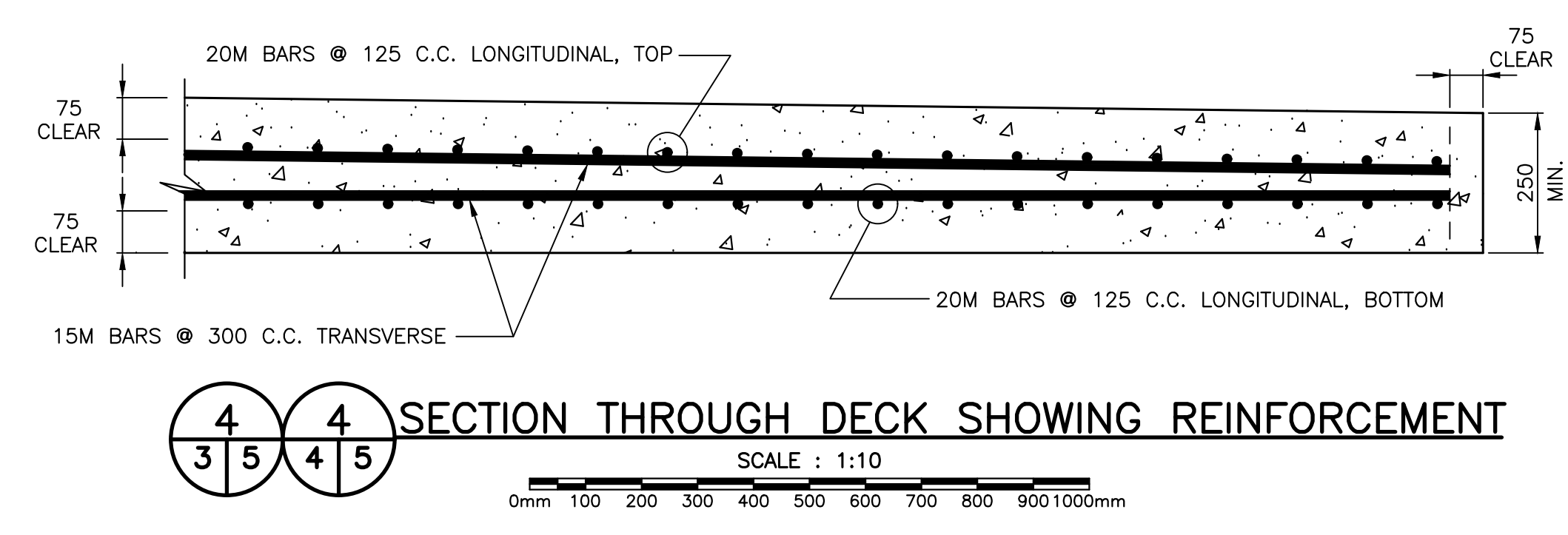
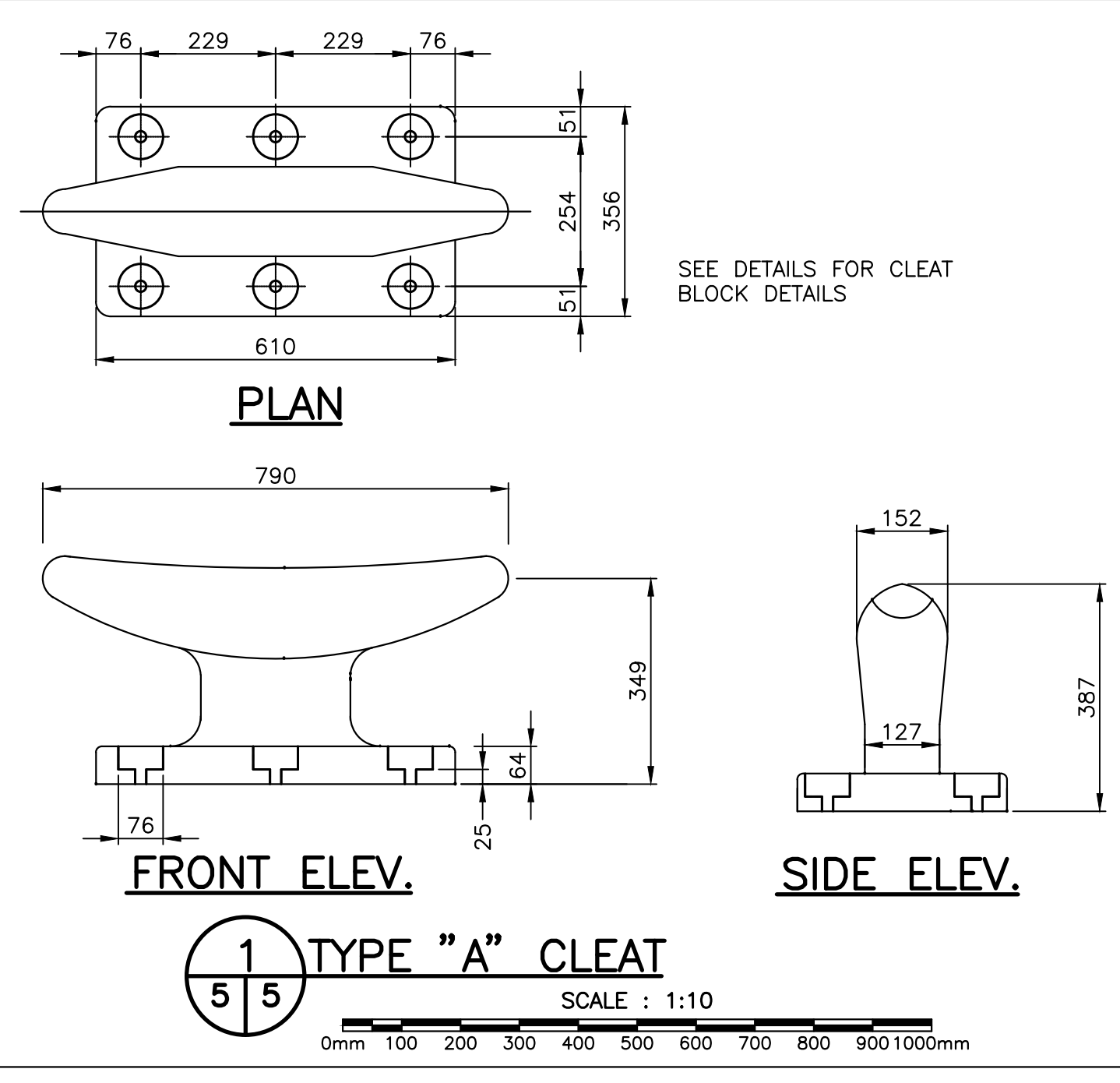
drawing design
NEW FINGER PIER SECTIONS

designed C. FISHER	concu
date NOVEMBER 2019	
drawn P. MARSH	dessine
date NOVEMBER 2019	
approved	approuvé
date	
Tender	Soumission
DFO Project Manager Administrateur de projets MPD	no. du projet
project number	
723229-001	
drawing no.	no. du dessin
C4 OF 7	



- GENERAL NOTES:**
- ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
 - ALL ELEVATIONS IN METERS.
 - DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
 - MINIMUM CONCRETE STRENGTH 35 MPa @ 28 DAYS.
 - REINFORCING STEEL YIELD STRENGTH 400 MPa.
 - REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3, LATEST EDITION AND AS INDICATED BELOW:

A.) STRUCTURAL DECK:	B.) ALL OTHER AREAS:
- 20M = 700mm LAP	- 20M = 850mm LAP
- 15M = 500mm LAP	- 15M = 650mm LAP
 - ALL REBAR TO HAVE MIN. COVER OF 75mm UNLESS OTHERWISE NOTED.



PROVINCE OF NEWFOUNDLAND AND LABRADOR		
PERMIT HOLDER		
This Permit Allows		
Meridian Engineering Inc.		
Member No. 04378		
To practice Professional Engineering in Newfoundland and Labrador:		
Permit No. as issued by PEG_N0453		
which is valid for the year 2020.		
revisions	date	
C	ISSUED FOR TENDER	31/03/20
B	ISSUED FOR 66% REVIEW	19/12/15
A	ISSUED FOR 33% REVIEW	19/11/25
project	FINGER PIER EXTENSION	
project	OLD PERLICAN, NL	

drawing		design
DETAILS SHEET 1		
designed	C. FISHER	concu
date	NOVEMBER 2019	
drawn	P. MARSH	design
date	NOVEMBER 2019	
approved		approve
date		
Tender		Submission
DFO Project Manager	Administrateur de projets MPD	
project number		no. du projet
	723229-001	
drawing no.		no. du dessin
	C5 OF 7	

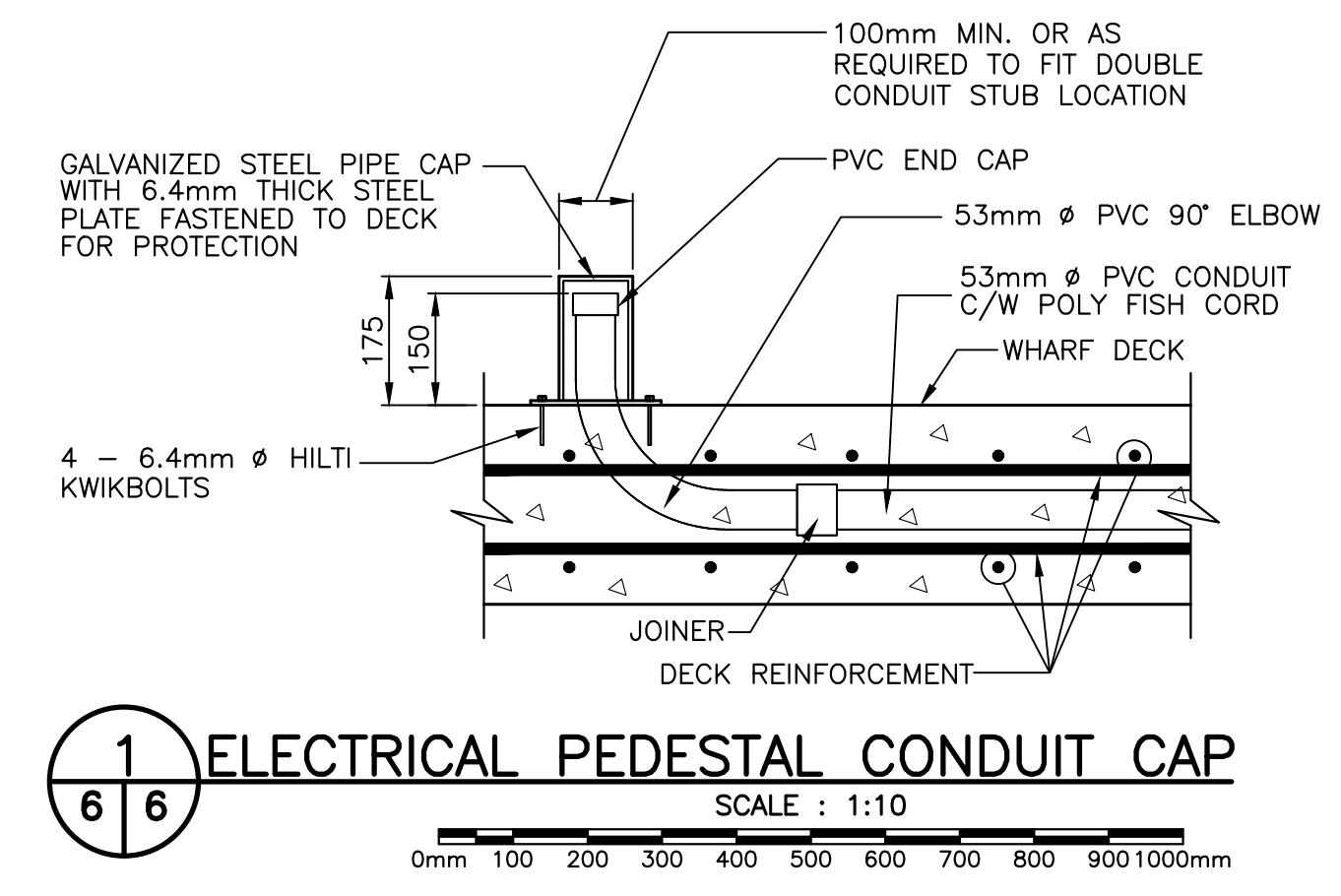
SMALL CRAFT HARBOURS



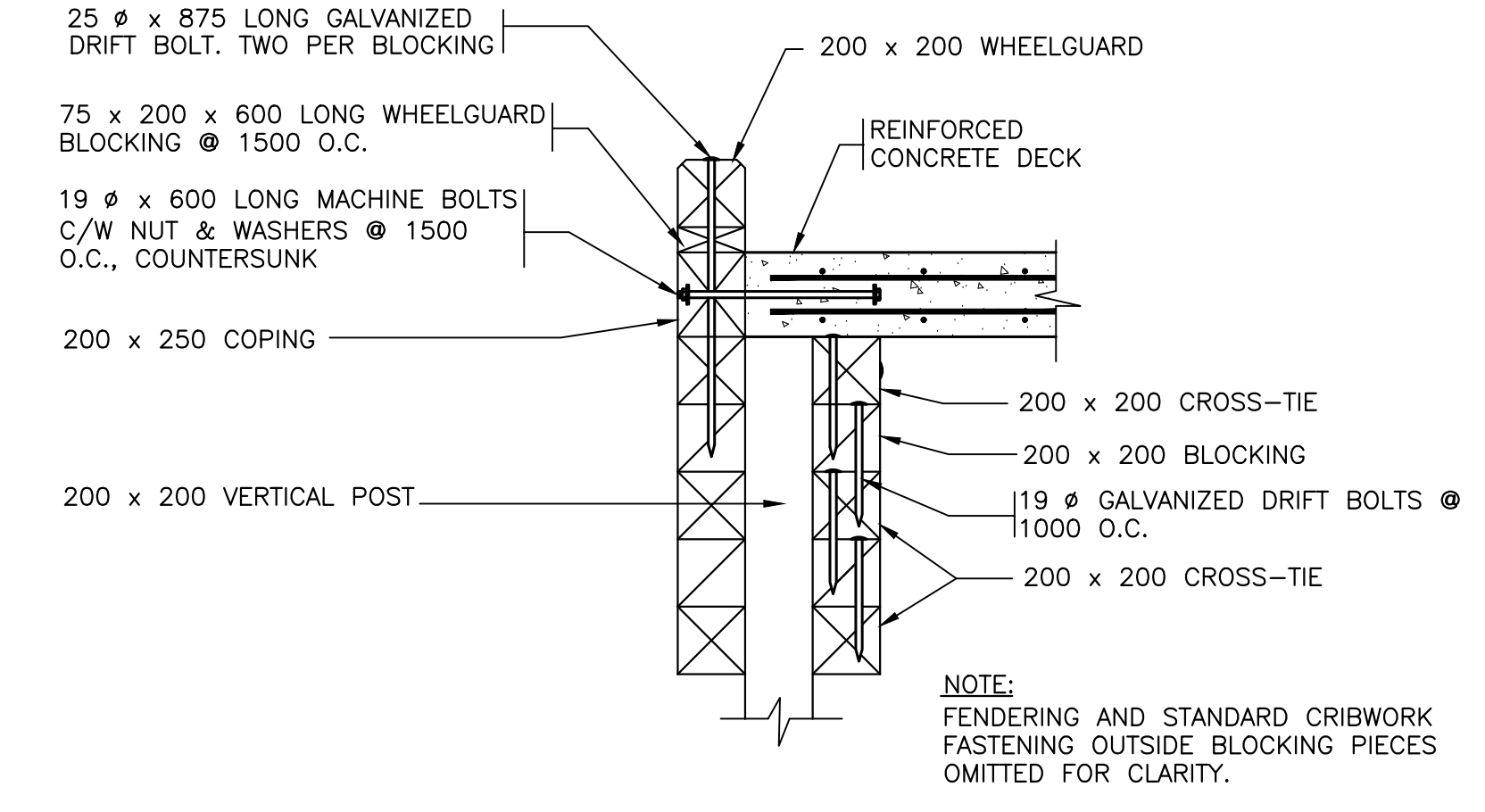
GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
2. ALL ELEVATIONS IN METERS.
3. DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS AS SHOWN.
4. MINIMUM CONCRETE STRENGTH 35 MPa @ 28 DAYS.
5. REINFORCING STEEL YIELD STRENGTH 400 MPa.
6. REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3, LATEST EDITION, AND AS INDICATED BELOW:

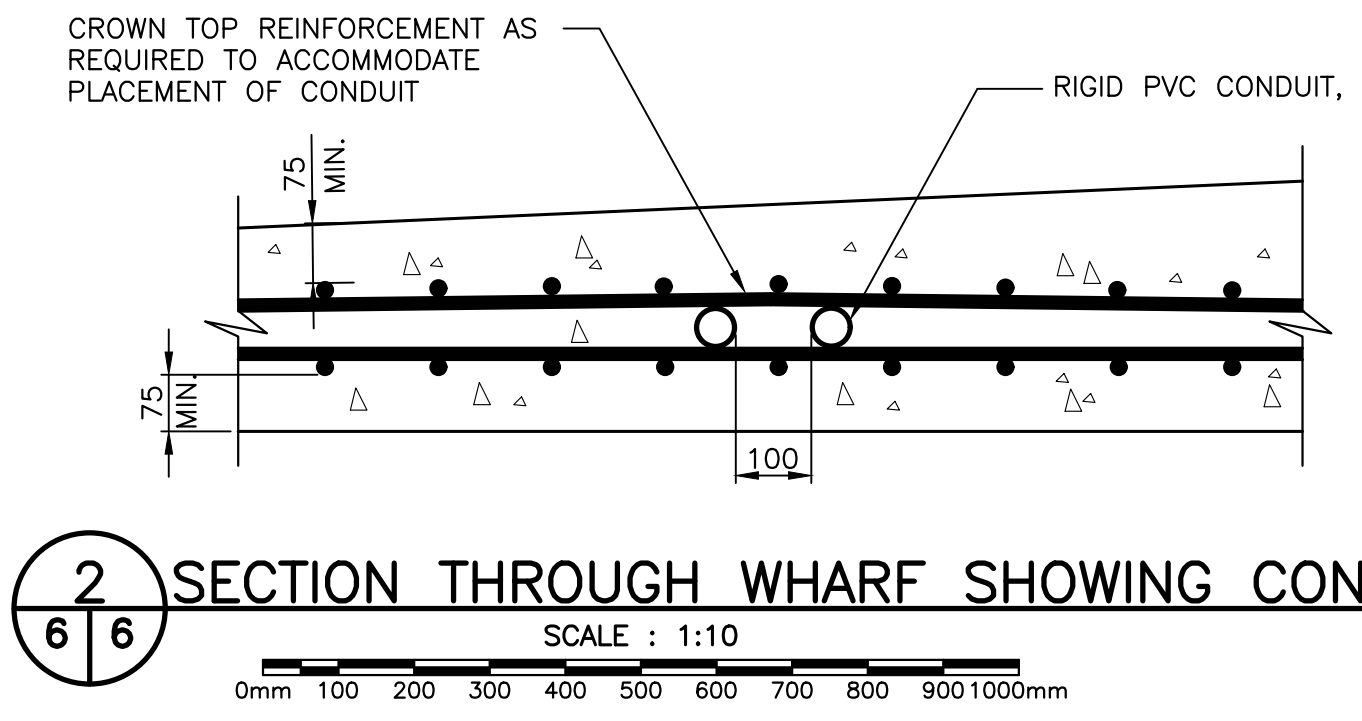
A.) STRUCTURAL DECK:	B.) ALL OTHER AREAS:
- 20M = 700mm LAP	- 20M = 850mm LAP
- 15M = 500mm LAP	- 15M = 650mm LAP
7. ALL REBAR TO HAVE MIN. COVER OF 75mm UNLESS OTHERWISE NOTED.



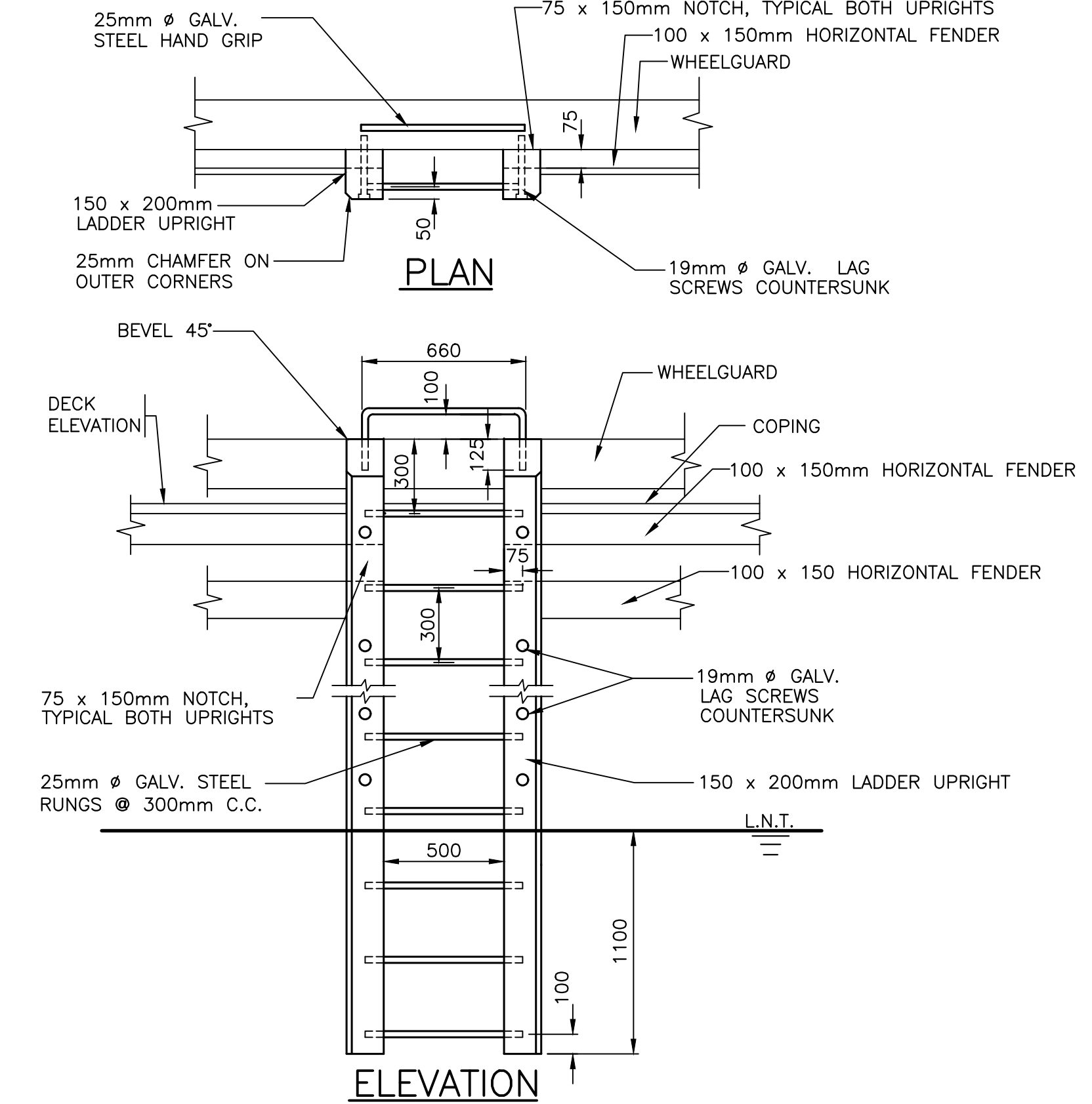
1 ELECTRICAL PEDESTAL CONDUIT CAP
 SCALE : 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm



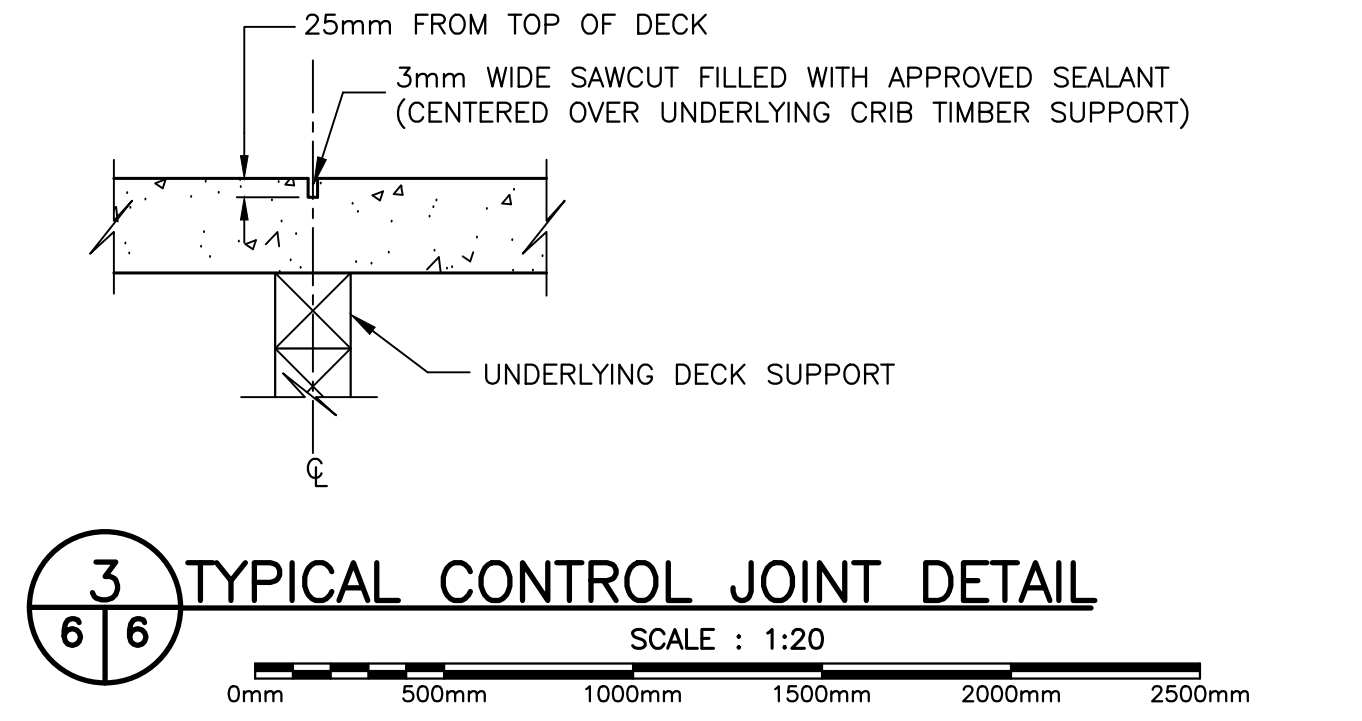
4 END OF WHARF BLOCKING DETAIL
 SCALE : 1:20
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



2 SECTION THROUGH WHARF SHOWING CONDUIT
 SCALE : 1:10
 0mm 100 200 300 400 500 600 700 800 900 1000mm



5 LADDER DETAILS
 SCALE : 1:20
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



3 TYPICAL CONTROL JOINT DETAIL
 SCALE : 1:20
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



PROVINCE OF NEWFOUNDLAND AND LABRADOR
P.E.G. PERMIT HOLDER
 This Permit Allows
 Meridian Engineering Inc.
 Member No. 04378
 To practice Professional Engineering
 in Newfoundland and Labrador:
 Permit No. as issued by PEG_N0453
 which is valid for the year 2020.

revisions	date
project	project
C	ISSUED FOR TENDER 31/03/20
B	ISSUED FOR 66% REVIEW 19/12/19
A	ISSUED FOR 33% REVIEW 19/11/19

**FINGER PIER
 EXTENSION**
OLD PERLICAN, NL

drawing dessin
**DETAILS
 SHEET 2**

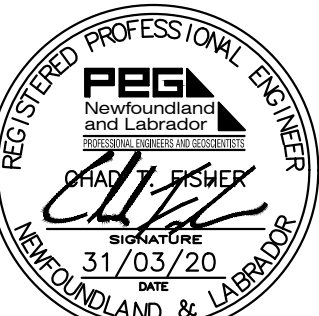
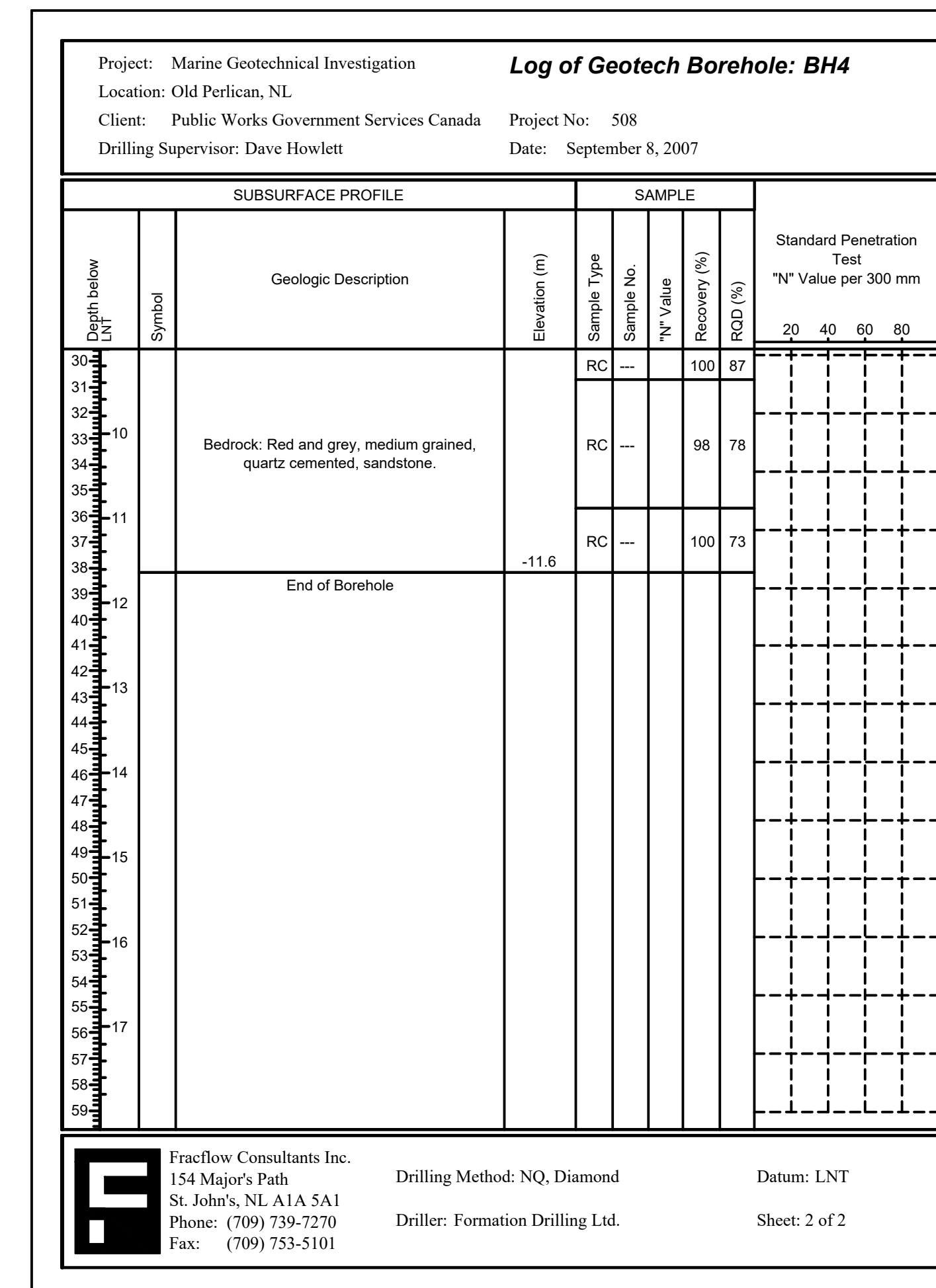
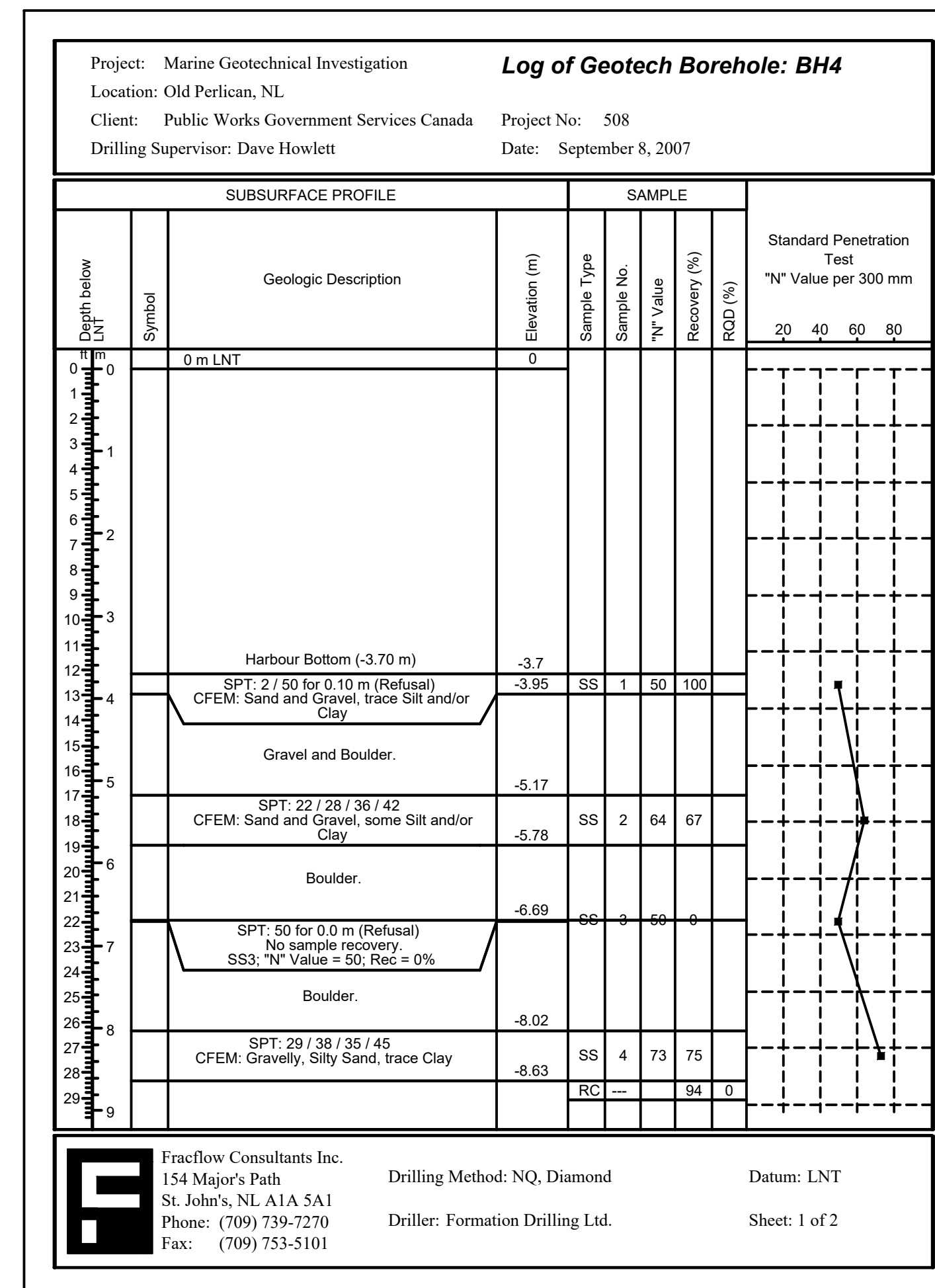
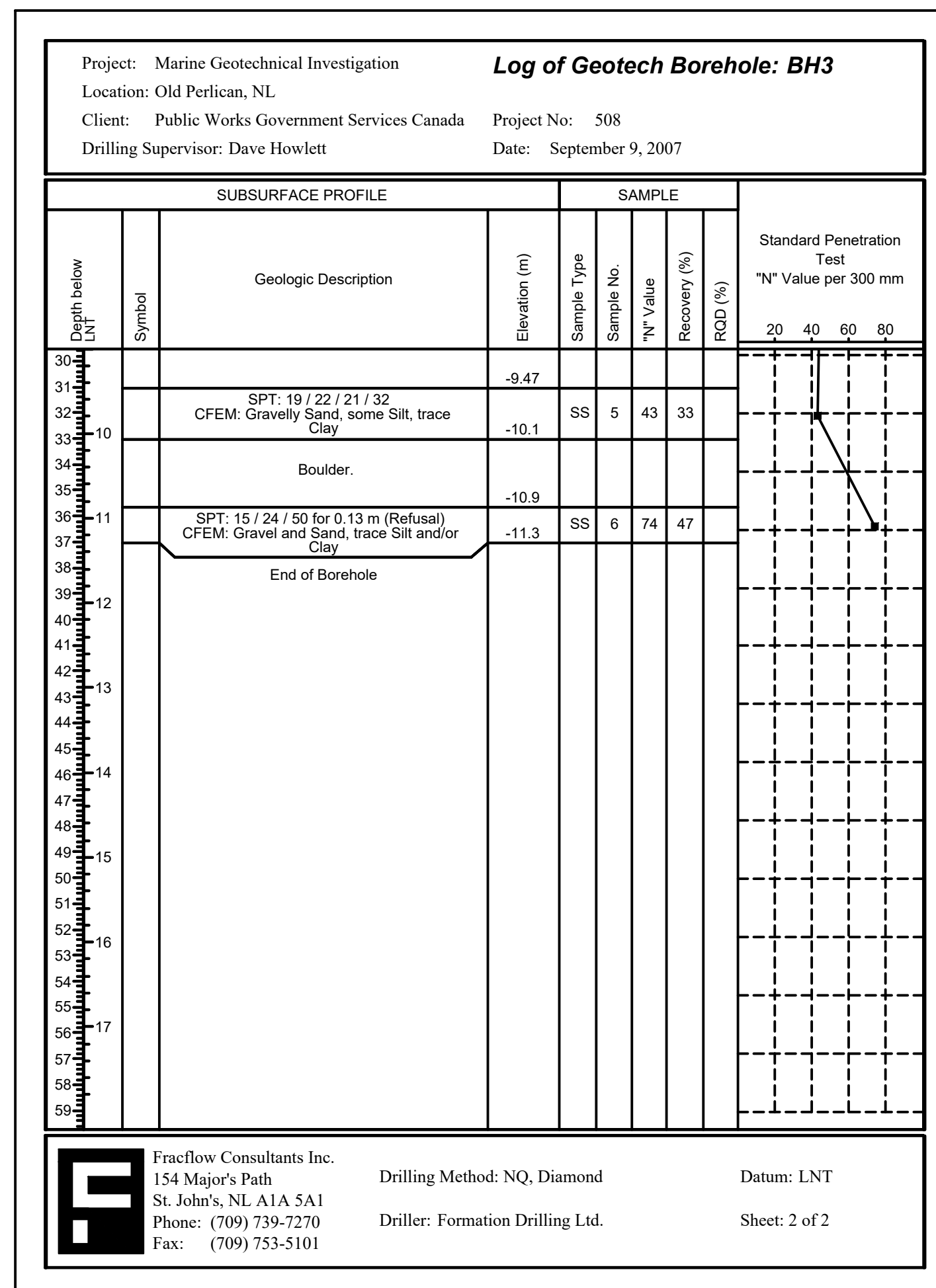
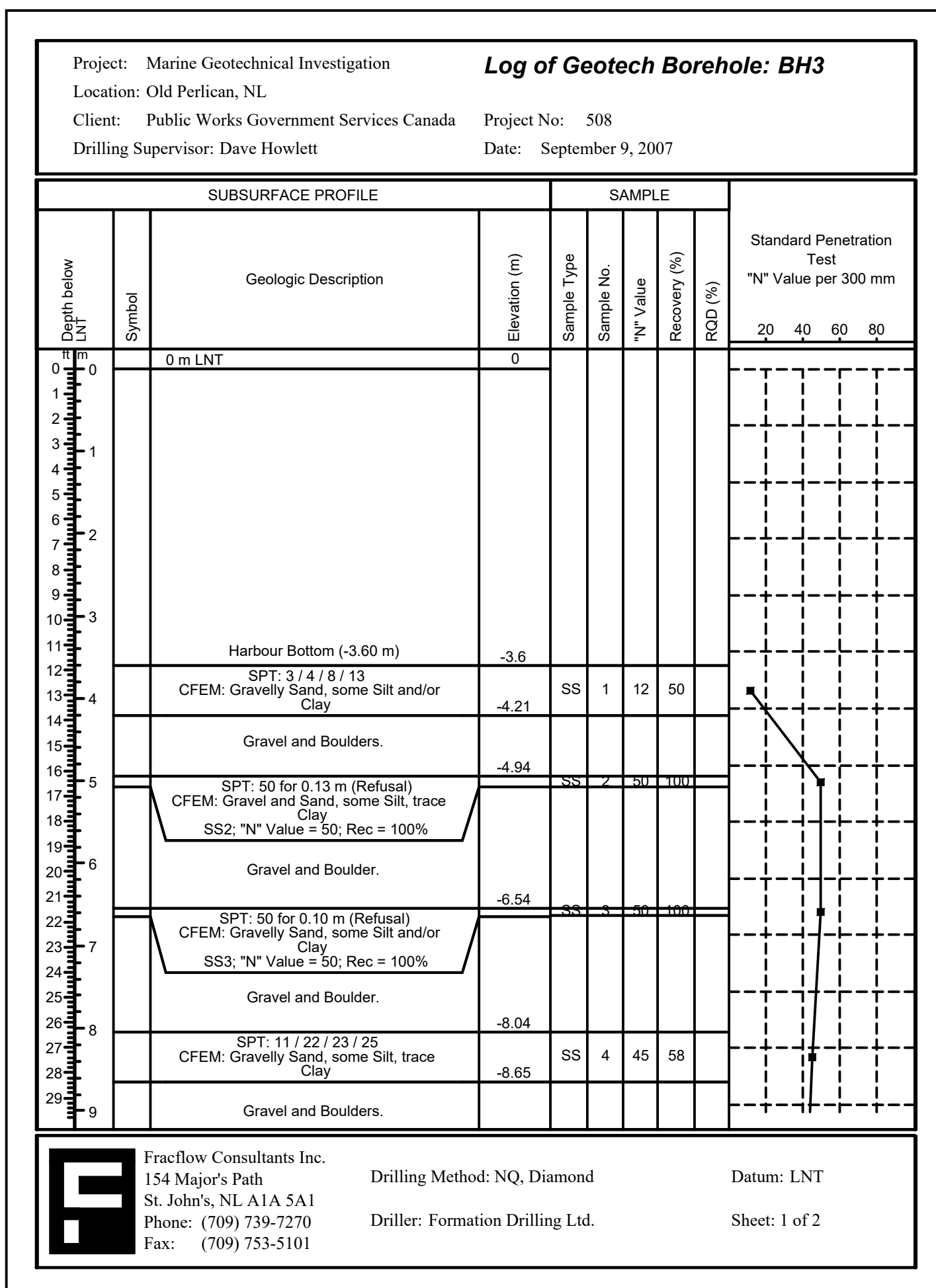
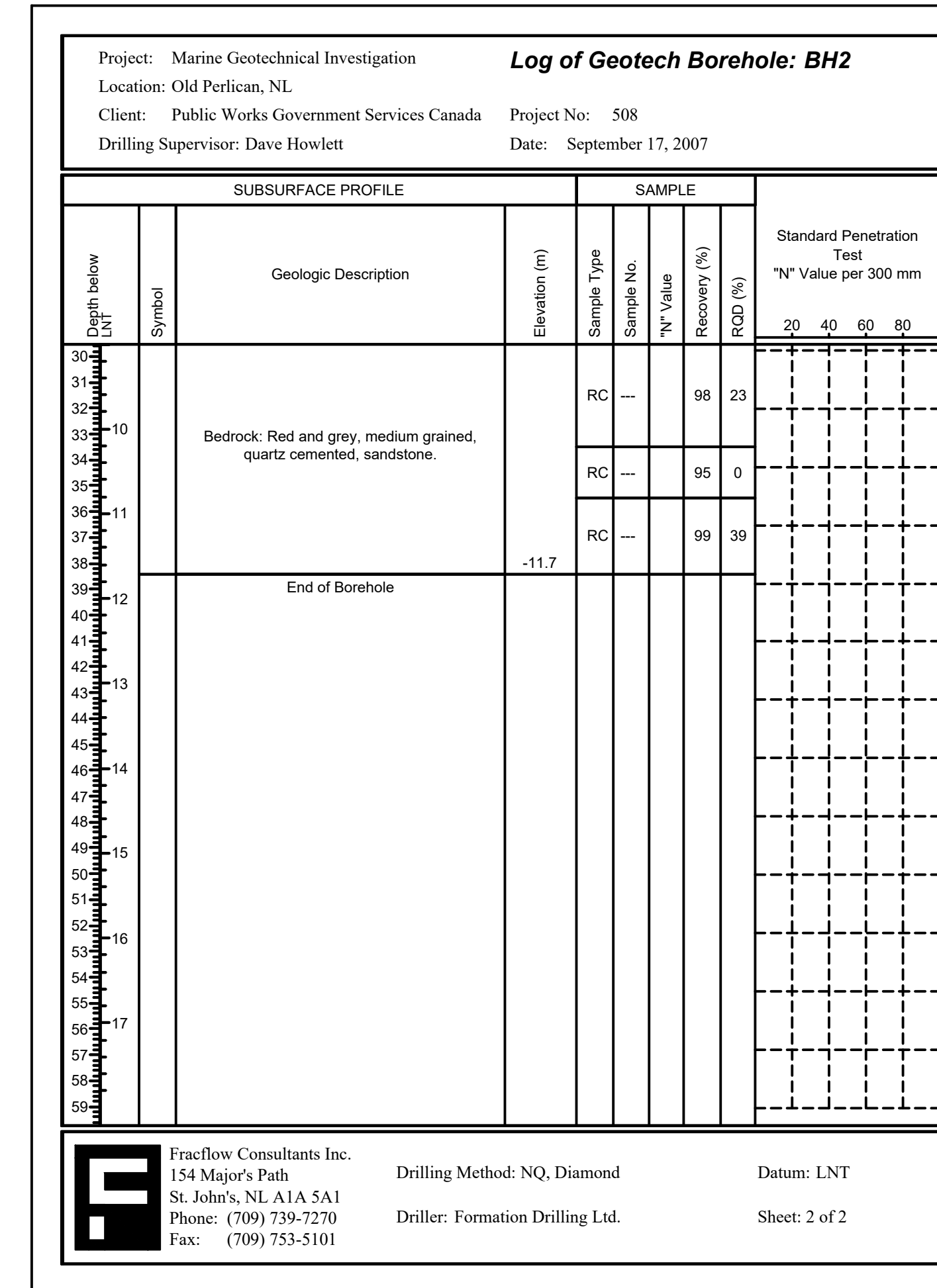
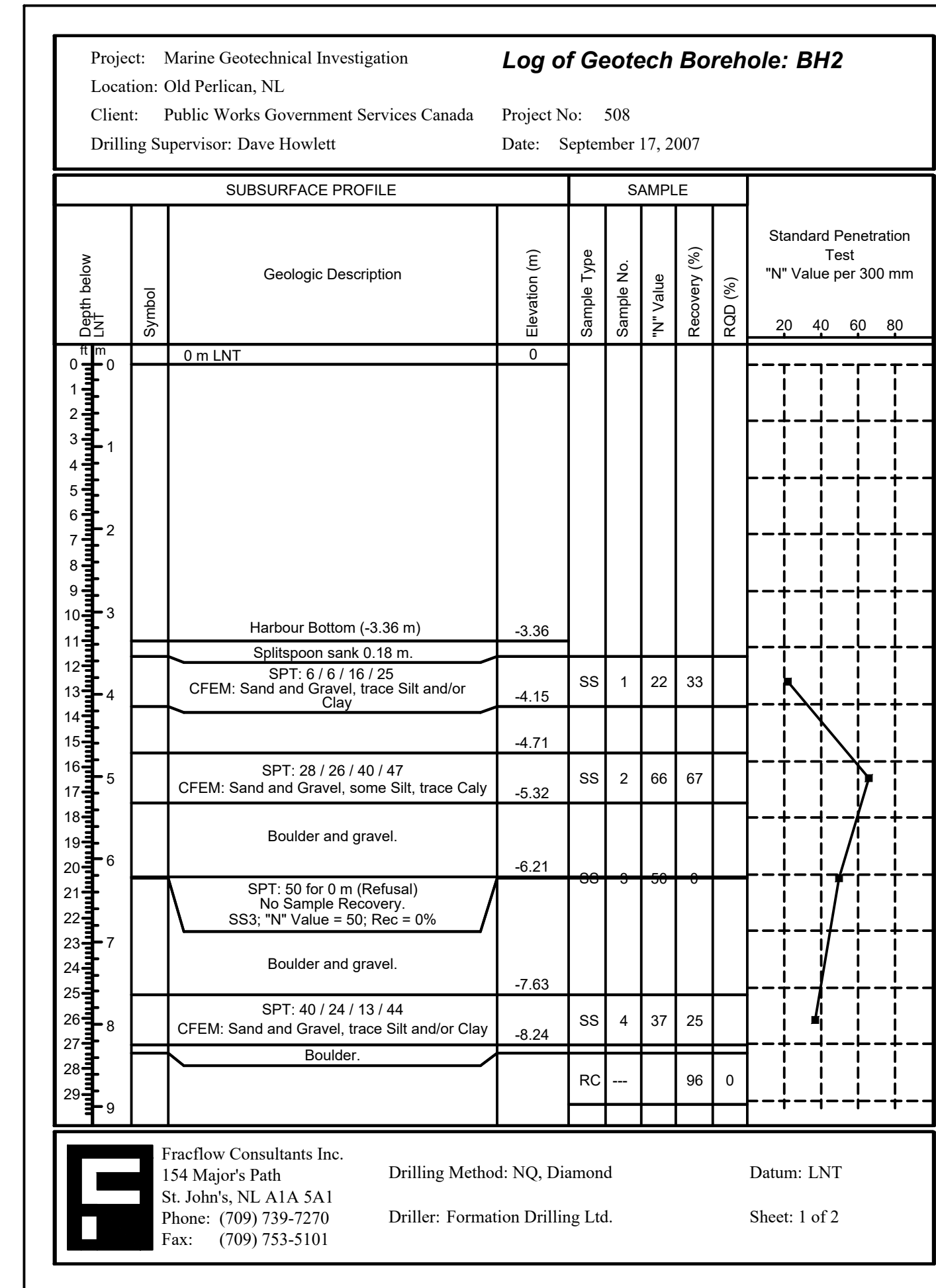
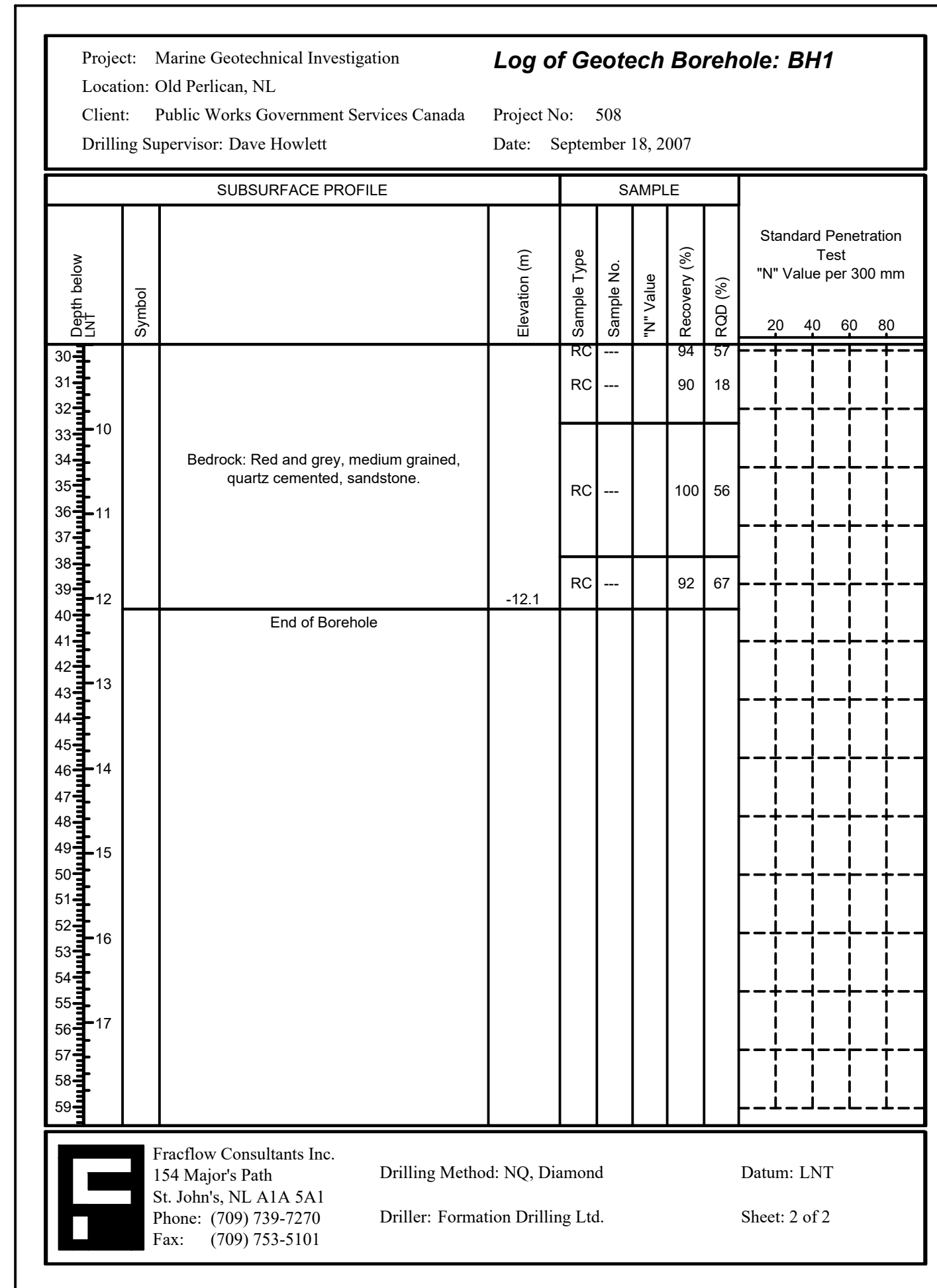
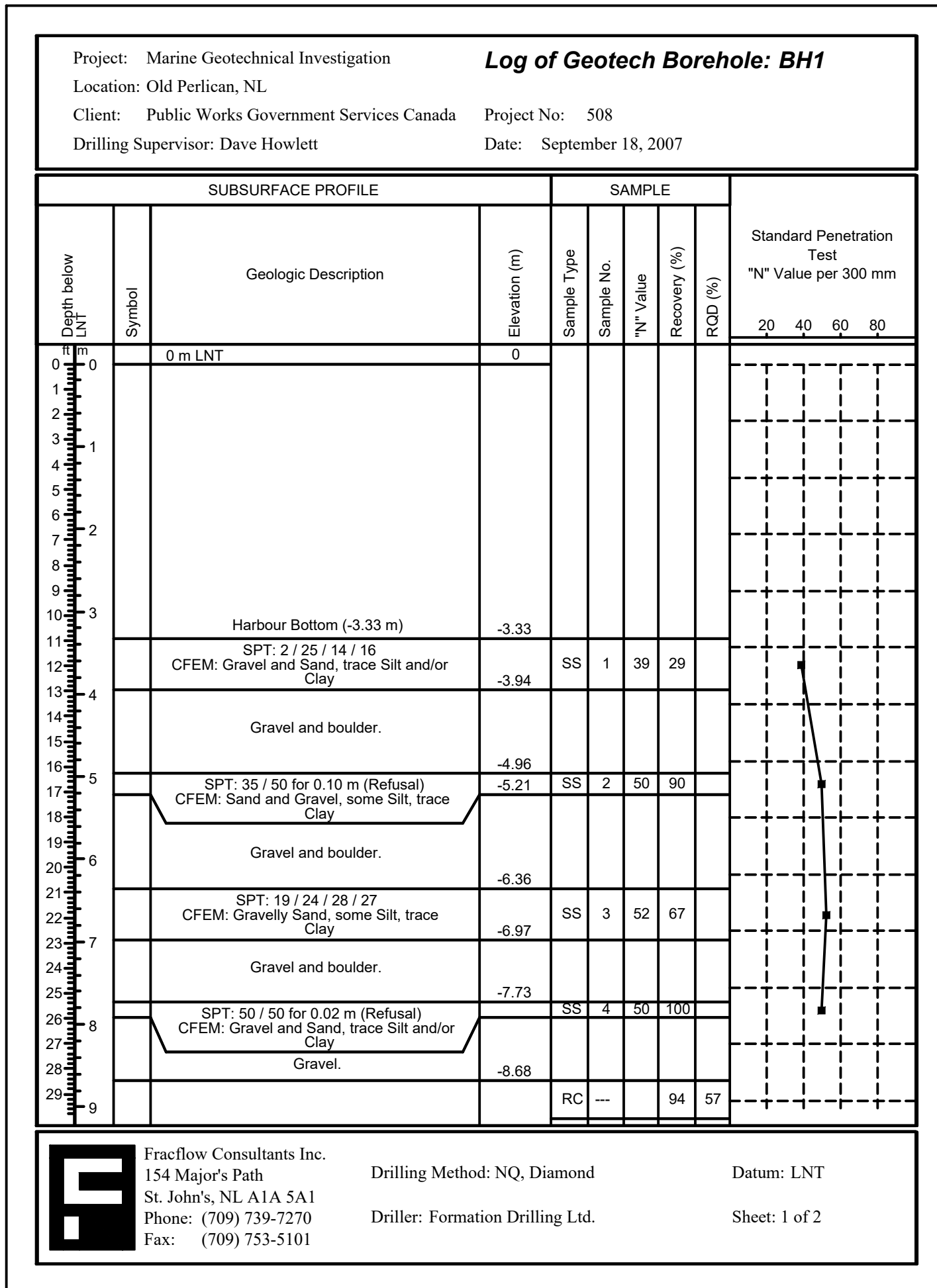
designed C. FISHER concu
 date NOVEMBER 2019
 drawn P. MARSH dessine
 date NOVEMBER 2019
 approved approuvé
 date
 Tender Soumission
 DFO Project Manager Administrateur de projets MPD
 project number no. du projet
723229-001
 drawing no. no. du dessin
C6 OF 7

SMALL CRAFT HARBOURS



GENERAL NOTES:

- HARD BOTTOM ELEVATIONS SHOWN ON DRAWINGS ARE TO BE CONSIDERED APPROXIMATE ONLY. THE BOREHOLE INFORMATION PROVIDED REPRESENT THE SOIL CONDITIONS AT THE BOREHOLE LOCATIONS ONLY. ANY INTERPRETATION OF AND FROM BOREHOLE INFORMATION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO BASE COST FOR CRIBSEAT EXCAVATION AND ASSOCIATED RISK ACCORDINGLY.



PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
Member No. 04378
To practice Professional Engineering
in Newfoundland and Labrador:
Permit No. as issued by PEG_NL0453
which is valid for the year 2020.

C	ISSUED FOR TENDER	31/03/20
B	ISSUED FOR 66% REVIEW	19/12/05
A	ISSUED FOR 33% REVIEW	19/11/25

revisions	date
-----------	------

project	project
---------	---------

**FINGER PIER
EXTENSION**
OLD PERLICAN, NL

drawing design

BOREHOLE LOGS

designed C. FISHER concu

date NOVEMBER 2019

drown P. MARSH desine

date NOVEMBER 2019

approved approve

date

Tender Soumission

DFO Project Manager Administrateur de projets MPO

project number no. du projet

723229-001

drawing no. no. du dessin

C7 OF 7

Appendix C
Regulatory Responses/Approvals



Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment
Water Resources Management Division

PERMIT TO ALTER A BODY OF WATER

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **DECEMBER 21, 2018**

File No: **532-02**
Permit No: **ALT10060-2018**

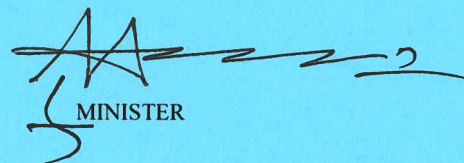
Permit Holder: **Department of Fisheries and Oceans Canada
Small Craft Harbours Branch
John Cabot Building, 10 Barbers Hill
St. John's, NL, A1C 5X1**

Attention: **Mr. Paul Curran**

Re: **Minor DFO Dredging, Infilling, and Works Projects**

Permission is hereby given for : **routine dredging or beach grading of 3500 cubic metres or less of primarily sand, gravel, cobble and boulder material in order to provide safe navigation at various Department of Fisheries and Oceans' Small Craft Harbours facilities around the Province of Newfoundland and Labrador as well as the infilling of 500 square metres or less of DFO SCH leased waterlot to construct new or increase existing service/laydown areas at existing DFO SCH facilities, with reference to the application dated November 20, 2018.**

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.


MINISTER

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

File No: 532-02
Permit No: ALT10060-2018

APPENDIX A
Terms and Conditions for Permit

Dredging

1. Dredging activity must only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site.
2. The area to be dredged must be enclosed and isolated from the rest of the body of water through the use of a filter fabric curtain or similar method.
3. Dredged material must be disposed of in accordance with the regional Service NL Centre of the Department of Service NL. The Department of Service NL may require samples to be submitted for testing and analysis.

Infilling

4. The slopes along the perimeter of infilled areas must be no steeper than two horizontal to one vertical (2H:1V).
5. The constructed works must be inspected regularly so that action can be taken to undertake repairs as required.
6. Fill material must be obtained from an approved quarry site. It must not be taken from beaches or streams, and must not be dredged from a body of water.
7. The natural course of any stream must not be altered.
8. Infilling must not disrupt the established surface drainage pattern of the area.
9. Infilling must not cause increased water elevation upstream or increase flow velocity downstream of the site. Reduction of the natural cross sectional area of any watercourse is not permitted.
10. Before infilling, any vegetation and topsoil must be completely removed and under no circumstances shall it be used as fill material. Topsoil must be stored and reused in final landscaping of the infilled area.
11. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease, or license for occupancy.
12. Select heavy rocks must be placed along the toe of any infilling to provide slope stability and erosion protection.
13. A minimum 15 metre wide vegetated buffer zone must be maintained along the edge of the waterbody in order to provide bank stability and maintain local aesthetics.

Special Conditions

14. The Permit Holder must apply for and obtain a separate permit under the Water Resources Act, SNL 2002 cW-4.01, specifically Section 39 <https://assembly.nl.ca/Legislation/sr/statutes/w04-01.htm> for any minor dredging or associated works that may take place within any designated Protected Public Water Supply Area servicing any community as indicated in Water Resources Portal available at <https://maps.gov.nl.ca/water/mapbrowser/Default.aspx>.
15. The Permit Holder may be required to apply for and obtain a separate permit under the Water Resources Act, SNL 2002 cW-4.01, specifically Section 48 <https://assembly.nl.ca/legislation/sr/statutes/w04-01.htm> for any minor dredging or associated works that may take place within any designated flood risk area as indicated at <https://www.mae.gov.nl.ca/waterres/flooding/frm.html>.
16. Any alteration in or near a freshwater body (including wetlands) requires a separate permit under the Water Resources Act, SNL 2002 cW-4.01, specifically Section 48 <https://assembly.nl.ca/legislation/sr/statutes/w04-01.htm>. The Permit Holder must avoid work activities in wetlands wherever possible.
17. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the Permit Holder sample, analyze, and submit results of water quality tests, for the purpose of ensuring that the water quality

is maintained within acceptable guidelines. All analyses must be undertaken by a CALA accredited laboratory.

18. Suitable booms must be deployed around work sites to contain any floating debris that might otherwise be carried away. All booms must be properly maintained and remain in place until all work is completed.
19. Creosote treated wood must not be used in the construction of any structures in or within 15 metre of any body of water.
20. If a minor dredging or associated work carried out under this Permit does prohibit, restrict or impede public access along the shoreline reservation then the Permit Holder shall restore the shoreline reservation to the satisfaction of the Minister within sixty (60) days of a written notice.
21. For each minor dredging or associated work carried out under this Permit, the Permit Holder must notify this Department via email to waterinvestigations@gov.nl.ca or facsimile at (709)729-0320 in accordance with a reporting protocol as deemed necessary and appropriate in the opinion of the Minister. Also, each minor dredging or associated work carried out under this Permit shall be subject to the payment of applicable fee by the Permit Holder as stated in the application fee schedules approved by the Minister.
22. The acknowledgment of the receipt of this Permit by the Permit Holder constitutes the acceptance of this Permit and its terms and conditions and requirements stated in Appendices A, B and C.
23. At the end of each year, the permit holder submits a report of all the work done under this permit along with the applicable fees incurred during the period.

General Alterations

24. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
25. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
26. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.
27. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
28. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.
29. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
30. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
31. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
32. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.
33. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.
34. All waste materials resulting from this project must be disposed of at a site approved by the Department of Service NL.
35. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
36. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

37. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
38. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.
39. The attached Completion Report (Appendix C) for Permit No. 10060 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
40. This Permit is effective January 1, 2019 and shall expire on December 31, 2020 or earlier if modified, suspended or cancelled by the Minister. Also, this Permit may be renewed by the Minister for such renewal term as the Minister deems appropriate, on such terms and conditions as the Minister considers appropriate and in the public interest, provided the Permit Holder applies for the renewal at least ninety (90) days before the expiry of this Permit.
41. All work must be carried out within the Permit Holder's legal property boundaries.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

File No: 532-02
Permit No: ALT10060-2018

APPENDIX B
Special Terms and Conditions for Permit

1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit, as determined by this Department, the Minister may, without notice, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

- cc: Amir Ali Khan, Ph.D., P.Eng.
Manager, Water Rights, Investigations and Modelling Section
Water Resources Management Division
Department of Municipal Affairs and Environment
P.O. Box 8700
4th Floor, West Block, Confederation Building
St. John's, NL A1B 4J6
akhan@gov.nl.ca
- cc: File Copy for Binder
- cc: Mr. Ken Russell (Labrador)
Manager of Operations, GSC - Happy Valley-Goose Bay, Service NL
Government Service Centre
2 Tenth Street, P.O. Box 3014, Stn. B
Happy Valley-Goose Bay, NL A0P 1E0
krussell@gov.nl.ca
- cc: Mr. Rick Curran (Eastern)
Director of Regional Operations Avalon , Service NL
149 Smallwood Drive, Mount Pearl
PO Box 8700
St. John's NL A1B 4J6
rjcurran@gov.nl.ca
- cc: Mr. Robert Locke
Manager of Operations and Environmental Protection, GSC - Mount Pearl, Service NL
P.O. Box 8700
St. John's, NL A1B 4J6
rlocke@gov.nl.ca
- cc: Mr. Wayne Lynch (Central)
Regional Director (Central)
Service NL
P.O. Box 2222
Gander, NL A1V 2N9
waynelynch@gov.nl.ca
- cc: Ms. Susan Hoddinott (Western/Labrador)
Regional Director
Service NL
PO Box 2006
Corner Brook NL A2H 6J8
SusanHoddinott@gov.nl.ca
- cc: Marine Safety
Transport Canada, Atlantic Regional Headquarters
Airports, Harbours and Ports, and Environmental Services
95 Foundry St.
P.O. Box 42
Moncton, NB E1C 8K6
NPPATL-PPNATL@tc.gc.ca
- cc: Mark McNeil
Public Works and Government Service Canada
Suite 204, 1 Regent Square
Corner Brook, NL A2H 7K6
mark.mcneil@pwgsc-tpsgc.gc.ca
- cc: Mr. Shawn Kean
Environmental Services
Public Works & Government Services Canada

John Cabot Building, 10 Barter's Hill
P.O. Box 4600
St. John's, NL A1C 5T2
shawn.kean@pwgsc.gc.ca



Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment
Water Resources Management Division

Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **DECEMBER 21, 2018**

File No: **532-02**
Permit No: **ALT10060-2018**

Permit Holder: **Department of Fisheries and Oceans Canada
Small Craft Harbours Branch
John Cabot Building, 10 Barbers Hill
St. John's, NL, A1C 5X1**

Attention: **Mr. Paul Curran**

Re: **Minor DFO Dredging, Infilling, and Works Projects**

Permission was given for : **routine dredging or beach grading of 3500 cubic metres or less of primarily sand, gravel, cobble and boulder material in order to provide safe navigation at various Department of Fisheries and Oceans' Small Craft Harbours facilities around the Province of Newfoundland and Labrador as well as the infilling of 500 square metres or less of DFO SCH leased waterlot to construct new or increase existing service/laydown areas at existing DFO SCH facilities, with reference to the application dated November 20, 2018.**

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Municipal Affairs and Environment and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date: _____ Signature: _____

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Municipal Affairs and Environment
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6



P.O. Box 5667
St. John's, NL A1C 5X1

Your file *Votre référence*

July 10, 2020

Our file *Notre référence*

20-HNFL-00241

Paul Curran
Small Craft Harbours, Fisheries and Oceans Canada
10 Barters Hill
St. John's, NL A1C 5X1

Subject: Finger Pier Extension, Old Perlican – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

Dear Mr. Curran:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on May 28, 2020.

We understand that you propose to:

- Construct an extension on an existing finger pier in Old Perlican, Newfoundland. The wharf extension will be a crib and span construction, consisting of 2 new cribs and spans, measuring approximately 7.6m wide by 21.3m long.

Our review considered the following information:

- A request for review, drawings, and project notification form received on May 22, 2020; and
- Additional information received on June 5 and 15, 2020.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*. ; and
- The introduction of aquatic species into regions or bodies of water frequented by fish where they are not indigenous, which is prohibited under section 10 of the *Aquatic Invasive Species Regulations*.]

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- The project should be carried out in a manner that minimizes the release of sediment and/or other project related material in the waters of Old Perlican or any adjacent water body.
- Limit the duration of in-water works, undertakings and activities so that it does not diminish the ability of fish to carry out one or more of their life processes (spawning, rearing, feeding, migrating).
- Implement erosion and sedimentation controls as needed to avoid the introduction of sediment into any waterbody during all phases of work including:
 - Installation of effective erosion and sediment control measures prior to beginning work in order to stabilize all erodible areas.
 - Regular inspection and maintenance of erosion and sediment control measures and structures during all phases of the project.
 - Regularly monitor the watercourse for signs of sedimentation during all phases of the project and take corrective action.
 - Keep the erosion and sediment control measures in place until all disturbed ground has been permanently stabilized.
 - Remove all exposed, non-biodegradable sediment control materials once the site is stabilized.
 - Dispose of, and stabilize, all excavated materials above the high water mark of any waterbodies and ensure sediment re-entry into a watercourse is prevented.
 - Schedule work to avoid wet, windy, and rainy periods that may result in high flow volumes and/or increase erosion and sedimentation.
- All equipment used in water should be cleaned, drained and dried on land before and after use for the purposes of preventing the introduction or spread of aquatic invasive/non-indigenous species.
- All machinery on site should be kept in a clean condition and free of fluid leaks to prevent any deleterious substances from entering the water.
- Armour stone should be clean blasted rock or boulders, free of fines or sediment, concrete or any other deleterious substance.
- Armour stone should be of sufficient size to withstand displacement by storm surges, wave action or tidal activity.
- Armour Stone should be blocky, angular shape and comprised of mixed gradation so that smaller rock fill the interstitial spaces between the larger

rock to provide compaction and stability, as well as possible substrate for kelps and algae colonization.

- When works are completed, shoreline and approaches should be restored to original condition.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

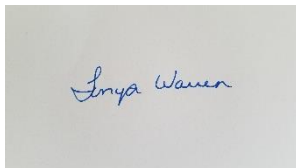
Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (<http://www.dfo-mpo.gc.ca/pnw-ppe/contact-eng.html>).

We recommend that you notify this office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

If you have any questions with the content of this letter, please contact me by telephone at (709) 693-8291 or by email at Tonya.Warren@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



Tonya Warren
Senior Regulatory Review Biologist - Regulatory Review
Fish and Fish Habitat Protection Program, Ecosystems Management Branch
Fisheries and Oceans Canada
P.O. Box 5667
St. John's, NL A1C 5X1
Email: Tonya.Warren@dfo-mpo.gc.ca
Cell: (709) 693-8291

