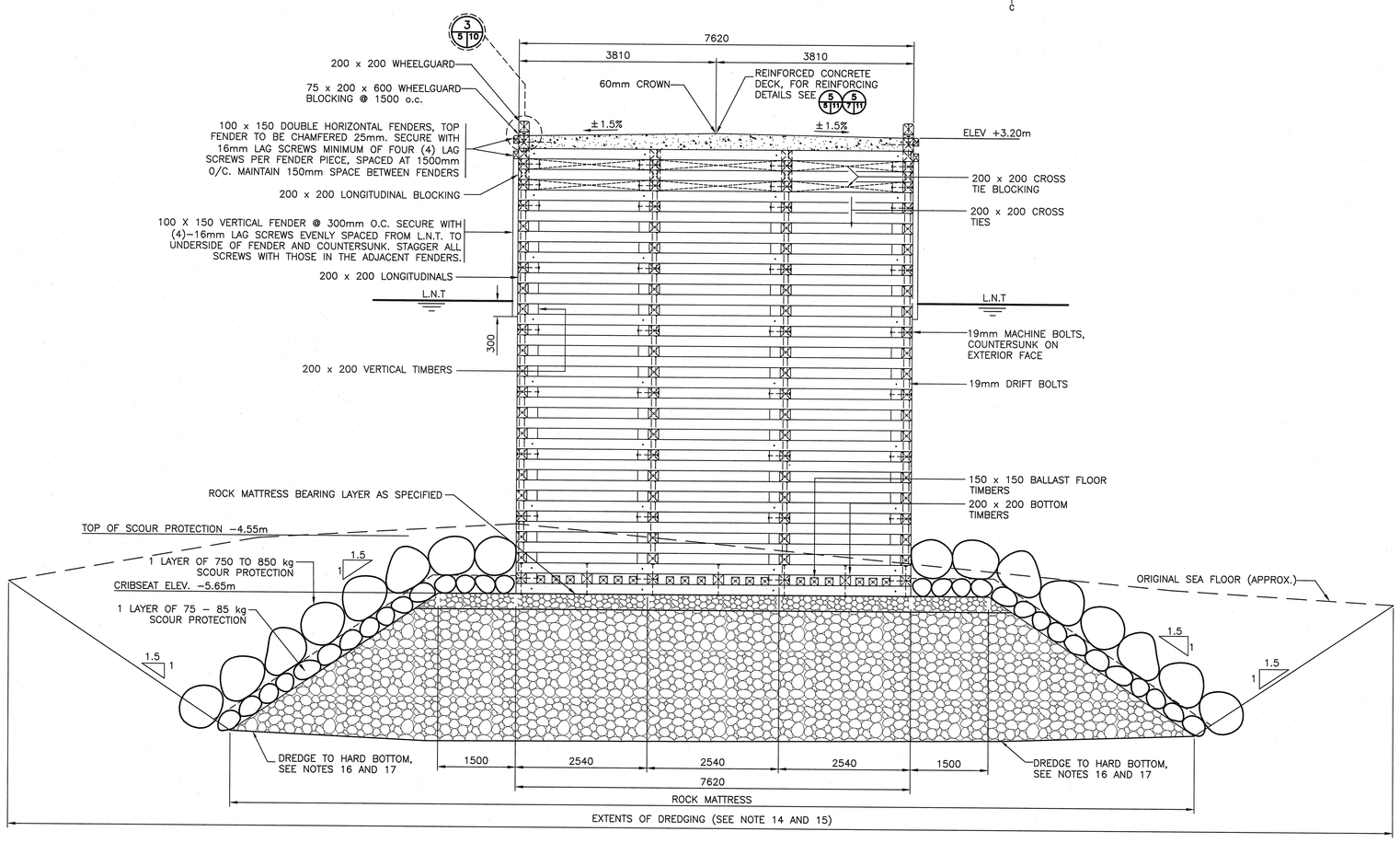
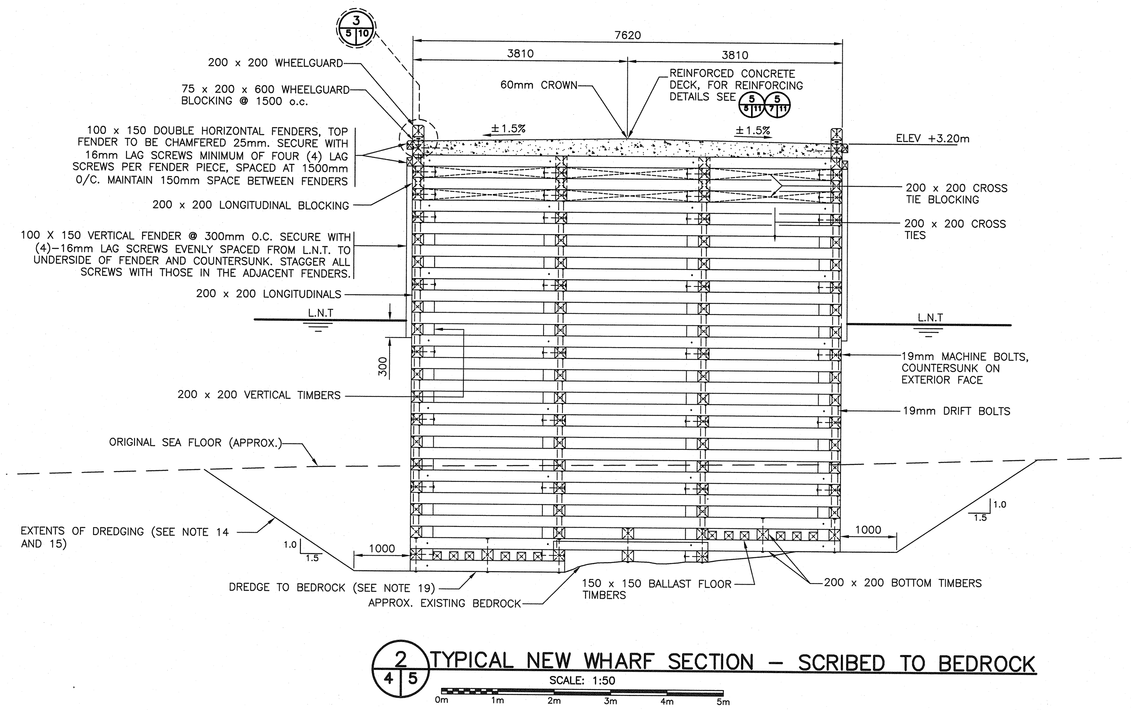


1/4 5 TYPICAL NEW WHARF SECTION – SEATED ON ROCK MATTRESS

SCALE: 1:50

0m 1m 2m 3m 4m 5m



2/4 5 TYPICAL NEW WHARF SECTION – SCRIBED TO BEDROCK

SCALE: 1:50

0m 1m 2m 3m 4m 5m

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS.
2. ALL ELEVATIONS IN METERS.
3. DO NOT SCALE FROM DRAWINGS, USE DIMENSIONS SPECIFIED.
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 = 700 mm LAP
   - 15M = 500 mm LAP

   B.) ALL OTHER AREAS:
   - 20M = 850 mm LAP
   - 15M = 650 mm LAP
7. ALL REBAR TO HAVE MIN. COVER OF 75mm UNLESS OTHERWISE NOTED.
8. ALL MACHINE BOLTS 19mm DIAMETER (GALVANIZED).
9. ALL DRIFT BOLTS TO BE 19mm DIAMETER (GALVANIZED) UNLESS OTHERWISE NOTED.
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 DESIGN CODE, 2006 EDITION, AND BASED ON THE CL-625 TRUCK AND ASSOCIATED DYNAMIC LOAD ALLOWANCE AND LANE LOAD.
12. GALVANIZING WILL CONFORM TO ASTM A123/A123M-09, LATEST EDITION.
13. ALL LAG SCREWS TO BE GALVANIZED AND SIZED AS PER FOLLOWING:
   - LADDER UPRIGHTS - 19.0 mm
   - FENDERING - 16 mm
14. CONTRACTOR TO DREDGE IN SUCH A MANNER AS TO ENSURE STABILITY OF SLOPES PRIOR TO AND DURING CRIB CONSTRUCTION.
15. ALL DREDGING PAY LIMITS TO BE 1.5 HORIZONTAL TO 1 VERTICAL (1V:1.5H).
16. THE CONTRACTOR SHALL DREDGE THE EXISTING LOOSE /SOFT SILT AND SAND LAYER DOWN TO HARD BOTTOM ELEVATION, INDICATED ON THE BOREHOLE LOGS AS THE DENSE SAND AND GRAVEL LAYER. THIS WILL ALSO REQUIRE DREDGING OF THE EXISTING ROCK FILL, WHICH WAS PLACED FOR THE BASE OF A PORTION OF THE EXISTING STEM CRIBWORK AS SHOWN ON THE EXISTING WHARF SECTIONS. ALL ROCK FILL INCLUDED WITHIN THE EXTENTS OF THE DREDGING LIMITS FOR THE NEW WHARF STRUCTURE TO BE COMPLETELY DREDGED AND REMOVED. GIVEN THE FACT THAT THE EXISTING WHARF STRUCTURE HAS BEEN IN PLACE FOR OVER 30 YEARS SOME OF THE UNDERLYING SOFT LAYER MAY HAVE CONSOLIDATED OVER THIS PERIOD AND HARD BOTTOM MAY BE ACHIEVED SLIGHTLY ABOVE THE DENSE LAYER ELEVATIONS SHOWN ON THE BOREHOLE LOGS. AS A RESULT, IF THE CONTRACTOR DETERMINES THAT HARD BOTTOM IS ACHIEVED PRIOR TO THE DENSE LAYER ELEVATION SHOWN, THE CONTRACTOR SHALL DEMONSTRATE THROUGH THE USE OF DREDGING EQUIPMENT OR OTHER MEANS, THAT SUFFICIENT MATERIAL HAS BEEN REMOVED TO ENSURE ROCK MATTRESS MATERIAL WILL COME TO REST ON HARD BOTTOM. ONCE THE CONTRACTOR HAS DETERMINED THAT HARD BOTTOM HAS BEEN ACHIEVED THROUGH DREDGING EQUIPMENT, THE CONTRACTOR SHALL THOROUGHLY PROBE THE AREA IN A MINIMUM 1.0m X 1.0m GRID TO CONFIRM THAT ALL LOOSE AND SOFT UNSOUND SOILS HAVE BEEN REMOVED TO HARD BOTTOM. ALL PROBING ACTIVITIES TO BE COMPLETED BY DIVERS USING A 15mm ø X 2000mm LONG STEEL ROD DRIVEN WITH A 2.5 kg HAMMER. UNLESS OTHERWISE DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE, HARD BOTTOM IS TO BE CONSIDERED TO BE ACHIEVED WHEN THE PROBE CANNOT PENETRATE MORE THAN 400mm INTO THE UNDERLYING SOILS, WITHIN THE FOOTPRINT OF THE AREA TO RECEIVE ROCK MATTRESS. ALL WORK TO BE OVERSEEN BY THE ONSITE INSPECTOR. IF THE PROBE PENETRATIONS EXCEED 400mm, THAN THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUE DREDGING TO A DEPTH WHICH HARD BOTTOM IS REACHED AND RE-PROBE TO ACHIEVE THE REQUIREMENTS NOTED ABOVE. THE CONTRACTOR AND THE DEPARTMENTAL REPRESENTATIVE SHALL AGREE ON SITE AS TO WHEN THE DREDGE DEPTHS REQURIED TO REACH HARD BOTTOM ARE MET.
17. ROCK MATTRESS SHALL NOT BE LESS THAN 1000 mm IN ANY LOCATION, UNLESS APPROVED OTHERWISE BY THE DEPARTMENTAL REPRESENTATIVE.
18. ALL WORK TO BE COMPLETED AS PER DIRECTION OF DEPARTMENTAL REPRESENTATIVE.
19. CONTRACTOR IS RESPONSIBLE TO DREDGE ALL MATERIAL BETWEEN ORIGINAL SEA FLOOR AND BEDROCK, AS INDICATED ON THE DRAWINGS TO FACILITATE PLACEMENT OF CRIBS 1-3. THIS WILL ALSO REQUIRE DREDGING OF THE EXISTING ROCK FILL, WHICH WAS PLACED FOR THE BASE OF A PORTION OF THE EXISTING STEM CRIBWORK AS SHOWN ON THE EXISTING WHARF SECTIONS. ALL ROCK FILL INCLUDED WITHIN THE EXTENTS OF THE DREDGING LIMITS FOR THE NEW WHARF STRUCTURE TO BE COMPLETELY DREDGED AND REMOVED. SCRIBE CRIB NUMBERS 1-3 TO BEDROCK AS REQUIRED TO ENSURE FULL SUPPORT IS PROVIDED UNDER THE TIMBERS. CONTRACTOR TO SUBMIT SCHEMATIC OF PROPOSED BOTTOM OF CRIB CONFIGURATION FOR APPROVAL TO DEPARTMENTAL REPRESENTATIVE.

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

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEGL Newfoundland and Labrador
PERMIT HOLDER
This Permit Allows
Meridian Engineering Inc.
To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by PEG N0453
which is valid for the year 2015.

STAMP
REGISTERED PROFESSIONAL ENGINEER
PEGL Newfoundland and Labrador
CRAIG J. FISHER
SIGNATURE
15/03/12
PROVINCE OF NEWFOUNDLAND & LABRADOR

E	ISSUED FOR TENDER	15/03/12
D	ISSUED FOR 100% REVIEW	15/02/27
C	ISSUED FOR 99% REVIEW	15/01/22
B	ISSUED FOR 66% REVIEW	14/12/19
A	ISSUED FOR 33% REVIEW	14/11/27
revisions		date

project / projet

WHARF RECONSTRUCTION PORT AU CHOIX, NL

drawing / dessin

NEW WHARF SECTIONS

designed C. FISHER / conçu
date NOVEMBER 2014
drawn R. SNOW / dessiné
date NOVEMBER 2014
approved / approuvé
date
Tender / Soumission
PWGSC Project Manager / Administrateur de projets TPSGC
15 April 2015

project number / no. du projet
R.075163.001

drawing no. / no. du dessin
C5 OF 12

E-DRM/GDD-E: 513841

PWGSC B1 (2004)

0 10 20mm 40 60 80 100 120 140 160 180 200mm