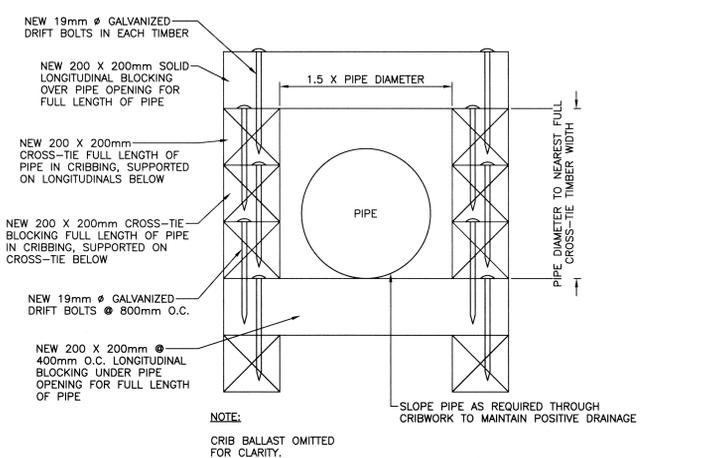


SMALL CRAFT HARBOURS



NOTES:
 1. ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

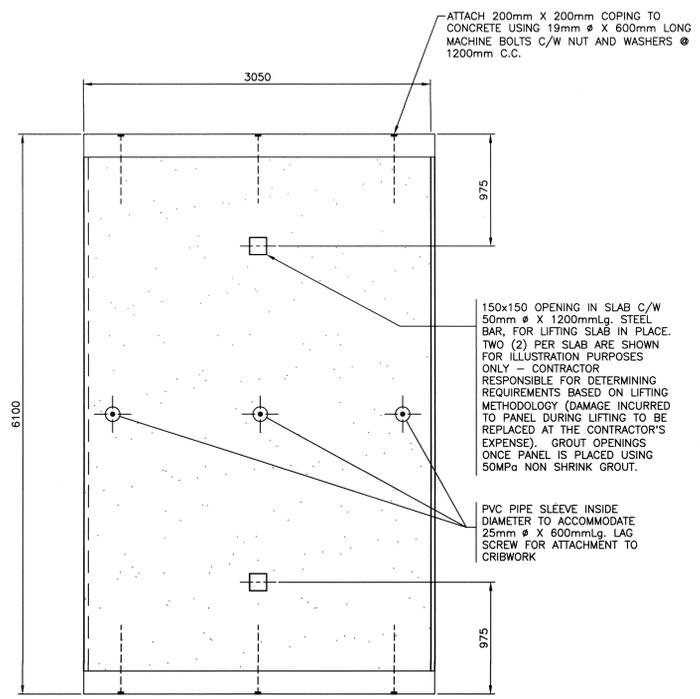
PROVINCE OF NEWFOUNDLAND
 PERMIT HOLDER
 This Permit Allows
 APN ENGINEERING INC.
 To practice Professional Engineering in Newfoundland and Labrador. Permit No. as issued by APBONI, F0282, which is valid for the year 2018.



SLEEVE BLOCKING FOR CULVERT

SCALE: 1:100

1/11/11



TYPICAL PRE-CAST CONCRETE PANEL

SCALE: N.T.S.

3/11/11

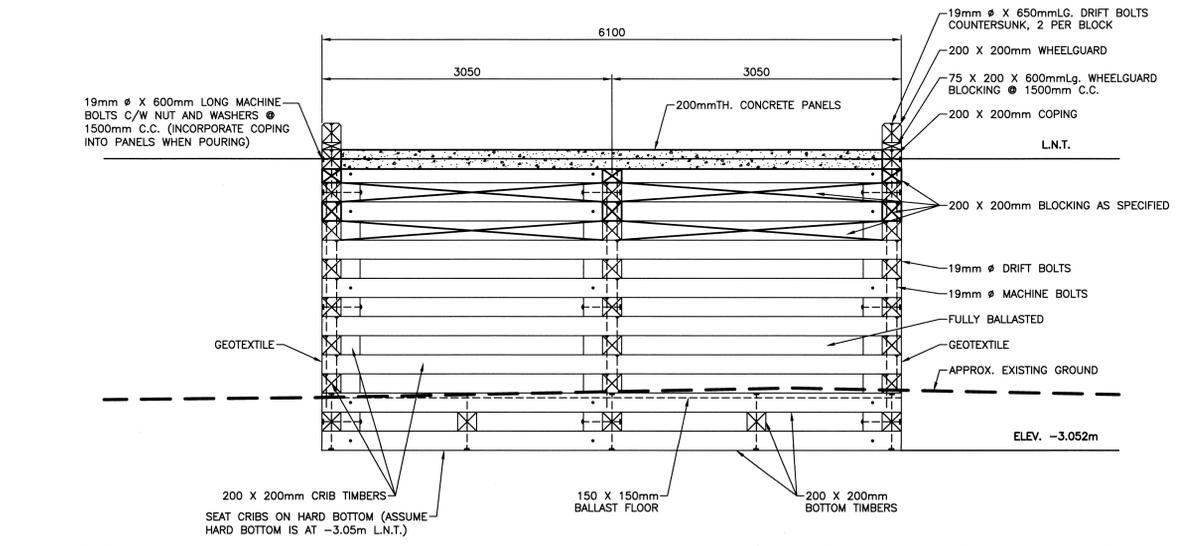
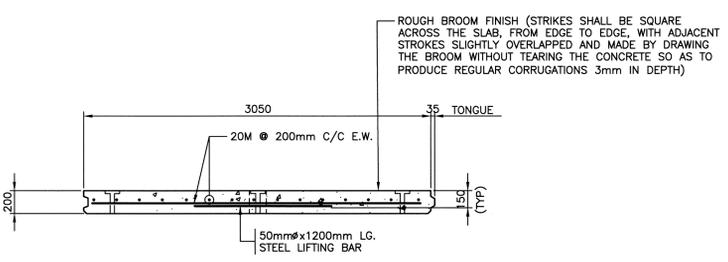
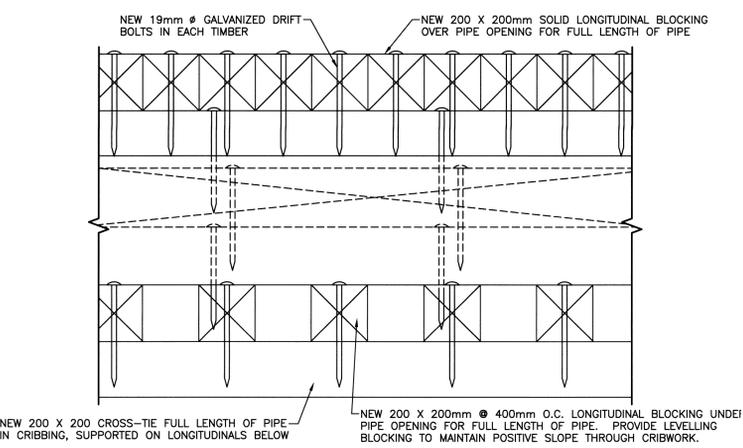
TYPICAL TONGUE AND GROOVE BETWEEN PANELS

SCALE: 1:5

4/11/11

- GENERAL NOTES:
- DO NOT SCALE FROM DRAWINGS. USE DIMENSIONS SHOWN. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO PROCEEDING WITH ANY PORTION OF THE WORK.
 - MINIMUM CONCRETE STRENGTH 35MPa @ 28 DAYS.
 - REINFORCING STEEL AND YIELD STRENGTH 400MPa.
 - REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3 LATEST EDITION AND AS INDICATED BELOW:
 - 20M = 700mm LAP
 - 15M = 500mm LAP
 - ALL REBAR TO HAVE MINIMUM COVER OF 75mm UNLESS OTHERWISE NOTED.
 - ALL MACHINE BOLTS TO BE 19mm DIAMETER (GALVANIZED), UNLESS OTHERWISE NOTED.
 - ALL DRIFT BOLTS TO BE 19mm DIAMETER (GALVANIZED), UNLESS OTHERWISE NOTED.
 - ALL TIMBER TO BE TREATED TO CSA 080, LATEST EDITION UNLESS OTHERWISE NOTED.
 - GALVANIZING TO CONFORM TO ASTM A123/123M-09, LATEST EDITION.
 - CONTRACTOR IS RESPONSIBLE TO CONFIRM PLACEMENT OF LAG SCREW SLEEVES IN PRE-CAST SLABS SUCH THAT THEY ALIGN WITH THE UNDERLYING TIMBERS.

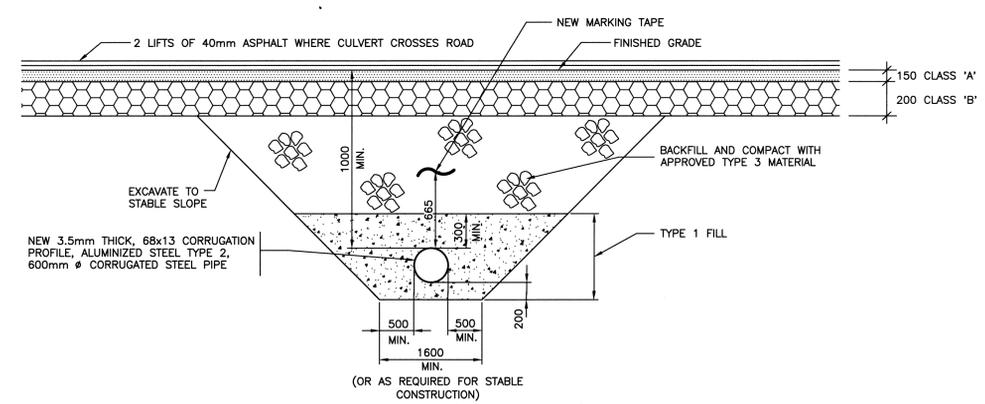
- NOTES:
- FILL TYPES AND THICKNESS TO BE AS SPECIFIED BELOW FOR ALL BACKFILLING. FILL SHOULD BE PLACED IN MAXIMUM 150mm LIFTS INDICATED AND COMPACTED AS OUTLINED BELOW. COMPACTION DENSITIES INDICATED ARE PERCENTAGES OF MAXIMUM DENSITIES OBTAINED FROM ASTM D1557 CORRECTED MODIFIED DRY DENSITY.
 - TYPE 3 FILL: TO BE USED FOR BACKFILL IN LOCATIONS INDICATED. COMPACT TO 95% FIELD DENSITY OF ROCKFILL OR COARSER GRAINED FILLS TO BE VERIFIED BY VISUAL INSPECTION DURING PROOF ROLLING BY GEOTECHNICAL PERSONNEL.
 - CLASS 'A': TO BE USED FOR FINAL 100mm LAYER TO FINISH GRADE AND PIPE SURROUND MATERIAL. COMPACT TO 98%.
- CLASS 'A' FILL TO CONFORM TO THE FOLLOWING REQUIREMENTS OR AS OTHERWISE SPECIFIED:
- (a) CRUSHED STONE OR SAND;
- (b) GRADATIONS TO BE WITHIN LIMITS SPECIFIED BELOW WHEN TESTED TO ASTM C136 AND ASTM C117, SIEVE SIZES TO CAN/CGSB-8.1.
- | SIEVE DESIGNATION | TYPE 1 FILL (% PASSING) |
|-------------------|-------------------------|
| 75.0mm | - |
| 50.0mm | - |
| 37.5mm | - |
| 25.0mm | 100 |
| 19.0mm | 75 - 100 |
| 12.5mm | - |
| 9.50mm | 50 - 80 |
| 4.75mm | 30 - 60 |
| 2.00mm | 20 - 45 |
| 0.425mm | 10 - 25 |
| 0.180mm | - |
| 0.075mm | 3 - 8 |
- TYPE 3 FILL: SELECTED MATERIAL FROM EXCAVATION OR OTHER SOURCES APPROVED BY CONTRACTOR FOR USE INTENDED, WELL-GRADED, UNFROZEN AND FREE FROM ROCKS LARGER THAN 100mm, CINDERS, ASHES, SODS, REFUSE OR OTHER DELETERIOUS MATERIAL.



SECTION

SCALE: 1:30

2/10/11



CULVERT TRENCHING DETAIL

SCALE: N.T.S.

5/4/11

revision	date	project
D	ISSUED FOR TENDER	7/9/18
C	ISSUED FOR 99% REVIEW	3/15/17
B	ISSUED FOR 66% REVIEW	2/16/17
A	ISSUED FOR 33% REVIEW	1/30/17

MARGINAL WHARF RECONSTRUCTION
 FOXTRAP, NL

LAUNCHWAY DETAILS AND CULVERT INSTALLATION DETAILS

date	description	approved
designed N.H.	concu	
date	JULY 9, 2018	
drawn	P.H.	designe
date	JULY 9, 2018	
approved	approved	
Tender	Paul Curran	Submission
DFO Project Manager		
project number	721924	no. du projet
drawing no.	C11	no. du dessin