

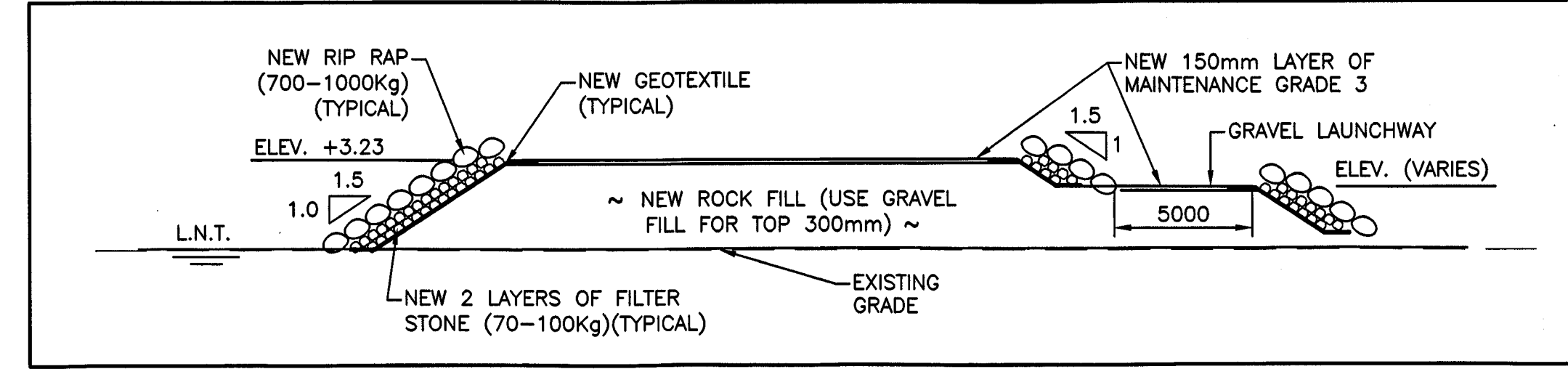
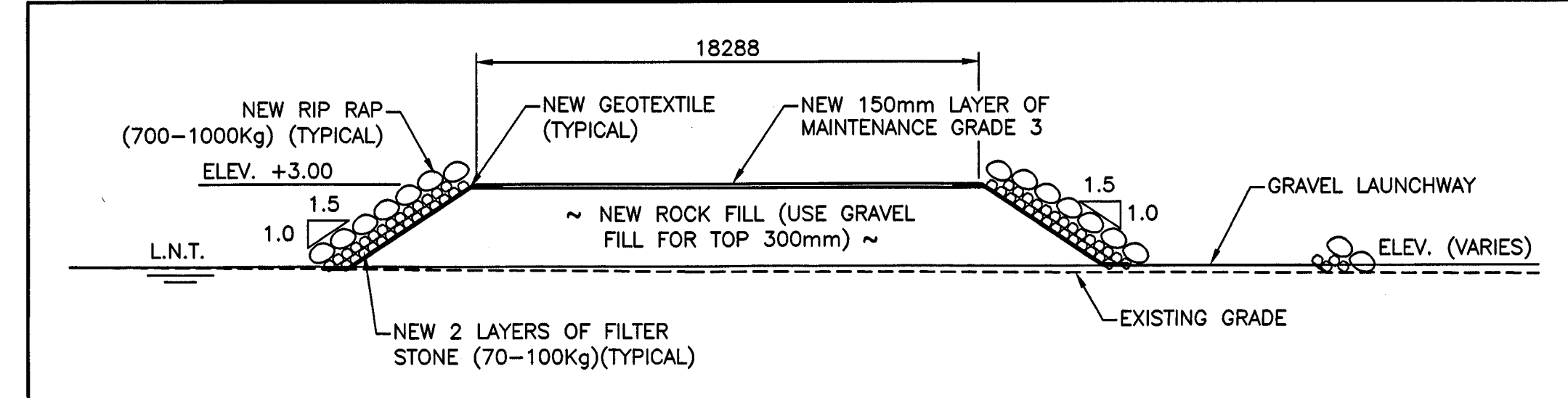
Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

PROVINCE OF NEWFOUNDLAND  
PERMIT HOLDER  
This Permit Allows  
APN ENGINEERING INC.  
To practice Professional Engineering  
in Newfoundland and Labrador  
Permit No. as issued by APENL F0892  
which is valid for the year 2013.

STAMP  
NEIL C. HUNT  
REGISTERED PROFESSIONAL ENGINEER  
NEWFOUNDLAND & LABRADOR

O	ISSUED FOR TENDER	13/06/14
revisions		date
project	project	
<b>HARBOUR DEVELOPMENT PHASE I</b>		
<b>MARY'S HARBOUR, LABRADOR</b>		
drawing	dessin	
<b>NEW SITE PLAN INNER BASIN SITE</b>		
designed N.H.	conçu	
date	FEBRUARY 11, 2013	
drawn P.H.	dessiné	
date	FEBRUARY 11, 2013	
approved	approuvé	
date		
Tender	Soumission	
PWOSC Project Manager	Administrateur de projets TPSGC	
project number	no. du projet	
<b>R.064896.001</b>		
drawing no.	no. du dessin	
<b>C4 OF 11</b>		

E-DRW/000-E: 444545 Ver 1



**LEGEND:**

- AREA OF NEW WORK
- GPS LOCATION
- NEW GRADES

**GPS COORDINATES FOR NEW WORK**

	EASTING	NORTHING
A	E = 579250.7879	N = 5796575.3772
B	E = 579270.9429	N = 5796539.7226
C	E = 579286.8633	N = 5796548.7221
D	E = 579272.9632	N = 5796573.3117
E	E = 579295.6614	N = 5796548.4704
F	E = 579299.6458	N = 5796551.4911
G	E = 579279.6813	N = 5796588.6188

NOTE: CONFIRM LAYOUT WITH THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING.

- LEGEND**
- ACQUACULTURE
  - ANCHOR BLOCK
  - BOLLARD
  - BORERHOLE
  - BOUNDARY MARKER
  - CARD POSITION BUOY
  - CATCH BASIN
  - CLEAT
  - CULVERT
  - DERRICK
  - DISPOSAL
  - DREDGE CONTROL
  - ELECTRICAL OUTLET
  - FIRE HYDRANT
  - FIRST AID
  - FISH HANDLING EQUIP.
  - FOG HORN
  - FUEL PUMP
  - H PILE
  - HORIZONTAL CONTROL
  - ICE PLANT
  - INVERT PIPE
  - JIB CRANE
  - FLAG 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
  - SON
  - TELEPHONE
  - TELEPHONE POLE
  - TIDE GAUGE/STAFF
  - TREE
  - UTILITY POLE
  - VERTICAL CONTROL
  - WATER TAP/OUTLET
  - WATER VALVE
  - WATER WELL
  - WOOD PILE
  - ARMOUR STONE
  - CL RAILROAD
  - GRASS PIPE
  - EDGE ROAD / SHOULDER
  - FENCE LINE
  - FLOATING WAREHOUSE
  - GUARD RAIL
  - HIGH WATER MARK
  - LOW WATER MARK
  - MARSH OUTLINE
  - PROPERTY BOUNDARY
  - RANGE LIGHT EXTENSION
  - RETAINING WALL
  - RIP RAP
  - TOE OF BANK
  - TREE LINE
  - UNDERGROUND CABLE

**SURVEY NOTES**

SURVEY PARTY CHIEF: EDDIE BEARNS  
SURVEY VESSEL: ALUMINUM BOAT  
SURVEY DATE(S): BETWEEN OCTOBER 24, 2010 - AUGUST 23, 2011 & NOV. 08, 2012

SCANNER TYPE: SINGLE TRANSDUCER  
SCANNER SETTING: 1000 kHz  
DEPTH GATE USED: N/A  
POSITIONING SYSTEM USED: DGPS (WITH QIF)  
LAND SURVEY POSITION BY: DGPS (WITH QIF)  
DATA TYPE/SCOPE USED: DGPS (WITH QIF)  
CAD DRAWING FILE(S):  
TOTAL REDUCTION SCHEME: REDUCTION OF MATRICES

**OFFICE PROCESSOR** EDDIE BEARNS  
**DATE OF PROCESSING** NOVEMBER 2012

**MODE OF PLOTTING** LEAST OF MINIMUM DEPTHS  
**MATRIX CELL WITH X LENGTH**  
**REDUCTION OF MATRICES**

PL. NAME	EASTING	NORTHING	CD ELEV	DESCRIPTION
2003017	579541.081	5796268.285	8.132 m	PROVINCIAL BRASS PLAQUE SET IN BEDROCK
796-1988	579542.353	5796280.463	5.664 m	I.P. WITH CAP SET IN BEDROCK
PWC 1-94	579557.743	5796336.488	2.527 m	X-CUT IN GUY WIRE ANCHOR
PWC 2-94	579685.306	5796291.808	2.469 m	BOLT SET IN CONCRETE DECK
59F9336			6.269 m	CHS BRASS PLAQUE SET IN BEDROCK
59F9337			6.525 m	CHS BRASS PLAQUE SET IN BEDROCK
59F9338			4.078 m	CHS BRASS PLAQUE SET IN BEDROCK

ALL SOUNDINGS & ELEVATIONS IN METRES.  
ALL SOUNDINGS & ELEVATIONS REFERRED TO CHS BM 95F9336 ELEV. +6.298m (BRASS PLAQUE SET IN BEDROCK).  
SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE DIFFERENTIAL GPS POSITIONING SYSTEM ON OCTOBER 23, 2011 & NOV. 08, 2012 BY PWOSC 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 & BATHYMETRIC CORRECTION.  
SOUNDINGS WERE REDUCED USING HYPACK MAX VER.02.12.  
SPEED OF SOUND WAS OBTAINED USING A DIGIBAR-PRO VELOCIMETER.  
NOTE: NEW SOUNDING WAS LOCATED ON JULY 23, 2012.

**GENERAL NOTES:**

- ALL DIMENSIONS IN MILLIMETRES.
- ALL ELEVATIONS IN METRES.

