

TIMBER NOTES:

- TIMBER MATERIALS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
 - SPECIES: S-P-F GRADE NO 2.
 - TYPE: PRESSURE TREATED.
 - SOUND SEASONED WOOD WITH ENDS SQUARE.
 - DIMENSIONS AS INDICATED.
 - STRAIGHT AND FREE FROM LOOSE KNOTS, SWEEP, STAKES, ROT, AND CHECKS.
- ALL TIMBER TO BE TREATED WITH CCA PRESERVATIVES IN ACCORDANCE WITH CAN/CSA-080 SERIES 97, WATER BORNE SALT PRESERVATIVE (6.4 kg/M²), UNLESS OTHERWISE NOTED. USE OF CREOSOTE OIL IS NOT PERMITTED.
- FASTENERS:
 - ASTM A307 BOLT. SIZE AS INDICATED ON THE DRAWINGS.
 - NAILS AND SPIKES: IN ACCORDANCE WITH CSA STANDARD B111 WITH GALVANIZED FINISH.
- GALVANIZE ALL HARDWARE TO CSA G164-M1981, MINIMUM ZINC COATING OF 610 g/m², UNLESS OTHERWISE NOTED.

METAL FABRICATION NOTES:

- STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
 - ROLLED SECTION OR PLATE TO CAN/CSA G40.21M Gr. 350W.
 - TIE-RODS TO ASTM A815, GRADE 517 MPa, CONTINUOUSLY THREADED BAR WITH SINGLE CORROSION PROTECTION.
 - PRE-ASSEMBLE, MARK AND TEST TIE-ROD ASSEMBLIES IN SHOP.
 - HEAVY HEX NUTS TO HAVE FULL CAPACITY OF THE TIE-ROD.
 - NUTS AND BOLTS TO ASTM A307.
- ALL STEEL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH CAN/CSA S16.1, LATEST EDITION.
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH CSA W59, LATEST EDITION.
- HOT DIP GALVANIZE ITEMS INDICATED TO CAN/CSA G-164, MINIMUM ZINC COATING OF 610 g/m².
- FOR TIE RODS 'A' & 'B', PROVIDE BEVEL WASHERS AS REQUIRED ON EACH END OF ANGLED TIE ROD.

PILE NOTES:

- STEEL SHEET PILE, MINIMUM FLANGE THICKNESS - 15.5mm, MINIMUM WEB THICKNESS - 12.0mm, MINIMUM CROSS SECTIONAL AREA 225cm²/m, MINIMUM ELASTIC SECTION MODULUS (S_x) - 3700cm²/m, Gr. 350W. STEEL SHEET PILING TO BE BLACK STEEL.
- PILES SHALL BE DRIVEN TO ELEVATIONS INDICATED ON THE DRAWINGS.
- SSP LAYOUT GEOMETRY IS BASED ON A LINEAR, CENTER TO CENTER LOCK DIMENSION OF 700mm PER SHEET OR 1400mm PER DOUBLE SHEET. GEOMETRY IS SUBJECT TO CHANGE DEPENDING ON THE ACTUAL S.S.P. SHEET CHOSEN.
- PROVIDE RATED HAMMER ENERGY TO BE A MINIMUM OF 450J/cm² OF STEEL CROSS-SECTIONAL AREA OF STEEL SHEET PILE.

CONCRETE NOTES:

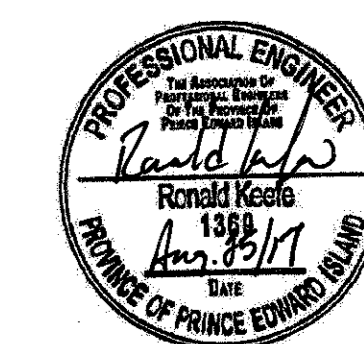
- ALL CONCRETE WORK TO BE IN ACCORDANCE WITH CAN/CSA A23.1, CAN/CSA A23.2 AND CAN/CSA A23.3 LATEST EDITIONS.
- CONCRETE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
 - CEMENT = PORTLAND TYPE GU.
 - CLASS OF EXPOSURE = C1
 - MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 35 MPa
 - 20mm MAX AGGREGATE SIZE
 - MAX WATER CEMENT RATIO = 0.40
 - AIR ENTRAINMENT = 5% - 8%
 - SLUMP AT THE POINT OF DISCHARGE = 20-80mm. A REQUIRED INCREASE IN SLUMP MAY ONLY BE ACHIEVED BY THE USE OF ADMIXTURES, NOT WATER. USE OF ADMIXTURES MUST BE APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
- COVER TO REINFORCING = 75mm UNLESS OTHERWISE NOTED.
- REINFORCING STEEL TO CSA G30.18 M92 Gr. 400W BLACK STEEL.
- PROVIDE SELF PENETRATING SILANE SEALER FOR ALL CONCRETE SURFACES.
- CAST IN PLACE CONCRETE SLAB TO HAVE A CONTROL JOINT OR A CONSTRUCTION JOINT AT MAXIMUM SPACING OF 3.5 METERS IN ANY DIRECTION. CONTROL JOINTS AND CONSTRUCTION JOINTS TO BE EQUALLY SPACED ALONG LENGTH OF SLAB
- REINFORCING LAP SPLICES TO BE CLASS B.
- CONCRETE MIX DESIGN MAY BE MODIFIED TO ACCOMMODATE PUMPING BUT ONLY UPON REVIEW BY THE DEPARTMENTAL REPRESENTATIVE.

GENERAL NOTES:

- EXISTING CONDITIONS BASED ON DRAWINGS PROVIDED BY PWGSC AND BY SURVEY CONDUCTED BY DEREK A. FRENCH PROFESSIONAL SERVICES INC., DATED APRIL, 2017.
- COORDINATES ARE REFERENCED TO P.E.I. CONTROL MONUMENTS 2468 AND 2483, P.E.I. DOUBLE STEREOGRAPHIC PROJECTION COORDINATES, NAD83 (CSRS) DATUM, ZONE 20, EPOCH 1997 WITH PUBLISHED GRID COORDINATES N711424.502, E444829.353, DERIVED CHART DATUM ELEVATION 25.488 METRES AND N711919.436, E446056.954, DERIVED CHART DATUM ELEVATION 31.918 METERS, RESPECTIVELY.
- ELEVATIONS ARE REFERENCED TO CHART DATUM (METRIC) AND ARE BASED ON GEODETIC MONUMENT No. 76-P-102 LOCATED AT THE OCTAGONAL LIGHT HOUSE WITH PUBLISHED CHART ELEVATION 14.024m
- ALL ELEVATIONS SHOWN REFERENCED TO CHART DATUM. CHART DATUM IS, BY INTERNATIONAL AGREEMENT, A PLANE BELOW WHICH THE TIDE WILL SELDOM FALL. THE CANADIAN HYDROGRAPHIC SERVICE HAS ADOPTED THE PLANE OF LOWEST NORMAL TIDE (L.N.T.) AS CHART DATUM. AS THE RISE AND FALL OF TIDES VARIES DAILY, THE CANADIAN TIDE AND CURRENT TABLES, AS ISSUED BY THE CANADIAN HYDROGRAPHIC SERVICE, SHOULD BE CONSULTED FOR TIDAL PREDICTIONS AND OTHER TIDAL INFORMATION RELATING TO THE WORK.
- DO NOT SCALE FROM THE DRAWINGS.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- GEOTECHNICAL INFORMATION AS PER JOOSE ENVIRONMENTAL GEOTECHNICAL REVIEW REPORT, (PRO No. JEO160-B), DATED MARCH 29, 2016, FOR OTHER PERTINENT INFORMATION REGARDING THE BOREHOLES THE CONTRACTOR CAN REVIEW THE COMPLETE GEOTECHNICAL REPORT, AVAILABLE UPON REQUEST.
- ANY INFORMATION PERTAINING TO SOILS AND ALL BOREHOLE DATA IS FURNISHED BY THE DEPARTMENTAL REPRESENTATIVE AS A MATTER OF INFORMATION ONLY. BOREHOLE DATA IS NOT TO BE INTERPRETED AS DESCRIPTIVE OF CONDITIONS AT LOCATIONS OTHER THAN THOSE DESCRIBED BY THE BOREHOLES THEMSELVES.
- ANY STOCKPILING OF MATERIAL ON SITE WILL BE AT A LOCATION COORDINATED WITH THE DEPARTMENTAL REPRESENTATIVE AND THE LOCAL HARBOUR AUTHORITY.
- SPECIFIED DESIGN LIVE LOAD IS A UNIFORM LOAD EQUAL TO 18 Kpa. SSP WALL IS DESIGNED FOR A MAXIMUM DREDGE LIMIT ELEVATION OF -1.8m AND AN ALLOWANCE FOR SCOUR OF 300mm.
- EXISTING RUBBLE MOUND BREAKWATER INFORMATION AS PER FUNDY ENGINEERING ARMOUR STONE VERIFICATION AND SPECIFIC GRAVITIES REPORT (JOB #12516), DATED JULY 21, 2017. FOR OTHER PERTINENT INFORMATION REGARDING THE EXISTING RUBBLE MOUND BREAKWATER THE CONTRACTOR CAN REVIEW THE COMPLETE REPORT, AVAILABLE UPON REQUEST.
- THE CONTRACTOR MUST BUILD AND SURVEY A MOCK-UP OF THE RUBBLE MOUND BREAKWATER PRIOR TO COMMENCING WORK AS PER THE REQUIREMENTS OUTLINED IN THE SPECIFICATION.

LEGEND

- 305 PWGSC STRUCTURE IDENTIFICATION NUMBER
- △ BENCHMARK
- ⊕ BH-3 BOREHOLE INDICATOR



0	ISSUED FOR TENDER	AUG 25 2017
revisions		date
project		project

STRUCTURE #304 AND #306 RECONSTRUCTION NAUFAGE, HARBOUR KINGS COUNTY, PE

drawing design

SITE PLAN AND KEY PLAN

designed	D.HENNESSEY	conçu
date	MARCH 2017	
drawn	S.GILLIS	dessiné
date	MARCH 2017	
approved		approuvé
date		
Tender		submission
PWGSC Project Manager		Administrateur de projets PWGSC
project number		no. du projet
	R.088165.001	
drawing no.		no. du dessin
	M1 of 10	

