

11 10 9 8 7 6 5 4 3 2 1

GENERAL NOTES
1. FOUNDATION CONTRACTOR IS RESPONSIBLE FOR PLACING AND LEVELLING THE EMBEDMENT RING IN ACCORDANCE WITH THE SPECIFIED TOLERANCES AND TURBINE SUPPLIERS SPECIFICATIONS. ENSURE THE EMBEDMENT RING IS PLACED IN ACCORDANCE WITH THE SPECIFIED TOLERANCES AND TURBINE SUPPLIERS SPECIFICATIONS. ENSURE THE EMBEDMENT RING IS PLACED IN ACCORDANCE WITH THE SPECIFIED TOLERANCES AND TURBINE SUPPLIERS SPECIFICATIONS. ENSURE THE EMBEDMENT RING IS PLACED IN ACCORDANCE WITH THE SPECIFIED TOLERANCES AND TURBINE SUPPLIERS SPECIFICATIONS.

2. CAST-IN PLACE CONCRETE AND STEEL REINFORCEMENT
A. GENERAL
CONCRETE WORK SHALL BE IN GENERAL COMPLIANCE WITH THE FOLLOWING LATEST VERSIONS OF CODES AND SPECIFICATIONS:
- CSA A23.1-18, SECTION OF CONCRETE STRUCTURES
- CSA A23.1-18, CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION TEST METHODS AND STANDARD PRACTICES FOR CONCRETE
- CSA A23.3-18, CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION TEST METHODS AND STANDARD PRACTICES FOR CONCRETE
- CSA A23.3-18, CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION TEST METHODS AND STANDARD PRACTICES FOR CONCRETE

3. TOWER ANCHOR BOLTS, EMBEDMENT PLATE AND TEMPLATE RINGS
A. GENERAL
PRODUCTS, EXECUTION AND TESTING IS SPECIFIED TO PROVIDE DURABLE ANCHOR BOLTS AND PLATES.
EXECUTION AND INSTALLATION SHALL BE PERFORMED BY THE CONTRACTOR FOLLOWING THE TURBINE MANUFACTURER'S SPECIFICATIONS. IN ADDITION TO THE REQUIREMENTS HEREIN, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
B. SUBMITTALS
SUBMIT PRODUCT DATA FOR ANCHOR BOLTS AND WIDOWHOLE.
SUBMIT MILL CERTIFICATES FOR ANCHOR BOLTS INDICATING YIELD STRENGTH AND ULTIMATE STRENGTH OF MATERIAL.
SUBMIT LABORATORY TENSION TESTS FOR ANCHOR BOLTS, COMPLETE WITH THREADS, FOR EACH HEAT.
SUBMIT A POST-TENSIONING EQUIPMENT CALIBRATION PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT A POST-TENSIONING PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT POST-TENSIONING TEST PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT POST-TENSION TEST DATA FOR ANCHOR BOLTS THAT ARE TESTED INDICATING BOLT LOCATION AND TENSION VALUE.
SUBMIT AN ANCHOR BOLT PROTECTION PROCEDURE FOR EXTENDED AIR EXPOSURE, AS WELL AS FOR WINTER PROTECTION.

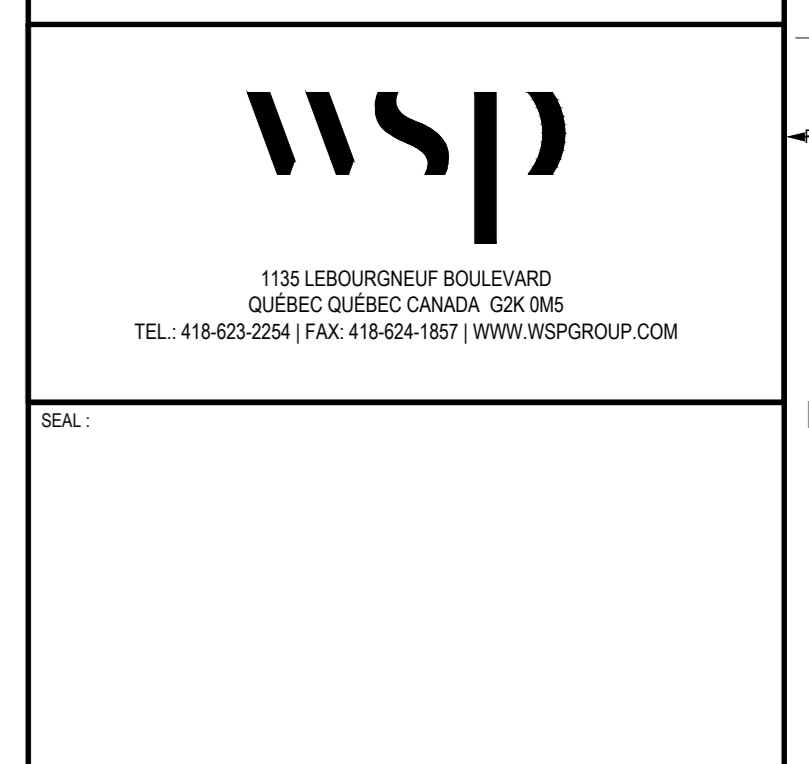
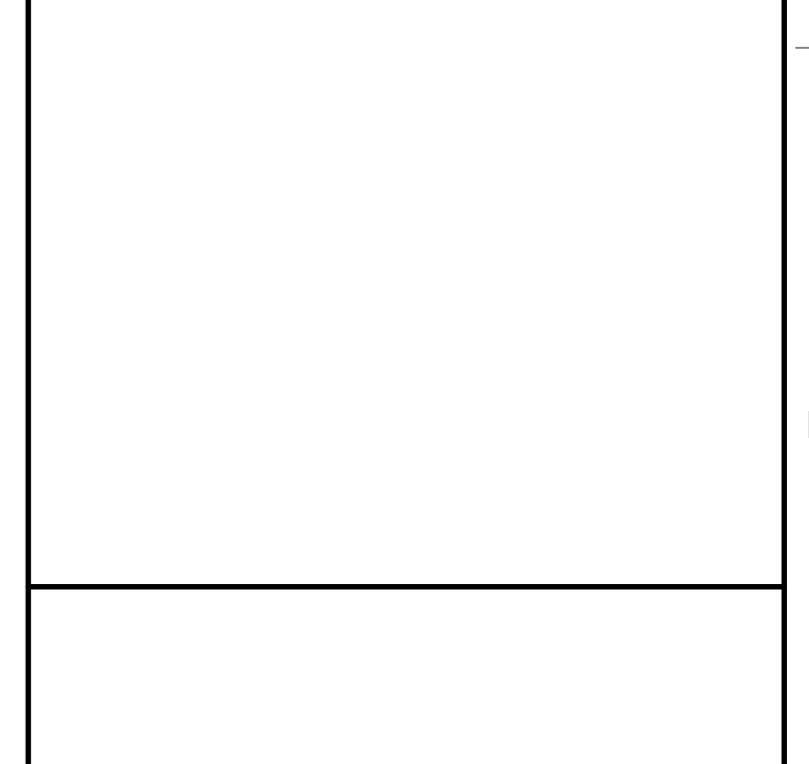
4. TOWER ANCHOR BOLTS, EMBEDMENT PLATE AND TEMPLATE RINGS
A. GENERAL
PRODUCTS, EXECUTION AND TESTING IS SPECIFIED TO PROVIDE DURABLE ANCHOR BOLTS AND PLATES.
EXECUTION AND INSTALLATION SHALL BE PERFORMED BY THE CONTRACTOR FOLLOWING THE TURBINE MANUFACTURER'S SPECIFICATIONS. IN ADDITION TO THE REQUIREMENTS HEREIN, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
B. SUBMITTALS
SUBMIT PRODUCT DATA FOR ANCHOR BOLTS AND WIDOWHOLE.
SUBMIT MILL CERTIFICATES FOR ANCHOR BOLTS INDICATING YIELD STRENGTH AND ULTIMATE STRENGTH OF MATERIAL.
SUBMIT LABORATORY TENSION TESTS FOR ANCHOR BOLTS, COMPLETE WITH THREADS, FOR EACH HEAT.
SUBMIT A POST-TENSIONING EQUIPMENT CALIBRATION PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT A POST-TENSIONING PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT POST-TENSIONING TEST PROCEDURE FOR REVIEW AND APPROVAL.
SUBMIT POST-TENSION TEST DATA FOR ANCHOR BOLTS THAT ARE TESTED INDICATING BOLT LOCATION AND TENSION VALUE.
SUBMIT AN ANCHOR BOLT PROTECTION PROCEDURE FOR EXTENDED AIR EXPOSURE, AS WELL AS FOR WINTER PROTECTION.

5. MISCELLANEOUS CONCRETE EMBEDMENTS
A. GENERAL
COORDINATE THE LOCATION AND PLACEMENT OF GROUNDING GRIDS, CONTROL CONDUIT AND ELECTRICAL CONDUIT WITH FOUNDATION ELECTRICAL DRAWINGS.
B. SUBMITTALS
COORDINATE WITH ELECTRICAL REQUIREMENTS.
SUBMIT DRAWINGS SHOWING LOCATION OF ELECTRICAL DUCTS INSIDE THE FOUNDATION FOR REVIEW AND APPROVAL (IF APPLICABLE).
SUBMIT MANUFACTURERS APPROVED MIXING, PLACING AND CURING INSTRUCTIONS FOR GROUT TO BE PLACED.
SUBMIT GROUT CURB STRENGTH TEST RESULTS.
C. PRODUCTS
NON-SHRINK CEMENTITIOUS GROUT: PRE-PACKAGED GROUT CONFORMING TO ASTM C579 METHOD B WITH A MINIMUM STRENGTH OF 30 MPa AFTER 3 DAYS AND 80 MPa AFTER 7 DAYS.
D. EXECUTION
MIX, PLACE AND CURE GROUT IN ACCORDANCE WITH APPROVED MANUFACTURERS INSTRUCTIONS AND TURBINE MANUFACTURERS SPECIFICATIONS.
POUR THE GROUT ONLY FROM ONE SIDE AND WITHOUT INTERRUPTING.
TO ENSURE SUFFICIENT CURE AND HEALING OF THE LAYERS, USE A METAL STRIP TO RAKE IN THE FRESHLY POURED GROUT BEFORE IT STARTS TO CURE.
POUR THE GROUT UNTIL IT REACHES THE FOUNDATION TOP. IN THIS AREA, NO ACCUMULATION OF RAIN WATER IS ALLOWED.
GROUT THICKNESS UNDER THE TOWER FLANGE: 60 mm (TOLERANCE: -0 mm, +10 mm), TOWER FLANGE TO BE EMBEDDED 10 mm IN THE GROUT.
E. TESTING AND INSPECTION
CAST A MINIMUM OF 12 GROUT CURBS AND PERFORM ONE LABORATORY STRENGTH TEST AT 3 DAYS (3 CURBS TOTAL), ONE LABORATORY STRENGTH TEST AT 7 DAYS (3 CURBS TOTAL), ONE LABORATORY TEST AT 28 DAYS (3 CURBS TOTAL) IF NECESSARY (ONE AT EACH OF 3 CURBS TOTAL). IF NECESSARY, CAST ADDITIONAL CURBS AS REQUIRED TO DETERMINE STRENGTH AT OTHER TIMES.

CONCRETE MAIN FOUNDATION:	35 MPa	EXPOSURE CLASS:
CONCRETE PRECAST:	45 MPa	BY CSA: F-1
CONCRETE CONSTRUCTION SLAB:	15 MPa	REINFORCEMENT STEEL

LOAD CASE	DESCRIPTION	F ₁ (kN)	F ₂ (kN)	F ₃ (kN)	M ₁ (kN-m)	M ₂ (kN-m)
UC1-D3 (UNFACTORED)	NORMAL	-2,270	-6,020	750	66,750	0
UC2-E2 (UNFACTORED)	EXTREME NORMAL	-2,270	-6,020	1,060	102,300	9,500
UC2-E2 (UNFACTORED)	EXTREME NORMAL	-2,270	-6,020	1,010	102,300	30,650
UC2-E2 (UNFACTORED)	EXTREME ABNORMAL	4,700	6,020	1,410	127,350	12,800

ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01	ENBRON E-188 EPS E2-ST-111-FB-C-01
------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------



EASTERN KINGS WIND PLANT PHASE 2
ELMIRA, KINGS COUNTY, PRINCE EDWARD ISLAND, CANADA

REV	DATE	DESCRIPTION
B	2020-08-07	ISSUED FOR FINAL COMMENTS
A	2020-04-09	FOR COMMENTS - 90%

IS	RV	DATE	DESCRIPTION
		2020-04-09	

DESIGNED BY: R. M. B. B. M. T.	IF THE BAR IS NOT 20 mm DIA. BOLT YOUR PLACING SCALE.
DRAWN BY: C. W. B. M. T.	25 mm

DISCIPLINE: STRUCTURAL

TITLE: ENBRON E-188 EPS E2-ST-111-FB-C-01 SHALLOW FOUNDATION WITH BUOYANCY GENERAL NOTES

RESP NUMBER: 191-12540-00-EKW-S-101

SHEET #	01	OF	01	REV #
---------	----	----	----	-------

FOR FINAL COMMENTS

DATE OF:	2020-08-07	0
----------	------------	---

THIS DRAWING MUST BE USED WITH PLAN: 191-12540-00-EKW-S-100
191-12540-00-EKW-S-102
191-12540-00-EKW-S-103
191-12540-00-EKW-S-104
191-12540-00-EKW-S-105