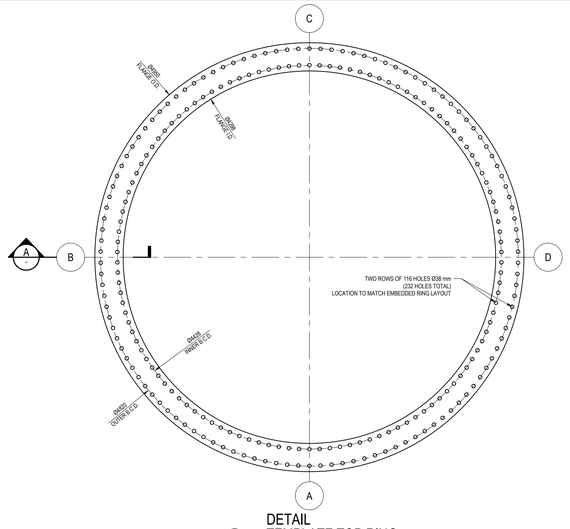
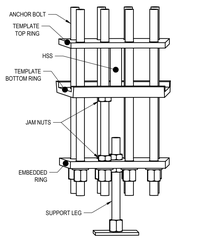
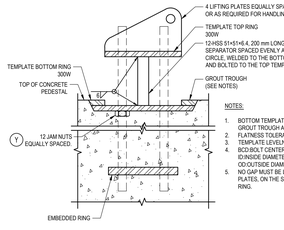


1 DETAIL TEMPLATE TOP RING
1:25



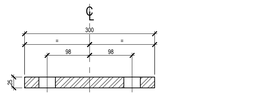
INSTALLATION SCHEMATIC ISOMETRIC VIEW
N.T.S.

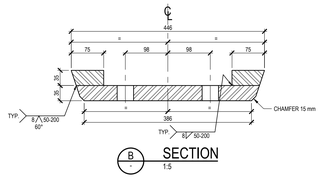


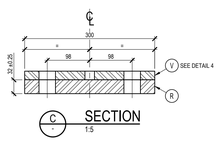
INSTALLATION SCHEMATIC
1:10

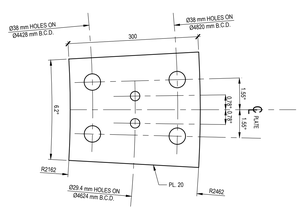
TYPICAL DETAIL
TOWER ANCHOR BOLT ASSEMBLY AND SUPPORT LEGS
1:5

LEGEND - SCHEDULE TABLE				
No.	DESCRIPTION	MATERIAL TYPE	FINISH	QTY.
Q	STEEL PLATE 12.5×200×200	G40.21 300W	GALVANIZED	12
R	EMBEDDED RING STEEL PLATE (SEE DETAIL 3)	G40.21 300W	PLAIN FINISH	1
S	TOWER ANCHOR BOLTS Ø35 mm	ASTM A193 B7	PLAIN FINISH	232
T	HEAVY HEX NUTS H1F	ASTM A194 GRADE 2H	PLAIN FINISH	476
U	RIF HARDENED WASHER (8 mm THK. MIN.)	ASTM F436	PLAIN FINISH	464
V	ASSEMBLY STEEL PLATE (SEE DETAIL 4)	G41.21 300W	PLAIN FINISH	6
W	ANCHOR SHEATH, L = 2030 mm APPROX.	PVC	-	232
X	SUPPORT LEGS Ø35 mm, L = 1100 mm APPROX.	ASTM A193 B7	PLAIN FINISH	12
Y	HYF NUTS	ASTM A194 GRADE 2H	PLAIN FINISH	48
Z	PVC CAP (SUPPLIED BY BOLT FURNISHER)	PVC	-	116









2 DETAIL TEMPLATE BOTTOM RING
1:25

3 DETAIL EMBEDDED RING
1:25

SPECIFICATIONS ACCORDING TO CAN/CSA A23.1, A23.2, A23.3			
CONCRETE MAIN FOUNDATION :	35 MPa	EXPOSURE CLASS	
CONCRETE PEDESTAL :	45 MPa	BY CSA :	F-1
CONCRETE CONSTRUCTION SLAB :	15 MPa		
CONCRETE COVER		REINFORCEMENT STEEL	
TOP 55 mm	BOTTOM 55 mm	SIDE 55 mm	CAN/CSA G30.18
			GRADE : 500W
CONCRETE QUANTITY		QUANTITY (METRIC TON)	
MAIN FOUNDATION, 35 MPa :	654 m³	FOUNDATION :	≠#E1
PEDESTAL, 45 MPa :	23 m³		
TOTAL :	677 m³		

ENERCON E-138 EP3 E2-ST-111-FB-C-01

LOAD CASE	DESCRIPTION	F_Z MAX (kN)	F_Z MIN (kN)	F_{XY} (kN)	M_{XY} (kN·m)	M_Z (kN·m)
DLC D.3 (UNFACTORED)	NORMAL	-5,270	-6,020	730	65,750	0
DLC E.2 (UNFACTORED)	EXTREME NORMAL	-5,270	-6,020	1,060	102,700	9,500
GROUP N/A/T (UNFACTORED)	EXTREME ABNORMAL	-5,270	-6,030	1,070	102,700	10,650
GROUP N/A/T (FACTORED)	EXTREME ABNORMAL	-4,750	-6,630	1,470	137,350	12,800

REFERENCE DOCUMENT: D0025885-1, DATED 2019-06-18
DESIGN SERVICE LIFE: 25 YEARS

NOTES:

1. ERECTION REINFORCEMENT TO BE SUPPLIED BY THE FOUNDATION CONTRACTOR.
2. ERECTION REINFORCEMENT SHALL BE DESIGNED AND SHOWN ON THE REINFORCEMENT SHOP DRAWINGS AND IS THE RESPONSIBILITY OF THE FOUNDATION CONTRACTOR.
3. WEIGHT OF SUCH ERECTION REINFORCEMENT HAS NOT BEEN INCLUDED IN THE REINFORCEMENT QUANTITY STATED ABOVE AND SHALL BE ESTIMATED BY THE FOUNDATION CONTRACTOR.

wsp
1135 LEBOURGNEUF BOULEVARD
QUÉBEC QUÉBEC CANADA G2K 0M5
TEL.: 418-623-2254 | FAX: 418-624-1857 | WWW.WSPGROUP.COM

SEAL :

CLIENT :

PEI ENERGY CORPORATION

CLIENT REF. # : -

PROJECT :

EASTERN KINGS
WIND PLANT
PHASE 2

ELMIRA, KINGS COUNTY,
PRINCE EDWARD ISLAND, CANADA

DISCLAIMER :
THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND REPORT ALL ERRORS AND OMISSIONS PRIOR TO COMMENCING WORK.
THIS DRAWING IS NOT TO BE SCALED.

ISSUED FOR - REVISION :

IS.	RIV.	DATE	DESCRIPTION
B		2020-08-07	FOR FINAL COMMENTS
A		2020-04-09	FOR COMMENTS - 90%

PROJECT NO : 191-12540-00	DATE : 2020-04-09
ORIGINAL SCALE : AS SHOWN	IF THIS BAR IS NOT 25 mm LONG, ADJUST YOUR PLOTTING SCALE. 25 mm
DESIGNED BY : S. MANELLA, P. ENG.	
DRAWN BY : C. NTSBA	
CHECKED BY : M. PLAHONCEON RATTÉ, P. ENG.	

DISCIPLINE : **STRUCTURAL**

TITLE :

ENERCON E-138 EP3 E2-ST-111-FB-C-01
SHALLOW FOUNDATION WITH BUOYANCY RING PLATES AND ANCHOR DETAILS

WSP NUMBER :

191-12540-00-EKW-S-105

SHEET # : 01 OF 01

ISSUED :

FOR FINAL COMMENTS

DATE OF : 2020-08-07

RIV. # : 0

THIS DRAWING MUST BE USED WITH PLAN:
191-12540-00-EKW-S-100
191-12540-00-EKW-S-101
191-12540-00-EKW-S-102
191-12540-00-EKW-S-103
191-12540-00-EKW-S-104

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