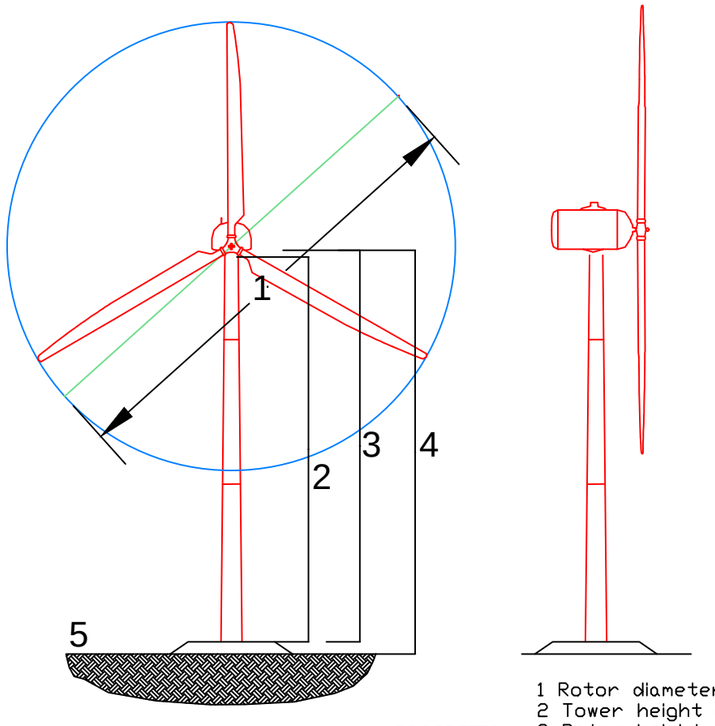
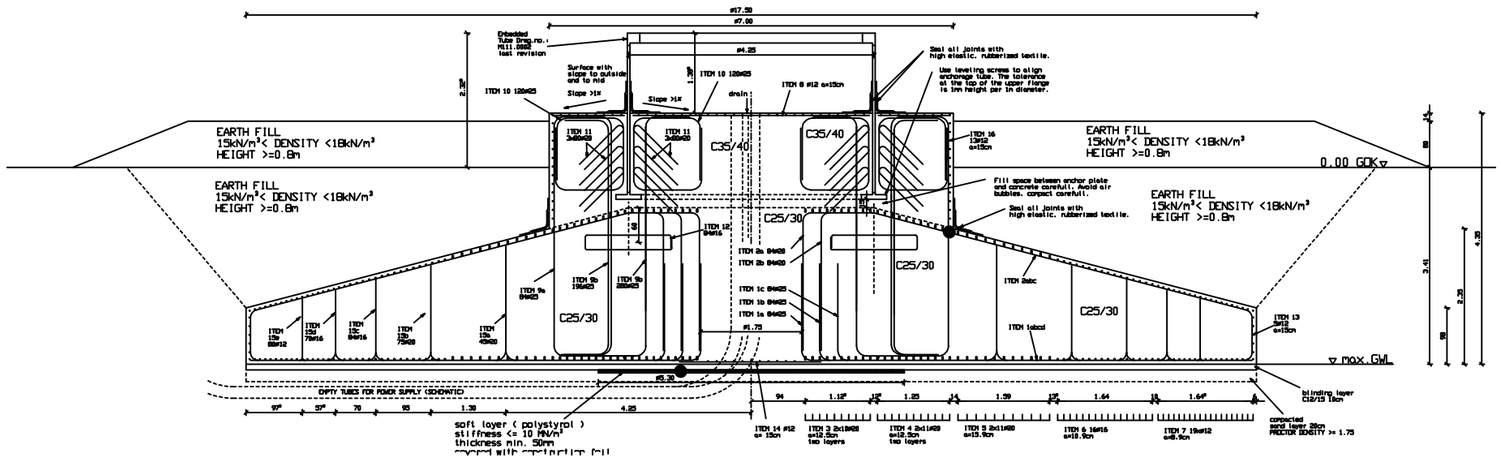
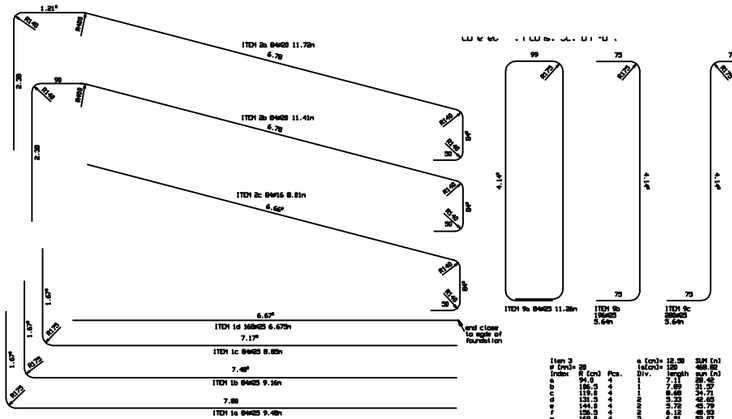
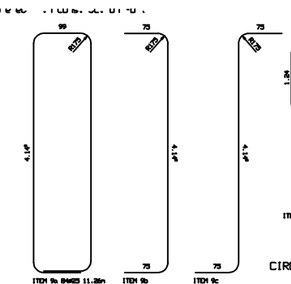


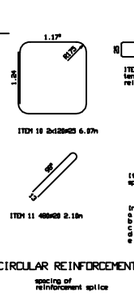
PROSPETTO

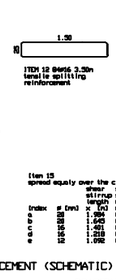
1 Rotor diameter 97.0 m
2 Tower height m 96.2
3 Rotor height m 97.7
4 Hub height m 100.0
5 Ground top level

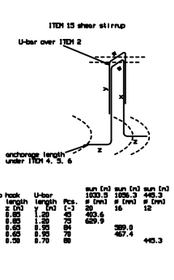












SOIL SPECIFICATION

average soil bearing pressure under reduced base area according to DIN 1054 and DIN 4017		
permanent load	827.1	kN/m²
normal working load	130.5	kN/m²
Extract loads at top of foundation without safety factors		
overturning moment =	51481.9	kNm
torsional moment =	5382.1	kNm
horizontal thrust force =	1841.8	kN
vertical thrust force =	3950.3	kN
highest ground water level :		
GW_hr = 5.41 m		
minimal angle of friction between concrete and soil :		
30°		
minimal static constrained modulus:		
Es,stat = 25 MN/m²		
minimal static spring modul overturning:		
kϕ = 2.77E+10 kN / 1		
minimal dynamic spring modul overturning:		
kϕ = 1.01E+11 kN / 1		
required dynamic constrained modulus:		
Ed,dyn		
(-) MN/m²		
0.15 117		
0.20 120		
0.25 127		
0.30 139		
0.35 159		
0.40 203		
0.45 302		

The soil condition have to be confirmed by a local soil engineering expert.

THE EARTH FILL ON TOP OF FOUNDATION PREVENTS OVERTURNING OF THE HOLE CONSTRUCTION. THERE IS NO POSSESSION TO REMOVE IT IN ANY CASE. TAKE CARE THAT WIND OR RAIN DON'T REMOVE IT.

CONCRETE REINFORCEMENT LIST / Betonstahlliste

NO.	PCS.	ø [cm]	LENGTH ø 8	ø 10	ø 12	ø 16	ø 20	ø 25
Nr.	Stk.		170	12	16	29	8	23
1a	84	25	9.48					796
1b	84	25	9.160					769
1c	84	25	8.850					743
1d	164	25	6.673					1093
2a	84	25	11.78			984		
2b	84	25	11.41			958		
2c	84	16	8.81		673			
3	Tab.	20	488.82			469		
4	Tab.	25	958.54			937		
5	Tab.	20	1407.01			1407		
6	Tab.	16	1358.51		1358			
7	Tab.	12	1906.18 1927					
8	Tab.	12	488.82 496					
9a	84	25	11.26					945
9b	168	8	5.64					1185
9c	288	25	2.64					1579
10	248	25	6.97					1457
11	488	25	2.18			1088		
12	84	16	3.20		294			
13	Tab.	12	1888.12 388					
14	Tab.	12	71.38 71					
15a0	Tab.	20	1852.28			1834		
15a1	Tab.	16	1852.28		1836			
15b	Tab.	12	462.57 462					
16	Tab.	12	384.69 385					

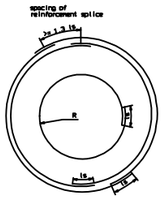
LENGTH	per ø	[m]		2579	2082	6797	8491
MASS	per ø	[kg/m]		0.888	1.578	2.466	3.853
MASS	per ø	[kg]		3177	3248	16762	32719
REINFORCEMENT STEEL			SUM	57999	kg	32918.59971	

REINF.STEEL BST 500 S
CONCRETE COVER: 55 mm
BUILDING MATERIAL ACCORDING TO DIN 1045-1
BUILDING CLASS = XC4 / XF1
EXPOSITION CLASS = S5 / F3
PROTECTION = 1.1 / 1.1

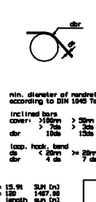
BUILDING MATERIAL SPECIFICATION ACCORDING TO DIN 1045-1

EXPOSITION CLASS XC4 ACCORDING TO DIN 1045-1
IT IS REQUIRED TO CONSULT A CONCRETE EXPERT TO PREVENT DAMAGE CAUSED BY CONCRETE SHRINKAGE OR HEAT OF HYDRATION OR HIGHER EXPOSITION CLASS.

CIRCULAR REINFORCEMENT (SCHEMATIC)



THE LENGTH OF THE CIRCULAR REINFORCEMENT IS CALCULATED BASED ON A PRINCIPAL STEEL BAR. LENGTH OF LAP AND PRACTICAL TRANSPORT WIDE OF 2.50m. IF OTHER LENGTH ARE AVAIBLE OR STEEL WORK IS WILL BE DONE AT SITE. THE PARTITION CAN BY CHANGED. THE DIAMETER OF STEELBARS, THE SPACING AND THE SPLICE HAVE TO BE RETAINED.



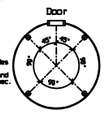
min. diameter of mandrel according to DIN 1045 Tab.23

inclined bars
cover: ≥100mm > 50mm <= 80mm
> 7db > 3db <= 3db
dbr = 10db = 15db = 20db

loop, hook, bend
db < 20mm >= 20mm
dbr = 4 db = 7 db

EARTHING

Door



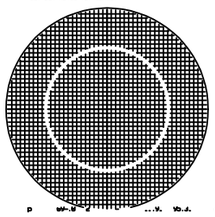
Exit points of earthelectrodes

Please note the arrangement and implementation of Earthing Spec. - see Doc no.:

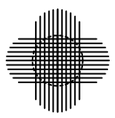
SES.FC.113.09.0036.Rev3

PLEASE NOTE RISK ANALYSIS FOUNDATION:
"Anchoring of Wind Turbines by enbed tower part"
Doc.no.: SEG-EF-110-10-01005

ITEM 8 REINFORCEMENT ON PEDESTAL TOP
SCALE: 1/100
#12 ø= 15cm, cut bars at side. total lenght 398m
cut out holes for conduit



ITEM 14 REINFORCEMENT IN CENTRE BOTTOM
SCALE 1:100
#12 ø= 15cm, cut bars at side. total lenght 71m
cut out holes for conduit



REGIONE BASILICATA PROVINCIA DI MATERA

COMUNE DI TRICARICO

Committente :

Adest
Via Annunziatella 45 - 75100 Matera (MT)
ITALIA
C.F. e P.Iva: 03707230284

Progetto **DEFINITIVO** :

Parco eolico "Corona Prima" di Tricarico (Mt)

Oggetto :

Disegni architettonici aerogeneratori e particolari sistemi di ancoraggio

Elaborato N. A.16.b.8 - 2

Scala : --

Progettisti :

Suzlon Wind Energy Italy S.r.l.

ambiente
Engineering & Consulting

Revisioni :

N.	Data / Date	Descrizione / Description	Disegnato / Drawn	Visto / Checked	Approvato / Approved
0.	01/08/2011				
1.					
2.					
3.					

Note :

Gli elaborati si intendono validi unicamente ai fini indicati nell'intestazione. E' espressamente vietato l'utilizzo ai fini diversi da quelli indicati nell'intestazione senza il permesso da parte del progettista. I diritti di riproduzione e di adattamento totale o parziale e con qualsiasi mezzo (copie fotostatiche, film didattici, microfilm etc...) sono riservati per tutti i paesi.