

Platform Name:

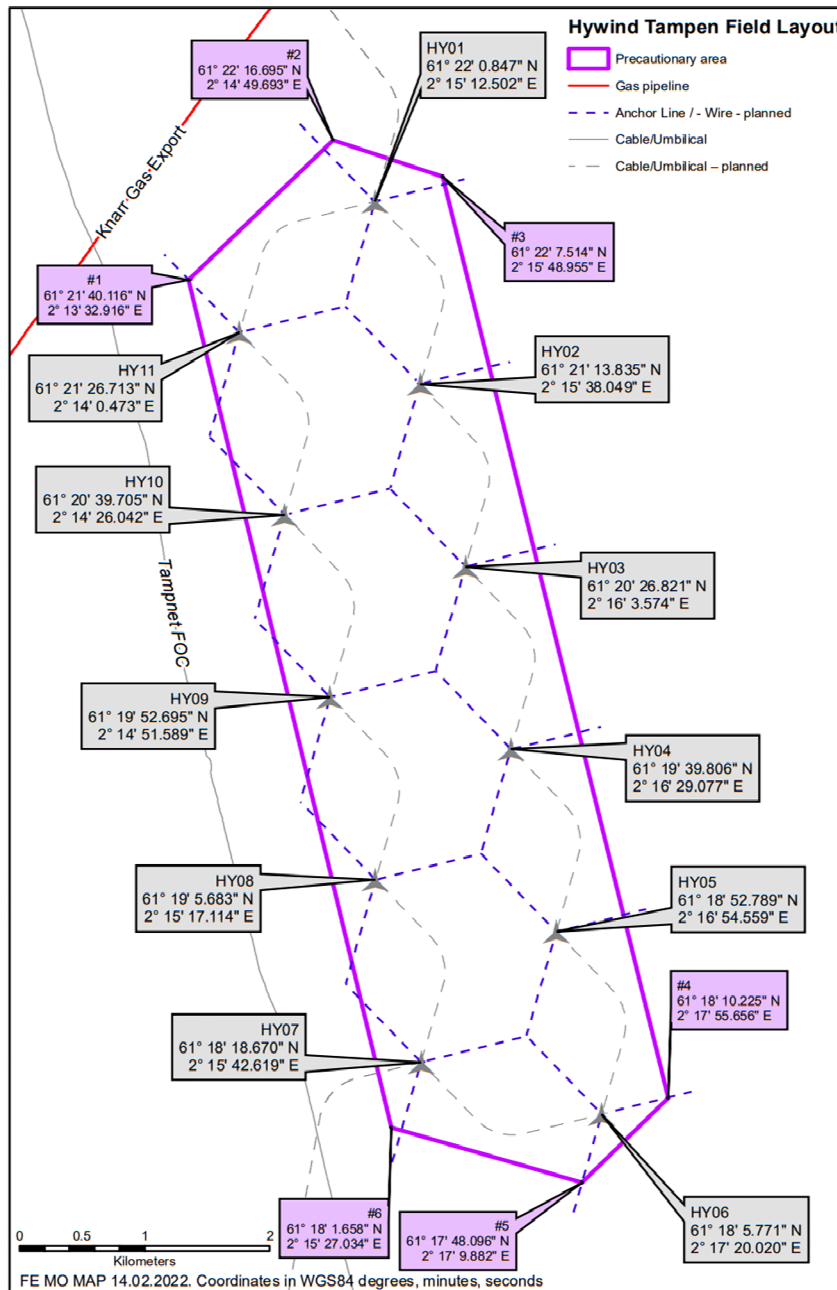
Hywind Tampen Wind Farm



Contact Information

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VHF Sandsli Main Control Room:	69 (and 16)
Sandsli MCR Tetra:	SOV TG1

Map with zones (not to scale)



Wind Turbines

NAME	LAT	LONG
HY01	61° 22' 0.847" N	2° 15' 12.502" E

NOTE: HY02, HY03, HY04 and HY05 will be installed 2023.

HY06	61° 18' 5.771" N	2° 17' 20.020" E
HY07	61° 18' 18.670" N	2° 15' 42.619" E
HY08	61° 19' 5.683" N	2° 15' 17.114" E
HY09	61° 19' 52.695" N	2° 14' 51.589" E
HY10	61° 20' 39.705" N	2° 14' 26.042" E
HY11	61° 21' 26.713" N	2° 14' 0.473" E

Cautionary zone

NAME	LAT	LONG
#1 NE Corner	61° 21' 40.116" N	2° 13' 32.916" E
#2 N Corner	61° 22' 16.695" N	2° 14' 49.693" E
#3 NW Corner	61° 22' 7.514" N	2° 15' 48.955" E
#4 SW Corner	61° 18' 10.225" N	2° 17' 55.656" E
#5 S Corner	61° 17' 48.096" N	2° 17' 9.882" E
#6 SE Corner	61° 18' 1.658" N	2° 15' 27.034" E

Zone coding		
	Meaning	Reason
Precautionary Area:	Entering this zone needs approval from Sandsli MCR in addition to information Equinor Marine.	<ul style="list-style-type: none"> MCR need to be aware of any activities, work permit activated to ensure that start up is inhibited. The turbine nacelle shall be turned away from entry route. Blade pitch should be set to Idle (rotating slowly).

Hywind Tampen specific information	
Approaching speed 500-meter from a Turbine	From 500m - 200m; ≤ 5,0 kts. From 200m - 50m; ≤ 2 kts; From 50m to worksite; ≤ 0,5 kts
Lowest height from Sea Level to blade tip:	20,7 m
Access platform:	Grating 17,8 m MSL. Push-on profile UPN-300, Length 1.8 m.
Gates:	3-off
DP reference:	4-off Radius transponders, 3-off laser prisms, placed on the railing approx. 19 m above MSL.

Displacement / Significant wave height -table for vessel operation on weather side of a wind turbine

E = 19.6 MJ		Overview of Radius ID.							
Displacement [ton]	Significant wave height [m]	Turbine, radius	Radius ID	Turbine, radius	Radius ID	Turbine, radius	Radius ID	Turbine, radius	Radius ID
5000	4,7	HY01, r1	160	HY04, r1	160	HY07, r1	160	HY10, r1	160
6000	4,3	HY01, r2	170	HY04, r2	170	HY07, r2	170	HY10, r2	170
7000	4,0	HY01, r3	180	HY04, r3	180	HY07, r3	180	HY10, r3	180
8000	3,7	HY01, r4	190	HY04, r4	190	HY07, r4	190	HY10, r4	190
9000	3,5	HY02, r1	168	HY05, r1	168	HY08, r1	164	HY11, r1	164
10000	3,3	HY02, r2	178	HY05, r2	178	HY08, r2	174	HY11, r2	174
11000	3,2	HY02, r3	188	HY05, r3	188	HY08, r3	184	HY11, r3	184
12000	3,1	HY02, r4	198	HY05, r4	198	HY08, r4	194	HY11, r4	194
13000	2,9	HY03, r1	164	HY06, r1	164	HY09, r1	168		
		HY03, r2	174	HY06, r2	174	HY09, r2	178		
		HY03, r3	184	HY06, r3	184	HY09, r3	188		
		HY03, r4	194	HY06, r4	194	HY09, r4	198		

For HYxx Radius 1, 2, 3 and 4 position, see Figure 3 Access Platform, Transponders, Prisms and Direction

Additional information

Hywind Tampen Wind Farm consist of 11 wind turbines.

Prior to enter the 500 m zone, the nacelle shall be turned to the opposite direction of the vessel entry route to allow for open entry corridor, according to the blade strike analysis.

Blade consideration before entrance; Idling, service conditions, locked position.

Confirmation about nacelle position and blade settings shall be given prior to approaching a wind turbine.

HY07, Hywind Tampen Turbine 7; prior to enter this turbine, the radar on northeast corner shall be stopped.

Minimum: L1= 10m, **L2 = 20.7mLAT**, Maximum: L3 = 25m, L4= 23.0mLAT

Each turbine can move with an amplitude up to ±9 meter, and speed of up to 0.5 knots. An DP analysis shall be performed before walk to work (gangway) operations. A DGPS (MRU and AIS) in installed on each turbine. Turbine motion behavior readings (latitude and longitude) is available within the employer SCADA control system, and should be verified prior to gangway operations.

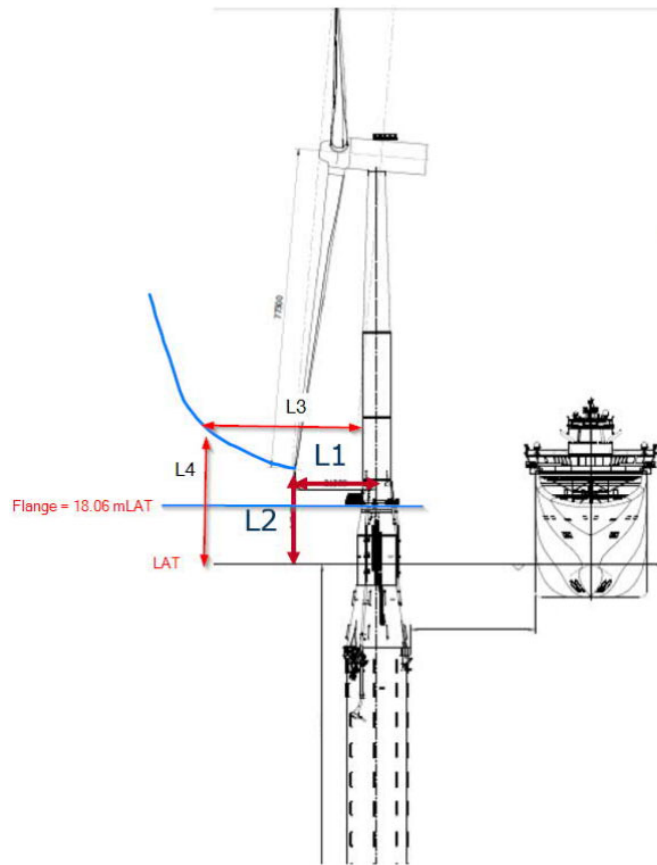


Figure 1 Turbine blade tip height above sea level

- The top of push plates is 17.8m above sea level with a draft of 90.0 m. Note that the draft is 90.0 with 50% marine growth and will be 90.2 with 100% marine growth expected after two years.
- The orientation of the gateways from true North will be:
 1. W2W Gate North : 93° from True North
 2. W2W Gate East : 166° from True North
 3. W2W Gate South : 256° from True North

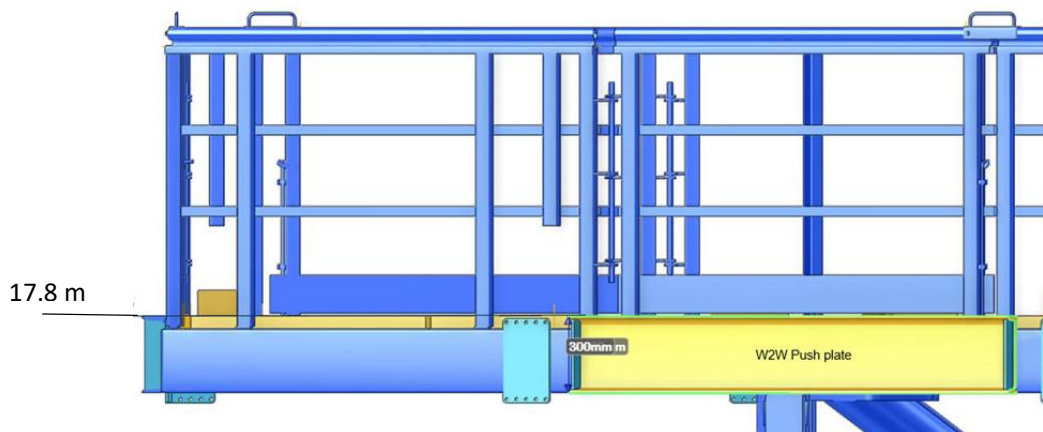
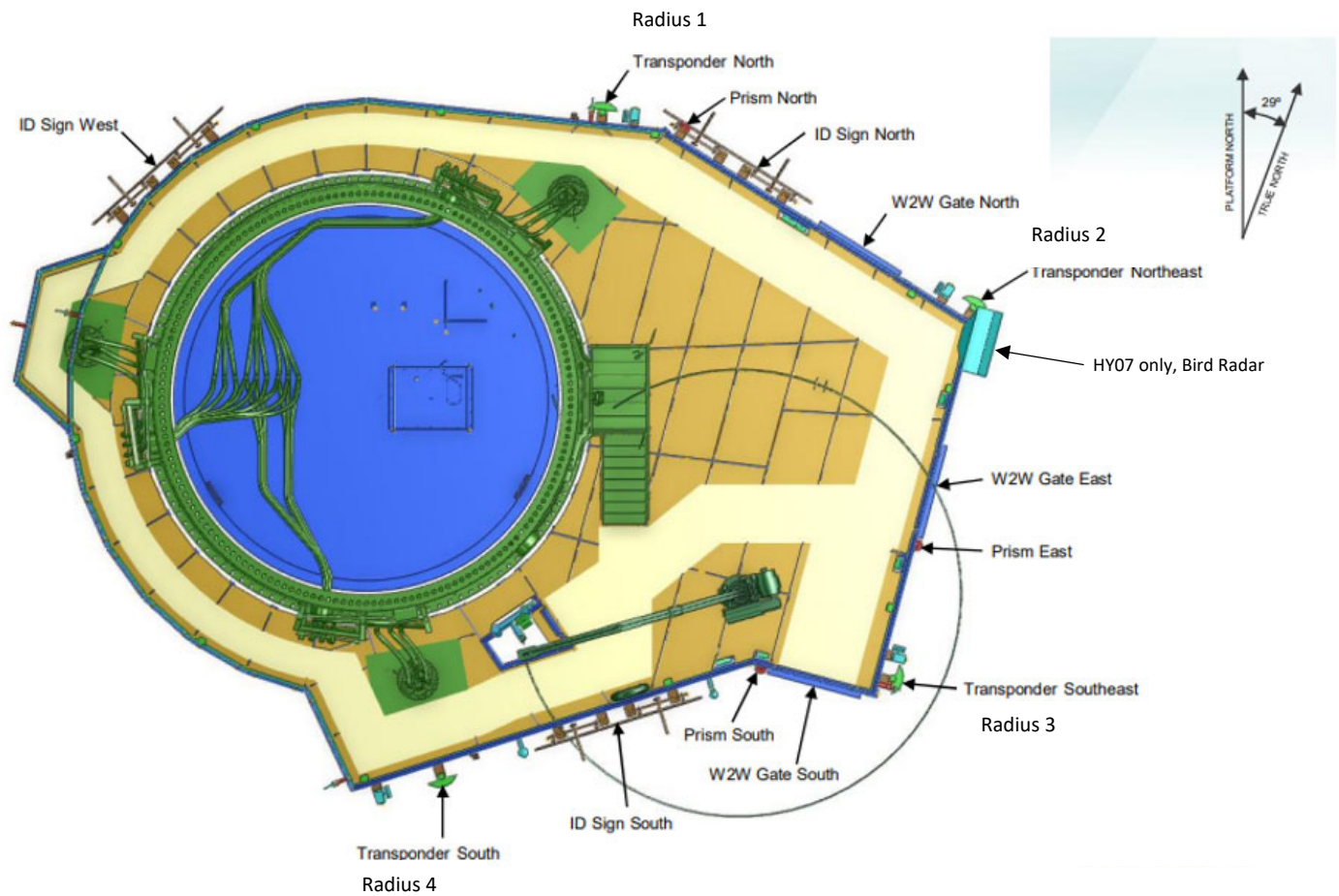
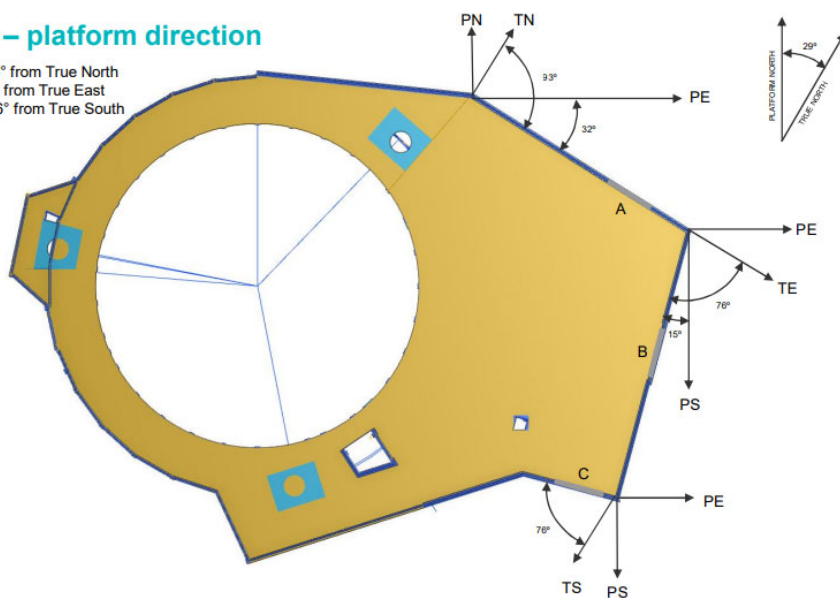


Figure 2 UPN 300 Gangway, Walk to Work - Push on Beam



Hywind Tampen – platform direction

Gate A Northerly orientation: 93° from True North
 Gate B Easterly orientation: 76° from True East
 Gate C Southerly orientation: 76° from True South



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Figure 3 Access Platform, Transponders, Prisms and Direction

REN, Prepare for Operation Department Equinor		
Rev. No	Date	Name
3	12.12.2022	Odd Sigurd Holme