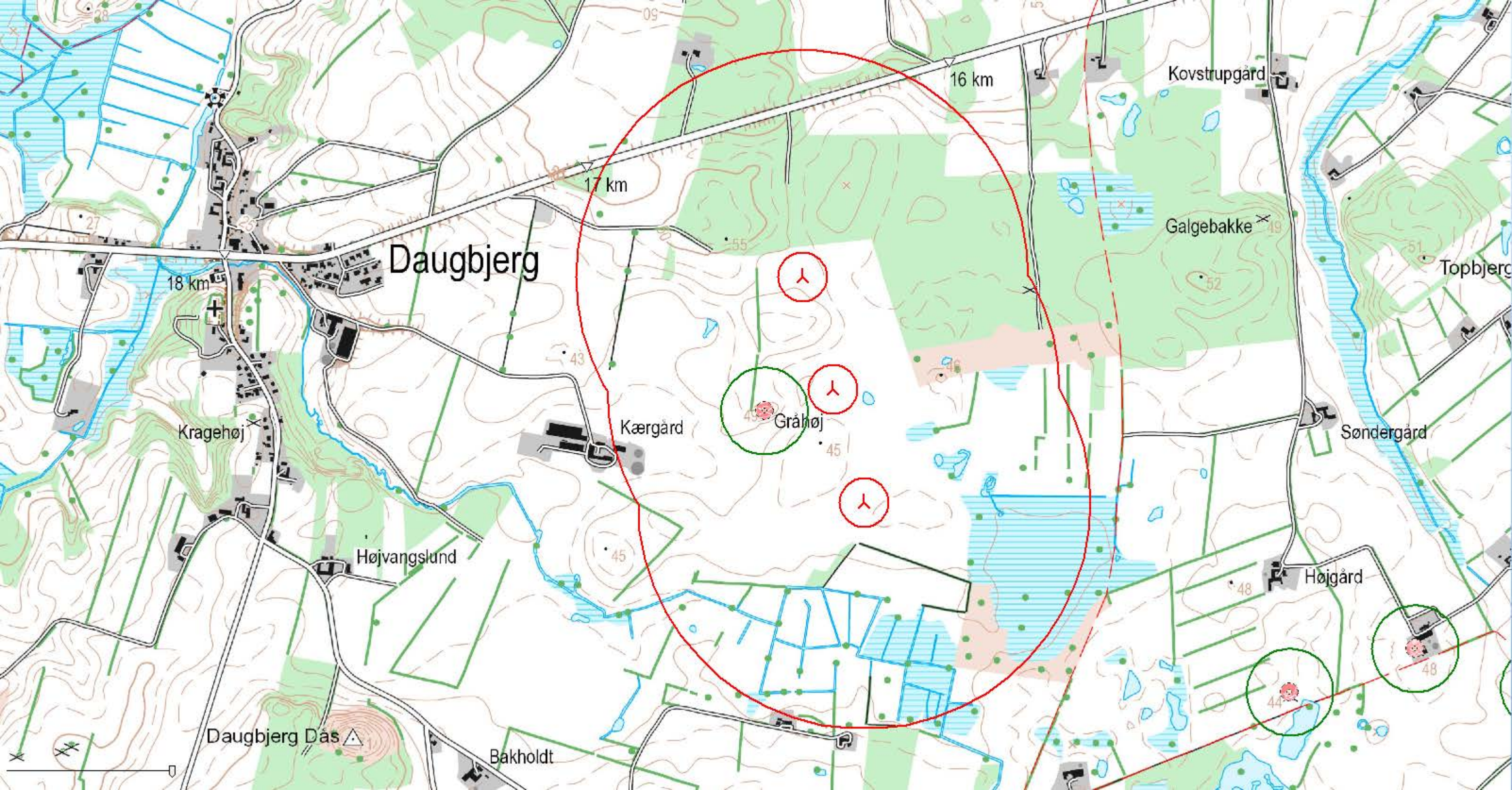




DECIBEL - Main Result

Calculation: 3 x V136 - 4,2 MW

Noise calculation model:

Danish 2019

The calculation is based on "BEK nr 135 af 07/02/2019" from the Danish Environmental Agency.

The noise impact from WTGs are not allowed to exceed the following limits: (Wind speeds in 10 m height)

1) At outdoor areas maximum 15 m from neighbor settlements in the open land.

a) 44 db(A) at wind speed 8 m/s.

b) 42 db(A) at wind speed 6 m/s.

2) At outdoor areas in residential or recreational areas.

a) 39 db(A) at wind speed 8 m/s in residential areas.

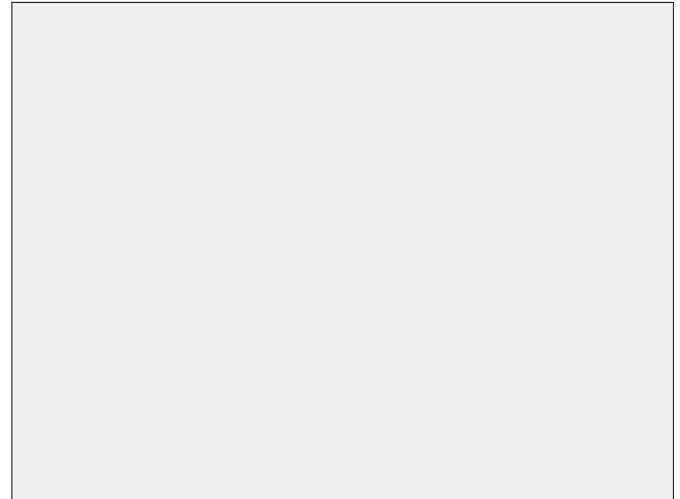
b) 37 db(A) at wind speed 6 m/s in residential areas.

The low frequency noise impact from WTGs are not allowed to exceed 20 dB indoor at wind speeds 8 and 6 m/s

The limits are not to be taken into account for houses belonging to WTG owner

All coordinates are in

UTM (north)-ETRS89 Zone: 32



Scale 1:50.000

New WTG

Noise sensitive area

WTGs

	Easting	Northing	Z	Row data/Description	WTG type			Power, rated	Rotor diameter	Hub height	Noise data		First wind speed	LwaRef	Last wind speed	LwaRef
					Valid	Manufact.	Type-generator				Creator	Name				
			[m]					[kW]	[m]	[m]			[m/s]	[dB(A)]	[m/s]	[dB(A)]
1	509.762	6.253.886	42,5	-15,2°, 310,7 m	Yes	VESTAS	V136-4.0/4.2-4.200	4.200	136,0	82,0	USER	4.2 - PO1	6,0	103,2	8,0	103,9
2	509.680	6.254.185	40,0		Yes	VESTAS	V136-4.0/4.2-4.200	4.200	136,0	82,0	USER	4.2 - PO1	6,0	103,2	8,0	103,9
3	509.598	6.254.485	44,8		Yes	VESTAS	V136-4.0/4.2-4.200	4.200	136,0	82,0	USER	4.2 - PO1	6,0	103,2	8,0	103,9

Calculation Results

Sound level

Noise sensitive area

No.	Name	Easting	Northing	Z	Immission height	Wind speed	Noise	Distance	From WTGs	Distance to noise demand	Noise	Distance	All
				[m]	[m]	[m/s]	[dB(A)]	[m]	[dB(A)]	[m]			
A	Holstebrovej 225	510.217	6.255.007	51,9	1,5	6,0	42,0	600	36,5	387	Yes	Yes	Yes
A						8,0	44,0		37,2	454	Yes		Yes
B	Holstebrovej 221	510.382	6.255.038	47,5	1,5	6,0	42,0	600	35,1	529	Yes	Yes	Yes
B						8,0	44,0		35,8	598	Yes		Yes
C	Holstebrovej 215	510.852	6.255.012	39,6	1,5	6,0	42,0	600	32,1	903	Yes	Yes	Yes
C						8,0	44,0		32,7	977	Yes		Yes
D	Hvidevej 16	510.989	6.254.750	35,0	1,5	6,0	42,0	600	32,1	917	Yes	Yes	Yes
D						8,0	44,0		32,7	994	Yes		Yes
E	Holstebrovej 217	510.943	6.254.108	42,5	1,5	6,0	42,0	600	33,4	737	Yes	Yes	Yes
E						8,0	44,0		34,1	812	Yes		Yes
F	Holstebrovej 219	510.858	6.253.696	45,0	1,5	6,0	42,0	600	33,6	690	Yes	Yes	Yes
F						8,0	44,0		34,3	756	Yes		Yes
G	Hvidevej 26	511.227	6.253.548	43,1	1,5	6,0	42,0	600	30,5	1.085	Yes	Yes	Yes
G						8,0	44,0		31,2	1.151	Yes		Yes
H	Søvsøvej 13	510.289	6.253.175	43,5	1,5	6,0	42,0	600	35,1	492	Yes	Yes	Yes
H						8,0	44,0		35,8	552	Yes		Yes
I	Søvsøvej 11	509.780	6.252.969	46,6	1,5	6,0	42,0	600	34,7	524	Yes	Yes	Yes
I						8,0	44,0		35,4	584	Yes		Yes
J	Søvsøvej 9	509.418	6.252.951	44,5	1,5	6,0	42,0	600	34,1	598	Yes	Yes	Yes
J						8,0	44,0		34,8	658	Yes		Yes
K	Søvsøvej 6	509.163	6.252.959	47,5	1,5	6,0	42,0	600	33,3	698	Yes	Yes	Yes
K						8,0	44,0		34,0	762	Yes		Yes
L	Daugbjerg	508.494	6.254.460	32,1	1,5	6,0	42,0	600	33,9	664	Yes	Yes	Yes
L						8,0	44,0		34,6	735	Yes		Yes
M	Holstebrovej 202	509.291	6.255.067	52,5	1,5	6,0	42,0	600	37,7	264	Yes	Yes	Yes
M						8,0	44,0		38,4	323	Yes		Yes
N	Holstebrovej 200	509.378	6.255.407	43,7	1,5	6,0	42,0	600	34,4	555	Yes	Yes	Yes
N						8,0	44,0		35,1	615	Yes		Yes

To be continued on next page...

DECIBEL - Main Result

Calculation: 3 x V136 - 4,2 MW

...continued from previous page

Noise sensitive area

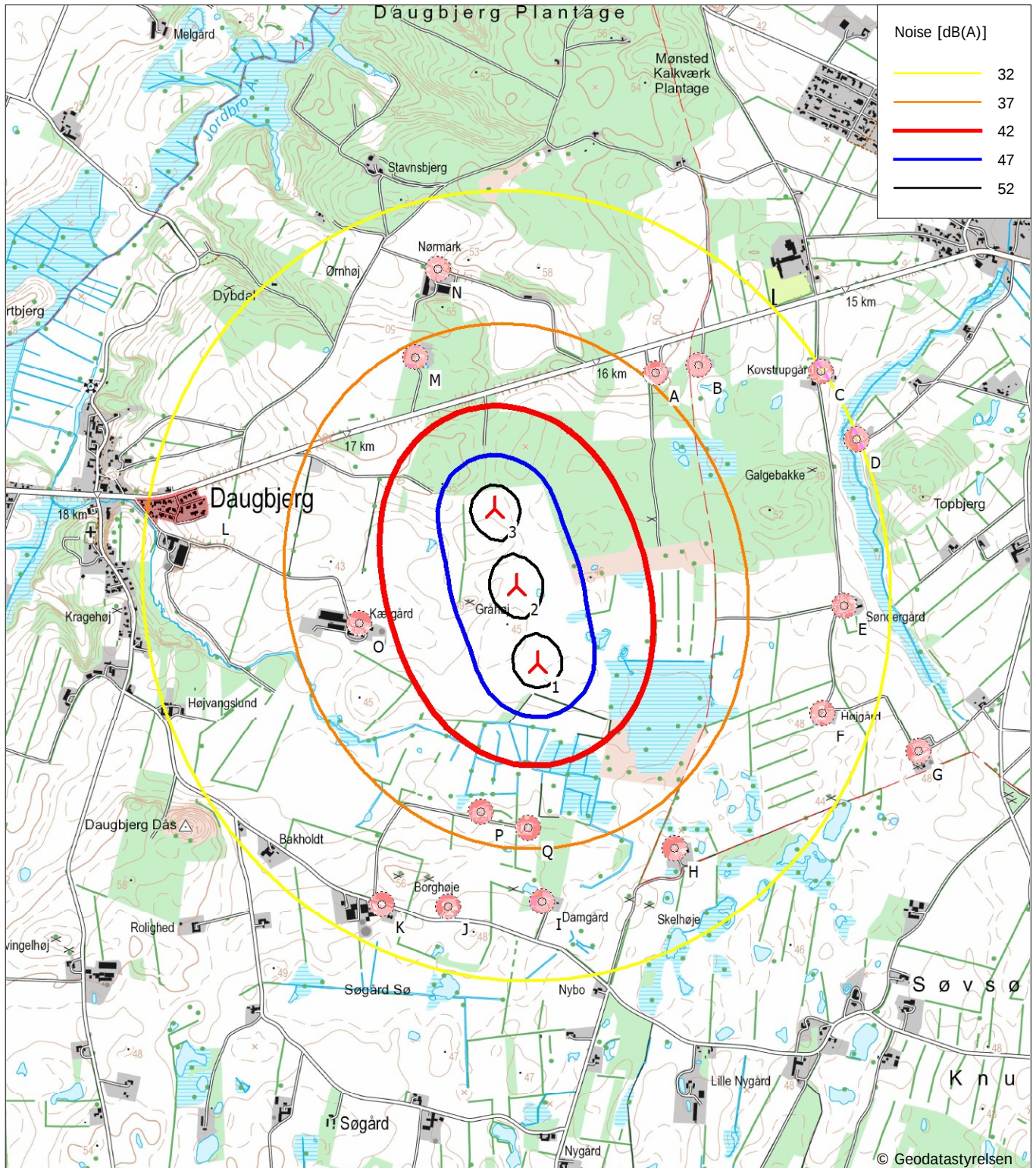
No.	Name	Easting	Northing	Z	Immission height	Wind speed	Noise	Distance	From WTGs	Distance to noise demand	Noise	Distance	All
				[m]	[m]	[m/s]	[dB(A)]	[m]	[dB(A)]	[m]			
O	Gravgårdsvej 4 (Søren B Christensen)	509.075	6.254.043	37,5	1,5	6,0	42,0	600	40,2	118	Yes	Yes	Yes
O						8,0	44,0		40,9		195		Yes
P	Søvsøvej 5	509.543	6.253.316	40,8	1,5	6,0	42,0	600	38,5	212	Yes	Yes	Yes
P						8,0	44,0		39,2		273		Yes
Q	Søvsøvej 7	509.725	6.253.252	43,0	1,5	6,0	42,0	600	38,0	241	Yes	Yes	Yes
Q						8,0	44,0		38,7		302		Yes

Distances (m)

NSA	WTG		
	1	2	3
A	1210	982	810
B	1308	1104	960
C	1568	1434	1361
D	1501	1426	1417
E	1201	1265	1397
F	1112	1276	1487
G	1504	1674	1880
H	885	1180	1482
I	917	1221	1527
J	996	1262	1544
K	1104	1331	1587
L	1393	1218	1104
M	1271	963	657
N	1569	1258	947
O	704	621	684
P	611	880	1170
Q	634	934	1239

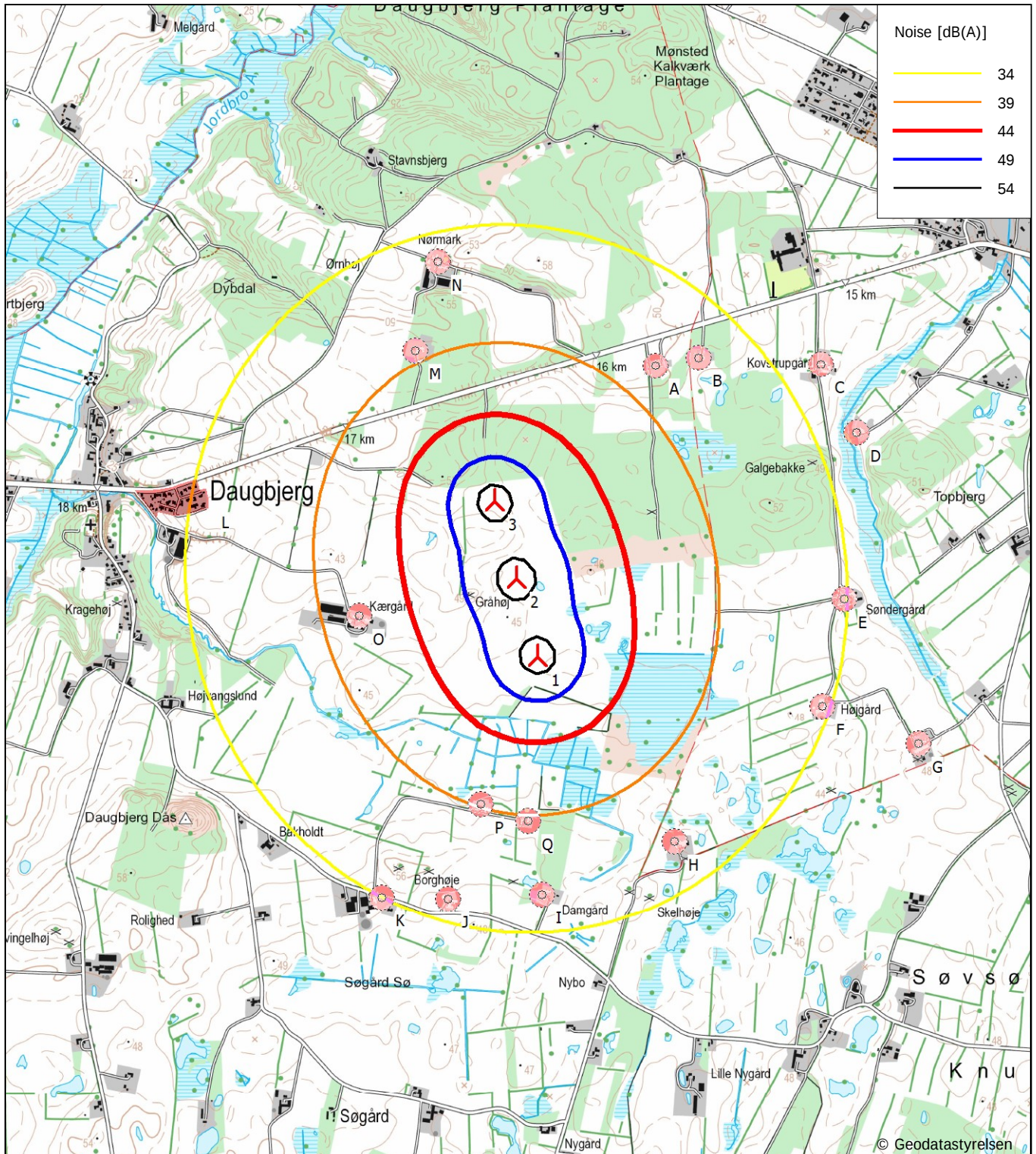
DECIBEL - Map 6,0 m/s

Calculation: 3 x V136 - 4,2 MW



DECIBEL - Map 8,0 m/s

Calculation: $3 \times V136 - 4,2 \text{ MW}$



0 250 500 750 1000m

Map: KMS - Topografisk 1:25.000 , Print scale 1:22.000, Map center UTM (north)-ETRS89 Zone: 32 East: 509.680 North: 6.254.185

New WTG

Noise sensitive area

Noise calculation model: Danish 2019. Wind speed: 8,0 m/s
Height above sea level from active line object