

**Derreenacrinnig West Wind Farm  
Grid Connection - Excavation Estimates**

Element of Grid Connection	Underground Cable Length (m)	Number of Poles	Soil Type/ Surface Description	Volume of Peat to be Excavated (m3)	Volume of Topsoil to be Excavated (m3)	Volume of Soil / Subsoil to be excavated (m3)	Volume of Rock to be Excavated (m3)	Volume of Road Surfacing to be Excavated (m3)	Volume to be Backfilled (m3)	Volume for Disposal / Reuse Elsewhere (m3)	Material for Disposal / Reuse
Wind Farm Substation to Pole P157	113	0	Exposed Bedrock which may be overlain by peat up to 0.5m deep	9.2	0.0	0.0	25.7	0.0	24.8	10.1	Rock
Pole P157 to Pole P145	0	12	Peat Overlying Bedrock	7.2	0.0	0.0	23.0	0.0	29.3	0.9	Rock
Pole P145 to Pole P143	0	2	Conifers - Peat overlying subsoil	1.2	0.0	3.8	0.0	0.0	4.9	0.2	Subsoil
Pole P143 to Pole P127	0	16	Grassland overlying subsoil	0.0	5.8	36.5	0.0	0.0	41.0	1.2	Subsoil
Pole P127 to Pole P114	0	13	Grassland overlying subsoil	0.0	4.7	29.6	0.0	0.0	33.3	1.0	Subsoil
Pole P114 to Pole P113	1046	0	Roadway (936m) + Lands (110m)	0.0	10.7	281.8	0.0	49.1	24.1	317.5	Road Surfacing and Subsoil
Pole P113 to Pole P102	0	12	Grassland overlying subsoil	0.0	4.3	27.4	0.0	0.0	30.8	0.9	Subsoil
Pole P102 to Pole P101	113	0	Grassland overlying subsoil	0.0	11.0	23.9	0.0	0.0	23.0	11.9	Subsoil
Pole P101 to Pole P81	0	21	Grassland overlying subsoil	0.0	7.6	47.9	0.0	0.0	53.8	1.6	Subsoil
Pole P81 to Pole P75	0	6	Grassland overlying subsoil	0.0	2.2	13.7	0.0	0.0	15.4	0.5	Subsoil
Pole P75 to Pole P71	0	4	Peat Overlying Bedrock	2.4	0.0	0.0	7.7	0.0	9.8	0.3	Rock
Pole P71 to Pole P46	0	25	Grassland overlying subsoil	0.0	9.0	57.0	0.0	0.0	64.1	1.9	Subsoil
Pole P46 to Pole P39	0	7	Peat Overlying Bedrock	4.2	0.0	0.0	13.4	0.0	17.1	0.5	Rock
Pole P39 to Pole P25	0	14	Grassland overlying subsoil	0.0	5.0	31.9	0.0	0.0	35.9	1.1	Subsoil
Pole P25 to Pole P21	0	4	Peat Overlying Bedrock	2.4	0.0	0.0	7.7	0.0	9.8	0.3	Rock
Pole P21 to Pole P18	0	3	Grassland overlying subsoil	0.0	1.1	6.8	0.0	0.0	7.7	0.2	Subsoil
Pole P18 to Pole P17	1081	0	Verge of Roadway	0.0	105.4	228.4	0.0	0.0	237.1	96.6	Subsoil
Pole P17 to Pole P8	0	10	Grassland overlying subsoil	0.0	3.6	22.8	0.0	0.0	25.6	0.8	Subsoil
Pole P8 to Pole P7	625	0	Roadway (140m) + Lands (485m)	0.0	47.3	141.1	0.0	7.4	106.4	89.4	Road Surfacing and Subsoil
Pole P7 to Pole P1	0	8	Grassland overlying subsoil	0.0	2.9	18.2	0.0	0.0	20.5	0.6	Subsoil
Pole P1 to Ballylickey Substation	202	0	Grassland overlying subsoil	0.0	19.7	42.7	0.0	0.0	44.3	18.1	Subsoil
Joint Bay in Lands			Grassland overlying subsoil	0.0	1.4	5.9	0.0	0.0	1.4	5.9	
5 no. Joint Bays in Roads			Roadway overlying subsoil	0.0	0.0	34.0	0.0	2.0	0.0	36.1	
<b>Totals</b>	<b>3180</b>	<b>157</b>		<b>26.6</b>	<b>241.7</b>	<b>1053.4</b>	<b>77.5</b>	<b>58.5</b>	<b>860.1</b>	<b>597.6</b>	

<b>SUMMARY</b>	
Total Vol of Peat	26.6
Total Vol Topsoil	241.7
Total Vol Subsoil	1053.4
Total Vol Rock	77.5
Total Vol Road Surfacing	58.5
TOTAL Excavations	1457.7
Reused	860
Surplus	597.7
Underground Length	3180
Underground on Road	2157
Underground - cross country	1023